STATUS, PROBLEMS AND CHALLENGES OF RUSSIAN TRANSPORT AND LOGISTICS COMPLEX DEVELOPMENT

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The article deals with status, main tasks and trends for increasing the efficiency of transport and logistics complex in Russia within raising international integration and global competition for consumer of transportation and logistics services.

Keywords: logistic approach, transport and logistics complex (TLCx), transport and logistics centers (TLC), forecasts of production and logistics processes, logistics technology, prospects of transportation and logistics services in Russia.

According to the World Bank's survey conducted in 150 countries, Russia takes 99th place in the world on level and development rate of the logistics sector (comparative analysis is based on Logistics Performance Index [1], which, is composed of a number of factors). It includes Russian's 83rd place in terms of personnel logistics competence (this highest rating obtained by us is an obvious example of situation when the staff professionalism defines everything), 87th- in terms of delivery, 93rd- for infrastructure status, 97th - for International Transport operations, 131st- in terms of the cost of domestic shipping and 136th- for the work of custom offices.

This situation creates anxiety and makes us looking for ways to correct current tendencies. Especially because the total value of the

Russian market of transportation and logistics services can increase approximately three times from 48.5 billion to 150 billion U.S. dollars until 2015 according to experts' evaluation. Meanwhile, the average annual rate of this market growth (considering inflation) will come to about 15% [2].

The global financial crisis has adversely affected the Russian logistic sector. In 2009 the volume of the logistics services market decreased by 20.9% and amounted to 36 billion Euros. To retain customers, Russian companies started to reduce prices dramatically. At the same time the demand for warehouse space and the amount of private cargo transport decreased by more than 30% [3].

However, as experts note, the market for logistics services in Russia is potentially very profitable for companies working in the sector, but the logistics infrastructure of the country is sorely in need of investments to meet European and world standards. Moreover, economic instability, bureaucratic delays and management style differences remain the significant barriers for entrance into the market.

In a new study "The Russian market of logistics services" the global consulting company «Frost & Sullivan» claims that 2010 is more successful for the entire logistics industry and predicts the market stabilization with growth rates of 6-9%. Specialists suppose that the pre-crisis market volume will restore by 2012-2013 years.

«Frost & Sullivan» analyst Dominique Bushta (Dominik Buszta) notes: «Until 2009 the market had being increasing annually by more than 10%, but the financial crisis heavily affected both market participants and consumers. Logistics industry in Russia lags far behind Europe and the United States because the Russian transportation resources and infrastructure remain underdeveloped. Nevertheless, the market looks very promising for investors due to development of contract logistics, increasing turnover in the segment of daily demand (convenience) consumer goods, expansion of storage facilities and the introduction of modern IT-solutions» [4].

According to D. Bushta in the first half of 2010 the situation in the logistics market has stabilized and today the demand is growing due to improved operating activities of the companies using the services of logistics firms, as well as the overall recovery of the Russian economy.

Russia's growing storage sector, in his opinion, will contribute mainly to development of the convenience goods, chemical and pharmaceutical industries. According to forecasts this year Russia's warehouse sector will remain stable since most projects are "frozen" until 2011, and therefore the market situation is unlikely to improve until the end of the year [5].

However as the «Frost & Sullivan» experts note contract logistics is not very popular in Russia, though it has tremendous growth prospects over the next 3-5 years. This sector is still not particularly popular among the Russian companies and providers of logistics services. Therefore, only the large mainly foreign companies can offer a wide range of logistics services to their clients, again mainly foreign customers [6].

According to preliminary data of the State Statistics Service in the first half of 2010 the turnover of the Russian ruble market increased by 17% in comparison with the corresponding period of 2009. However, until the end of the year the growth rates are unlikely to be maintained. Obviously, the recovery of the global and domestic economy is very difficult and will require long time.

