

# I. ACTUAL PROBLEMS OF MANAGEMENT IN THE ECONOMIC AND SOCIAL SPHERES



## PROBLEMS OF INSTITUTIONAL INFRASTRUCTURE FORMATION FOR KNOWLEDGE-INTENSIVE ECONOMY IN THE EURASIAN ECONOMIC UNION

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**Summary.** The research is directed to studying of interrelation between formation of the integrated innovative infrastructure of the Eurasian Economic Union and development of the hi-tech sector in national economies of member countries. The empirical analysis was carried out based on data of Department of industrial policy of the Eurasian economic commission, statistic data of national statistical authorities of member countries of the Eurasian Economic Union. Results of the research will be interesting to appropriate authorities of public administration of the member countries of the Eurasian Economic Union, supranational structures of the Eurasian economic commission dealing with issues of formation of innovative infrastructure and development of the hi-tech sector and also the scientists dealing with issues of development of science and an innovation in integration regional associations.

**Keywords:** The Eurasian Economic Union; institutional infrastructure; knowledge-intensive economy.

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In the conditions of acceleration of world processes of scientific and technical and technological development and considerable strengthening of the competition in the world markets of hi-tech products all states meet an important problem of intensive updating and effective use of material and technical resources of the research organization [1].

Processes of introduction of innovations, actively advanced last years, in the conditions of the current period of instability and uncertainty appeared in new economic reality of the Eurasian Economic Union (EAEU). Feature of our time is formation of new priorities, new calls and new approaches to the solution of the problems arising in front of Kazakhstan and other countries of the Eurasian Economic Union [2]. The large-scale changes happening today in the world economy also directly influence not only a situation in economy and policy, but also in the scientific and innovative sphere [3]. They create new opportunities for the accelerated innovative development, but also at the same time set restrictions with which all subjects of innovative activity should reckon [4]. Innovative plans and strategies of the enterprises of all levels are exposed to reevaluation and adjustment. Proceeding from it, the main objective of the current stage of the research was receiving operational assessment of relevance of carrying

out innovative changes in conditions of new economic reality of the countries of the Eurasian Economic Union.

Understanding that only innovations is a key to intensive development of national economies and that only effective NIS are capable to promote the rapid advancing growth, finds reflection in program and target documents and scientific publications of scientists-experts of all studied countries of EAEU [5].

In the EAEU State Parties in a number of the priority directions the modern scientific and technical potential is created which at its effective use and updating has to become the most important source of acceleration of social and economic development. The list of the existing objects of innovative and industrial infrastructure of the EAEU countries in 2017 structured on their specialization is provided in table.

Along with standard forms, such as SEZ, industrial parks, technoparks, scientific and technological centers and the research organizations, there are also territories of the advancing social and economic development, zones of territorial development, the innovation and industrial clusters, science cities that in general is characteristic for the Russian practice of infrastructure providing. Also it testifies to wide support system in Russia of regional innovation systems that needs to be used actively in practice of other member countries of EAEU.

*Table*

**Objects of innovative and industrial infrastructure of the countries of EEU in 2017**

Object of innovative and industrial infrastructure	Armenia	Belarus	Kazakhstan	Kyrgyzstan	Russia
Special economic zones (SEZ)	3	7	10 + 57 free warehouses	4	33 (in those 19 with industrial function) + 1 in Crimea
Territories of the advancing social and economic development					14
Zones of territorial development					20
Industrial (industrial) parks	5	6	15	1	190
Technoparks	3	10	23	3	160
Business incubators	3	16	50	3	200
The innovation clusters					25
Industrial clusters					59
Science cities					14
Free port					1 (5 planned)
Scientific and technological centers	About 15	About 140	About 70	About 10	More than 200
The organizations which are carrying out research and development	20	530	350	30	3 570

*Source: [6]*

Among the material resources used in science, the special place belongs to modern complexes of the scientific equipment, difficult unique experimental installations and devices. Creation of infrastructure of scientific research is almost exclusive zone of responsibility of the state which possesses about 80 and more percent of the park of scientific devices and the equipment and with joint property (with private enterprises and the foreign organizations) it exceeds 90 %.

Building and modernization of material and technical resources of science in EAEU were carried out, in many cases, without binding to solution of major social and economic and scientific problems. As a result loading of the expensive equipment is not always optimum. Besides, the budgetary restrictions complicate process of updating of fixed assets of science, result in need of use morally and physically worn-out equipment. There are problems of full load of devices, the experimental equipment and the unique scientific installations connected with backwardness of cooperation communications and shortcomings of planning of research and development, a problem of creation and a promotion to the market of services of difficult analytical and measuring complexes instead of separate devices. Systematically the equipment cost is increased and exceeds possibilities of some organizations for its acquisition and modernization. Institutions are forced to be guided in many cases by acquisition of the inexpensive equipment, which is not making basic changes to technological capabilities of researches. For these reasons receiving significant scientific results and carrying out breakthrough developments becomes more and more problematic [7].

The solution of these problems lies in the course of creation and support of the centers of collective use of the scientific equipment in which loading of the equipment is significantly higher due to active involvement to work with its use of researchers of the country of residence and other EAEU members. Creation of network structure of the centers of collective use as new institute of cooperation in the sphere of use of material and intellectual resources of scientific and technical cooperation on space of EAEU will allow to increase efficiency and quality of research and development, it is essential to lower costs of their carrying out, to raise real fixed assets capacity of the research organizations and knowledge intensity of innovative products.

Formation of interstate network of the organizations of EAEU is carried out on the basis of points of concentration of knowledge, competences and technological capabilities, elements and the accumulated experience of functioning of innovative infrastructures of the EAEU members and the European experience. For formation of such network identification of the specialized leading organizations in the states of EAEU is provided with universal scientific installations, the skilled and experimental equipment, test benches, grounds, etc.

In total with other recommended actions creation of network of the centers of collective use of the equipment will promote formation of a system of interstate cooperation of innovative infrastructures and will allow to reach qualitatively new level of global competitiveness of national economies of the Eurasian Economic Union.

The considered directions of interaction of subjects of national innovative systems within implementation of joint projects and network forms of supranational support of innovative activity within EAEU reflects current trends, such as:

- use of the combined sources (the states and private) financings of research and innovative activity, including from institutes of development;
- creation of preferential terms for innovators, including long terms of transfer to operation, grace periods of investment, lack of sanctions when obtaining negative results;
- orientation not only to national scientific shots, but also creating favorable conditions for development of innovative business, attracting huge number of innovators from around the world;
- accurate distribution of spheres of responsibility: the administration of the organization of innovative infrastructure undertakes all bureaucratic and organizational issues, and inventors are engaged only in developments;
- leading to positive results of implementation of joint innovative projects to increase in scientific and innovative potential of any national economy in general, through creation of the competitive knowledge-intensive sector of economy and strengthening of the export potential non-oil goods that is very relevant for all member countries of EAEU.

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