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DEVELOPMENT MECHANISM OF THE PUBLIC-PRIVATE PARTNERSHIPS

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Abstract: *In Russia, the formation of the public-private partnership institution dates back to 2004. Russia's experience in implementing public-private partnerships is mainly related to infrastructure projects, while abroad typical implementation areas of public-private partnerships are transport, housing and utility infrastructure, residential building, telecommunications, environmental projects, the financial domain, and the social sector. The expediency of using public-private partnership mechanisms in the social sector of the Russian Federation is determined by the high need for extrabudgetary funds and the use of effective management methods to increase the population's provision with health, education, culture, housing, communal, and other services. International practices show that public-private partnerships are developed widely. To some extent, almost every state implements the concept of the public-private partnership. Therefore, it is natural that the development level of the public-private partnerships institution, its specifics, and orientation to certain schemes and sectors depend on the state development features and directions, its economic growth, and the social sector.*

Keywords: *state, social sector, public-private partnership, follow-up mechanism, legal framework.*

INTRODUCTION

Scientists and practitioners note several problems when organizing a project within the framework of public-private partnership (PPP), including shortcomings of the legal framework, lack of clarity and transparency of the partner selection procedures, the formation of the terms of the agreement, the follow-up mechanism, and other elements of project formation and implementation. A significant place here is occupied by methodological issues. In particular, no recommendations are available for organizing projects in various fields of activity that take into account the specifics of the project objects operation or organizing financial support for the project. This is largely because Russian science and practice lack a unified view of the PPP concept, besides, research on the role of PPP in increasing the provision of public services is limited. Thus, developing

scientific and practical recommendations for the formation of a PPP in the social sector becomes expedient.

METHODS

When preparing the article, the legislative and regulatory documents that underlie public administration and local self-government of the Russian Federation were analyzed, as well as the socio-economic policy of the Russian Federation and the Moscow region. The authors also considered the regulation of relations between the state and business structures, as well as statistical materials, namely, publications of Federal Service of State Statistics (Rosstat) and Statistic Service of the Moscow region (Mosoblstat), proceedings of relevant international and all-Russian conferences, national statistical publications, reports, and data available in periodical print. The authors used economic and statistical analysis methods, quantitative and qualitative research, as well as consistency and development principles.

RESULTS AND DISCUSSION

Many researchers agree that there are two main international models of the PPP, namely, the European and Japanese models (Silvestrov, 2005; Atamanchuk, 2005; Volostnov, 2014; Dansaranova, 2007; Silaeva et al., 2019; Khavanova, Bokareva, 2017; Bokareva et al., 2020, Morozova et al., 2015). The European model is based on the experience of the UK, where in the early 90's the law on Private Finance Initiative (PFI) was adopted, which was supposed to facilitate private entities' entry into the public services sector by clearly defining the framework conditions. In the UK, the cost of private finance initiative facilities, which are the main form of partnership in this country, amounted to GBP 24 bln over the past 10 years. Moreover, projects totaling GBP 12 bln are planned to be implemented over the next three years. Up to 80 new agreements are signed annually and, according to the British government, such projects provide 17% of savings for the country's budget (Efimova, 2003). At that, risks and obligations are evenly distributed between the state and the private sector. Under the British model, the business entity, as a rule, carries large risks associated with the project economy, project implementation, rendered services, as well as the level and quality of such services. A feature of the PPP agreements is that they rather in detail describe scenarios and possible developments in the implementation of the project, as well as how partners will interact when implementing a certain scenario, how they will regulate property relations arising concerning the involved resources, and the result obtained owing to their application.

