

# Legal regulation of the transport and logistics system

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**Abstract.** The paper considers the legal regulation of the transport and logistics system of Ukraine and the European Union countries in order to gain experience in this area with further adaptation to current legislation. The main priorities and problems that need to be solved by the transport and logistics system are identified. Areas of Ukraine's participation in transport and logistics integration are those we concentrate on.

**Keywords:** transport, transport system, transport and logistics system, transport sector.

## 1 Introduction

**Formulation of the problem.** The main advantages of our country in the international arena are an incredibly convenient geographical location at the intersection of major freight flows from Europe to Asia, the presence of non-freezing Black Sea ports, a strong and developed network of railways and highways, extensive pipeline system, gradual development of transport. However, according to official data, the transit potential of the state is used only by a quarter.

The transport system of Ukraine consists of more than 22 thousand km of railways, which are coordinated with the railways of 7 neighboring countries. There are 40 interstate railway crossings, about 170 thousand km of roads, 30 airports with 130 runways, 18 state sea trade ports with a total technological capacity of over 170 million tons, 4 fishing ports, 13 private port points and berths, more than 42 thousand km of oil and gas pipelines. The traffic statistics are as follows: about 2.2 million tons of cargo and more than 19 million passengers [1].

However, despite such excellent baseline indicators, the efficiency of the state transport system is very low.

In addition, the situation is exacerbated by the fact that transport legislation is quite confusing, contains many conflicts and is imperfect. There is also a lack of

comprehensive research on the development and implementation of effective transport mechanisms as a system.

**Analysis of recent research and publications.** The main feature of the article is to determine the optimal model of legal regulation of the transport system on the basis of individual studies of such issues as: the concept and content of the transport and logistics system [2, 4,7]; integration of Ukraine's transport system into the European transport space [9,10].

**The aim of the study** is to study the mechanism of legal regulation of the transport and logistics system of Ukraine and ways to modernize the regulatory framework in this area.

## **2 Forms of legal regulation of transport and logistics activities**

It is worth noting that the transport and logistics system plays a major social, economic and environmental role. This is due to its direct impact on the functioning of society and the environment and rising living standards. Creating legal mechanisms for the development of the transport and logistics system is one of the factors strengthening the economy and improving the welfare of the population. Transport is an integral part of the logistics chain. According to Art. 1 of the Law of Ukraine "On Transport" transport is one of the most important branches of social production and is designed to meet the population and social production in transport needs. State target programs are aimed at ensuring sustainable development and improvement of the transport system. The emphasis is on taking into account its priority, on the basis of the latest achievements of scientific and technological progress, and is provided by the state [2].

Transport is an integral part of production and trade. That is why the transport component is involved in solving many logistical problems. However, there is a fairly independent transport sphere of logistics, in which multifaceted coherence between the participants in the transport process can be considered outside the direct links with the associated production and warehousing areas of material flow. Transport as a branch of material production carries passengers, luggage and cargo, and in the structure of social production belongs to the sphere of material services. The term "transport" covers not only vehicles of different types and kinds, but also transport infrastructure, specially trained personnel and information system [3].

The transport sector is one of the main sectors of the economy, has an extensive railway, road network, seaports and river terminals, airports and a wide network of air connections, cargo customs terminals, which creates the necessary conditions to meet the needs of transport users in providing transport services and business development. in general [4]. The Law of Ukraine "On Transport" outlines the purpose and objectives of public administration in the field of transport. In particular, public administration in the field of transport should ensure: timely, complete and high-quality satisfaction of the population and social production needs in transportation and defense needs of Ukraine; protection of citizens' rights during their transport services; safe operation of transport; observance of the necessary rates and proportions of development of the national transport system; protection of economic interests of

Ukraine and legitimate interests of enterprises and organizations of transport and consumers of transport services; creation of equal conditions for the development of economic activity of transport enterprises; restriction of monopoly and development of competition; coordination of work of different types of transport; licensing of certain activities in the field of transport; protection of the environment from the harmful effects of transport [2].

Today, the volume of cargo transportation compared to the previous year shows a negative trend to a significant decrease (Fig. 1).

