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TRANSPORT AND TRANSPORT INFRASTRUCTURE OF UKRAINE IN THE PRE-WAR PERIOD (2010-2021)

Transport i infrastruktura transportowa na Ukrainie w okresie przedwojennym (2010-2021)

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Abstract: The article researches the development state of transport and transport infrastructure in Ukraine over last years. The research findings specify the topicality of the issue solution concerning the enhancement of transport and transport infrastructure in the conditions of structural, energy and financial crises, as well as considering a destructive influence of COVID-19 pandemic, occupation of Crimea, an anti-terrorist operation in East of Ukraine and a full-scale intervention of the Russian Federation started on February 24, 2022.

Such methods of improving transport and transport infrastructure development in Ukraine have been offered under the research findings: the increase of public administration level with regard to all aspects of transport infrastructure; the use of proactive management; activation of searches and implementation of investment projects; introduction of an institute of public-private partnership on transport; partial and temporary decrease of tax burden; the development of complex solutions for transport services consumers under the infrastructure areas; optimization of transport pricing, etc.

Key words: Transport, transport industry, infrastructure, public regulation, European integration, Ukraine.

1. Introduction

Transformation processes during 2010-2021 in Ukraine in the euro integration context aimed at reconstruction and gradual accumulation of economic potential. Taking into account a structural, energy and financial crises, as well as a geopolitical conflict, the country requires systemic reforms. Since the developed transport and transport infrastructure are ones of important indicators of stable and dynamic parameters of continuous and dynamic growth of economics, this area requires special attention and large-scale technological transformations. Due to the full-scale aggression of Russia against Ukraine, the restoration of the destroyed infrastructure in the liberated territories of the country is an extremely important assignment. Ukraine is located at the conjunction of main trans-European corridors connecting Eastern and Western Europe, the Baltic states with the Black Sea region, and it has a potential as a transport corridor between Europe and Asia. This convenient location has to ensure successful integration into the global economic environment as well as national security. However, it is losing this potential because of the aggression committed by the Russian Federation.

The main purpose of this article is to evaluate the state of transport and transport infrastructure development in Ukraine over the last years to develop propositions concerning their improvement, taking into account topical conditions of economic activity, based on the circumstances occurred and the real situation in the country.

2. Political prerequisites for reforming the transport industry in Ukraine

The level of transport service of Ukraine's economy and population shows significantly worse indicators than the developed countries' ones, being the 54th out of 64 countries in the Global Competitive Index rating. Topical state of Ukraine's transport and transport infrastructure is characterized with highly deteriorated and depreciated fixed assets as well as with obsolete management methods of both business facilities and the industry itself.

Studying the condition of transport and transport infrastructure development in Ukraine over the last years certifies the decreased amount of enterprises in the industry. The analysis of freight volume traffic structure by modes of transport demonstrates prevalence of motor transport, which is not a positive aspect due to a range of problematic issues related to organization and provision of services. Studying the volume of freights delivered by modes of transport certifies its unstable dynamics, which is mainly referred to the

economic and geopolitical crises in Ukraine. Financial performance of transport and transport infrastructure activities the over last years does not also demonstrate a positive tendency – with the beginning of turbulent 2013-2015, the enterprises of Transport, Storage Facilities, Postal and Courier Economic Activity suffered losses, only 2016 and 2019 showed profitability. As a result, the level of transport infrastructure efficiency is also characterized with instability.

The inclusive process of adaptation in Ukraine of Sustainable Development Goals (SDG) approved at the United Nations Sustainable Development Summit 2015, specified the establishment of Ukraine's development benchmarks until 2030. Thus, one of SDGs became Industry, Innovations and Infrastructure, because "reliable and accessible infrastructure covering both traffic, energy and information-communication networks and the innovative infrastructure is a guarantee of effective business activity and qualitative conditions of population's life-sustaining activity" (National Report UA, 2017).

As of 2022, the transport service level of Ukraine's economy and population is still significantly lower than the indicators of the developed countries. World Economic Forum jointly with Eurasia Competitiveness Institute and Strategy Partners, a consulting company, publish annually the Report of Global Competitiveness Index that includes a range of parameters. Thus, in 2021 Ukraine was the 54th out of 64 countries in the rating of global competitiveness of economy, occupying the same place as it was in 2019 (Global Competitiveness Report, 2021). By sub-index of Transport Infrastructure, Ukraine improved its results in comparison with the previous years (2017 and 2018 – 53rd place, 2019 – 52nd, 2020- 54th, 2021-51st) (Governmental Portal of Ukraine, 2020). However, the topical state of Ukraine's transport infrastructure is still characterized with highly deteriorated and depreciated fixed assets and incompliance of country's motorization speed with the condition of roadway network.

