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# Institutional Instruments of the Regional Innovation Policy as Markers of Innovations' Implementation Reality (Based on the Example of the Siberian Federal District Regions)

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The proposed article deals with institutional instruments of regional innovation policy. The authors, putting forward a hypothesis about the existence of the influence of the level of sufficiency and completeness of institutional support on the effectiveness of the implementation of innovations, conduct research on the existing one. The research uses the approach of counter verification of the conclusions of desk analysis of documentary support of innovation processes in the regions and analysis of regular public statistics on their innovation sector, which is the basis for conclusions about the correlation of the innovation process and its normative reflection in the innovative sectors of regional economies. It is illustrated and justified that the state of institutional support of the innovation sector can be used as a marker of the quality of innovation transformation processes in the regional economy.

Keywords: region, Siberia, innovations, institutes.

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Research area: economics.

Introduction to the research problem

Innovation as a way of the movement of the economic system, ensuring the generation of resources of a new level of efficiency, in the market economy depends on the sustainability of demand for their results (production (organizational, technological changes), social transformations or products of final consumption). It is the demand for innovation, creating a flow of income for their creators, strengthening the development

by the consumer (for both productive and final consumption) of changes in economic practices that changes the configuration of economic behavior of participants in the economic system. The ongoing change of the paradigm of resource provision of local, regional or national economic systems can be described in terms of innovation policy.

## Conceptual bases of research

Consideration of innovation policy as a system of tasks, decomposed from goals, measures,

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tools and activities on their use in the process of achieving the goals, reveals the objectivity of the conformity of the innovation and industrial policies of the territory, labor market policies and other components of national and territorial socioeconomic strategy and tactics. In fact, it is the innovation policy that can be considered as an instrument for giving integrity and new quality to economic practices, without losing sight of the requirements of conformity in the development of the regional and national whole in the economic space of Russia. The demand for innovation is objectively formed by the coherence of structural and infrastructural factors in the development of the socioeconomic system:

- academic science, engineering community and universities (within the field of view of which is not only training, but also "inculcation of taste" to the flow of changes in economic practices);
- banks and funds (creating not only financial support for demand for innovation, but also generating demand for the development of digital technologies);
- infrastructure (business accelerators, technology transfer centers);
  - large business;
- a state that produces a steady demand for innovation and a legislative and legal environment (system of regulatory legal acts) of the innovation process.

### Statement of the problem

This vision aims at analyzing the sustainability of the institutional foundations of the region's innovation system as a condition that takes into account the interests of all participants and provides the required structural links for the creation and development of innovations in the economic system<sup>1</sup>. The behavior of all participants in the innovation sector is institutionalized by the "field" of current regulatory and legal acts.

# Methodology

The research uses the approach of counter verification of the conclusions of desk analysis of documentary support of innovation processes in the regions and analysis of regular public statistics on their innovation sector, which is the basis for conclusions about the correlation of the innovation process and its normative reflection in the innovative sectors of regional economies.

The inventory approach to the institutional and documentary reflection of the innovation systems of the regions of the Siberian Federal District (SFO) shows a motley picture of qualitatively different legislative conditions prevailing in the local socioeconomic systems of the regions (Table 1). At the same time, awareness of the urgency of using innovative factors in resource management of the economy forms a progressive expansion of the regulatory and legal field of innovation activity in the territories of the constituent entities. The dynamics of improvement of institutional foundations is revealed by comparing the state of institutionalization of the conditions for the development of the innovation system in 2016 and 2014 with the period 2004-2007, which we consider as the initial period of the formation of systemic notions of the required regulatory framework of innovative practices. The classification of normative legal documents gives grounds for singling out three patterns in them (the vastness of borrowings of the structure and content of documents objectively available at the initial stages of the development of the regulatory and legal field give grounds for the application of this term): "Legislation in the field of socioeconomic development", "The law regulating the innovation sphere" and "By-laws regulating the innovation sphere".

