

DEVELOPMENT OF TRANSIT AND SOCIO - ECONOMICAL POTENTIAL OF EASTERN UKRAINE ON THE EXAMPLE OF LUGANSK REGION

Maxim Slobodyanyuk, Elena Lapaeva

Volodymyr Dahl East-Ukrainian National University, Lugansk, Ukraine

S u m m a r y . This article considers the questions of creating the Euro-region on the example of Lugansk region, Ukraine. International, inter-regional cooperation is an important component in the development of foreign economic relations of Ukraine. Reforming of social - economic relationships in Ukraine, structural rearrangement of all mechanisms of society vital functions creates the background for the acceleration of territorial development of every region, first of all at the expense of beneficial geographical position and technological accessibility of transport - logistic service.

K e y w o r d s : traffic flows, transportation, transit, storage systems, transit potential, transport - logistical sphere.

mln. tones, in 2011 this index was only 151.2 mln. tones - it is 2.5 times less. In spite of the fact that in the complex program of the statement of Ukraine as a transit state for the period of 2002 – 2015 the achievement of transit cargo traffic on the territory of the country in the value of 300 million tons, (it is 1.5 times more than the present time value) was foreseen. [Slobodyanyuk 2011], indicators of characterizing the traffic volume shown in figure 1.

INTRODUCTION

The transformation of the former USSR republic into the independent states is the reason of the actualization of the border problem. On the one hand, a state border is an attribute of an independent state. On the other hand, the borders of the new states are mixed. One part of them is a former Soviet Union's state border and the other part is in fact, the administrative border between former republics. The first is an old border which has a long history and tradition, the second part is only being formed.

As it is said in the Program of economic reforms for 2010 - 2014 years "Wealthy society, competitive economics, effective state", transit potential of the country is not being used in full: for example the cargo traffic between Europe and the Russian Federation through Belarus is 5 times higher than through Ukraine [Nechaev 2011].

If in 2007 which is characterized by the highest figures achieved for the last ten years, the general volume of the transit cargo was almost 387

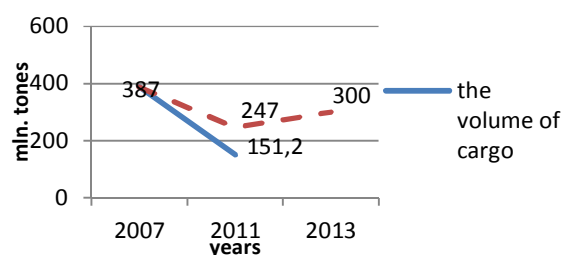


Fig. 1. Indicators characterizing actual and projected volume of transit traffic of Ukraine

In this connection nowadays the problem of the development of mechanisms which improve the quality of the transit communication, logistics infrastructure and transit cargo traffic becomes actual and the usage of which can create the real preconditions for increasing the transit traffic to unachieved 300 mln. of tones, improving the social - economic situation of the border territories and the economy of Ukraine in general.

OBJECTS AND PROBLEMS

The analysis of the traffic flow distribution in regions demands for creation of effective storage facility systems. Though the traffic flows inside the net of distribution must be organized according to the logistic principles and the transport communication must have an alternative.

The system of storage facilities distributed in the area must be coordinated by controlled transport connections in a way which allows telling about transport- storage systems. Only in this way the capacity of the warehouses will be used efficiently, and the whole system will be capable to transform the input streams into the output ones, which means to absorb and smooth the eruption of flows.

Rational flow management in the net of the distribution demands to create automatic management systems which use optimization models. In transportation, especially railway one, a developed information environment, which forms the basis for the effective management is created.

The basic partners of Ukraine in 2011 remained the same. On the first place in freight turnover was Russia where the trade "levelling" took place. The import of Russian goods to Ukraine increased to 2.2%, the export increased to 37.3%. Germany took the second place in freight turnover. China was on the third place (in trade with China a levelling of balance took place because of the increase in Ukrainian exports to the Chinese Republic in 2011, comparing with 2010 it was 59.7%, when the China's goods import to Ukraine grew only on 0,2). The fourth in cargo volume with Ukraine on the basis of 2011 was Belarus, the imported goods from which increased for account of oil products, agricultural machines, mechanical machines. Also, Ukraine increased the export of raw materials and metallurgical products to Poland, which was on the fifth place [Slobodyanyuk 2012].

In figure 2 the structure of freight turnover with countries partners is shown.

As the State Statistics Committee of Ukraine says, in January 2011 the import of goods from the Russian Federation was 51.3% of total import volume that makes up the highest figure among the CIS countries.