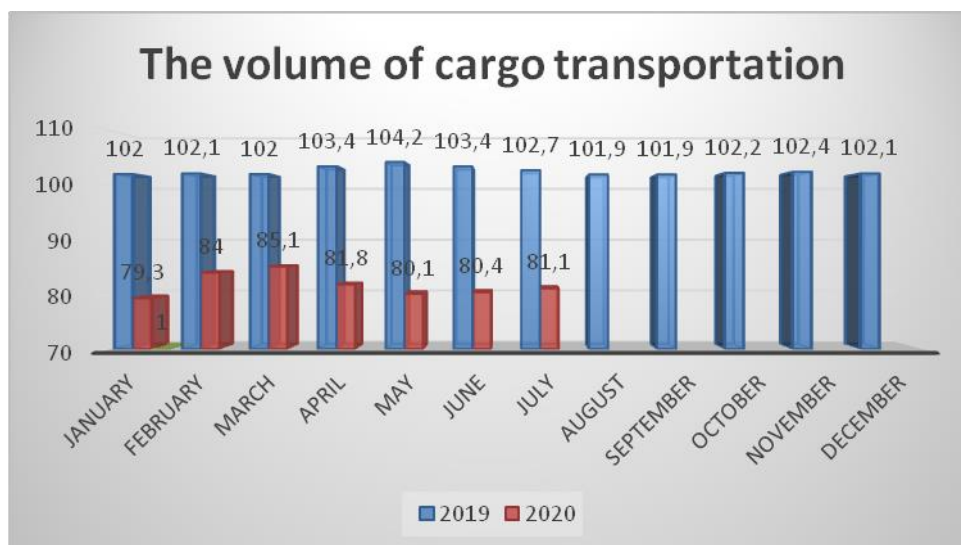


Fig.1

When studying the legal regulation of the transport and logistics system, we consider it appropriate to clarify the legal nature of this concept. The following definitions prevail in the scientific literature:

1) a set of functional and supporting subsystems, consisting of numerous interacting and interdependent elements that are parts of the state transport and distribution network, integrated with the flow of goods, general business objectives, consistent with the strategy of socio-economic development of the region and Ukraine in general[5];

2) multilevel and multifunctional system consisting of micro-, meso- and macro-levels, which not only meets the needs of transport and logistics services, but also increases the competitiveness of the whole region. Although this definition contains the concept of the system and the purpose of its operation, but not all elements of the transport and logistics system are considered comprehensively [6];

3) integrated set of subjects of transport and logistics activities and objects of transport and logistics infrastructure, which interact with each other in order to optimize the movement of freight flows "door to door" while minimizing and

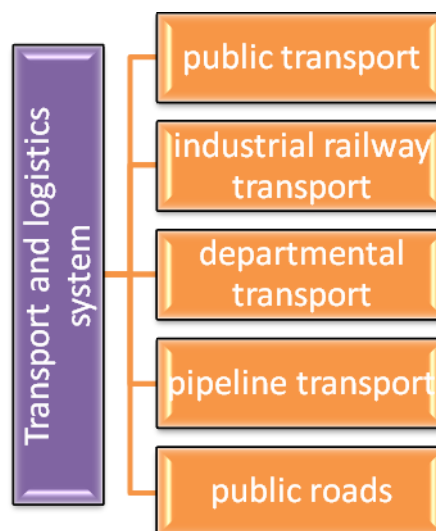
applying the most favorable conditions. This system, like any other system, consists of specific subsystems and elements, to which, depending on the specific functional phase of the logistics service of the cargo flow in the process of movement. It is advisable to include such subsystems as: transport and delivery, transport and warehousing, transport and logistics services and management, integrated information and transport and logistics solutions, as well as transport and sales system [7].

Obviously, the latter definition is the most complete for defining the concept of transport and logistics system. Therefore, we also support the positions of these scientists.

As for the actual tools of public administration of the transport sector, they include: rules of law that regulate the relationship between the transport industry and ensure the effective interaction of different modes of transport on the principles of logistics and joint competition; national and regional programs for the development of both the transport system as a whole and various modes of transport and their interaction; transport activity taxation system; development of national and regional transport balances related to plans for the development of productive forces, etc.

The priority of state regulation was and remains the improvement of regulatory and legal support for the development of both the transport system and the transport services market, including the creation of a regulatory framework governing the quality of transport services, mobilization training of transport organizations and their development of public-private partnership mechanisms; distribution of rights, responsibilities and risks between the state and the investor, as well as the definition of priority areas of these mechanisms in transport [7, p. 110].

In Ukraine, the transport and logistics system consists of public transport (road and air, sea, river, rail, as well as urban electric transport and subway); industrial railway transport; departmental transport; pipeline transport; public roads (Fig.1).



