

## **FINAL THESIS REPORT**

The overview of innovation infrastructure in Saint-Petersburg, Russia

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### Abstract

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#### **ABSTRACT**

This final thesis was written for The Baltic Institute of Finland in the frame of "SPb InnoReg - Promoting Regional Innovation System in St. Petersburg through Transnational Cooperation" project. The project aims at fostering competitiveness and developing regional innovation system in Saint-Petersburg through cooperation with innovation actors of the Baltic Sea region.

This work is intended for everyone who is interested in development of innovations in Russia, particularly in Saint-Petersburg city. Present paper is dedicated to analysis of the regional (Saint-Petersburg) innovation infrastructure. The review of Saint-Petersburg legislation on development of innovational processes as well as existing innovational institutions in Saint-Petersburg is represented.

The theoretical part of the thesis covers the definitions related to the innovation process. Russian definition of innovation differs from the European definition of innovation, leading to different approaches in innovation system development.

The report is based on qualitative case study method. The data has been gathered from the interviews, literature and an internet.

The author is working at The Baltic Institute of Finland as project manager of the "IPR Saint-Petersburg. Enhancing Intellectual Property Rights Competence and Cooperation in Russia (St.Petersburg), Finland, Denmark and Sweden" project, as well as she is taking part in "SPb InnoReg. Promoting Regional Innovation System in St. Petersburg through Transnational Cooperation" project at the time of writing the thesis.

Key words: Innovation Special Economic Zones Russia Saint-Petersburg

### **Foreword**

There are many people to whom I am indebted for helping and supporting me in this research.

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## 1 Introduction

This work is intended for everyone who is interested in development of innovations in Russia, particularly in Saint-Petersburg region. Present paper is dedicated to analysis of the regional (Saint-Petersburg) innovation infrastructure. The review of Saint-Petersburg legislation on development of innovational processes as well as existing innovational institutions in Saint-Petersburg region is represented.

Economic globalization, de-regulation and liberalization of the markets, information technologies, change of consumption models and increasing sophistication of scientific and technological development, have caused growth of competitive pressure, as well as new opportunities for business. These driving factors are closely inter-connected and drastically affect each other. The change from a quite stable environment to an increasingly complex and uncertain one has considerably altered competition and forced the companies to be responsive with more complicated strategies.

Instead of focusing only on the costs reduction and keeping on within the frames of the traditional price competition, the companies "have to think in terms of growth and value-added through knowledge creation and knowledge application in innovation processes" (Schienstock & Hämäläinen 2001). It does not mean though, that prices and costs have lost their significance as criteria of competition. Quite to the contrary, multinational companies aim at getting the competitive advantage within last years, partly relocating functions of the business to the countries with low wages. It means that the companies have to combine the ability to produce the required amount of quality products on time and with reasonable expenses, along with an opportunity of fast and constant innovations. Presently, the companies need quality, value services, innovations and a quick market entry, to be successful in business. In the future, these factors will become even more crucial.

Nowadays, the enterprises that respond more dynamically to the changing requirements of the market are winning in the competition; in other words, they employ the innovative projects of their development. Considering the challenge of utilizing innovation on a wider, i.e. regional level, the worldwide experience shows that the most

successful countries and regions today are those which have created the best conditions for realization of strategic innovations on the basis of achievements of a world science.

Being aware of the necessity to implement a complex of measures, make it possible to define the innovative way of evolution to the economy of Saint-Petersburg, the economic block of the Government of Saint-Petersburg has worked out the Program of development of innovative and technological sphere in the industry of Saint-Petersburg for 2006-2008. The Program has been ratified by the Government of Saint-Petersburg and signed by the Governor of Saint Petersburg on August 29, 2006.

The program provides for the plan of measures to construct the regional innovation system of Saint-Petersburg taking into account the peculiarities of this region. It determines the following tasks: integration of scientific and technical as well as intellectual and personnel potentials of science, industry and education; adaptation of higher education to the needs of science and industry, bringing in additional investments to develop the priority scientific tendencies and critical technologies.

To complement the existing Program, the Committee on the Economic Development, Industrial Policy and Trade, Saint-Petersburg Administration has developed an integrated program for the development of innovational infrastructure of Saint-Petersburg for 2008-2011. On 23 January 2008 at the meeting of Saint-Petersburg Government the Integrated Program "Actions for innovation policy implementation in St Petersburg for 2008-2011" was approved. The Governor of Saint-Petersburg V.I. Matvienko mentioned that the program of actions on realization of innovative policy has a concrete, subject character. "Without transition of our economy into innovative rails it will be difficult for us to move forward. Innovations are the key to the development of all economy ", - told the Governor, having emphasized, that one ruble of budgetary funds enclosed in development of an innovative infrastructure, should involve at least five rubles of private investments. It is obvious that the meaning of innovation for the economy has been accepted in Russia and in Saint-Petersburg in the same way as in Europe. However, understanding of the meaning of the term innovation differs in Russia and in Europe.

<sup>&</sup>lt;sup>1</sup> Source: Official website of Government of Saint-Petersburg City

The final thesis is structured as follows. In chapters One and Two the difference of the meaning of the term innovation in Russia and in Europe, as well as general terminology to the term innovation are introduced. The introduction is followed by an overall description of the development of innovation systems in Russian Federation in chapter Three. Chapters Four and Five give an analysis of the innovation infrastructure in St. Petersburg. Chapter Six presents two projects coordinated by The Baltic Institute of Finland, which are connected to the development of the innovation infrastructure of Saint-Petersburg. The author of this final thesis is working at The Baltic Institute of Finland as a project manager of the "IPR Saint-Petersburg. Enhancing Intellectual Property Rights Competence and Cooperation in Russia (Saint-Petersburg), Finland, Denmark and Sweden" project, and she is also taking part in "SPb InnoReg. Promoting Regional Innovation System in St. Petersburg through Transnational Cooperation" project. Project materials have been used to describe the innovation situation in Saint-Petersburg.

## 2 Innovations and their characters

# 2.1 The concept of innovations<sup>2</sup>

The concept of an innovation is frequently used to describe a material object, but the term does not always refer to the technical innovation. An innovative product can be both new goods, and new services. It is becoming more difficult to make a distinction between new goods and new services since borders between the two types of innovations are disappearing. The process of innovations, on the other hand, is not limited to the new technologies of production, it also includes organizational innovations. Industrial innovations concern of what is made, while innovations of processes concern of how the things are made. Mainly, process innovations result in growth of productivity and influence price competition, while product innovations influence quality, first of all.

Russian definition of innovation differs from the European definition of innovation, leading to different approaches in innovation system development:

### a) Russian practice

- In Russia, innovation is understood as the end result of innovative activity, resulting in new or improved product, introduced on the market, new or improved technological process used in practice, or a new approach to social services (Statistics of Science and Innovation: Brief Terminological Dictionary M.: TSISN, 1998).
- Innovation (innovation, innovative product) is the result of innovative activity in new products, services and technology, and/or new organizational and economic form with obvious qualitative advantages in design, manufacturing, sales, consumption and utilization of products, providing additional economic or public benefit in comparison with prior product or organizational or economic scheme (Appendix to Project "Introduction to Policy of the Russian Federation in

<sup>&</sup>lt;sup>2</sup> This chapter partly relies on the presentation of Mr Sergey Andreevich Fiveisky "Innovation Activity in St. Petersburg", St Petersburg, June 2007

Development of Innovative Systems through 2010 and beyond," approved by the President of the Russian Federation on 30/03/2002 under No. 576).

- Innovation is the end result of innovative activity, resulting in new or improved product sold on the market, new or improved technological process used in practice. (Concept of Innovative Policy of the Russian Federation for 1998-2000, approved by the Government of the Russian Federation on July 24, 1998 under No. 832).

### b) European practice

Following "The Measurement of scientific and technological activities. Proposed guidelines for collecting and interpreting technological innovation data" (Oslo Manual, OECD, Eurostat 1997), innovation is a complex and diversified set of many interrelated activities. Determining the components of innovation is difficult due to the fact that most products and processes that create these products are complex systems. Innovations determine changes in properties and characteristics of product effectiveness overall and changes in components improving its effectiveness, including the character of services it provides.

Innovations are in the heart of economic progress. Radical innovations determine the look of large-scale changes in the world, while incremental innovations make the process of change continuous.

The wider concept of the innovation includes five categories (Schumpeter 1934):

- introduction of a new product or a qualitative change in an existing product;
- process innovation new to an industry;
- the opening of a new market;
- development of new sources of supply for raw materials or other inputs;
- changes in industrial organization.

The Oslo Manual talks about technological innovations only, which requires objective improvement of product efficiency. The minimal requirement for innovation is that the product or process is new (or considerably improved) for the company (it does not have to be new for the entire world).

To conclude, *In Russian practice* innovation is viewed as *the end result* of innovative activities. *In Europe* the notion is viewed as *a type of activity, the process of change*. It is important to take into account the different understandings of innovation term, due to the fact that it is reflected in how innovation systems are developed in Russia and in Europe, what is researched, where the innovation related investments are put and some other aspects.

Recently, researchers have focused on the social innovations that include organizational changes within and among companies (group work, inter-organizational networks, flexible working hours), new styles of management (participation of workers), new social techniques (telework at home), new services (e-marketing), new patterns of serving demands (self-service, telelearning) and new institutions (scientific parks) (Schienstock & Hämäläinen 2001). There are fair reasons to pay more attention to organizational and institutional innovations. First of all, new organizational forms may become the key sources for the growth of productivity and innovative activity, depending on whether they can stimulate or not the creation of innovations. Besides, technical changes and organizational re-structuring are closely inter-connected: they develop simultaneously. It means that when a technical innovation is introduced, it is often necessary to change the organization of production process. In order to receive advantages of productivity from the modern information technologies, introduction of new organizational forms is also required. For example, the fact that introduction of modern ICT had smaller than anticipated influence on productivity is interpreted as a failure of effective adaptation of the organizational form to the new technical system.

Organizational innovations become extremely important when the fate of a company in a greater extent depends rather on its capability to constantly make innovations, than on the success of a fundamentally new product or a technological process. The knowledge enclosed in organizational forms and in the capital of human resources, social practices, business culture and so on is knowledge of implicit nature. It represents a value that can hardly be copied and that guarantees *stable competitiveness*.

## 2.2 Concept of an innovation system

When we look at innovations as a diversified process that includes some number of various participants with various opportunities, who constantly exchange knowledge and cooperate in order to make a new product or a technological process or some other innovation, it will result in the principle **of innovation system**. Innovations have *a systematic, inter-dependent character*. The factors which form and influence innovations, including organizational and institutional factors, are inter-dependent and provide bilateral interaction.

There is no single definition of national innovation systems. In a publication of OECD "National Innovation Systems" (1997) a few definitions are mentioned:

- "the network of institutions in the public and private sectors whose interactions initiate, import, modify and diffuse new technologies" (Freeman 1987: 1).
- "the elements and relationships which interact in the production, diffusion and use of new, and economically useful, knowledge ... and are either located within or rooted inside the borders of a nation state." (Lundvall 1992)
- "a set of institutions whose interactions determine the innovative performance... of national firms." (Nelson 1993)
- "the national institutions, their incentive structures and their competencies, that determine the rate and direction of technological learning (or the volume and composition of change generating activities) in a country." (Patel and Pavitt 1994)
- "that set of distinct institutions which jointly and individually contribute to the development and diffusion of new technologies and which provides the framework within which governments form and implement policies to influence the innovation process. As such it is a system of interconnected institutions to create, store and transfer the knowledge, skills and artefacts, which define new technologies." (Metcalfe 1995)

Recently, the innovation system is regarded as *the system of transformation of knowledge* (Schienstock & Hämäläinen 2001). It means that knowledge is considered as the basic input information that is taken by the innovative system from environment. This knowledge inside the system turns into new knowledge and it means that knowledge is also the basic result, or output of the system. The process of

transformation of knowledge includes the following **functions**: acquiring of knowledge, production of knowledge, outspread of knowledge, regulation and standardization of knowledge, application of knowledge, and handling of knowledge. These functions are carried out by several different organizations, including universities, research institutes, scientific research departments of companies, centers of technologies transfer, institutes of standardization, patent agencies, and the government agencies included in the innovative policy.

Institutions are considered as the key aspect of system of innovations. In OECD publication "Innovation and growth. Rationale for an Innovation Strategy" (OECD 2007) it is mentioned that: "innovation also relies heavily on the creation of basic knowledge, through both education and science. A well-performing and broadly accessible education system facilitates the adoption and diffusion of innovation. The contribution of education and human capital accumulation to economic growth is well documented. Some of this occurs through science and innovation. Investment in education and training of researchers and other highly skilled workers is a major factor in determining the contribution that scientific research can make to scientific progress and innovation". In essence, the institutional environment supports, stimulates, and adjusts processes of innovations. This environment includes different types of institutions: the institutions that give information and thus reduce uncertainty, the institutions that settle down conflicts and cooperation and the institutions that stimulate innovative activity. But institutions may also to hamper the progress of innovation (tradition or legal regulation). It is possible to conclude that institutions influence the behavior of organizations, making restrictions or stimulus for training and innovations.