In general, the transport industry consists of two main areas: freight and passenger carriage. In the freight area, Ukraine uses railway, sea, river, motor and air transport. According to State Statistics Service of Ukraine, 90,591 business entities under Transport, Storage Facilities, Postal and Courier Economic Activity worked as of the beginning of 2019. However, the active enterprises in this group amounted to 17,957 (Fig.1) as of the end of the year.

In 2021 the bigger part of freights was transported by railway (62.4% from the total amount) which, in our opinion, is explained by a high level of the railway development and cover, relatively cheap prices as well as independence on weather conditions. Moreover, one should mention that as early as in 2019, the

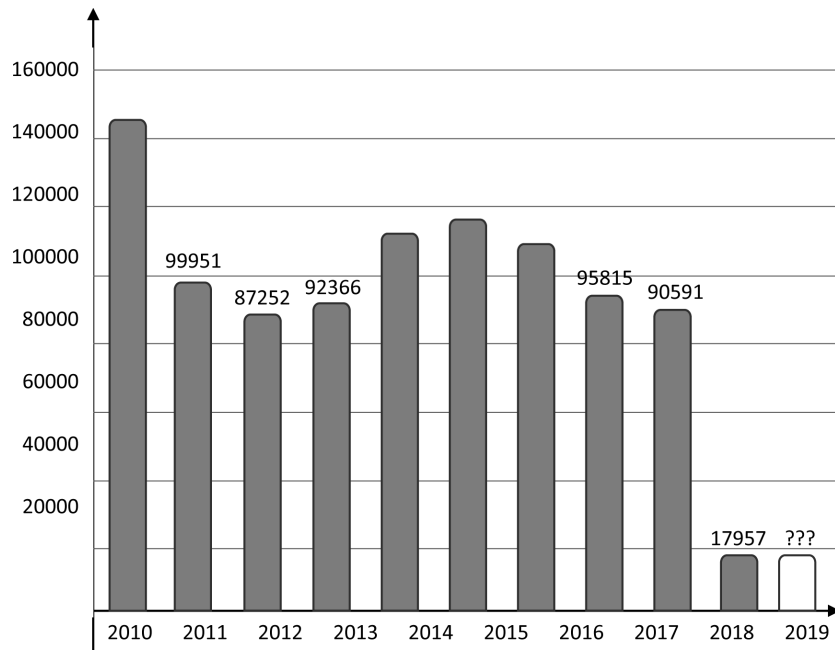


Fig. 1. Amount of business entities under Transport, Storage Facilities, Postal and Courier Economic Activity, un. developed by the authors based on the data from State Statistics Service of Ukraine

Source: State Statistics Service of Ukraine: official Internet portal, 2021

bigger part of freights fell on motor transport. This is a problem for transport infrastructure development since this transport creates significant technology-related burden on the environment and is a source of hazardous substances emissions. The lowest amount of freights was recorded for aviation transport (less than 0.1%). Fig.2 demonstrates the structure of freight volume with regard to the modes of transport in 2021.

In 2021, the general indicator of freights in the transport industry appeared to be 0.3% lower than for

the previous year, but it is explained by 14.5% fall of the Russian gas flow through the gas pipeline system of Ukraine. All other kinds of transport demonstrated during a year a positive tendency of freight accumulation by 102-110%.

Motor and railway transport prevail in passenger freights, over 50% of the total passenger turnover fall on them; moreover, during 2021 this passenger turnover, for example, increased by 146.4% at the railways. However, the biggest growth in 2021 demonstrated

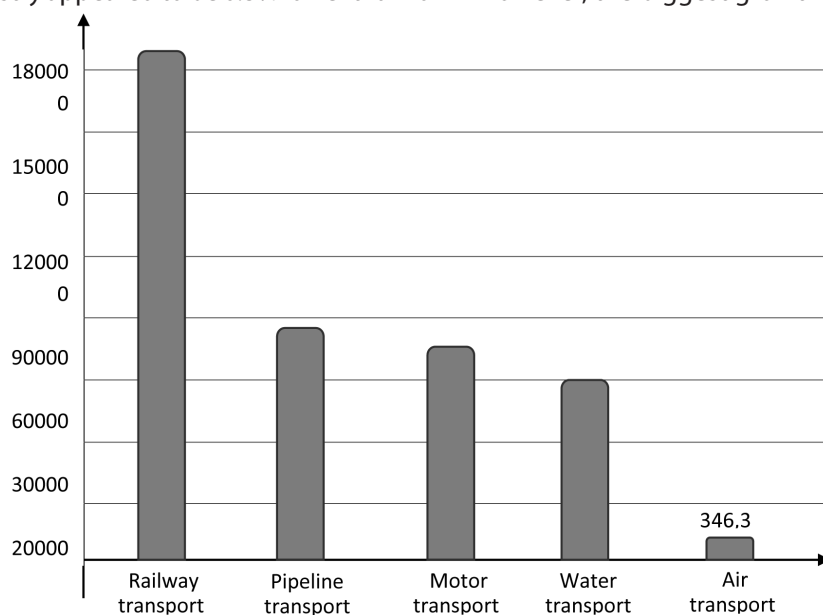


Fig. 2. Structure of freight volume by modes of transport in 2021. developed by the authors based on the data from State Statistics Service of Ukraine