The export of Ukrainian goods to the Russian Federation in January made up 25.7% of the whole value of export, totally among the CIS countries - 33,7%. In comparison with January 2010 export to Russia increased to 82.3% and achieved almost 1,187 billion dollars.

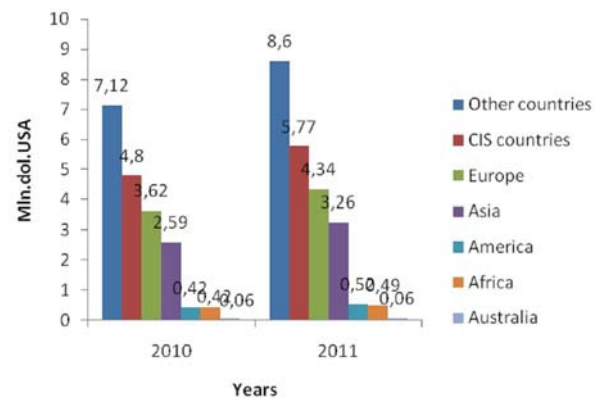


Fig. 2. Geographic structure of traffic of goods in Ukraine in 2010-2011

Reformation of the social - economic relationships in Ukraine, structural rearrangement of all mechanisms of vital functions of society creates the background for the acceleration of territorial development of every region first of all at the expense of beneficial geographical position and technological accessibility of transport - logistic service.

The positivity of formation and functioning of the Euroregion "Donbass" (further "Euroregion", depends a lot on condition of transport - logistic system of the incoming definite border territories - Lugansk region, Donetsk region (Ukraine) and Rostov region (the Russian Federation)) [Nechaev 2010].

During the creation of the Euro region "Donbass", the development of trade - economic contacts, creation of common enterprises in the border territories and the simplification of crossing the border for the citizens of Rostov, Belgorod, Voronezh and Lugansk regions are supposed. Lugansk region has the longest border in Ukraine - it is about 800 km with Russian Federation [13].

In eastern Ukrainian regions powerful industrial complexes are concentrated. To increase the volume of the export activity the transport system in different fields which is capable to provide the development of transport - transit traffic volume is needed. The motorway Europe - Asia crosses the territories of Zaporozhye, Donetsk and Lugansk regions.

Bilateral export-import relations between Russia and Ukraine are the highest in volume and more diversified in nomenclature in all post soviet area. They show the specifics and contradictions of trade and economic - political relations between new independent states in the best way. The basic volume of the transport - transit interrelations falls

on the city of Lugansk and Lugansk region, which is proved by statistics about cargo transit for the period of 2000 - 2011 years, which is shown in the table 1.

Table 1. Cargo transit in Lugansk region according to different kinds of transport for the period of 2000-2011

Years / modes of transport	2000	2005	2008	2009	2010	2011
Transport in general	2590,6	3855,0	4907,2	4407,8	5073,3	5413,8
Railway transport	1703,1	2157,5	2592,6	2218,5	2367,0	2347,7
Automobile transport	887,5	1697,5	2314,6	2189,3	2706,3	3066,1

Positive tendencies in cargo transit by the railway transport of general use are observed in the way of the diagrams in figure 3.

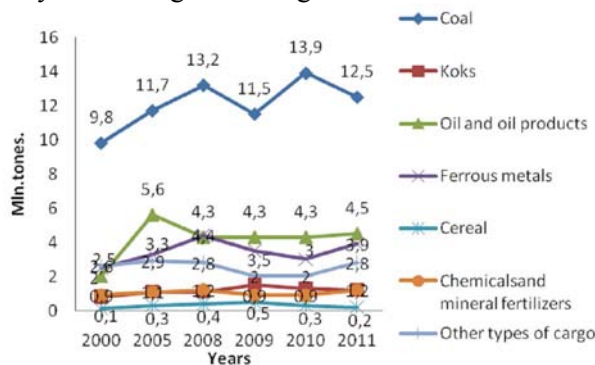


Fig. 3. Graphics of cargo transit by the means of railway of the general use in Lugansk region for the period of 200-2011, mln of tones

The tendencies in cargo transit by motor transport shows the data which is shown in table 2.

Table 2. The data of cargo transit by motor transport of common use in Lugansk region for the period of 2000 – 2011

Years	2000	2005	2008	2009	2010	2011
Total mln.t.	26,1	31,8	27,4	24,7	24,3	26,3

Volumes of cargo transportation in the Lugansk region motor and railway transport shown in figure 4.