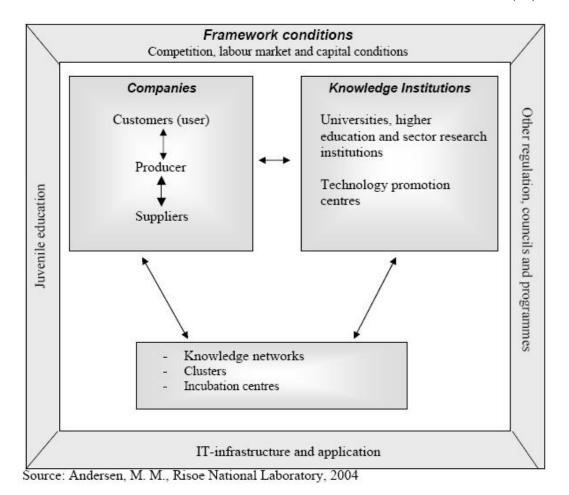


Image 1: The core elements of the innovation system analytical frame (Andersen, M.M.,Risoe National Laboratory 2004)

By analyzing the schema, presented in Image 1, Dr Maj Munch Andersen in her presentation on "The Green of Policies – Interlinkages and Policy Integration Conference" on 3-4 December 2004, in Berlin, Germany mentioned that the knowledge producers are the key components in the national innovation system: "On the one side companies, with emphasis on the interfere learning between companies in the value chain and the knowledge structure of companies, i.e. the distribution of different industrial sectors and their knowledge intensity. On the other side the public and semi public knowledge institutions providing research and education. Transgressing these two groups are knowledge networks, clusters and incubators that make up important spheres of cooperation between these two groups. The arrows indicate an active interplay in the knowledge production. The purpose of the NIS approach is not just to shed light on these different elements, but very much to focus on their interaction and synergy effect, as the figure also seeks to illustrate".

Since any of the participants is not isolated in the innovative activity, communication and processes of an exchange between them are becoming determinative factors. The important theoretical and political problem that is set up under the system approach is that innovations are generated not only by individuals, the organizations and institutions, but also by their complicated models of interaction. The system approach represents such an approach under which the independence of participants in the system is one of the most important characteristics. To understand why systems of innovations differ as concerns their achieved economic success, it's not enough to list the participants and supporting institutions of the system and to describe their resources. We should take into account interrelations and interactions between these participants. When participants of the innovative system are connected properly, they can become powerful machine of economic development. In case of bad ability to interaction, they can seriously detain the process of innovations (Freeman 1987). It means that the success of innovation system to a great extent depend on the form of management, due to the fact that management then always reflects how the concept of innovation is understood.

# 2.3 Forms of innovations management<sup>3</sup>

It is possible to allocate **3 types of innovation management**: *the markets* which include the reverse and direct relations, and also horizontal relations; *hierarchical structures* (bureaucratic) with unilateral streams of resources, skills and knowledge; and *structures of interaction*, such as the networks "consumer - manufacturer".

It is also distinguished between the mechanisms of market transactions, procedures of planning and management inside companies or some forms of the network mechanism. It seems logical that *networks* are the most effective form of management in the innovation systems. Economists refer to *operational and organizational expenses*, asserting that the markets create high operational expenses and that the bureaucracy creates high organizational expenses, while networks optimize both kinds of expenses. Sociologists, on the other hand, assert that innovations, including the implicit knowledge, to the greater extent, depend on *reliable connections* between the

<sup>&</sup>lt;sup>3</sup> This chapter based on the interview with Mr Kirill Razguljaev, director of The Institute of Regional Innovation Systems

participants of the system that may rather originate in a network structure, than in the market or hierarchical interrelations.

### 2.4 Innovation system as a part of economic system

The innovation system is regarded as one of *the subsystems of national economy* alongside with other subsystems, such as a financial system, a labor market or a system of production subsystem. It is important to understand that the success of economic system depends, to a great extent, on the mutual conformity of various subsystems and interaction between them.

As a subsystem of economy, the innovation system is focused on "the generation of changes in the economic system, by producing new knowledge" (Hauknes 2000). The primary aim of the innovation system is to contribute to the creation of growth and social welfare within an economy by producing knowledge that is used particularly to modernize and renew the production system, its products, services, and processes. Therefore, the innovation system contributes only indirectly to economic growth and competitiveness (Schienstock & Hämäläinen 2001).

On the other hand, for effective performance of modernization function, the innovation system depends heavily on other subsystems of economy. It is clear, for example, that a new small business, playing a key role in innovative processes, sufficiently depends on the availability of venture capital. The important role of the labor market is obvious enough to innovative processes, as creation of a new product and technological process or new services depends on availability of sufficiently qualified employees. It means that the labor market should give stimulus to workers to participate in the innovative - oriented process.

Whether the innovation system is capable to carry out the modernizing function depends as well on the positive influences of its *environment*, such as the education system, science, legislation or culture. For example, the innovativeness of economy depends, to a great extent, on whether the research resources are transferring to more innovative hi-tech industries. The innovativeness of a country may be limited, if the

education system has not introduced preliminary reforms to support the appearance of highly innovative industries. The legislative system also influences innovative activities (the property rights and patent regulation). Though patents can encourage the companies to invest into the research with bigger risk, they can also interfere with distribution of new knowledge thus complicating the innovative activity of other companies. The business spirit as a basic element of culture of transformations is the key-supporting factor for innovative activities in the country.

It is possible to conclude that the innovation system should be regarded as "the open system" (Lundvall 1992) that is closely connected to several other systems. As the innovation system is a subsystem of the economic system, its function is to modernize the economy by means of development of new products and technological processes, as well as services and other social innovations. Effective realization of modernization function depends on the input data from other subsystems of economy, such as the financial system, labor market or production, and on support of other subsystems of society, including the education system, scientific system, legislative system or cultural system. Most likely, to improve regional innovativeness, the integral approach that is not limited to only the system of innovation must be applied.

## 2.5 Innovation networks

The innovative opportunities of companies depend not only on their own abilities to generate new knowledge, partly, these opportunities are determined by their ability to acquire and apply knowledge from external sources. Pavitt emphasizes that because of amplifying specialization of scientific disciplines, companies are compelled to use increasing amount of knowledge to solve technical problems and achieve their technical goals. New products become more and more sophisticated and combine knowledge from different areas. Sources of knowledge are diverse and frequently lay outside the control of separate companies.

As a result, the companies that produce new products must have various knowledge, but they cannot cover the whole spectrum of the basic disciplines. Not having the opportunity to independently produce all the necessary knowledge, the companies must keep track of other companies and producers of knowledge worldwide and in the various branches since inter-disciplinary becomes crucial (OECD 2000). The companies should search for partners that specialize in those areas of knowledge which are necessary for their innovation activities but which they have no competence in.

Quite recently the strategy developers have realized that it is not enough to just establish supporting institutes. Because of growing specialization, streams of knowledge and distribution of knowledge become more and more important for success of innovations, and the strategy developers must also start developing policies for creation and supporting of inter-organizational networks. The strategy developers are focusing more and more on integration of participants of innovative systems into the global streams of knowledge and networks (Schienstock & Hämäläinen 2001).

During fundamental changes the uncertainty becomes a key question for the strategy developers, as well as for all other participants of the process of transformation. Nevertheless, it is difficult to assume that the strategy developers have excellent understanding of conditions of the market or the technological information; more likely they have an excellent ability to coordinate different kinds of institutions. It means that though the importance of technological macroeconomic management may be reduced, the role of the state in innovative processes might remain rather significant. The new role of the state can be described as a catalyst for innovation processes, a supporter of ongoing research and innovation activities, a facilitator of cooperation in research and innovation processes, a moderator of diverging interests, an organizer of a dialogue between various economic actors on future developments and as an initiator of questions and new tasks (Schienstock 1994). Creation of new vision can be regarded as formation of a network for connecting the existing capital of knowledge and competences, for making up the opportunities to learn through information interchange and experience, and for opening up new communication channels between the various participants included in the process of transformation (Schienstock & Hämäläinen 2001).

The OECD states: "Networks are an important component of national systems of innovation. An important function of science and technology policy is to strengthen

existing innovation-related networks and to help build networks in areas where they are lacking" (OECD 1992; see also OECD 1998a).

Governments can also facilitate networking activities and through that facilitate innovation processes. But as mentioned in the book "Transformation of the Finnish innovation system" of Gerd Schienstock and Timo Hämäläinen: "Network-facilitating policies differ significantly from country to country. They can involve different types of actors (firms, universities, government agencies, business associations, etc.), geographical dimensions (local, regional, national, international), industrial sectors, and phases of the innovation process (basic research, design, international marketing, etc.). Network policies can also be cross-sectoral, involve many different geographical dimensions and cover most activities in the value system."

As a conclusion one could note that networks differ from each other and are important for companies, research institutions and countries. Therefore it is no surprise that not only companies but also governments recognize the importance of networking for economic growth and for boost of innovations.

# 3 Worldwide experience of innovative activity

The economy of the modern developed countries is more and more based on the knowledge. Consequently, economic development relates such factors as investment in research and engineering, increase of innovative activity, improvement of quality of education and qualification of specialists. Nevertheless, to boost economic development it is not enough just invest to the above-mentioned components (Schienstock & Hämäläinen 2001).

The linear model of innovations, supposing a unidirectional relationship between scientific knowledge and innovations, represents rather an exception than a rule. The ideas underlying innovations frequently proceed from many sources and different stages of researches, development, transfer of knowledge, training or the market demand (Schienstock & Hämäläinen 2001). The innovation may have different forms: technological, process, productive, organizational or social. The innovation process is based on the complex system of interrelations of the elements, which produce different knowledge, manage their streams and usage of the knowledge. The efficiency of the innovative process in many respects is defined by how the basic participants of the process cooperate with each other as the elements of the collective system of creation and using of knowledge, as well as of technologies. Interaction may appear in joint researches and development, consultation, training of the personnel, purchase of licenses, the equipment, etc.

# 3.1 Innovation system<sup>4</sup>

Regarding innovations as a diversified process that comprises a number of different participants with various competences and possibilities that constantly exchange the knowledge and cooperate in order to make a new product, a technological process or

<sup>&</sup>lt;sup>4</sup> This chapter partly relies on book "Transformation of the Finnish innovation" by G.Schienstock and T.Hämäläinen 2001

another innovation, results in the concept of innovative system. Innovations have a systematic, interdependent character. The factors forming and influencing innovations, including organizational and institutional ones, are interdependent and provide bilateral interaction (Schienstock & Hämäläinen 2001).

The primary elements of the innovation system are enterprises, research organizations, universities, individual scientists and inventors. The basis is made by enterprises that aspire to develop production by means of innovations. They search for channels of reception of new sources of knowledge. If such channels, connecting the enterprises with the research organizations, universities and scientists, are adjusted, the innovative system works and develops.

There are both the state organizations and private ones with the mixed ownership cooperating inside the system; however, the governmental structures play the most important role. The state policy comes through them influencing innovative processes. It is the state policy that determines the institutional structure of the system that depends, in many respects, on such factors, set by the government bodies, as the mode of functioning of enterprise environment, the level and orientation of basic researches on the market, system of motivation of research activity, its orientation to producers, the organization of higher education (Schienstock & Hämäläinen 2001).

Together with growing globalization of economy and appearance of the economy based on knowledge, conditions of business have significantly changed. Today companies should combine an ability to make a necessary amount of qualitative goods in time and at reasonable prices with a possibility to quickly and constantly introduce innovations. The economic success depends on the ability of companies to exceed the competitors, to be the first ones in the market with new goods in demand. To retain top positions in both production and application of knowledge the company should be focused on its basic competences that, on the other hand, make it more dependent on the additional knowledge that is produced by other organizations. The companies cannot introduce innovations if they are altogether isolated. On the contrary, producing of new knowledge and applying it to new production takes place in the innovation networks (Schienstock & Hämäläinen 2001).

The geographical affinity is frequently considered as an advantage since it makes it easier to exchange the implicit knowledge between the specialized organizations, but innovative networks, especially in hi-tech branches, overcome national borders. The connection with global streams of knowledge is becoming more and more important for success of innovative activity.

The changing conditions have forced to develop technological and innovative policy. The policy of direct innovations is being changed to the policy of capability to innovations, being focused on the creation of supporting institutional structures, as well as cluster and network formations.

The opportunity of managing the innovative processes on a national level is being reduced. First of all, it is connected with the fact that the national borders in the innovative processes are being erased because the transnational corporations break down the chains of added cost and place them there where they find local advantages. A region becomes a natural economic area under process of globalization.

It is necessary to take into account two major tendencies in the geographical aspect. Firstly, the innovative processes become more transnational; secondly, regional innovative networks appear. In this connection the regional governments should adapt globalization strategies of companies, making up supporting conditions and establishing special organizations and institutions that make the region attractive for foreign investments, simultaneously retaining them in the territory. It shows that competitive advantages of regions can be created on purpose. Alongside with the changing role of the state in the innovation system, transition from a national level to a level of a regional policy is observed.

Based on the global experience, it is possible to draw a conclusion that in big countries the concept of a centralized national innovation system not taking into account peculiarities of the regional development appears to be ineffective. Therefore, the creation and support of regional innovation systems plays the key role.

# 4 The development of innovation system in the Russian Federation<sup>5</sup>

It is necessary to note that currently the resources for realization of intellectual potential in the regions of the Russian Federation and its transformation into different forms of capital are far from being utilized to the full. Industrial clusters and network regions provide the most stable national economy and its strongest positions in the worldwide market. At the moment, judging by the structure of export, there are almost no industrial clusters competitive on the world level in the country. It obviously impedes the innovative development of Russian industry and weakens its competitiveness.

In many regions of the Russian Federation, the programs connected with the innovative development do not have a complete character; there are the key aspects of interaction of small innovative business, the scientific and educational organizations and the large industrial companies outside the frameworks of the programs. Besides, as a rule, there is no uniform organizational basis, which could create a regional innovation strategy and could take the responsibility of developing a comprehensive regional innovation system (RIS). However, according to experts, interaction of participants of innovation processes and the development of a supporting institution system, are crucial success factors in developing the innovative potential of regions.

