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# SCIENCE CITY AS MUNICIPALITY: PROBLEMS OF LEGAL REGULATION

**Irina V. Glazunova[1], Oleg A. Kozhevnikov[2,3]**
[1] *Dostoevsky Omsk State University, Omsk, Russia*
[2] *Ural State Law University, Yekaterinburg, Russia*
[3] *Ural State University of Economics, Yekaterinburg, Russia*

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The subject of this study is the current municipal reform in the Russian Federation and an assessment of its impact on the legal status of science cities.
The purpose of the article is to determine the theoretical approaches and practice of legislative regulation of the legal status of science towns, prospects for modern and future legal regulation of the peculiarities of local self-government in such a territory as a science city.
The main hypothesis is that the blank method of regulating the peculiarities of local self-government in science cities, perceived by the federal legislator, does not achieve its goal, which obviously requires a revision of approaches to legislative regulation of the status of such a special territory as a science city.
The authors used both general research methods, including methods of analysis and synthesis, and industry methods, including the formal legal method.
The main results. The authors note the inconsistency and inconsistency of the legislative regulation of the legal, organizational, economic and social foundations of science cities and the peculiarities of the implementation of local self-government in them. Foreign experience in the formation of analogues of Russian science cities demonstrates that, firstly, the creation and development of technopolises contributes to the formation of the most optimal forms of interaction between science and production. Secondly, foreign technopolises are usually formed at research centers and universities, without having a strict link to the territorial foundations of the functioning of municipalities.
The authors claim that the science cities of the Russian Federation do not have a constitutional and legal status and are neither the subject of study of such a branch of Russian law as constitutional law, nor the subject of regulation of constitutional legislation. At the moment, the legal status of a science city in the Russian Federation has a dual nature: on the one hand, a science city is a municipal entity with the status of an urban district; on the other hand, it is a territory within which there is a scientific and production complex. At the same time, these two sides of the legal status of a science city in the Russian Federation are poorly interconnected at the level of regulatory regulation. It seems that a science city as a territory with a scientific and industrial complex obviously has a different legal nature than a science city – an urban district, as a territory within which the population and (or) local self-government bodies resolve issues of local importance.
Conclusions. It is important to determine at the level of federal authorities the need for further consolidation of the status of municipalities or other legal status of the territory of a science city, which includes high-tech enterprises with a significant concentration of human and material scientific and technical resources, the use of which is aimed at the implementation of science and state scientific and technical policy. If the link "science city – municipal entity" is recognized as necessary and fundamental in the future, taking into account the provisions of Articles 12 and 132 of the Constitution of the Russian Federation, it is necessary to establish, firstly, the legal features of the implementation of local self-government in science cities, and secondly, the basic principles of interaction of local self-government of science cities with public authorities as the solution of issues of local importance in the interests of the population living in the territory of the science city, and the forms and order of participation of the organization.

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**1. Introduction**

Today, building an innovative economy that does not depend on the volume of mining and fluctuations in prices for basic energy carriers is a priority task of our state. Meanwhile, technological modernization of the national economy, increasing innovation activity and the economic role of intellectual property are not possible without the creation of an advanced infrastructure of research and development of fundamental and applied nature, innovation, the formation of an integrated system of training and professional growth of scientific personnel, providing conditions for young scientists to conduct research and development by creating scientific laboratories and competitive collectives [1, p. 11; 2, p. 5-9].

One of such elements of the modern infrastructure of scientific research of the Russian Federation, capable of making a significant contribution to achieving the designated national goals and solving strategic tasks of the development of the Russian Federation as a social state, are municipalities with developed scientific and technical potential, including those with the status of a science city of the Russian Federation (hereinafter referred to as science cities).

Science towns are unique urban settlements that played a huge role in the formation of the USSR as a great scientific, technical and economic power. They provided the necessary scientific and technical support for industrialization, the development of the military-industrial complex and the competitiveness of the USSR [3, p. 71; 4, p. 18-20]. And at present, science cities are characterized as territories of innovative development or territories with a high concentration of scientific, technical and innovative potential due to the leading Russian scientific organizations, universities, manufacturing enterprises and technological entrepreneurship entities operating in these settlements that develop and manufacture high-tech products [5, p. 107; 6, p. 4-5; 7, p. 76].

Thus, the development of science towns is a promising direction of territorial and economic development of Russia, which determines the study of the legal aspects of the organization and implementation of local self-government in science towns.

**2. The current state of legal regulation of the status of science cities in the Russian Federation**

Revealing the issue of current trends in the legal regulation of relations in the sphere of functioning of science cities, it should be noted that the science cities of the Russian Federation do not have a constitutional legal status and are neither the subject of study of such a branch of Russian law as constitutional law, nor the subject of regulation of constitutional legislation, except for the indication that the legal regulation of the status of a science city is carried out in in accordance with the Constitution of the Russian Federation. However, this is rather a "tribute" to the established practice of legal techniques for the preparation of legislative acts, since the Constitution of the Russian Federation itself contains the provisions of Article 15, which provides that "The Constitution of the Russian Federation has supreme legal force, direct effect and is applied throughout the territory of the Russian Federation. Laws and other legal acts adopted in the Russian Federation should not contradict the Constitution of the Russian Federation" [8, p. 11].

The fact that the Methodological Recommendations for the preparation of documents on the assignment of the status of a science city to a municipal entity of the Russian Federation (approved by the Ministry of Education and Science of Russia on 31.07.2006) do not even contain any reference to the Constitution of the Russian Federation, mentioning acts of a general sectoral nature, indirectly indicates the absence of binding constitutional and legal status to science cities.

The constitutional and legal status has another legal category, so far mentioned in the legislation on science cities and is the subject of study of a complex branch of Russian law - municipal law, this is local self–government, which is one of the foundations of the constitutional system of the Russian Federation, recognized, guaranteed and implemented throughout the territory of the Russian Federation [9, p. 89].