Source: State Statistics Service of Ukraine: official Internet portal, 2021

passenger turnover at the air transport, the dynamic of its growing became one of the best in the EU, it increased by 182.2%, which allowed reaching a mark of 18,410 passenger kilometers, and that is 25% more of total volume. Fig.3 provides the general structure of passenger freights in Ukraine in 2021.

showed 8% increase. We agree that “the main factors of the freight volume fall besides the annexation of Autonomous Republic of Crimea and military-and-political conflict in the East of the country are the following: significant fall of industrial manufacturing volumes due to the competition of foreign markets

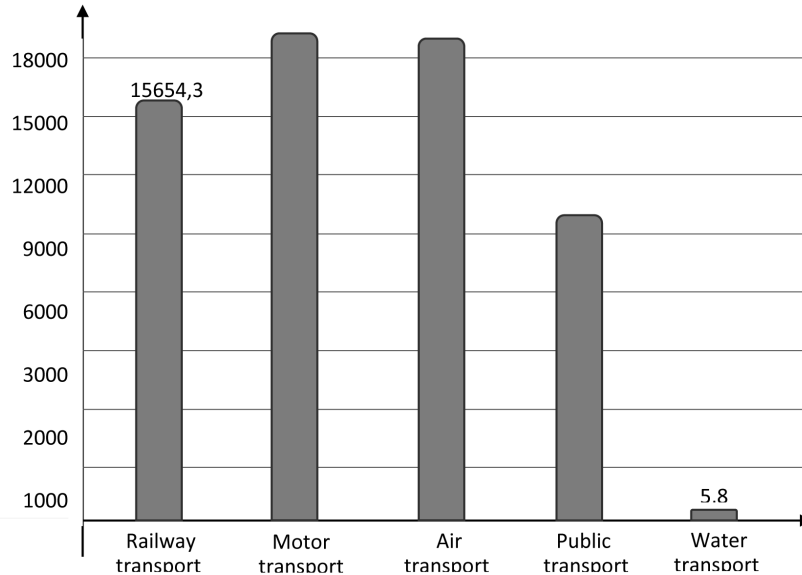


Fig. 3. Passenger freight volume in Ukraine by modes of transport in 2021. developed by the authors based on the data from State Statistics Service of Ukraine

Source: State Statistics Service of Ukraine: official Internet portal, 2021

At the same time, the dynamics of transport industry functioning in Ukraine is quite unstable, and the increased volume of freight and passengers carried is followed by its fall in 2015, after that a gradual but ambiguous growth begins, particularly, in motor, river and air transport, which showed 7.5%, 1.6%, 9.7% gain in 2018 respectively in comparison with 2017. However, in 2019 the freight turnover falls again for all modes of transport except the water one, which

tending to deterioration, the decreased volumes of domestic demand because of decreased purchasing power” (official Internet representative office of the President of Ukraine, 2021). Financial performance of the transport infrastructure activity for 2010-2019 (there are no data for 2020-2021 at the website of the State Statistics Service of Ukraine) also does not demonstrate a positive tendency (Table 2).

Tab. 2. Financial performance of the enterprises under Transport, Storage facilities, Postal and Courier Economic Activity for 2010-2019.

Years	Net profit (loss), UAH thousand	Enterprises received profit		Enterprises suffered losses	
		% with regard to the total amount of enterprises	Financial performance, UAH thousand	% with regard to the total amount of enterprises	Financial performance, UAH thousand
2010	1,348,692.4	52.8	6,730,672.8	47.2	5,381,980.4
2011	2,839,835.3	61.4	9,890,902.9	38.6	7,051,067.6
2012	3,127,680.8	60.1	9,728,595.7	39.9	6,600,914.9
2013	-1,423,456.6	62.1	7,406,792.1	37.9	8,830,248.7
2014	-22,591,574.7	61.6	9,991,373.1	38.4	32,582,947.8
2015	-17,847,817.6	70.5	18,969,841.3	29.5	36,817,658.9
2016	7,408,710.9	71.1	23,614,168.1	28.9	16,205,457.2
2017	-16,796,739.9	71.1	23,398,983.4	28.9	40,195,723.3
2018	-24,265,433.3	73.6	25,870,599.3	26.4	50,136,032.6
2019	8,369,500.0	73.3	37,261,700.0	26.7	28,892,200.0

