2017 Economics

#### UDC 33+658.11

### PRINCIPLES OF MODEL FORMATION OF PUBLIC-PRIVATE PARTNERSHIP IN THE CONSTRUCTION OF LOGISTICS CENTERS

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This article describes the general and specific methodological principles of creating logistics centers based on public-private partnership (PPP). The author proposes structural and resource model of interaction of PPP in the construction of a logistics center.

Based on the study, analysis and generalization of foreign and domestic scientific sources, we find it necessary to examine the principles of the models of public-private partnerships, together with the general principles of logistics, to attract domestic and foreign investment in the construction of logistics centers, to improve the management system of product distribution. The analysis of the examined sources allowed to formulate the following basic methodological principles of creating logistics centers [1, 2, 3, 4].

The principle of the system approach, which requires significant investments in supporting infrastructure. It creates favorable conditions for co-operation between the public and the private sector to provide a full range of logistics services, including warehousing, freight forwarding, and others.

The principle of total cost, providing for consideration of the totality of the costs of management of material, information, finance, service, personnel flow across the supply chain, from the inception of the project to establish a logistics center to its operation and obtain services the final consumers.

The principle of global optimization is ensured by achieving a global optimum, using as a criterion for logistics costs in the production of complex logistics and transport, and transport and marketing systems.

The principle of integration, and logistical coordination in the activities of logistics centers based on the achievement of a coherent integral participation of all services of the logistics center in the management of the implementation of the main objective function. The role of the coordinator in the logistics center must perform the management company 4, 5PL-provider.

The principle of the development of the necessary complex subsystems, ensuring the formation and effective functioning of the logistics center: technical, technological, informational, organizational, economic, human, environmental and others.

The principle of total quality management, based on ensuring the reliability and quality of operation of each structural element of the logistics center to ensure the overall quality of the goods and services supplied to final consumers.

The principle of humanization of all the features and technological solutions in the logistics centers means matching resource-saving technologies, environmental requirements on environmental protection, social, national, ethical standards of staff.

The principle of sustainability and adaptability, according to which the logistics center is to sustainably operate at acceptable levels of deviation parameters and environmental factors (changes in the conditions of supply and procurement of material resources, transportation routes and variations in tariffs, etc.).

Using the theory of compromise between the partners, due to the complexity of the design, the impossibility of rapid construction of logistics centers and profit in the initial stages of their operation, which leads to the fact that the partners will not be able for a certain period of time to be profitable.

The development of logistics services in integrated logistics services in the delivery of goods will ensure timely delivery of products and their safety, reasonable fees for additional services rendered. To do this, create logistic centers for use in logistics schemes involved the delivery of benefits and reduction of transport at the expense of transport and logistics costs.

The principle of modeling and information and computer support, intended use in the analysis and optimization of logistics centers of mathematical objects, graphics, simulation and other models. This is due to the fact that the establishment of logistics centers requires the prior simulations based on various models in order to avoid errors (failures).

Thus, the logistics center should operate on the principles of integrated logistics operator in the different modes of transport, allowing rational to organize the transportation process in the interest of the customer and the carrier. For the reliability and quality of logistics services, logistics centers must be created with the use of public-private partnerships as the organizational framework introducing new forms of interaction. Unfortunately, the principles of the system approach and the theory of compromise observed not in full, which affects disproportionately developing links in the transport and logistics infrastructure.

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Basic specific principles for the implementation projects public-private partnerships are presented in Table 1.

Table 1 – Specific principles for the implementation projects public-private partnerships

Principles	Characteristic
Equality interests of the parties and freedom to choose action	equality of all partners in accessing services; the right to enter into PPP contracts; Freedom to choose partners, forms and methods of achieving the objectives
Responsibility for the execution of the contract	services in full compliance with the terms of the contract and the responsibility for their implementation
Competitiveness	selection of the private sector to the competitive process, there is at the stage of signing a contract with the public sector, which allows the investor to choose effective and reduce the overall cost of the project
Non-Iinterference	after the signing of the PPP contract, the public sector does not interfere in the economic and administrative activities of the private sector
Transparency and feedback	open access to full information on PPP project; providing consumers with information feedback channels
Stimulation and guarantees	attracting private investors to participate in PPP projects with the help of political and economic preferences
Onerousness	reimbursement of private sector investments, unearned income in the event of termination of contact PPP, except for breach of contract parties
Equal attitude towards investors	equal treatment of foreign and domestic investors
Realized projects PPP project company	the project company generates capital from private investors and attracting debt financing
Continuity of rendering of services	services to consumers should provide continuous, as defined public-law nature of the relationship of PPP

Source: personal elaboration based on the study of the scientific literature.

Thus, the construction, operation and further operation of logistics centers based on the application of the general logistics and specific principles of public-private partnership, will implement the overall strategic as well as tactical and operational goals of logistics centers in the rational use of material, information, financial and human resources and the harmonization local criteria for the operation of economic agents with the purpose of functioning of the global logistics center.

The interaction of the state and the private sector is an important indicator of the state of society as a whole. The relationship between the impact on the nature of power, style, and technology management. There are four basic models of interaction [5]:

- ideal (theoretical) model that recreates the interaction of the state and the private sector in a perfect market environment;

- national model reflects the general features of the interaction of public and private sector, formed as a result of the evolution of the real practice of state construction, business development and cooperation;

- standard model describes the interaction of public and private sector, which has developed on the basis of experience, established norms and rules;

- real institutional model that shows real cooperation of public and private sector, peculiar to a specific territory.