The legal status of the science city is based on the provisions of Federal Law No. 131-FZ dated 06.10.2003 "On the General Principles of the Organization of Local Self-Government" (hereinafter - the Law on Local Self-Government), Federal Law

No. 127-FZ dated August 23, 1996 (as amended on 04/16/2022) "On Science and State Scientific and Technical Policy" (hereinafter - The Law on Science and GNTP), other federal laws and by-laws, acts of the subjects of the Russian Federation.

The beginning of legislative regulation of the status of science cities was laid by the Message of the President of the Russian Federation to the Federal Assembly of the Russian Federation dated February 16 , 1995 on the need to develop a federal law on science cities . The basic Law on Local Self-Government for local self-government in Article 81 contains only an indication of the type of municipality in which a science city can be created and refers to Federal Law No. 70-FZ dated 07.04.1999 "On the Status of a Science City of the Russian Federation" (hereinafter referred to as the Law on Science Cities), assuming that it enshrines the norms regulating the specifics of implementation local self-government in the science city. However, it seems that this "bundle" has not justified itself.

The law on Science Cities does not even contain a preamble, in which, according to the rules of legislative technique, the subject of regulation should be determined, the type of public relations regulated by the normative act, the goals (tasks) that it is intended to solve should be indicated [10, p. 145]. This lack of legal technology has significantly affected the quality of both the text of the said law and law enforcement practice. The law is mainly devoted to the procedure for granting the status of "science city of the Russian Federation" to municipalities that meet certain criteria and have passed the necessary coordination of their development program.

Granting a municipality the status of a science city has largely become a way of obtaining additional state support to cover the costs of the relevant municipalities for the implementation of the action plan for the implementation of the strategy of socio-economic development of a municipality with the status of a science city. In fact, the issues of the specifics of the organization of local self-government on the territory of the science city are reflected only in Article 8.1. The Law on Science Cities, which defines the rights of local self-government bodies in the implementation of measures provided for in the action plan for the implementation of the strategy of socio-economic development of a municipality with the status of a science city. In this regard, it is hardly possible to say that the Law on Science Cities fulfills its full function to determine the regulatory framework for the implementation of local self-government in science cities of the Russian Federation [8, p. 12].

Neither does the Law on Science and GNTP define any specifics of the implementation of local self-government in science towns. This act is primarily devoted to the relations between the subjects of scientific and scientific-technical activities, public authorities and consumers of scientific and scientific-technical products. At the same time, it should also be noted that the said law does not indicate either the population of the municipality or local self-government bodies as subjects of the formation and implementation of state scientific and technical policy, state support for innovation.

Thus, the analysis of the basic provisions of the federal legislation on the legal status of science cities of the Russian Federation in the context of the implementation of local self-government on its territory, obviously, allows us to conclude that at the moment, the legal status of science city has a dual nature: on the one hand, science city is a municipal entity in the status of an urban district - with the inherent municipal entities with territorial, economic and organizational-legal bases; on the other hand, it is a territory within which there is a scientific and production complex, including scientific and other organizations that carry out their activities in accordance with the priority directions of the development of science, technology and technology of the Russian Federation.

### 3. Foreign experience of legal regulation of the procedure and conditions for the creation of science cities

Considering the foreign experience of creating science cities, it should be noted that in international practice, science cities are usually associated with the name technopolises or technoparks. Despite the differences in names, the goal of such entities is generally the same: to concentrate in one place all the necessary infrastructure for the development of

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high-tech business (inventors, business consultants, financial institutions, and so on) and to provide high-tech enterprises with the opportunity to collectively use this infrastructure on the most favorable terms.

Technopolis (technopolise: from Greek. techne - mastery and polis - city) is a modern form of territorial integration of science, education and highly developed production, it is a single scientific-industrial and educational, as well as residential and cultural-living zone, united around a scientific center, providing a continuous innovation cycle based on scientific research [11, p. 11].

Based on the review of the available scientific material, it seems possible to identify the following models of formation and functioning of foreign analogues of Russian science cities: [12, p. 97-99]

**The American model.**

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Traditionally, it is believed that the first technopolis originated in the USA. It appeared spontaneously. After World War II, a number of enterprises on the West Coast of the United States, in California, received orders from the government to create new types of products. It was named "Silicon Valley" due to the fact that enterprises producing microprocessors based on the addition of silicon crystals in their manufacture functioned on its territory [13]. The first technopolis appeared as a symbol and sign of the scientific and technological progress of the world, one of the world centers of electronics at the micro level, the revolution of computers, applied experience and maximum profitable extracts. It became possible to develop a synthesis of university works (based on Stanford) and companies manufacturing products in the field of electronics, aviation and space. Subsequently, other technopolises began to form in the United States, in North Carolina, Texas, Florida, the District of Columbia, the Northeast, and the Midwest [14, p. 59]. The main feature of American technopolises and technoparks is their close connection with universities and government research centers. At the same time, the forms of interaction differ significantly. Thus, according to the calculations of E.A. An, 20% of technoparks were created by universities as their structural subdivision, 10% - as independent units, 28% - on the basis of contracts with developers of innovative projects, 38% - as joint ventures and only 4% are technoparks with the participation of state structures.

The impressive success and growth of technopolises in the USA, the deployment of the telecommunications revolution and structural economic crises significantly contributed to the creation of Western European and Japanese programs for the development of knowledge-intensive sectors of the economy, in which the drivers of growth were to become science cities.

**The European model.**

For a long time, European countries have been noticeably lagging behind the USA and Japan in terms of the development of technopolises and technoparks. Moreover, the European countries, although they strive to bring the level of development of their states closer, nevertheless, they are quite different both in terms of the types of government, economic structures, and in terms of the culture of doing business. In this regard, it is not necessary to talk about a single European model for the creation and functioning of technopolises and technoparks, however, common approaches and trends are obviously present.

