

Innovative Policy of the Management Improvement by the Technology Transfer In Russia

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Abstract: In article the state support of innovative activity in Russia, management of a transfer of technologies in Russia within national innovative system is considered, the main directions of development of innovative policy on creation of institutional conditions and the management improvement by the technology transfer. Important question of efficiency of innovative policy of Russia is the question of a versatility of applied measures of regulation, aiming of the bills, actually realized programs and strategy planned to performance to real calls of innovative development. The government policy offers are developed on creation of institutional conditions and the management improvement by the technology transfer in Russia, namely: increase in expenses for innovative developments, increase in number of innovative enterprises, reforming of hi-tech industries and providing the research sector with an innovative orientation and also improvement of institutional conditions of innovative activity in Russia. The author offers some aspects of infrastructure of support of the innovative enterprises. The author defined the tasks facing the Russian state on stimulation of development of a transfer of technologies.

Key words: Technology transfer • Management improvement by the technology transfer • Institutional conditions • Innovative activity in Russia • Innovative development

INTRODUCTION

In Russia the policy of modernization of all spheres of life of society, including is pursued by the innovative. The state support of innovative activity is carried out in the following main forms:

- Definition of priorities of innovative development and development of innovative programs and innovative projects of national value;
- Development of the forecast of scientific and technical development of Russia on long-term prospect;
- Formation of necessary organizational conditions and, if necessary, creation or reforming of existing institutes of executive power for innovative development and economic modernization;
- providing necessary economic conditions for realization of effective innovative policy, including creation of the effective mechanism of tax and customs policy;
- Taking measures to increase of efficiency of the budgetary expenses for science by transition to the centralized nature of formation of offers on volumes of allocations for scientific researches;
- Taking measures to stimulation of technological modernization of monopolies and large industrial corporations;
- Participation of the state in creation of competitive productions;
- Providing the guaranteed sales markets of the innovative production created by the state order;
- Advance of domestic innovations on foreign markets;
- Formation of innovative infrastructure;
- Target financing from the state budget.

The essence of the innovative policy pursued in Russia, is that the state carries out regulation of innovative processes as directly initiating innovations and acting as the participant of the relations connected with it and indirectly, stimulating innovations with indirect

Table 1: The main actions of innovative policy in Russia

Directions	Actions
1. Increase in expenses at innovative development to 2,5% of gross domestic product	development and financing of several large federal programs in the field of high technologies, choice and support of priority scientific and technological projects, creation and support of system of a technology transfer
2. Increase in number of innovatively active enterprises	Reduction of taxes for the organizations working in the field of information technologies, creation of technology development zones, creation of science and technology parks in the field of high technologies
3. Reforming of research sector in a context of an innovative orientation	Acceptance of a number of administrative decisions by the Ministry of Education and Science of the Russian Federation and other ministries responsible for this sphere, according to "Strategy of development of science and an innovation in the Russian Federation for the period till 2015"

methods and creating the corresponding economic mechanism. The central place in system of direct state regulation is taken by financing of research and development and innovative projects from budgetary funds.

Now to the main measures of innovative policy realized in Russia, carry the following:

- Target financing from the state budget;
- The state financial help to the enterprises through granting grants, subsidies, loans for development of the hi-tech productions;
- Financing of programs or the projects developed for strengthening of cooperation and interaction of participants of innovative process and improvement of functioning of innovative system as a whole;
- The measures directed on simplification of access to scientific achievements;
- Distribution or increasing knowledge of specific aspects of national innovative system (development of branch or regional strategy, distribution of experience of the best innovative enterprises and so forth);
- Legislative ensuring innovative activity (right to intellectual property, legislative regulation of creation and activity of the innovative enterprises, protection of copyright and so forth);
- Financing of innovative infrastructure and links;
- Creation of subjects of a technology transfer, such, as centers of a transfer of technologies, science and technology parks, business incubators.

The Directions of Innovative Policy in Russia: The main actions of innovative policy in Russia are shown in Table 1.

