

# **PRIORITY METHODS OF STIMULATING THE DEVELOPMENT OF PUBLIC-PRIVATE PARTNERSHIPS AS AN INSTRUMENT OF THE CLUSTER POLICY OF THE OMSK REGION**

**Anna Breusova – Albina Kiseleva**

---

## **Abstract**

Nowadays, one of the priority tasks is the formation and development of clusters that allows the region to occupy a worthy place in the system of the national economy. To realize the potential of cluster policy in Omsk region, it is proposed to use the public-private partnership, which mostly depends on joint actions of regional authorities and interested representatives of the business sector. That can act as a creation mechanism of the new configurations of productive forces in the regional economy in accordance with the required infrastructure's development. Based on this, the purpose of the research is to determine the priority stimulation methods of the public-private partnership development in Omsk region for the implementation of cluster initiatives. Thus, the matrix method for the assessment of the public-private partnership's development is evolved at the article. The assessment is based on a behavioral approach to the public-private partnership's development using an expert survey. The results of the expert survey are obtained in the form of an aggregated indicator in a quantitative scale. Based on the research results, the priority methods have been formulated to stimulate the development of public-private partnership as an instrument of the regional cluster policy.

**Key words:** cluster policy, public-private partnership, regional economy, investor.

**JEL Code:** E22, L26, L32

---

## **Introduction**

Today, the development of the public-private partnership in the regions has distinct regional specifics. Federal law sets the general framework for the development of the public-private partnerships. The specific regional conditions for the development of both public-private partnership and cluster policy are determined by the actions of regional authorities, taking into account the specifics of the territory. The importance of the creating of the attractive conditions for the interaction of business and government in a public-private partnership format is crucial for the implementation of cluster policy directions. This, as a consequence, the entails of the

ensuring sustainable socio-economic development of the region by attracting funds from the private investors to infrastructure development, and the creation of the comfortable business conditions for the development of the regional economic growth points through the cluster policy. The development of the specific measures to create an environment for the development of public-private partnerships takes into account the specifics of the region, based on the reliable assessment of the current institutional conditions for the implementation of the public-private partnerships in the practice of the regional policy. The certain possibilities will depend on the chosen methods of the condition's assessment of the development of partnerships in the region: the authorities receive an instrument of the effective influences on the institutional environment and the specific private partners provide an incentive to develop strategies for interacting with the authorities.

## **1 Theoretical bases of the research**

The cluster policy is a set of methods and tools aimed at the formation of a complex of interrelated enterprises. The main task of the cluster policy is to link in a single value-added chain both the producers of goods, works, services and the organization of the transport and logistics, financial and insurance, scientific and educational spheres. Nowadays, all economies of the world are covered by the clustering. The cluster policy requires new approaches to the organization of the interaction space of economic entities both in terms of the infrastructure development and in terms of creating institutional conditions for the interaction by identifying of new financing mechanisms for joint cluster projects. As the understanding of clusters expanded, the real cluster policy practices evolved: from the geographical concentration of enterprises (to realize the possibility of cooperation) to the achievement of the necessary critical mass in the cluster size (to ensure development and to realize the possibilities of internal dynamics). Thus, the problems of the cooperations between business entities, including the aspect of their participation in the cluster initiatives with the state, were considered Birgul A. (2017), Žižka M., Valentová V., Pelloneová N. and Štichhauerová E. (2018), Pustynnikova E. V. and Uskova E. O. (2017), Suire R. and Vicente J. (2014), Vernay A.L., D'Ippolito B. and Pinkse J. (2018), Ablaev I.M. and Akhmetshina E.R. (2016) and etc.

Under these conditions, the public-private partnership (PPP) plays a special role, acting as an instrument of cluster policy. The PPP allows the state to create the required infrastructure (transport and logistics, educational, financial, organizational, etc.), to perform its public functions of goods or services. The issues of the PPP in the context of their strategic importance and infrastructure characteristics are reflected in the works of the authors Palermo G. (2000),

Tsvetkov V.A., Zoidov K.Kh. and Medkov A.A. (2017), I. Marques II (2017) and etc. It is important to find and maintain a balance of the interests of both the authorities and private structures to participate in such a partnership. The PPP in cluster policy allows to use the financial resources and technologies of a private partner while maintaining the control functions of the state in the socially significant areas.