In Western Europe, the emergence of technopolises occurred in two waves in 1969 – 1973 and 1983 – 1993 [15, pp. 47-50]. From the point of view of the chronology of the appearance of technopolises and technoparks, Western European countries can be divided into 3 groups: the first - before 1980 - includes Great Britain, France, Belgium; the second - after 1980 began to vigorously catch up with the first - Germany, the Netherlands, Sweden, Finland; the third - includes technoparks, which began to form only in the second in the mid-1980s, Switzerland, Austria, Norway, Spain, Portugal, Denmark and Italy.

In France, as in most other Western European countries, universities are the main centers for the development of science. For a long time Paris with its famous, founded back in the XIII century. the University (Sorbonne) and other unique intellectual

infrastructure concentrated the vast majority of all national research in the field of science and technology. The role of Paris as a leading scientific center has become even more significant after the creation of a large technopolis in the area of its new satellite cities of Ivry and Saint-Quentin-en-Yvelines, often referred to as the Ile-de-France city of science. There are 9 science and technology parks located here.

In 1970, at the initiative of French Senator Pierre Laffitte, the SofiaAntipolis Technology Park was formed between the cities of Nice and Antibes to produce and promote innovations in the fields of information technology, microelectronics, computer technology, pharmacology and biotechnology. Then, under the auspices of the French government, with the help of local authorities, large, medium and small businesses, a whole "Technopore" was organized – an economic, geographical and innovative complex, including technoparks, technopolises and universities located in the areas of such Mediterranean cities as Marseille, Toulon, Aix-en-Provence, Nimes and Montpellier.

In the UK, thanks to bottom-up initiatives, science parks have sprung up at universities in Edinburgh (in 1972) and Cambridge (in 1973) to accelerate research and development in the field of electronics, computing and software. Other science parks have emerged mainly in Eastern England, in the so-called M-4 corridor between London and Bristol, but they also exist in more remote areas of the central part of England, its Northeast, Scotland. In all cases, the areas chosen for the arrangement of scientific parks are distinguished by attractive living conditions and developed infrastructure.

In Germany, the first technoparks appeared much later than in France and the UK. The opening of technoparks in Bonn, Munich and Hamburg and a number of other cities was initiated in the early 80s of the last century by the government of Helmut Kohl. At the same time, in the 90s and subsequent decades, a significant part of small German technoparks and technopolises arose due to network initiatives and interactions of stakeholders - residents of settlements, entrepreneurs, university and scientific workers, engineers, programmers, etc. So in Berlin since 1983 The Berlin Innovation Center (BIC) is successfully operating, providing companies and firms with the necessary consulting assistance. The Izar Valley Science Park near Munich specializes mainly in microelectronics. Its appearance here is explained by the presence of a large cultural potential in the capital of Bavaria (nine universities, including two universities, scientific libraries, museums, etc.), as well as the residences of such large concerns as Deutsche Aerospace, Siemens, and a developed banking sector.

Other important science parks and technopolises of Germany are located in Hamburg, Bremen, Nuremberg, Stuttgart, Ulm, Hanover, Bonn.

Japanese model.

France has been ahead of Japan in creating technopolises for almost 7 years, in which they have become a strategic goal of the state from the very beginning and are developing in accordance with clear state plans. The Technopolis state program has been created and is being implemented in Japan, according to which the entire territory of Japan will be a network of 19 technopolises.

In 1963, the Land of the Rising Sun actually began the construction of the Tsukuba science city, located 50 km from the capital Tokyo, from scratch. The state-funded construction of the technopolis took almost twenty years. By 2000, 60 national research institutes and 2 universities specializing in various fields were built in Tsukuba: higher education and special training, construction, physics and engineering research, biology and agriculture.

The peculiarity of the Japanese experience of the formation and development of "national science cities" is the fact that they were formed at university territories, and their names were in accordance with the cities of education – for example, Akita, Hakodate and others. Among the parameters of Japanese technopolises, one can distinguish: the territory nearby the airport; the university on the territory; the well-coordinated organization of industrial zones, research centers, residential areas; an innovative information network; favorable living circumstances. Typical sources of financing for technopolises in Japan are: 30% - state financing, 30% - municipalities, 30% - enterprises and individuals, 10% - foreign investors.

Thus, in France and Japan, science cities were

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created and began to grow successfully thanks to the pronounced dirigiste policy of central, regional and local authorities, in the UK they started with the help of grassroots initiatives, in Germany most of the technopolises were formed on the basis of network interactions [16, p. 19].

The analysis of the order of formation of analogues of Russian science cities in foreign countries shows that:

- firstly, the creation and development of technopolises contributes to the formation of the most optimal forms of interaction between science and production. The functioning of technopolises is built on the basis of an organic combination of the latest scientific ideas and innovative activities brought to the stage of mass production of new products;

- secondly, foreign technopolises are usually formed at research centers and universities, without having a strict link to the territorial foundations of the functioning of municipalities. This is due to the fact that state and municipal bodies are not the basic financial donors of technopolises, and both scientific institutions and representatives of business structures are equally interested in the development of the declared territories. All this turns technopolis not so much into a territory of implementation by the local community and the local self-government bodies formed by them into a zone of solving "public affairs", as into a territory of partnership of state, municipal, scientific and business structures in the development of economic, technical and technological, research, communication, social and other issues, far coming out in their significance and scope in relation to the organizational, territorial, economic and other foundations of local self-government, as it is present from the point of view of the provisions of the legislation on science cities in force in the Russian Federation.

**4. Problematic aspects of determining the legal status of science cities of the Russian Federation.**

Highlighting the two sides of the legal status of a science city in the Russian Federation, it should be noted that they are poorly interconnected at the level of regulatory regulation.

It seems that a science city as a territory with a scientific and industrial complex obviously has a different legal nature than a science city - an urban district, as a territory within which the population and (or) local self-government bodies resolve issues of local importance.

According to Article 1 of the Law on Science Cities, "science city is a municipal entity with the status of an urban district, having a high scientific and technical potential, with a city-forming scientific and production complex (NPC) - i.e. a set of organizations engaged in scientific, scientific and technical, innovative activities, experimental development, testing, training in accordance with state priorities directions of development of science, technology and engineering of the Russian Federation" .

