

## Public-private partnership in Russia: Problems of regional development



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### ABSTRACT

Social infrastructure provides the development of the territory of regions and countries. Public-private partnership is currently one of the most important tools for modernizing social infrastructure. A modern analysis of publications on infrastructure development shows a high interest of scientists in this issue: The relationship between quantitative and qualitative indicators of infrastructure functioning and socio-economic development of territories, and the dysfunction of management practices are studied. At the same time, the scientific literature does not sufficiently study issues related to a comprehensive assessment of the level of development of public-private partnership, restrictions, and prospects for interaction between government and business on the development of social infrastructure at the regional level. The purpose of this article is to identify the limitations and prospects of interaction between government and business on the development of social infrastructure at the regional level in the Russian Federation based on an integrated assessment of the level of PPP development. The main method of this research is an expert survey of civil servants and representatives of the business community in the Moscow region. The results of the study revealed a low level of mutual trust between business and government, and an average level of PPP development at the regional level. It is concluded that to assess the depth of development of the PPP mechanism in the region, it is necessary to include criteria that demonstrate the evaluation of these projects by the PPP participants themselves. Assessment of the level of PPP in the region should be integral, contain both quantitative indicators (financial and economic) and qualitative (assessment of PPP participants). The strategic direction of PPP development should be to increase the involvement of all stakeholders, taking into account their views in making management decisions in this area. This will help to increase the transparency and openness of the relevant procedures and will allow timely identification of dysfunctions that arise as a result of interaction between government and business.

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### 1. Introduction

Social infrastructure provides the satisfaction of the key needs of the individual, development of the territory of regions and countries. The relevance of research on infrastructure management processes and modernization trends is dictated by its social significance, its role in ensuring social security, political stability of the country, economic growth, and improving labor productivity (Bajar and Rajeev,

2016). Social infrastructure facilities contribute to the development of human capital and meet the basic needs and interests of the individual. The educational, professional, and entrepreneurial activity of an individual is largely determined by the presence of appropriate infrastructure conditions that allow them to realize their potential (Frolova et al., 2016).

Modern research highlights the “recent infrastructural turnaround in social science” due to the role of infrastructure in everyday social life practices (Power and Mee, 2020). The research is particularly relevant due to the growing population of cities, which increases the burden on infrastructure systems (Crane, 2008). In these conditions, the main task of the state is to improve

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infrastructure planning and make effective investment decisions (Dowall and Ried, 2009).

The research interests of scientists are focused on the following issues: The relationship between financial investment in the construction of infrastructure facilities and economic growth, the specifics of management processes, the adequacy of infrastructure facilities to socio-economic interests and needs at various stages of social development (Liu et al., 2014). In particular, Dash and Sahoo (2010) examined the role of industrial and social infrastructure in economic growth, taking into account other important variables such as investment, labor, and trade in India between 1970 and 2006. The scientists have concluded that industrial and social infrastructure has a significant positive impact on the volume of production and the growth of human capital (Dash and Sahoo, 2010). Similar conclusions were obtained in other studies. In particular, improving infrastructure is seen as a crucial factor in India's continued economic growth and urbanization processes (Singhal et al., 2011). The importance of holistic, integrated management of the country's infrastructure assets is illustrated in the studies of Amador-Jimenez and Willis (2012). The scientists consider the following indicators of infrastructure development: The presence and length of paved roads, railways, the quality of seaports, and urban infrastructure. It is concluded that there is a correlation between quantitative and qualitative indicators of state infrastructure provision and national development (Amador-Jimenez and Willis, 2012).

The analysis of infrastructure development processes in various socio-economic periods has led to the conclusion that the construction of infrastructure facilities is usually used in the activities of government bodies as a means of economic growth, a tool for creating jobs. Periods of economic downturn and financial uncertainty are often accompanied by government efforts focusing on building and maintaining social infrastructure. Cities and communities that in the past have experienced a lack of infrastructure facilities will then benefit from adjusted policies at the national and state level to support economic prosperity through appropriate infrastructure development programs (Legacy, 2017).

One of the most important tools for attracting investment necessary for the modernization of social infrastructure is currently the mechanism of public-private partnership. Constructive interaction with business on infrastructure development issues not only reduces the financial costs of government authorities but also introduces business innovations that improve the quality of services for the population (Frolova and Medvedeva, 2018).