Source: State Statistics Service of Ukraine: official Internet portal, 2021

Thus, with the beginning of turbulent 2013-2015, the enterprises under Transport, Storage Facilities, Postal and Courier Economic Activity suffered losses; only 2016 and 2019 showed a profitable activity. However, the beginning of 2020 was marked for the world with a global uncontrollable factor, which had a negative impact on economic activity – COVID-19 pandemic. In the first quarter of 2020 the transport infrastructure enterprises suffered losses equal to UAH 26, 688.1, and later this indicator was only becoming worse. Fig.3 demonstrates the dynamics in changes of cost efficiency level of operation activity of enterprises under Transport, Storage Facilities, Postal and Courier Economic Activity for 2010-2020, certifying an unstable cost efficiency of the industry being researched due to general economic processes in the country.

The capacity of these ports is 62 mln tons per year. 35 thousand employees work in the sea ports. However, the bottom of the Ukrainian ports must often be reinforced, cleaned of silt, the ports require repairs and the money for that is often insufficient. The Ukraine’s Sea Ports Administration governs the operating activities of all ports in Ukraine. It is subordinate to Ministry of Infrastructure of Ukraine and its authorities include the deepening of the rivers and bays beds where the ports are located. The authorities of the Administration also include the distribution of the ports profits, and their partial investment into infrastructural projects. Under the calculations of Nibulon, the project had to bring USD 500 mln annually.

Ministry of Infrastructure of Ukraine believes that the country is highly promising with regard to the

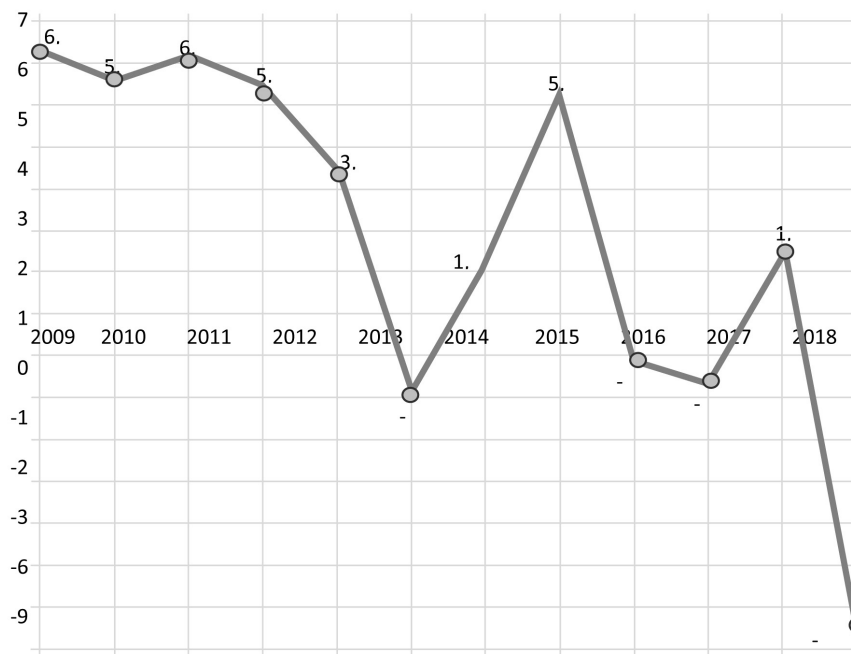


Fig. 3. The dynamic of profitability rate changes of the operating activity of the enterprises of Foreign Trade of Transport, Storage Facilities, Postal and Courier Economic Activity for 2010-2020, %.

Source: State Statistics Service of Ukraine: official Internet portal, 2021

Both sea and river transport are developed in Ukraine. This industry includes 38 state-owned enterprises with turnover of about UAH 10 bln. per year, 5,000 industrial business entities and 100,000 sailors who are the citizens of Ukraine. Ukraine has 18 continental sea ports, 5 of them are situated in the occupied Crimea.

river transport development. In Ukraine there are 3 navigable rivers, two of them are included into TOP-6 longest rivers in Europe, 16 river ports and terminals. All those provide a possibility to have 60 mln tons of capacity a year.

