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> Analysis of the mechanism of state regulation of innovative projects in the regions of the Republic of Kazakhstan

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ҚР аймақтарындағы инновациялық жобалардың мемлекеттік реттеу механизмдерінің сараптамасы

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Изучение опыта государственного регулирования инновационных проектов в г. Алматы The main priority areas of science in Almaty is possible to determine areas such as nuclear science, biomedical science and technology research in the field of natural resources, agricultural science and technology, environmental protection and others. Innovative development of economy of the country is now the basis of the state policy of Kazakhstan, which is aimed at creating the economic conditions for production of competitive high-tech products. This article analyzes the mechanism of state regulation of innovative projects in the regions of Kazakhstan. To better support the new policy, the State should take the example of the benefits provided by the industrialized countries. Also believes that instruments to support innovation activities include tax incentives for activities of regional technology parks and EPZs.

Key words: region, innovation, design innovation, government regulation.

Алматыдағы ғылымның негізгі басым бағыттары деп ядролық ғылым, табиғи ресурстар, жаратылыстану мен аграрлық технологиялар, қоршаған ортаны қорғау және басқа да саладағы биомедициналық ғылымдар мен технологияларды ғылыми-зерттеу бағыттары ретінде анықтауға болады. Елдің экономикалық инновациялық дамуы бүгінгі таңда қазақстан республикасының экономикалық шарттарда өндірістің жоғарытехнологиялы өнімдерге қол жеткізу мақсатындағы басты мемлекеттік саясаты болып отыр. Бұл мақалада қр аймақтарындағы инновациялық жобалардың мемлекеттік реттеу механизмдеріне сараптама жасалған. Жаңа бағытта мемлекеттік жобаларды қолдау үшін өндірісі дамыған елдердегі жеңілдіктерден үлгі алу керек. Сонымен қатар инновациялық қызметті қолдаудың құралы ретінде аймақтық технопарктер мен еркін экономикалық аймақтарда (ЕЭА) салықтық ынталандыру шараларын айта аламыз.

**Түйін сөздер:** аймақ, инновация, инновациалық жоба, мемлекеттік реттеу.

Основными приоритетными направлениями развития науки в городе Алматы можно определить такие сферы, как ядерная наука, биомедицинская наука и технологии, исследования в области изучения природных ресурсов, сельскохозяйственная наука и технологии, охрана окружающей среды и другие. В данной статье проведен анализ современного состояния государственного регулирования инновационной деятельности в г. Алматы. В связи с чем выявлено, что инновационной деятельности отводится большая роль; инновационная деятельность в республике пока не является источником увеличения степени конкурентоспособности страны на мировом рынке. При обеспечении мер государственной поддержки инновационного бизнеса потенциал роста инновационной сферы в г. Алматы представляется весьма высоким, принимая во внимание конкурентные преимущества города в национальной экономической системе – наличие большого количества квалифицированных кадров, развитую инфраструктуру, реализуемые меры государственной поддержки, благоприятное расположение и инвестиционный климат.

Ключевые слова: инновация, инновационная деятельность, государственное регулирование.

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## ANALYSIS OF THE MECHANISM OF STATE REGULATION OF INNOVATIVE PROJECTS IN THE REGIONS OF THE REPUBLIC OF KAZAKHSTAN

In the coming years the main focus in the development of science will be linked to the revitalization of the national research centers. 8 national research centers from 9 are located in Almaty:

Center for Chemical-Technological Research of Kazakhstan.

Centre for Physical-Mathematical Studies of RK.

Center for Astrophysical Research of Kazakhstan.

Biological Research Center of Kazakhstan.

Centre for geological and geographical studies of RK.

The National Center for Scientific and Technical Information of the Republic of Kazakhstan.

Center of the Earth Sciences, Metallurgy and Enrichment of RK. National Nuclear Center.