At the legislative level, this issue is regulated by such legal acts as: Customs Convention on the International Carriage of Goods under the Carnet TIR of 1975, version 29.05.2008 № 995\_012, Air Code, Code of Merchant Shipping of Ukraine, Charter of the Railways of Ukraine, the Order of the Cabinet of Ministers of Ukraine "On approval of the National Transport Strategy of Ukraine for the period up to 2030" from 30.05.2018 № 430-r, Laws of Ukraine "On Transport", "On Road Transport", "On Railway Transport", "On transit of goods", "On pipeline transport", "On transport and forwarding activities", "On foreign economic activity", "On the functioning of the unified transport system of Ukraine in a special period" from 05.01.2013 № 194 - XIV, etc.

It is necessary to focus on the main problems that stand in the way of the development of transport legislation of Ukraine: the existence of outdated legislation of the USSR, which contradicts the new market conditions; a large number of regulations, the provisions of which contradict each other; non-compliance of existing transport standards with international (and, above all, European) standards, which causes great difficulties in the implementation of international freight.

According to the Commercial Code of Ukraine and the Law of Ukraine "On Transport" in Ukraine there is a single transport system, which consists of rail, road, water, air and pipeline transport. The most important problem not only in Ukraine but also in the world is the coordination of all elements of the transport system. For its successful functioning, it is necessary, first of all, to bring to a "single denominator" the legislative array that regulates them. In our opinion, there are several ways to achieve this goal:

1. Consolidation of basic and common for each institute provisions in the Civil Code of Ukraine.
2. Adoption of the Transport Code of Ukraine [8, p.45].

The second way is the most effective and rational - the adoption of the Transport Code of Ukraine, which would serve as the Basic Law in the field of transport. All other legal acts would expand the provisions of this Code and be adopted to fulfill its general principles.

Also quite problematic is the inconsistency of transport and other areas of legislation, as well as the inconsistency of some provisions of transport legislation with international standards, in particular, in the field of international road and rail transport.

If we turn to the most common problems of transport system development, the following groups can be distinguished among them (Fig. 1).

#### **COMMON PROBLEMS OF TRANSPORT SYSTEM DEVELOPMENT**

<b>№</b>	<b>Group</b>	<b>Characteristics</b>
<b>1.</b>	<b>Economic</b>	Significant depreciation of fixed assets. Rising prices for fuel and material and technical resources, a significant percentage of the import component. Insufficient efficiency of financial and economic mechanisms that stimulate the allocation of investment

		<p>in the development of the transport system. High level of tax burden, lack of preferences.</p> <p>Low level of competitiveness of domestic enterprises in the domestic and international markets of transport services. Decline in production in cargo-forming sectors of the economy. Low level of innovative and high-tech components of the transport sector, tariffs subject to state regulation, imperfection of vehicle leasing mechanism on the terms of concessions and public-private partnerships.</p>
2.	<b>Organizational and managerial</b>	<p>Low level of intersectoral and interregional coordination in the development of the transport services market. Weak degree of use of geographical location benefits and opportunities of transport communications for delivery of transit cargo. Irrational use of resources and low efficiency of vehicles. Low level of management preparation for work in fierce competition. The functions of the state on management of transport subjects in the field of formation of the market of transport services are lost. Low level of informatization of transport process and information interaction of transport with other branches of economy. Imperfection of the legislation of Ukraine in the field of customs, tax, investment regulation.</p>
3.	<b>Technical and technological</b>	<p>Slow improvement of transport technologies and their lack of consistency with production, trade, warehousing technologies. Significant excess of international environmental standards of negative impact of transport on the environment. The technical level of transport infrastructure and production and technical base of transport does not meet modern market requirements.</p>

(Fig.1)

At the same time, in accordance with the provisions of the National Transport Strategy of Ukraine, the need to introduce new principles of formation and coordination of state policy in the transport sector is emphasized, creating conditions for quality control over the performance of relevant executive bodies. For the most complete and effective realization of the transport potential of Ukraine, first of all, as a transit country, it is necessary to create a customer-oriented system of transport services. It is also necessary to take measures to ensure the optimal organization of

the transport and road complex of the country and to obtain a synergy effect from the effective combination of potential and capabilities of all modes of transport based on the principles of partner competition during transportation [3].