It is possible to note the most common problems, which the developers of regional innovative programs face:

- There are no activities aimed for creation of long-term tools for planning and for management of RIS, and as the consequence, there is no valid allocation of the budget to the key directions supported by the government of regions.
- Absence of real indicators evaluating the efficiency of the program (absence of legislative base).

-

<sup>&</sup>lt;sup>5</sup> This chapter based on research made by the Institute of Regional Innovation Systems (IRIS) in 2006 for "Center of social and conservative policy" (CSCP) of the "United Russia" party for discussions on federal regulation on support of innovation processes in economy and additional research made by IRIS in 2007 on formation of Federal programme on support of innovation systems of Russian Federation subjects.

- Incompleteness of a legal base of innovative activities, in particular the absence of legislatively fixed concepts (and criteria) for an innovative product, an innovative project, a hi-tech branch (industry), etc.
- There is no precise differentiation of the Federal and regional functions in the field of innovation activities.
- Absence of the precise information on the created national innovative system.
- The majority of regions do not have a strategy of the innovative development; therefore elaborated programs of development, as a rule, do not produce the expected result.
- The majority of regions do not have mechanisms of integration of regional system with national, and inclusion of RIS into the international networks.

Thus, currently regions have no advanced innovation system, have no valuable strategy of innovative development, and, correspondingly, cannot effectively develop. There is a misunderstanding of the issue of division of functions between the Federal and regional authorities in the area of the joint strategic development of regional and national innovation systems.

On the other hand, important objects such as business incubators, the centers of collective access, are being established in regions, but there is no creation of any single informative and analytical center that would carry out the analysis of the strong and weak points of regions and would promote the coordination of the strategy for participants of innovation activity. Activity of such a center would allow forming the structure of a future business incubator and the structure of a center of collective access. Finally, activity of the center would promote handling the development of the chosen cluster in coordination with a region.

According to the international experience, the federal bodies can carry out several different functions aimed at supporting the mechanisms of development of innovative processes in economy. These functions are explained in table 1.

Table 1: Functions of the federal bodies in supporting innovative processes (R.I.Gainutdinov 2006)

Functions	Activity		
Analytical	Benchmarking, foresight, distribution of effective practice, development of national strategy		
Initiating	Legislative regulation, national programs		
Consulting	Development of supervising documents on development (regional) innovative systems, granting of expertise, trainings for developers of regional policies		
Supporting	Financial support, tax privileges, policy of purchases, creation of state institutions		
Coordinating and intermediary	Creation of inter-national and regional discussion platforms, creation of transregional exchange and joint development		
Monitoring	Development of programs for evaluation of development		

Nowadays, a number of important functions on the federal level are not carried out efficiently and in full completely. Especially this is true for analytical, coordinating and consulting functions.

# 5 Formation of regional innovation system of Saint-Petersburg

## 5.1 Innovation environment in Saint-Petersburg

St. Petersburg is the second largest (after Moscow) industrial centre of Russia. The city produces 3% of all Russian manufactured goods. The industry is the leading branch of Saint Petersburg's economy: it accounts more than 25 % of the gross national product and about a fourth of the able-bodied citizens of the city. The industrial enterprises are the basic source of income to the budget of Saint-Petersburg, stably providing more than third of tax revenues. The rate of growth of production in the industry of St. Petersburg in 2002 was 131.4 per cent. The average number of employees of large-scale and medium industrial enterprises is 304,600 people.<sup>6</sup>

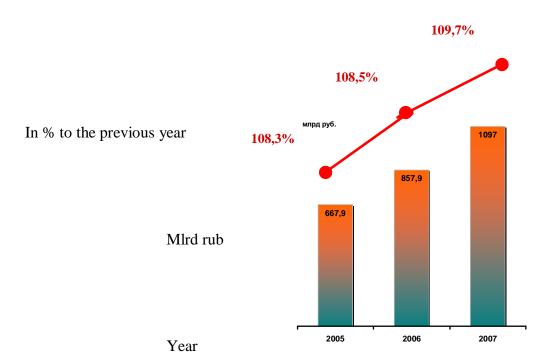


Image 2: Gross regional product of Saint-Petersburg (Presentation of Aleksey Sergeev 2008)

<sup>&</sup>lt;sup>6</sup> Source: Official website of The Government of Saint-Petersburg City

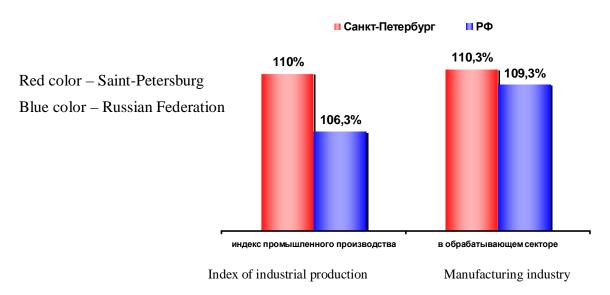


Image 3: Index of industrial production in 2007 (Presentation of Aleksey Sergeev 2008)

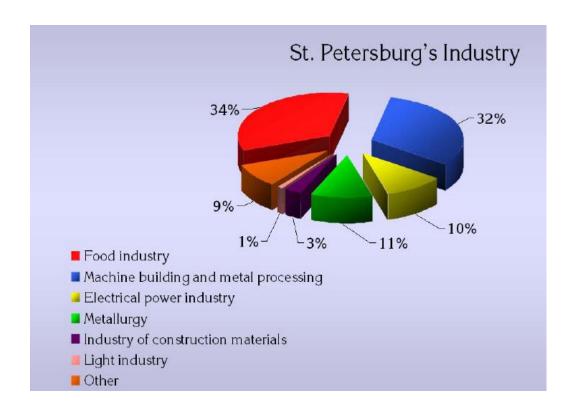


Image 4: Saint-Petersburg's industry (Presentation of Mr.Sergey Fiveysky 2007)

15 % of scientific and educational potential of Russia is accumulated in Saint-Petersburg. In the city there are 53 state owned and 40 private higher educational institutions, 2299 educational institutions, 73230 teachers and 1500000 students. In total, there are 4,6 million inhabitants (about 3,2 % of the population of Russia) in Saint-Petersburg. There are more than 100 theatres in the city, including world famous former imperial theatres, such as Mariinsky (Kirovsky) theatre, Maly theatre of opera and ballet named after Mussorgsky, Aleksandrinsky theatre. The city possesses a unique cultural and historical heritage. More than 80 % of historical monuments are preserved in the original. Historically Saint Petersburg has always been a research and development center. Saint Petersburg is known for a great many highly knowledgeable specialists and scientists. There are more than 320 Research Studies Institutes in the city, of which 49 belong to the Russian Academy of Sciences. There exists more than 1200 small and medium-sized innovation enterprises in Saint-Petersburg with 100 000 employees. There are 6 Technological innovation centers in Saint-Petersburg. 20 % of all Russia's advanced technologies are being created in Saint-Petersburg; 5 % of active innovative production enterprises and service industry are located here; the share of Gross Regional Product is 10 % from GDP. The share of industrial products volume is about 12 %; studying and advanced development expenses are more than 13 %. All these factors influence the inventive and patent activity of Saint-Petersburg.

The following number of inventor's applications was registered in Saint-Petersburg in 2007<sup>8</sup>:

Inventions: 1875 (in 2006 - 1794),

Utility models: 812 (in 2006 - 876),

Industrial design: 232 (in 2006 - 329)

Trademarks and service marks: 2828 (in 2006 - 2927)

However the percentage of commercialized innovation projects is insufficient. It is connected with the lack of demand for innovations in the region.

<sup>&</sup>lt;sup>7</sup> Presentation of Mr Mikhail Oseevsky, Vice-Governor of St. Petersburg

<sup>&</sup>lt;sup>8</sup> Annual reports 2006 and 2007 of ROSPATENT - The Federal Service for Intellectual Property, Patents and Trademarks:

# **5.2** Legal base<sup>9</sup>

In accordance with the decree of the Government of Saint-Petersburg dated 20.07.2007 No. 884 «About the Concept of social-economic development of Saint-Petersburg until 2025», innovation development of Saint-Petersburg has been determined as one of the main trends of Saint-Petersburg development until 2025. In the recent years the Government of Saint Petersburg has passed a number of decrees, which ensure several activities in the sphere of support and development of the innovation activity:

- decree of the Government of Saint-Petersburg dated 20.07.2007 No.881 «About the principles of the innovation policy in Saint-Petersburg for the period 2008-2011»;
- decree of the Government of Saint-Petersburg dated 13.11.2007 No.1423 «About approval of the plan of activities on state support of small business in Saint-Petersburg for 2008-2011»;
- decree of the Government of Saint-Petersburg dated 29.08.2006 No. 1053 «About approval of the Program of development of the innovation and technological sphere in the industry of Saint-Petersburg for the period 2006-2008»;
- decree of the Government of Saint-Petersburg dated 19.06.2007 No.684 «About approval of the plan of the main activities on development of the scientific work in Saint-Petersburg for the period 2008-2011».

# 5.2.1 Complex program of activities on realization of the innovation policy in Saint-Petersburg for the period 2008-2011

On 23 January 2008 a program of activities on realization of the innovation policy for the period 2008-2011 has been approved at the meeting of the Municipal Government of Saint-Petersburg. Decree of the Government of Saint-Petersburg dated 23.01.2008 «About Complex program of activities on realization of the innovation policy in Saint-

<sup>&</sup>lt;sup>9</sup> Official website of The Government of Saint-Petersburg City

Petersburg for the period 2008-2011» (hereinafter referred to as the Decree) has been drawn up on the basis of the decree of the Government of Saint-Petersburg dated 20.07.2007 No. 881 «About the principles of the innovation policy in Saint-Petersburg for the period 2008-2011», decree of the Government of Saint-Petersburg dated 20.07.2007 No. 883 «About the plan of activities on performance in Saint-Petersburg of the tasks, which arise from the Message of the President of the Russian Federation to the Federal Assembly of the Russian Federation in 2007» and in accordance with the «Main political trends in the Russian Federation in the sphere of the innovation system until 2010» (ratified by the letter of the Government of the Russian Federation dated 05.06.2005 No.2473π-Π7).

The Decree has been drawn up by the Committee on economic development, industrial policy and trade (hereinafter referred to as the Committee) in accordance with the powers, stated by the Federal Law dated 06.10.1999 No. 184-Φ3 «About the general principles of organization of the legislative (representative) and executive bodies of the state authority of constituent entities of the Russian Federation», Federal Law dated 23.08.1996 No. 127-Φ3 «About the science and state scientific and technical policy», legal statements of the Government of the Russian Federation on guidance of constituent entities of the Russian Federation. In accordance with article 4 of the Law of Saint Petersburg dated 20.10.2000 No.489-58 «About the science and scientific and technical policy of Saint-Petersburg» the questions of formation of the main trends of activity in this sphere refer to the competence of the Government of Saint-Petersburg. Moreover, the decree of the Government of the Russian Federation dated 24.08.1998 No. 832 has approved the Concept of the innovation policy of the Russian Federation for the period 1998-2000. According to it the innovation policy makes an important part of the state social and economic policy, determines the aims of the innovation strategy and mechanisms of support of the priority innovative programs and projects. In the mean time article 21 of the Federal Law dated 06.10.1999 No.184-Φ3 «About the general principles of organization of the legislative (representative) and executive bodies of the state authority of the constituent entities of the Russian Federation» states that the higher executive body of the state authority of the constituent entity of the Russian Federation shall develop and perform actions in order to provide complex social and economic development to the constituent entity of the Russian Federation.

Thus, there are legal grounds for the Government of the Saint-Petersburg to issue the suggested decree.

The project systematizes the decrees of the existing legal statements, which control innovation activity in Saint-Petersburg, as well as introduces new decrees, which along with the former ones form a system of activities, which provide purposeful development of the innovation system in the city.

Realization of the project is aimed at the achievement of the strategic goal, determined at a seating of the Government of Saint-Petersburg on 20.07.2007. Before 2025 Saint-Petersburg should become an innovation center ofthe world-level. In the medium-term period the effect of the Decree is aimed at the increase of the economic competitiveness of Saint-Petersburg, guarantee of the industrial and service sectors with the educational, scientific and financial spheres, creation of the mechanism which would support the innovation activity at all the stages of the innovation cycle. Moreover, the Decree performance will allow to increase investment attractiveness of Saint-Petersburg and to bring the level of life and conditions of economic activity in the city closer to the European standard.

### **5.3** Structure of the Decree

The Decree consists of the two related documents:

- «Complex program of activities on realization of the innovation policy in Saint-Petersburg for the period 2008-2011» (hereinafter referred to as the Program).

- «Procedural Regulation of influence of the executive body of the state authority of Saint-Petersburg on the questions of realization of the innovation policy in Saint-Petersburg» (hereinafter referred to as the – Procedural Regulation).

The Program comprises a list of activities on realization of the innovation policy in Saint-Petersburg for the period 2008-2011. The activities of the Program are grouped in accordance with the priority methods of realization of the innovation policy in Saint-

Petersburg, determined by the decree of the Government of Saint-Petersburg dated 20.07.2007 No.881.

