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Legal Issues of Ensuring Technological Sovereignty

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Keywords

digital solidarity,
digital technologies,
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technological leadership,
technological mode,
technological security,
technological sovereignty

Abstract

Objective: to identify the legal issues of ensuring technological sovereignty and to determine scientifically grounded vectors of their solution.

Methods: the study is based on formal-legal, historical-legal, comparative-legal methods, as well as the methodology of soft systematicity, legal forecasting, and legal modeling.

Results: the article presents a theoretical and legal approach to understanding sovereignty and differentiating its types. Under modern conditions, a significant role is given to the independence and autonomy of the state in the technological sphere. The correlation of digital and technological sovereignty is considered; the latter notion is outlined taking into account the gaining popularity of the Western concept of digital (technological) solidarity. The regulatory foundation of the state strategic autonomy is legal regulation, in which the concept of technology-centrism has been firmly established in recent years. The technological paradigm of modern legal regulations was identified. It consists in strategizing the scientific and technological innovations in strategic planning documents, as well as in sovereignization and cyclization of the legal sphere, digital transformation of the culture of lawmaking and law enforcement, technologization of the legal language, expansion of the scope of legislative regulation and the volume of subordinate legislation. The analysis of the correlation between the legislative and subordinate law levels of technological positioning of the Russian Federation in strategic areas has allowed to emphasize the important systemic interrelation of the involved traditional and innovative law-making tools as they ensure technological development. The author also identifies the risks of expanding legal experimentation in the digital area of public relations, which should exclude the possibility of circumventing the established critical limitations.

Scientific novelty: the work forms a theoretical and legal model of ensuring technological sovereignty, which is of strategic importance for the preservation of the Russian Federation sovereignty in its classical understanding as the main and most important feature of the state.

Practical significance: the results can be used in law-making activities of public authorities to create legal mechanisms for research, development and implementation of critical and end-to-end technologies and the production of high-tech products based on them in order to ensure national security of the Russian Federation.

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Contents

Introduction

Epochal comprehensive transformation of the global social and political processes, civilizational challenges of the modern world order, aggravated by the strengthening technological competition between states under the growing sanctions confrontation and acute geopolitical context – all this puts on the agenda of legal science the search for new approaches to the protection of the national security foundations, reliable guarantees of its preservation and stable existence of society and the state in general. One of the urgent tasks in this regard is to ensure technological security of the state as the most important component of national security, interdependent with its other components: economic, social, informational, etc.

Technological security implies, first of all, the sustainable functioning of technologies critical for ensuring people's lives, competitive economic development and effective public management of technologies (information infrastructure, energy, communications, transport, defense, health care, food supply, etc.) that can be created, modernized, implemented and successfully maintained in an autonomous mode, regardless of the

presence or absence of the political, commercial, or other economic interaction with foreign states, and notwithstanding periodical internal and external disturbances.

The dominant function in the conceptualization of technological security is performed by the technological mode. Its theory was developed within the Russian doctrine for the periodization of current and future changes in science (Glazyev & Kharitonov, 2009; Pashentsev et al., 2021). Currently, it is customary to talk about the transition to the sixth technological mode, the core of which consists of nano-, bio-, and information technologies, spliced with anthropo- and techno-environment (Glazyev & Kosakyan, 2024). This transition is relevant primarily for developed countries, since changes in technological modes occur in differently in different countries, and often several technological modes may coexist in the same country (Tikhomirov, 2023). The seventh and eighth technological modes are also predicted, the innovations of which should be reflected in the model of socio-normative anticipatory impact on them.

With the establishment of technogenic civilization, the need for society and the state to ensure their sustainable organization and further development becomes paramount. At that, technology plays the most important role in solving global problems of humanity. This, in particular, was demonstrated by the coronavirus pandemic of 2020–2021. Academician V. S. Stepin outlined the axiological potential of sustainable development for technogenic civilization several years ago. Now the need for sustainable development has been elevated to the constitutional level in the Russian Federation, as reflected in Article 751 of the Constitution transformed in 2020. Under the world order turbulence, sanctions and geopolitical confrontations, the model of sustainable development of the Russian Federation is directly related to the level of the country's actual independence in the field of science, engineering and technology. The concept of technological security is closely related to the concept of technological sovereignty[1]. The task of long-term provision of the latter is strategically important for the preservation of the sovereignty of the Russian Federation in its classical understanding as the main and most important feature of the state[2].

