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## TRANSPORT INFRASTRUCTURE AS THE MAIN LINK IN ECONOMIC RELATIONS

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The article considers the development of transport in the infrastructure system of Ukraine. Several main problems that hinder the development of transport infrastructure have been identified. The role of transport in the sphere of economic relations is determined. Transport, as an infrastructure sector, should provide timely and efficient freight and passenger transportation, promote the integration of Ukraine's economy into European and world economic systems. However, the current unsatisfactory condition of the rolling stock of various modes of transport in Ukraine causes a low level of use of Ukraine's potential as a transit country and, accordingly, reduces the competitiveness of the country's economy. Our state has significant potential in the development of air transport and increasing the volume of cargo and passenger traffic by air fleet of foreign and domestic production. But to realize this potential, it is important to adapt legislation to European standards. The importance of transport is that it provides links between industries, enterprises, regions of the country, foreign countries. It should be noted that the problems associated with the need to modernize the transport infrastructure of Ukraine do not lose their relevance over a long period of time. Transport is a necessary condition for the emergence and development of intensive exchange of goods between the individual territories involved in this division. The expansion of the territorial division of labor, its improvement and the emergence of new, more efficient forms largely depends on the level of development of transport. The role of the transport industry in the modern economy is very large. The efficiency of other industries and, consequently, the economic well-being of the country depend on its efficiency. The level of development of transport infrastructure, which provides the movement of freight and passenger flows, directly affects not only the socio-economic growth of territorial social systems. The developed transport system forms the «framework» of the regions and is the basis for the territorial division of labor. Transport is a necessary condition for the territorial division of labor, specialization of regions, and their integrated development.

**Keywords:** transport, infrastructure, relations, sector, branch, region.

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### *Introduction*

In recent years, the topic of infrastructure development, financing its creation, modernization and expansion, as well as further operation has become especially popular around the world. As most of the transport infrastructure in Ukraine is extremely worn out, the time factor is becoming stronger. That is why the creation of new, reconstruction and modernization of existing infrastructure is becoming especially important, but their own experience of

investing in infrastructure is largely lost. Financial problems of the industry are manifested in the inconsistency of funding with the regulatory requirements of the processes of reproduction of fixed assets due to the reduced role of the depreciation mechanism and the low level of investment activity. The lack of own experience in organizing the development of this type of infrastructure can be compensated by the successful adaptation of the best models developed by the most experienced countries in this field [1].

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Transport is a necessary condition for the emergence and development of intensive exchange of goods between the individual territories involved in this division. The expansion of the territorial division of labor, its improvement and the emergence of new, more efficient forms largely depends on the level of development of transport [2].

#### ***The main material***

Transport networks and their development are a priority for all regions of the country. Transport highways significantly increase the investment attractiveness of the region, gives the prospect of intensification of production activities, infrastructure development, which improves the living standards of the population, strengthens the interregional exchange of labor.

The financial resources of the region allow us to consider new options for modernization of transport policy, which are increasing every year. Reforming the region's transport sector should primarily focus on improving access for citizens and businesses and modernizing infrastructure and transport services.

Research of factors, tools of influence on effective functioning of a transport infrastructure of region and the country are works of such scientists: Varnavsky V., Pozamantir E., Bakaev O. O, Bichta K., Bondar B. E, Vass P. etc. [3, 4].

Transport is the most important link in the field of economic relations, one of the leading branches of material production. He participates in the creation of products and delivery to consumers, communicates between production and consumption, between different sectors of the economy, between countries and regions [1].

#### ***The aim of the article***

The aim of the article is to study the role of transport in the infrastructure system of the region.

#### ***Presentation the main material***

Interpretations of the concept of «transport» in the modern economic literature of domestic and foreign authors are quite many, the most capacious is the following: «transport» is a branch of material production that carries out a set of transport and technological processes in the movement of passengers and goods. Transport is one of the branches of economic infrastructure, which, in addition to all types of main transport, includes energy, communications, utilities, and engineering structures.

The concept of infrastructure is a general concept to denote many activities. The term «infrastructure» (from the Latin *infra* - below, under; *structura* - structure, location) is used to denote a set of components of the general equipment of economic life, which are subordinate in nature and ensure the normal functioning of the economic

system as a whole [5, 6].

Today, the transport sector of Ukraine's economy as a whole meets only the basic needs of the economy and the population in transportation. The level of safety, quality and efficiency of passenger and cargo transportation, energy efficiency, the level of man-made load on the environment do not meet modern requirements [7].