### All the activities are divided in two units:

- 1. «Projects, which are realized by the executive bodies of the state authority in Saint-Petersburg in interaction with the innovation entities». This unit includes the activities, which are developed and performed by the executive bodies of the state authority of Saint-Petersburg only, without participation of the federal level. This group includes: the activities of existing regulatory legal statements of Saint-Petersburg, which have influence on the development of the innovation system of Saint-Petersburg; budgetary financing is provided for realization of these activities, and they do not require additional financing; the complete list of these requirements is stated in annex 1 to the explanatory note;
- new activities, formulated by the Committee as a result of numerous discussions with specialists in the sphere of innovation activity and within the framework of the meetings of the Interdepartmental Coordinating Council on the economic, scientific and technical, innovation and industrial policies under the Government of Saint-Petersburg and Scientific and Technical Council under the Governor of Saint-Petersburg. The activities require budgetary financing and its justification is stated below.
- 2. «Projects, which are realized in Saint-Petersburg under the organizational, financial and information support of the federal executive bodies of the state authorities». Here belong the activities, which are developed and realized in the framework of the joint projects of the federal and regional authorities. The activities are financed from the federal budget and the budget of Saint-Petersburg. No additional financing is required.

The Procedural Regulation forms the mechanism of interaction of the executive bodies of the state authority of Saint-Petersburg during program realization and during realization of activities of the other programs. The procedural rule allows for the Committee to perform its powers in the sphere of ensuring and realization of the common innovation policy in Saint-Petersburg.

# 5.4 Budget of the Program<sup>10</sup>

As table 2 shows us, the budget of other programs on innovation activity till 2011 year is 603,3 mln. rub. Total financing of innovation activity for 2008 – 2011 is 9636,6 mln.rub.

Table 2: Budget of other programs on innovation activity for 2008-2011

Mln. rub

2008 year	2009 year	2010 year	2010* year	Total
1817,8	2377,0	4128,1	710,4*	9033,3

<sup>\*</sup> Out of frames of 3 years budget planning

Target values of the figures, stated in the Procedural Regulation, have been formed with consideration of the forecast of social-economic development of Saint-Petersburg for 2008 and for the period until 2010, as well as forecast of social-economic development for the period until 2020. Target values of the figures are related to the milestone target values of the draft of «Program of social-economic development of Saint-Petersburg for the period 2008-2011» and target values of the performance indicators of «Tasks of social-economic development of Saint-Petersburg for the period 2008-2011», developed by the Committee alongside with the present Program.

<sup>&</sup>lt;sup>10</sup> Source: Presentation of Ms N.Korenko, Head of Innovation department of the Committee on the Economic Development, Industrial Policy and Trade on The Innovation Forum in Saint-Petersburg on 8-10 October 2008

# 6 Components of Saint-Petersburg Innovation Infrastructure

The innovation infrastructure of Saint-Petersburg is comprised of many structures, either city or state governed. They include:

- Special Economic Zones
- Innovation technology centers
- IT park
- Science city "Naukograd"
- Ventures funds

All these components play an essential role in the regional innovation system of Saint-Petersburg and are geographically shown in image 5.

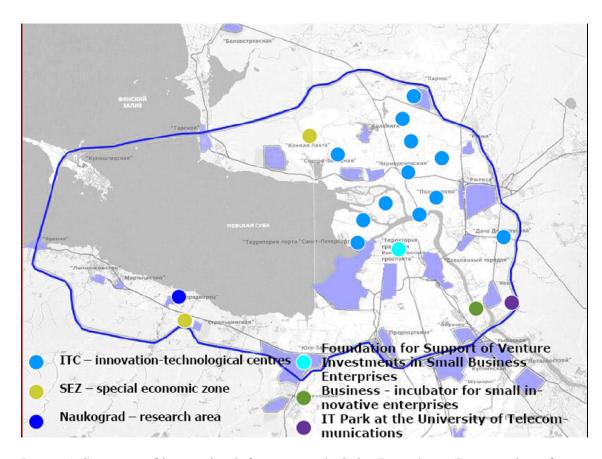


Image 5: Structure of innovation infrastructure in Saint-Petersburg (Presentation of Mr. Sergey Fiveisky 2007)

## **6.1 Special Economic Zones**

#### 6.1.1 Definition

There are several definitions of Special Economic Zones. One of the definitions concludes that a Special Economic Zone (SEZ) is a geographical region that has economic laws that are more liberal than a country's typical economic laws. The category 'SEZ' covers a broad range of more specific zone types, including Free Trade Zones (FTZ), Export Processing Zones (EPZ), Free Zones (FZ), Industrial Estates (IE), Free Ports, Urban Enterprise Zones and others. Usually the goal of an SEZ structure is to increase foreign investment. One of the earliest and the most famous Special Economic Zones were founded by the government of the People's Republic of China under Deng Xiaoping in the early 1980s. (Wikipedia)

Investment dictionary defines the Special Economic Zones as designated areas in countries that possess special economic regulations that are different from other areas in the same country. Moreover, these regulations tend to contain measures that are conducive to foreign direct investment. Conducting business in a SEZ usually means that a company will receive tax incentives and the opportunity to pay lower tariffs.

In the legislation of the Russian Federation, the Special Economic Zones are defined as follows: "Part of the territory of the Russian Federation determined by the Government of the Russian Federation, with the special entrepreneurship regime." (Federal law of the Russian Federation of July 22, 2005. № 116-FZ "On special economic zones in the Russian Federation", Article 2. Concept of special economic zone).

### **6.1.2 SEZ** in Russian Federation<sup>11</sup>

In accordance with the regulations of the Federal law from July 22, 2005 № 116-FZ "On special economic zones in the Russian Federation" and Attachment to that law from June 3, 2006 in the Russian Federation four types of special economic zone can be

 $<sup>^{11}</sup>$  Information is taken from the website of The Federal Agency for Management of Special Economic Zones

created: Industrial-production, Technological-and-innovative<sup>12</sup>, Tourist-and-recreational and Port.

### The main purposes of SEZ creation in Russian Federation are:

- Development of processing and hi-tech economy branches;
- New type of products manufacture, import-substituting manufactures development;
- Transport infrastructure development;
- Development of tourism and sanatoria health-resort sphere.

### 6.1.2.1 Management of SEZ

The Federal Agency for Management of Special Economic Zones is responsible for management of SEZ of Russian Federation. It is established in accordance with Decree of the President of the Russian Federation of July 22, 2005 № 855 "On Federal Agency for Management of Special Economic Zones".

The Federal Agency is under the charge of Ministries of Economic Development of Russian Federation and shall effectuate its activity directly and through their regional bodies and subordinate organizations in co-operation with other federal executive bodies, executive bodies of subjects of the Russian Federation, local self-government bodies, public associations and other organizations.

Principal functions of the Agency are rendering of state service and fulfilment of law-enforcement duties in management sphere of special economic zones (Federal law of July 22.2005. № 116-FZ "On special economic zones in the Russian Federation"), as well as control over execution of agreements on industrial-production or technology-innovative activities.

In accordance with "Regulation of Federal Agency for Management of Special Economic Zones", approved by "The decree of the Government of the Russian Federation of August 19, 2005 №530" the agency exercise administration of special economic zones in accordance with the procedure and within the limits, provided by the

<sup>12</sup> In some sources it called "innovation-economic type" (presentation of Mr M.Eschenko, The Head of Innovation System Development Department of CEDIPT, on Conference "Problems and Ways of Development of Innovation Activities in Modern Conditions" 17 October 2007) or "special engineering innovation type" (presentation of Mr M.Rychev, Deputy Head of the Federal Agency for Special Economic Zones, on International Conference EU-Russia Co-operation: Priorities for science and technology 2007-2013, 22 February 2007)

law of the Russian Federation; the applications selection for creation of special economic zones according to the established procedure carries out; organizes maintenance of the data bank of land plots allotted for creation of special economic zones, and real estate objects, located in the territory of special economic zones.

The author of this work will concentrate on **Technological-and-innovative** type of SEZ, due to the fact that the type of two SEZs of Saint-Petersburg is **Technological-and-innovative**.

# 6.1.2.2 Technological-and-innovative type of SEZ

In the Russian Federation at the moment there are four places of SEZs of technology-innovative type:

- Special economic zone in St. Petersburg
- Special economic zone in Zelenogradsky administrative district, Moscow
- Special economic zone in Dubna (Moscow Region)
- Special economic zone in Tomsk (Tomsk Region)

In image 6 the geographical location of the zones is shown.



Image 6: Technological-and-innovative type of SEZ in Russia (The Federal Agency for Management of Special Economic Zones)

## Description of SEZ of technology-innovative type:

- Technology-innovative activity
- Are created on not more than two territory plots, the total area of which is not more than three square kilometres (Part two in the wording of. Federal law of 03.06.2006 № 76-FZ).
- May not be situated in territories of more than one municipal entity;
- Must not include the whole territory of any administrative-territorial entity. (the part three in the wording of Federal law of 03.06.2006 № 76-FZ)
- Can exist maximum 20 years

# In the territory of technology-innovative special economic zone the following activity shall not be allowed:

- Allocation of housing stock units. (Part fourth in the wording of. Federal law of 03.06.2006 № 76-FZ )

- Minerals fields development, their mining, except for development of fields of mineral waters, therapeutic muds and other natural therapeutic resources, their mining, and metallurgy industry in accordance with the All-Russian classifier of economic activity categories; (item 1 in the wording of Federal law of 03.06.2006 № 76-FZ)
- Mineral processing, except for industrial mineral water bottling, other use of natural therapeutic resources, and processing of non-ferrous and ferrous scrap; (item 2 in the wording of. Federal law of 03.06.2006 № 76-FZ)
- Excisable goods production and processing (except for cars and motorcycles).
- The Government of the Russian Federation can specify other types of activity, the fulfilment of which shall not be allowed in special economic zone. (Part six in the wording of. Federal law of 03.06.2006 № 76-FZ)

At the time of creation of technology-innovative special economic zone the land plots that form its territory, except for land plots, which are given to accommodate and use objects of the engineering infrastructure and on which such objects are located, shall not be in possession and/or in use of citizens and legal persons, except for educational and/or research organizations.

#### **SEZ** administration agencies:

- The Federal executive body, empowered to realize Function of normative-and-legal regulation in the field of creation and functioning of Special Economic zones
- Supervisory board of special economic zone.

## **6.1.3** SEZ of Saint-Petersburg

The special economic zone — the part of the territory of Saint-Petersburg (by means of the Federal Government decision) with the special entrepreneurship regime. The purpose of the Saint-Petersburg SEZ is to develop processing industries, high-tech, new kind of products and transport infrastructure development.

Saint-Petersburg is the winner of the competition for establishing of the special economic zone in Russia. The SEZ in St.-Petersburg is establishing according to:

- The Law of the Russian Federation of 2006/07/22 N 116-Φ3 «About special economic zones in the Russian Federation».

- The Governmental Regulation of the Russian Federation of 2005/12/21 N 780
   «About establishing of the special economic zone of technical-implementation type in St.-Petersburg».
- The Agreement between the Government of the Russian Federation and the Government of St.-Petersburg of 2006/01/18 «About establishing of the special economic zone of technical-implementation type in St.-Petersburg».



Image 7: Management of the SEZ (Presentation of Mr Yuri Mikhailov)

**The hierarchy of management** of Saint-Petersburg SEZ is as follows:

Ministry of Economic Development of Russian Federation (Ms. Nabiullina E.S.)



The Federal Agency for Management of SEZ (RsOEZ) (Mr. Alpatov A.A.)



The Territorial Directorate of Federal Agency for Management of SEZ (Mr. Mikhailov Y.A.)



The Supervising Council of SEZ (Mr. Oseevsky M.E.)

#### Goals and Objectives of SEZ are:

- High-tech industry development;
- Innovation products manufacturing;
- Commercialization of science-based achievements;
- Higher level of the national economy competitiveness.

**The main branches** of the activity of the SEZ in Saint-Petersburg are:

- Analytical instrumentation
- Informational technologies
- Telecommunication
- Bio and Medical technology
- Microelectronics

**The financing** of SEZ in Saint-Petersburg is divided between the budget of Russian Federation 50 % and the budget of Saint-Petersburg City 50 %. The following table demonstrates the planned investments in creation on SEZ in Saint-Petersburg for 3 years.

Table 3: Planned investments in creation on SEZ in Saint-Petersburg (Presentation of Mr. Yuri Mikhailov)

2007 year		2008 year		2009 year	
Russian	Saint-	Russian	Saint-	Russian	Saint-
Federation	Petersburg	Federation	Petersburg	Federation	Petersburg
1,5 mlrd rub	1,5 mlrd rub	1,8 mlrd rub	1,8 mlrd rub	1,3 mlrd rub	1,3 mlrd rub
3,0 mlrd rub		3,6 mlrd rub		2,6 mlrd rub	

A resident of SEZ in Saint-Petersburg could be an individual entrepreneur or company registered in Saint-Petersburg which have an agreement with RusSEZ that defines its activity in SEZ and it must not have brunches outside of SEZ.

It is planned to develop: communication facilities, military and civil avionics, the telecommunication and medical equipment, radio-electronic equipment, the automated control systems of technological processes, analytical devices and manufacture of experimental batches on the territory of Special Economic Zones of Saint Petersburg.

Within the next 2 years, due to the budget funds of Russian Federation, all the engineering preparation will be carried out on the territory, the infrastructure will be advanced and all the conditions for development of production of high technology and spheres of services will be created in the field of high technologies.