Placed in the strategic basis for ensuring the technological sovereignty of the Russian Federation, the Strategy for Scientific and Technological Development[3] highlights the great challenges of scientific and technological development of the country. Responding to these challenges requires both the acquisition of new knowledge in fundamental science, the creation of scientific and technological platforms, the implementation of a set

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1 The presence in the country (under national control) of critical and cross-cutting technologies, its own development lines and conditions for the production of goods based on them, which provides a sustainable ability of the state and society to achieve national development goals.

2 Kucherov, I. I., Nudel, S. L., & Semykina, O. I. (Eds.) (2023). Criminal-legal guarantees of a state sovereignty (comparative legal study): scientific and practical manual. Moscow: Prospect. https://clck.ru/3EFbfw

3 Decree of the President of the Russian Federation No. 145 of February 28, 2024 (2024). Collection of Legislation of the Russian Federation, 10, Art. 1373.

of organizational and coordination measures, and the development and implementation of a wide range of legal solutions.

Vectors of humanity development are changing, while "traditional" threats are simultaneously preserved; the latter have been emerging for a number of years and pose risks to the strategic security of the country and its citizens. Under these complex conditions, one of the main guarantors of the viability and normal functioning of social and political institutions is the timely response of state-legal mechanisms, including lawmaking, to the tasks of society and state management that require daily solutions. The task of ensuring technological sovereignty was set at a high state level. It requires not only a breakthrough in technological terms (Bergek et al., 2015; Luan et al., 2024; Ulmanen & Bergek, 2021), qualitative changes in approaches to scientific development (Lapaeva, 2023; Acosta et al., 2020), but also large-scale innovations in the legal sphere to be transformed under the influence of the technological imperative. The present study is devoted to the search for ways to resolve the legal problems arising in this process.

1. Theoretical and legal approach to the understanding of sovereignty

Sovereignty is one of the main features of the state. According to the Constitution of the Russian Federation, the sovereignty of the Russian Federation extends to its entire territory (part 1 of Article 4), and the Russian Federation ensures the protection of its sovereignty and territorial integrity (part 21 of Article 67). Sovereignty, according to the legal position of the Constitutional Court of the Russian Federation[4], as well as its generally accepted understanding in the Russian doctrine, implies supremacy, independence and autonomy of the state power, the completeness of legislative, executive and judicial power of the state on its territory and independence in international communication. Sovereignty is a necessary qualitative feature of the Russian Federation as a state, characterizing its constitutional and legal status. In Russia, sovereignty belongs to the Russian Federation as a whole, and the sovereignty of its subjects is not allowed.

Since the time of its justification in the works of a thinker J. Bodin in the 16th century, the concept of sovereignty has undergone some changes. These changes are most noticeable under the modern large-scale technological innovations and civilizational challenges to humanity. They reflect the differentiation of sovereignty into several types – economic, industrial, energy, legal, political, network and so on.

The spatial limit of state sovereignty of the Russian Federation is its state border. At the same time, due to the development of information and telecommunication

[4] Resolution of the Constitutional Court of the Russian Federation of June 7, 2000, No. 10-P "On the case of verifying the constitutionality of certain provisions of the Constitution of the Republic of Altai and the Federal Law 'On general principles of organization of legislative (representative) and executive bodies of state power of the subjects of the Russian Federation'. (2000). Bulletin of the Constitutional Court of the Russian Federation, 5.

and digital technologies, spatial boundaries are not the only limit of spreading the independent power of one state in relation to other countries and their citizens (subjects). In the informational (virtual, cyber) space, which is increasingly an alternative environment for human existence, there are no territorial boundaries. Hence, it becomes more complicated both to establish full control over information flows and for the state to maintain its sovereign power. During information and cognitive wars, a struggle for people's consciousness takes place using the latest achievements of information, digital, neuro- and other high technologies through destructive information and psychological influence, disinformation and fakes. The issue of information (digital) sovereignty of the state becomes relevant and is widely discussed in legal scientific and scientific-practical literature (Stepanov, 2024; Adams & Albakajai, 2016; Adonis, 2019; Floridi, 2020; Johnson & Post, 1996; Pizzul & Veneziano, 2023; Timmers, 2019).