The introduction of a public-private partnership model demonstrates strong capabilities in the implementation of infrastructure projects (Jin et al., 2021). The works of Brennan and Solomon (2008) emphasized the importance of hybrid organizational forms of public-private partnership that operate at

the intersection of the public and private sectors. However, when implementing PPP projects, various problems arise. In particular, in the study of concession agreements between a private firm and the state, Silaghi and Sarkar (2021) highlighted moral risks in the framework of real options. The role of social risks of PPP projects in the development of infrastructure is revealed in the works of Gilmour et al. (2010). The new public administration looks at the various drivers of control and intervention between authorities and other entities, focusing more on programming and control through reporting (Shaoul et al., 2012).

Scientists from different countries study the use of public-private partnerships for the development of social infrastructure. Public-private partnerships have great potential in Norway. According to Xue et al. (2021), by dividing high start-up costs into more affordable amounts, facilitating the flow of information between different sectors and involving all sectors to create new incentives. The implementation of PPPs in Australia is the subject of English (2005); the peculiarities of implementation of PPP in the health system of Greece is considered Biginas and Sindakis (2015); the role of the state in the formation and development of social infrastructure of Kazakhstan is studied by Yessengeldina et al. (2014); PPP as a new way for national development of Ghana is determined in works of Zaato and Ohemeng (2016).

Nyein and Hadikusumo (2021) based on in-depth interviews, highlight the factors influencing the implementation of PPP projects in the housing sector in Myanmar (Nyein and Hadikusumo, 2021). In India, PPPs are predominantly used in municipal solid waste management projects (Dolla and Laishram, 2021). Based on the analysis of documents at the central level on the implementation of PPP in China, researchers pay special attention to the relationship between policy uncertainty and investment at the company level. To analyze the risk management system, the authors introduce the PPP Policy Uncertainty Index (Qin et al., 2021).

However, the lack of institutional maturity, typical for countries with a transitional economy, often makes it difficult to attract private partners for their PPP projects. The PPP institutional maturity model can be based on three institutional characteristics: Legitimacy, trust, and capability (Casady et al., 2020). Rasche et al. (2021) aimed to examine the legitimacy of various types of multi-stakeholder data partnerships arising in the context of sustainable development. They are developing a framework for assessing the democratic legitimacy of two types of data partnerships: Open data partnerships (where data and ideas are mostly available free of charge) and closed data partnerships (where data and ideas are mainly transferred within a network of organizations) (Rasche et al., 2021).

Estimates of the level of PPP development in foreign studies are mainly focused on economic analysis. In particular, Fourie and Burger (2000)

investigated the effectiveness of PPP used in market conditions based on economic indicators (Fourie and Burger, 2000).

The analysis of publications on infrastructure development shows a high interest of scientists in this issue: The relationship between quantitative and qualitative indicators of infrastructure functioning and socio-economic development of territories, risk management in the framework of PPP projects, and the dysfunction of management practices are studied.

At the same time, despite a significant volume of publications, the scientific literature does not sufficiently study issues related to a comprehensive assessment of the level of development of public-private partnership, restrictions, and prospects for interaction between government and business on the development of social infrastructure at the regional level.

## 2. Methods

The information base includes the results of a sociological study conducted with the participation of the authors on the topic "The practice of public-private partnership in the development of the social sphere of the Moscow region." Experts were civil servants of the government of the Moscow region (N=27), as well as representatives of the business community (N=34). The expert survey was conducted in the form of a semi-formal interview. The purpose of the expert survey was to identify experts' opinions on the state and problems of implementing PPP projects in the Moscow region. The survey was conducted in 2017 and 2019, which allowed us to compare the results and analyze how the assessments of public servants and entrepreneurs on the development of PPP in the Moscow region have changed.

We also used the results of WCIOM's (2019) research "Business in Russia: An inside view," and "Business constraints and economic growth opportunities (WCIOM, 2018)."

The purpose of this article is to identify the limitations and prospects of interaction between government and business on the development of social infrastructure at the regional level in the Russian Federation based on an integrated assessment of the level of PPP development.

## 3. Results

At the regional level, public-private partnership is a priority mechanism for improving the quality of service delivery in social infrastructure sectors. One of the leading regions in terms of public-private partnerships in the Russian Federation is the Moscow region.

