UDK 332.1

JEL Classification: O18

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### INCREASING THE EFFICIENCY OF STATE REGULATION OF INNOVATIVE ACTIVITIES AT THE REGIONAL LEVEL

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The article examines the issues of state regulation of innovative activities at the regional level and proposes measures to increase the efficiency of regulation. The research analyzes the current state of innovative activities in regions and identifies factors hindering its development, including weak regulatory framework, insufficient support from regional authorities, and limited public-private partnership. To address these challenges, the authors propose a set of recommendations that include improving the legislative base to ensure more favorable policies, strengthening the role of regional authorities in stimulating innovation, and developing mechanisms for public-private partnerships. They also emphasize the importance of promoting an innovative culture and education and creating favorable conditions for small and medium-sized businesses. The proposed measures aim to promote the integration of innovative processes into the economic and social life of regions, which will contribute to the sustainable development of the country as a whole. The article concludes that the success of these recommendations depends on the active participation of all stakeholders, including the government, businesses, scientific community, and civil society. Working together, they can create an ecosystem that fosters innovation and supports its development in regions.

**Keywords:** state regulation, innovation subsystems, innovative development, region, innovation networks, potential.

**DOI:** 10.32434/2415-3974-2022-17-1-88-97

# Introduction and problem statement in general and its connection with important scientific or practical tasks

The relevance of the research topic is due to the fact that in modern political conditions, Ukraine's position in global innovation processes is not yet adequate to the country's intellectual and educational potential. The conservation of the situation is dangerous for the loss of prospects for national competitiveness in global markets of scientific products, irreversible lag behind leading world powers in post-industrial technologies. Building an innovative economy in Ukraine is an important socio-economic task. Currently, due to the difficult political situation in most regions and municipalities of Ukraine, there is a trend towards a slowdown in socio-economic

development, which is associated with outdated technologies and equipment in industry and housing and communal services, lack of necessary funds for technical and technological re-equipment of production. As a result, regions lose their competitive advantages, the volume of investments decreases, and local government bodies cannot provide a high standard of living for the population. State and regional policies remain fragmented, lacking systemic solutions that would enable the restructuring of the economy and endow it with innovative qualities. The need to develop directions for increasing the efficiency of state regulation of innovation activity at the regional level determines the relevance of the conducted research.

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# Analysis of recent research and publications that initiated the solution to this problem and on which the author relies

The works of O.O. Yevseyeva, Yu.A. Tsypkin, and others [3] are dedicated to the problems of increasing the efficiency of state regulation of innovative activities. However, the results of these authors' research no longer fully correspond to modern realities and therefore require reassessment in the conditions of production and society's dynamism. Regarding the new conditions, it is necessary to review the theoretical and institutional foundations of state regulation of innovative activities in the region, and to fully disclose the significance of tools to enhance its effectiveness.

The identified article focuses on previously unresolved parts of the general problem. In regards to new political and economic realities, it is necessary to review the institutional foundations of state regulation of innovative activities at the regional level and to fully disclose the significance of tools to enhance its effectiveness.

### Formulation of the article's objectives (task statement)

The aim of the article is to identify and justify practical recommendations for enhancing the effectiveness of state regulation of innovation activity at the regional level in Ukraine. To achieve this, we have set two tasks:

- a) to identify the priority areas of state regulation of innovation activity in the region;
- b) to develop and justify measures aimed at creating infrastructure for sustainable innovation development in the Kharkiv region.

### Presentation of the main research material with a full justification of the obtained scientific results

Innovation subsystems of the regional economy play an important role in regional and intra-regional socio-economic development. The innovation system of the region as a set of interacting elements that provide the innovation process, innovative development, and develop according to certain regularities in time and space to solve the problem of activating the innovation process, forming the necessary objective and subjective prerequisites for enhancing the effectiveness of innovation activity in the region's enterprises that are characterized by a certain structure, requires a dynamic vector of sustainable development. This is facilitated by effective state regulation of innovation activity in the region of Ukraine.

Foreign experience in shaping and developing national innovation systems indicates that the state, in implementing its innovation policy, provides a framework for the development of innovative businesses; develops a strategy for innovative economic development; forecasts scientific and technological development; develops innovation infrastructure; creates mechanisms for stimulating and motivating innovation activity; ensures priority development of fundamental science; and uses national innovation systems as one of the main tools for regional development [4].