In light of the urgent need to overcome the country's critical lagging behind technological leaders, the concept of technological sovereignty has been formalized at a high state level (Maurer et al., 2015; Beltrán, 2016). Its provision is the theme of several strategic planning documents, adopted recently. Fragmentation of sovereignty into types is criticized as reducing the state authority, including in the external environment. However, the adopted strategic planning documents focus on the concept of technological sovereignty as state sovereignty in the relevant sphere, assuming that additional guarantees will be created to strengthen the latter.

In some foreign countries (the European Union, the UK, Canada, the USA), technological sovereignty is equaled to digital sovereignty (Potaptseva & Akberdina, 2023; Couture & Toupin, 2019; da Ponte et al., 2023). Another viewpoint is that digital sovereignty is absorbed by technological sovereignty (Hellmeie & Scherenberg, 2023). The present study proceeds from the compatibility of these concepts, which relate as part and whole.

The concept of sovereignty used in the context of technologization assumes independently generating technological and scientific knowledge in the state or, alternatively, the lowest possible level of structural dependence on other countries (Dosi et al., 2006; Edler et al., 2023). Achieving a sufficient level of technological sovereignty is a preliminary condition for strategic state autonomy (Broeders et al., 2023; Crespi et al., 2021).

The concept of digital (technological) solidarity, as opposed to technological sovereignty, was outlined by the U.S. Department of State in the Strategy for the United States International Policy on Cyberspace and Digital Technologies (May 2024)[5] and presented as a tool for weakening the technological potential of Russia, China, Iran, DPRK, etc. It deserves close attention both on the part of the state and from the standpoint of scientific knowledge, including jurisprudence.

[5] United States International Cyberspace & Digital Policy Strategy. https://clck.ru/3EFd8R

According to this document, digital solidarity is understood as "working together to provide mutual assistance to victims of malicious cyberactivity and other digital harms; helping partners, especially emerging economies, to adopt safe, resilient, and sustainable technologies to achieve their development goals; and building a strong and inclusive innovation economy that can shape our [the U.S. and its allies' – Note by M. Z.] economic and technological future"[6]. However, the obvious risk of implementing the concept of digital solidarity for states that are or may potentially become part of the U.S. sphere of influence could be the loss of their own digital sovereignty. This may have consequences like increased dependence on "digital" leaders, deepening digital inequality among peoples and states, violation of cyber security and cyber resilience, etc., which jeopardizes both technological sovereignty and the sovereignty of state power of such states.

2. Legal regulation as a regulatory foundation of the strategic autonomy of the state

Ensuring technological sovereignty requires both the intensification of scientific and industrial areas and the creation of an appropriate regulatory framework. The challenges of technogenic civilization determine the close interrelation and mutual influence of the legal and technological spheres. On the one hand, technologies (first of all, informational and digital ones) have firmly penetrated into the legal environment, where it is appropriate to discuss their application at different stages of legal regulation. This refers to the development of generative artificial intelligence able to perform lawmaking, monitoring and expert functions, as well as to the sphere of law enforcement (Bex et al., 2017; Ermakova & Frolova, 2022; Pashentsev & Babaeva, 2024; Reiling, 2020), with such relevant functions as automation of routine procedures, self-execution of contractual obligations (smart contracts), machine-readability and machine-execution of law, mediatization of judicial power, e-justice, etc.[7] A future prospect is the introduction of neurotechnologies into the legal sphere (Filipova, 2021; Istace, 2024; Ligthart et al., 2023).

On the other hand, due to its nature as a measure of anticipatory reflection of reality, law expectedly responds to the dynamics of social development, an essential layer of which are technological innovations. The stages of construction of legal reality are transformed, which is reflected in legislation, law enforcement practice, and legal culture of individuals. The individual and collective legal consciousness that changes under the influence of the technological imperative is subsequently reflected in law. Thus, the technological imperative becomes determinant in the evolution of the legal sphere, where it shifts the achievements of anthropocentrism towards technologocentrism.

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6 Ibid.

