

DEVELOPMENT OF TRANSPORT INFRASTRUCTURE IN EASTERN UKRAINE AND ITS INTERACTION WITH THE INTERNATIONAL TRANSPORT CORRIDORS

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Summary. In the article considered conditions and facilities of development of transport infrastructure in eastern Ukraine and its interaction with the international transport corridors.

Key words: transport corridors, logistics, transportation technologies, transport, Lugansk region.

INTRODUCTION

The development of transport and logistics systems receives increasing consideration with the development of international cooperation, more intensive integration processes in the global economy and their globalization. At the same time the intergovernmental, economic, cultural and other connections providing is agreed on the desirability of creating an effective international transport infrastructure, which has certain technical parameters and provides consistent application of transportation technologies that can ensure the integration of national transport systems into the world transport system [Nechaev 2009, Nechaev 2010, Burkinsky 2009, Slobodyanyuk 2010, Primachev 2006].

RESEARCH

Up to 2010 year the Government of Ukraine had been repeatedly formulating tasks, the solution of which had to provide the measures for reconstruction of transport routes of the country, including them into the system of international transport corridors (ITC).

Among the documents adopted by the Government [Nechaev 2010, Rabotnev 2010, Izotov 2010]:

The network of national roads and constructions, which formed the structure of ITC and required some reconstruction and modernization was set by the program. It was

indicated that there were three transport corridors (№ 3, 5, 9) which passed through the territory of Ukraine and the other four corridors of the Black Sea Economic Commonwealth (BSEC), Europe – Asia; the Baltic Sea – the Black Sea; Eurasian.

7,2 billions of UAH were assigned for their construction and operation, integration into the national network of international transport, which would allow to bring 1200 km of operating roads into the system. The Program proposed the construction of new and the reconstruction of existing roads, which coincided with the direction of ITC № 3, 5, 9. The Program implementation would provide a radical reconstruction of many road sections of the country and include them in the international communication network. It was also proposed to continue the reconstruction of national roads and to construct 270 km of new main roads. However the appropriate organizations didn't launch the implementation of the Program tasks.

As a result of many years systemic faults in governmental organs the weakening of the transit potential is not the only factor in Ukraine's internal politics nowadays. Bad quality of main roads, lack of necessary logistics services force shippers of neighboring states to drive our country around.

The analysis of the transit potential of Ukraine has shown that it is the largest by its volume of turnover in Europe. It is based in the Concept of the Government program of transboundary cooperation development in 2011-2015 years, and approved by the Cabinet of Ministers of Ukraine on 28.09.2010, 15:12.

According to the experts estimations, this potential is used only for 55-60%. Incomes from transit and set of services connected with it are about 5-7% of GDP. For comparison: in the Baltic countries this index reaches 30%. Ukraine doesn't receive about \$ 2,5 billions into the budget because of the unbalanced use of transit potential annually.

It is also important to note that the transit cargoes following the reverse direction, passing through the Lugansk region (Chervona Mogila – Sverdlovsk – Rovenky) and then through Debaltsevo by the territory of Donetsk and Dnipropetrovsk regions in the direction of European countries go on the most loaded section of Dnieper and Donetsk railways, where the parameters of motion are 60-70 million t-km/km in one direction. This affects the overall movement of railway transport negatively and does not permit to increase the speed over 120 km/h, that confirms the necessity of urgent reconstruction and development of main roads included in the international transport corridors within the country [Nechaev 2005, Nechaev 2006, Nechaev 2010, Slobodyanyuk 2009].

Thus it is necessary to note that international roads in Ukraine are equipped, their communication facilities are driven to European standards, it provides the optimal characteristics of traffic flow. The direction of international roads coincides with the main freight traffic, including the transit one, by the following areas: West Ukraine – Kharkiv – Lugansk; Lvov-Kiev-Belarus; sea ports of Ukraine – Dnipropetrovsk – Russia; the Caucasus; Moldova – Russia, etc. **It is obvious that the Lugansk region has only two sections of roads of this type.** Their direction is – Debaltsevo – Lugansk – Krasnodon – Izvarino; Debaltsevo – Antracit – Dovzhansky. These are M-03 and M-04, which coincide with the roads of European routes E-50, E-40 (the total length is 182 km). And this is when the border infrastructure of the region consists of 12 international and interstate border checkpoints.