Numerous researchers of national innovation systems note that innovation systems in different countries generally correspond to the level of development of productive forces and the system of socio-economic relations formed in those countries. Based on this basic premise, we have come to the conclusion that national innovation systems for each individual country, and within it, for each individual region, should be formed individually.

Innovative subsystems of the economy of regions are adaptive systems, that is, they have the ability to adapt to constantly changing conditions of functioning. With changes in external conditions, innovation subsystems of the economy of regions change the forms and methods of their activity.

The open socio-economic subsystem of the regional innovation system is characterized by primary fundamental properties: non-additivity, emergentism, synergism, multiplicativity, integrity, level of isolation, centralization, compatibility, and feedback.

As a type of economic system, the innovative subsystems of regional economies are considered cybernetic, meaning they are controlled systems. It is known that the efficiency of any system is determined by the degree of rational interaction of all its component elements. Therefore, it is natural that in order to successfully operate the objectively existing systems of innovative subsystems of regional economies, certain actions are necessary aimed at their formation, organization of the process of their functioning, and development.

The peculiarity of managing innovative systems of regional economies is that they represent a so-called "innovative network". It is known that in order for companies to successfully withstand innovation competition, they have to concentrate their resources and focus on those areas of knowledge and production in which they are leaders. At the same time, they must get rid of those competencies in which they lag behind, in order to transfer them to more specialized competitors.

The process of developing and implementing innovations, creating and practically implementing new knowledge, which is accelerating more and

more, creates difficulties in implementing these processes directly in companies and becomes a significant obstacle to the systematic advancement of enterprises in the field of innovation processes.

For companies, it becomes increasingly difficult to maintain research and development, as well as their transformative capacity in various and often unrelated production areas. All of this indicates that more specialized companies, enterprises, and organizations have all the necessary prerequisites for a significant activation of the innovation process, development, and implementation of innovations, compared to less specialized companies and enterprises.

Meanwhile, the most specialized enterprises are becoming increasingly dependent on the additional knowledge of other companies. The situation arises where individual companies or their groups become unable to develop and implement innovative solutions in isolation from one another. Such enterprises and organizations should systematically establish and develop partner "innovative" relationships with various stakeholders, including customers, suppliers, universities, technology institutes, and others. Thus, it can be concluded that in the conditions of an innovative economy, innovation becomes increasingly a collective matter, which is reflected in the formation of so-called innovation networks.

In scientific literature, models of innovative relationships and the interaction of their subjects are often represented quite simplistically: the developer of innovation is a business subject. However, as the results of a number of studies show, such ideas are highly simplified models that are inadequate to the modern realities of innovation processes.

Modern innovative relationships, in the conditions of an innovative economy, are not only institutionalized but also have their highly developed infrastructure - innovation networks. Such relationships, from individual disparate innovation agreements, are moving towards organized and coordinated actions, uniting in innovation networks. Innovation networks in recent years have increasingly become an effective tool for activating innovation processes and increasing the effectiveness of innovative activities of enterprises.

Innovative networks are manifested in the formation of relationships and interdependence between scientific, research, project organizations, higher educational institutions and their research units, innovative intermediary firms, enterprises working in innovative business, and enterprises-consumers of innovations vertically and horizontally

at different hierarchical levels: national, regional, municipal, economic, and intra-economic levels.

The development of innovative networks ensures the systematic implementation of innovative relations among all participants included in the composition of innovative networks.

The main elements of innovative networks are: innovative infrastructure; a network of educational and scientific organizations; a system of financial support; subjects and objects of entrepreneurial activity; organizations and enterprises; a competitive business environment, etc. In turn, innovative networks are elements of the market that produce innovation goods oriented towards consumer demand by entrepreneurial and other structures.

Scientific generalizations allow formulating and disclosing the main regularities and peculiarities of the development of innovation networks in relation to the socio-economic conditions of Ukraine [5]. The following can be considered as the main ones.

The first regularity is that the level of development of innovation networks increases where the degree of state intervention in innovation processes increases, where the state is a consumer of innovations, or is a supplier of them; where the state performs various controlling and distributive functions in the field of innovation activities.