Currently, according to the methodology of the Ministry of economic development of the Russian Federation, the assessment of the level of PPP development in Russian regions is based on such criteria as the dynamics of PPP projects, the

accumulated experience in implementing PPP projects, and the state of the regulatory and institutional environment in the Russian Federation.

The dynamics of PPP project implementation over the past 5 years in the Moscow region are mostly positive. If in 2014 the level of development of public-private partnership was only 38% (with the forecast of 65.2%), then by 2018 it reached 90% (ahead of the forecast values). To date, the Moscow region has managed to achieve a leading position in terms of the development of public-private partnerships among the subjects of the Russian Federation, increasing its level by 52%.

An analysis of the number of public-private partnership projects in the Moscow region shows the following trends: While only 11 projects were concluded in 2015, as of 2018, 39 projects are being implemented in the Moscow region within the framework of PPP, and about 41 PPP projects are under preparation or tender procedures (Investment portal). At the same time, the main part of PPP projects are aimed at the development of the transport sector (in 2018–22 projects). The social sphere is less attractive for investors. In 2018, only 6 PPP projects were implemented.

The Moscow region has accumulated considerable experience in implementing PPP projects. To attract the private sector to public-private partnership projects in the Moscow region, various support measures are available: Tax preferences; benefits for creating new capital construction projects; provision of land; benefits for special investment contracts and regional investment contracts; compensation for engineering infrastructure costs; and benefits from the Moscow region industrial development fund.

The main indicators of the regulatory and institutional environment for PPP development are, first of all, the availability of specialized bodies responsible for the development of PPP, as well as relevant planning documents that take into account the mechanisms for the development of public-private partnerships (Table 1).

From the presented data, it follows that the Moscow region scored the maximum score (1.0) on only two indicators of the institutional environment. The region has identified an authorized body in the field of public-private partnership, which is the Ministry of investment and innovation of the Moscow region, and created a single body responsible for preparing and conducting a competitive selection of a private partner—the project office of the Moscow region.

Thus, the assessment of the level of PPP development in the Moscow region allows us to determine both the state of the institutional environment and the experience of the region's participation in PPP projects. However, the assessment does not take into account the opinion of direct participants in the PPP—representatives of government and business. In this regard, in order to obtain an integrated assessment of the level of PPP development in the Moscow region, the study was

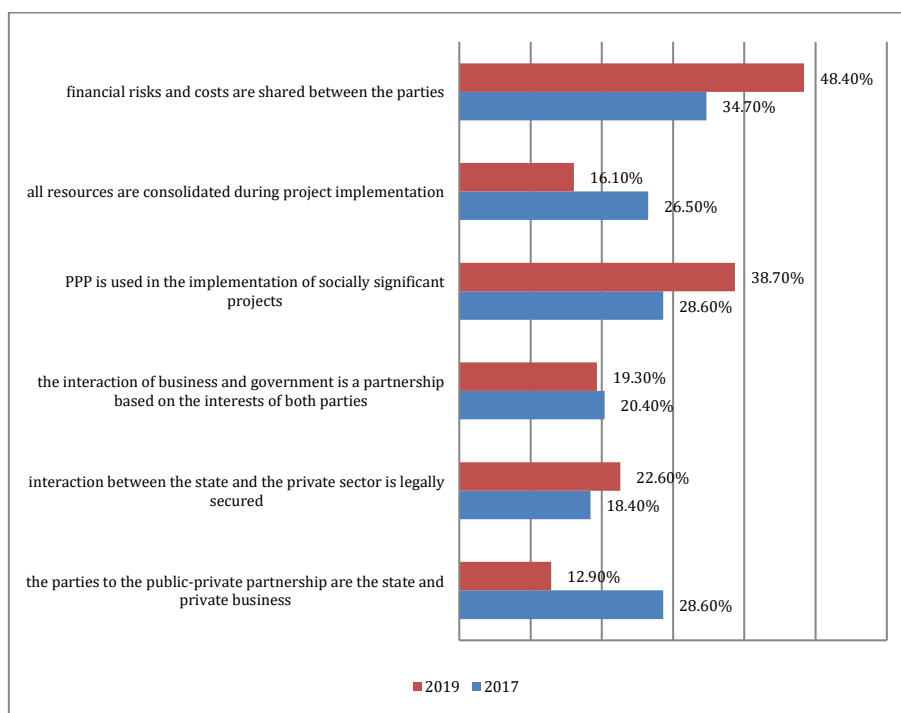
conducted to identify the views of civil servants of the government and entrepreneurs of the Moscow region.