The separation of the pattern "Legislation in the field of socioeconomic development" allows establishing the place of the innovative sector of the economy in achieving the strategic goals of the region's development. The separation of the pattern "The law regulating the innovation sphere" allows revealing the logic of the deployment of the most innovative segment of the regional socioeconomic system, its sectoral localization and drivers of innovative growth. The pattern "By-laws regulating the innovation sphere" gives grounds for harmonizing tools and mechanisms for regulating social and economic relations that are specifically formed in the innovative sector of the region.

### Discussion

The visualization of the available data in the form of Table 1 indicates the progressive dynamics of the expansion of the institutional environment, both qualitatively and quantitatively.

The territories indeed carried out significant work in the field of legislation in terms of socioeconomic development, the purpose of which was in some cases the inclusion of a section on innovative development in the structure of documents, in others it was the expansion and strengthening of their content. The improvement of the qualitative component of regional laws

Table 1. Dynamics of filling and elaboration of the normative-legal field of the innovation policy of the SFD regions

|                                 | Legislative regulation of socioeconomic development |        |         |           | Legal acts regulating the innovation sphere |                 |           |      |      |           |      |      |           |       |      |           |        |      |
|---------------------------------|---|--------|---------|-----------|---|-----------------|-----------|------|------|-----------|------|------|-----------|-------|------|-----------|--------|------|
|                                 | Strategy  |        | Program |           |   | Law By-law acts |           |      |      |           |      |      |           |       |      |           |        |      |
| Region                          | 5   | trateg | ЗУ      | P         | rogra                                       | m               |           | Law  |      | Со        | ncep | tion | P         | rogra | ım   | S         | trateg | зу   |
|                                 | 2004-2007   | 2014   | 2016    | 2004-2007 | 2014  | 2016            | 2004-2007 | 2014 | 2016 | 2004-2007 | 2014 | 2016 | 2004-2007 | 2014  | 2016 | 2004-2007 | 2014   | 2016 |
| Russian<br>Federation           | +   | +      | +       | +         | +   | +               | -         | -    | -    | -         | -    | -    | +         | +     | +    | +         | +      | +    |
| Siberian<br>Federal<br>District | +   | +      | +       | +         | +   | +               | -         | -    | -    | -         | -    | -    | -         | -     | -    | -         | -      | -    |
| Republic of Altai               | -   | +      | +       | +         | +   | -               | -         | -    | -    | -         | -    | -    | -         | -     | -    | -         | -      | -    |
| Republic of<br>Buryatia         | -   | +      | +       | +         | +   | +               | +         | +    | +    | -         | -    | -    | -         | +     | +    | -         | -      | -    |
| Republic of Tuva                | +   | +      | +       | +         | +   | +               | -         | +    | +    | -         | +    | -    | -         | +     | -    | -         | +      | +    |
| Republic of<br>Khakassia        | +   | +      | +       | -         | +   | +               | -         | +    | +    | -         | +    | +    | -         | +     | +    | -         | -      | -    |
| Altai Territory                 | +   | +      | +       | +         | +   | +               | +         | +    | +    | -         | ı    | +    | -         | -     | -    | -         | +      | -    |
| Zabaykalsky Krai                | +   | +      | +       | +         | +   | +               | +         | +    | +    | -         | ı    | -    | +         | +     | -    | -         | -      | -    |
| Krasnoyarsk Krai                | -   | +      | +       | +         | +   | +               | -         | +    | +    | -         | -    | +    | -         | +     | +    | -         | +      | +    |
| Irkutsk Region                  | +   | +      | +       | +         | +   | +               | +         | +    | +    | -         | +    | +    | -         | -     | -    | -         | -      | -    |
| Kemerovo Region                 | +   | +      | +       | +         | +   | +               | -         | +    | +    | -         | +    | -    | -         | +     | +    | -         | -      | -    |
| Novosibirsk Region              | +   | +      | +       | -         | +   | +               | +         | +    | +    | -         | +    | +    | -         | +     | +    | -         | -      | -    |
| Omsk Region                     | +   | +      | +       | +         | +   | +               | +         | +    | +    | -         | +    | +    | -         | -     | -    | -         | -      | -    |
| Tomsk Region                    | +   | +      | +       | +         | +   | +               | +         | +    | +    | +         | +    | -    | +         | +     | -    | +         | +      | +    |

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regulating the innovation sphere reflects the objectivity of the region's need to expand the resource base of economic development that forms the investment attractiveness of the territory.