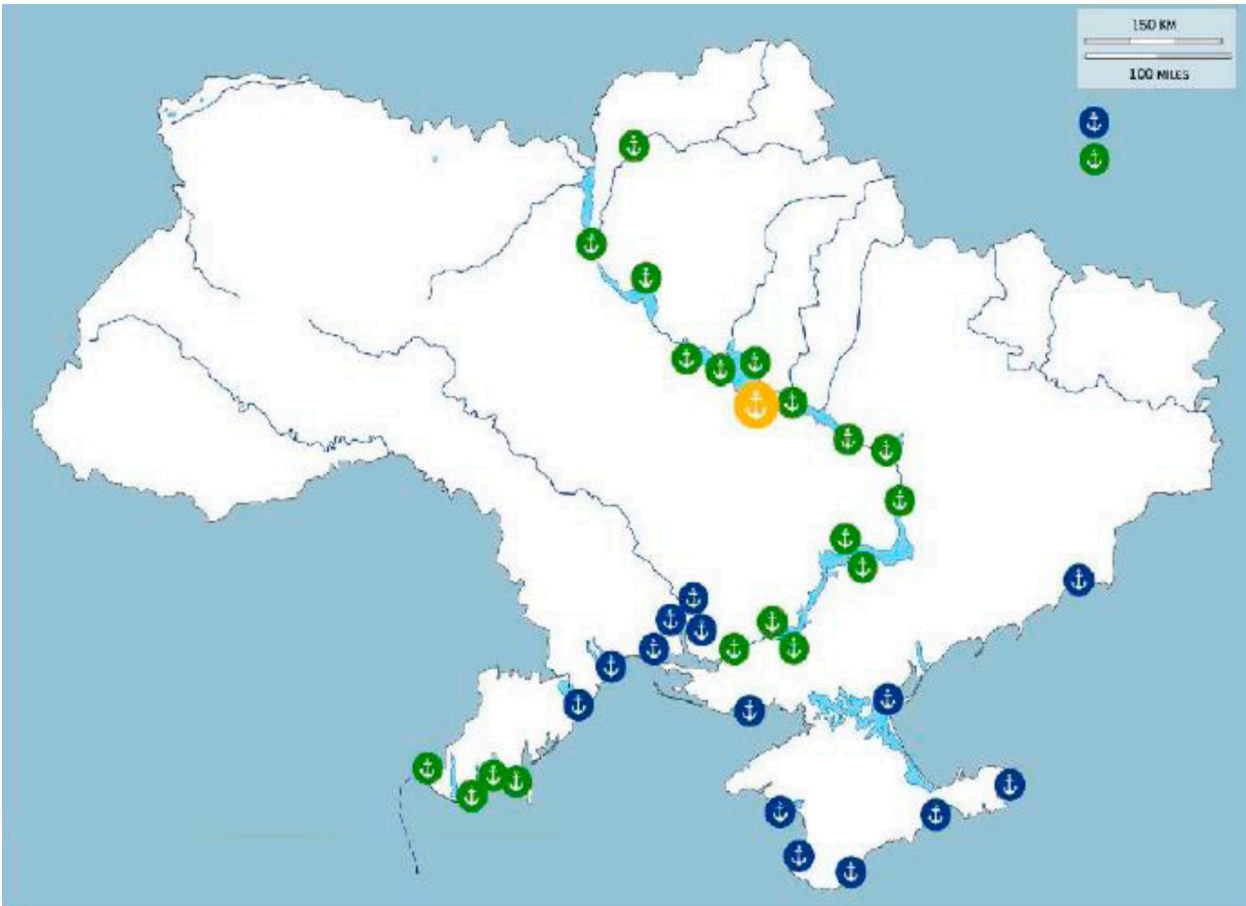


Fig. 4. Map of ports and terminals.

Source: Official Internet portal of Ministry of Infrastructure of Ukraine, 2020

3. The transport infrastructure condition

An important element for ensuring transport functioning in the country is transport infrastructure, its condition and the level of technical equipment. Being one of the fundamental GDP-contributing industries in Ukraine' economy (transport share amounts to approximately 10%), transport infrastructure has an extensive railway network, a developed motorway network, sea and river ports (terminals), airports and a wide network of air connections, freight and customs terminals. The development of transport infrastructure creates a range of social and economic effects: effect from the investment demand; agglomeration effect; effects from the growth of industrial output related to the liquidation of infrastructural restrictions; effects from increased export related to enhancement of transport accessibility to global markets; increased freights security; implementation of projects on complex territory development; environmental effect; development of urban public transport.

In Ukraine, transport infrastructure is considered to be a "purpose-oriented subsystem of the transport system which elements are:

- 1) transport communications (transport network including all the types of communications);
- 2) facilities on serving freight (freight stations, terminals, etc.) and passenger traffic (stations, terminals, ports, airports, roadside service facilities);
- 3) facilities on technical maintenance and repair ensuring required conditions for rendering services on transporting freights and passengers;
- 4) state-owned and private institutes of business facilities functioning in the area of transport infrastructure;
- 5) the management system of transport infrastructure development (public authorities and their competence concerning relevant decisions made)" (Bondar, 2014).