Increased revenue in the segment of cargo transportation in the first half of this year was associated with relative freight turnover growth of transport companies in the first half of 2009, when the most severe reduction of cargo was recorded as well as fare growth (by 9,4% in December last year for railway transport). In the second half of 2010 the effect of "growth from zero" will be largely exhausted. In turn, the relatively low growth rates and industrial production, stagnancy in such freight traffic sector as construction as well as the unstable situation in foreign markets due to slow demand recovery in developed countries will significantly impede to increased freight flow.

In the segment of storage services significant improvement of the situation is not expected in 2010. According to experts, the growth in transactions in the first half of the year is due not so much to the economic recovery but as the realization of pent-up demand due to lower rental rates. Positive changes in the market have not yet acquired a sustainable trend. As per RBC Consulting department information, growth of transport and logistics services by the end 2010 will be at least 12%, while turnover in the segments of the freight forwarding and warehousing services will not exceed 5% [7].

According to data specified in the «The Russian market of transportation and logistics services in 2009-2010 and forecast up to 2013» review, during crisis in 2009 total revenue of transport and logistics companies in rubles decreased by 8% and market turnover fall in U.S. dollars was even more dramatic - by 28% in comparison with 2008. Relatively favorable situation was observed in companies engaged in transportation of crude oil and petroleum products (export traffic). That segment demonstrated a positive trend even in crisis (for example, private operators «Transoil» and «BaltTransService»). So, despite of fares and prices growth, for example at the largest Russian carrier – «Russian Railways», the amount of revenue from freight traffic (according to Russian accounting standards) fell by 7,5% and amounted to 783.4 billion rubles in comparison with 2008.

Major stevedore companies felt themselves rather confident in 2009 as well. Thus, particularly due to increasing volumes of cargo handling the transport group «Novorossiysk Commercial Sea Port» increased its turnover by 32%. However, the crisis dramatically affected companies specializing in container transport and related lease agreements (e.g., transport groups «FESCO», « DVTG/Far Eastern Transport Group», «Eurosib», «SPb-Transportation Systems»). Many of the companies that had received very negative dynamics of financial performance even decided not to publish the results for 2009 [8].

Among Western logistics operators the French «FM Logistic» showed good results which ruble revenues grew by 26% despite the crisis. Nevertheless in dollar equivalent in 2009 the turnover of the majority of domestic and foreign companies operating in the Russian transport and logistics market decreased in comparison with 2008 as a result of the devaluation of ruble [9].

In our opinion it is necessary to solve problems mentioned below and thus improve the efficiency of its operation to male grounds for further development of transport and logistics complex (TLCx) in Russia.

1. The most important thing is so-called logistic approach to resource provision to the whole national transport system, particularly in establishment and operability of railway, road and pipeline networks, as well as air transport, seagoing and river vessels and respective infrastructures.

Objective necessity for the logistics organization of resource provision of the whole transportation sector can be attributed to the following reasons[10].

Firstly, an integrated logistics tools synthesizing the methodology of general systems theory, computer science, systems engineering, cybernetics, marketing, management and other disciplines allow to solve the problem of movement of materials and information flow from their places of origin to the place of consumption.

Secondly, the logistics creates the conditions for removal of the most acute conflicts between different segments and activities in the transport sector as it implies a potentially high harmonization (matching) of the economic interests of all participants in supply chains, complexes and systems.

Thirdly, logistics has a powerful resource-saving potential, because of systematic approach to organization of not only material but also of other economic and information flows during the operation, construction, reconstruction, repair and maintenance of transport networks.

2. For effective planning and coordination of manufacturing and logistics processes across the country and sectors of the national economy the accurate forecasts are necessary (e.g. forecasts of cargo base, developing multi-modal transport network, investments, industrial production, directions and rates of the scientific and technological progress and innovations, etc.). These forecasts give opportunity to predict in advance, to plan and allocate resources in order to meet new challenges instead of implementing expensive changes in capacities boot (redistribution) process and use of reserves.