As an illustration, we can cite the experience of the Tomsk region, where the main document that organizes the space for innovative development has already undergone the 3<sup>rd</sup> acting edition by now. Simultaneously, it is necessary to emphasize the expansion of the pattern of regulating the sectors of innovation activity. In particular, in the Altai Territory, in addition to the law "On State Support of Innovative Activity in the Altai Territory", the Law "On the Poles of Innovative Development in the Altai Territory" acts; in the Kemerovo Region it is the law "On the Innovation Policy of the Kemerovo Region", in the Tomsk Region it is the law "On Innovation Activities in the Tomsk region" and others. At the same time there is bewilderment at the comparative weakness of the development of the unit of by-laws (Table 1). Consideration of the hierarchical link of the regulation of innovative systems Concept-Strategy-Program leaves not quite clear what exactly becomes the basic document for the organization and management of innovative development in most regions and what is the ultimate goal of the initiated innovative transformations (Republics of Altai, Buryatia, Khakassia, Zabaykalsky Krai, Irkutsk region). The fragmentation of the expected innovative changes, the reference coverage of the private, apparently, hinders the ability of the participants in the innovation system to formulate and implement the agreed innovative direction of regional development. This condition is reflected in the Strategy of Socioeconomic Development of Siberia until 2020, in the process of work on which the lists of investment and innovation projects

were substantially revised without a detailed elaboration of the sources of their financing.

Most subjects are extremely slow in mastering the regulatory capabilities of the innovation segment (due to the poor development of the subject within their administrative boundaries). It is not by chance that the most lagging pattern of normative legal documents is the third one that is "By-laws regulating the innovation sphere".

The reference to the substantive part of normative legal acts makes it possible to note the following aspects:

- weak, and in most cases absent, correlation of the provisions of socioeconomic development and innovative regional legislation documents. This is reflected both in the establishment of overestimated development targets in general, not taking into account the real state of the segments of the economy, and the unjustified generalization of the tools and mechanisms recommended for their achievement. At the same time, there are examples of constructive practices of lawmaking in Russia such as the Republic of Tatarstan. In the adopted "Strategy of socioeconomic development of the Republic of Tatarstan until 2030" (the Strategy of socioeconomic development of the Republic of Tatarstan until 2030, 2015), the content of the section "Innovation Ecosystem" is organically linked to investment, cluster aspects, while providing organizational, methodological tools and includes the education sector in the participants in the innovation process, and links the quality of regional human capital with innovative changes.
- Typicality of the region's "innovative de-listing" arises as a reaction to the "shock of vertical regulation". Decorability of innovative design is revealed in the framework and overly formalized nature of the adopted regional laws that regulate the innovation sphere. The textual

analysis of normative legal acts of the constituent entities of the Russian Federation demonstrates the existence of "tracing" of federal documents, stereotyped structural and semantic components of federal analogues (without reliance on the specificity of the territorial prerequisites and conditions of innovation systems) does not contribute to the realism of the implementation of innovation change plans and the identification of adequate instruments for their implementation. The adopted by-laws are a text, mainly containing references to a set of documents that are relatively weakly connected in content, organizational and not financially secure. However, it is the innovative sphere, understood as a system of specific development tools, which requires the skills of coordinating the efforts of all related participants, the skills of working in a team, the ability to "integrate" innovations into traditional practices. The study of the problem shows that the patronage (cultivation) of the regional innovation system acquires the appropriate pace and quality only when maintaining collective action practices that rely on a variety of organizational forms of activity (research organizations, economic entrepreneurship, educational projects, etc., various forms of industry specialization in federal, regional overdepartmentalization and private ownership). Thus, the Tomsk Region, which is located at the top level of the rating of innovation susceptibility among the regions of the Siberian Federal District, has the most developed idea of the institutional nature of the innovation sector. Relying on the rating of innovation susceptibility of the regions (Vladimirova, Malakhovskaya, 2016), we will identify the territorial system of the Krasnoyarsk Territory for analyzing the institutional foundations of innovation policy. Qualitative features of the system of innovative institutions formed by the policy (supporting institutions and resource provision of the innovation policy of the territory)