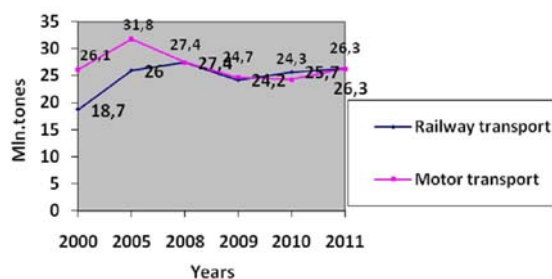


Fig.4. The dynamics of cargo transit in Lugansk region by motor and railway transport for the period of 2000 – 2011 years

For the period of 2008-2011 GC "Sverdlovskantratsit", is one of the major flows making enterprises in the Eastern part of Ukraine. Its volume is shown in table 3.

Table 3. The volume of readymade products in different years in "Sverdlovatratsit"

Year	2008	2009	2010	2011
Coal production, thousand tons	6109,72	5817,64	6375,95	6559,03
Finished products, thousand tons	3694,3	3624,6	3872,9	3913,4

To model the structure of transport system of border area of Eastern Ukraine, in consideration of rather high index numbers of transport flows which are formed at the local level and make up flows of transport corridors is necessary:

- to learn the conditions and prospects of the development of modern transport communications and logistic infrastructure of Sverdlovsk region;

- to develop and correct the process of Sverdlovsk, Chervonopartizansk cities planning and other territories of the region having the aim to optimize the location and industrial-technical objects, including the objects which are close to the border infrastructure and implementing the functions of effective goods promotion in the ITC Europe-Asia – Europe system;

- to learn the opportunities of using the custom regimes in the conditions of Ukrainian-Russian border area and partly in the region of Sverdlovsk city. The regimes are defined by the customs code of Ukraine: reimport, reexport, temporary import (export), and "special custom zone", the regime which is used in free economical zones, goods reprocessing in the custom's territory and out of it and others;

- while planning and realization of the complexes of organizational, scientific and technical events, it is important to use methodology of non commercial partnership of authorities, business and science. This approach is called to provide the system implementation in every day practice the cutting edge technologies, new technique, making non standard, first of all financial decisions. It will assist the intensive development of the partners because of the development of their competitive abilities and getting extra profit and organizing more perspective science – technical design development, consulting maintenance investment prepositions, programmes and projects;

• in the period of changes in Ukrainian economy, the economic activity of most of its parties is impossible without the realization of the functions of cargo storage and transportation, although the organization of this function is often on the low level. It leads to the significant financial losses of the mentioned parties and the decrease of the logistics client service and structural departments of the enterprises.

As the processes connected with the activity of warehouses and different types of cargo motor transport, present the main part of cumulative expenses in the network commodity distribution, so the efficiently organized objects of logistic infrastructure (storehouses, transport), and also their integrative interaction allows to optimize the expenses of the logistic system, therefore to reduce the final cost of the product. In this part the optimization the management of warehouses and transport creates the economic effect for the managing party.

CONCLUSIONS

Considering the fact that the shortest cargo transit directions are going across Ukraine because of its geographical position and also because of developed transport net, and non-freezing ports, there are potential opportunities to increase the volume of international cargo transit.

The available transport flows which get round Ukraine in favor of more beneficial conditions of crossing the border and the execution of cargo documents. The winners are those who have active transit policy which is directed to the development of the infrastructure transit power, modernization of movable staff, the ordering of the procedure of cargo movement across the borders and the implementation of the modern technologies of cargo transit and information support.

The usage of terminal store-house complexes allows to manage the technologies of cargo transit efficiently and more effectively. As at these objects the transformation of economic flow by the changes in characteristics of the accepted and dispatched cargo according to the size, composition and the other characteristics having a goal to send the cargo further with the help of motor transport.

The effective organization of object logistics interaction of logistic structure consists of terminal storehouse complexes and motor, railway transport creates strategic benefits of three kinds - economic, servicing and technological.

It is necessary nowadays to work out the methodological base to build and to develop effective transport storehouse system in the region of distribution of cargo flows that surely allows provide the cargo movement with a minimum expenses and necessary transport - storehouse service for product consumers.

Thereby the effective organization of the logistic structure objects' interaction that consists of terminal storehouse complexes and motor, railway transport creates strategic benefits of three kinds - economic, servicing and technological.

There is a necessity to work out the methodological base of building the effective transport storehouse system in the regions of cargo flows distribution that will allow to provide the processes of the cargo movement with a minimum expenses and the necessary transport - storehouse service for product consumers.