By the law, investors in SEA have got lots of duties. The main one is to invest not less than 1 million euro into the area. But there are also rights. The foreign goods can be imported on the territory of SEA without paying customs fees and VAT. On territory of SEA the special customs routine will set up the simplified order to make export - import operations. The joint social tax will be reduced on 12 % and will make only 14 % at annual wages of a person up to 10 thousand dollars. Residents of SEA will be released for five years from payment of the land tax, property tax, transport tax. Also residents of SEA are released from profit tax regarding its part that goes to the budget of Saint-Petersburg, at a rate of 4 % (thus, the tax will make 20 %). The maximal size of a rent for the land plots given to a resident of special economic area, on the basis of the agreement on conducting technical&promotional activity, makes 2 percent of their cadastral cost per a year. There will be given guarantees for 20 years from possible changes in the tax regulations. If tax regulation in Russian Federation will change, and due to that reason the position of SEZ residents could be harmed, the new tax regulation will not be applied in the SEZ during 20 years (since 2005).

Table 4: Taxation in the SEZ of Saint-Petersburg (Presentation of Yuri Mikhailov)

Tax	General regime	Regime for residents SEZ	
Unified Social tax	26 %	14 %	
Profit tax	24 %	20 %	
Personal income tax	13% (30%)	13%(30%)	
Property tax	no more than 2,2%	0 % in 5 years	
Transport tax (rubles/horsepower)	max 200	0 rubles in 5 years	
Acre-shot (local land tax)	max 1,5%	0 % in 5 years	

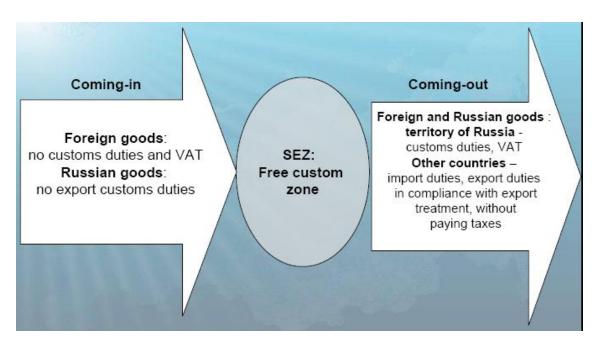


Image 8: Import and Export of goods on SEZ (Presentation of Mr. Yuri Mikhailov)

It is planned to reduce the administrative barriers, by applying the principle of "one window" when the investor (businessman) cooperates with possible smaller number of authorities on all questions connected with the activity of SEA. Realization of this principle will be carried out by delegating some authorities to the Federal agency on management of special economic zones.

For creation of Special Economic Zones in Saint-Petersburg has been chosen two territory: "Neudorf' or "Noidorf' area 18,99 hec, situated on the territory of the municipal institution "Strelna" of the Petrodvorets region and "Novo-Orlovskaya" or "Novo-Orlovsky" area 110,41 hec, situated in Primorsky region on the territory of northwards of the Novo-Orlovskij forest park.

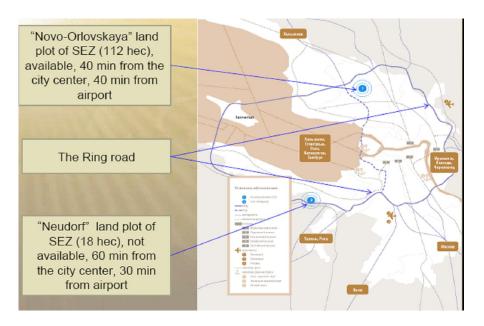


Image 9: Location of SEZ in Saint-Petersburg (Presentation of Mr. Yuri Mikhailov)

# **Branch SEZ "Neudorf"**

During 2004-2005 networks of water supply, water disposal and gas supply is laid, the roads are built, the illuminating is accomplished. The registration and accomodation of SEZ residents in the "Neudorf" department is planned in 2007-2008 years. Being near Petrodvorets, where already many years exists the scientific complex, set up twelve research institute, centre of laser physics, telecommunication centre, St Petersburg university, state sea academy named after. Makarov admiral, as well as numerous of professional and higher educational establishments of Ministry of Defense of the Russian Federation, the territory "Neudorf" (1) should provoke interest at investors and residents.



Image 10: The territory of SEZ "Neudorf" (Presentation of Mr. Yuri Mikhailov)

# Accessibility:

- Public motor road closeness to federal motor-roads: Russia (Saint-Petersburg Moscow ) 17 km St. Petersburg-Pskov 6 km St. Petersburg-Narva 2, 2 km, Ring road 2 km.
- Railway track St. Petersburg railway junction 100 railway stations, 8 warehouse depots.
- Sea and river ports Saint-Petersburg Sea-port. Two river port. Freight turnover
   96, 6 million tonns-kilometr
- Airports airport of 1st class "Pulkovo"

# Branch "Novo-Orlovsky"

The Committee of economic development, industrial policy and trade of Saint-Petersburg has developed in 2006 the draft layout of "Novo-Orlovsky" department. The registration and accommodation of SEZ residents in the "Novo-Orlovsky" department is planned in 2008-2009 years, as of creation of the infrastructure. In the following image it is possible to see the territory of SEZ "Novo-Orlovsky" ( 1 ) and its neighbouring territories: Institute of Electronic physics and Electronic energetic RAS (1), Ioffe Physico-Technical Institute (PhTI RAS) (2), Institute of Applied Astronomy RAS (3)



Image 11: The territory of SEZ "Novo-Orlovsky" (Presentation of Mr. Yuri Mikhailov 2008)

## Accessibility:

- Public motor road closeness to federal motor-roads: Scandinavia (St. Petersburg-Vyborg-national boundary) 2, 3 km, Ring road 5, 5 km.
- Railway lines Saint-Petersburg railway junction 100 railway stations, 8 warehouse depots.
- Sea and river ports St. Petersburg Sea-port. Two river port. Freight turnover 96, 6 million ton-kilometers
- Airports airport of 1st class "Pulkovo"

The government of Saint-Petersburg, headed by Governor Valentina Matvienko promises the investors the guaranteed support at all stages of development of the SEZ. The special supervisory council created in the SEZ consists of representatives of the Federal Agency for Management of Special Economic Zones, Saint-Petersburg City Administration, residents of SEZ, Saint-Petersburg Chamber of Commerce and Industry, Russian Academy of Sciences and Saint-Petersburg State Universities. All this should help to make it so, that nobody could offend the business, and all the questions would solve effectively, quickly and transparently.

# 6.2 Innovation-technological centers

# 6.2.1 Role of Innovation-Technological centers in realization of regional innovation processes<sup>13</sup>

It is known that in industrially developed countries small and medium size enterprises (SME) produce up to 50-60% of the gross national product. Scientific and technical sphere is included into national priorities of these countries, and in recent decades is observed a rapid growth of organizations, that place at their territory SME of various specialization and support their establishment from the technical-organizational side. The development of the mentioned above organizations is one of the basic areas of national and regional policy in scientific and technical sphere of these countries, because they strongly influence the decision of such important problems as:

- development of science-intensive and high-technology industries and increase in their competitive ability at a world level;

<sup>&</sup>lt;sup>13</sup> This chapter based on the interview with Mr Kirill Razguljaev, director of The Institute of Regional Innovation Systems

- increase in employment of population;
- export-import activity extension;
- stabilization of bounds between scientific-technical organizations and institutes and regional industrial enterprises;
- generation of new regional image;
- increase in the role of science and education.

In the foreign sources these organizations are referred as: "incubator", "industrial park", "enterprise centre", "technological business centre", "innovation-technological centre" (hereinafter referred to as ITC), etc. The distinctive feature of ITC is that they first provide not the implementation of concrete projects for creation of innovational products, but support to development of independent business entities.

Thus ITC is a property complex, used by his owner (manager) for providing to SME of scientific and technological sphere (hereinafter referred to as – SME STS) on advantageous for both sides terms:

- office and industrial premises on a long-term lease to adapt these premises for industrial technical demands of SE STS leaseholder;
- complex of services for providing them with innovational and household activity.

A property complex availability including a separate technological building or a complex of situated nearby buildings, connected with common engineering services and corridors (galleries) is a significant feature of ITC.

The activity of these structures appeared to be rather effective: according to various data 70-80 SME-residents of ITC exist at the market for at least 3 years, when at the same time at least 75% of SME not having got the support from ITC "perish" during a year and a half of their existence. In some time in the future ITC can come up to self-repayment, however most of them for at least 3-5 years of their existence work with the help of the essential material support of the government, possessing a series of benefits either at the national or at the regional level.

# 6.2.2 ITC activity creation in Saint-Petersburg<sup>14</sup>

Recent years in Saint-Petersburg, as well as in other technologically rich regions of Russia, adaptation of the developers and producers of complex technical equipment to new economic conditions takes place, which helps them not to loose their specialization. As a result a section of competitive SME is being formed, that often seems to be the best form of organizations for introduction to manufacture the results of the best researches in the difficult conditions of economic reorganization in the Russian science and science intensive industry. At the same time the objective of SME of scientific and technological sphere is not only the creation of new technologies and delivery of them to big enterprises for wide-ranging manufacture, but above all research and analysis of the future market of the offered high technological products. They can also stimulate the creation of this market, advertising new output and creating necessary prerequisites for wide consumption.

The urgency of ITC activity creation in Saint-Petersburg is determined not only by a possibility of the problem decision that ITC solve in other countries, but the structural economy reorganization, that gain strength in Russia: it is necessary to organize sequentially its way to divest of big enterprise's monopoly and creation of a middle property class.

Saint-Petersburg's turn to innovational way of development foresee economy stabilization and overcoming industry recession with the help of its reconstruction and adoption of modern technology subject to the market requirements. Increase in business activity in the area of small science intensive enterprise activates the mentioned processes and gives to the city's budget an important increase in coming of financial assets for taxes and thousand of additional high qualification level working places. According to the city committee statistics there are more than 3000 SME of scientific and technical sphere (SME STS) in Saint-Petersburg, however a few of them are able to gain commercial success. The urgent problems they face are:

- Severe conditions for business conduction:
  - high taxes and absence of benefits to activity in high technology area;

<sup>&</sup>lt;sup>14</sup> This chapter based on the interview with Mr Kirill Razguljaev, director of The Institute of Regional Innovation Systems

- high expenditures connected with leasing of premises, property and activity of SE security enforcement;
- absence of bank and venture financing of R&D;
- Peculiarity of science intensive production:
  - high cost and duration of R&D;
  - demand for an expensive technical equipment;
  - long duration of complex technical products production cycle;
  - strong dependence on partners and suppliers;
  - high degree of subjection to various risks;
  - necessity and expensiveness of intellectual property protection;
- Underdevelopment and/or expensiveness of required infrastructure;
- Problems of SME STS formation
  - lack of experience in rational usage of gained investment;
  - management weakness;
  - lack of market culture;
  - lack of experience in introduction of new scientific and technical production in the conditions of tough and not always civilized business competition from the side of big enterprises and existing customer's preference for foreign products.

ITC should render assistance to either placing at their territory SME of scientific and technical sphere or other innovational SME of the city to solve these problems. For SME STS location in ITC is attractive because of their activity in ITC legal platform, relatively low price, quality and wide range of services available, and also existence of comfortable innovation sphere, being common for all included in ITC SME STS groups. Thus the objective of ITC activity in Saint-Petersburg is to assist preservation and development of the city's scientific and technical potential through the support of innovational process, implementing by SME STS, placed in ITC.

The main objective, being solved by the city's ITC, is ensuring of reliable interface between scientific organizations and industrial enterprises from the one side, and between industrial enterprises and market from the other side.

#### General functions of ITC:

1. Support to processes of development and approbation of science-intensive technologies and high technology products.

- 2. Rendering of premises to small scientific and technical firms under lease appropriate for intensive technologies development.
- 3. Rendering of full range innovational services to scientific and technical firms (business planning, scientific-technical and economic expertise of a scientific-technical idea, providing a title to intellectual property objects, information services, advertising activity, technology transfer, technological audit, certification of products, services, staff, projects supervision, etc.).
- 4. Creation and formation of scientific and technical firms for concrete scientifictechnical ideas.
- 5. Staff retraining for a science-intensive business.
- 6. Market analysis of scientific and technical products and technologies.
- 7. Assistance to big industrial enterprises for launching large-scale manufacture of science intensive production, developed by small firms. The main goal of the assistance is to reduce a risk and probable losses of a big enterprise while they are mastering new production.

The activity of ITC must be turned to solve such important for Saint-Petersburg problems as:

- development and assistance to stable technological innovational activity of SME
   STS, being placed in ITC for their effective implementation of integrating functions in innovational circle "researches development manufacture- sale";
- occupation of big industrial enterprises with manufacture of the products, being developed in ITC, in the first term – enterprises, participating in creation of ITC;
- increase of investment attractiveness of projects in the area of high technologies;
- apply ITC centers not only for providing service to SME STS, placing at their territory, but also for other enterprises in the city, that are occupied with technological innovational activity.

ITC activity is assessed according to the following factors:

- total valuable ITC area;
- a number of SME STS located in ITC;
- output per worker;
- output per 1 square meter of ITC leasing area;
- total value of tax receipts to local budget;

 ratio of funds form non-budget fund involved in SME STS to straight budget investments.

# **6.2.3** Innovation-Technological centers in Saint-Petersburg<sup>15</sup>

In Saint-Petersburg there is rather high scientific and technical potential, high qualified science and engineering staff, sufficient natural resources for development of different economic and industrial fields. The development of economy and industry, solving of the most important problems of municipal services according to the needs of modern society is impossible without using of the latest science developments and innovational technologies. Innovation technological centers (ITC) serve as an interlink between science and industry, the developers of science intensive products and investors. In ITC small and medium firms are stationed, that implement innovational projects, joined organizational and financial resources of different authorities and structures responsible for realization of national innovational policy in scientific and technical sphere. In ITC the business planning of innovational projects and their expertise, financing, further consulting and informational support, investor's possible participation in ruling of innovational program is carried out.