As part of the already established scientific and technological infrastructure (research centers, institutes and universities) establishes a network of national research laboratories and shared laboratories of engineering profile at universities.

To date, 5 research laboratories are created, 3 of which are in Almaty:

JSC "Center of the Earth Sciences, Metallurgy and Enrichment" (technologies for hydrocarbon and mining sectors and related service industries).

RSE "Al-Farabi Kazakh National University" (nanotechnology and new materials).

State Enterprise "Kazakh National Technical University named after SatpayevKI" (information and space technology).

In Kazakhstan is already operates 15 laboratories of engineering type at universities, including in Almaty:

Al-FarabiKazakh National University. (nanotechnology and new materials)

KazNAU (nano-biotechnology, and ecology).

KazNTU named by Satpayev K.I. (new technologies for hydrocarbon and mining sectors and related services).

Around the national and university, laboratories will be subsequently created the technological and business - incubators, focused on the decision and commercialization of small engineering projects [1, p. 2].

Park of innovative technologies "Alatau" (hereinafter - PIT), is located in Almaty, has the status of a special economic zone. In the initial phase along with infrastructure equipment and the ICU organization of production by local companies, is expected work to

attract innovative companies from abroad. Next will be the primary technology transfer, using the capacity of public institutions of development (in particular, the National Innovation Fund) and the establishment of the trial, including the "screwdriver" plants necessary for practicing the further development of innovative industries [2, p. 2].

Regional parks are formed to study the impact of the disclosure of further progressive innovation potential of the region, equipping the region's economy in innovative products.

Important task of science-intensive industries is solved by the Almaty Technology Park. Formation of the park structures such as the Center for Technology Transfer, Information and Marketing Center, the Fund support for innovation, engineering center, Trade Fair Centre can contribute to mutual reinforcement of the competitiveness of these enterprises. On the territory of institutions of higher education: Al-FarabiKazakh National University (Almaty), Satpayev NPU (Almaty) - there are two regional technology park.

In the future, in Almaty is possible to be established the technology parks of multifaceted level and scale; united, they can form a network of industrial parks. In the city there are conditions for the creation of "Infopark" as areas of prominent firms on the development of software products aimed at export as Almaty grew bright human resources professionals in the field of programming.

A good point of the organization of the technopark is Talgar. Attractive climatic conditions, proximity to a large city, with its advanced scientific capabilities, social infrastructure can stimulate the development of advanced areas are research and development and build on knowledge-intensive industries.

Technology parks can also specialize in the development, testing and implementation of high technologies for agriculture, known as the technological village. These parks can be created near Almaty based on agro-towns and Keyes KNIITZH and specialize in the creation and use of intensive technologies and industrial methods of production, storage and deepprocessing of crops and livestock [3, p. 2].

Forming technology parks refers to large-scale projects, among which may be developed small regional innovation centers, operating mainly as technology transfer centers, operating in the form of a business incubator and business center.

An important direction of development of innovative infrastructure of Almaty should be venture capital funds, investment companies are working exclusively with innovative companies and projects. Their activities are focused on the application of technical and technological innovations, scientific discoveries not previously used in practice. This contributes to localization of scientific and technological capacity in Almaty. The development of the city as a financial center creates the preconditions for the formation of Almaty a number of corporate venture funds that can finance innovative projects.

An important area of industrial-innovative development is the creation of innovation infrastructure. To increase the attractiveness of industries for foreign investment should be used the creation of modern industrial and technological parks.

One of the large-scale economic development projects was the creation of the Park of innovative technologies "Alatau" (PIT). The aim of its organization is the development of innovative technologies, revitalization of the economy entering the city in national and international relations, attraction of investments, creation of high-performance and hightech industries, development of new products.

A highly professional business environment is formed with the active support of the state. In the Park of innovative technologies in existing projects is involved more than 100 companies. The status of the special economic zone "PIT" Alatau "an advantage in trade, attracting investment provides benefits to pay taxes. It presents innovative projects in the production of agriculture, medicine, the field of communications, the military-industrial complex, which allows reducing costs, increase profits and increase productivity. Mission Park of innovative technologies "Alatau" as a regional center gives a significant boost to the development of technology parks and business incubators [4, p. 2].