The above definition of a science city indicates a historical tradition that allows defining the territories of science cities, following the provisions of Part 1 of Article 131 of the Constitution of the Russian Federation, since the status of "science city of the Russian Federation" was assigned not to newly formed urban districts, but to municipalities that already existed at the time of assigning such status with city-forming scientific and industrial complexes formed on their territory [17, c. 141].

The purpose of such districts is quite clear. In Russia, traditionally, single-profile or multi-profile scientific institutions function in science cities, fundamental scientific research is being conducted, new progressive technologies are being introduced. We are talking about relatively small territories where powerful NPCs are concentrated in order to effectively and ethically acceptable use of research and productive potential.

At the same time, from the standpoint of the legislation on local self–government, a science city is an urban district - an independent municipal entity with the maximum amount of powers that is not part of another district (urban or municipal) or municipal district. It is important to note here that a number of federal subjects (for example, the Moscow Region) they consist entirely of urban districts . In this regard, the question naturally arises about the "well-being" of science cities among urban districts formed by combining all settlements of the municipal district and actually equal to the former

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municipal district in population, territory and other indicators? It is often not very "comfortable" – as a kind of dwarf among the basketball team: the area of their territory, as well as the population, is usually several times inferior to the area of other urban districts [18, p. 23-25].

It's no secret that science cities as urban districts are geographically small. Moreover, there is virtually no possibility of their expansion – they simply have nowhere to develop spatially. At the same time, a shortage of territory ("stenochoria") is often accompanied by a shortage of all other resources (a kind of "managerial angina pectoris").

It is important to keep in mind the history of the formation of science cities. In the USSR, there was a tendency to concentrate scientific and production facilities in closed territories with a special status. In addition, scientific and technical cooperation with foreign states was also transferred to special scientific centers isolated from other territories of the Soviet state. Of course, in the USSR, all issues of resource provision of such territories with a special status were resolved by the central state administration bodies [19, p. 50-70].

In foreign countries (in particular, in the USA and Germany), the territories of the NPC developed as special clusters, but according to the general principle – not as separate cities. They were and are part of ordinary municipalities, where local government and self-government are carried out, general issues of local importance are resolved. There is no need for the development of urban economy by universities or research and production corporations, local government and self-government, as a rule, are carried out in a general manner in the municipality on whose territory the scientific cluster is based [20].

The global trend in the development of scientific centers follows the path of their inclusion in the territories of larger municipalities with the simultaneous legislative establishment of an order according to which scientific and production issues are solved by sectoral government bodies together with the scientific community, and general - by state and municipal bodies of territorial entities, whose composition will include settlements endowed with special scientific status [21, p. 33]. Russia will probably have to integrate into this trend.

Analyzing the problems of territorial public administration, it is extremely important not to lose sight of the position of citizens living in the relevant territory. Let's ask ourselves: why are municipalities formed? The answer is contained in the Constitution of the Russian Federation, in which the population is declared a subject of local self-government (Article 130), and municipalities are named territories where local self-government is carried out (Article 131). It is the residents of any locality, including the science city, who unite to independently resolve issues of local importance directly and through local self-government bodies.

The science city, in turn, is formed to conduct scientific research and implement their results in practice – first of all, in production. Research teams are focused on solving scientific and production tasks, but not on municipal management. Residents of such settlements, of course, exercise their right to local self-government. At the same time, how effective is the implementation of local self-government within the city district? Maybe it would be more effective within the framework of a larger municipality, provided with various kinds of resources and managerial personnel? Is it worth limiting science cities only to such types of municipalities as an urban district or an inner-city territory (inner-city municipality) of federal cities?

We believe that the size of science towns, the number of their population and resource availability raise the question of how necessary it is to preserve the binding of the status of a science town to the type of municipality in the current legislation and the inexpediency of preserving the status of a city district for science towns?

Indeed, until recently, the Law on Local Self-Government provided for the maximum opportunities for the urban district both in terms of the scope of issues of local importance assigned by legislation to this type of municipality, and the powers to resolve these issues by local self-government bodies. With the introduction of legislation on local self-government of such a type of municipal entity as a municipal district into the "niche", differences in the scope of local issues and the powers to resolve them between urban and municipal districts were leveled. In the concept of

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draft Law No. 40361-8 "On general principles of the organization of local self-government in a unified system of public authority", the authors excluded the consolidation of the category "issues of local importance" for types of municipalities, and in chapter 4 "Functional foundations of the organization of local self-government" proposed a far from indisputable, but qualitatively different structure of competence formation. Firstly, it is now assigned not to municipalities, but to local self-government bodies, and secondly, the competence itself is divided into its own powers of local self-government bodies to address issues of direct provision of the vital activity of the population, redistributable powers that can be assigned to local self-government bodies by the laws of the subjects of the Russian Federation, state powers, the assignment of which to local self-government bodies are governed by federal laws and the laws of the subjects of the Russian Federation and the rights of local self-government bodies on, not referred to their competence by the legislation. Thus, from the point of view of the provisions of the draft law, the competence of local self-government bodies of municipal and urban districts is "aligned", and the competence of inner-city territories (inner-city municipal formation) of cities of federal significance is now determined at the legislative level of existing cities of federal significance, and it is supposed to be left in the same form by the authors of the draft law. In this regard, the logical meaning of assigning a science city to specific types of municipalities loses its previously existing purpose.

It should also be noted that both in the current Law on Local Self-Government and in the proposals to draft Law No. 40361-8 "On the general principles of the organization of local self-government in the unified system of public authority", the general line continues to consolidate the features of the organization of local self-government in the science cities of the Russian Federation in federal laws. At the same time, there are practically no features of the organization of local self-government in the profile Law on science City, since the law itself does not specify the subject of legal regulation (the circle of public relations) to which it is dedicated [10, p. 148; 22, p. 134-135]. It seems that the norms available in the said law concerning the assignment of the status of a science city and other few provisions (the law itself consists of only 15 articles) can hardly speak about any significant features of this type of urban district.