were obtained in the course of studying program documents reflecting the representations of the region on how to organize innovative practices of the territory (presented in Table 2).

With a little more careful inventory of the documentary grounds for innovation in the core infrastructure of innovation policy, chaotic and fragmented nature is revealed: it seems that there is no both a systemic vision and a concept of consolidated regulation of innovations as a space for changes in the economic system in the territory. In particular, the only sustainable financial source in the documents is the state budget. The list of institutions designed to provide an innovative transformation of the socioeconomic order considers them as separate ones, ignoring the network communications required to maintain the viability of the innovation system. In addition, to develop an agreed vision of the strategic goal of innovative changes as a prerequisite for coordinating actions and co-operating the resources available to the participants is the most difficult task, complicated by the various departmental subordination of participants in the innovation system. Organizational heterogeneity and difference in the goals and tasks mentioned in regulatory documents of innovation infrastructure institutions, the likely competitiveness arising from the uncertainty of their functions, call into question the attainability of the declared values of development indicators.

The classification of regions for a more detailed analysis of the influence of the connection between the quality of the regulatory framework of the innovation system and the real regional innovation process reveals the possibility of identifying two groups of "breakthrough" configuration of innovation policy documents. The first group (all types of documents in "several generations" are presented): Krasnoyarsk Krai, the Tomsk Region, the Republic of Tuva. The second group (all the patterns of documentary support

Table 2. Instruments and sources of financing innovation activity and innovation infrastructure institutions in the strategic documents of the Russian Federation and the Krasnoyarsk Territory

| Indicators                   | Strategy of innovative development of the Russian Federation until 2020                                    | Strategy of innovative development of the Krasnoyarsk Territory until 2020   | Investment strategy of<br>the Krasnoyarsk Territory<br>until 2030  | Draft socioeconomic<br>development strategy for<br>the Krasnoyarsk Territory<br>until 2030   | Strategy of scientific and technological development of the Russian Federation until 2025 |
|------------------------------|--|--|--|--|---|
| Sources                      |  |  |  |  |   |
| Own. Attracted. Borrowed     |  |  |  |  |   |
| Instruments                  |  |  |  |  |   |
| Government funding           | +  | +  | +  | +  | +   |
| Tax incentives               | +  | +  | +  | +  | +   |
| Customs incentives           | +  | +  | 1  |  | +   |
| Investment tax credit        | +  | +  | +  |  | ı   |
| Preferential lending         | +  | ı  | 1  | 1  | 1   |
| Leasing Financing            | +  | ı  | +  |  |   |
| Venture financing            | +  | +  | +  | +  | +   |
| Institutes of Infrastructure |  |  |  |  |   |
| Legally arranged             | Federal development institutions; Venture companies; Technoparks; Business incubators; Engineering centers | Federal and regional development institutions; Venture companies; Technoparks; Business incubators; Engineering centers; Cluster development centers | Federal and regional development institutions; Venture companies; Technoparks; Business incubators; Engineering centers; Cluster development centers | Federal and regional development institutions; Venture companies; Technoparks; Business incubators; Engineering centers; Cluster development centers |   |
| Legally<br>informal          | Technical and innovative special economic zones; Science cities  |  | Industrial parks;<br>Technological platforms   | Territories of advanced socioeconomic development (TASED); Industrial parks  |   |