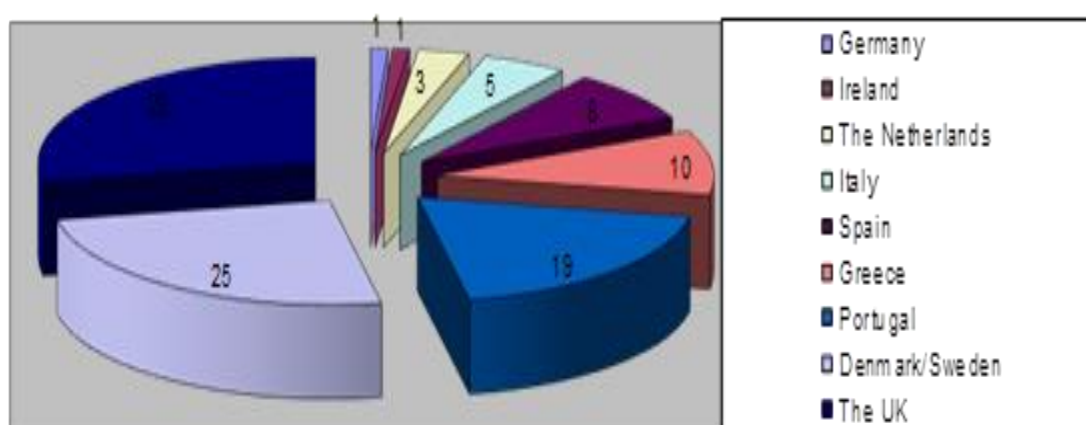


Figure 1. The proportion of EU countries in the overall funding of the partnership between the state and the private sector, % (Silvestrov, 2005).

Specifics of PPP developing in the EU countries include the following features (Silvestrov, 2005; Silaeva et al., 2019; Bezgodov, 2007; Gorovenko, Samolovov, 2014; Gorovenko, Samolovov, 2014; Romanova, Churilova, 2015): specific budget accounting requirements; the need for special budget-based thinking (in addition to accounting-based approach); the different legal status of partners; detailed regulation of public sector debt according to the Convergence criteria (Maastricht Treaty); limited readiness of the state to make decisions on the project; formal requirements for the decision-making procedure; various rules and regulations in the field of state orders and procurement for the project.

However, there are different approaches to choosing a private partner. Under the Anglo-Saxon system, three tenders are held separately for design, construction, and maintenance (or management). According to the French system, one tender is held for all types of work and services. Which of the methods suppresses immunity against the competition is a moot point. In France, for example, a law was passed (1993) which requires preliminary publication of proposals (Efimova, 2003). The most common form of PPP under the European model is when an enterprise structure builds objects at its own expense, then operates them for some time, and receives income either from the direct operation of these objects or in the form of payments from the state. Below are the following examples. When building toll roads, the business structure takes on the business risks associated with the object, that is, the road is exploited, and the funds received form the business income. Another case is that the state pays a fixed and agreed fee in advance for the existence of this object, for the fact that it is operational, and also assumes all risks for its exploitation. Such an object can be also a hospital, for example. A rarer form is the use of a bonus that appears as a result of creating an infrastructure object. For example, the company that has built the highway gets a monopoly right to lease (buy) land in its vicinity as a bonus for constructing the highway. Since the land will rise in price due to the appearance of the highway, then the investor can recoup the cost of building the highway by renting (selling) land plots and new facilities (gas stations, parking lots, townhouses) built on this land. In the framework of the Japanese model, the state assumes almost all risks and guarantees the return of capital in exchange for providing funds and ensuring the proper level by business structures (Alekseev, 2016). Such contracts in Japan, for example, do not provide for the large amounts of costs for consultants, engineering support, and assistance, which are very significant in the

European model. Next, the track record of success in using the European PPP model is considered. Table 1 shows the main areas where PPP projects are implemented.

Table 1. Countries and areas where PPP mechanisms are used (Gritsay, 2006)

X Completed projects	Road	Rail	Water	Waste	Ener	Health	Educ	Pris	Defe	Offic
O Projects under preparation										
Austria	X	X	X			X	O	X	X	
Belgium	X	O	X	X		X	O			
Canada	X	X	X	X		O	O	X	O	X
Finland	X	O				X	O			X
France	X		X						O	
Germany	X	O	X	O					O	
Greece	X	X				O	O			
The Netherlands	X	O	O							
Ireland	X	O	X	O	X		O	X		X
Italy	O	X	O	X						
Portugal	X	O	X			O			O	
South Africa	X		X			O	O	X		
Spain	X	X	X			X				
The UK	X	X	X	X		X	X	X	X	X
The USA	X		X	O				X	O	

Researchers distinguish the Irish model (Gritsay, 2006), where a significant influx of foreign investment is felt mainly due to the attractive tax regime that resulted in emerging enterprises with high-tech productions. The following PPP implementation schemes have been widely developed in Ireland. One of the PPP schemes involves Design, Construction, and Management agreements between the public and private sectors for the design, construction, and management of public facilities and infrastructure. The contractor designs and builds a facility that meets the requirements of the public sector and retains responsibility for the management and maintenance of the facility for a predetermined period, at the end of which the facility is transferred to the public sector. The construction of the facility is financed by the public sector and it remains in public ownership for the entire duration of the contract.