Moreover, Russian practice [23, p. 161-162; 24], as well as foreign experience of consolidation of municipalities (in particular, Canada, China, Finland, South Africa) [25, p. 418; 26], push to give science cities the status of a special urban settlement (a city with a special (special) status) within geographically large municipalities at the level of urban (municipal) districts [27, pp. 20-22]. In this case, the specifics of managing the development of science towns as urban settlements with a special (special) status could consist in the fact that scientific and production issues within its framework were solved by the directorate - as an executive body (formed by the department specialized for the activities of the science city) and the scientific (scientific) council – as a representative body of the scientific community. In turn, the main functions of municipal administration could be carried out by local self-government bodies of larger municipal-territorial units. that with such a distinction, scientists could do their own thing, and managers could do their own, the territorial organization of local self–government would be harmonized, and Russian science would have the opportunity to combine the domestic traditions of the administrative-territorial organization of the NPC with the best achievements of the world experience of scientific clusters such as Silicon Valley.

In this regard, it seems important to determine at the level of federal authorities, the need to further consolidate the status of municipalities for science towns, or still otherwise "fix" the legal status of the territory of the science city, which includes high-tech enterprises with a significant concentration of personnel and material scientific and technical resources, the use of which is aimed at the implementation of science and state scientific and technicaltechnical policy. In the event that the "science city – municipal formation bundle" will continue to be recognized as necessary and fundamental, then taking into account the provision of Article 12 of the Constitution of the Russian Federation that local self-government bodies are not included in the system of state authorities, and the

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provisions of Part 3 of Article 132 that local self-government bodies and state authorities are part of a unified system of public authority in the Russian Federation and interact for the most effective solution of tasks in the interests of the population living in the relevant territory, it is necessary to establish the legal features of the implementation of local self-government in science towns and at least the basic principles of interaction of local self-government of science towns with the authorities state authorities as for solving issues of local importance in the interests of the population, living on the territory of the science city, as well as the forms and procedure of participation of local self-government bodies in cooperation with state authorities in the implementation of powers in the field of science and state scientific and technical policy on the territory of the science city.

**5. Problems of financial support of science cities**

The dual nature of the legal status of a science city also influences its financial and legal status, which combines elements of the financial and legal status of a science city as a municipal entity and elements of the financial and legal status of a science city as a city with high scientific and technical potential, with a city-forming scientific and industrial complex [8, p. 12].

The peculiarities of the legal status of a science city as a municipal entity also have an impact on their financial and legal status, which determines the general features of its budgetary, tax and other financial legal relations arising from the peculiarities of the financial and legal status of a city district established by the budget and tax legislation of the Russian Federation. At the same time, the special status of a science city, due to its scientific goals, determines the features of its financial and legal status associated with state support of such municipalities [28, p. 12-14].

The dual status of the science cities of the Russian Federation determines the special order of financial support and state support for the tasks they implement. In accordance with Article 8 of the Law on Science City, the assignment of the status of a science city to a municipal entity is the basis for providing inter-budget transfers from the federal budget to the budgets of science cities in accordance with the procedure determined by the Government of the Russian Federation. At the same time, these inter-budget transfers are not taken into account when distributing inter-budget transfers from the federal budget and the budgets of the constituent entities of the Russian Federation.

This provision of the law has undergone a number of changes in the process of its implementation. The form of the inter-budget transfer has repeatedly changed (subvention, subsidy, other inter-budget transfer). The latest changes in the rules for granting subsidies to science cities occurred in 2019 in connection with the adoption of the state program of the Russian Federation "Scientific and Technological Development of the Russian Federation". The Rules define the goals, conditions and procedure for the provision and distribution of subsidies from the federal budget to the budgets of the constituent entities of the Russian Federation, on the territories of which municipalities with the status of a science city of the Russian Federation are located.

The analysis of regional legal acts shows that the subjects of the Russian Federation have different approaches to the issue of establishing conditions for the provision of subsidies to science cities. For example, in the Tambov region, the Procedure for granting subsidies from the budget of the Tambov region to the budget of Michurinsk initially established as one of the conditions for granting subsidies "the availability in the budget of Michurinsk of budgetary allocations for the fulfillment of expenditure obligations, for which a subsidy is provided, in the amount of at least 0.1% of the subsidy amount", subsequently the amount of co-financing was not established .

Other subjects of the Russian Federation do not provide for mandatory co-financing of municipalities with state support of the science city. For example, the Procedure for granting subsidies from the regional budget to the municipal formation of the city of Biysk does not contain such a condition for granting subsidies. At the same time, the structure of expenditures of the budget of the city of Biysk for 2022 provides for the costs of "implementing measures to implement the strategy of socio-economic development of the city of Biysk –

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the science city of the Russian Federation, contributing to the development of the scientific and industrial complex, as well as the preservation and development of infrastructure", which can be considered the fulfillment of the conditions for co-financing.

Due to this financial support, an action plan for the implementation of the socio-economic development strategy is being implemented in science cities, since the coincidence of the territory of the science city and the municipality determines the direction of state support for a specific scientific and industrial complex and to support the development of the municipality as a whole.

The sources of financing for the development of Russian science cities are the federal budget, the budget of the constituent entity of the Russian Federation on whose territory the science city is located and, in fact, the budget of the science city, as well as extra-budgetary funds.

Since the advent of science cities and until 2008, there has been a tendency to increase financial support, and 2008 was also the peak of financial payments to science cities, the amount of which amounted to more than 1.5 billion rubles. In recent years, there has been a negative trend of a sharp reduction in the volume of state support for science cities: in 2019, the amount of payments for science cities amounted to 382 million rubles, in 2020 - 375 million rubles, with this trend continuing until 2022. For example, in 2021, compared to the level of 2008, the total volume of inter-budgetary transfers financed from the federal budget was reduced by 75% [29, p. 23].

