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**Technopark «Zhiguli valley» as the new area for the
development of interregional economic cooperation**

Parallel session

The role of SPTs and AOlS in inter-regional cooperation

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Introduction

"Zhiguli valley" Technopark is included into 12 technoparks, built within the bounds of complex federal program "The establishment of technoparks in the sphere of high technologies in the Russian Federation". Technopark in the sphere of high technologies "Zhiguli valley" is aimed at encouragement of positive environment for innovative development and modernization of economy in Samara region, new jobs creation, diversification of economy of Togliatti, integration of science, education, financial institutions, enterprises and entrepreneurs.

The infrastructure of Technopark "Zhiguli valley" was built from 2010 till 2014. Technopark has been started from scratch. Establishing a new area of innovation and starting the project as Greenfield has allowed a fresh view on how to create a working area of innovation, and to attract the best Russian and international talents, the best practices. The opening ceremony of all objects of Technopark was held on 28 December 2014.

Technopark "Zhiguli valley" is one of the largest technoparks in the sphere of high technologies in Russia. Technopark "Zhiguli valley" is located in the city of Togliatti, Samara region, near OJSC "AVTOVAZ" (carmaker of LADA, Renault and Nissan) and Special Economic Zone. Technopark territory is 29 ha, including the Administrative Center with Business incubator and Hotel, 4 Office and Laboratory buildings, 2 Office and Production buildings and Data Center. Technopark infrastructure fully complies with the needs of projects and companies working in the sphere of innovations and high technologies. Technopark "Zhiguli valley" includes the following objects: Business incubator and Co-working center, Regional engineering center, Educational and training center, Interregional Resource center, Equipment sharing centers, Center of 3D prototyping.

The main objective of technopark is providing support to projects and companies working in the sphere of innovations and high technologies at all stages: from idea to the final product release in the market. Technopark focuses efforts of all the elements of the regional innovation activities: universities, institutions of business support, public authorities, professional communities, scientific organizations, financial institutions, etc. All the elements of Technopark "Zhiguli valley" innovation infrastructure were created and developed taking into account the Russian Federal Law, as well as methodological recommendations of the "Russian Association of clusters and technoparks" and the international experience.

Five research priority sectors were identified such as:

1. Information and telecommunication technologies,
2. Transport and aero-space technologies,
3. Energy efficiency and energy saving,
4. Chemistry and new materials,
5. Biotechnologies and medicine.

These areas represent priority sectors of the Russian national economy, derived from the higher-level modernization plans of the country. Within these sectors both the strong traditions of Russian science and the potential for market demand are highlighted.

Favorable modern infrastructure and business incubation program for support and development of innovation projects created a unique business environment.

Technopark "Zhiguli valley" is considered as the new area for the development of interregional economic cooperation due to the main following factor:

- Favourable location,
- Involvement and integration of Technopark "Zhiguli valley" in the regional cluster industries.

The special circumstances of the geographical location of Technopark "Zhiguli valley"

Technopark "Zhiguli valley" is located within the boundaries of the Samara-Togliatti Agglomeration (STA). In the list of Russian agglomerations STA is third after Moscow and Saint-Petersburg. Total population size of STA is 2.5 million people. Agglomeration focuses efforts of the scientific, technical, industrial, socio-cultural potential of the region. The territory of STA is high-tech clusters, large-scale investment projects which have become strong magnets for many types of people, businesses and activities. All of this one with another allows to consider STA as one of Russian economics leaders.

Special Economic Zone and Technopark "Zhiguli valley" give a new impulse for Samara region development. Thanks to these projects, the enterprises on the territory of Samara city begin interacting with Togliatti companies and building up cooperation with each other on a more frequent basis. A unique location of Samara and Togliatti relative to each other - distance between them is only 70 km - allows to see a perspective of development as a mutually beneficial union. At present a tendency of Samara and Togliatti rapprochement is traced quite clearly.

Technopark and agglomeration are closely interlinked and have an impact on each other. The basis for accelerated economic development of the agglomeration and growth of interregional collaboration are the key resources of Technopark:

- New jobs in high-tech companies of Technopark provide the influx of necessary human resources to local economies;
- New research and production company increase taxes in the local budget;
- Favorable conditions for developing new kinds of activities in the area.

Meanwhile agglomeration contributes to the effective development of Technopark "Zhiguli valley". Samara-Togliatti Agglomeration has helped attract new investment and businesses as customers of innovative products Technopark "Zhiguli valley".