The second regularity is that higher rates and scales of innovation dissemination in the economy occur at the national and regional levels of state power.

The third regularity is the institutionalization of innovation networks, which is manifested in the creation of so-called support structures at the state and regional levels of government. This often manifests itself in the creation of units at each government agency that oversee issues of innovation development.

The fourth law states that the innovative attractiveness and level of development of innovative networks sharply increases in areas where it is not institutionalized: innovative and venture business, academic science, certain types of small and mediumsized businesses, small private medical practices, a number of enterprises and organizations in the social sphere, consulting businesses, and others.

The fifth law states that innovative networks tend to have a mechanism of self-reproduction and expansion of scales.

The sixth law states that innovative networks have gained the widest distribution in monopolized sectors of the economy, primarily in the extractive sectors of natural monopolies, mining and raw materials industries, financial sector (banking) and

insurance activities.

The seventh law states that the most widespread distribution of innovative networks (innovative potential) is in regions with high innovation and investment attractiveness, i.e. regions with the highest economic potential, where this potential is concentrated in a limited number of economic entities. Such regions with high corruption attractiveness include primarily large cities, transport hubs, coastal cities, ports, and others.

All the above mentioned features of forming and developing innovative subsystems of regional economies have determined the peculiarities of applying mechanisms, tools, and methods of regulatory influence by state and regional management bodies on the processes of forming and developing innovative subsystems of regional economies.

Forming and developing innovative subsystems of regional economies is one of the main and fundamental issues. The effectiveness of the created innovative subsystems of regional economies largely depends on the success and efficiency of socioeconomic development of the territories.

Forming innovative subsystems of regional economies requires serious scientific development and substantiation. As a rule, this process involves solving the following two main tasks:

- a) clarification of the objectives of forming innovative subsystems of regional economies;
- b) justification of a rational scheme and mechanisms for their effective functioning.

The most fundamental features of the innovation subsystems of the regional economy are in the creation of objective conditions for activating innovation processes and increasing the efficiency of innovative activities of regional enterprises in order to meet the daily demands of the population and improve the level and quality of people's lives.

Solving the problem of specifying the goals of forming innovative subsystems of the regional economy, despite its apparent simplicity, is a rather complex task, and strategic planning can be a tool for solving it. In the strategy of socio-economic development of the region in the current conditions of transition to an innovative economy and modernization of the national economy of Ukraine, an important place should be given to the strategy of developing innovative subsystems of the economy. Such a strategy should find its reflection and presentation in concepts that represent a system of views and ideas about the strategic goals and priorities of innovative development, its objectives, and tools for achieving them.

The formation and development of innovative subsystems of the regional economy should become one of the main directions of socio-economic and, in particular, innovative policies of the state and local government bodies.

The innovative strategy of the region should cover all key directions and areas of management activities of the regions based on activation and improvement of the effectiveness of innovation processes.

The main directions of management activities to increase innovation activity and effectiveness in regions should primarily include:

- creating favorable conditions and factors for the systematic implementation of innovations in all structures and enterprises in the region;
- developing mechanisms for resource support of innovative activities, including mechanisms for creating venture financing funds;
- ensuring social partnership and responsibility,
   business cooperation of representatives of the scientific community, enterprises of various industries, business, and regional administration in solving the problem of innovative development of all spheres of the socio-economic complex of the region;
- formation of an effective organizational and economic mechanism for motivating and stimulating innovation promotion;
- creation of a favorable socio-psychological climate for innovation activity of enterprises and organizations in the region;
- formation of a favorable environment for innovation activity, attractive for investment in the scientific and production sectors of the economy;
- development of a regulatory framework for innovation activity;
- financing of scientific research and design works for the creation and implementation of new or improved products within the framework of regional target programs;
- provision of grants for financing the creation of objects of intellectual property and implementation of the results of scientific research in production;
- promotion of the placement of state orders for the procurement of products created as a result of innovation activity.

The main goal of the innovation development strategy for regional economies is to identify fundamental, strategic principles and directions for the functioning and development of the innovation subsystem of territorial formations, taking into account specific priorities such as improving conditions and raising the living standards of the population in the region based on increasing the innovative activity of regional businesses.