Common problems that need to be addressed are:

1) the lack of an effective system of collection and boxes of administrative data in the transport sector, which can not objectively assess its condition and future development;

2) lack of a systematic approach to coordinating the development and long-term planning of all modes of transport, taking into account the socio-economic needs of the population, business, defense and geopolitical interests of Ukraine;

3) the fragmentary nature of administrative reform, which is manifested primarily in the process of delimitation of functions of state regulation and control, including the formation of relevant government agencies, operational activities and economic functions of transport enterprises;

4) low effective systems of control over the effectiveness of management decisions, insufficient transparency of reporting and behavior of public authorities and economic entities of the public sector of the economy in the transport sector;

5) outdated means of communication and feedback between transport authorities, transport companies and users of transport services, which reduces the efficiency of transport management and the quality of transport and logistics services;

6) imperfection of the system of criteria and indicators for assessing the quality of transport services;

7) too low level of development of intermodal, multimodal transportations, transport logistics;

8) the tendency to reduce the efficiency of capacity utilization of the national transport system (insufficient level of competition in the market of transport services and non-compliance with European requirements for access to the market of transport services);

9) imperfect tariff policy in the field of transport services;

10) relatively low speed of delivery of goods "door to door" and timeliness;

11) the presence of "narrow cities" of transport infrastructure;

12) low economic attractiveness of shipowners using the Ukrainian flag;

13) imperfect system of prevention of destruction of public roads, in particular control of the sizes and weight of vehicles and the corresponding level of responsibility for excess of the allowed parameters, admissible values of axial loadings of vehicles [3].

In connection with Ukraine's desire to join the EU in the near future, we consider it crucial to turn to foreign experience. The development of transport and logistics systems in the world is also successful due to the integration and creation of macro-logistics structures, such as the Benelux countries (economic union of Belgium, the Netherlands and Luxembourg), the EU, USA and Canada, Southeast Asia.

The regional factor reinforces the trend of globalization due to such aspects as the similarity of political systems and economic levels of countries; proximity of social way of life, traditions, historical roots; population migration; the only sources of

energy, raw materials; unified transport system and road infrastructure; unified telecommunication communication; absence of customs and trade barriers, etc.

At the present stage of its development, the transport and logistics system of Ukraine is developing in the direction of European integration (due to the desire of the state to become part of the European Union). Also a priority is joining the world transport and logistics system due to Ukraine's inclusion in world socio-economic processes. From the point of view of European integration, Ukraine must rapidly develop the transport and logistics system as a branch of infrastructure in order to promote the rapid economic and social development of the country and its participation in the international division of labor. Ukraine's accession to international transport organizations and structures, ratification of a number of international agreements, conventions and other documents on the organization of transport systems and transportation were the first steps that began the integration of the Ukrainian transport and road complex into the European transport system. An important direction in the development of the transport and logistics system of Ukraine is to reduce the environmental hazards posed by transport to the environment. This will not only improve the environmental situation in the regions, but will also contribute to the formation of a positive image of transport enterprises [9, p. 57].

There are the following areas of Ukraine's participation in European transport and logistics integration: 1) Pan-European Transport Corridors (PETC); 2) Transcontinental Transport Corridors (TTCC); 3) Pan-European Transport Zones (PETZ); 4) International Logistics Terminals (ILT).

The integration of our country into the European transport and logistics system is a strategic direction of Ukraine's development. It is carried out on the basis of the "Concept of development of the transport and road complex of Ukraine in the medium term and until 2020" and "The program of forming a network of logistics centers in the international transport corridors of Ukraine". According to these documents, the purpose of creating a network of PETC and TTCC, which provides for the development of their territorial schemes in Ukraine and proposals for the establishment of 45 logistics centers in the system of international transport corridors of Ukraine. In order to create a single transport and logistics infrastructure of the EU, which would meet the latest requirements at a new stage of development of logistics in a united Europe, new guidelines were identified, which are the development of a Common Europe - space for the East, including Ukraine as an integral part of Eurologistics through a network of international transport corridors and logistics centers will be connected to the transport and logistics systems of Asia and other continents [10, p. 137].

