

## **INVESTMENT CONSTITUENT OF CO-OPERATION OF TRANSPORT ENTERPRISES IN NETWORK STRUCTURES**

**Annotation.** *The article estimates the modern state and prospects of development of enterprises which can interact within a transport network; investigates existent and potential sources of investing facilities into the renovation of their material and technical basis and implementation of infrastructural projects.*

**Keywords:** *investments, credit, transport enterprises, co-operation, network structures, clusters.*

**Formulation of the problem in general.** *An important factor of economic growth and competitive growth of the country and its regions is the development of network structures in transport, especially in areas of international streams of traffic. Modernization and structural adjustment of the transport industry of Ukraine requires ensuring conditions for increasing investment activity of transport enterprises, and concentration of investment resources to upgrade their material and technical basis, introduce new technologies, implement infrastructure projects.*

*Formation of multi-profile and multifunctional network transport business associations as part of an integrated transport network generates necessity for implementation of innovative technologies as well as unconventional approaches to the sources of financial resources accumulation.*

**Analysis of recent research and publications.** *The issue of procurement of investments for enterprises of various modes of transport, evaluation of efficiency of investments in transport sector, investment risk management has been studied in the works of O.O. Bakaiev, M.I. Danko, O.H. Deineka, V.L. Dikan, O.M. Zharova, V.M. Zahorulko, V.P. Ilchuk, V.H. Koba, O.M. Kryvoruchko, Yu.F. Kulaiev, V.V. Matveiev, L.O. Pozdniakova, Ye.M.Sych, V.H. Shynkarenko, V.I. Shchelkunov, H.M. Yun and others.*

*However, the tendency of the increasing role of network structures in transport and their investment support requires further research.*

**Formulation of the aims of the Article.** *The aim of the article is to study existing and potential sources of investment into the creation, operation and development of network structures in transport.*

**Summary of the main material.** *The need for creation of transport network structures is specified in the adopted strategic documents containing information on further development of economic cooperation between Ukraine and the countries of near and far abroad and their transport service.*

*The Agreement on CIS free trade area as of 18.10.2011 promotes trade and economic relations and preservation of traditional markets in the former Soviet Union area. The development and strengthening of cooperation of Ukraine, especially with the countries of the Customs Union – Russia, Belarus and Kazakhstan – will influence further increase of mutual commercial exchange and abolition of existing restrictions in trade [1].*

*The revival of trade relations between Ukraine and the EU will be due to the creation of a free trade area, which will imply liberalization of trade in goods and services by eliminating*

*non-tariff barriers, increased access of European exporters to the national market and increased access of Ukrainian exporters to European market. [2]*

*Ensuring efficient movement of freight and passenger traffic in European and Eurasian areas is possible through transition of transport enterprises to application of network approaches, especially in the development of terminal and logistics networks.*

*An example of slowdown of these processes is the formation by Russia of a large-scale terminal and logistics center near the Ukrainian border, on the basis of which the container flows from the EU to Russia, Asia, the Caucasus and in the opposite direction to the countries of European Community will be concentrated [3].*

*In order to ensure the availability and improve the quality of transport services, the Transport Strategy of Ukraine till 2020 offered to provide organizational and legal support for consolidation of motor carriers, to develop a network of complex motor transport enterprises, to coordinate the operation of various modes of transport; to create a business entity which will incorporate rail carriers, enterprises, institutions and organizations of railway transport, which will ensure its activity as a single industrial and technological complex, etc.*

*The mentioned Strategy points to the need for creation of favourable conditions for attracting investments into the transport sector, particularly, foreign investments, for upgrade and modernization of the material and technical basis, development of public-private partnership, attracting investments on the terms of concession, improving the leasing mechanism to ensure renewal of transport vehicles [4].*

*The creation of functionally interrelated modern network business associations of transport based on co-operation of enterprises of various modes of transport, transport mechanical engineering, transport infrastructure, research establishments, financial institutions and other economic entities will help accelerate the integration processes of entrance to the international transport market.*

*Operation and development of transport network structures requires a significant amount of investment funds, which requires creation of incentives by increasing the interest of investors in investing.*

*In modern conditions, the financing sources for structural reforms in transport are the funds of international financial institutions and organizations, state and local budgets, loans of national banking institutions and other financing instruments.*

*The amount of private funds that are invested in fixed assets and infrastructure projects for transport is quite small because of their long period of recoupage, high degree of financial risk, lack of incentives for attracting investments, particularly in those entities that are not subject to privatization. Therefore, most carriers invest their own funds to support cargo transportation and especially passenger transportation sectors, while the amount of these funds is insufficient to solve the existing problems.*