Increase in Expenses at Innovative Development to 2,5% of Gross Domestic Product: In 2010 the share of expenses on research and development made 1% of gross domestic product of the country. For comparison, in the USA this indicator is equal 2,8% of gross domestic product, in Japan - 3,3% of gross domestic product, in Germany - 2,4%. Share of Russia in promptly growing world knowledge-intensive market while less than 2% (Table 2).

Now the Government of Russia pursues active policy on reduction of influence and elimination of available problems. Budgetary appropriations on basic researches are provided of 85 billion rubles for 2011, 83 billion rubles for 2012 and 83 billion rubles for 2013 and exceed level of 2010 approximately on 12 billion rubles. Dynamics of budgetary appropriations on basic researches in Russia, provided for 2010-2013, is presented in Figure 1 [2, p. 42].

The main volume of means of the federal budget provided on basic researches in 2012, was directed on support of the state academies of Sciences and their regional offices.

Increase in Number of the Innovation-active Enterprises: It is possible to claim that in Russia the majority of the small innovative enterprises don't play a significant independent role for the objective economic reasons:

- Administrative pressure,
- High risk of implementation of innovations,
- Absence of demanded knowledge and the equipment,
- Shortage of shots of the necessary qualification.

One of critical problems for the Russian innovative companies is access to the capital. Creation and financing of the small innovative enterprises need to be carried out at the expense of means of the state grants and private investors.

Table 2: Expenses of the countries on research and developmental development in 2010

Country	Expenses on research and development		
	bln. dollars	Share in gross domestic product, %	Share in world expenses on research and development, %
USA	395,8	2,8	34,4
Japan	142,0	3,3	12,34
China	141,4	1,4	12,28
Germany	68,2	2,4	5,93
South Korea	42,9	3,0	3,73
France	41,5	1,9	3,61
Great Britain	37,6	1,7	3,27
India	33,3	0,9	2,89
Canada	23,7	1,8	2,06
Russia	22,1	1,0	1,92
Italy	18,7	1,1	1,63
Brazil	18,6	0,9	1,62
Taiwan	18,2	2,3	1,58
Spain	17,2	1,3	1,49
Australia	15,3	1,8	1,33
Sweden	11,6	3,3	1,01
The Netherlands	10,6	1,6	0,92
Israel	9,1	4,2	0,79
Austria	8,2	2,5	0,71
Switzerland	7,4	2,3	0,64
Belgium	6,8	1,7	0,59
Turkey	6,7	0,7	0,58
Finland	6,1	3,1	0,53
Mexico	6,0	0,4	0,52
Singapore	6,0	2,2	0,52
Denmark	4,9	2,4	0,43
Norway	4,1	1,6	0,36
Czechia	3,7	1,4	0,32
Poland	3,6	0,9	0,31
South Africa	3,6	0,7	0,31
Portugal	2,8	1,2	0,24
Argentina	2,6	0,4	0,23
Ireland	2,6	1,4	0,23
Greece	1,8	0,6	0,16
Hungary	1,7	0,9	0,15
New Zealand	1,4	1,2	0,12
Romania	1,3	0,5	0,11
Slovenia	0,8	1,4	0,07
Slovakia	0,5	0,4	0,04
Iceland	0,3	2,3	0,03
Total	1150,7	-	100

Source: [1].