Another scheme involves Design, Construction, Management, and Financing agreements between the public and private sectors for the design, construction, management, and financing of public facilities and infrastructure. The contractor designs and builds a facility that meets the requirements of the public sector and retains responsibility for the management, maintenance, and financing of the facility, and returns the cost of its construction solely from public sector payments. At the end of the contract, ownership usually is passed to the public sector. Concession contracts are the same Design, Construction, Management, and Financing agreements but with the exception that a private-sector contractor returns the cost of building a facility through charging direct users, or by combining charging with government grants. The Italian model assumes the involvement in PPP of other structures, such as banks, insurance companies, transport companies, etc. (Fig. 2).

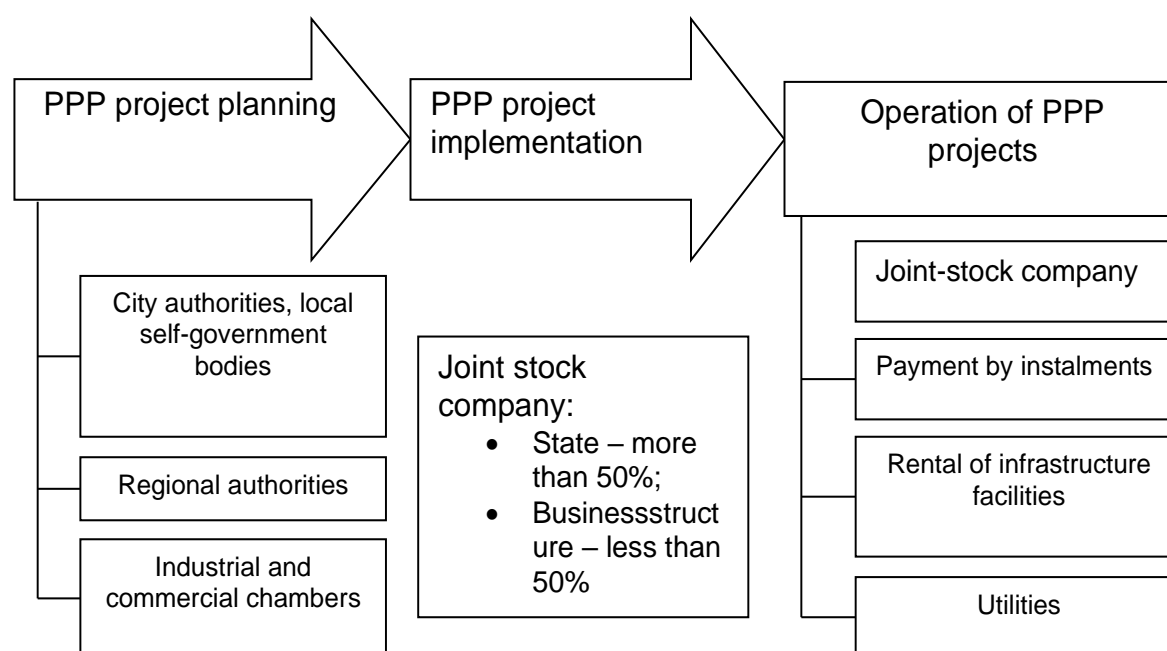


Figure 2. Italian model of implementing investments in logistics centers.

For example, the construction of logistics centers is usually supported by the Italian government and is carried out according to government plans. The initiator of the construction of logistics centers is the state (public) sector, while the structure of each such project involves both local governments and regional governments of cities, regions, as well as chambers of commerce and industry. A typical organizational form for implementing PPP projects to create logistics centers in Italy is a joint-stock company in which the public sector has more than 50% of the shares. Thus, an open joint-stock company allows the public sector and private companies to participate in investments while maintaining follow-up over the state. This ensures the inflow of private capital and at the same time guarantees compliance with the EU requirements regarding the targeted use of incoming funds by the Union's entities, especially when they make demands for additional financing of infrastructure construction. Unlike other models, Italian logistics centers own a significant part of the infrastructure.