Considering in general the financial support to science cities allocated from the federal budget over the past 17 years (2005-2022), it should be noted that the effectiveness of inter-budget transfers allocated to science cities was not very high, since the funds allocated were mainly directed to support issues of local importance of the city district as a whole, without taking into account the scientific potential of the municipality [28, p. 15]. This is evidenced by both the reports of the science cities themselves and the results of inspections of science cities by the Accounting Chamber of the Russian Federation .

The amount of inter-budget transfers for each science city is determined by the current financing mechanism based on the number of permanent population. At the same time, the main problem of science cities is the insufficient distribution of subsidies for the implementation of measures to implement socio-economic development strategies [29, p. 24].

Every year, a list is developed for the development of social, economic, engineering and innovation infrastructures. The funding comes from funds from the federal budget, within the established limit for the current fiscal year. In the Federal Law of December 6 , 2021 No. 390-FZ "On the Federal Budget for 2022 and the planning period of 2023 and 2024" provides subsidies for the implementation of measures for the implementation of strategies for the socio-economic development of science cities of the Russian Federation, contributing to the development of the scientific and industrial complex of science cities of the Russian Federation, as well as the preservation and development of the infrastructure of science cities of the Russian Federation (inter-budget transfers) in the amount of 344 087.2 thousand. rubles annually .

The socio-economic development of science cities is mainly aimed at supporting the life support of urban districts. In 2020, the distribution of the total volume of inter-budget transfers was carried out as follows: innovation structure - 3%; social infrastructure - 54%; engineering infrastructure - 43%. These proportions of the distribution of inter-budgetary transfers do not seem to give dynamic development to the scientific, technical, innovative and human potential of science cities [30, pp. 287-289].

For the development of innovation infrastructure, it is necessary to strengthen the targeted orientation of state financial support by establishing a fixed share of federal funds allocated for the development and support of innovation infrastructure.

Financial support of innovations plays an important role in the development of science cities. The percentage of internal research and development costs in most of Russia is very small and amounts to no more than 0.45%. The analysis of the financial support of innovations clearly shows a noticeable problem of internal financing of the

regions in which the science cities are located. The science cities of the Russian Federation are not able in modern conditions to fully realize their role in the development of high-tech production in the country and the formation of an innovative economy. This is due to the failure to fully use their scientific, technical, educational and cultural potential, the narrowing of the powers of local authorities, insufficient and inefficient funding from the federal budget [29, p. 26].

Investments in fixed assets are of great importance for the innovative development of science cities. The source for investments are assets of enterprises, patents for manufactured goods, product brands, shares of enterprises. For example, the costs of investments in fixed assets and fixed assets are: 2,617,731 thousand rubles. - in Korolev; 1,313,539 thousand rubles. - in Biysk; 299,233 thousand rubles. - in Chernogolovka; 156,123 thousand rubles. - in Pushchino.

The costs of investments in fixed assets and fixed assets are necessary for the production of high-tech industrial products. Science cities hold events aimed at creating conditions for investment attractiveness and competitiveness of the city's economy.

In each science city, general events are held aimed at creating conditions for the development of an investment-attractive and competitive economy of the city and comprehensive measures to implement the Strategy of socio-economic development of the city [31, p. 21]. The financial component of science cities is different: for example, the volume of budget funds of Biysk is 5,563,77,78 thousand rubles, extra-budgetary - 3,929,001.98 thousand rubles; Dubna - 97,758,896.56 thousand rubles and 0 rubles; budget funds of Michurinsk are 361,285,66 thousand rubles, and extra-budgetary - 544,361. 50 thousand rubles. [29, p. 29]. There is no definite trend, science cities receive different amounts of budgetary and extra-budgetary funds.

State support for science cities has manifested itself in a new way in national projects and programs. Thus, the federal project "Support of Science cities" was adopted as a means of achieving the goal 4.1.4.2. "Infrastructural support for technological development" within the section "A set of measures aimed at achieving the indicators "Ensuring the growth rate of the country's gross domestic product above the global average while maintaining macroeconomic stability" and "Ensuring the rate of sustainable growth of household incomes and the level of pension provision not lower than inflation"" A unified plan to achieve the national development goals of the Russian Federation for the period until 2024 and the planned period until 2030 .

In addition to the annual inter-budget transfers allocated from the federal budget, the science city can receive additional payments. Payments are directed to the implementation of innovative projects, the purpose of which is to create and develop the production of high-tech industrial products and (or) innovative goods and services in accordance with the priority directions of the development of science, technology and technology of the Russian Federation and distributed according to the results of competitive selection. Each science city submits its own event for competitive selection and as a result, according to the number of points scored, 3 candidates are selected to receive subsidies from the federal budget, which does not have a fixed rate.

The funding model of science cities has several disadvantages. The regulatory framework has blurred the concept of science cities as territories focused on obtaining scientific knowledge and their implementation as new technologies. The current legislation prohibits municipalities from directing federal budget funds to support innovative projects.

**6. Conclusions and suggestions**

1. The legal status of a science city in the Russian Federation has a dual nature: on the one hand, a science city is a municipal entity with the status of an urban district; on the other hand, it is a territory within which there is a scientific and production complex. At the same time, these two sides of the legal status of a science city in the Russian Federation are poorly interconnected at the level of regulatory regulation. It seems that a science city as a territory with a scientific and industrial complex obviously has a different legal nature than a science city - an urban district, as a territory within which the population and (or) local self-government bodies resolve issues of local importance.

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2. The analysis of individual issues of the organization and implementation of local self-government in science cities indicates the inconsistency and inconsistency of its legal regulation. The indication of a single type of municipality in relation to science towns, taking into account the reform of local self-government in the system of public authority, seems outdated and hinders the development of science towns.