The development of the innovation development strategy for regional economies in the medium and long term should be based on the concept of socio-economic development of the region, which covers all the main issues related to the socio-economic aspects of effective functioning of regions [6, 8].

The main principles of the development and implementation of the innovation development strategy for the regional and municipal levels include comprehensiveness, systematicity, multivariate, alternativeness, application of different methods, comparability of indicators, stagedness, and others.

The generalization of experience in developing innovation development strategies in regions and municipalities in our country and abroad suggests that the central link in this process is, first of all, addressing the following issues:

- justification and clarification of goals, tasks, scenarios, principles, and parameters of innovation development;
- consideration of objective trends and problems in innovation development;
- analysis of conditions and factors determining the level of innovation activity and effectiveness of innovation activity of enterprises in the region;
- identification of features and prospects for the functioning of regional intra-regional innovation subsystems of the economy;
- improvement of models, forms, and methods of innovation management in regions and municipalities;
- determination of directions and mechanisms for implementing innovation policy in conjunction with other directions of socio-economic policy of regions and municipalities;
- formation of measures to activate innovation activity of enterprises in the regions, support and stimulation of innovative entrepreneurial activity, and others.

Strategies for the innovation development of regional economies should be developed based on a systematic approach, starting with an analysis of the formed level of innovation in economic, organizational, social, technical, technological development, and potentially available opportunities of territorial formations — natural, production-economic, scientific-technical, investment, financial, labor potential, market conditions, demographic situation, state of the economy, and social sphere.

During our research, we proposed and justified a typology of strategies for innovative development of regional economies.

The strategy for innovative development, with the main goal of forming an effective innovation subsystem of the regional economy, is implemented through various tools, such as comprehensive targeted innovation programs, projects, and innovative initiatives.

Our research has shown the need to use a system of criteria (both general and specific) for the comprehensive evaluation of the effectiveness of the development and implementation of innovation subsystems in regional economies.

A general criterion for evaluating the effectiveness of innovation subsystems in regional economies should be the maximization of the task of activating the innovative activities of enterprises and organizations within the region, with the aim of further increasing the level and quality of life for the population with given resources or optimal expenditures. This criterion for effectiveness allows for a generalized expression of the level of development of the innovation subsystem of the regional economy and the measurement of its functioning results.

Private criteria used to evaluate the effectiveness of the innovation subsystem of regional economies should reflect the assessment of the performance of the main measures contained in the innovation development strategy. These private criteria include:

- functional efficiency criterion characterizes to what extent specific goals and main tasks (technical, technological, organizational, social, environmental, etc.) defined in the innovation development strategy have been achieved;
- economic efficiency criterion characterizes
   the relationship between the results obtained from
   the implementation of the innovation strategy
   measures and the costs incurred;
- socio-economic efficiency criterion determines to what extent the measures of the innovation strategy affect the conditions, organization, and nature of work of people, and whether their results satisfy material and spiritual needs:
- criterion of social-psychological effectiveness characterizes the influence of the results of implementing innovative development strategies on the formation of a positive social-psychological climate, achieving the loyalty and satisfaction of the population with the activities of local government bodies:
- criterion of ecological effectiveness reflects
   the degree of direct impact of the results of the innovative strategy on the state of the surrounding

natural environment, the degree of its reproduction, rational use, and preservation;

- criterion of innovative effectiveness - characterizes the degree of use of the latest achievements of advanced science and practice in the process of implementing the innovative strategy.

The practical significance of the proposed system of criteria for evaluating the effectiveness of innovation development strategies lies in the possibility of their direct use in assessing and substantiating the effectiveness of both innovation development strategies as a whole at various hierarchical levels and objects of the region, as well as in evaluating the feasibility and effectiveness of individual innovation decisions made.

However, it should be noted that the discussed criteria for the effectiveness of innovative subsystems of regional economies are in a certain contradiction, which must be taken into account in the process of evaluating their effectiveness.

Since the criterion for the effectiveness of innovative subsystems of regional economies provides a generalized formulation of the ultimate goal of their functioning, it is practically the only one for all hierarchical levels of the economy of the regions. However, evaluating the effectiveness of innovative subsystems of regional economies with a single synthetic criterion is extremely difficult, as this subsystem itself is a multi-component concept. For these purposes, a system of appropriate indicators is needed that reflect the various aspects of the effectiveness of innovative subsystems of regional economies.