Ireland is characterized by centralized management of PPP projects through a Central PPP Division within the Department of Finance. The Portuguese PPP model is currently being actively developed due to the following prerequisites: the need to develop infrastructure while maintaining the pace of economic development and continuing further growth; the need to remain competitive in Europe, and especially in the Euro area. Besides, the emergence of the Euro, as well as Portugal's entry into the Euro area has made it possible to attract more funds to the economy for a longer period than it was possible using Escudo. Until now, PPP has been used primarily in Portugal for the development of road infrastructure and in the water sector. Portugal's current road program includes 14 PPP-based road construction projects. The program costs more than EUR 8 bln. The municipality is responsible for providing water and sewerage services to the population.

Five water concessions are currently in operation in Portugal, and three more are nearing contractual completion. When municipalities are not large enough to attract private investors, the usual procedure is to link projects within the municipality system. Recently, the government has been exploring the possibility of using PPP for projects

implemented in ports, airports, railways, healthcare, schools, prisons, the military-industrial complex, and leisure. The development of PPP has led to the government's decision to create an informal special body that will incorporate representatives of both the private and public sectors. Its task is to identify and develop various mechanisms of PPP, improve contractual forms, remove legal obstacles, create institutional structures, and use the experience of other countries.

In the authors' opinion, the German PPP model is the most structured and involves the participation of many actors. It should be emphasized that PPP practices in Germany are supported at all levels of public authority, while public sector participation is based on federal laws and the laws of federal lands. For example, as part of a Federal plan for the development of logistics centers, the federal budget participates in the financing of investment through the Deutsche Bahn AG (German Railways). At that, the allocation of subsidies to the budgets of federal lands, as well as earmarked grants and loans for specific investment projects are practiced widely (Fig. 3). When triggering the creation of a logistics center in Germany, involving the participation of the government, banks, logistics operators, and other stakeholders, an organization with limited liability is established, entrusted with the following tasks: developing the logistics center construction program and documentation; searching for investors and funds; purchasing and developing land plots; supervising over the construction of a logistics center.