#### 12 ITCs operate at the territory of Saint-Petersburg:

1. ITC Fond TVN of St. Petersburg State Polytechnic University performs the "incubation" function of small innovational enterprises of scientific and technical sphere, providing the processes of commercialization of technologies, developed by scientists of SPbSPU and other institutes of higher education. It has been created on 1997. Total space with infrastructure is 6 000 square meters. There situated 25 small high technology companies. There are more than 300 employees and around 100 students. Address: 195220, Saint-Petersburg, Gzhatskaya st., 27. Director of Fond TVN is Ms. Popova Vera Alekseevna, seen in image 12 (www.fondtvn.spb.ru).

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<sup>&</sup>lt;sup>15</sup> This chapter rely on the information from the official website of Saint-Petersburg Administration, retrieved on 1 October 2008 from http://www.gov.spb.ru/gov/admin/otrasl/c\_science/itc (in Russian language)



Image 12: Ms Popova Vera Alekseevna (www.fondtvn.spb.ru. )

2. ITC of Saint-Petersburg Regional Foundation for Scientific and Technological Development (RFSTD) was established in August 1992 by federal and municipal authorities. RFSTD which peculiarity is inseparable boundary of small enterprises with organizations that carries out fundamental and applied researches, and also ensures industrial manufacture. ITC residents are enterprises, developing and producing semiconducting and optoelectronic technique, telecommunication, informational technologies, composite, chemical and pharmaceutical substances and materials, mechanical engineering production. There are more than 30 small innovative enterprises at the moment. Address: 194156, Russia, Saint-Petersburg, Prospekt Engelsa, 27, build. 12B Director of RFSTD is Mr Gladkih Igor Vladimirovich, seen in image 13 (www.rfntr.neva.ru).



Image 13: Mr Gladkih Igor Vladimirovich (www.rfntr.neva.ru.)

3. ITC of Saint-Petersburg State University of Information Technologies, Mechanics and Optics is one of the largest ITC of the city's institutes of higher education with the total area of 15 thousand square kilometers. At present ITC places 30 small innovational companies, implementing the developments in

producing software, optoelectronic and laser technique. "The purpose of the ITC is to generate the long-term competitive advantages for the ITC actors by of means of integration education, science and business. The main actors of the ITC are 1) the university SPbSU ITMO, 2) the research center Vavilov State Optical Institute and its subsidiaries and 3) small innovation companies - residents of the ITC"(The website of ITC of SPbSU ITMO). The address: 16, Birzhevaya line, Vasilyevsky Island, Saint-Petersburg, 199034, Russia. Director of ITC of SPbSU ITMO is Mr. Yuri Valentinovich Tsypkin, seen in image 14(www.itcitmo.ru). .



Image 14: Mr Yuri Valentinovich Tsypkin (www.itcitmo.ru.)

4. ITC of St. Petersburg State Mining Institute (Technical University) called "The Network Centre of the Unique Equipment Collective Usage", among the principal activity trends of which are cooperation with the leading domestic and foreign enterprises that works with extraction and processing of mineral wealth while holding research and project searching works, creation of new technologies and materials, involvement of received results into industry. Purpose ITC - expansion of possibilities of scientific researches and workings out, and also increase of labour productivity and quality of production of small enterprises on the basis of an effective utilisation of the unique scientific and industrial equipment. The Internet portal contains the Database of the unique equipment of 37 high educational institutions; scientific research institutes and the industrial organisations of Saint-Petersburg equipped with the modern equipment and devices of leaders foreign and home producers. The address: 199106, Saint Petersburg, Vasilivcky Island, 21st line, Building 2

(http://www.sckp.ru/) (Only in Russian language).

5. ITC occupied with recycling and utilization of industrial and hard domestic wastes of the Research and Engineering Corporation "Mekhanobr-tekhnika". ITC perform functions of scientific and information providing of City Administration subsidiaries` activity concerning questions of industrial and domestic wastes treatment, holding of expertise assessment of investment projects, R&D, projects of administrative and legislative documents in the area of recycling and utilization of industrial and hard domestic wastes, etc. Mekhanobr-Tekhnika encompasses the entire machine-building complex of the Mekhanobr Institute. "Mekhanobr-tekhnika" provides services for enterprises and organizations of: The mining and concentrating industry, Metallurgical industry, Coal industry, Construction materials sector, Machine-building industry, Enterprises engaged in abrasive materials production, Enterprises processing scrap of precious and non-ferrous metals. The address: 3, 22 liniya, V.O., 199106, St. Petersburg, Russia. General Director of "Mekhanobr-tekhnika" is Mr. Leonid A. Vaisberg, seen in image 15 (www.mtspb.com).



Image 15: Mr. Leonid A. Vaisberg (www.mtspb.com)

6. ITC of Saint-Petersburg State University of Design and Technology, the main activity of which is creation and development of progressive technologies in the sphere of ecology, medicine, textile and light industry in general. ITC consists of 6 departments: transfer of technologies, protection of intellectual property, support of innovational projects, laboratory of social-economic studies, analytical and department of organization of exhibitions and conferences.

Established in 2002. The address: Bolshaya Morskaya street 18, 191186, Saint-Petersburg, Russia (www.innov.sutd.ru).

- 7. ITC Technopark of Saint-Petersburg Forest Technical Academy the main function of which is the development and support of educational and industrial resource base for St. Petersburg Forest Technical Academy, approbation and introduction of new technologies into timber processing area. Established in 1994. Main business areas: wooden windows manufacture, production of sawn timber, wood house building, house thermal protection, woodworking machinery sales and service, car repairs, innovative projects. The address: Zemledeltseskaya street 1, building 3, Saint-Petersburg, Russia. Postal address: Lesnoj prospekt 94, 194021, Saint-Petersburg, Russia. Head of Directors' Council is Mr. Shestov Aleksandr Yurjevich. General Director is Mr. Shakin Sergey Ivanovich (http://www.technopark.spb.ru/page.php?id=380)
- 8. ITC "The Centre of Innovations Support" of Ioffe Physico-Technical Institute. The main activity of the firms, located in ITC is electronics and nanotechnologies. The address: 26 Polytekhnicheskaya, St Petersburg 194021, Russian Federation. Phone: 7 (812) 247-93-99. Director is Mr. Zabrodskiy Andrey Georgievich (http://www.ioffe.ru/).
- 9. ITC North-west Regional Innovational centre of Intensive Technologies "ARTES" of Institute of Electro physics problems of Russian Academy of Science. The activity of the center is focused on the priority areas of modern science and technology, the latest innovational technologies oriented to solve the problems of ecology, environment protection, destruction and recycling of various wastes, including hard domestic wastes, medical and especially toxic, and also on introduction of the latest plasmatic methods of getting energy from the renewable energy sources. The address: Dvortsovaya nabereznaya 18, 191186, Saint-Petersburg, Russia. Telephone: 7 (812) 571-65-26. E-mail: artes@iperas.nw.ru Head is Ms Kumkova Irina Ivanovna

10. ITC "Innovations of Leningrad Institutes and Enterprises (ILIP)" of Saint-Petersburg State Electrotecnical University "LETI", where 21 small enterprises are located, working in the scientific and technical sphere. Among the services, providing by ITC to small enterprises: assistance to small innovational firms in manufacture and market promotion of scientific and technical production, transfer of scientific and technical, technological, organizational innovations to industrial enterprises, participation in the development of innovational activity in Saint-Petersburg, realization of system innovations, international contracting, research works, engineering, including such directions as: Carbon nanotechnologies;Biocybernetic systems "Smart home". Established in 1989. The address: 197022, St.-Petersburg, Instrumentalnaya str., 6. General director of ILIP JSC is Mr. Ermilov Nikolay Nikolayevich, seen in image 16 (www.ilip.ru).



Image 16: Mr. Ermilov Nikolay Nikolayevich (www.ilip.ru).

- 11. City Coordinating Centre of SPbSPU for the Innovational Activity Development in the Science and Education of Saint-Petersburg State Polytechnical University, the main purpose of which is the integration of the scientific educational, experimental-design and technological forces of St. Petersburg's organization occupied with formation and development of city's innovational system in science and education. Director is Mr. Nurulin Yurij Refkatovich (www.inncenter.spb.ru). (Russian language only).
- 12. North-West Center of New Information Technologies of The State University of Aerospace Instrumentation (SUAI), which includes branch fund

of algorithms and programs, laboratory of musical information science and acoustics, educational information center Runnet. Address: 190000, Saint-Petersburg, Bolshaya Morskaya street, 67

(http://guap.ru/guap/szcit/krat1\_main.shtml) (Only in Russian language)

#### 6.3 IT Park

A scientific and technological park specialized in the field of information technologies – IT-park will be established on the basis of The Bonch-Bruevich Saint-Petersburg State University of Telecommunications. On 17 April 2006 The Agreement on creating the IT-park was signed between the Ministry of an information technology and communications of the Russian Federation, the Government of Saint-Petersburg and The Bonch-Bruevich Saint-Petersburg State University of Telecommunications. This IT-park will be built in the frame of the Russian Federation State programme "Creating high-technology sector technoparks in Russian Federation".

The IT-park represents a scientific and technical complex. It is planned to elaborate and test new technologies in the sphere of communication and software. This is the first project of such kind in Russia, which makes the University the unique place for specialist training in the sphere of telecommunications.

# The purposes of IT-park of Saint-Petersburg are <sup>16</sup>:

- carrying out scientific, research, development, informational projects and programs;
- implementing the results of R&D programs into manufacturing;
- marketing of knowledge-based products and technologies;
- providing informational, consultative and expert services in the telecom area;
- organizing special informational and educational programs and courses.

<sup>16</sup> Source: presentation of Mr M.Eschenko, The Head of Innovation System Development Department of CEDIPT, on Conference "Problems and Ways of Development of Innovation Activities in Modern Conditions" 17 October 2007

## **Main Figures of the IT-park:**

- total area of the premises over 500 000 sqm, including:
  - o university campus 100 000 sqm
  - o business incubator 20 000 sqm
  - o offices for rent 200 000 sqm
  - o offices of the partners 100 000 sqm
- total amount of the investments over 500 mln USD
- schedule of the development:
  - o planning & design 2007-2008
  - o making agreements with investors and tenants the end of 2007
  - o construction I phase 2008-2009
  - o construction II & III phase 2008-2012

The IT-park will be located on 65,5 ha of a green field in the eastern part of the city called Nevsky district. It is 30 min drive to the international airport; 15 minutes drive to the city centre, adjacent to an underground station. Image 17 shows the location seen from a satellite.





Image 17: Location of IT-park (Presentation of Mr. M.Eschenko 2007)

The IT-park will consist of the following elements: cultural-leisure centre, conference-centre, offices for rent, office premises of the partners of the Technopark, hotel, recreational area, residential premises, business incubator, fitness-centre and stadium. Image 18 shows the plan of the IT-park.

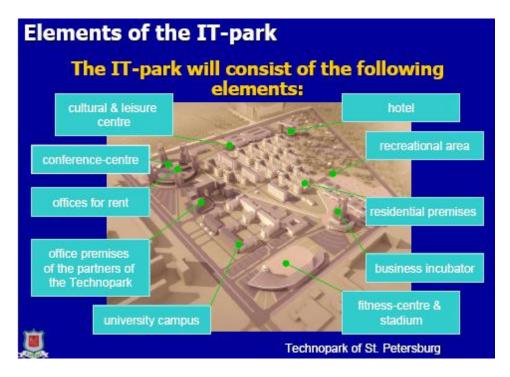


Image 18: Elements of the IT-park (Presentation of mr. M. Eschenko 2007)

Federal Government of Russian Federation provides the project with start-up financing from federal program "Electronic Russia" for developing the infrastructure of telecommunications, from federal programme "Creating high-technology sector technoparks in Russian Federation", as well as 30 bln US \$ are allocated to be invested within 10 years into the telecom industry and 162 mln US \$ of state investments are allocated for this particular project within three years. The total cost of IT-park will constitute 1 mlrd US \$. The financing of IT-park in Saint-Petersburg is divided between the budget of Russian Federation 50 % and the budget of Saint-Petersburg City 50 %. The budget of Russian Federation and Saint-Petersburg City will cover the creation of infrastructure, and the construction of buildings will be carried out on investors' budget.<sup>17</sup>

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<sup>&</sup>lt;sup>17</sup> Source: The website of Federal program "Electronic Russia" http://www.e-rus.ru/main.shtml, in Russian language only





Image 19: IT-park in the future (The presentation of Mr M.Eschenko 2007)

# 6.4 Peterhof - Science city "Naukograd" 18

Petersburg. Peterhof became the first in Russia science city, which have two constituting — a scientifically educational complex and memorial estate. In a city a number of faculties, and also campus of the Saint-Petersburg State University, Naval institute of radio electronics is possessed. The status of science city has been given to Peterhof for a period of five years (from 2005). Upon termination of these five years the city should report for the conducted works for status acknowledgement of Science city. By the results of these works the decision on extension of the status or its deprivation will be accepted.