When justifying the indicators for the comprehensive evaluation of the effectiveness of innovative subsystems of regional economies, we relied primarily on the fact that their use should ensure:

- the correlation of the criterion with the entire set of indicators; achieving correlation between overall and specific performance indicators;
- display of the main characteristics of the functioning subsystem results;
- comparability and comprehensive evaluation of the effectiveness of innovative subsystems of the economy of regions at different hierarchical levels (republic, region, district, municipal entity, enterprise);
- identification of the most rational options for developing scientifically substantiated innovative measures;
- identification and evaluation of the impact of implementing a complex of innovative measures on improving the efficiency of functioning and

development of the economy of regions.

Since the overwhelming majority of performance indicators are determined either by the sum of the effect or its ratio to costs, the question of which indicators characterizing the effect and costs should be the basis for evaluation and determining the possibilities of using such indicators to solve the task becomes crucial. The solution to this problem should be carried out individually in each separate case using a well-known system of indicators widely used in the process of evaluating the effectiveness of public production (gross, final, commodity, net production, profit; indicators characterizing the degree of use of labor, material, financial and land resources, etc.).

Speaking about indicators for evaluating the effectiveness of innovative subsystems in regional economies, it should be noted that their use is a complex and multifaceted process that cannot be limited to only the mentioned indicators. Therefore, in order to improve the assessment of the effectiveness of innovative subsystems in regional economies, it is necessary to use wider range of indicators that have not yet found reflection in planning and statistical reporting practices.

During the conducted research, we identified trends and revealed peculiarities of state regulation of innovative activities in the Kharkiv region, identified priority directions of state regulation of innovative activities in the region, and substantiated measures aimed at forming an infrastructure for sustainable innovative development of the Kharkiv region.

Effective implementation of the region's innovation policy promotes the development of mass innovation processes (innovative enterprises and innovative products and technologies), and attracts strategic investors. However, the position of many enterprises in the Kharkiv region is expressed by the "transfer" strategy, which involves the use of foreign scientific and technical potential and the transfer of innovations to the region's economy. The innovative output of production is still quite low, and there are enough reasons for this: infrastructure suffers, enterprises are not ready for innovative development, relying on state support and subsidies, maintaining remnants of the planned economic regime, lack of resource material base, developed design bureaus, small innovative structures, etc. However, the region has a good foundation for stable economic and innovative development, serious analysis of the real possibilities of the Kharkiv region, and a comprehensive approach to their activation and development [7].

Scientific justification of the priority directions of innovation and scientific and technical activities contributes to the effective and optimal use of the region's limited resources.

During the research, we identified the following directions for improving the effectiveness of state regulation of innovation activity in the Kharkiv region:

- improving the management of innovation development in the Kharkiv region;
- stimulating existing companies in the Kharkiv region to use innovation;
- creating an effective infrastructure to support innovation;
- increasing the level of innovation culture in the Kharkiv region;
- creating an effective scientific and innovation system (SIS);
- creating an innovative model for the development of the industry in the Kharkiv region, based on the interaction of government bodies, science, and business in the process of forming a scientific system, which is the foundation for the successful modernization of the region's industrial complex;
- restructuring the Kharkiv Chamber of Commerce and Industry and creating an information and consulting department for innovation and modernization, using outsourcing and subcontracting methods in the activities of the Kharkiv Chamber of Commerce and Industry.

First and foremost, it is necessary to encourage existing companies in the region to use innovations.

The objective of this initiative is to promote the active use of innovations in all areas, including technological innovations as well as innovations in management, marketing, finance, and more, by existing companies in the region.

The active use of innovations will enhance their effectiveness and competitiveness, help companies accelerate their growth, explore new markets, create new jobs, and ultimately drive the economic development of the Kharkiv region, increase the tax base, and improve the quality of life.

This initiative has the greatest potential for achieving the innovative goals of the region and can yield results in a relatively short timeframe as it utilizes the resources of existing companies and does not require the creation of new businesses. The Kharkiv region possesses sufficient conditions for the successful implementation of this priority direction.