7 Pietropaoli, I., Anastasiadou, I., Gauci, J.-P., & MacAlpine, H. Use of Artificial Intelligence in Legal Practice. British Institute of International and Comparative Law. https://clck.ru/3EFdGC

The development of legal regulation of relations in the sphere of ensuring technological sovereignty occurs in the following directions:

– strategizing future changes of science, engineering and technology in program documents;

– growing sovereignization of legal regulation, which is a natural response to the change of the globalization vector in the new geopolitical realities and to the task of legal provision of the state strategic autonomy. Within the 2020 constitutional reform, the constitutional and legal basis of Russian science was strengthened, while constitutional norms in strategic planning documents and normative legal acts regulating state support of the scientific sphere were subsequently concretized. With the aggravation of the geopolitical situation and growing sanctions restrictions, the regulatory potential of international and supranational regulators continues to weaken in the Russian legal system;

– cyclization of the normative legal array, in which atypical legal arrays such as digital law are gaining systemic importance, while the formation of technological law, begins, providing a normative foundation for the country's technological independence;

– technologization of the language of law and the language of legislation, which acquire interdisciplinary character, accompanied by unification of concepts and terms of the digital (more widely – technological) legal array;

– expansion of the sphere of legislative regulation and a natural increase in the volume of subordinate regulation;

– spreading of experimental legal regimes, which test the legal models of new social relations or those significantly changed under the influence of technological imperative;

– digital transformation of the culture of lawmaking and legislative procedure.

3. Technological paradigm of modern legal regulators

From the viewpoint of legal regulation, the technological space is characterized by a significant substantive complexity and, therefore, a variety of sources of regulation of relevant legal relations, i. e., normative legal acts of both legislative and subordinate levels of regulation of social relations.

The needs of society and the state, changed in the course of technological development, inevitably change the system, composition, scope and limits of action, as well as the quantitative expression of the sources of law (Marchant & Allenby, 2017). The transformation of law into a more flexible social regulator is predicted (Pashentsev, 2019), replacing legislative regulation with soft law.

At the same time, at present and in the near future, in the modern Russian legal system, legislation is the main and primary regulator of the most important and stable social relations, giving value-legal orientation to subordinate regulation. Subordinate normative legal acts are consistent with the provisions of laws, which establish the limits of subordinate lawmaking (Abramova, 2019). Concretization of laws is carried out both

horizontally – in other legislative acts (primary sources), and vertically – in subordinate normative legal acts adopted on their basis (documents of secondary property). At that, the problem of determining the limits of such concretization should be solved:

– hierarchical limits, implying the account of subordination of acts in terms of legal force, which is reflected in the peculiarities of their issuance and the conditions that must be observed[8];

– competency limits (observance of law-making powers);

– spatial limits (delimitation of federal and regional subjects of jurisdiction); and

– substantive limits, determined by the scope and object of legal regulation.

Subordinate legal acts, different in form and content, have different functional relationship with the law. For example, presidential decrees and resolutions of the Government can act as a primary source of regulation of certain social relations on issues that constitute their exclusive competence, when these relations are not the subject of legislative regulation, but objectively need legal regulation[9].

The technological paradigm of modern legal regulations is designed to solve the problem of the delayed response of the law to social and technological dynamics. The basic legislative act in this area[10] has long been outdated, and repeated attempts to modernize it (Gabov et al., 2017) have not been successful so far. The new draft law "On scientific and scientific-technical activity", put forward for public discussion in 2019, received critical responses from the scientific and expert community (Semenov et al., 2019). At the same time, the doctrine suggests the overdue need to codify the legislation on science and technology, consolidate all legal norms in this area in a single act, and form a relevant branch of scientific law (Vasiliev, 2020; Lapaeva, 2023). The issue of codification of legislation regulating relations in the sphere of digitalization remains unresolved. Although the adoption of the Digital Code carries a number of risks (first of all, the emergence of conflicts and contradictions, as well as the preservation of fragmentation of legal regulation of the relevant relations), there is no doubt about the need to streamline the digital (and then technological in general) legal array, for example, in the form of consolidation.

The volume of legislative norms regulating social relations associated with the application of technological solutions is constantly increasing. A set of legislative acts of various industry and subject matter (more than 100 federal laws) has been adopted in this area. Along with this, an expanding number of subordinate normative

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8 Constitution of the Russian Federation (part 3 of Article 90, part 1 of article 115); Resolution of the Government of the Russian Federation No. 1009 of August 13, 1997 (1997). Collection of legislation of the Russian Federation, 33, Art. 3895.