4. Reform Perspectives

The development of Ukraine's transport and transport infrastructure has not demonstrated a positive trend over the last few years, to the contrary, they significantly require the increase in efficiency and competitiveness, adaptation to European standards

and qualitative modernization. Currently, they meet only basic needs of the population and business with regard to freight by volume rather than by quality.

During the last five years the EU became the main trade partner of Ukraine. A specific weight of trade turnover with the countries of the European Union in 2021 amounted to more than 41%, and the volume of freights by motor transport increased by almost 42%. Further growth was limited with shortage of licenses for international transportation the amount of which on individual courses either remained unchanged or decreased significantly. In fact, the system of licenses and permits was an artificial barrier for free trade, restricting not only two-way trading but also the transit of our goods through the EU countries.

In the pre-war period, 75% of the Ukrainian export went through the ports – this is the main amount of commodities (ore, grains, oil, metals – 20 mln tons in total). The most value-added goods were exported as container shipments by motor transport. As of currently, due to the full-scale armed aggression of Russia, the export is being built from scratch for some markets at the western border. This issue is both technical and logistical. The Ukrainian state railway company Ukrzaliznytsia scales up maximum the connections, but the heaviest load falls on motor transport. For the

last three months of the war, due to the blockade of the Ukrainian ports, the volume of the goods turnover with the EU by the motor transport has increased several times. Only fuel import by motor transport was 15 times higher than in the pre-war time. It is obvious that no certificate and permit system would bear this load and it was at high risk of terminating the export by motor transport already in September–October 2022. After signature of the Transport Liberalization Agreement, the issue of shortage of permits for international transportation will be ultimately solved. It is planned to sign the document before the end of the current month. (Official Internet portal of the Ministry of Infrastructure of Ukraine, 2022).

Strategic vision of Ukraine’s transport and transport infrastructure development is at the stage of reforming. The purpose of the transport infrastructure reform has become “the creation of a safely functioning and efficient transport complex of Ukraine, integrated into the world’s transport network, the achievement by Ukraine of a regional transport hub status, meeting the population’s needs for transportation and enhancement of business running conditions to ensure competitiveness and efficiency of national economy”. Table 1 demonstrates the tasks under reform.

Tab. 1. Tasks under the transport infrastructure reform.

Industry	Task
Aeronautical industry	Enhancement of management efficiency; 1. modernization of aeronautical infrastructure, enhancement of its safety and bringing it into compliance with EU standards; 2. reconstruction and development of the national network of regional airports by building terminal freight and passenger complexes with multimodal technologies (Bondar et al., 2020)
Railway industry	Mastering the national legislation and its harmonization with the regulations and standards of the European legislation; • structural reform of Ukrzaliznytsia JSC; • modernization of the rolling stock and the development of railway routes; • implementation of hauling by private operators (Bondar et al., 2020)
Area of motor transport and the industry of public roads system	Performance of large-scale overall repair and maintenance of roads; 1. implementation of modern mechanisms of control over planning and quality of repair works performance; 2. increase of transportable mass-size complexes and implementation of the newest system of weight-in-motion (Bondar et al., 2020)
Nautical and river transport industry	Enhancement of statutory conditions: 1. development of a new procedure for tariffs formation with regard to the actual structure of costs; 2. engagement of private investments into the development of sea and river port terminals of development; 3. approval of method for calculating the port charges rates, revision of their amount taking into account the structure and directions of freight flows; 4. ensuring the relevance of actual depths in sea ports of Ukraine; 5. repair and modernization of shipping locks of Ukraine (Bondar et al., 2020)

Source: Internet media of Ukrainian News, 2021

The first results under the reform have become liberalization of the air freights market and engagement of leading world's air companies, in particular, European low-cost carrier Ryanair. Until 2022 there was opened 28 international destinations for foreign air companies and 20 international and domestic destinations for the Ukrainian air companies. Airports of Mykolaiv and Uzhhorod started their work. Unfortunately, the full-scale aggression of Russia in the beginning of 2022 led to termination of air transport with Ukraine by air companies, and the leasing companies withdrew the planes leased to Ukrainian air carriers. According to Radio Svoboda "the biggest insurance companies of the world warned the Ukrainian air carriers on the eve that they would stop insuring the planes for the flights in the airspace of Ukraine within 48 hours. They explain this decision by "higher risks of commencement of hostilities" (Official Internet – portal of Ministry of Infrastructure of Ukraine, 2021).

