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Michael A. Samkov, Post graduate student, Siberia State Aerospace University n.a. MF. Reshetnev;

> Galina Ya. Belyakova, ECD (Doctor in Economics), professor, Siberian Federal University

Innovation Corridor as **a** Basis of the Simulation Region's Innovative Process

Key words: innovation process, "innovation corridor", principals of the "innovation corridor" creating, spatial development

Annotation: The article shows the conception of the "innovation corridor", which is by providing the cooperation of all innovative process elements forms the congenial innovative climate and relevant infrastructure for innovation activity.

One of the main conditions of the transition economy to an innovative way of development outlined in the Strategy of innovative development of the Russian Federation for the period up to 2020 is to increase the effectiveness of the instruments of state support for innovation, expansion of scientific and industrial cooperation, the formation of new innovation partnerships, new value-added chain formation and highly processed production (services) and improving business innovation activity, which susceptibility to technological innovation is currently still low.

According to the Strategy, Russia has to become one of the leaders in the world market of high technology products, as well as take a strong global position in the field of innovative and high-tech products over the next five years.

Table 1. shows the indexes of innovative development of Russia, including Siberian Federal District and some regions of Siberia.

Table 1. Innovative development Indexes of Russia and individual regions of the Siberian Federal District

N⁰	Index	Year			
		2011	2012	2013	
1.	Share of organizations, which deal with				
	technological innovations, %				
	Russian Federation	8,9	9,1	8,9	
	Siberian Federal District	7,6	7,7	8,2	
	Krasnoyarsk Territory	8,7	8,3	9,8	
	Novosibirsk District	7,5	8,0	9,4	
	Tomsk District	11,8	10,1	12,9	
2	Share of small enterprises, which deal with				
	technological innovations, %				
	Russian Federation				
		5,1		4,8	
	Siberian Federal District				
		5,6		5,7	

Krasnoyarsk Territory	5,0	3,7
Novosibirsk District	6,9	8,0
Tomsk District	7,1	9,5

data from the Federal State Statistics Service. Innovation statistics in Russia http://www.myshared.ru/slide/180652/

As the table shows, in recent years, statistics of Russia innovative development has practically not changed. So that the share of organizations implementing technological innovation in Russia in 2013 in comparison with 2012 decreased and amounted only 8.9% (SFO - 8.2%) of the total number of industrial enterprises, which is significantly lower than the typical German values (71.8%), Belgium (53.6%), Estonia (52.8%), Finland (52.5%) (1).

Also the share of small enterprises engaged in technological innovation decreased and amounted in Russia - 4.8% (SFO - 5.7%). Small and medium-sized enterprises are at the forefront of scientific and technological progress in developed economies. On their basis, the large companies carry out innovative products testing and it goes into production after the successful development.

Innovative way of development of the Russian economy involves the formation in Russia of new areas of so-called advanced development (TAD). At the same time as the conditions, innovation activity in the territories of priority development is the availability of the innovative and entrepreneurial potential; the legal framework for effective innovation, the venture-type financial resources; the innovative infrastructure for supporting and facilitating the implementation of innovative projects, and the integrated system of the innovation process managing. In addition, it is crucial to provide the conditions for interaction between science and business and significantly improve the scientific research commercialization in public research institutes and universities.

Accessibility of innovative solutions for the entrepreneur is very important for rapid growth of innovation, which largely depends on the development of innovative infrastructure (universities, technology parks, research centers, etc.) level. The main feature of the innovation economy at the moment is that the field of scientific and technical activity becomes more critical in the country development. Regionalization in matters of innovative development allows with combining efforts to liberalize the measures to strengthen cooperation, to get ample opportunities for the infrastructure services sector development, providing a harmonious combination of economic growth with the natural environment preservation (2).

The innovation process - a process which combines science and production, is a chain of successive actions - from research and development of new ideas to practical implementation, created on the basis of its innovation. The innovation process can be divided into two main stages: the first stage (the longest) includes research and development, the second stage is the life cycle of the product.

Innovation process, and innovation must be seen as a system of measures focused on the development, implementation, deployment, diffusion and commercialization of innovations (3,4).

In this case economic and technological impact of the innovation process is just partially materialised into new products or technologies, but more evidenced into the economic and scientific-technical potential increasing as a new equipment predictors, thereby increasing innovation susceptibility.

In the generalize model of the innovation process (IP) can be represented as: BR - >AR-> R&D -> D -> IP -> M -> S;

where: BR - basic research; AR - applied research; R&D - development and design; D - development; IP- industrial production; M - Marketing; S - sales.

The traditional approach to the new products introduction has always provided "push" proposals for a known demand resistance. The innovative project on the way from idea to commercialization passes gradually steps that the classical venture capital investments theory defines as: the seed, the startup, the initial expansion, the rapid growth. It is assumed that each of them should have its own group of investors and "support" organizations with different specializations, which together allow a startup to become a high-tech business. Figure 1 shows the model of "innovation corridor" through which the innovation takes place from idea to finished product innovation.



Figure 1. Model of Innovation Corridor.

Systemic structural interactions are paramount for ensuring the effectiveness of innovative development as part of the "Innovation Corridor" that ensure the continuity of stages and continuous process over time. This is particularly evident in an underdeveloped market infrastructure and market failures. Mechanisms that affect the order of creation, implementation, promotion of innovation (innovation), and on economic relations that occur between all participants in the process: this focus on supply and demand changes in the commodity markets, including the market for innovation; sources of investment, the need to optimize them; the need to consider the horizon calculations.

The concept of "innovation corridor" is a functional complex, which provides practical methods for an innovative product creating, which concentrated all areas of innovation, which are closely related to each other:

- methodological direction, which includes: modern expert estimates, the "green" standards, economic models and others. It makes possible to quickly adapt to external conditions, including to market requirements. This requires continuous improvement of creative thinking and principles management methods of, etc.;

- information-analytical direction includes new software that provide prototyping and modeling of new technical systems, etc .;

- material and technological direction is connected with the advanced application of innovative technologies, materials and experimental facilities, etc..

In addition, the interrelation of innovative directions defines "technological system", which is assessed by the presence of industrial, scientific and technical, innovation and human resources (5).

The purpose of "innovation corridor" is aimed primarily at ensuring effective communication infrastructure in the innovation process and the enterprises in the region, representing regional integration. Validation of the model of public-private partnerships becomes crucial for the implementation of regional innovation infrastructure, because it is directly dependent on the model of innovative development of the region. Activities on "Innovation Corridor" will ensure the effective integration of the interests of both the public and private sector:

A major role in the construction of "Innovation Corridor" plays R&D university, which is focused on effective project development and has technological solutions and qualified scientific personnel with the skills of entrepreneurship. At present, the traditional functional principle of innovation infrastructure formation, providing some form of life, no longer meets the needs of innovative enterprises, not less important is the creation of social and economic conditions for innovation: the state guarantees, innovative products and services markets, accessible information and communication services and etc., while services remain being the prime development factor (6).

Thus, the regional innovation corridor has all the features of the system: it contains a subject (the source of innovation), the object of innovation (economic entity), the relationship between them (investment to produce a specific effect for all participants in the process), the environment and the single point of control created for the formation and development of innovation infrastructure, demand at every stage of the innovation process.

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