#### Legal basis of Naukograd

By the Russian Federation Government decree № 449 of June 23, 2005, the suburb of Saint-Petersburg – town Peterhof, was assigned a status of the Science Town of Russian Federation that confirmed its well-deserved recognition as a unique centre of education, science and culture. According to this decree the directions of scientific, scientific-and-technological and innovative activities, exploratory development, testing and personnel training, being a priority to town Peterhof as the Science Town of Russian Federation and correspondent to top-priority goals in the development of science, technology and engineering of Russian Federation were approved:

ecology research;

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<sup>&</sup>lt;sup>18</sup> This chapter rely on the information from the website of Science city "Naukograd": http://www.naukograd-peterhof.ru (in Russian language only)

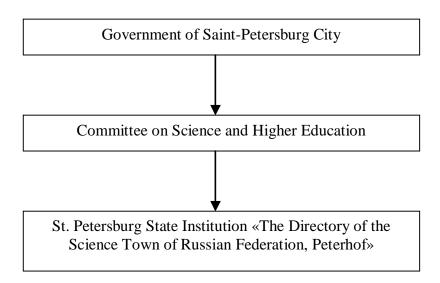
- information and telecommunication technology and electronics, including communication and maritime mobile objects detection systems;
- earth's physical fields' and spheres' structure research (atmosphere, magnetosphere, ionosphere, lithosphere, hydrosphere, earth's mantle and core);
- methods of streamlined synthesis of complex organic molecules with the purpose of acquisition of physiologically active substances with the selective effect;
- living systems technologies, genetic processes, cell biology and development biology, structural and molecular-genetic mechanisms of individual development regulation;
- the development of perspective armament, military and special enginery, including those for the navy;
- research concerning museum, historical and cultural values restoration and maintenance;
- highly qualified personnel training, including the artifacts of culture and art conservation and instauration specialists, as well as those of military professions.

In correspondence to the Russian Federation Government decree № 449 of June 23, 2005 "On awarding town Peterhof with the Science Town of Russian Federation status", the St. Petersburg Government decree № 361/1 of March 09, 2004 "On basic undertakings in the of science sphere and innovative activities in science and education of St. Petersburg during 2004-2007" the government of St. Petersburg has approved the decree № 1792 of November 25, 2005 according to which:

- the supervisory council of the Science Town of Russian Federation, Peterhof has been established;
- supervisory council regulation has been approved;
- the Committee of science and higher education has been commissioned to manage the coordination of work of the institution;
- St. Petersburg State Institution «The Directory of the Science Town of Russian Federation, Peterhof» has been established;

According to the St. Petersburg Government decree № 1792 of November 25, 2005 the governor of St. Petersburg V. I. Matvienko has been appointed to be the president supervisory council.

#### Structure of administration



#### The results of development of the Science Town in 2006-2008:

According to the Program of complex socio-economic development of the municipal education of town Peterhof as the Science Town of Russian Federation in 2006-2010 and the Event List on development and support of social, engineering and innovative infrastructure of the Science Town of Russian Federation, Peterhof, financed from the means of the federal budget in 2006-2008 the following projects were accomplished:

Measures on development and support of social infrastructure:

- the design and estimate documentation on the multifunctional sport complex construction has been developed;
- the Restorer School has been established on the basis of the Interscholastic Educational Training Complex №1.



Image 20: Future view of sport complex (http://naukograd-peterhof.ru)





Image 21: Restorer school (http://naukograd-peterhof.ru)

# Measures on development and support of engineering infrastructure:

- the design and estimate documentation on the video surveillance system instrumentation of the Science Town of Russian Federation, Peterhof has been developed;

Measures on development and support of innovative infrastructure:

- § The design and survey work has been arranged and the design and estimate documentation on the innovative-technological centre building construction has been developed;
- § the technology transfer centre has been established;
- § the telecommunication portal has been established: www.naukograd-peterhof.ru;
- § the activities on the designing and the I stage main fiber-optic cable laying telecommunications network of the Science Town of Russian Federation, Peterhof with connecting to educational institutions of the district.

# 6.5 The Innovative-technological Centre

In the network of the event dedicated to the development of the Science City of Russian Federation in Peterhof, innovational and technological center must be a key project in developing of innovation structure in Peterhof. Having a significant science, educational, and innovational potential Peterhof has a great number of working small and medium-sized enterprises that will make a principal source of increasing the taxable base, a number of working places, widening of nomenclature, and increase in the volume of producing products. At present these enterprises face difficulties because of the insufficiently developed innovational infrastructure.

The innovative-technological centre (ITC) – the most important infrastructural project within the development the innovative infrastructure of the Science City of Russian Federation, Peterhof. The core of the centre will be:

- the techopark of information technology,
- the centre of nanotechnology,
- the centre of low-tonnage production,
- the centre biotechnologies,
- business incubator.

The establishment of the ITC is objectively contributed by the existence of solid scientific and educational basis – St. Petersburg State University's educational-scientific complex of Petrodvorets with its faculties of natural sciences:

- chemistry,
- physics,
- applied mathematics an management process,
- mathematics-mechanics, and 10 scientific research institutes. The innovative-technological centre construction will allow to provide the developed innovative infrastructure of the district.



Image 22: Future view of innovative-technological centre (http://naukograd-peterhof.ru)

Around the development of "Naukograd" few scandals and student's mass meetings took place. By the end of 2008 the unique realised project of "Naukograd" - School of restorers is opened. The director of "Naukograd", Mr Erkulov Anatoly is fired.



Image 23: Mr Erkulov Anatoly, former director of the State Institution «The Directory of the Science Town of Russian Federation Petergof» (http://www.mopetergof.spb.ru/naukograd.html)



Image 24: Mr Igor Kusheverskij, Temporarily fulfilling duties of the director the State Institution «The Directory of the Science Town of Russian Federation Petergof» (http://naukograd-peterhof.ru)

#### **6.6** Ventures funds

# 6.6.1 The Foundation for Assistance to Small Innovative Enterprises (FASIE)<sup>19</sup>

The Foundation for Assistance to Small Innovative Enterprises (FASIE) is a non-commercial state organisation set up by Russian government resolution No. 65 of February 3, 1994.

<sup>19</sup> The information is taken from the website of The Foundation for Assistance to Small Innovative Enterprises: www.fasie.ru, retrieved on 21 November 2008

The main purpose of Foundation is support of small innovative enterprises (SME) by providing them financial and informational support. Since its creation, more then 4,000 SME from various regions around the country have applied to the foundation. The foundation's tender commission and experts have selected around 2,000 projects for funding. The Foundation's international partners include the Tacis program, the Eurasia Fund and the British Council. Strong ties have been established with similar foundations in France (ANVAR), Britain (DTI), the U.S. (CRDF) and others. Joint programs are aimed at creating informational, marketing and consulting support for small innovative enterprises in Russia. Every year the foundation supports the participation of over 150 small businesses in specialized medical, engineering, bio-technological, informational and other exhibitions.

# 6.6.2 Programme "Start" 20

As an example of system, which support the development of innovative projects the program "START", declared in 2003 can be examined. The basic purpose of the program is the assistance to the scientist, technical officers, the students, aspiring to develop and organise the manufacturing of the new goods (a product, technologies) or services on the basis of the results of the scientific researches. Thus it is supposed, that for realization of the given task, the new small enterprise of the high technology business will be created, or the existing small enterprise will take a niche by means of highly technological production of new goods or services.

The program is realized in two stages. The first stage of the innovative project can last for one year and it is called "sowing" ("posevnoj"). At this stage the applicant for rather small funds (up to 750 thousand roubles), given to him on an irrevocable basis, for the research and development, carries out a number of actions, which will allow him to be convinced of a reality (or unreality) of commercialization of the results of his scientific research. Among those actions there can be the finishing scientific researches, development of the prototype of a product, its testing, patenting, drawing up of the business plan, etc. Thus in the program there are no formal requirements on structure of the works, the potential businessman himself decides, what it is necessary for him for

This chapter based on the interview with Mr Kirill Razguljaev, director of The Institute of Regional Innovation Systems

carrying out from the listed actions to receive objective acknowledgement of the opportunity of commercialization of his ideas and to convince the experts of the Fund.

The second stage of the project assumes formation of a small enterprise, basic activity of which will be the high technology works connected with realization of the idea of commercialization of results of scientific research. The real commercialization for the program promotion of the new enterprise (new division at the enterprise) by the end of the third year is considered when the number of employees comes to 15-20, and the volume of realization of the new product or service is not less than 750 thousand roubles per such an employee per one year.

At the second stage of realization of the project, financing given by the Fund for supporting of the innovative project, will depend on the course of works and the volume of inappropriate sources of financing involved with the executor, but not exceeding 4,5 million roubles in total for three years.

The system of expert selection of projects is created by Fund according to the Regulation of the Ministry of the General and Vocational training of Russian Federation. The Fund does not establish any special form of the application for the innovative project. The opportunity itself in the any form is given the applicant to convince experts of the reliability of his business idea. Thus, additional check of knowledge by the applicant of modern approaches to the formulation of business idea, development of business plans etc. is made. In any case, the applications must show that applicants have the right on the scientific results offered to commercialization (presence of the property right to the patent, the license agreement, the letter of the head of the scientific organization, etc.). The selection of projects for financing is done in two stages:

- 1. The first stage is the appraisal of the project by an independent expert
- 2. The second stage is the personal interview of the applicant before the Jury. (www.fasie.ru)

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6.6.3 Russian Venture Capital Association

Mission - assistance to formation and development of the venture industry in Russia.

The primary goals:

Assistance to formation of a favourable enterprise climate in the country

Representation of interests of the members in the country and abroad

Supply with information of participants of the Russian venture market

Preparation of experts for venture business.

It is created in 1997. Russian Venture Capital Association is member of the European

Association of Direct Investment and the Venture Capital (EVCA). It is recognised by

all professional Associations abroad, realises the projects directed on construction of an

infrastructure on venture business in regions and at federal level and conducts

researches of the market of private investments in the country.

The Russian Venture Capital Association was one of the main organisers of IV Russian

venture forum and IX Russian Venture Fair, which was organised in the frame of the

Saint-Petersburg International Innovation Forum, which took place on 8-10 October

2008. The author of this final thesis took part in that forum, in the frame of the project

of The Baltic Institute of Finland "SPb InnoReg - Promoting Regional Innovation

System in St. Petersburg through Transnational Cooperation" (see the chapter №6).

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# 7 Projects of The Baltic Institute of Finland related to the development of innovation infrastructure of Saint-Petersburg

#### 7.1 The Baltic Institute of Finland

"The Baltic Institute of Finland (BIF) is a project organization established in 1994 to facilitate the launch of concrete cooperation projects within the Baltic Sea Region (BSR) and foster Finnish participation in the BSR cooperation. The Institute's activities materialize in concrete commercial, administrative, educational and cultural development projects. BIF organises seminars and workshops dealing with topical issues and co-operation opportunities in the BSR" <sup>21</sup>

The author of this final thesis is working as a project manager in BIF. She was taking part in different projects, lead by BIF, organised several seminars and network meetings. Network meetings ensured the Institute with new project ideas and new partners.

Leningrad Region Administration visit, which was organised by the Baltic Institute of Finland in collaboration with City of Tampere, Tampere Polytechnic - University of Applied Sciences and Administration of Leningrad Region on 7-8 May 2007 is an example of successful cooperation that leads to the implementation of new project.

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<sup>&</sup>lt;sup>21</sup> The information is taken from the website of BIF: www.baltic.org



Image 25: From left to the right Ms Julia Lihhatsjova, project manager, BIF, Mr. Valentin Chmil, Head of department of Socio-economic development, Administration of Leningrad Region and Mr. Timo P.Nieminen, The Mayor of Tampere City (Photo: Ms Katja Kaunismaa).

On the base of this meeting the future project "BSR InnoReg – Strengthening innovation governance in Baltic non-metropolitan regions through transnational cooperation" found new partners – Administration of Leningrad region. This project will start in February 2009 and will end on September 2011.

# 7.2 SPb Innoreg - Promoting Regional Innovation System in St. Petersburg through Transnational Cooperation

By The Baltic Institute of Finland in collaboration with the Institute of Regional Innovation Systems in Saint-Petersburg, Tampere Polytechnic – University of Applied Sciences and Tampere University on 14-15 September 2006 in Tampere was organised The Finnish-Russian Innovation Forum. The forum provided a topical overview on recent trends and developments in innovation policies and innovation performance in Russia, especially in Saint-Petersburg.

The main speaker of the Finnish-Russian Innovation Forum was Mr. Mikhail Osejevski, Vice-Governor on economic development, tax, industrial, scientific and technical policy of Saint-Petersburg. Mr. Osejevski presented the innovation situation in Saint-Petersburg, where the biggest challenge is the creation of regional innovation system. Mr. Osejevski stressed that Saint-Petersburg wants to learn from Finnish experience and good practices in innovation development.

As a student of E-Academy module the author of this thesis took part in organization of "The Finnish-Russian Innovation Forum". During the preparation time the author has multiple trips to Saint-Petersburg together with director of BIF Esa Kokkonen and project director of BIF, Katja Kaunismaa. In Saint-Petersburg we had meetings with key players in development of Saint-Petersburg regional innovation system. This Forum has put a basis for the organization of the project "SPb InnoReg - Promoting Regional Innovation System in Saint-Petersburg through Transnational Cooperation".

The project "SPb InnoReg" - Promoting Regional Innovation System in St. Petersburg through Transnational Cooperation" aims at fostering competitiveness and developing regional innovation system in Saint-Petersburg through cooperation with innovation actors of the Baltic Sea region. The project is highly based on the partnerships and results of two previous projects: VBN InnoReg and BaltMet Inno - the latter concentrating on developing innovation environments of the Baltic Sea metropolises.