Recently, the considerable attention has been attracted to the problems of the PPP research. Thus, in the Russian Federation, the PPP development center annually assesses the current state of the PPP, determines development trends and develops the regional rankings. At the same time, the multiplicity of approaches to the assessment does not allow to identify a set of factors and conditions that have to be repelled when forming the environment in order to solve the problems of cluster policy and the PPP development. Also, the result of the all-Russian rating is the position of the particular region in terms of development on the territory of PPP relative to the other subjects of the Russian Federation, presented through the integral index. This does not allow using the results of the rating for the development of cluster initiatives and complicates the understanding of the bottlenecks of the region when working with investors on PPP terms. The use of PPP as an instrument of cluster policy requires an assessment of the ratio of business expectations from entering into partnerships and the conditions of their participation offered by the regional authorities.

The need to refract the PPPs into the cluster policy requires the formation of a specific approach to the research. The PPP as a mechanism of the interaction between business and the state represented by the authorities, in our opinion, can be considered from the point of view of the several approaches, which is indicated at the Table 1.

**Tab. 1: The PPP research approaches**

| Approaches | Authors  | Contents  | Evaluation Features  |
|------------|--|---|--|
| Functional | Varnavsky V.(2011),<br>Kabashkin V. (2010)                               | A cooperation mechanism that provides opportunities for interaction between government and business in order to involve private partners in solving the tasks facing the government | The presence / The absence of the possibility of organizing PPPs in regulatory legal acts  |
| Behavioral | Maksimov V. (2009),<br>Martusevich R., Sivaev S.,<br>Khomchenko D.(2006) | Technologies of the interaction between authorities and the private sector, allowing to realize the existing potential and opportunities of PPP                                     | The organization of interaction between the main subjects of PPP and their influence on each other through the creation and the development of the institutional |

|  |  |  |                                |
|--|--|--|--------------------------------|
|  |  |  | environment of the interaction |
|--|--|--|--------------------------------|

Source: compiled by the authors

The development of the regulatory framework of the PPP in the Russian Federation, the liberalization of the conditions for the access of the non-state companies to the provision of the state and municipal services, the development of the competition creates a new form of the interaction between the government and businesses, and reflects the filling of the functional approach to assessing the development of the PPP. In the study, the assessment parameters are important, allowing government authorities and businesses to assess the possibilities of using PPPs in the implementation of cluster initiatives and cluster development projects. This assessment also contributes to take into account the regional peculiarities of the PPP development process by identifying measures to improve the institutional environment in order to maximize the use of PPP in the cluster development practice. It is important to emphasize that the construction of the communications between public and private partners require the harmonization of the conflicting interests of the region (as a territory), the government and businesses. In this connection, the study proposes the use of a behavioral approach to identify the contradictions of the subjects that influence the use of the PPP potential in the solving of the problems of cluster policy. Thus, M. A. Yagolnitsler and E. A. Kolobova in the modeling of the institutional environment of cluster policy emphasize the importance of the assessment of the impulses for the analysis of the reaction of the control influence on the estimated parameter, which makes it possible in the future to reach a compromise when making decisions on the development of clusters during the negotiations (Kolobova, E. & Yagolnicer, M. (2017)).

Thus, the behavioral approach will make that possible to identify changes in the institutional environment in order to determine the necessary measures for its improvement. The institutional environment determines the possibility of the successful implementation of a project under the PPP terms for cluster policy, taking into account the organizational, legal, political and administrative situation in the region. The institutional environment will determine the potential for applying of the PPP practice in solving the problems of cluster policy. By adjusting the factors and the conditions of the institutional environment, this can influence the potential of the PPP, and also the possibility of using it through the development and implementation of the projects aimed at the developing clusters in the region.