In the railway infrastructure national projects have been implemented. The following facilities were built and put into service before 2022: Beskydy Tunnel that increased the capacity of pan-European international transport corridor No.5 and accelerated the railway connection between Ukraine and EU; project of "Air Express" – a line of railway connection between Kyiv and Boryspil, an international airport. The government are developing railway connection between Ukraine and EU; in 2018 there were there were opened new railway routes from Ukraine to Poland, Hungary and the Baltic countries. In 2018 there were purchased and manufactured using own production capacities, 3.4 thousand wagons, updated 118 coaches, repaired 115 locomotive engines. Moreover, under the contract with the American company General Electric there were supplied 30 locomotive engines. Regrettably, in June 2022 Beskydy Tunnel was partially destroyed by several rocket hits from the military forces of the Russian Federation.

One more big contract for purchasing 130 locomotive engines from France manufactured by the French company Alstom Transport SA for the total amount of EUR 900 mln was signed during the meeting of Presidents of Ukraine and France in 2020. However, the Federation of Employers of Ukraine made a statement on hiding from the society of important information concerning the localization of the locomotive engines manufacturing in Ukraine (this is specified by the law of the country), which could facilitate reception of "more than UAH 10 billion of products made, establishment of thousands of working places in the transport machine building and integration into the world leader's manufacturing chains in machine building". The threats of absent localization in the contract with Alstom Transport SA, according to Ruslan Illichov, the Executive

Director for Federation of Employers of Ukraine, "is an illustrative marker for the state of Ukraine: whilst the financial aid promised by the French government coincides strangely with the value of the contract for French equipment purchase, we can simply receive one more commodity loan and the equipment will enter Ukraine without any taxes or charges to be paid, but Ukraine could have received direct investments" (Internet media of Ukrainian News, 2021).

There was implemented a range of national projects in the road infrastructure, too. In 2018 Ukraine started an international infrastructural project of GO Highway, the purpose of which was to connect the ports of the Black and Baltic Seas and to come into the European transport network of TEN-T. The project specifies the repair of the road infrastructure and the establishment of an international transport corridor from the western border of Ukraine through central regions to the ports of Odesa and Mykolaiv.

On March 1, 2020, the President's Program of Big Building (Ukrainian: "Velyke Budivnytsvo") aimed at building the transport infrastructure started in order to develop the State Target Economic Program on Development of National Public Motorways for 2018-2022. Under this program, in 2020 there were updated or built more than 6,500 km of motorways, and in 2021 – more than 7,000 km of roads of different purposes. As specified Volodymyr Zelenskyy at the Forum called Big Building: Roads and Bridges: "updated and built – what we see today in compliance with the statistics, – more than 40% of the main road network of Ukraine that connects big and small towns, all important Ukrainian regions" (Official Internet representative office of the President of Ukraine, 2021).

The program of Big Building, despite all its usefulness and real development of the transport infrastructure, is being criticized quite much in Ukraine; first of all, they say about a large corruption component while motorways building. Oleksa Shalaysky states: "When the building of Kyiv beltway was withdrawn from Prozorro and given to a concrete firm of Bechtel Corporation, I thought it would be an ordinary theft. I admit I was wrong. To tell the truth, it was Ukraine that decided to head the global rating of road high costs, beating current leaders – Romania where one kilometer of a motorway was EUR 24 mln" (Internet media of Ukrayynski Novyny, 2021).

European integration processes serves as drivers for reforms and implementation of innovative solutions, including those that concern the transport infrastructure of the country. The positive step was the approval by the Cabinet of Ministers of Ukraine in 2018 of National Transport Strategy of Ukraine for the Period until 2030 of "Drive Ukraine 2030", the purpose of which is 'the creation of a safely functioning efficient

transport complex of Ukraine integrated into the world transport network, meeting the population's needs in transportation and improvement of business running conditions to ensure competitiveness and effectiveness of the national economy" (Governmental portal of Ukraine, 2018).

Moreover, the implementation of an initiative Touristic Magnets of Ukraine, road building, establishment of creative industries centres, integration of Ukrainian transport industry into the European transport space and, correspondingly, implementation by Ukraine of a relevant regulatory and legal framework of the European Union, Regulation 1370/2007 and Directives 2012/34, 91/440, 2001/14 in particular, are specified as national priorities of the action plan for 2021-2023.

We believe that these legislative initiatives being implemented under such areas as a competitive and efficient transport system, innovative development of the transport industry and global investment projects; safe for society, environmentally friendly and energy efficient transport, unhampered mobility and inter-regional integration will allow qualitative reorganization of the transport infrastructure in Ukraine in compliance with the EU standards. At the same time, it is necessary to solve the tasks of operating response to the problems arisen before business and society due to COVID-19 pandemic, occupation of Crimea and full-scale aggression of the Russian Federation in the transport infrastructure context: ensuring unhampered activity, mobility, security of the transport infrastructure. The implementation of a concept on transport infrastructure management using the advantages of public-private partnership is also quite a positive instrument for intensification of Ukrainian transport infrastructure development (Bondar et al., 2020), since the mechanism of public-private partnership is considered to be the most effective to use in such areas as manufacturing infrastructure and highly technological production – transport and communication, transport infrastructure, etc. (Barbir, 2020).