Technopark "Zhiguli valley" as part of cluster strategy in the region

The global community is discussing the role of science park in the cluster policy of the region. To make this palpable let us resort to a practical example - Silicon Valley. Some experts had considered that Silicon Valley is a science park, others define as a cluster. Both parties were right. First, Stanford Research Park was created in Silicon Valley. It was the driving force creation of technology cluster. Technology companies, investors, banks, skilled workers, major research institutions began to appear over time. In this way research park may evolve in cluster.

S&T policies more generally include a broad range of measures where cluster considerations often are greatly important. A key role for policymakers is to foster governance that provides for a favourable division of responsibilities between different authorities and other actors. Competencies in governance and communication should be promoted in ways that help reconcile conflicting interests, and counter the risk that policy is captured by vested interests. To the extent possible, processes should be organised and communicated at early stages, without unduly pre-assigning responsibilities for certain tasks based on actor groups, but in ways that promote gradual learning and improvement on all sides.

Science parks can function as link-creators between various actors in the park. Such links can in turn be seen as bridges between the components of a cluster. Local context and governance seem to play a decisive role on the development of science parks. In terms of context the most important factor seems to be the formal and informal institutional framework residing at the location of the science park, especially regarding incentive structures.

Drawing on an international comparison there is often a parallel drawn between Technopark "Zhiguli valley" and Silicon Valley as a part of cluster policy in the region according to functional and territorial factors. The uniqueness of Technopark "Zhiguli valley" is to create a unified center of excellence for development of science parks and clusters. Moreover, the melding of the management functions in one body allows for participants of innovative process becomes the basis for successful development of regional innovation system.

High results were achieved during the creation of Technopark in the sphere of high technologies "Zhiguli valley": about 2000 jobs were created in more than 150 companies. Technopark "Zhiguli valley" contributes significantly to increasing the share of innovative products in Gross Regional Product.

Technopark "Zhiguli valley" is the catalyst for development of innovation clusters in the region. Fundamental to the functioning of the cluster are a number of building blocks that serve as critical enabling factors. Strongly prevalent here are the institutional, legal and regulatory environment deciding the framework for the interplay among cluster actors; social capital that enables value-enhancing inter-linkages and functioning combinations of competition and cooperation; S&T structures providing knowledge input; and transport and communications infrastructure. Success in determining which factors are key to the future prospects of a particular cluster may be decisive for putting the concept to operational use. The general features of clusters may have limited applicability in the specific case.

It should be mentioned that Samara region is one of the first regions in Russia to begin studying and using cluster approach in regional development management. The basic directions of specialization of Technopark corresponds to the key competences regional cluster policy:

- Automotive cluster,
- Aero-Space cluster,
- Cluster of the medical and pharmaceutical industry.

The conditions for the formation of innovative clusters in Technopark "Zhiguli valley":

1. Three actors involved in the innovation process: government, university, business. Harmonizing the agendas of industry, university/research and government was initially more visceral than intentional, but the effectiveness of this interaction and the sophistication of the results grew over time. With globalization, free trade and technology that change at an ever-increasing pace, taming the triple helix is a key to constructing competitive advantage. The ability to move three headstrong and independent horses in vaguely the same direction allows innovation, research and commercialization to prosper.

2. A key area for increased interaction between university and business is a special infrastructure. The platform for attraction of clusters participants in the region was created thanks to such Technopark infrastructural objects as the Regional engineering center, the Center of 3D prototyping and modelling. Where there is a need to cross boundaries between academia (idea) and firms, firms and clusters, clusters and regional- or national innovation systems, science parks can contribute to this in several ways: by providing firms with both the hard and soft infrastructure of clusters; by providing management services; and by supporting the emergence and growth of knowledge intensive industries. To obtain efficient boundary crossing, policymakers and other actors have to work on institutions and incentive structures. This work has to be sensitive to specific context.

3. Competence management instead of product management. The success and positioning of the cluster in the industry achieves technological competence. The key ability of the infrastructure of Technopark for developing clusters is to apply all available technologies or to find solutions for the market demand. Technopark "Zhiguli valley" is creating clusters of specialized, highly-technological industries, with a market for potential goods. Hence, it is necessary to combine this driving force of the industrial production with other economic drivers.