| Mixed type  | Technology transfer centers; Centers for the collective use of scientific equipment |                            |                              | Technology transfer centers; Centers for collective use of scientific equipment | Centers for the collective use of scientific and technological equipment, experimental production and engineering |
|---|---|----------------------------|------------------------------|---|---|
| Planned levels of development indicators  | t indicators  |                            |                              |   |   |
| 1. The share of funds received through R & D in the structure of funds entering the leading Russian universities from all sources                                       | No less than 25 % by 2020   | I                          | I                            | Up to 60 % by 2030  | I   |
| 2. The number of newly created small innovative enterprises with the support of the Foundation for Assistance to Small Innovative Enterprises in Science and Technology | 700 units by 2020   | ı                          | ı                            | ı   | ı   |
| 3. Internal costs of R & D  | 3 % added to GDP by 2020  | 1,5 % added to GRP by 2020 | 2,5-3 % added to GRP by 2030 | I   | No less than 2 % added to GDP   |
| 4. Internal costs of R & D by sources of financing:   |   |                            |                              | I   | proportional growth of private investment, the level of which should not be lower than state one by 2035          |
| Budget resources  | 43 % by 2020  | 45 % by 2020               | I                            | I   |   |
| Extrabudgetary resources  | 57 % by 2020  | 55 % by 2020               | I                            | ı   |   |
| 5. The share of funds in the structure of income of SFU and leading universities of the Krasnoyarsk Territory, obtained through the implementation of R & D             | I   | will achieve 25 %          | I                            | I   | I   |

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are presented, except for subordinate acts of the Strategy): Novosibirsk and Kemerovo regions. A comparative analysis of the relative data of the indicators "Dynamics of the number of employed people in the research and development sector", "Shares of innovative products, works, services in the total volume of shipped goods, works, services" and "Shares of organizations engaged in technological, organizational, marketing innovations" may indicate the existence of a link between the quality of documentary provision and the quality of innovation activity in the region, or between the speed of innovation changes and the speed of adaptation / advancing of documentary support of innovative changes in the economy to them. The quality of the indicators' dynamics can be determined by comparing them with the dynamics of similar indicators for the Russian Federation (the indicator will substantially smooth out the particular effect of regional values) and the Siberian Federal District (the indicator will reveal the influence (in case of significance of the values) of regional values).

Comparative constancy of the share of the employed in the research and development sector in sample regions based on the breadth of documentary support of the innovation process and in relation to the data for the Russian Federation and the whole SFR (Fig. 1) indicates either the sectoral concentration of innovative activity or an argument for the classification of Russian innovation organizations as "mice" and "elephants" (Yudanov, 2010).

The presence of wave dynamics of shipped innovation products, seen in Figure 2, reflects the overall cyclical nature of the economy.

The "splash" of the share of shipped goods in the upward component of the wave dynamics occurred with a shift in the territories and is visible for Krasnoyarsk Krai and the Russian Federation in 2013, Novosibirsk region in 2014 (and continues in 2015). The Tomsk Region detects short-wave dynamics with peaks in 2010, 2013, 2015. The Siberian Federal District as a whole shows the maximum value of the indicator in 2015; The Republic of Tuva in 2010. Cyclicity is also observed in the dynamics of the number of organizations that implement innovations (Fig. 3).

The aggregation of data on the innovation sector for the regions (Fig. 4) makes it possible to visually observe the dependence of the quality of institutional support for innovation activity and the activity of the innovation sector. The significant shift in the indicators of the share of innovation products and the share of innovative organizations after 2010, in correlation with the creation of the third pattern in the region

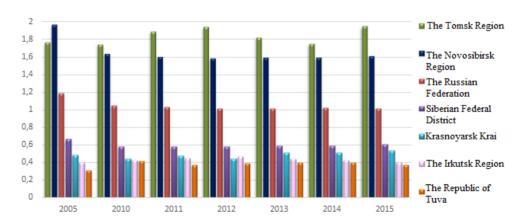


Fig. 1. The share of persons engaged in research and development in the total number of the employed (in percent)