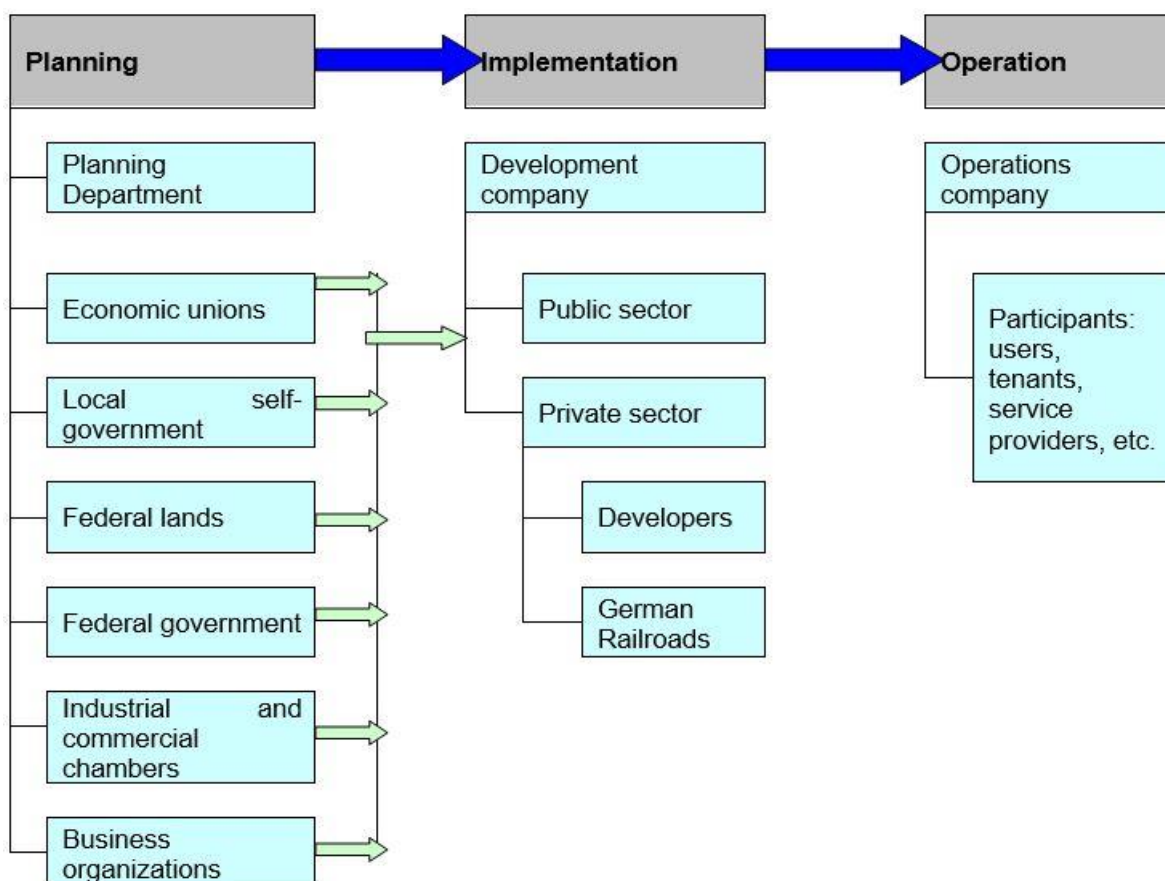


Figure 3. German PPP model for investment in logistics centers

Sources of investment funds are usually investors who want to make infrastructure available to logistics operators, as well as transport companies, and entities

that form associations with private capital. Besides, funding sources can be budget funds and trust funds of federal lands, programs, and federal funds aimed at infrastructure development, grants from cities and regions, grants and programs of the European Union, and bank loans. Established logistics centers are managed through supervisory bodies that are created by project participants, i.e., investors, development companies, city/municipality, associations, and unions. The logistics center is directly managed by the operations company, which leases the property from the development company. This is a fairly common practice which to a certain extent allows avoiding certain taxes on economic activity in full compliance with the law in the case where the entity that receives income from renting out infrastructure to other entities is not its owner but only the employer (Bokareva, Egorova, 2014; Lebedeva, 2007; Utorov, 2017).

Thus, in the German model of PPP implementation, as well as in the Italian model, it is necessary to note the involvement of the public sector not only in the planning phase but also in the investment implementation phase. This is confirmed by existing investment consortia, for example, in some logistics centers. Besides, a special feature is the creation of new organizations (joint ventures) of various organizational and legal forms during the implementation, operation, and planning stages, in which the public and private sectors are full partners and jointly address the tasks set. Relatively recently, scientists and practitioners have begun to highlight the Kazakh PPP model, which is still in its infancy. Of interest is the planned securitization mechanism, where funds are raised on a long-term basis under the assignment of future payments. In this case, foreign and national accumulative pension funds that are primarily interested in long-term investments can become the main investors in projects implemented under PPP conditions. Various forms of partnership between the state and private businesses, used in international practice, are described below (Vakulenko, 2006; Konishcheva, Tikhonov, 2005; Bokareva et al., 2018; Yakovlev, 2006).

- Concessions, as the most popular model, account for 60 to 80% of all PPP agreements in Europe and the USA. Concessions are most common in countries where the partnership is based on a developed legal framework, such as France, whose concession legislation is one of the most developed in the world and consists of a complex system of legal norms contained in a wide variety of state and local regulations, and which has a rich judicial practice.
- Long-term lease of state or municipal-owned infrastructure facilities is intended to attract private investment in modernization, ensure more efficient operation of the infrastructure facility, and must be necessarily justified by investing in the development of the facility. This form is widely used in the public infrastructure sector, such as water supply, sanitation, and wastewater treatment.
- Contracting for services is common in roadmending and maintenance, waste collection and disposal, collection of utility bills, maintenance of utility networks, installation and maintenance of meters, etc. A project of this kind must necessarily include investment in the creation of facilities, such as a network of technical maintenance workshops, appropriately equipped buildings, and premises, as well as equipment and vehicles.
- Reverse leasing means that the developer builds and puts into operation an object, which is then leased to the state (municipality).
- Transferring ownership of the object with the obligation to provide services.