Due to the global financial crisis and the decline in demand for basic export goods, freight traffic fell in the first half of 2009 by 31.8% compared to the previous period [7].

The level of customer service remains low, the available transit potential and the favorable geographical location of the country are not used enough. There is a lag in the development of the transport network, especially the lag of public roads from the pace of motorization of the country (over the past twenty years, their length has not increased). The transport and operational condition of the roads is unsatisfactory. The average speed on the roads of Ukraine is 2-3 times lower than in Western European countries [7].

Lack of investment has led to the aging of fixed assets and rolling stock, which leads to non-compliance of the technical and technological level of domestic transport with European requirements. Seaports of Ukraine in terms of quality, technical characteristics, such as depth, means of reloading and storage, technical condition of berths and equipment, level of automation and computerization, remained at the level of the late 80s - early 90s of the last century.

Transport creates a significant man-made load on the environment, is the source of a third of emissions of harmful substances in Ukraine. This is especially true of road transport in cities, where its share reaches 90% [7].

It is known that Ukraine is a convenient transport hub between Europe and Asia. A country with one of the longest railway systems in Eurasia, whose transport capacity is surpassed only by China, India and Russia. Our country is located at the crossroads of the main trans-European corridors connecting Eastern and Western Europe, the Baltic States with the Black Sea region [8].

According to the sub-index «Infrastructure» of the Global Competitiveness Index 2017-2018 of the World Economic Forum, Ukraine ranked 78th out of 137 countries with a score of 3.9, showing a decrease of 3 points from the previous year and 10 points compared to 2014, being at the level of Vietnam (3.9 points), Armenia (3.9 points), Argentina (3.9 points) and Tunisia (3.8 points) [8].

Undoubtedly, the worst infrastructural indicator of Ukraine is the quality of roads - 130th place out of 137 possible - the level of Moldova, Nigeria and

Paraguay. The quality of port and aviation infrastructure remains unsatisfactory (93rd and 92nd place respectively) [8, 9].

The current state of transport infrastructure in Ukraine

According to the Ministry of Infrastructure:

– 95% of roads are broken, 90% of roads have not been repaired in the last 30 years;

– road deaths - the highest in Europe;

– average age of locomotives - over 40 years;

– the level of wear of freight and passenger cars - more than 85%;

– only 3-4% of the population of Ukraine use air transport;

– 3% of river potential is used;

– the logistics cost of transporting goods is 40% higher than in EU countries;

– the average age of small class buses (minibuses) is 8-10 years, large buses - 15-18 years and more;

– 20 airports of Ukraine have uncertain prospects for operation;

– the share of river transport in the transport system is less than 0.9% due to the shallowing of rivers and the critically outdated infrastructure of the country [8].

Today in Ukraine, transport, as the infrastructure of the economy, is a specific sector of the Ukrainian economy, which participates in a single production and technological process of production of various sectors of the economy, which affects the level of transport costs in the country and overall production efficiency. And since the transport sector is always associated with the general development of productive forces, it is considered as one of the most important components of the infrastructure of the economy as a whole [10].

Transport in our country is represented by the following types: rail, road, sea, river, air transport and pipeline. All its types, performing the main function - providing the economic complex of the country in freight and passenger traffic, interact with each other and most areas of production. This gives grounds to consider transport as a system, and the whole mechanism of its formation and development - in inseparable unity with the entire economy [10].

Thus, the transport system is a branch of the economy, which includes: the transport network of all modes of transport, mobile vehicles serving devices, equipment and facilities, as well as the management system of all modes of transport at all levels. In this sense, the concepts of «transport system» and «transport» are identical. Very often in the economic-geographical and especially economic literature under the transport system is understood only a network of roads. Of course, the roads are one of the most important components of the

transport system, but it is impossible to reduce the transport system only to the roads.

Recovery of Ukraine's economy after a long economic crisis, intensification of foreign trade due to the gradual opening of European commodity markets, as well as the global trend to increase population mobility require stable and efficient transport [11].

The main reason for this state of the transport system of Ukraine was a violation of the provisions of economic laws governing the processes of simple and extended reproduction of fixed assets. As a result, the stock of technical resources of the industry (infrastructure, rolling stock) created in Soviet times is practically exhausted and there is a real threat of losing its stability. Transport, which is one of the most capital-intensive sectors of the economy, requires large long-term investments for its development, and to ensure its sustainable further work it is necessary to attract significant funds to the industry. However, the state's capabilities are limited here, and the own resources of enterprises are exhausted. The dynamics of development of fixed capital investment is unstable [11].