9 For example, as a result of the constitutional reform of 2020, the Russian Government was granted the authority to provide state support for scientific and technological development of the Russian Federation, preservation and development of its scientific potential (para. "c1" of part 1 of Article 114 of the Constitution of the Russian Federation).

10 On science and state scientific-technical policy. No. 127-FZ of August 23, 1996 (1996). Collection of legislation of the Russian Federation, 35, Art. 4137.

legal acts establish mechanisms for implementing legal norms in the sphere of ensuring technological sovereignty.

Today, the basic direction of subordinate regulation of relations in the sphere of technological security is the conceptualization of the model of technological sovereignty and leadership in strategic planning documents. One of the main acts here is the Concept of technological development for the period until 2030[11]. This document highlights the goals of technological development[12] and reveals their implementation mechanisms. An integrated approach to the implementation of technological development goals implies the support of technological sovereignty projects, the taxonomy of which is established at the subordinate legislation level[13].

The President of the Russian Federation has named technological leadership and digital transformation among the national development goals of the country, the achievement of which is characterized by fulfilling a number of target indicators. Among them: ensuring technological independence and the formation of markets in the areas of bioeconomy, means of production and automation, digital transformation, artificial intelligence, advanced space and energy technologies, and increasing the share of domestic high-tech goods and services created on the basis of own development lines, growth of investments in domestic IT solutions, ensuring network sovereignty and information security in the Internet, etc.[14]. An important role is assigned to the scientific sphere, which should create a foundation for the development of relevant technologies, to increase the volume of research and development, including by increasing the state's internal expenditures and private investment for these purposes.

The main characteristics of subordinate normative legal acts are their prompt adoption and expansion of action range. These characteristics are actualized in crises (coronavirus pandemic, sanctions pressure, threats of technological degradation). Under such conditions, the powers to take economic and social measures are concentrated at the subordinate legislation level, the ratio of legislative and subordinate regulation changes, the unit weight of prompt subordinate lawmaking in the total array of adopted acts (both at the federal and regional levels) increases (Tikhomirov, 2022). However, even in such situations, the positive consequences of prompt legal response may collide with the negative results of legality violation. In order to avoid anticipatory subordinate

11 Order of the Government of the Russian Federation No. 1315-r of May 20, 2023 (2023). Collection of legislation of the Russian Federation, 22, Art. 3964.

12 Ensuring national control over the reproduction of critical and cross-cutting technologies; transition to innovation-oriented economic growth, strengthening the role of technology as a factor of economic and social development; technological support of sustainable operation and development of industrial systems.

13 Order of the Government of the Russian Federation No. 603 of April 15, 2023 (2023). Collection of legislation of the Russian Federation, 17, Art. 3141.

14 Decree of the President of the Russian Federation No. 309 of May 7, 2024 (2024). Collection of legislation of the Russian Federation, 20, Art. 2584.

regulation of those social relations that are the subject of legislative regulation, which diminishes the role of the law in the system of law and the mechanism of legal regulation, it is necessary that a subordinate act does not contradict the law but corresponds to it (Abramova, 2019).

The doctrine rightly emphasizes that the poor effectiveness of many laws is due to the lag in the development and application of subordinate legislation (Baranov, 2022). In this context, it is important to ensure the direct effect of laws and avoid the unjustified inclusion of an excessive number of reference norms, which imply further sub-law specification, into the projected legislative acts. The benchmark of optimal sub-legal specification of the norms of the law is "achievement of the necessary effect of legal regulation in the relevant sphere of social relations, its completeness in terms of the needs of social development" (Abramova, 2019).

The problem of ensuring compliance and prompt development of subordinate norms persists, which is conditioned by the adoption of relevant legislative acts. Its solution is both in simultaneously developing legislative and concretizing subordinate legal norms, and in postponing the law entry into force, correlating it to the development of subordinate normative legal acts concretizing its provisions.