A list of actions conducive to cluster development was elaborated:

- Adopt a national policy of cluster-based economic development.
- Promote a shared long-term vision for the development of the cluster.
- Fund cluster assessment/analysis and strategy development.
- Increase R&D spending and tax incentives (invest in learning).
- Diffuse technology through incubation/industrial/research parks.
- Ease the access to public laboratory facilities.
- Fund marketing, common brands and advertising.
- Use public procurement strategically.
- Restructure programs and services to support the cluster in its entirety.
- Make public information and statistics relevant and available to clusters.

Promotion and cooperation of clusters on the territory of Technopark "Zhiguli valley":

- types of regional and global cooperation:
 - Technopark "Zhiguli valley" interacts with universities and research institutes of the Russian regions of Russia's Regions.

- Collaboration between the cluster enterprises and regions of Russia facilitates the different modes of technology transfer.

- Database of innovation projects of the Samara region to identify potential interregional partners and investors was created.

- cooperation of Technopark within clusters:

- The base departments of the leading technological universities of the Samara region are available in Technopark "Zhiguli valley".

- Meetings with international delegations to discuss the possibilities of further cooperation are held regularly on the territory of Technopark "Zhiguli valley". The infrastructure of Technopark used to meet the delegations from China, Germany, France, Switzerland and other countries, who come for negotiations with the representatives from Samara region authorities, Samara enterprises and companies in order to exploit the possibilities of cooperation between the regions.

- Technopark is as link-makers between the components of the cluster.
 - Regional Engineering Center was created.

- promoting goods and services in domestic and international markets:

- The Government of the Samara region has created the Regional Venture Fund. Regional Venture Fund of the Samara region supports initiatives in the area of serious innovation. This mutual fund high-risk venture capital began its work in 2009.

- The Exhibition Center of Technopark "Zhiguli valley" provides the ideal communication platform for awareness on residents activities and their projects promotion.

– Technopark was selected to carry out the activities of the international and interregional levels in the field of cluster development, such as Samara Inter-Regional Economic Forum “Cluster Policy - Basis for Innovative Development of National Economy” and the First International Automobile Forum “Autointegration” - 2015. In particular, such activities on the territory of Technopark facilitate collaboration and sharing of experiences in the sphere of creation of favorable environment for the development of innovations.

– One of the directions of interregional relations development in the sphere of innovation is to conduct activities on the territory of Technopark “Zhiguli valley” with the support of leading innovation centers and development institutions such as Russian Venture Company and SKOLKOVO. For instance, “Business-catalyst StartupSamara” acceleration program, regional session of practical consulting LOGA Group & Seed Forum International Foundation, road show of Russian development institutions - Russian Start-Up Tour and others. In 2015 the area of Technopark “Zhiguli valley” was selected to hold the Federal accelerator for technology startups “GenerationS-2015” by Aerospace direction. These events enable innovative companies of Samara region to present their projects to the experts of the regional venture funds and Russian hi-tech companies, to estimate the investment attractiveness of their projects.

Promotion and cooperation of clusters on the territory of Technopark “Zhiguli valley” facilitates fruitful interaction between participants of Technopark and communities and knowledge-sharing through the establishment of collaborative activities with organizations at the local, national, regional and global levels.

Conclusion

Samara region has all necessary conditions for the development of innovative activity. The innovation process is based on a systematic approach from the stage of knowledge generation (idea) to expansion stage of business. Innovation infrastructure meets the business needs and replaces missing elements. The local authority creates the most favorable conditions for doing business in sphere of innovations.

Technopark “Zhiguli valley” is a very interesting and important project that can become a powerful motivation for innovation and modernization in Russia. Technopark “Zhiguli valley” creates a new territory rich in diversified productive clusters, which are capable of generating continuous innovation in research and industrial products through strong local interaction (strong interchange in a locally networked economy), and even of getting a position in the regional, continental and global markets through this local practice.

The mechanism of interregional cooperation depends on actors: state authorities of the regions of the Russian Federation, large enterprises, SMEs, start-ups, research institutes and universities, organizations of innovative infrastructure, financial institutions, public organization, and professional communities. Local context and governance seem to play a decisive role on the development of science parks. In terms of context the most important factor seems to be the formal and informal institutional framework residing at the location of the science park, especially regarding incentive structures. Thanks to the openness of Samara region entities for interaction and due to the efforts of public authorities to build up the interregional economic cooperation, our region is considered internationally as the economically developed entity of the Russian Federation. The creation of Technopark “Zhiguli valley” gives a new impetus to the development of interregional relations in the sphere of innovation.

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