Prompt improvement of legislation on the legal, organizational, economic and social foundations of science cities and the specifics of the implementation of local self-government in them is required. In this regard, it seems important to determine at the level of federal authorities the need for further consolidation of the status of municipalities or other legal status of the territory of the science city, which includes high-tech enterprises with a significant concentration of human and material scientific and technical resources, the use of which is aimed at the implementation of science and state scientific and technical policy.

If the link "science city – municipality" is recognized as necessary and fundamental, then taking into account the provision of Article 12 of the Constitution of the Russian Federation that local self-government bodies are not included in the system of state authorities, and the provisions of Part 3 of Article 132 that local self-government bodies and state authorities are part of a unified system of public authority in the Russian Federation and interact for the most effective solution of tasks in the interests of the population living in the relevant territory, it is necessary to establish the legal features of the implementation of local self-government in science towns and the basic principles of interaction of local self-government of science towns with public authorities. how to address issues of local importance in the interests of the population, living on the territory of the science city, as well as the forms and procedure of participation of local self-government bodies in cooperation with state authorities in the implementation of powers in the field of science and state scientific and technical policy on the territory of the science city, with the transfer of necessary and sufficient financial and material resources for the development of its scientific and production complex, the creation of conditions ensuring a decent life and free development of citizens living and working in the science city.

3. Currently, the financing of measures for the development and support of the social, engineering and innovation infrastructure of science cities from the federal budget is carried out by providing inter-budget transfers to the budgets of the subjects of the Russian Federation to transfer them to the budgets of municipalities with the status of a science city.

The form of the inter-budget transfer has repeatedly changed (subvention, subsidy, other inter-budget transfer).

The currently used form of financial support in the form of a subsidy involves co-financing not only from the regional, but also from the local budget.

In different periods, the funds allocated to science towns were provided without taking into account the scientific potential of the municipality, in connection with which it should be recognized expedient to clarify the allocation of subsidies to science towns exclusively for the development of scientific potential, which does not deprive science towns of the right to apply for other inter-budgetary transfers that can be directed to general issues of local importance.

Using economic methods, the state can help ensure that the highly developed scientific and industrial complex of science cities is preserved and oriented to solving strategic scientific, technological and production tasks not only of the regions and municipalities where it is located, but also of the country as a whole. The fulfillment of these tasks is especially important in the light of the preparation and implementation of the strategy of innovative development of the Russian Federation for the period up to 2030.

## *REFERENCES*

1. Gorodov O.A. Legal support of innovation activity as a condition for the modernization of the Russian economy. *Entrepreneurial Law*, 2012. no. 2, pp. 10–15. (In Russ.).

2. Gokhberg L.M., Kuz'minov Ya.I., Sabel'nikova M.A., Shadrin A.E. (eds.). *Indicators of innovation activity: 2019*, Statistical Collection. Moscow, HSE Publ., 2019. 376 p. DOI: 10.17323/978-5-7598-1945-5. (In Russ.).

3. Glisin F.F., Razin V.L., Khabarova T.V. Science cities in the modern economy of Russia. *Innovation*, 2011, no. 2 (148), pp. 71–76. (In Russ.).

4. Report "On the state of state policy on science cities and directions of its development". *State power and local self-government*, 2006, no. 7, pp. 17–26. (In Russ.).

5. Akzhigitov T. R., Cherevatkina D.Y., Komov V.E. The role of science cities in the modern economy of the Russian Federation. *Bulletin of the Tula branch of the Financial University*, 2020, no. 1, pp. 106–108. (In Russ.).

6. Gritsenko E. V. Science cities of Russia as innovative territories: evolution of legal status. *Municipal property: economics, law, management*, 2022, no. 3, pp. 3–7. DOI 10.18572/2072-4314-2022-3-3-7. (In Russ.).

7. Danilova S.N., Petrov A.M., Teislina O.G. State regulation of the development of territories with a special status.*Bulletin of the Saratov State Socio-Economic University*, 2018, № 4 (73), pp. 75–79. (In Russ.).

8. Kozhevnikov O.A. Legal regulation of science cities in Russia: the current state and possible prospects. *Municipal property: economics, law, management*, 2022, no. 3, pp. 11–13. DOI: 10.18572/2072-4314-2022-3-11-13. (In Russ.).

9. Kutafin O.E., Fadeev V.I. *Municipal law of the Russian Federation*, textbook, 3rd ed. Moscow, Prospekt Publ., 2013. 669 p. (In Russ.).

10. Dokuchaev A.Yu. Legislation on science cities of the Russian Federation: content, ways of improvement. *Russian Law Journal*, 2010, no. 3 (72), pp. 144–152. (In Russ.).

11. Tatsuno Sh. *Strategy – technopolises*. Moscow, Progress Publ., 1989. 344 p. (In Russ.).

12. Safronova E.S. Domestic and foreign models of the development of science cities. *Issues of regional economy*, 2020, no. 3 (44), pp. 96–102. (In Russ.).

13. Raksha S.Y., Sidorova V.V. A review of international experience in the formation and development of technoparks and technopolises. *Stroitel'stvo i tekhnogennaya bezopasnost' = Construction and industrial safety*, 2017, no. 6 (58), pp. 30–34. (In Russ.).

14. Cooke P. *Knowledge Economies: Clusters, Learning and Cooperative Advantage*. London, Routledge Publ., 2002. 240 p.

15. Martsinkevich V.I. (ed.). *Socio-economic efficiency: the US experience. System of self-development*, Monograph. Moscow, Nauka Publ., 2000. 301 p. (In Russ.).

16. An E.A. Whether foreign experience is necessary to the Russian integration formations of a science of education and production?. *Evraziiskaya integratsiya: ekonomika, pravo, politika = Eurasian Integration: economics, law, politics*, 2012, no. 12, pp. 53-62. (In Russ.).

17. Hassink R., Berg S.-H. Regional Innovation Support Systems and Technopoles, in: D.S. Oh, F.Y. Phillips (eds). *Technopolis: Best Practices for Science & Technology Cities*, London, Springer, 2014, pp. 43–65.