*In accordance with Economic Reform Program of Ukraine for 2010 - 2014 in the area of "Transport infrastructure development", the railroad industry was set a task to reduce the level of depreciation of fixed assets of rail transport up to 65% by the end of 2014 [5].*

*In the context of limited own financial resources of transport enterprises, an example of solving the problems of financing the purchase of rolling stock and implementation of infrastructure projects is the issue of corporate bonds. For example, "Ukrzaliznytsia" has been issuing such securities since 2009. Following the results in 2011, the volume of bonds issue of six rail carriers amounted to 1.8 billion UAH, while the same for 10 months in 2012 amounted to 1.08 billion UAH [6].*

First of all, the renewal of fixed transport assets requires significant volume of investments, without which Ukraine cannot hope to achieve its declared social and economic goals.

The amount of funds invested in activities of various modes of transport is shown in Table 1 [7].

**Table 1.**

**Capital investments according to the modes of transport, million UAH.**

Mode of transport	Years				
	2007	2008	2009	2010	2011
Above-ground transport, including	11,386.0	13,366.3	6,040.8	10,485.8	12,821.5
railway transport	6,683.5	8,549.3	3,597.3	5,734.8	6,458.5
other above-ground transport	3,442.7	3,831.3	1,651.8	3,055.1	4,717.8
pipe-line transport	1,259.8	8,985.7	791.7	1,695.9	1,645.2
Water transport, including	52.3	56.8	34.8	52.4	103.7
sea transport	14.6	34.3	18.3	14.6	21.7
river transport	37.7	22.5	16.5	37.8	82.0
Air transport	305.0	160.1	123.9	105.5	307.2

As it can be seen from the data presented in the table, the volume of investments in the activities of various transport modes in 2011 compared with the previous year tends to increase, except for pipeline transport where there is a slight decrease in investments by 50.7 million UAH or by 2.9%.

The following regions have the largest volume of investments in fixed assets by type of economic activity "Transport and communication" among the regions of Ukraine, in million UAH: Lviv – 4,340.3, Kyiv – 4,025.8; Dnipropetrovsk – 3,523.1; Donetsk – 3,513.4, Kharkiv – 3,108.6, Odesa – 2,455.9, Poltava – 2,278.7 and Kyiv City – 7,158.8. The following regions have the smallest volume of investments in fixed assets by type of economic activity "Transport and communication" among the regions of Ukraine: Chernivtsi - 86.7 million UAH and Sevastopol - 67.0 million UAH. This being said, the degree of depreciation of fixed assets of transport enterprises and communication is 94.4% [7].

Without investments into the replacement of fixed assets of transport enterprises, especially their transport vehicles and rolling stock, it is not possible to achieve competitiveness in the transport market and meet customer requirements to quality, range, safety, and environmental friendliness of these services.

Therefore, the carrier enterprises within transport network (TN) must closely cooperate with the transport enterprises mechanical engineering.

The Program on forced economic development for 2013-2014 identified the tasks to ensure sustainable operation and development of aircraft industry, development of competitive motor industry and shipbuilding industry. The Program also makes provision for increase of domestic production volume of motor-cars to 121 thousand in 2014; renewal of garage of passenger buses, namely the acquisition of 7,000 units of buses with medium, large and extra-large passenger capacity during 2013 - 2014 and the railway rolling stock – 12,800 freight cars during the above period and 500 passenger cars in 2014 [2].

*Improving the competitiveness and export orientation of transport enterprises mechanical engineering primarily requires their innovative upgrading.*

*In 2010, only 81 of 282 transport enterprises mechanical engineering and equipment manufacturing were engaged in innovative activities. Despite the decrease in number of these enterprises to 274 in 2011, the number of enterprises engaged in innovative activities, has increased to 84.*

*At the same time, the number of enterprises that sold innovative products, was 65 and 70 enterprises respectively; including the products that were new to the market, produced by 32 enterprises in 2010 and 2011, as well as the products which were new only for the enterprise, produced by 45 and 50 enterprises respectively by the years in the period under review [8].*

*Statistical analysis of data for 2009-2011 shows that the share of transport enterprises mechanical engineering and equipment manufacturing that have been implementing innovative products is 29.9 %, the share of those that have been implementing innovative processes is 21.5%, the share of those that have been implementing organizational innovations is 10.6%, and the share of those that have been implementing marketing innovations is 9.1% [9, 10].*

*Stimulating domestic demand for the products of transport enterprises mechanical engineering requires forced development of leasing facilities for purchase of rolling stock. Following the results in 2011, it is the transport sector which is the largest consumer of leasing services; the value of signed contracts amounted to 74,434.6 million UAH, or 61.5% of their total amount [11], among which the largest portion falls within the leasing of motor transport, but, unfortunately, that of foreign manufacturers.*