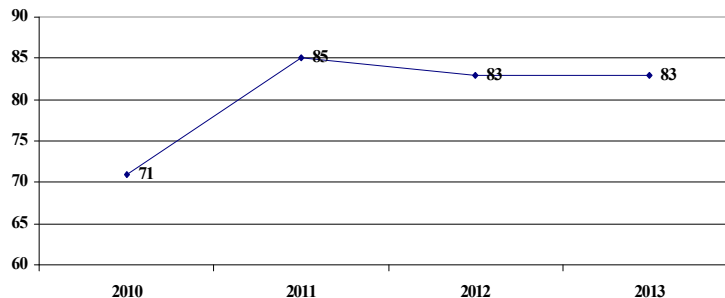


Fig. 1: Dynamics of budgetary appropriations on basic researches in Russia in 2010-2013, billion rubles

The author offers some aspects of infrastructure of support of the innovative enterprises. In this regard it is expedient to undertake the action following:

- To enter direct tax measures of support of research works and introduction of innovations among which we will note possibility of reduction of taxable base for the sum of expenses on the research and development, the accelerated depreciation of the equipment, zeroing of a rate of the property tax of the enterprises, used in innovative activity (laboratory equipment, skilled installations, buildings of research divisions);
- The right to postpone losses to the subsequent periods can be the effective tool. The insufficient profit of the small innovative enterprises can appear a problem at its use. Besides there is a danger of a manipulation the reporting (alternation of “corpulent” and “thin” years) for minimization of taxes. At the same time, tax privileges for the innovative enterprises can't be combined with policy of redistribution of the income from “provided” to “needy” [3, p. 131];
- To create uniform public institution which duties would include delivery of loans and guarantees on the credits to the small and medium-sized innovative enterprises in Russia. Indicator is France where since 2005 one organization (OSEO) is engaged in financing of the small innovative enterprises that allows not to spray funds for support of important sector of economy and also it is easier to inform to businessmen information on conditions of providing the financial help. Now to 90% of the credits in France are covered with OSEO guarantees. It testifies to efficiency of activity of this organization;
- To give target support to small enterprises which are thus and the most numerous subjects of innovative business at the state level. In France where they were exempted from need to pay contributions to off-budget funds from each employee accepted in 2009, new work in the small innovative enterprises was got by not less than half a million people [4, p. 48].

Reforming of High-Tech Industries of the Industry and Innovative Orientation of Research Sector: The government of the Russian Federation started reforming sector of innovative development according to “Strategy of development of science and innovations in the Russian Federation for the period till 2015” [5]. The first steps

realized in the public research sector, especially in the Russian Academy of Sciences, were reduced to dismissal of part of employees and increase of a salary of the remained. Specification of the status and functions of research institutes and also their places in innovative system has to be the following step.

Important question of efficiency of innovative policy of Russia is the question of a versatility of applied measures of regulation, aiming of the bills, actually realized programs and strategy planned to performance to real calls of innovative development. Not less important is also the question of a ratio of measures of direct regulation (first of all, in the form of the budgetary subsidies) and systems of the incentives creating favorable conditions for activity of businessmen, realizing difficult, high-risky innovative projects. The main call for the Russian innovative policy is the problem of redistribution of responsibility of participants of the innovative system, meeting requirements of more dynamic and open market economy and also development of new forms of their interaction.

Essential element of direct support of innovative processes in economy is formation of innovative infrastructure - unique objects of material base, information support of researches and development and also networks of communications, an exchange of scientific and technical information, the flexible organizational structures promoting innovative development at federal and regional levels [6]. The state has to promote also to rendering services to the private sector necessary in the course of research work and at a stage of introduction of research and development and also promote an exit of domestic producers of goods and services to the world market.

The Directions of Innovative Policy on Improvement of Management by a Transfer of Technologies in Russia:

Very important direction of the state innovative policy on improvement of management by a transfer of technologies is implementation of the state support of large regional scientific-industrial complexes, innovative networks and the clusters, allowing to concentrate the scientific and production capacity of regions at all stages of an innovative cycle [7].