The main objectives of this direction are:

 providing assistance in ensuring informational support for entities engaged in innovation activities and small businesses regarding the availability of qualified personnel, business partners, opportunities for product promotion, and more;

- supporting the formation of specialized structures in the region that establish connections with businesses;
- providing support for promising innovative projects that are being implemented in the interests of the region.

The objective of the "Creation of an effective infrastructure to support innovation" direction is to create an efficiently functioning infrastructure that promotes the rapid development of innovation activities in the region.

First of all, it is necessary to establish the basis of a comprehensive infrastructure and provide conditions for its self-development. Based on the type of provided infrastructure services, the following interconnected systems can be identified:

- information support system;
- system of program and project expertise;
- financial and economic support system;
- production and technological support system;
- certification system;
- system for promoting scientific products to the market;
- coordination and regulation system for the development of innovative activities in the region.

In this case, the formed infrastructure systems should coordinate their actions in providing services and work as a single mechanism.

The system-forming elements of the regional innovation infrastructure of the region should be state scientific centers, industry institutes, higher education institutions, leading scientific and production enterprises, technology parks, and business incubators. Implementing a new approach to infrastructure support for scientific, technical, and innovative activities will allow research and development organizations to compensate for the lack of many components necessary for successful work and provide opportunities for commercializing their own developments.

The main tasks of this direction include:

- organizing events that promote the development of infrastructure networks (seminars, conferences, exhibitions, etc.);
- promoting the creation and development of innovative infrastructure objects in the Kharkiv region;
- facilitating the development of external relationships between the organizations of the region's innovation infrastructure.

The goal of the direction "Increasing the level

of innovation culture in the Kharkiv region" is to increase the level of innovation culture by maximally utilizing the human potential to implement innovative directions of the concept.

The ability to generate new ideas, objectively make decisions regarding their implementation, and professionally solve assigned tasks is a defining factor for the success of practically achieving the goals of the region. The main objectives of the direction are:

- proposing higher and vocational educational institutions in the region to organize targeted training and retraining of personnel for innovative productions, as well as organizations of innovative infrastructure with internships in industrial enterprises;
- supporting inventive activity, involving students and young professionals in the creative process;
- promoting innovative culture through a system of regional and nationwide contests in scientific-technical and innovative spheres.

If we analyze the statistical data on the development of the Kharkiv region over the last five years, it becomes clear that the region's economy is not showing significant growth rates. This is largely due to underestimating the importance of scientific research activity in the region, which is the main supplier of innovations to production, which naturally affects its national and regional funding, as evidenced by statistics. This especially applies to expenses for the development of technical sciences, without which, in our view, the innovative development of the industrial sector of the Kharkiv region is not possible.

Currently, there are four groups of indicators that describe various aspects of scientific and innovative activity:

- statistical indicators of research and development: research and development expenditure, number of research personnel, etc.;
  - patent statistics;
- bibliometric data on scientific publications and citations;
- technological balance of payments, which characterizes the international transfer of technology, methodological features of analysis, and other issues of application.

Analyzing the statistical data on scientific research activity over the last decade, we can conclude that the innovation activity of the industrial sector of the economy of the Kharkiv region is in a state close to critical. It is necessary to rebuild the process of interaction between science and business, science and regional administration in the areas of

training and employment of qualified personnel, development of technical innovations, and formation of a scheme for financial support of innovative development of the region's industry. The primary and fundamental stage in this process is the development and implementation of an innovation policy in the region, the main task of which should be the creation of an effective scientific and innovation system (SIS). The importance of the SIS is due to its formation as a component of the economic complex of the region, closely integrated with other sectors of the economy of the state entity, and primarily, naturally, with industry.

In the Kharkiv region, it is necessary to establish an effective partnership between science and industry. Currently, this relationship is practically non-existent, as is the scientific and innovative complex. The same trend is observed in the relationships between industrial enterprises. Therefore, we believe that only the implementation of the comprehensive program of innovative industrial development presented will allow the state entity to modernize its economy and make it not only agriculturally developed, but primarily industrial and efficient. The trio of "state - science - business" will form a stable and promising economic situation in the Kharkiv region, which will ultimately increase the region's rating and once again attract domestic and foreign investors to its territory.