**Table 1:** Indicators of the regulatory and institutional environment of public-private partnership in the Moscow region in 2018

N	The name of the indicator	Number of points (maximum 1.0)
1	Authorized structure in the field of PPP, including concession agreements	1.0
2	Specialized structure responsible for supporting PPP projects	0.8
3	Inter-Ministerial structure responsible for the review of projects initiated for PPP and policy formation in the sphere of PPP	0.6
4	A single structure that is responsible for preparing and conducting competitive selection of a private partner (concessionaire)	1.0
5	Moscow region goal-setting documents that take into account mechanisms for developing PPP, including concession agreements	0.8
6	Planning and programming documents for the Moscow region that take into account mechanisms for developing PPP, including concession agreements	0.6
7	Specialized information resource of the Moscow region in the field of PPP in the information and telecommunications network "Internet"	0.5
8	List of objects for which it is planned to conclude an agreement on PPP and concession agreements in the Moscow region	0.7
9	Tax and other support measures for private partners and concessionaires	0.7

As part of the conducted survey, the representatives of the government and business identified the key features of public-private partnership, assessed the level of PPP development in the region, and highlighted priority areas for the implementation of PPP projects.

According to the civil servants, both in 2017 and 2019, one of their main characteristics of public-private partnership is the need to distribute financial risks and costs between the parties (this was stated by 34.7% in 2017, and 48% in 2019) (Fig. 1).



**Fig. 1:** Distribution of answers to the question: What features of public-private partnership do you consider the most significant? (% estimates of civil servants)

Over the past two years, the importance of PPP mechanisms has increased. About 40% of the respondents stated that PPP is used in the implementation of socially significant projects in 2019 (for comparison, in 2017–28.6%). However, only one in five respondents still perceive PPP as a mechanism for interaction between business and government through partnership. Therefore, despite the fact that the Federal law on PPP was adopted in 2015, representatives of the business community still do not act as partners in the assessments of civil

servants, and taking into account the interests of both parties is not a priority.

The opinions of the civil servants regarding the priority areas of PPP development have changed significantly in 2 years. If in 2017 transport (52%), and utilities and energy (48%) were the key sectors for implementing PPP projects, in 2019 the vector changed towards the social sphere (41.9%). It is worth noting that the social sphere has not been a priority for PPP projects for many years.

The level of PPP development in the Moscow region, according to the government representatives, is currently average. This was stated by 45.2% of the respondents in 2019. In 2017, the civil servants mostly rated it as fairly high (64%). The same trend can be seen in respondents' assessments of the level of development of public-private partnerships in the sphere of social infrastructure in the Moscow region: in 2017, the "average" rating prevailed (76%). In 2019, the share of those who rated this level as average decreased to 58.1%, while 35.6% of the respondents rated it as low (for comparison, in 2017–24%). Therefore, despite the fact that the number of PPP projects is increasing, there are certain barriers that prevent the development of PPP at a high rate.

The results of the survey of representatives of the business community allowed us to draw the following conclusions. According to business, the most significant signs of public-private partnership are that financial risks are distributed between the parties (58.3% in 2019 and 18.4% in 2017), and the interaction between the state and the private sector is legally secured (41.7% in 2019 and 12.3% in 2017). The opinion of representatives of the business community, according to the survey data in 2017 and 2019, differs significantly. If in 2017 about a third of the respondents (28.6%) were of the opinion that PPP is used in the implementation of socially significant projects, in 2019 the number of the respondents who adhere to this point of view decreased to 20.9%. At the same time, only one in ten respondents (12.5% in 2019, 12.1% in 2017) still perceive PPP as an interaction between business and government, having a partnership character based on the interests of both parties.