As part of a particular model between the subjects of mutually beneficial exchange of resources occurs. Both the public and private sectors, have the resources, access to which can be useful and beneficial to others. The government has economic, political, administrative and information resources, and the private sector – financial, expertise and innovation. Sharing these resources is the basis of their economic relations, which is shown in Figure 1.

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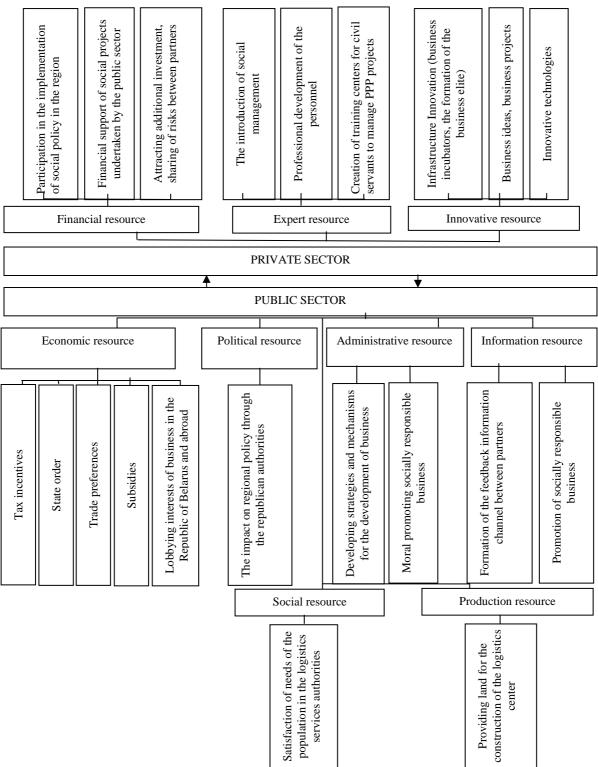


Fig. 1. Structural-resource model of interaction of PPP in the construction of a logistics center

Source: personal elaboration based on the study of the scientific literature.

Thus, the formation of the project management of public-private partnership to build logistics centers should be guided by the following basic principles [1]:

- managing the logistics center must wear a three-level character: national, regional and local. This will require a clear delineation of functions and powers between the authorities of different levels, agreed to take joint decisions in the sphere of mutual interests;

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- accounting the specificity of the market economy, providing, in particular adherence to mutually beneficial terms of cooperation, the creation of a unified system of economic and legal relations between the participants of an integrated logistics system of product distribution through harmonization of their interests through the achievement of the economic trade-offs and the redistribution of aggregate synergies between the services of the logistics center;

- ensuring the competitiveness of logistics centers based on the implementation in practice of the organizations marketing methods and logistics management, maximum satisfaction of quantitative and qualitative requirements of customers through the development of logistics services;

- application of the mechanism direct state regulation of the market of logistics services on the basis of the licensing business in these areas to improve the quality of logistics services through the application of principles of product distribution logistics;

- provision of equity financing of transport and logistics infrastructure with the involvement of the budget and extra-budgetary sources, including the private sector, foreign capital;

- providing the necessary organizational, economic and technical conditions of production and to create an integrated information management system for service logistics center;

- organization of training and retraining in the field of freight forwarding, shipping and warehousing, distribution, service and other logistics activities with learning advanced technologies and logistical approach to the management of commodity-material and attendant service, information and financial flows;

– creation of a system of government support and regulation ensuring conditions most favored partners through the introduction of state regulation, including concessional lending investments into transport and logistics infrastructure, tax breaks, allocation of land for the construction of logistics centers, as well as other objects of transport and logistics infrastructure, legal regulation aimed at ensuring favorable conditions for equal partners;

- ensuring the integration of the regional logistics system with the republican, international product distribution logistics system based on the formation of inter-regional and international integrated transport and logistics systems.

#### REFERENCES

1. Прокофьева, Т.А. Логистика транспортно-распределительных систем: Региональный аспект / Т.А. Прокофьева, Лопаткин О.М. – М. : РКонсульт, 2003. – 400 с.

2. Еловой И.А. Формирование транспортно-логистической системы Республики Беларусь : учеб.-метод. пособие / И.А. Еловой, А.А. Евсюк, В.В. Ясинский ; М-во образования Респ. Беларусь, Белорус. гос ун-т трансп. – Гомель : БЕЛГУТ, 2007. – 155с.

3. Еловой, И.А. Логистика : учеб.-метод. пособие / И.А. Еловой ; М-во образования Респ. Беларусь, Белорус. гос. ун-т трансп. – Гомель : БелГУТ, 2009. – 163 с.

4. Варнавский, В.Г. Государственно-частное парнерство. Теория и практика [Электронный ресурс] : учеб. пособие / В.Г. Варнавский, А.В. Клименко, В.А. Королев. – Режим доступа: http://www.universalinternetlibrary.ru/book/12135/ogl.shtml. – Дата доступа: 10.03.2015.

5. Ускова, Т.В. Частно-государственное партнерство как механизм модернизации экономики территорий: теоретико-методологические основы / Т.В. Ускова // Проблемы развития территорий. – 2013. – Вып. 3 (65). – С. 7–16.

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