International transport corridors functioning happens due to the integration connections of railway transport. And it isn't accidental. Initiating the development project of transport corridors since 1980th, in order to optimize traffic flows, the European Commission has been paying special attention to ensuring the increasing volume of transit cargoes between Europe and Southeast Asia. For this purpose use of ports in Bulgaria, Romania and Ukraine will unload roads from the vehicles, especially in Western Europe. But the common EU strategy is also directed for the purposes of improving ecological standards and increasing proportion of the most ecological rail and water transport [Nechaev 2005, Nechaev 2006, Nechaev 2007]. The analysis shows that cargo transportation by vehicle is 44% of traffic volume in EU countries, by sea transport – 41%, by rail transport – 8%, by inland water transport – 4%. Meanwhile in Ukraine during the last years, the share of the rail transport is 50-55%, the sea – about 25%, the vehicle – 20-25%.

In some reasons Belarus has been successfully competing with Ukraine in cargo transportation by rail transport. For example, according to the Ministry of Transport of Belarus Republic, in 2008-2009 there were 992,3 thousands of transit trips of foreign carriers done through the territory of Belarus. As for Ukraine, there was about one million of trips of foreign carriers (export, import, transit).

Despite the fact that enterprises and organizations of the railway, running through the Lugansk region, are not involved in organization of cargo-and-passenger flows directly, following the direction of Europe – Asia – Europe, their role in the near future can increase substantially because of the appearance of new, more optimal routes branching ITC and the necessity to increase the occupancy and the intensity of transit traffic.

For this purpose is initiated: the reconstruction of rail transport nodal point that includes the stations "Dolzhanskaya", "Chervona Mogila; the changing of the international railway crossing point status "Lantratovka" and renaming it from the "passenger" into the "cargo-and-passenger"; the creation of the warehouse complex, including the functions of intermodal freight terminals in the direction of Debaltsevo – Lugansk – Kondrashevskaya. The State Administration of the Lugansk region before the Government of Ukraine has been initiating the rail communication on the route Lugansk – Millerovo and the construction of a new branch railway in the direction of Svatovo – Starobelsk – Melovoe – Chertkovo. The implementation of only these measures will increase the speed characteristics of railway stations, extend the volume of transit traffic, that will certainly have positive impact on economic and other indicators. Material and technical basis, personnel potential of Donetsk railway enterprises and organizations located within the Lugansk region, confirm the reality of the plans and the availability of technological projects aimed at better use of reserves to increase cargo-and-passenger flows.

It is admitted that the Lugansk region – is the transit gate of Eastern Ukraine and Lugansk, as a regional center and the city, located less than 45 km from the Russian Federation border, almost at the crossroads of the main railway and highways, in fact is the key, the use of which has been providing a positive trade balance volume between the neighboring regions. For example, in the first quarter of 2010 foreign trade turnover of the Rostov region with Ukraine had increased by 55% and had reached almost \$ 400 million. Due to close interaction of border areas, the share of Ukraine in foreign trade

turnover of the Southern Federal District of Russia has been growing steadily and now comprises almost 30% [Nechaev 2003, Nechaev 2008, Nechaev 2010, Slobodyanyuk 2009].

The fact that the Lugansk region takes one of the first places in Ukraine in its transit potential, defines the special importance of its territory and the necessity of implementing this active transport policy here.

Foreign economic operations with goods the region performed with partners from 108 countries.

The largest volume of exports were done into the Russian Federation – 63,6%.

The integration of communication continues to develop increasingly, the arrangements of business partnership in the territories of Russian-Ukrainian border work positive as follows:

- The Public corporation "Luganskteplovoz" increases the activity of direct contacts with the Novocherkassk Electric Locomotive Plant "NEVZ" on the main-line locomotive 2EL5.

- The Ukrainian Mashine Building Holding Ltd Company has acquired additional 50% of shares in Kamensk Engineering Plant, which produces material mining equipment.

- The "NORD Group" Company in the city Matveev Kurgan of Rostov's region started the production and the maintenance of refrigeration equipment, transport air conditioners.

- The Ukrainian company "Shahtostroyontazh" Co Ltd has acquired the processing plant "Sholohovskaya", which did not work with the Public corporation "Zaporizhstal" jointly.