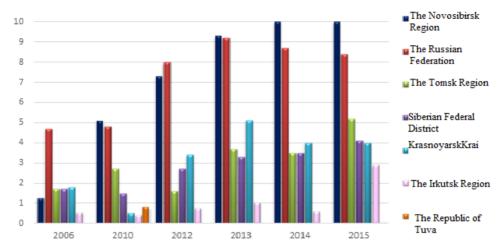


Fig. 2. The share of innovative goods, works, services in the total volume of shipped goods, works, services (in percent)

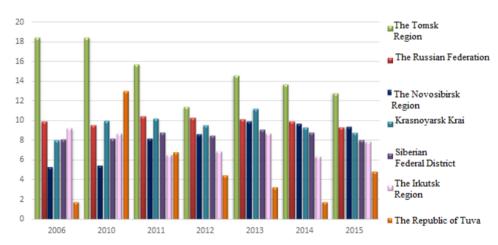


Fig. 3. The share of organizations that carried out technological, organizational, marketing innovations in the total number of organizations surveyed (in percent)

(regulatory and legislative support for the innovation process), confirms the importance of transparency and certainty of mutual obligations of regional economic entities acting as stakeholders of innovative changes.

The Tomsk Region and Krasnoyarsk Krai, classified as a group of regions with "a full, developed package that is largely mastered by the participants" for the documentary support for the region's innovation system, show a high correlation of the indicators of the the share of innovation products and the share of the employed

in the innovation sector. However, the counter dynamics of these indicators in the Tomsk region in the interval from 2012 may indicate qualitative changes in the innovation sector of the territory (a shift towards enterprises of an entrepreneurial type ("gazelles") is quite possible (especially when taking into account the upward dynamics of the specific GRP (Table 4)), confirmation of which will require a special study by the method of D. Birch (Yudanov, 2010)).

The Irkutsk region belonging to the regions (the Omsk Region is the second region in the

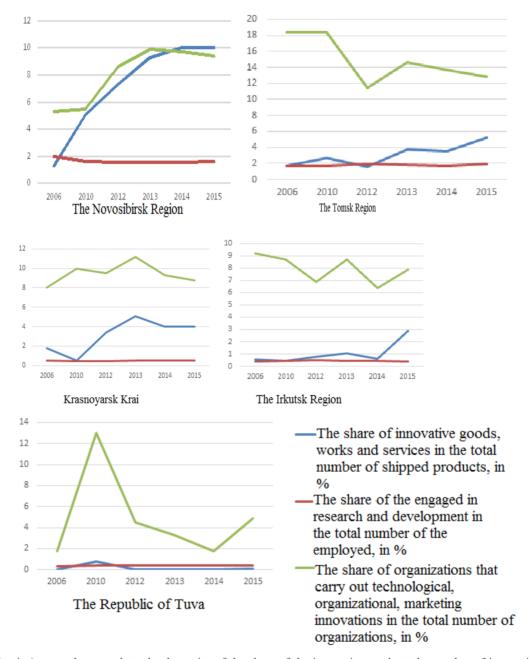


Fig. 4. A general approach to the dynamics of the share of the innovative product, the number of innovative organizations and the number of the employed in the innovation sector (by sample regions)

group), which do not have a full package in the "Legislative acts regulating innovation sphere" pattern, but changed the institutional support for the innovation sector synchronously with the regions of the breakthrough group, shows "failures" in terms of the indicators of the dynamics of the share of innovative organizations

and the share of the innovative product in 2012 and 2014 (Fig. 4). However, the compensation by the rise in the elimination of the "failure" values of the indicator for innovative organizations, allow us to establish a dynamics similar to the picture observed in the Tomsk region (a decrease in the share of innovative enterprises with a