According to the Euro-vector of Ukraine's development, cooperation with the EU has common goals: to promote the restructuring and renewal of the Ukrainian transport sector; gradual harmonization of existing standards and policies with ones in the European Union (*acquis communautaire*); improving the movement of goods and passengers by eliminating administrative, technical and other obstacles; cooperation, including measures to improve border crossings. Particular priorities include cooperation to expand trans-European transport networks (TEN-T), transport axes, within which Ukraine will identify and allocate resources to finance transcontinental



transport corridors (including the Europe-Caucasus-Asia transport corridor (ECATC), sea lanes and the Black Sea Transport Zone (Black Sea PETrA)) in accordance with procedures for ensuring clear implementation and effective implementation of international transport agreements and conventions.

Cooperation also includes interoperability and support for intermodality of transport networks, cooperation in the use of space transport systems under the "Agreement on Cooperation in Civil Global Navigation Satellite Systems (GNSS) between the European Community, its Member States and Ukraine", signed in 2005. In addition, Ukraine will take an active part in the work of the World Transport Forum, the United Nations Economic Commission for Europe (UNECE), the International Civil Aviation Organization (ICAO), the International Air Transport Association (IATA), the International Maritime Organization (IMO), and Pan-European Aviation Organizations: European Civil Aviation Conference, European Aviation Safety Agency (EASA), Intergovernmental Organization for International Carriage by Rail (OTIF) [10, p. 137].

Today, Ukraine receives financial and technical assistance from the EU to support the implementation of the principles of national transport development under three programs: "Support to the Implementation of Ukraine's Transport Strategy" (65 million euros), "Support to the Implementation of Ukraine's National Environmental Policy Strategy" (35 million euros) and "Twinning and technical assistance to support the European Neighborhood Policy" (16 million euros) [13, p. 127].

The latter is one of the key means of supporting the mechanism of adaptation of Ukrainian legislation in the field of transport services to EU norms and standards through the spread of twinning (support for the development and improvement of training of civil servants in Ukraine). To some extent, the implementation of other EU technical assistance programs in Ukraine also contributes to the development of the transport sector, in particular: INOGATE (Interstate Oil and Gas Transport to Europe), the Interstate Oil and Gas Supply Program to Europe; IBPP (Institution Building Partnership Program), Tacis Program for Partnership in Institutional Development; CBC (Cross-Border Cooperation Program). In fact, EU support is aimed at reforming Ukraine's transport sector, in particular, rail, improving road, air and shipping safety, increasing traffic flows through Ukraine and bringing transport legislation to an international level [10, p.137].

For its part, Ukraine actively participates in the activities of European organizations that determine the development of international economic cooperation and mechanisms of cooperation between countries in the field of transport: the European Conference of Ministers of Transport (ECMT), which operates within the Organization for Economic Cooperation and Development (OECD), and as well as the Committees of the United Nations Economic Commission for Europe and the Committee on Transport and the Subcommittee on Inland Transport, Intermodal Transport and Logistics, and the Trade Committee of the Center for Trade Facilitation and Modernization (CEFACT), European Railway Agency (ERA), Eurasian Transport Conference (MCAT), etc.

Over the past few years, experts of these international organizations and Ukrainian specialists have developed a "road map" of the integration of Ukraine's transport and

logistics system into the European subregional space: 1) technical and technological modernization of border crossing infrastructure and reasonable reduction of control procedures, simplification of control mechanisms at checkpoints across the state border of Ukraine; 2) accelerated development of container service in accordance with ICD-transit technology; 3) introduction of a multifunctional complex system "Electronic Customs": customs information electronic document management of transportation infrastructure (including transit) and its integration into international customs databases; 4) improvement of the system of collection and dissemination of customs statistics, which will create a system of monitoring and forecasting of international transit of goods [10, p. 137].

The EU's transport and logistics strategy is called "Eurologistics", it is considered as an infrastructural basis and an important part of the European integration process. The course of creating a single transport system is enshrined in all major EU documents since the Treaty of Rome (1957) [11, p. 56].

Thus, the development of the transport and logistics system of Ukraine in modern conditions should be based on the following principles: promote the economic development of the country as a whole and its regions, which will increase the welfare of the population and the competitiveness of the country; rely on innovative methods of organization, management, marketing, which ensure the implementation of its main purpose - to meet consumers' needs on the basis of coordinated work of all stakeholders; ensure the ecological quality of life of the population; promote high social living standards, increase employment. Implementation of these principles will create conditions for effective competition of transport and logistics companies, the development of transport infrastructure of the country and its integration with transport and logistics systems of other countries [9, p. 59].