Among positive shifts in realization of the Russian innovative policy, occurred for the last years, it is possible to allocate the following:

- The innovative policy became priority for growing number of governmental departments;

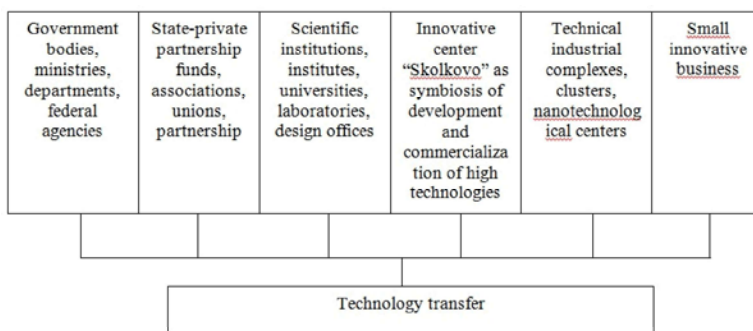


Fig. 2: Structure of management of a technology transfer by means of interaction of national institutes within innovative system of a transfer

- Attempts to integrate all elements of innovative system into uniform strategy, to combine direct budgetary support with other stimulating measures are made;
- When developing the purposes and problems of innovative policy medium-term statistics and indicators are used;
- At definition of perspective tasks, tendencies and measures of innovative policy the priority is given to complex forecasting.

The author ranks the following as shortcomings of modern Russian innovative policy:

- Many directions and problems of innovative policy aren't supported with concrete measures, especially when developing branch strategy;
- Specific weight of such measures of the general character, as tax and antimonopoly regulation is insignificant;
- The innovative policy often is based on a set of the conceptual documents which are quite often duplicating each other that testifies to low qualitative level of their development;
- Results of monitoring, analysis and assessment of separate actions.
- Innovative policy are used for strategy and tactics correction.
- Innovative development of the country incidentally, irregularly [8].

Based on these provisions, the author defined the tasks facing the Russian state on stimulation of development of a transfer of technologies. Their detailed analysis and only identification and designation key of them wasn't the purpose of the author. First of all, besides direct financing of the scientific and technological sphere

comprising elements of a technological transfer, the state (even in the presence of sufficient resources) has to focus attention on indirect methods of regulation of its development, a way:

- Granting the state guarantees to investors;
- Formations of effective mechanisms of transfer of results of the research and development executed on means of the state budget, in production;
- Use of adequate tax levers;
- Encouragement and stimulations of investments from the private sector to the scientific and technological sphere.

Modern researches confirm that the innovative component of any process embodied in new technological development or decisions, is the main catalyst of economic growth. Thus it is necessary to consider need of use of institutional approach at realization of innovative policy [9].

The structure of management by means of interaction of national institutes in a context of realization of innovative policy is presented by a technology transfer in Figure 2 [10].

Actual measures of innovative policy for creation of institutional conditions and management improvement by the technology transfer in Russia are:

- Increase in expenses at innovative development to 2,5% of gross domestic product:
 - Development and financing of several large federal in the program of area of high technologies;
 - Choice and support priority scientific and technological projects;
 - Creation and support of system of a technology transfer.

- Increase in number of the innovation-active enterprises, including:
 - Joint financing of the innovative development which is carried out by the small innovative enterprises, including creation of uniform credit institution for delivery of loans to subjects of small innovative business;
 - Tax exemption of the organizations working in the field of information technologies;
 - Creation of technology development zones;
 - Creation of favorable investment climate;
 - Legislative ensuring different formation innovative organizations.
- Reforming of high-tech industries of the industry and giving of an innovative orientation to research sector, namely:
 - Acceptance of a number of administrative decisions by the Ministry of Education and Science of the Russian Federation and other ministries responsible for this sphere, according to “Strategy of development of science and an innovation in the Russian Federation for the period till 2015”;
 - Creation of a network of the centers of distribution of innovations;
 - Development of dual-use technologies (on the basis of military - creation of civil technologies of an innovative orientation);
 - Increase in number of science and technology parks, innovative and technological centers, centers of a technology transfer.
- Improvement of institutional conditions of innovative activity in Russia:
 - Creations of institutes of development;
 - Followings of a perspective institutional trajectory;
 - Realization of the structure of management developed by us by a technology transfer by means of interaction of national institutes in a context of realization of innovative policy.

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