Table 4. Gross regional product per capita (rubles)\*

| Indicator/year   | 2005     | 2010     | 2011     | 2012     | 2013     | 2014     |
|--|----------|----------|----------|----------|----------|----------|
| Gross regional product by subjects of the<br>Russian Federation (gross value added at<br>current basic prices) – total | 125658,7 | 263828,6 | 317515,3 | 348641,5 | 377006,0 | 403178,9 |
| Siberian Federal District  | 99628,4  | 214401,6 | 249420,1 | 269171,0 | 287293,8 | 316380,1 |
| The Republic of Tuva   | 38429,7  | 99999,9  | 108178,0 | 120582,9 | 132745,7 | 149334,8 |
| Krasnoyarsk Krai   | 152389,0 | 372848,1 | 413172,4 | 416272,7 | 441084,9 | 498372,4 |
| Kemerovo region  | 104764,5 | 226198,1 | 272564,2 | 261527,1 | 243932,3 | 273825,1 |
| Novosibirsk Region   | 88475,5  | 181732,7 | 223623,0 | 269870,4 | 300522,5 | 326867,5 |
| Tomsk Region   | 155365,2 | 272576,5 | 317037,4 | 350116,9 | 377218,0 | 399207,9 |

<sup>\*</sup>Source: (Regions of Russia, 2016)

simultaneous increase in the share of innovative products).

### Conclusion

Thus, the important role of consolidation of the institutional support of the innovation sector with the instruments and priorities of the Strategy of socioeconomic development of the region is statistically confirmed: increasing the certainty and transparency of mutual obligations of participants in the development of the regional economy (observed in the substantive continuity

of legislative documents). Innovative changes contribute to a significant improvement in the quality of life on the territory (the growth of GRP is more significant), allowing us to ensure a sustainable development and achievement of the objectives of the Strategy of the region, contributing to the sustainable development of the social and economic system of Russia. Consequently, the state of institutional support of the innovation sector can be used as a marker of the quality of innovation transformation processes in the regional economy.

# References

Investitsionnaia strategiia Krasnoiarskogo kraia na period do 2030 goda: Ukaz Gubernatora Krasnoiarskogo kraia ot 17.12.2013 № 239-ug [The investment strategy of the Krasnoyarsk Territory for the period up to 2030: Decree of the Governor of the Krasnoyarsk Territory of December 17, 2013 No. 239-ug], *In Spravochnaia pravovaia sistema «Konsul'tant-Plius» [Legal reference system "Consultant-Plus"]*. Available at: www.consultant

Proekt Strategii sotsial'no-ekonomicheskogo razvitiia Krasnoiarskogo kraia do 2030 goda: Proekt ot 23.06.2016 [Draft Strategy for Socioeconomic Development of the Krasnoyarsk Territory until 2030: Draft dated June 23, 2016], *In Ofitsial'nyi portal Krasnoiarskogo kraia [Official Portal of Krasnoyarsk Krai]*. Available at: www.krskstate.ru/dat/File/0/2030strateg\_2/strateg23062016.pdf

For example, a stable demand for innovative products, corresponding to the priorities of the idea of the National Technological Initiative, can be formed at the expense of the municipal order. According to available data, the city of Irkutsk spends 2.8 billion rubles a year on purchases. The analysis of goods and services that the municipality buys shows that about 5-10 % can be allocated for the acquisition of innovative products. So the city plans to create demand for the development of Irkutsk companies (materials for construction, utility technology). In 2018 it is planned to allocate 75 million rubles for innovative products. (Purchase of innovative products by the Irkutsk administration by 2019 should account for half of the total volume of supplies of small enterprises and reach 360 million rubles). See: Demand for Innovation; RVK. State Fund of Funds and the Institute for Development of the Russian Federation. Available at: www.rvc.ru/press-service/media-review/nti/98103/ (accessed 28.03.2017).

Regiony Rossii. Sotsial'no-ekonomicheskie pokazateli [Regions of Russia. Socioeconomic indicators] (2016). Rosstat. 326 p.

Spros na innovatsii [Demand for innovation], In RVK. Gosudarstvennyi fond fondov i Institut razvitiia Rossiiskoi Federatsii [RVK. State Fund of Funds and the Institute for Development of the Russian Federation]. Available at: www.rvc.ru/press-service/media-review/nti/98103/ (Accessed 28.03.2017).