At the same time, for the Russian Federation, the adoption of the concept of digital solidarity in unfriendly states makes it necessary to strengthen legal, institutional and organizational steps to ensure national security and technological sovereignty. These issues not only relate to the external manifestations of the state power sovereignty, but directly affect the internal sovereignty of the state. The latter implies the independence of the state from any other political force within the country and building a national legal system based on the established legal values, legal traditions and needs of the country. Developing the digital solidarity concept requires either amendments to existing program-strategic acts or the development of new ones to take into account new threats in cyberspace. This refers, in particular, to the Doctrine of Information Security, which was approved back in 2016[15], while the development of informational-telecommunicational, digital and other high technologies requires advanced regulation. Strategic documents, which in legal form determine the directions and prospects of the state development, play a crucial role under the continuous and accelerating technological transformations. They create the legal foundation of innovative development, defining the bases of state policy. The idea of developing an Information Security Strategy has certain prospects. As a system of formally-defined provisions, setting forth the strategic goal, tasks and directions of activities of public authorities to achieve it, means and resources that can be spent on it, the Strategy

[15] Decree of the President of the Russian Federation No. 646 of December 5, 2016 (2016). Collection of legislation of the Russian Federation, 50, Art. 7074.

differs significantly from such a strategic planning document as a doctrine. The Strategy should describe a comprehensive systematic approach to the implementation of the specified goal and objectives, coordinated and interrelated actions and measures, which would be based on target indicators at each stage of implementation.

There is a significant number of still unremoved legal barriers to technology development and to ensuring technological leadership of the country. This is evidenced by the albeit positive but spreading practice of applying experimental legal regimes, based on the Law on experimental legal regimes in the sphere of digital innovations in the Russian Federation[16]. On the other hand, there are still risks of using experimental legal regimes for illegal purposes to circumvent critical restrictions. In this regard, it is advisable to ensure the systemic interconnection of the law-making tools for the technology development (regulatory impact assessment, "regulatory guillotine", regulatory roadmaps for eliminating the barriers of the National Technological Initiative[17]).

4. Sub-legal level of technological positioning in strategic areas

Subordinate regulation of relations in the sphere of ensuring technological sovereignty is the most significant legal array among the variety of adopted acts, the main features of which are as follows:

– strategic importance of qualitative and optimal subordinate regulation, taking into account the emerging external and internal conditions; it arises from the strategic importance of the technological security sphere, the stable and uninterrupted functioning of which is a necessary prerequisite for ensuring normal life and a guarantor of protection of the society and state basic interests;

– content diversity and a complex system of subordinate normative legal acts;

– uniqueness of subordinate regulation in the sphere of ensuring technological sovereignty (the content of subordinate normative legal acts is largely specific and complicated due to the use of special terminology, special legal constructions of mechanisms applicable to activities to ensure technological sovereignty);

– special practical (economic) value of subordinate regulatory legal acts for the effective development of the economy spheres affected by them (by creating conditions of maximum favorability for the development of modern technologies in the relevant spheres);

– rapidity of development and adoption of subordinate normative legal acts if a need for the relevant regulation is identified, in view of the fact that such a need is of strategic importance for the security of the state as a whole.

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16 On experimental legal regimes in the field of digital innovation in the Russian Federation. No. 258-FZ of July 31, 2020 (2020). Collection of legislation of the Russian Federation, 31 (part I), Art. 5017.

17 Order of the Government of the Russian Federation No 317 of April 18, 2016 (2016). Collection of legislation of the Russian Federation, 17, Art. 2413.

In addition, the peculiarities of subordinate regulation of relations arising and developing under the influence of the technological imperative are expressed in the need for simultaneous implementation of both the legally established bases for the regulation of relevant legal relations[18], and systemic strategic directions of development and priority protection of this sphere determined at the highest level of public administration. Often the tasks of developing the sphere of technological security (which should be solved, including at the level of subordinate normative legal regulation) are defined in strategic documents[19].

Taking into account the above-mentioned and other legally established and determined by strategic planning documents priority directions of technological security development, we can distinguish several blocks of tasks to be solved at the level of subordinate normative regulation. These blocks include ensuring information, industrial, energy, transport security and technological independence of the defense-industrial complex.

The above are just a few aspects of technological security and subordinate normative legal acts aimed at their regulation. The sphere of technological security is extensive and covers all possible cases of application of various kinds of technologies for a variety of human needs.