Prediction improves the efficiency of logistics since it creates an opportunity for sharing information and resources, not reserves. Perspective techniques and forecast tools today are the methods of stochastic, dynamic and multidimensional prediction based on the identification of relationship between independent and dependent variables as well as economic and mathematical, statistical modeling and simulation, etc. [11]

3. It is necessary to solve and overcome major challenges and constraints that hamper the development of logistics itself and logistics technologies in Russia, the main ones in our opinion are the following.

- *First issue*. Lack of transport infrastructure, which is a prerequisite for economic growth and investment activity of the national economy. Annual Russian economy losses from bad state of the roads and insufficient level of its development exceed 1.8 trillion rubles or more than 2% of GDP - according to experts it exceeds the government defense spending.

Poor road infrastructure leads to the fact that the transport component in the cost of production in Russia has reached 20% or more (mostly due to the fact that in Russian exports structure the products of extractive industries have the lion's share and the value of transport costs here is about 50-80% of the commodities prices), whereas in developed countries this figure does not exceed 8% (and for the high-tech products is less than 1-4%) [12].

In Europe the average rate of commodities movement is 1000 km per day while in Russia it is no more than 300 km per day. Finally, the cost of road transportation in Russia is 1.5 times higher than in EU countries and the relative fuel consumption is 30% higher than there [13].

It is obvious that the current state of the Russian transport system severely inhibits the growth of the national economy. Realizing this the Government intends to significantly increase funding for infrastructure projects. According to the new federal target program for 2010-2015 they are going to allocate 13 trillion rubles (4.7 trillion rubles of which are from the federal budget) to the domestic transportation system development. While in 2008 there 300 billion rubles of federal funds were allocated for infrastructure development transport investments will grow up to 584 billion rubles in 2010 and up to 770 billion rubles in 2011 [14].

- *Second issue*. The second problem is irrational development of goods and services distribution systems (the absence of a deliberate strategy of distribution systems in industry and commerce, lack of organized commodity markets at large and medium wholesale), inadequate and unstable rates of modern packaging industry development, etc.

Despite the fact that the turnover of the packaging market in Russia in 2008 reached 12 billion U.S. dollars and according to the World Packaging Organization (WPO) the Russian packaging market has even entered the top ten largest ones in the world, there are some acute problems in this sector of economy [15].

In 2007 the Russian packaging industry for first time faced with difficulties that today can lead to stagnation in the industry. Firstly, some enterprises still have low profitability, and secondly, many of the investment programs were suspended or just collapsed. In addition, the sector's infrastructure has reduced its output, but activity of the branch organizations and enterprises including NCPack subcommittee of the Chamber of Commerce and Industry of the Russian Federation in development of the packaging industry, as well as the PAKMASH association requires further consolidation of opportunities and efforts of above mentioned actors.

Experts suppose that in 2010 payments delay tendency which started in 2009 will continue its negative impact on profitability of packaging materials production. The production of different types of packaging will be developed unevenly or actually decline in production of certain types of packaging may be observed with efforts of raw material industries to increase value of their products while increasing custom taxes for importing resources.

Moreover, it is expected that the influence of raw materials and packaging suppliers from Asia (China and South Korea) will be increased. According to the most pessimistic forecasts, in 2010 the turnover of the packaging market in Russia will decline by 10-15% in comparison with 2008 [16].

- *Third issue.* It includes extremely low level of introducing modern electronic communications systems, electronic networks, communication and telecommunication systems, distribution and transport-logistics centers, informational and computering as well as organizational and legal logistics activities support, the low level of industrial-technical base of storage facilities, lack of modern production processing equipment, low level of mechanization and automation of warehouse operations. Distribution system is characterized by the slow advance of goods from producers to consumers, the high level of unmet demand, unreliable and inadequate quality of service to consumers and insufficient number of freight terminals, as well as their low technical and technological level. Moreover, the issue includes slow pace of modern logistics technologies innovation in transportation and cargo handling such as intermodal, multimodal, and terminal systems, "door-to-door" transportation technology, advanced telecommunications systems for freight tracking, etc.