Today the situation with the export of transport services is unstable and unsatisfactory for the Ukrainian market of transport services. Thus, in particular, the structure of exports of services in the first half of 2020 indicates a decrease in the level of just transport services, exports of which in 2019 amounted to 58.3% according to the Ministry of Economic Development, Trade and Agriculture of Ukraine (Fig. 1). In particular, due to hostilities in eastern Ukraine, as well as the annexation of Crimea, the volume of traffic decreased both as a whole and by individual modes of transport. If we talk about 2020, the volume of traffic in general has decreased due to the introduction of a number of restrictions related to quarantine measures.

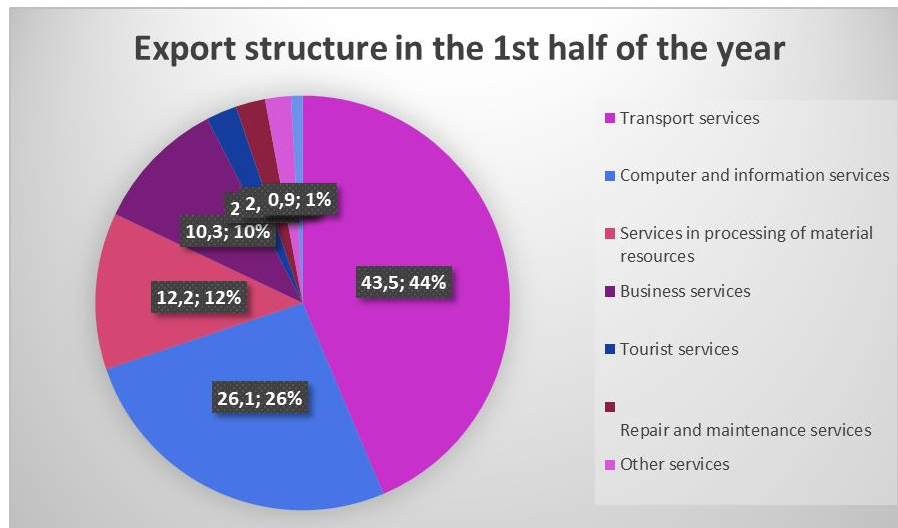


Fig.1

The current state of the transport and road management system needs to be improved, which should be carried out by public authorities at the regional level in the following areas: monitoring compliance with current legislation in the transport sector of the region, including safe use of transport, environmental protection; assistance in attracting domestic and foreign investments in the transport and road complex of the region, financing of transport services provided to socially vulnerable categories of the population, as well as ensuring the special needs of state organizations in transport services; improving the regulation of regional markets for transport services, avoiding the implementation of discriminatory measures against both carriers and recipients of this type of service, ensuring tariff regulation of the activities of transport organizations-monopolists [7, p. 110].

Today in Ukraine there is a single logistics system, the main task of which is to maintain the level of compliance with the requirements of social production, with national security requirements, create an expanded infrastructure, ensuring foreign economic relations of Ukraine.

Analysis of the activities and main trends in the freight market has shown that the need for a highly developed transport and logistics system is further enhanced by Ukraine's integration into the European and world economy and can become the basis for Ukraine's effective entry into the world community. To design a new or modernize the existing organizational and production structure of a particular international transport and logistics center, a tree of goals is formed, stable links and contacts between individual logistics structures are established, as well as with service companies and organizations, suppliers and various modes of transport. As a result of the departmentalization processes, the organizational structure of the center and the management system of its operation are developed, what implements the main production functions of logistics management [7, p. 112].

Creation of multimodal terminal complexes and logistics transport and distribution centers will allow effective use of advanced logistics technologies and ensure the integration of material, information, service and financial flows of transit traffic between Europe, Asia and the Middle East [7, p. 113].

Today there is a number of problems of state regulation that hinder the effective development of the transport sector of Ukraine. In particular, it is an imbalance in the development of a single transport system; the presence of territorial and structural disparities in the development of transport infrastructure; insufficient level of accessibility of transport services for the population, mobility of labor resources; insufficient quality of transport services; low level of exports of transport services, including the use of transit potential; insufficient level of transport safety [7, p. 114].

Further development of the transport and logistics system of Ukraine should follow the path of innovations that will allow adapting to modern market conditions. Based on the experience of foreign countries, we can choose the right path for our country to make appropriate changes to regulations, with mandatory adaptation to current legislation to ensure (improve existing) resources and the ability to take into account the interests of all parties.

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