Subordinate normative legal regulation in this area is a vast array of existing normative prescriptions, providing the solution of a wide range of practical tasks to ensure technological sovereignty in the relevant legislative and politically determined priorities. It is a necessary element in the system of legal regulation of the relations under consideration, without which it is impossible to ensure the effective mechanisms of protection and improvement of the state technological security.

Conclusions

In relation to the sphere of ensuring technological sovereignty, law fulfills a number of functions:

– regulatory (creating a normative framework for the functioning and development of science and technology),

– stimulating (introduction of technologies into various spheres of life),

– restrictive (aimed at preventing technological and legislative singularity).

[18] On the security of critical information infrastructure of the Russian Federation. No. 187-FZ of July 26, 2017 (2017). Collection of legislation of the Russian Federation, 31 (Part I), Art. 4736; On the safety of fuel and energy complex facilities. No. 256-FZ of July 21, 2011 (2011). Collection of legislation of the Russian Federation, 30 (part 1), Art. 4604; On transport security. No. 16-FZ of February 9, 2007 (2007). Collection of legislation of the Russian Federation, 7, Art. 837; et al.

[19] Decree of the President of the Russian Federation No. 400 of July 2, 2021 (2021). Collection of legislation of the Russian Federation, 27 (part II), Art. 5351.

Ensuring technological sovereignty implies doctrinal substantiation and solution of overdue and potential legal tasks, among which are:

– legal identification of strategic technologies;

– creating an updated legal standard of scientific and scientific-technological activity;

– streamlining the normative array in the sphere of technological security;

– unification of concepts and terms of the technological legal array;

– correlating the adopted normative legal acts with the model of technological sovereignty conceptualized in the existing strategic planning documents;

– ensuring the direct effect of the law;

– observing the limits of horizontal and vertical concretization of the legal norms;

– ensuring compliance and prompt development of subordinate norms conditioned by the adoption of relevant legislative acts.

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Правовые проблемы обеспечения технологического суверенитета

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Ключевые слова

право,
стратегическая автономия,
стратегическое планирование,
суверенизация правового регулирования,
технологическая безопасность,
технологический суверенитет,
технологический уклад,
технологическое лидерство,
цифровая солидарность,
цифровые технологии

Аннотация

Цель: выявить правовые проблемы обеспечения технологического суверенитета и определить научно обоснованные векторы их решения.

Методы: в основе исследования лежат формально-юридический, историко-правовой, сравнительно-правовой методы, а также методология мягкой системности, юридического прогнозирования, правового моделирования.

Результаты: в статье представлен теоретико-правовой подход к пониманию и разграничению суверенитета на виды, где в современных условиях значительная роль отводится независимости и самостоятельности государства в технологической сфере. Рассмотрено соотношение цифрового и технологического суверенитета, а понятие последнего изложено с учетом набирающей популярность западной концепции цифровой (технологической) солидарности. Регулятивным фундаментом стратегической автономии государства служит правовое регулирование, в сфере которого в последние годы прочно закрепляется концепция технологоцентризма. Выявленная технологическая парадигма современных правовых регуляторов заключается в стратегировании научно-технологических новаций в документах стратегического планирования, суверенизации и циклизации правовой сферы, цифровой трансформации культуры правотворчества и правоприменения, технологизации юридического языка, расширении сферы законодательного регулирования и объема подзаконного правового массива. Проведенный анализ соотношения законодательного и подзаконного уровней технологического позиционирования Российской Федерации в стратегических областях позволил подчеркнуть важность системной взаимосвязи задействованных традиционных и инновационных инструментов правотворческого процесса в обеспечении технологического развития и выявить риски расширения правового экспериментирования в цифровой области общественных отношений, которое должно исключать возможность обхода таким образом установленных критически важных ограничений.

Научная новизна: в работе сформирована теоретико-правовая модель обеспечения технологического суверенитета, имеющего стратегическое значение для сохранения суверенитета Российской Федерации в его классическом понимании как основного и важнейшего признака государства.

Практическая значимость: полученные результаты могут найти применение в правотворческой деятельности органов государственной власти по созданию правовых механизмов исследования, разработки и внедрения критических и сквозных технологий и основанному на них производству высокотехнологичной продукции в целях обеспечения национальной безопасности Российской Федерации.

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Конфликт интересов

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