18. Patsula A.V., Kolesnikova E.D. Genesis of success and growth of science cities: international experience, in: *Man in the XXI century*, Materials of the XI International Scientific and Practical Conference, Obninsk, May 15, 2020. Obninsk, All-Russian Research Institute of Hydrometeorological Information – World Data Center Publ., 2020, pp. 9–20. (In Russ.).

19. Kalinin V.V. Some issues of legislative regulation of local self-government in science towns through the prism of Russian constitutionalism. *Bulletin of the O.E. Kutafin University (MGUA)*, 2022, no. 6 (94), pp. 138–150. DOI 10.17803/2311-5998.2022.94.6.138-150. (In Russ.).

20. Balytnikov V.V., Grishkovets A.A., Sergeev A.A., Chertkov A. N., Shtukin V. V. Announcement of the annual report of the Center for Research on Problems of Territorial Administration and Self-government for 2021. *Bulletin of the Moscow State Regional University. Series: Jurisprudence*, 2021, no. 4, pp. 123–127. DOI: 10.18384/2310-6794-2021-4-123-127. (In Russ.).

21. Agirrechu A.A. *Science cities of Russia: the history of formation and development*, Monograph, Moscow, Lomonosov Moscow State University (Publishing House (Printing House), 2009. 192 p. (In Russ.).

22. Lipset S.M. *The First New Nation: The United States in Historical and Comparative Perspective*. New York, Basic Books, 1963. xviii + 366 p.

23. Belov M.D. Science cities of the Russian Federation: features of the organization of local self-government and topical issues of land and property complex management. *Municipal property: economics, law, management*, 2021, no. 4, pp. 32–36. DOI: 10.18572/2072-4314-2021-4-32-36. (In Russ.).

24. Mardanshina E.A. Legal status of subjects of innovative infrastructure. *Bulletin of the Udmurt University. Economics and Law Series*, 2012, no. 3, pp. 133–139. (In Russ.).

25. Prokhorova V.V., Somov M.N., Muradyan V.M. The concept of the formation of a science city on the territory of the Krasnodar Territory, in: *Tools and mechanisms for the formation of competitiveness and sustainability of economic systems*, materials of the International Scientific and Practical Conference, Krasnodar, July 01, 2022, Krasnodar, Krasnodar Central Research Institute - branch of the Federal State Budgetary Institution "REA" of the Ministry of Energy of Russia, 2022, pp. 159–164. (In Russ.).

26. Kondratenkova T.I., Petrova E.A. Problems and possible solutions to digital transformation through the prism of the status of a science city on the example of the first science city of the Russian Federation – the city of Obninsk. *Russian Economic Online Journal*, 2022, no. 2, available at: https://www.e-rej.ru/upload/iblock/866/866c45a48b0daa988cb9703c8d21e0c8.pdf. (In Russ.).

27. Perrin J. C. A deconcentrated technology policy – lessons from the Sophia-Antipolis experience. *Environment and Planning C.: Government and Policy*, 1988, vol. 6, no. 4, pp. 415–425.

28. Russel M.J., Moss D.J. Science parks ana economic development. *Interdisciplinary Science Reviews*, 1989, vol. 14, no. 1, pp. 54–63.

29. Chertkov A.N. Search for optimal approaches to the delimitation of powers between regional and municipal levels of power, in: Balytnikov V.V. (ed.). *Unity of Public power in modern society*, Collection of works of the Center for Research of Problems of Territorial Administration and Self-Government. Moscow, Moscow Region State University Publ., 2020. pp. 19–24. (In Russ.).

30. Mironova S.M. Financial and legal status of science cities and features of its implementation. *Financial Law*, 2021, no. 7, pp. 11–17. DOI: 10.18572/1813-1220-2021-7-11-17. (In Russ.)

31. Trebushkova I.E. Geographical analysis of state policy in relation to Russian science cities. *Scientific notes of the V.I. Vernadsky Crimean Federal University. Geography. Geology*, 2022, vol. 8, no. 1, pp. 20–35. (In Russ.).

32. Strazd A., Trebushkova E. Geographical analysis of the current state of the scientific potential of science cities, in: *XXIII All-Russian Student Scientific and Practical Conference of Nizhnevartovsk State University, Nizhnevartovsk, 06-07 April 2021*, Nizhnevartovsk, Nizhnevartovsk State University Publ., 2021, pp. 285–289. (In Russ.).

33. Mil'kina I.V. Development of science cities as territories of innovative development, in: *Rossiya: Tendentsii i perspektivy razvitiya*, annual, iss. 6, pt. 2, Moscow, Institute of Scientific Information for Social Sciences of the Russian Academy of Sciences Publ., 2011, pp. 488–494. (In Russ.).

34. Kirillova S.S., Rodyukova A.S. Stimulating innovation activity at the municipal level. *Science and Education*, 2019, vol. 2, no. 3, available at: http://opusmgau.ru/index.php/see/article/view/1099/1098. (In Russ.).

## INFORMATION ABOUT AUTHORS

***Irina V. Glazunova*** – PhD in Law, Associate Professor; Associate Professor, Department of State and Municipal Law
*Dostoevsky Omsk State University*
55a, Mira pr., Omsk, 644077, Russia
E-mail:irine.glazunovoi@yandex.ru
RSCI SPIN-code: 9844-8842; AuthorID: 297941

***Oleg A. Kozhevnikov*** – Doctor of Law, Professor;
[1] Professor, Department of Constitutional Law;
[2] Professor, Department of Constitutional and International Law
[1] *Ural State Law University*
[2] *Ural State University of Economics*
[1] 21, Komsomol'skaya ul., Yekaterinburg, 620137, Russia
[2] 62/45, 8 Marta / Narodnoi Voli ul., Yekaterinburg, 620144, Russia

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E-mail: jktu1976@yandex.ru
ORCID: 0000-0003-1371-7249
RSCI SPIN-code: 1494-4895; AuthorID: 346061

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