The level of the development of public-private partnership in the Moscow region, according to the business representatives, is average: 54.1 % (for comparison–48.8% in 2017) of the respondents stated this; 20.9% (in 2017–42.4%) of the respondents consider it low, and 25% (8.4% in 2017) consider it high. The results of the survey indicate that the conditions for PPP development in the region have improved over the past 2 years, as the percentage of those with low ratings has decreased by almost 2 times. The decrease in the negative perception of business can also be seen in their assessments of the level of development of PPPs in the field of social infrastructure. According to the respondents, it is currently an average of 58.1% (in 2017–45.8%). At the same time, every third respondent considers it low–35.5% (in 2017–41.7%) and only 6.4%–high (in 2017–0%).

The business has become more active in participating in PPP projects. According to the 2019 survey, representatives of the business community stated the need to develop such industries as social (51.2%), and utility and energy (25.3%). If we compare the results with the data from the 2017 survey, it is worth noting that business priorities in the development of PPP projects have somewhat changed. In 2017, the transport industry was in the

first place among all the industries that, according to the respondents, needed to be developed with the help of PPP.

#### 4. Discussion

The assessment of the level of a public-private partnership at the regional level consists of many characteristics. First, it is the development of the regulatory and institutional environment, the experience of participation in PPP projects, and the dynamics of PPP project implementation. Such indicators are the basis for the methodology for assessing the level of PPP in the Russian Federation. At the same time, the existing methodology does not sufficiently take into account the qualitative indicators of the region's development when implementing public-private partnership mechanisms.

The research conducted in the Moscow region revealed the level of PPP development in the sphere of social infrastructure. The results presented by the region based on the methodology of the Russian Government demonstrate that the Moscow region is the leader: the dynamics of implementation of PPP projects is positive, the number of PPP projects and amount of funding increase year by year, we have accumulated considerable experience in implementing PPP projects, and a variety of support measures are in place.

However, the analysis of the results of the survey of the representatives of public authorities and businesses allows us to note that they estimate the level of development of public-private partnerships in the Moscow region equally as average. The average level of PPP development in the sphere of social infrastructure in the Moscow region, according to the estimates of direct PPP participants, indicates that there are still certain barriers that do not allow regional authorities to effectively implement policies using PPP mechanisms in the social sphere.

According to the representatives of government and business, the distribution of financial risks between the parties to the partnership is a key characteristic of a PPP. Indeed, the fair distribution of obligations and risks for project implementation between the two sides of the public-private partnership is one of the most important principles of this mechanism. The implementation of PPP projects in the social sphere should be based on the consideration of all risks, which should be carried out by both private and public partners. The risk management process should be based on the fact that both interacting parties have provided the appropriate conditions for the performance of their obligations, and are responsible for the fact that these conditions were not met, or the obligations were not fulfilled. Increasing transparency has a positive impact on the quality of PPP policies (Rosell and Saz-Carranza, 2019).

Currently, there is a problem of incomplete clarity in such matters as the transfer of ownership of social infrastructure facilities to private partners from the

state. This creates very serious risks for private investors who may become potential partners in implementing projects related to social infrastructure facilities belonging to the Moscow region. This is due to the fact that there are no normative legal acts on state property, on concessions, as well as other normative acts that are of particular importance for the full implementation of social projects of public-private partnership in the region. Such risks can be reduced if the rights and conditions of the use of state-owned objects are fixed in regional regulations, as well as legal guarantees for the return of investments made in such objects by private partners. The creation of such norms, which are fixed at the legislative level, will help attract investment in social infrastructure facilities not only from Russian but also from foreign private businesses.

The need to develop PPPs in the social sphere was stated by both government and business representatives. However, there are significant differences in the estimates of the respondents in 2017 and 2019. Even in 2017, the social sphere was not considered as a promising industry for the introduction of PPP mechanisms, but in 2019 the opinions of the respondents changed, and the social sphere, in their opinion, became one of the priorities for investment. This was also facilitated by the fact that the level of development of the institutional environment of public-private partnerships in the Moscow region is currently increasing.

However, an effective institutional environment in the field of PPP is no longer a competitive advantage of regions and is becoming a prerequisite for attracting the desired infrastructure investor. The development of PPPs in Russia is hindered not only by the lack of regional regulations in this area but also by the lack of long-term financing mechanisms. Russian banks for various reasons refuse to lend to long-term projects at the regional level. Entrepreneurs do not invest enough funds in social projects, which indicates the need to create an integrated system of state and regional initiatives that can correct the current situation.

