

Management development of region's transport infrastructure

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Abstract. in the article the transport infrastructure of the region as a factor of its social and economic development is considered and the need of management of the called infrastructure locates. Classification of the factors defining the development of the transport infrastructure is presented, effects of their influence and economic consequences for the region development are specified. The model of management development of the region's transport infrastructure is offered.

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Introduction

Effectiveness of regional economic development depends on many factors, one of which is the existence of the developed infrastructure since the infrastructure largely determines the growth of the productive forces in a particular region [1].

Infrastructure is an integral part of the economic space in the region [2] and represents a set of interrelated or interacting elements in total creating a complex of conditions of effective functioning of goods production branches, society activity or the solution of specific objectives within the territory [3, 4].

As any system, the regional infrastructure consists of the interconnected and interacting elements [5]. The detailed analysis of existing classifications of the regional infrastructure and their components [6, 7, 8] allowed to establish that each of them represents a set of elements related to a particular type of the infrastructure in the region, depending on the purpose and functions and such division has a rather conditional character. So, depending on their functions, some items cannot be directly attributed to a particular type, as they have the same value for each type of the infrastructure development in the region and create general conditions indispensable for the efficient development of economic and social spheres i.e. have a region-forming value. One of such infrastructure elements is the transport taking a special place in the infrastructure system of the region and representing the "circulatory system" of the development of its economy. This substantiates the allocation of transport into a separate regional infrastructure - transport infrastructure, a key feature of which is the implementation of regional and inter-regional transport and economic relations. As Moskovets A.V. notes, "none of the phases of the process of social

reproduction in the regions can be realized without the participation of the transport infrastructure" [9].

It should be noted that the settled, unambiguous and complete definition of the transport infrastructure of the region as the economic category doesn't exist. In our opinion, to define the concept "transport infrastructure" it is necessary to use a combination of functional and cost approaches. It is caused by the following provisions. First, the infrastructure, primarily, is urged to provide realization of certain functions. As it has already been noted, the aggregate function key transport infrastructure, determined its economic substance and region-character, is the implementation of regional and inter-regional transport and economic relations. Second, the axiomatics of the economic science considers the cost factor as a system and universal indicator of the market economy [10] and the creation and operation of the transport infrastructure is impossible without investment, thus transport is one of capital productive and inertial sectors of economy, therefore, the cost factor plays a crucial role in the development of the transport infrastructure. Thirdly, the transport infrastructure is important in the solution of social and economic problems of the region, participating in creation of production made in the region, carrying out territorial availability of objects of the social sphere, providing transport mobility of the population and by that, making a contribution to production of the gross regional product by means of implementation assigned to this type of infrastructure of functions. At the same time, the amount of capital invested in the transport infrastructure depends on the social-economic development of the region. Based on the above assumptions, in our opinion, it is necessary to understand a special type of the infrastructure capital having a specific region-forming character as the transport infrastructure of the region, being expressed

in the ability of the transport infrastructure to provide the territorial integrity of the region and to create a synergetic effect of the social and economic development by means of implementation of the functions assigned to it on implementation of transport economic relations. Development of the regional transport infrastructure and its functional characteristics determined by the specific region, the degree of interaction and relationships with other infrastructure elements, and depends on many different factors that it is expedient to classify in accordance with the scope of external arising on the level of the macroeconomic system, and internal arising on level of the region (Fig. 1).

Internal factors are subjective and make a direct impact on the development of the transport infrastructure therefore these factors can be defined as infrastructure formative. External factors are objective and have an indirect influence on the development of the transport infrastructure, not only, but also other types of infrastructure in the region, so they can be defined as the economy created conditions for the formation of the regional infrastructure.

Thus, the development of the transport infrastructure in the region is influenced by infrastructure formative factors created in the economy and the conditions of its formation and, in turn, is one of the determinants of the level of its socio-economic development. At the same time, the efficiency of the regional transport infrastructure depends not only on infrastructure formative factors and conditions of formation, but also on the management of its development.

Management development of the transport infrastructure of the region represents purposeful activities for development and acceptance of reasonable administrative influences to achieve the objectives of the productivity increase of its functioning, interrelations considering specifics both between internal elements of the regional space, and with their external environment. Therefore the management of development of the transport infrastructure on the level of the region has to promote the increasing satisfaction of increasing requirements of economic, social and other spheres of the region.

Based on the role of the transport infrastructure, its development should be seen in the context of social-economic development of the region as a whole, due to their strong relationship and interdependence defined the region-dual nature of the transport infrastructure. At the same time, in our opinion, management of the transport infrastructure development should be limited to the formation of an integrated transport infrastructure in the region, but

not the impact of the individual blocks, and complex, purposeful decision tasks of managing the development of regional transport infrastructure as a key factor in enhancing social-economic development of the region [11].