The second systemic cause of the crisis in the transport sector is that market mechanisms have not yet become its main regulator. Mechanisms of competition and self-organization of transport enterprises are underdeveloped, and state regulation of the market of transport services is insufficiently effective. The monopoly in potentially competitive segments of rail transport remains, and the existing inefficient system of management of state transport enterprises leads to unsatisfactory results of their work, unprofitability, inability to upgrade their own rolling stock and reproduction of outdated transport infrastructure on parity with the state and private investors.

Third, global trends in commodity markets, increasing population mobility, globalization and European integration conditions make new demands on the functioning of transport systems and markets, but public policy on the development of the transport sector does not meet these challenges [12].

At the state level, there is currently no strategic vision of the competitive advantages of Ukraine's transport and road complex compared to other countries, prospects for the development of transit traffic flows, taking into account the world market situation and global production specialization, which reduces Ukraine's integration into the world transport system. transnational freight and passenger flows. Given the above, the transport system is becoming a risk factor for the state, which is not subject to accurate forecasts. If effective public policy measures are delayed, the transport sector is likely to fail to meet the country's economic growth needs in the

near future, as well as the population's travel needs due to future growth in effective demand, business development and tourism. There are risks of complete loss of competitiveness of the national transport system of Ukraine, which will manifest itself in the inability of the country to participate in servicing the main transnational and transcontinental cargo flows between West and East and the final loss of transit potential [11].

Railway transport of Ukraine, being the main carrier of Ukrainian industry and the basis of its transport system, carries more than 45% of passengers and more than 80% of cargo. At the same time, the depreciation of fixed assets and rolling stock is catastrophic [13, 14].

An important aspect in the development of the transport system of Ukraine is the high transit ratio of Ukraine, one of the highest in the world [15, P. 52]. The geostrategic location between the countries of Europe, Asia and the Middle East allows it to be a profitable transit bridge for the transportation of goods.

Ukraine's desire to actively participate in international economic processes, diversify exports and expand trade flows makes transport one of the key factors of economic growth. At the same time, Ukraine today has a high potential for both regional and transcontinental transit [16].

The main tasks of the development of the transport system of the region are: creation of legal bases for further development of transport transportation; compliance with the principles of international transport and customs policy in the field of international cargo transportation; maintenance of fixed assets in proper technical condition; introduction of new technologies for the organization of cargo and passenger transportation; conducting a balanced tariff and price policy that would help increase the competitiveness of transport services; development of international cooperation in the field of transportation [11].

The specificity of the transport system of the region as an industry is that it does not produce products, but participates in its creation, provides production of raw materials, equipment and transports finished products to the consumer. The cost of production includes transportation costs. Transport costs, in some industries, are especially significant, for example, in the oil and forest industries, where they can reach 50% of the cost of production [11].

According to experts from the Ministry of Infrastructure, due to its favorable geographical location, Ukraine can become a convenient link in servicing cargo flows between Europe and Asia. Ukraine has the shortest route between the countries of Asia and Northern and Central Europe, which determines the shortest time and cost of delivery [16].

### *Conclusions*

Transport is the most important link in the field of economic relations, one of the leading branches of material production. It participates in the creation of products and their delivery to consumers, provides a link between production and consumption, between different sectors of the economy, between countries and regions.

Today, the transport sector of Ukraine's economy meets only the basic needs of the economy and the population in transportation. Do not meet modern requirements: indicators of quality and efficiency of passenger and cargo transportation, level of safety, level of technogenic load on the environment.

Transport is a necessary condition for the emergence and development of intensive exchange of goods between the individual territories involved in this division. The expansion of the territorial division of labor, its improvement and the emergence of new, more efficient forms largely depends on the level of development of transport.

Lack of investment has led to the aging of fixed assets and rolling stock, which leads to non-compliance of the technical and technological level of domestic transport with European requirements. Transport creates a significant man-made load on the environment, is the source of a third of emissions of harmful substances in Ukraine. This is especially true of road transport in cities, where its share reaches 90%.

Ukraine is located at the crossroads of the main trans-European corridors connecting Eastern and Western Europe, the Baltic States with the Black Sea region.