## 2 Methods of research

The model for the development of public-private partnership was built to develop a methodology for assessing the institutional environment for the development of PPP in the Omsk

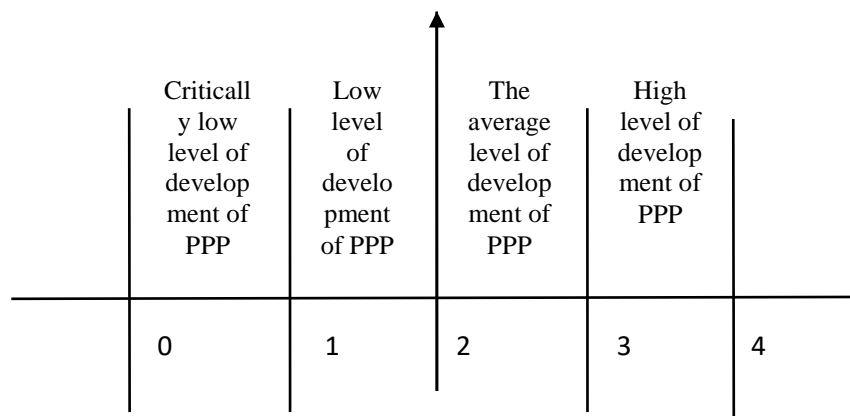
Region. Based on this, the following blocks were included in the methodology for assessing the institutional environment:

- the assessment of external factors of the PPP development;
- the assessment of the internal factors of the PPP development;
- the assessment of the conditions of the PPP development in the region.

For each block, the variables and indicators, determining factors and conditions of the institutional environment of the PPP development in the region within the framework of cluster policy were identified and were included in the survey model. The study was applied the method of the expert survey. The respondents were representatives of the business community (private partner) and authorities (public partner) of the Omsk region. On each side, 10 experts were interviewed who have experience of participating in the partnerships.

The survey model is represented by the following grouping of questions: the state of the institutional environment in the region, the assessment of the regulatory framework in the field of PPP, the problems of using PPP, the priority forms of PPP to achieve the objectives of cluster policy and the main risks of using partnerships for cluster initiatives. The questions suggest to find out the level of the state of factors and conditions of the PPP development in the region with the appropriate formulation of the measured variable. The state level was determined in a continuous scale of measurements (Fig. 1).

**Fig. 1: Continuous measurement scale (0 to 4)**



Source: compiled by the authors

Taking into account the fact that there are 25 questions in the questionnaire and each assessment of the respondent is measured through a scale, and each rank received is 5 points, provides the interpretation of the scales (table 2).

**Tab. 2: Interpretation of the assessment scale of the institutional environment for the**

**development of PPP**

| Scoring  | Level of development of PPP                |
|----------|--|
| 0-24.99  | Critically low level of development of PPP |
| 25-49.99 | Low level of development of PPP            |
| 50-74.99 | The average level of development of PPP    |
| 75-100   | High level of development of PPP           |

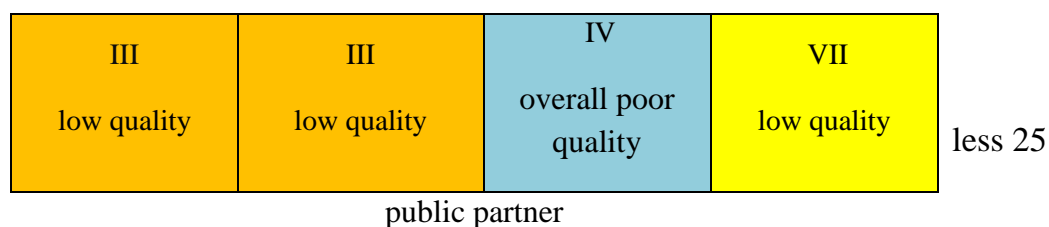
Source: compiled by the authors

**3 Results of the study**

The results of the study are obtained in the form of an aggregated assessment in a quantitative scale, reflecting the assessment by authorities and business of the conditions created for the development of public-private partnership in the Omsk Region. The aggregated assessment is built in the space of two components, which include the two-way assessment of the institutional conditions for the development of the PPPs: from the business community and from the authorities, as presented at the Figure 2. The overlapping assessments within a single measuring model make it possible to evaluate the actions of the authorities by the private partner assess the results of its activities directly to a public partner. The assessment, which was made up of the indicators, presented at the Table 2. This matrix will not only allow to determine the parameters, which shows the discrepancy in the estimates from the government and business and, accordingly, requires the adjustments, but also to correlate the results of the assessment with the type of the development of the institutional environment. Decoding of the General aggregated indicator is presented in Tab. 3.