By the year 2020, the growth of intra-regional cargo turnover will be increased by more than 100%. After EU enlargement, more than half of existing European transport corridors became the part of the network TEN-T. At present appeared the necessity to restate the existing network of international transport corridors (ITC) again and to define the priority projects for the coordination and concentration of the EU financial resources, as well as the development of a new transport strategy for the enlarged European Union. An important reason for this is the increasing number of problem areas with insufficient capacity, poor quality of transport and logistics infrastructure, weak interaction of different modes of transport and EU enlargement including eastern states.

Investments of 600 billion euros are needed to complete and upgrade the European networks in the enlarged EU.

Relying on the conceptual positions above, can be distinguished the most relevant activities for each administrative-territorial formation of the Lugansk region to develop cross-border partnership, including:

- simplification of procedures relating to State border crossing by citizens of neighboring states;

- giving the legal position of law to authorities of cross-border cooperation, established by local governments, that provides the formation of governments' budget, the adoption of funds from public and private sources, performing other functions according to the law;

- harmonization of national legislation, for the purpose of establishing joint productions on the territories of several states, providing the joint flow of goods and simplifying the tax treatment;
- equalization of transport costs connected with insufficient development of transport and logistics infrastructure, undeveloped border checkpoints, overpriced fares for interstate and transit traffic;
- approximation of laws in customs, tax, insurance, civil, immigration and other fields.

The specificity of the Lugansk region is that it is closely connected with the Donetsk and Kharkiv regions, and, as a part of Ukraine, it is situated between the economic space of EU on the one hand, and on the other – its transport communications around the perimeter of the eastern border are available, close to markets in Russia and Asia. The neighborhood with the developed and fast-developing countries gives the region huge benefits and creates many problems at the same time, associated with the competitiveness of the local cross-border production, cross-border migration, prevention of smuggling, protection of natural resources and environmental protection. The Lugansk region can and should play an important role in the interaction of Western Europe, Ukraine and Russia in entering the Central Asian space, in the direction of China, Kazakhstan, India, and function as a transit economic bridge and as an active participant of economic integration.

Thus, sustainable development of the transport system and the transport complex of the region and its "linkage" with the system of international transport corridors, passing through the territory of Ukraine, is becoming one of the main challenges in the development of the region and East of Ukraine as a whole.

The ITC Europe-Asia is the key, unalternative international transport corridor, which decides security issues and economic development of the Lugansk region. In its framework the parts of Crete corridors № 5, 3 are used and further from Fastov by the railway route ITC № 8. The given route using the roads in Ukraine has a system of road transit traffic (to Volgograd, Makat, Chardzhou) in the directions: Krakovets – Lvov – Rovne – Zhytomyr – Kiev – Poltava – Kharkov – Debaltsevo – Lugansk – Izvarino, with turn-off to Donetsk and Lugansk. For border industrial and agricultural areas of the region is important that the trunk ITC could be used by maximum for development of their own territories, so that the export of transit services, ie the national product of Ukraine, would be the most profitable for the regional community, through the development of various transport and other related services.

For the analysis and implementation of all the works relating to cross-border activities, accounting, construction and reconstruction of road and transport facilities, their more efficient operation and safety, it is necessary to create the national-wide structure – the Agency "Ukrgranitsa" with relevant offices in each region taking into account the example of other countries.

CONCLUSIONS

The implementation of the tasks above in the sphere of cross-border activities will allow the transport and logistics infrastructure of the Lugansk region to accept and

handle the total transit cargo following from Europe to Ukraine and further to the East, which according to optimistic forecasts, will amount 1 trillion UAH by 2015. This implementation will provide jobs for thousands of citizens and increase income in the budgets of different levels by 30-35%.

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СОСТОЯНИЕ И ПЕРСПЕКТИВЫ РАЗВИТИЯ ИНФРАСТРУКТУРЫ МЕЖДУНАРОДНЫХ ТРАНСПОРТНЫХ КОРИДОРОВ ВОСТОКА УКРАИНЫ

Григорий Нечаев, Максим Слободянюк

Аннотация. В статье рассматривается состояние и перспективы развития инфраструктуры международных транспортных коридоров Востока Украины.

Ключевые слова: транспортные коридоры, логистика, транспортные технологии, транспорт, Луганская область.