Today it is not surprise that in recent years logistics companies have more often focused the attention of the economic community. And indeed, their role in the economic life of society is steadily increasing. For example, in 2005 the total turnover of the European market of logistics services counted for more than 600 billion euros. Today it is estimated appr. 800-850 billion euros. Approximately 30% of logistics functions in all sectors of the economy are handed over to logistics companies every year. Demand for logistics operators is formed by industry and commerce that spend about 120-140 million euros annually for the logistics in Europe [17].

Unfortunately the Russian market for logistics services is not highly developed. Experts estimate its potential as 120 billion U.S. dollars, while the share of cargo forwarding and transportation for all modes of transport is 55%, warehouse services sector figure is 13% and integration and supply chain management sector share is 32% [18].

Experts believe that logistics market will be shared by Western companies soon for whom Russia is considered to be the area of interest.

International logistics companies from France, Sweden, Germany and other countries operate here. Considering this market development the national operators will need to expand the number of services and improve their quality to meet growing customer requirements to retain their positions. It is possible that some domestic companies will join efforts with international operators.

The Russian logistics market has already had powerful international logistics companies such as «P&O Trans European», «FM Logistic», «Kuhne& Nagel», «Welz», «Schenker RUSSO», «Panalpina», etc. There is great interest of major international logistics companies in the Russian warehousing infrastructure driven by the requirements of their international clients.

Furthermore, there is an actively developing process of logistics centers and hubs formation in today's Russia, not only within individual modes of transport but also on cross-sectoral basis, i.e. air-to-rail, rail-to-marine, aviation and railway transport, etc.

- *Forth issue.* Inefficiency of the Russian customs. Speaking about this critical issue to improve the efficiency of the cargo delivering system it is necessary to radically modify the customs operations, especially at checkpoints. In particular, valuable goods four days delay at the port costs as much as cargo transshipping. The existing system of customs clearance reduces the competitiveness of Russian ports for transshipment of high fare container cargo and leads to tangible losses for the operators and the state.

Every extra day of downtime adds to the cost of goods up to 0.5%. Today, the average time for cargo spending on berths in Russia is 35 days, but in the world this figure is just three days. Therefore, many Russian goods are being transported to foreign ports. An impressive example is that according to a survey conducted by DHL the goods transportation cost in Russia is 4 times higher than in China.

- *Fifth issue* is the absence of modern means of conveyance that meet world standards almost in all types of transportation as well as high degree of wear and tear of rolling stock equipment.

Conclusions

The conclusion that incurs from the examined tasks and approaches for enhancement of the Russian TLCx development is the following.

1. Today there is an objective demand for the logistics organization of resource providing to the national transport sector, i.e. necessity of logistical approach to resource provision of national transport system.
2. Meeting the challenges of logistics approach is impossible without transport prediction based on a thorough and substantive analysis of the transport industry and related spheres and sectors of national economy.
3. Existing difficulties and problems of the modern state of TLCx in Russia are related with objective and subjective reasons of the previous and the current stage of national development, and can be subdivided into factors of economic, financial, industrial, technological, geographical, political and mental nature.
4. The main directions of national TLCx future development are related with:
   - the improvement of program-oriented management of the complex,
   - development of its logistics and infrastructure,
   - personnel training and qualification system enhancement,
   - overall development and search of the new forms of international cooperation,
   - institutional reforms within the country aimed at the harmonization of "state - society - business" relations.

In our opinion, the implementation of the above-mentioned priority ways of TLCx formation and development in Russia, the harmonization of science-based strategic partnership between government, business and society will allow to create conditions for more efficient and competitive integration of Russian economy to the process of increasing consolidation and globalization in transport and logistics services.

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