**Fig. 2:** Matrix of interpretation of the results of the evaluation of the institutional environment for the development of PPP in the region within the framework of cluster policy

|                 | less 25                       | 25-49,99                     | 50-74,99                   | 75-100                |          |
|-----------------|-------------------------------|------------------------------|----------------------------|-----------------------|----------|
| private partner | VI<br>overall average quality | V<br>overall average quality | VIII<br>high               | I<br>high             | 75-100   |
|                 | VI<br>overall average quality | V<br>overall average quality | II<br>average quality      | IX<br>average quality | 50-74,99 |
|                 | III<br>low quality            | III<br>low quality           | IV<br>overall poor quality | VII<br>low quality    | 25-49,99 |



Source: compiled by the authors

**Tab. 3:** Characteristics of the level of development of the institutional environment for the development of PPP

| Type of development of PPP | Description of the institutional environment for the development of public-private partnerships in the framework of the implementation of cluster projects  |
|----------------------------|---|
| Quadrant I                 | highest quality: both public and private partners are completely satisfied with her condition   |
| Quadrant II                | average quality by both public and private partners   |
| Quadrant III               | low quality   |
| Quadrant IV                | low quality with differences in assessments by the public and private partners. Thus, the public partner is somewhat higher in evaluating the institutional conditions in comparison with the private partner (differentiation of assessments ranges from critically low and low from the private sector and the average assessment from the public sector) |
| Quadrant V                 | overall average quality: evaluation by private and public partners may vary within levels: low - high level of development  |
| Quadrant VI                | overall average quality with significant extreme differences in assessments by the public and private partners: the private partner assesses the quality of the institutional environment much higher than the public partner   |
| Quadrant VII               | low quality if there are significant extreme differences in the assessment of the public and private partners (differentiation of assessment in the section: high - extremely low)  |
| Quadrant VIII              | high quality: at the same time, the private partner assesses the quality of the institutional environment somewhat higher   |

Source: compiled by the authors

As a result of the applying the matrix method of the public-private partnership assessment, the level of development of the institutional environment of the PPP within the cluster policy in the Omsk region should be attributed to quadrant V. At the same time, the institutional environment of public-private partnership in the framework of cluster projects is characterized by a general average of the quality. The evaluation by private and public partner can vary within the levels: low - high level of development. Also, in general, a private partner assesses of the institutional environment's quality is much higher than the public partner.

## Conclusion

Based on the study, the following recommendations can be formulated for the PPP entities in the Omsk Region in order to improve the partnerships and their impacts on the effectiveness of the regional cluster policy. These recommendations are built for each partner separately. Recommendations for a public partner are:

- the establishing of the effective feedback with a private partner in order to obtain the information on the assessment of the quality of the institutional environment and the organization of the personalized work in the framework of the PPP projects;
- the analysis of the demand for the PPP tools and the adjustment of the regional legislations to ensure that the proposed tools meet the needs of the private partner;
- the organization of a round table to discuss the problems of the implementing the PPP projects in the framework of the cluster initiatives with the representatives of the private sector.
- the monitoring of the PPP projects in the framework of cluster initiatives to understand the processes in the implementation of such projects;
- conducting an active information policy to promote the PPP tool for the implementation of cluster projects;
- the monitoring of the assessment of the key problems of the implementing the PPP projects by the cluster members;
- revision of the economic feasibility of using one or another form of PPP for residents of clusters.