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## ТРАНСПОРТНА ІНФРАСТРУКТУРА ЯК ОСНОВНА ЛАНКА В ЕКОНОМІЧНИХ ВІДНОСИНАХ

Василюк О.В.

У статті розглянуто розвиток транспорту у інфраструктурній системі України. Визначено декілька основних проблем, які перешикоджають розвитку транспортної інфраструктури. Визначено значення транспорту у сфері економічних відносин. Транспорт, як інфраструктурна галузь, має забезпечувати своєчасні та ефективні вантажні й пасажирські перевезення, сприяти інтеграції економіки України в європейську та світову економічні системи. Однак існуючий незадовільний стан рухомого складу різних видів транспорту в Україні зумовлює низький рівень використання потенціалу України як транзитної держави та, відповідно, знижує конкурентоспроможність економіки країни. Наша держава має значний потенціал і у розвитку авіаційного транспорту та збільшенні обсягів вантажних і пасажирських перевезень повітряним флотом іноземного і вітчизняного виробництва. Але для реалізації цього потенціалу важливими є адаптація законодавства до європейських стандартів. Важливість транспорту полягає в тому, що він забезпечує зв'язки між галузями, підприємствами, регіонами країни, зарубіжними державами. Слід зазначити, що проблеми, пов'язані з необхідністю модернізації транспортної інфраструктури України не втрачають своєї актуальності протягом тривалого періоду часу. Транспорт є необхідною умовою виникнення і розвитку інтенсивного обміну товарами між окремими територіями, що беруть участь у цьому поділі. Розширення територіального поділу праці, його удосконалення і виникнення нових, більш ефективних форм значною мірою залежить від рівня розвитку транспорту. Значення транспортної галузі виробництва в сучасній економіці дуже велика. Від її ефективності залежить ефективність роботи інших галузей промисловості, а отже, і економічного добробуту країни. Від рівня розвитку транспортної інфраструктури, яка забезпечує рух вантажопотоків і пасажиропотоків, безпосередньо залежить не тільки соціально-економічне зростання територіальних суспільних систем. Розвинена транспортна система формує «каркас» регіонів і є базою для територіального розподілу праці. Транспорт є необхідною умовою територіального поділу праці, спеціалізації регіонів, їх комплексного розвитку.

**Ключові слова:** транспорт, інфраструктура, відносини, сектор, галузь, регіон.

## ТРАНСПОРТНАЯ ИНФРАСТРУКТУРА КАК ОСНОВНОЕ ЗВЕНО В ЭКОНОМИЧЕСКИХ ОТНОШЕНИЯХ

Васильюк О. В.

В статье рассмотрено развитие транспорта в инфраструктурной системе Украины. Определены несколько основных проблем, препятствующих развитию транспортной инфраструктуры. Определена роль транспорта в сфере экономических отношений. Транспорт, как инфраструктурная отрасль, должно обеспечивать своевременные и эффективные грузовые и пассажирские перевозки, содействовать интеграции экономики Украины в европейскую и мировую экономические системы. Однако существующий неудовлетворительное состояние подвижного состава различных видов транспорта в Украине вызывает низкий уровень использования потенциала Украины как транзитного государства и, соответственно, снижает конкурентоспособность экономики страны. Наше государство имеет значительный потенциал и в развитии авиационного транспорта и увеличении объемов грузовых и пассажирских перевозок воздушным флотом иностранного и отечественного производства. Но для реализации этого потенциала важны адаптация законодательства к европейским стандартам. Важность транспорта заключается в том, что он обеспечивает связи между отраслями, предприятиями, регионами страны, зарубежными государствами. Следует отметить, что проблемы, связанные с необходимостью модернизации транспортной инфраструктуры Украины не теряют своей актуальности на протяжении длительного периода времени. Транспорт является необходимым условием возникновения и развития интенсивного обмена товарами между отдельными территориями, участвующих в этом разделе. Расширение территориального разделения труда, его совершенствования и возникновения новых, более эффективных форм во многом зависит от уровня развития транспорта. Роль транспортной отрасли производства в современной экономике очень велика. От ее эффективности зависит эффективность работы других отраслей промышленности, а следовательно, и экономического благосостояния страны. От уровня развития транспортной инфраструктуры, обеспечивающей движение грузопотоков и пассажиропотоков, напрямую зависит не только социально-экономический рост территориальных общественных систем.

**Ключевые слова:** транспорт, инфраструктура, отношения, сектор, отрасль, регион.

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