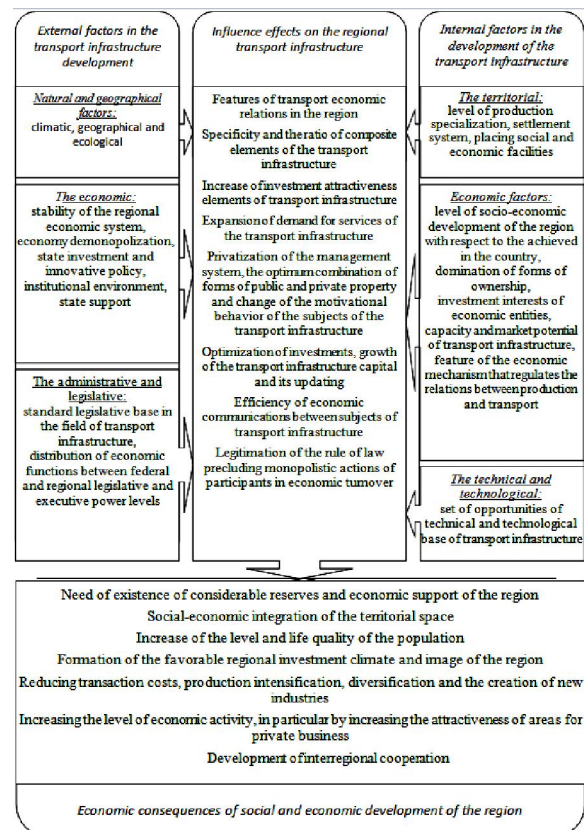


Figure 1. Factors of development of the transport infrastructure in the region

On this basis, the authors define the management of development of the transport infrastructure in the region as a continuous cyclical process aimed at improving the effectiveness of its functioning and contributing to the formation and strengthening of the position of the region by improving the social-economic development.

The conducted research allowed to reveal characteristics of modern management of the regional transport infrastructure in Russia: the lack of a unified concept of the development of the regional infrastructure system, poor coordination between regional agencies at various stages of infrastructure changes, high level of administrative barriers, low motivation of initiators and participants of the control system of the regional infrastructure, low development of the regional markets. Existence of the revealed features is caused by that development of the transport infrastructure of the region and

increase of productivity of its functioning is a very difficult process. In this regard the solution of this problem, in our opinion, is possible only on the basis of formation of a complete control system and assumes the transition from separate, often separate measures to their organized set, i.e. to a control system of development of the transport infrastructure of the region. Thus it is necessary to consider that the control system of development of the transport infrastructure is one of functional subsystems of management of social and economic development of the region and therefore its construction has to rely on the general principles of formation of a control system of the region as a whole. Therefore, at the regional level such a system of management of development of the transport infrastructure should be formed, which is capable of providing not only the increase of the effectiveness of its operation, but also the level of socio-economic development of the region. It should be noted that the system of management of development of the transport infrastructure, as well as a system of social-economic development of the region as a whole, can be defined as a system of increasing complexity. This is due to continuous internal development occurring within a specific region, the constant change in the mechanism of management of development of the transport infrastructure, internal and external conditions of its functioning [12], which entails a change as relations between elements of the transport system and the entire regional system as a whole. This circumstance requires systematic approaches to the management of the regional transport infrastructure, which will determine which of its elements, are basic, what the relationships and dependencies between them are the most important, as well as to identify common trends, challenges and contradictions of the system as a whole.

The proposed control system development of the transport infrastructure management entity is the level of development of the transport infrastructure in the region, which is a key factor in ensuring the region being more profitable in comparison with other regions, the situation and the achievement of strategic and tactical goals of social-economic development at the optimal flow rate of all kinds regional resources. Management model development of the transport infrastructure proposed by the authors is presented in Fig. 2.

The proposed model is based on the isolation of a problem-oriented control loop development of the transport infrastructure, which is a part of the overall management system of social-economic development of the region and provides a high level of adaptability to dynamic transport

infrastructure development conditions of the regional environment.

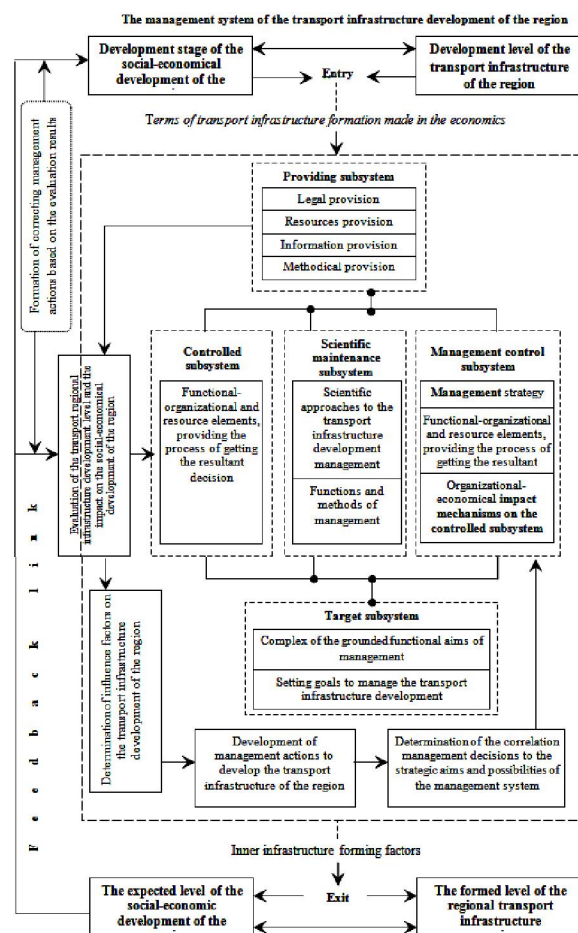


Figure 2. The model of management of the transport infrastructure development

The proposed approach will create a system of effective management of the development of the transport infrastructure in the region, consisting of functional subsystems of control management (the managing, manageable, providing and scientific), intrasystem and external relations. This system assumes continuous, consecutive process of goal-setting; formations of tasks; estimation of development of the transport infrastructure and its influence on level of social and economic development of the region; structurization of problems and adoption of reasonable administrative decisions focused on achievement of strategic and tactical targets of social and economic development of the region. According to the authors, the offered model can be useful to form systems of effective management by development of the transport infrastructure both within a definite region, and at interregional and state levels.

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