The basis for innovation and industrial development of Almaty city is an industrial complex that has, in contrast to the industry of the Republic of Kazakhstan, focus on the manufacturing sector. In the structure of industry in the city is 93.5% manufacturing, 0.5 - and mining - production and 6% distribution of electricity, gas and water. In 2006, the city industrial output (including small, subsidiary enterprises, the household sector) in current prices 293.645 billion tenge, which is to the level of 2005 was 107.1%, non-financial sector of the industry (excluding the household sector) respectively, to 292.384 billion tenge and 107.0%.

The industry, the most appropriate to the innovation development direction, is engineering. In the engineering industry during the year produced goods to 38.383 billion tenge, which is 13.1% of the city total. The index of physical volume in comparison with 2005 was 99.7%, including the manufacture of machinery and equipment - 122.1%, 103.8% - in the manufacture of electrical and optical equipment, and the production of vehicles and equipment - 90.6%.

Thus, even small production volumes are not all the sub-sectors of engineering tend to rise. To assess the prospects for the development of high-tech and innovation orientedindustries more expedient to analyze the current state of their development [3, p. 3].

Growth of innovative orientation of the city's industry contributes to the implementation of international standards of quality management (QMS). The main applicable standards are ISO 9000 and ISO 14000. For example, in the food industry of the city - the leading industry of Almaty - as of July 2007, implemented (or are in the process of implementation) QMS totally 25 companies. 12 companies out of 25 have already implemented QMS and have the certificates of ISO and HACCP, and the rest are at various stages of implementation (preparation of documentation, work with consulting firms, training of employees, etc.). [4, p. 1].

Another factor in the development of innovative services Almaty is a developed specialty of the city as scientific and educational center that allows personnel support implementing innovative projects. On its territory, there are about 700 research institutes, NGOs, other organizations and institutions with relevant scientific and technological developments and applications, which are now in the interests of the state, implementing a long-term strategy of industrial-innovative development. [5] In addition, the city is concentrated a significant amount of educational resources. Conducted since 1997, the reform of the education system made it possible to maintain the competitiveness of this sector and develop a strong private sector. Now Almaty are over 60 universities in which students learn a third of the country. Almaty serves as an educational center of the country.

In Almaty actively conducted the tasks of the program of forced industrial-innovative development. Today, the Industrialization Map includes 28 industrial and innovative projects worth 531.1 billion tengewill be created just about 5 thousand permanent jobs. The projects are implemented in 9 sectors of the economy. About 30% of the total volume of investments directed to the industry of manufacturing and processing, the remaining 70% are aimed at the development of transport, energy, infrastructure and tourism, sports. In 2010-2013, implemented 19 projects worth 280.1 billion tenge, created some 2,500 permanent jobs.

3 projects worth 31.9 billion tenge are implemented in 2010, created 427 permanent jobs. 7 projects completed in 2011 in the amount of 169.6 billion tenge, created 1306 permanent job places. In 2012 completed 5 of industrial and innovative projects worth 62.5 billion tenge with the creation of 504 permanent jobs.

Thus, while providing state support of innovative business growth potential of innovative services Almaty is very high, taking into account the competitive advantages of the city in the national economic system - the large number of qualified personnel, a developed infrastructure, implemented measures of state support, investment climate (Table 1).