After analyzing statistical data on research activities over the past ten years, we can conclude that it is necessary to rebuild the process of interaction between science and business, science and regional administration in the areas of training and employment of qualified personnel, development of technical innovations, and the formation of a scheme of financial support for innovative industrial development of the region. The primary and fundamental stage in this process is the development and implementation of an innovation policy in the region, the main task of which should be the creation of an effective scientific and innovative system. The importance of the scientific and innovative system is determined by its formation as a component of the economic complex of the region, closely integrated with other sectors of the state entity's economy, primarily the industrial sector.

### Conclusions from this research and prospects for further research in this direction

First. The priority tasks and goals of innovative activity in the Kharkiv region are: development of innovative infrastructure; improvement of methods of state support for commercialization of scientific research results and experimental developments;

increasing the number of organizations in the Kharkiv region that use innovations; development of small science-intensive production business; increasing the volume of competitive innovative products produced by organizations in the Kharkiv region; creation of a constantly operating system for monitoring the scientific and technical potential; creation of a favorable investment climate in the region; financial and credit support for priority developments; targeted training of specialists in higher education institutions in the interests of prospective directions of development of industry and social sphere based on "personnel support".

Second. It is proposed to form an effective tandem "science — production" in the Kharkiv region. The implementation of a comprehensive program of innovative development of the region's industry will allow the state subject to modernize its economy and make it not only agriculturally developed but primarily industrially efficient. It is the trio "state — science — business" that will form a stable and promising economic situation in the Kharkiv region, which, as a result, will increase the region's rating and again attract domestic and foreign investors to its territory.

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Received 10.04.2023

## ПІДВИЩЕННЯ ЕФЕКТИВНОСТІ ДЕРЖАВНОГО РЕГУЛЮВАННЯ ІННОВАЦІЙНОЇ ДІЯЛЬНОСТІ НА РЕГІОНАЛЬНОМУ РІВНІ

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У статті розглянуто проблеми державного регулювання інноваційної діяльності на регіональному рівні та запропоновано заходи щодо підвищення ефективності регулювання. У дослідженні аналізується поточний стан інноваційної діяльності в регіонах та визначаються фактори, які перешкоджають її розвитку, зокрема слабка нормативно-правова база, недостатня підтримка з боку регіональної влади та обмежене державно-приватне партнерство. Шоб вирішити ці виклики, автори пропонують набір рекомендацій, які включають удосконалення законодавчої бази для забезпечення більш сприятливої політики, посилення ролі регіональних органів влади в стимулюванні інновацій та розробку механізмів державно-приватного партнерства. Вони також наголошують на важливості сприяння інноваційній культурі та освіті та створенні сприятливих умов для малого та середнього бізнесу. Запропоновані заходи спрямовані на сприяння інтеграції інноваційних процесів в економічне та соціальне життя регіонів, що сприятиме сталому розвитку країни в цілому. У статті зроблено висновок, що успіх цих рекомендацій залежить від активної участі всіх зацікавлених сторін, включаючи уряд, бізнес, наукові кола та громадськість. Працюючи разом, вони можуть створити екосистему, яка сприятиме інноваціям і підтримує їх розвиток у

**Ключові слова:** державне регулювання, інноваційні підсистеми, інноваційний розвиток, регіон, інноваційні мережі, потенціал.

## INCREASING THE EFFICIENCY OF STATE REGULATION OF INNOVATIVE ACTIVITIES AT THE REGIONAL LEVEL

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The article examines the issues of state regulation of innovative activities at the regional level and proposes measures to increase the efficiency of regulation. The research analyzes the current state of innovative activities in regions and identifies factors hindering its development, including weak regulatory framework, insufficient support from regional authorities, and limited public-private partnership. To address these challenges, the authors propose a set of recommendations that include improving the legislative base to ensure more favorable policies, strengthening the role of regional authorities in stimulating innovation, and developing mechanisms for public-private partnerships. They also emphasize the importance of promoting an innovative culture and education and creating favorable conditions for small and medium-sized businesses. The proposed measures aim to promote the integration of innovative processes into the economic and social life of regions, which will contribute to the sustainable development of the country as a whole. The article concludes that the success of these recommendations depends on the active participation of all stakeholders, including the government, businesses, scientific community, and civil society. Working together, they can create an ecosystem that fosters innovation and supports its development in regions.

**Keywords:** state regulation, innovation subsystems, innovative development, region, innovation networks, potential.

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