*To change the situation for the better, the mechanisms for protection of domestic transport mechanical engineering market should be introduced.*

*Research of statistical data indicates a drop in production in the automotive industry. Thus, in 2012 compared with 2011 the volume of production of motor-cars fell by 28.5%, the volume of production of trucks fell by 7.1%, the volume of production of buses fell by 14.4%, and the volume of production of trailers and semi-trailers fell by 15.9%. Provisions were made for the introduction of a special duty on imports of motor-cars in Ukraine to protect domestic car manufacturers [9].*

*The obstacle to the development of transport network structures is the poor quality of national roads, 90% of which are worn to the critical point and require capital repairs. During the period of 2008-2012 58.4 billion UAH has been allocated for the repair of public roads, while in 2013 the need of road sector in the financing is more than 36 billion UAH [12].*

*The railway sector, fixed assets of which are depreciated by more than 80%, involves considerable expenditure as well. According to "Ukrzaliznytsia", there is a need to spend 65 billion UAH for the purchase of 111 thousand freight cars and about 68 billion UAH for the purchase of 2 thousand freight locomotives by 2020. Insufficient amount of funds allocated from the state budget for renewal of fleet of passenger cars, can result in a significant decline in passenger traffic in the future. The same applies to electric passenger locomotives. Overall, the annual demand of railway sector in capital investments is over 18 billion UAH [6].*

*The most export-oriented products are those of the aircraft industry of Ukraine, which experiences certain problems with sales of products in the domestic market due to the existence of low effective demand. The renewal of aircraft fleet by commissioning the aircrafts of domestic production, elimination of customs barriers on imports of aircrafts and aviation equipment of foreign manufacture will help stimulate demand for aviation equipment and*

development of aircraft engineering enterprises, which increased the volume of production of their major types of products to 3.41 billion UAH or by 19.91% following the operating results in 2011. At the same time, the volume of sold products reached 9.97 billion UAH, which is 30.4% more than that in 2010 [2].

Despite the growth of performance indicators of aircraft engineering enterprises, their further development requires state financing backing and provision of various kinds of preferences, especially in the creation of joint aircraft engineering enterprises.

Article 3 of the Law of Ukraine "On the development of aircraft industry" prescribes tax privileges for business entities engaged in aircraft manufacturing till January 1, 2016; Articles 3 – 1 for the period from January 1, 2013 to January 1, 2017 prescribes the introduction of state financing backing for sales of aircrafts of domestic production by easing of credits through the funds allocated from the state budget, while the use of these funds is governed by the Cabinet of Ministers of Ukraine [13].

The fact that the shipbuilding companies lost their positions in the domestic and international market impelled the state to create the conditions for restoration of competitiveness of products of domestic shipbuilding industry. The Law of Ukraine "On economic experiment of the state support of shipbuilding industry", along with the main areas of activity, proclaims the creation of favourable conditions for attracting domestic and foreign investments in order to develop the shipbuilding industry of Ukraine; facilitate the cooperation of legal entities and individuals involved in the fields of fundamental and applied science, manufacturing and other sectors of economy, with business entities engaged in shipbuilding industry etc. In order to implement the above-mentioned areas of activity, it is planned to provide state guarantees for foreign loans, ease the credits through partial compensation of credit rates of commercial banks to the level of the discount rate of the National Bank of Ukraine, provide tax incentives and establish special tax environments according to the procedure established by the Tax Code of Ukraine [14].

It is possible to take the competitive positions in national and international transport market through the forced development of cluster approaches to the interaction of transport sector and related sectors. Particular attention in this area of activity is paid to the creation and operation of air, motor, rail, marine, transportation and logistics, transport and tourism clusters, as well as clusters of transport mechanical engineering in Ukraine. Cluster formations contribute to the increase in cargo and passenger turnover, effective use of transit potential of the state and its regions, transport infrastructure development, growth of Gross Domestic Product and Gross Regional Product of territories in which they are created.

**Conclusions.** The forced establishment of network structures in transport requires investing a significant amount of investment resources which are very difficult to involve without comprehensive program of state support and stimulation. In developing the concepts of interaction of TN entities, in addition to developing public-private partnership, leasing, investing on the terms of concession, issue of corporate securities, one should also attract, on the terms of competitive financing, the resources of enterprises of other sectors of economy which are interested in improving quality of transport services and reducing transport component in the cost of goods and services, into the scheme of movement of investment flows.

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**O.M. Parubets**

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