Practice shows that executive authorities often do not always understand the very essence of public-private partnership, as it should be implemented at the current stage of development of the country. According to the survey results, the majority of the respondents do not perceive PPP as an interaction between business and the government, which is of a partnership nature. The reasons for this situation are usually a lack of knowledge about the features and mechanisms of implementation of public-private partnerships in the social sphere, both public servants and business representatives. In this regard, it is necessary to organize systematic work to improve the skills of civil servants and entrepreneurs in this area.

The results of the study are confirmed in the surveys of the All-Russian center for public opinion research (WCIOM), according to which the majority of Russian entrepreneurs assess the conditions for

doing business in our country as unfavorable (71%). Only 15% of the respondents believe that the government is taking active measures to support and develop business. The main factors that have the most negative impact on the business environment, according to the business community, are: the level of welfare of citizens (81%), the prevalence of corruption (72%), the level of energy prices (71%), the level of security of the owner, the work of the judicial system (62%), legal regulation in the business sector (62%), as well as the work of regulatory authorities (63%) (WCIOM, 2019). Thus, the business community identifies both macroeconomic and institutional barriers to the development of the business sector. In addition, the low level of trust in the authorities is evidenced by a fairly skeptical attitude of business about its development prospects: more than half of the respondents (51%) expect a deterioration in business conditions in the five-year term (WCIOM, 2018).

There is no consistency in the development of public-private partnership mechanisms in Russia. Most projects are formed on the basis of an outdated approach, the essence of which is not to attract private partners to investment and implementation of any social project, but to find a project for the funds allocated from the budget. Therefore, the implementation of important but expensive projects practically does not find its implementation in life, and only individual investment projects are implemented in the social sphere. In particular, in the Moscow region for many years, the social sphere has not been attractive to investors, despite the fact that entrepreneurs understand the importance and prospects of its development.

Thus, the strategic direction of PPP development should be to increase the involvement of stakeholders, take into account the opinions of experts and the general public in decision-making, and increase the openness (publicity) of the relevant processes (Lukyanenko, 2018). Moreover, to assess the depth of development of the PPP mechanism in the region, it is necessary to include criteria that demonstrate the evaluation of these projects by the PPP project participants themselves. This will allow timely detection of dysfunctions that arise as a result of interaction between government and business. Thus, the assessment of the level of PPP in the region should be integral, contain both quantitative indicators (financial and economic) and qualitative (assessment of PPP participants).

## 5. Conclusion

The level of development of public-private partnerships largely determines the stability of the regional economy. If we consider the model of institutional maturity of PPPs as a set of such institutional characteristics as legitimacy, trust, and opportunities, it should be noted that their assessment is of particular importance. The study of public-private partnerships in the development of

the social sphere of the Moscow region allowed us to draw the following conclusions.

The level of legitimacy of the development of PPP projects in the Moscow region is average. On the one hand, there is a fairly high level of the institutional environment: An authorized body in the field of PPP has been created, specialized structures responsible for supporting PPP projects have been developed, and goal-setting documents for the Moscow region have been developed that take into account PPP development mechanisms. However, on the other hand, the risk management process is not sufficiently developed in the regulatory framework, which significantly constrains the involvement of the business sector in PPP projects (according to the survey data, it is the distribution of financial risks that is one of the main priorities for business within the framework of PPP).

The level of trust between businesses and the government is not high at the moment. This is evidenced by the fact that the business sector has a fairly low assessment of the business development conditions in Russia, and more than half of the respondents expect the business environment to deteriorate in the five-year term. Both civil servants and the business community do not perceive PPP as a mechanism for interaction between business and government based on partnership, and taking into account the interests of both parties is not a priority.

However, despite the low level of mutual trust between business and the government, the average level of legitimacy in the development of PPP, currently, there are opportunities and impulses for the introduction of PPP mechanisms at the regional level: the use of modern project technologies in public administration; the presence of PPP development institutions; a favorable investment climate in the territory, etc. At the same time, the assessment of the level of PPP development at the regional level should be made not only based on quantitative, but also qualitative criteria. To identify barriers to the implementation of PPP projects, it is important to take into account the views of direct PPP participants. Thus, it is necessary to increase the involvement of all stakeholders and take into account their views in making management decisions in the field of PPP, which will help to increase transparency and openness of the relevant procedures.

## Compliance with ethical standards

## Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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