We consider a solution can be as follows: the increased level of public administration with regard to all aspects of transport infrastructure since the clever management builds trust; activation of the search and implementation of investment projects, particularly, on the conditions of public-private partnership; partial and temporary decrease of tax burden; the development of complex solutions for transport services consumers with regard to the infrastructural areas; pricing optimization.

The offers of the working group for the Cabinet of Ministry concerning the renewal and development of Ukraine's infrastructure, beside a powerful transport differentiation contain efficient steps for creating the basis of large-scale integration with the

EU in all the aspects of the transport-and-logistic areas. The recommendations offered to the government specify building, reconstruction and repair of 3,500 km of motorways of international and national transport corridors, implementation of Output and Performance-Based Road Contract (OPRC), as well as new and reconstructed existing international and national transport corridors all along the motorways length. The other interesting recommendation for the Cabinet of Ministers is the implementation of projects on construction and opening new entry points for motor communication, as well as holding negotiations with the countries-partners concerning the decision on opening new entry points for motor service. According to the forecasts of the Cabinet of Ministers of Ukraine, if the entry points on Poland's border start operating at 100% of designed capacity, 30% more cars (compared to nowadays) will be able to cross the border. This is extremely important in the current conditions as, in fact, the country is completely locked from east and south. Moreover, a new entry point can start work on the border with Romania. The plans also specify the creation of conditions on the Polish border for new entry points, whereas that depends on the infrastructure on both sides of the border. The procedure of approval and building can take from three to six months.

The second through-way of the country is the railway, its development and further integration into the uniform railway infrastructure with the EU. Coordinated planning and organization of freights performance between Ukrainian railway and EU railways, in particularly the formation of approved schedules of shipping-unloading and establishment by consignors of logistic chains in the territory of other countries are crucial in this area. The experts offer the government to scale up capacity and railways with the EU countries through building and modernization of complexes on changing the wagons from 1,520 mm way for 1,435 mm and overload capacities (logistic centres) within or beyond the limits of the entry points on the border crosses with the EU countries taking into account the requirements concerning interoperability and efficient use of railway infrastructure of 1,435 mm and 1,520 mm systems. The initiative is revolutionary and requires discussion between the government and business, these perspectives depend directly on the related business facilities. They are plants, enterprises, elevators, since Ukrzaliznytsia is not an independent structure that has a way separated from others. That means that for implementation of the changes specified it is necessary not only to understand them but also to provide a significant financial support, including both governmental and private investments.

There is a proposition to make the Polish port of Gdansk the main for the Ukrainian grains export. Before the full-scale intervention of Russia into Ukraine, Poland had expressed its interest in establishment of an intermodal corridor between the ports of Gdansk and Odesa. Intensification of container transport with Ukraine was declared to be a priority for Poland (Official Internet representative office of the President of Ukraine, 2021).

5. Conclusions and propositions.

The key problems for the development of Ukraine's transport and transport infrastructure in the pre-war period were: economic and geopolitical crises in the country, reactive management style, unsatisfactory state of the roads, obsolete pricing methods, highly deteriorated and depreciated fixed assets, lack of innovative implementations and advanced technologies. Despite the project of Big Building encouraged the development of connections network it did not lead to systemic improvements. The huge ruination committed from the beginning of the large-scaled Russian aggression brought the country into even deeper downfall of the transport-and-logistic area problems.

A positive legislative initiative aimed at building a transport complex in Ukraine integrated into the world transport network has become the adoption of the National Transport Strategy of Ukraine for the Period until 2030, but this document does not take war realia into account. Considering the accrual of a range of issues including the ones related to COVID-19 pandemic and the full-scale aggression of the Russian Federation, it is extremely necessary to develop a new concept on development of the Black Sea area as a component of international and transatlantic and Eurasian transport corridors.

Restoration and improvement of Ukraine's transport infrastructure must specify the increased level of public administration under all aspects of transport infrastructure, the use of a proactive form of management, activation of search and implementation of investment projects, partial and temporary decrease of tax burden, the development of complex solutions for transport services customers with regard to infrastructure areas and optimization of pricing. Moreover, it is necessary to elaborate the strategy of developing Ukraine's transport-and-logistical area based on current innovative technologies, being governed by the market challenges and customers' needs. This strategy must be in compliance with the global vision of the logistic flows development and serve as an important component in the world transport infrastructure. But at this time, in the conditions of active hostilities in

the east and south of Ukraine, it is practical to focus on restoration of the full-scale functioning of three modes of transport, which are key ones for Ukraine's export: motor transport, railway and sea one.

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