REFERENCES

1. Touching the development of cooperation in the field of transport // *Transport*. - 2002. - № 9. - 75 p.
2. **Novikov D.S. 2004.**: Transport in international economic relations. - M., 286 p.
3. Transport communication corridors of Ukraine // *Image of Ukraine*. - 2008. - № 4. - 80 p.
4. **Nechaiev G.I., Struk V.A., Gutsalo B.P., Slobodyanyuk M.E. 2011.**: Formation and development of transport - communicational and logistics infrastructure in the East of Ukraine in the conditions of globalization: Monograph. - Kiev: Dal EUNU publishing, 288 p.
5. **Nechaiev G.I., Izotov S.V. Kver I.K, Slobodyanyuk M.E. 2011.**: Potential of the transport corridors of Ukraine, problems and solutions // *Visnyk of Dal EUNU* - № 5 (159) part 1. - p. 9-13.
6. **Grigoriy Nechaev, Sergey Izotov, Igor Kaver. 2010.**: Transit potential of Ukraine. Post – crisis strategy// *Teka Kom. Mot. I Energ. Roln. – OL PAN*, 207-214.
7. **Grigoriy Nechaev, Maxim Slobodyanyuk. 2011.**: Development of transport infrastructure in Eastern Ukraine and its interaction with the international transport corridors // *Teka Kom. Mot. I Energ. Roln. – OL PAN*, p. 95-101.
8. **Grigoriy Nechaev, Maxim Luchko, Maxim Slobodyanyuk. 2011.**: The method of biofuel mixtures production and the determination of the production place in logistic chain of the consumption corridors // *Teka Kom. Mot. I Energ. Roln. – OL PAN*, p89-95.
9. **Slobodyanyuk M.E., Izotov S.V., Gutsalo B.P. 2011.**: Conceptual basis for the creation of transport - logistical system of Ukrainian border. - *Visnyk of Dal EUNU*. - № 4 (158) part 2. - p. 229-234.
10. **Slobodyanyuk M.E, Lapaeva E.N. 2012.**: The state and economic preconditions of the Eastern Ukraine transport system development. *Visnyk of Dal EUNU* - № 4 (158) part 2. - p. 229-234.

11. **Slobodyanyuk M.E., Lapaeva E.N .2012.:** The analysis of external traffic flows of Ukraine. Visnyk of Dal EUNU - № 6 (177) part 1. - p.315-319.
12. <http://pravoved.in.ua/dictionary/210-warehouse.html>.
13. <http://ostrovok.lg.ua/avtor-job/11/vostochnaya-granica-ukrainy-praktiki-vlasti-i-zhiznenny-mir209>.
14. www.ukrstat.com.ua
15. **Simchi-Levi, David. 2008.:** Designing and managing the supply chain : concepts, strategies, and case studies / David Simchi-Levi, Philip Kaminsky. New York: McGraw-Hill Companies - 496 p.
16. Development of logistics for supplier net models / Olli-Pekka Hilmola and Eugene Korovyakovsky(editors). — Kouvola: Lappeenranta University of Technology, 2009. 203 p.
17. **Grigorak M. 2006.:** Ukrainian Logistics Association as monitorator of the logistics services market in Ukraine / Grigorak M. // Servise market of integrated transportation systems and applied problems of logistics: Digest of Scientific Works. - К.: TAU - p. 3-7.
18. **Lanoviy O.T. 2006.:** The only transportation system of Ukraine and its socio-economic importance / Lanoviy O.T. // Problems of transport. – 3 edition. - p. 3-7.
19. **Kozlyuk I.A. 2002.:** Transport strategy as a tool for economic development in Ukraine / Kozlyuk I. A. // Problems of transport. - 2006. -3 edition. - p. 27-35.
20. **Zerkalov D.V.** Transport of Ukraine / Zerkalov D.V. - К.: Osnova – 416 p.
21. **Bielyi O. V. 2004.:**Transport as a factor of global competitiveness / Bielyi O. V. // Transport and Economic Growth: Digest of Scientific Works. - St. Petersburg - p. 33-35.

РАЗВИТИЕ ТРАНЗИТНОГО И СОЦИАЛЬНО – ЭКОНОМИЧЕСКОГО ПОТЕНЦИАЛА ВОСТОЧНОЙ УКРАИНЫ НА ПРИМЕРЕ ЛУГАНСКОЙ ОБЛАСТИ

Максим Слободянюк, Елена Лапаева

Аннотация. В данной статье рассматриваются вопросы создания Еврорегиона на примере Луганской области, Украины. Международное, межрегиональное сотрудничество является важной составляющей в развитии внешнеэкономических связей Украины. Реформирование социально – экономических отношений в Украине, структурная перестройка всех механизмов жизнедеятельности общества создает предпосылки для ускорения территориального развития каждого из регионов прежде всего за счет выгоды географического расположения и технологической доступности транспортно – логистических услуг.

Ключевые слова: транспортные потоки, транзит, складские системы, транзитный потенциал, транспортно – логистическая сфера.