|   | Opportunities  | Threats   |
|---|--|---|
| Strengths   | <ul> <li>«Strength - Opportunities»</li> <li>1. Development of the region's traditional areas of activity<br/>and support of high-tech industries in new promising areas.</li> <li>2. Promotion of economic entities in the region to de-<br/>velop and produce innovation.</li> <li>3. Formation an effective interaction of all participants<br/>of scientific and innovation sphere.</li> <li>4. The establishment and development of scientific and tech-<br/>nological cooperation with other regions and countries.</li> <li>5. The monitoring popularize success and experience in<br/>the science and innovation.</li> </ul> | <ul> <li>«The strength – the threats»</li> <li>1. Adoption of amendments and additions to the existing regional legislation and the development of draft legal acts aimed at the development and regulation of scientific and technological activities in the region.</li> <li>2. Identification of priority directions of development of science, technology and high-tech.</li> <li>3. Diversification of the economy of the region.</li> <li>4. Attraction of additional financial resources in scientific innovation.</li> <li>5. Involvement, support and consolidation of staff in Research, increase the prestige of scientific work.</li> </ul> |
| Weakness  | <ul> <li>«Weakness - Opportunities»</li> <li>1. The lack of clear priorities and guidelines of the scientific and innovative development of the region.</li> <li>2. Poor maintenance of scientific and innovation sphere of the region.</li> <li>3. Lack of interest of economic entities in the region in the design and development of innovations.</li> <li>4. Weak interaction between all participants in the sphere of science and innovation in the region.</li> </ul>  | <ul> <li>«The weakness - the threat of»</li> <li>1. Reduction of legal awareness of participants of scientific and innovation sphere of the region.</li> <li>2. The emergence of the threat of loss of continuity in science and technology.</li> <li>3. Reduce the prestige of scientific work and the lack of incentives to attract young people to science and innovation sector in the region.</li> <li>4. Slowing down the processes of creation and development of innovation in the region.</li> <li>5. Reduction of capital stock of science and innovation.</li> </ul>   |
| * - Note - Compiled by the author of the dissertation |  |   |

Table 1 – Characteristics of the opportunities and threats to the development of scientific and innovation sphere Almaty \*

Based on the above, we can conclude, that the strengths of science and innovation sphere of Almaty city are: the availability of incentives and conditions for the creation and development of innovation, the availability of opportunities for the reproduction of staff for science and innovation sphere, the presence of structures that support research and innovation activities region, diversified economic structure of the region. Features: availability of production facilities and facilities for the production of competitive products, stimulation of economic entities of the region in the design and development of innovation (tax relief, state guarantees and other features), as well as improving their innovation culture. Threats of innovation include the following factors: a weak legislative and regulatory support to the scientific innovation sphere of the city, the lack of clear priorities and orientations of its development,

the lack of highly qualified professionals with innovative thinking. Weaknesses are: low numbers of scientific personnel, a small amount of Research funding, especially from the business sector, low level of innovation and inventive activity of business and science in general.

Thus, while providing the state support of innovative business growth the potential of the innovation sphere in Almaty is very high, taking into account the competitive advantages of the city in the national economic system - the large number of qualified personnel, a developed infrastructure, implemented measures of state support, and favorable location investment climate.

Analysis of the status of the state regulation of innovative activity in the Republic of Kazakhstan informs that innovation play a big role; innovative activity in the country is not a source of increasing the degree of competitiveness in the world market.

## References

1 OECD. Science, Technology and Scoreboard. - 2003.

2 The World Bank Knowledge for Development Program // URL: www.worldbank.org/kam(дАтАобрАщения: 10.01.2016).

3 The Global Innovation Index: methodology // URL: http://www.managementtoday.co.uk/news/610009/(μArA treatment: 01/02/2016).

4 Investigation of the Parisian school INSEAD and the Internet - portal WorldBusiness: list of states that were ranked on an index of innovative development // URL: http://rating.rbc.ru/article.shtml?2007/06/04/31506802(μArA treatment: 01.02.2016).

5 Mukhtarova K.S., Myltykbaeva A.T., Ayganbekova A. Advancing Innovation in the Republic of Kazakhstan // X International scientific-practical conference "Science Days. - Czech Republic 2014 - v.9. - S. 74-78.