Recommendations for a private partner are:

- the promotion of successful practices of the region in supporting the PPP projects within the Russian Federation and the formation of the investment attractiveness of the territory;
- the participation in the round table on the interaction of the government and businesses in the implementation of the PPP projects in the framework of the cluster initiatives;
- the expansion of the industry proposals of PPP projects and cluster initiatives.

## **Acknowledgment**

The reported study was funded by RFBR according to the research project № 18-010-00436.

## **References**

Ablaev I.M., Akhmetshina E.R. "The role of the public private partnership in the innovation cluster development". *5th World Conference on Business, Economics and Management, WCBEM*, May 12, 2016 – May 14, 2016, Antalya, Turkey.



- Arslan, Birgul. "The Interplay of Competitive and Cooperative Behavior and Differential Benefits in Alliances." *Strategic Management Journal*, vol. 39, no. 12, 2017, pp. 3222–3246., doi:10.1002/smj.2731.
- D'Ippolito, B., Pinkse, J., & A-L Vernay. (2018, September 05). Can the government create a vibrant cluster? Understanding the impact of cluster policy on the development of a cluster. Retrieved April 23, 2019, from [https://www.research.manchester.ac.uk/portal/en/publications/can-the-government-create-a-vibrant-cluster-understanding-the-impact-of-cluster-policy-on-the-development-of-a-cluster\(e0f8b5b7-bcbb-47c9-9165-8236c20f2066\)/export.html](https://www.research.manchester.ac.uk/portal/en/publications/can-the-government-create-a-vibrant-cluster-understanding-the-impact-of-cluster-policy-on-the-development-of-a-cluster(e0f8b5b7-bcbb-47c9-9165-8236c20f2066)/export.html)
- Kabashkin, V. (2010) "*Public-private partnership: international experience and Russian perspectives*", Moscow, Russia: International innovation center.
- Kolobova, E. & Yagolnicer, M. (2017) "*Analysis of the impact of the institutional environment on the functioning of the cluster*". Innovation clusters in the digital economy: theory and practice, May 17, 2017 – May 21, 2017, Sankt-Peterburg, Russia, pp. 63-67.
- Ii, I. M. (2017). Vocational Education and the Practice of Public-Private Partnerships in Russia's Regions. *Journal of the New Economic Association*, 36(4), 198-207. doi:10.31737/2221-2264-2017-36-4-11
- Maksimov, V. (2010) "*Public-private partnership in transport infrastructure: criteria for assessing concession tenders*", Moscow.
- Martusevich, R., Sivaev, S. & Homchenko, D. (2006) "*Public-private partnership: international experience and Russian perspectives*", Moscow, Russia: institute of city economy.
- Palermo, Giulio. "Economic Power and the Firm in New Institutional Economics: Two Conflicting Problems." *Journal of Economic Issues*, vol. 34, no. 3, 2000, pp. 573–601, doi:10.1080/00213624.2000.11506295.
- Suire, Raphael, and Jerome Vicente. "Clusters for Life or Life Cycles of Clusters: in Search of the Critical Factors of Clusters' Resilience." *Entrepreneurship & Regional Development*, no. 1-2, 2014.
- Varnavskii, V. (2011) "*Public-private partnership: some issues of theory and practice*". *World economy and world relation*, no. 12 , 2011 - pp.41–50.
- Žižka, M., Valentová, V., Pelloneová, N., Štichhauerová, E. (The effect of clusters on the innovation performance of enterprises: traditional vs new industries, *Entrepreneurship and Sustainability* 2018 Issues 5(4): 780-794. doi:10.9770/jesi.2018.5.4(6))

**Contact**

Anna Breusova

Omsk F.M. Dostoevsky State University, Department of regional economy and territory  
management

Litskevicha sq., 1, Omsk, 644053, Russia

[annabreusova@yandex.ru](mailto:annabreusova@yandex.ru)

Albina Kiseleva

Omsk F.M. Dostoevsky State University, Department of regional economy and territory  
management

Litskevicha sq., 1, Omsk, 644053, Russia

[albkis@mail.ru](mailto:albkis@mail.ru)