Strategiia innovatsionnogo razvitiia Krasnoiarskogo kraia na period do 2020 goda «Innovatsionnyi krai – 2020»: Ukaz ot 24 noiabria 2011 goda № 218-UG [The strategy of innovative development of the Krasnoyarsk Territory for the period until 2020 "Innovation Territory – 2020": Decree of November 24, 2011 No. 218-UG], *In Spravochnaia pravovaia sistema «Pravo.ru» [Reference legal system "Pravovo. ru"*. Available at: www.docs.pravo.ru/document/view/21568270/20818126/

Strategiia innovatsionnogo razvitiia Rossiiskoi Federatsii na period do 2020 goda: rasporiazhenie Pravitel'stva ot 08.12.2011 № 2227-r [The strategy of innovative development of the Russian Federation for the period until 2020: Decree of the Government of 08.12.2011 № 2227-r], *In Spravochnaia pravovaia sistema «Konsul'tantPlius» [Reference legal system "ConsultantPlus"]*. Available at: www. cnb.uran.ru/userfiles /2227r.pdf

Strategiia nauchno-tekhnologicheskogo razvitiia Rossiiskoi Federatsii: Ukaz Prezidenta RF ot 01.12.2016 № 642 [The strategy of scientific and technological development of the Russian Federation: Decree of the President of the Russian Federation from 01.12.2016 No. 642], *In Spravochnaia pravovaia sistema «Konsul'tantPlius» [Reference legal system "ConsultantPlus"]*. Available at: www.consultant.ru/document/cons\_doc\_LAW\_207967/

Strategiia sotsial'no-ekonomicheskogo razvitiia do 2030 goda (Zakon Respubliki Tatarstan «Ob utverzhdenii Strategii sotsial'no-ekonomicheskogo razvitiia Respubliki Tatarstan do 2030 goda» ot 17.06.2015 № 40-ZRT) [The strategy of socioeconomic development until 2030 (The Law of the Republic of Tatarstan "On approval of the Strategy of socioeconomic development of the Republic of Tatarstan until 2030" of June 17, 2015 № 40-ZRT)], *In Ofitsial'nyi portal pravovoi informatsii Respubliki Tatarstan [Official portal of legal information of the Republic of Tatarstan*]. Available at: www.pravo.tatarstan.ru/eng/gossov/zakon.htm/?npa id=4431 (Accessed 29.03.2017)

Vladimirova, O.N. & Malakhovskaia, M.V. (2016). The dynamics of innovative susceptibility of the Siberian Federal District Regions in the context of the Russian Federation Innovation Development Rating in 2000-2013, *In Journal of Siberian Federal University*, *Humanities*, 9 (11), 2599-2615.

Yudanov, A.Yu (2010). Nositeli predprinimatel'stva: firmy-gazeli v Rossii [Bearers of entrepreneurship: firms-gazelles in Russia], *In Zhurnal novoi ekonomicheskoi assotsiatsii [Journal of the New Economic Association*], 5, 92-109.

# Институциональные инструменты региональной инновационной политики как маркеры реалистичности реализации инноваций (на примере регионов Сибирского федерального округа России)

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В предлагаемой статье рассматриваются институциональные инструменты региональной инновационной политики. Авторы, выдвигая гипотезу о наличии влияния уровня достаточности и полноты институционального обеспечения на эффективность реализации инноваций, проводят исследование существующей. В исследовании использован подход встречной верификации выводов камерального анализа документарного сопровождения инновационных процессов регионов и анализа регулярных общедоступных статистических данных по их инновационному сектору, что служит основанием выводов о корреляции инновационного процесса и его нормативного отражения в инновационных секторах региональных хозяйств. Проиллюстрировано и обосновано, что состояние институционального сопровождения инновационного сектора может использоваться как маркер качества процессов инновационной трансформации регионального хозяйства.

Ключевые слова: регион, Сибирь, инновации, институты.

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