The partners of SPb InnoReg include City of Saint-Petersburg and Saint-Petersburg Foundation for SME Development from Russia; City of Helsinki, Culminatum Ltd, University of Tampere, Hermia Business Development Ltd, Seinäjoki Technology Centre and Lappeenranta Innovation Ltd from Finland as well as Innovation- and Trendcenter Bentwisch, Technology Center Warnemünde and Wista Management from Germany. The application of the Lead Partner, the Baltic Institute of Finland in the BSR Interreg IIIB 9th call for proposals was approved by the Steering Committee in December and received funding during 2007–2009. Project budget is 625 000 EUR, out of which about 460 000 EUR will be co-financed by the EU.

#### 7.2.1 Activities of the SPb InnoReg

- 1. Analysis of the existing regional innovation system in St. Petersburg will be produced and recommendations on improving the innovation system will be elaborated.
- 2. Regional training events and study tours are organized to ensure involvement and capacity

building of all key innovation system actors and sustainability of the analysis results.

- 3. Existing, emerging and most potential clusters and technology areas in St. Petersburg will be identified from a transnational cooperation perspective.
- 4. Innovation Working Group will be established. Indicators to monitor the innovation strategy implementation in Saint-Petersburg will be selected (www.baltic.org).

SPb InnoReg is honored and challenged to be one of the important components of the Intergraded Program "Actions for innovation policy implementation in Saint-Petersburg for 2008-2011", accepted by the St Petersburg Government on 23.01.2008 (www.baltic.org).

A great example of Saint-Petersburg's innovation activity was the Innovation forum held in Saint-Petersburg at "Manezh" exhibit hall on October 8-10 2008, which was visited by over a thousand participants representing 40 cities of Russia and 20 countries. The event comprised of 30 events with different targets such as conferences, discussions, round-table discussions, seminars, covenant signings and award ceremonies for the winners of various contests. The organizers managed to gather together all the participants interested in innovation activity, from the representatives of fundamental and applied science to large investment companies that are ready to invest their stocks in the innovation products or services. The IV Russian Venture Fair and the IV Russian Venture Forum were held within the framework of the Forum.

In the frame of the Saint-Petersburg International Innovation Forum, the seminar "Development of the Regional Innovation Systems – from the Baltic countries experience" took place. This seminar was organized by The Baltic Institute of Finland in the frame of SPb InnoReg. On that seminar Finnish experts gave their comments on the Intergraded Program. Mr Erkki Kaukonen, Research director, Group for Science, Technology and Innovation Studies, University of Tampere, Finland underlined that "the Programme should focus more on the needs of the firms: how can firms' innovation capabilities be developed; Co-operation and networking needs to be stressed (network policy); Focus on innovations in services, particularly the role of KIBS (knowledge intensive business services) in innovation systems (new possibilities for SMEs)". Mr Erkki Kaukonen suggest to consider further structural reforms, even radical, to:

"Integrate scientific research (academic & partly sectoral) to universities and higher education:

-Different modes: new institutions, alliances, joint programs, programs for university-based research.

-A way to attract younger generation into STI

Promote transition from governmental sectoral research (otraslevaya nauka) to industrial R&D proper - to make (oversized) R&D more productive and bring it closer to the market & customers

–Modes: partial privatisation (cf. China), joint technology programs with companies, stimulating industrial R&D". <sup>22</sup>

Mr Harri Melin, professor of Sociology, department of Social research, University of Tampere, Finland stressed the fact that in Russia exists:

- "Institutional deficit: weak political institutions, rule of law?, corruption
- Low confidence on major social institutions
- Lack of openness and transparency
- Too close interconnection between economics and politics
- How to move from raw materials to innovations?"<sup>23</sup>

In addition to the previous problems there are economic problems: "Weak banking sector: how to get risk/start up funding for new firms, too much large corporations, much more SMS needed, and more emphasis to SMS needed" (Mr Harri Melin, The presentation on the seminar "Development of the Regional Innovation Systems – from the Baltic countries experience" on 10 October 2008, Saint-Petersburg). Mr Harri Melin said that the formation of the Intergraded Program is not enough, "foreign R&D projects needed and networking is essential".

During the seminar Finnish and Russian experts on innovation activity discussed the different ways of the development of Saint-Petersburg infrastructure. At the end of the seminar the list of comments on the Intergraded Program from Finnish experts has been submitted to the Committee on the Economic Development, Industrial Policy and Trade, Administration of Saint-Petersburg City.

More information about the project: www.baltic.org and http://innoreg.eu/

<sup>23</sup> Source: Presentation of Mr Harri Melin and Mr Raimo Bloom on the seminar "Development of the Regional Innovation Systems – from the Baltic countries experience" on 10 October 2008, Saint-Petersburg

Source: Presentation of Mr Erkki Kaukonen on the seminar "Development of the Regional Innovation
 Systems – from the Baltic countries experience" on 10 October 2008, Saint-Petersburg
 Source: Presentation of Mr Harri Melin and Mr Raimo Bloom on the seminar "Development of the

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7.3 IPR Saint-Petersburg. Enhancing Intellectual Property Rights

Competence and Cooperation in Russia (St. Petersburg), Finland,

**Denmark and Sweden**<sup>24</sup>

The regulation of the issues of the intellectual property is one of the most complex and

badly formalized issues of innovation management. Transfer of results of scientific

researches and distribution of the intellectual property between participants of the joint

project, and also distribution of income between them on results of commercialization

technologies in world practice is based on allocation and the further account of the

contribution of each partner. The meaning of contribution includes not only material

and financial resources of partners, but also their intellectual property. It is accepted to

allocate two kinds of the intellectual property that should be taken into account

separately during innovation activity.

The base intellectual property - the right of each of the parties on the previously

independently from each other obtained or independently got results of scientific and

technical activity, objects of the intellectual property, commercial and service secrets,

the other results of intellectual activity which are received by the parties independently

prior to the beginning of the project of the transfer.

The design intellectual property - the right of the parties on the objects of the

intellectual property, results of scientific and technical activity, which have been created

during the project. <sup>25</sup>

At planning the joint innovative project its participants should develop and sign the

agreement on regulation of questions of the intellectual property and division of the

future income of realization of innovative products. It is very important, that such

 This chapter rely on IPR Saint-Petersburg project materials
 Source: Article of V.G.Zinov and S.A.Tsiganov "Interaction of a small enterprise and scientific research institute in innovative projects "in magazine "Innovation" № 3, year 2003, retrieved from:

http://www.inti.kz/develop/document/f132.htm on 22 November 2008 (In Russian language)

agreement has been made at the stage of preparation of the project, instead of during its realization (especially - not at its end). Fulfillment of the given condition is a necessary (but not sufficient!) condition for the non-conflict realizations of the innovative project.

The project of The Baltic Institute of Finland "IPR Saint-Petersburg. Enhancing Intellectual Property Rights Competence and Cooperation in Russia (St. Petersburg), Finland, Denmark and Sweden" is based on the outcomes of on-going Nordic-Russian cooperation, started in the framework of a project "Promoting Intellectual Property Protection and Related Awareness Raising in Saint-Petersburg - Joint Cooperation Project between Finland, Denmark and the City of St. Petersburg, Russia" (2005–2006). According to the project results, the prevailing problem in the Russian IPR system is inefficient enforcement of laws and increasing counterfeit problems. Particularly foreign, but increasingly also Russian companies and their branded products are counterfeit problems, trademark infringements. experiencing and copyright Furthermore, the project demonstrated that some of the main challenges in developing IPR system in Saint-Petersburg include insufficient cross-sectoral and international cooperation and networking between key IPR actors and inadequate competence of IPR experts in many sectors.

The IPR Saint-Petersburg project aims at enhancing Nordic-Russian cooperation in protection and enforcement of intellectual property rights (IPR), in developing IPR education and in raising public awareness on importance of protecting intellectual property. The project contributes to the overall development of the IPR system in Saint-Petersburg by strengthening capacities and knowledge of key IPR actors in Saint-Petersburg. It also facilitates exchange and dissemination of information on Russian IPR system in the Northen Europe countries. The long-term objective of the project is to contribute to the development of regional innovation system by strengthening one of its core elements - an effective IPR system. Further a long-term objective is to establish versatile and functional contacts and cooperation networks between key IPR experts in the Nordic countries and North-West Russia. The project is financed by Nordic Council of Ministers and Ministry of Employment and the Economy of Finland.

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The project is divided into four components:

1. Promotion of IPR system development in St. Petersburg targeting

representatives of small and medium enterprises, city administration and IPR

experts through workshops and training.

2. Enhancement of cooperation between Nordic and Russian customs authorities

and law enforcement bodies on IPR protection.

3. Promotion of IPR education cooperation for students, teachers, researchers in

the partner universities through on-line courses and guest lecturers exchange.

4. Awareness raising campaign in St. Petersburg against counterfeit goods

targeting primarily youth.

The author of this final thesis is manager of that project and she would like to stress

your attention on the first component of this project. In the frame of the first component

of the project the trainings for Saint-Petersburg based SMEs, will be organised on 4 and

5 December 2008. The training seminar aims at increasing companies' knowledge of

IPR practices in Russia and the EU and awareness on how to utilise IPR for the benefit

of companies' development. Due to the fact that IPR is closely related to innovations,

and SMEs are one of the driving forces of the development of innovation infrastructure

it is very important to provide the education on IPR issues. The correct IPR strategy of

the company will bring more income to the owners of the company and consequently

will positively influence the development of the economy.

More information about the project: www.baltic.org and www.nofake.org (Only in

Russian)

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## 8 Conclusions

One of the three priorities of the strategy of development of Saint-Petersburg for the period till 2025 is transformation of the city into a world-level innovative centre. Undoubtedly, such a statement is easy to justify, as Saint-Petersburg is a large scientific and educational centre in Russia, and also has considerable industrial and innovative potential. Also the innovative infrastructure of Saint-Petersburg is gradually developing with such elements as Special Economic Zones, Innovation technology centers, IT park, Science city "Naukograd" and ventures funds. The city keeps considerable industrially-innovative potential. At the same time it is necessary to recognize that Saint-Petersburg considerably lags behind the leading world innovative centres.

Until recently, development of innovative activity was braked because of such problems as low level of internal demand for innovative production, lack of cooperation between the subjects of innovative activity, limitations of personnel potential, etc. As the government of Saint-Petersburg has announced, the aim to create an innovative centre of world level is new and even innovative for large Russian cities. Therefore the analysis of the best foreign experiences of creating a world-level innovative centre is needed.

An entrance of a new product to the market is the most difficult stage of the innovative process, and frequently requires active involvement of partners and lot of expenses. In Russia, the competitiveness in all markets is high; the majority of consumers are conservative, and significant efforts are needed to prove a novelty worthy a place in the market.

Recently the increasing help in development of innovations is rendered by so-called business incubators - specialised institutes that should create as favourable as possible conditions for development of ideas and introduction of new technologies and knowhow. Here innovative projects are carried out in close co-operation of the scientist, the investor and the manager. The scientist develops a new technology, the investor invests in it money, and the manager in his turn determines the market for the innovations and organises the work connected with their entrance to the market. As mentioned in Chapter 6, in Saint-Petersburg exists 12 incubators, so called Innovation technology

centres. They play an important role in the development of innovation infrastructure of Saint-Petersburg.

In the Soviet Union very extensive fundamental science was constructed under the defensive branch. Till now, the collectives that can profit of this potential are most effective. In the past years in Russia, more and more innovative products and technologies have evolved and their commercialisation and introduction to the market is increasingly taking place. The process, however, is not simple, but requires considerable efforts and serious investments.

Presently it is possible to find quite a few examples of introducing Russian technologies to the international market. The fact that the leading international innovative companies opened their R&D centres in Russia is already a good proof of Russia's development. Also, today it is possible to visit innovation forums of different fields, where the latest innovations are exhibited, and in which it is easy to receive exhaustive information on innovative products. A great example of Saint-Petersburg's innovation activity was the Innovation forum held in Saint-Petersburg at "Manezh" exhibit hall on October 8-10 2008, which was visited by over a thousand participants representing 40 cities of Russia and 20 countries.

Despite the fact that in Russia a high-grade innovative economy has been created, it is necessary to be not only innovative, but also capable to organise professional marketing of the innovations. In my opinion, it is only a matter of time when corporate culture will operate in close relation with the technological knowledge that in its turn will ease the entrance of Russian innovations to the international market. But, scheduling an innovative way, the inventor always meets difficulties: where to take money for realisation of the idea?

As already mentioned, a great attention is given to the venture business, which can give real possibility for the effective development of SMEs business in Russia. Besides, today in Russia there are also private businessmen, who are ready to finance innovative projects that are carried out by small innovative companies. These businessmen are also willing to assist scientists, qualified experts and students, aspiring to develop and master

manufacture of new competitive-capable goods and services on the basis of results of the scientific researches and fundamental science achievements.

With the development of innovation infrastructure in general, also the question protecting the intellectual property rights of innovations becomes more and more actual. The reasons are clear: development of market relations assumes that mechanism for protecting rights holders from actions of business pirates exists. Existence and use of reliable mechanisms of protecting innovations stimulates innovative activity and essentially allows improving the innovative climate. Unfortunately, today the level of protection of intellectual property rights is quite low in Russia. In the Russian business culture there is not sufficient experience of protection of ideas by means of international patenting. This issue increases the probability of the fact that individual persons or large companies will not allocate significant expenses in advancement of innovations.

The international projects of The Baltic Institute of Finland such us "IPR Saint-Petersburg" project or "SPb InnoReg" project are implemented to help the development of innovation process in Saint-Petersburg. In the frame of these projects, Russian experts will familiarise with the European way of the development on Innovation infrastructure. Together with the existing potential in Saint-Petersburg and the state-supported initiatives these projects could accelerate the development of Saint-Petersburg to become a world-class innovative centre.

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