- Selling with the subsequent lease is based on the fact that the state (municipality) sells the infrastructure object to a private company and leases it immediately after the sale.

Other examples of implementation of PPP options in the investment process in various economic sectors used in international practice are shown in Table 2.

Table 2. Examples of PPP projects abroad

Country	Examples of PPP projects
Finland	Road maintenance has been conceded by the state to private companies.
France	75% of the roads are payable. The state is responsible for setting fares on toll roads. Revenue from the operation of toll roads amounts to tens of millions of Euros per year.
Germany	Logistics centers in Kassel, Leipzig, transport and cargo center in Bremen. <i>Space</i> . Germany was able to get ahead of its competitors in the field of creating high-resolution space radars due to implementation of a progressive PPP scheme, combining the financial resources of the DLR space agency with a private initiative and technological developments of the European aerospace giant EADS Astrium. The total cost of the satellite was EUR 130 mln, of which EUR 102 mln were provided by the DLR agency. The project was developed in four years. The advantages of PPP can be seen when compared with the similar British satellite TerraSAR-L with L-band RSA, which is being developed in parallel with the TeraSAR-X project but according to the traditional scheme, i.e., under the leadership of the UK government agencies and ESA.
Ireland	According to the UN, Ireland currently ranks 10th in the world among highly developed countries in terms of economic competitiveness (for comparison, Russia ranks 89th) and shows growth rates exceeding 8% per year (this is how much Russia needs to double its GDP in 10 years).
Italy	The logistics center in the town of Frosinone in the Lazio Region. 90% of roads are payable. The state is responsible for setting fares on toll roads. Revenue from the operation of toll roads amounts to tens of millions of Euros per year.
Portugal	The main key to success is a political decision to create (or reconstruct) the transport infrastructure. The possibility of using PPP for projects implemented in ports, airports, railways, healthcare, schools, prisons, military-industrial complex, and leisure is being studied. It has been decided to create an informal "ad hoc body", which will include representatives of both the private and public sectors to identify and develop various PPP mechanisms, improve contractual forms, create institutional structures, and use the best practices of other countries.
Spain	100% of roads are payable. The state is responsible for setting fares on toll roads.
The UK	The following projects and partnerships can be used as examples of strategic partnerships in the UK: - Glasgow Alliance; - Birmingham Council of Community Organizations; Connect Project of Solihull City Council; - Public Forum and the Centre for Social Partnerships in Walsall.
Chili	40% of roads are payable. Setting fares for toll roads is up to the state.
Poland	Road construction. The law on toll roads was adopted in 1990. This law sets out what is left to the state and what can be transferred to private businesses. The state is responsible for organizing research in this area, preparing and approving projects, allocating land plots, and overseeing road construction. The financing is provided by the state and private business.
South Korea	100% of roads are payable. Setting fares for toll roads is up to the state.

In general, the following trends are observed in the development of PPP projects (Silvestrov, 2005): in some European countries, namely, Ireland, Portugal, Spain, and Italy, legislative acts have been adopted to facilitate the partnership of the state and the private sector in the project implementation; in the Netherlands, Germany, and Austria, pilot projects are still at an early stage of development; in Germany, the expansion of the partnership between the state and the private sector has great prospects in the transport and road infrastructure development; new EU member states, such as Hungary, Czech Republic, Slovakia, Croatia, and Poland, lagging behind the former EU members in infrastructure development, need to develop and implement joint projects; in Canada and Australia, the concept of PPP is incorporated in government programs; in many developing countries (China, Malaysia, Argentina, etc.), the first projects involving the state and private businesses are also being developed.

Thus, the following common features in the implementation of PPP projects abroad can be highlighted. First, one should note various state involvements in projects – from participation at the project design stage to participation only at the implementation stage that depends on the PPP activities nature and practices. Second, regardless of the level of state participation, PPP projects enjoy significant support from government agencies. Third, in addition to the state and private companies, other enterprises and companies are involved in the project. Fourth, in addition to carefully working out the main agreements, PPP projects provide for the possibility of additional agreements in the event of certain circumstances.

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