PROMISING TRANSPORT CORRIDORS BETWEEN CHINA – RUSSIA – EUROPE

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ABSTRACT

Russia turns its gaze increasingly towards Asia and, in particular, aims to find new opportunities in China, which concordant foreign policy is aimed at coupling of potential of Eurasian Economic Union and ambitious project «Silk Road Economic Belt». It is not just a revival of traditional trade routes, but a real infrastructure revolution. Ways of implementing promising potential include also creation of railway lines and trans-shipment centers on the route Shanghai–Sabetta–Kyzyl–Shanghai using the Northern Sea Route and the multimodal port Sabetta in Yamal.

Keywords: transport corridor, New Silk Road, economic belt, infrastructure, Northern latitudinal way, Yamal, multimodal port, Sabetta, development strategy.

Background. *In November 2008, the Federal Government approved a basic document concerning state strategic planning and transport and economic development of our country – the Transport Strategy until 2030 [1]. Russia's integration into the global transport space is claimed as one of the main objectives, which permeates the use of its transit potential.*

The geographical position of Russia has always been unique: connecting Europe and Asia, Russia is the shortest corridor between China and European countries. But their economics today do not actually use our capacity. For example, over 95% of freight traffic between China, South-East Asia and Europe goes by ship through the Suez Canal (see. Pic. 1). Egypt's economy annually receives more than $5 billion of pilotage through its territory, which is 2% of its GDP [2].

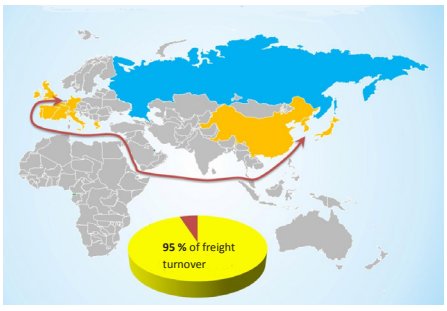
Over the past decade freight traffic from Asia to Europe has doubled, and the rate of transit of goods through the territory of our country has remained virtually at the same level [3, 4]. The domestic transport and the Russian economy were out of intensive growth of trade turnover between the economic centers of Europe and Asia.

Today, Russia is increasingly focusing on Asia, looking for new opportunities in China. The talks of Vladimir Putin and Chinese Chairman Xi Jinping on May 8 in Moscow, demonstrated most explicitly a renovated vector of foreign policy of our country [5]. They have demonstrated that Russia and China assess similarly prospects and plans for development in a multipolar world. During the negotiations a number of decisions was adopted on the coupling of potential of the Eurasian Economic Union and recreated the Silk Road Project, which is promoted by China [6].

Objective. *The objective of the authors is to investigate promising transport corridors on the direction China-Russia.*

Methods. *The authors use general scientific methods, simulation, evaluation approach.*

Results. *Xi Jinping previously stated an idea about the «economic belt of the Silk Road as a new form of deepening cooperation between China, Central Asia and Russia». It was in September 2013 in Astana, at the University n.a. Nazarbaev [6]. Behind the historic Silk Road term is a new approach – it is not just a revival of traditional trade routes. In fact, we are talking about present infrastructure revolution and creation of new cooperation opportunities in the vast area stretching from the Atlantic to the Pacific Ocean [7, 8].*



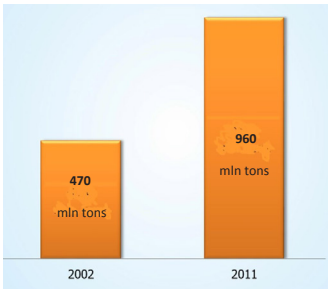
Pic. 1. The Suez Canal – the main Eurasian transport artery.

Silk Road economic belt offers ways to make changes in energetics and industry and especially transport infrastructure: construction of a new railway and highway, which will be one of the elements of design (Pic. 3). The same function will be performed by a high-speed railway line Moscow-Kazan, which will be the first step in the formation of large-scale and long-term economic belt. Investment memorandum in March 2014 on this 770-kilometer highway, declared as a section of a transit corridor Europe-Russia-China, stated the investment of about $20 million for the first phase for track and engineering infrastructure, rolling stock and passenger terminals [9]. China intends also to go ahead and invest necessary funds in this segment, and in the following sections of the transit corridor. The total volume of investments in the economic belt can reach more than $40 billion [10].

While discussing options for tracing new transport corridors parties shall endeavor to comply with common interests. On the Forum of media cooperation between China and Russia in Beijing in June 2014, foreign minister Sergei Lavrov emphasized «the importance of the commitment of Chinese partners to respect Russia's interests» [14]. From 2002 to 2011, the turnover of goods between China, Europe and the Asia-Pacific region has increased more than two times, from 470 to 960 million tons per year (Pic. 2) [11]. It is therefore necessary to consider the formation of new areas of economic activity in partner countries and especially in Russia, make the most of not only existing transport corridors, but also of those which are under construction or planned for construction in the coming years.

To understand possible options for tracing, it is necessary to know how and which goods will transport the blood in the arteries of the Silk Road. As for macroeconomic aspect there are three centers of formation of goods. The first – «Ore», a center of formation and consumption of goods in the amount of 150 million tons a year in which the main generators are metallurgical enterprises of the Urals. The second – «West-Siberian», the center of circulation of goods in the same volume of 150 million tons, this generates fuel and energy complex of Yugra and Yamal. And the third – «Central European», a center of formation and consumption of 100 million tons of cargo a year.

The current trade turnover between China and the countries of Southeast Asia, the Russian Federation and



Pic.2. Freight turnover between China, countries of Southeast Asia and Europe in 2002-2011.

CIS countries is less than 100 million tons of cargo per year [11]. In 2030, taking into account transit flows it can really reach 400 million tons (Pic. 4). Russia in the new circumstances should become a single center of formation and consumption of goods moving in the direction of China-Asian Center, which will be a single center for China and Southeast Asia.

The traditional existing route of movement of main cargo from China to Russia through Europe and back, uses sea and to a lesser extent rail transport with centers of handling and processing of goods in Shanghai, and then – in Rotterdam, then in Ust-Luga, afterwards in Vladivostok and again in Shanghai. The average length of the route is 16350 km with the mean transit time of goods of 52 days and an average travel speed of 13,1 km / h (Pic. 5).

The big economic, transport and temporary effect will be provided by the appearance of a railway line Hami (China) – Kyzyl (Tyva) – Kuragino (Krasnoyarsk region). The Russian government approved the project of construction of a railway with the length of 412 kilometers, which will link Tyva with Krasnoyarsk region and the Russian railway network [12]. The emergence of the railway link with China at Hami station in the south near the border with Mongolia in the framework of an existing project is an example of the «respect of Russian interests», the need for which was stressed by the minister Lavrov. It is important that the same spirit of dialogue and on account of the views of the partners are demonstrated by Chinese counterparts.

The traditional route grows in the section Kyzyl–Shanghai, which will allow redirecting part of the cargo from the traditional route to the newly created. The volume of cargo on the optimized route will be 12% of the total turnover. The average length of the route is 16200 km, with travel time is 48 days and average motion speed is 14,1 km / h. The economic effect of the emergence of additional transport options is around $900 million per year with growth of transit cargo by 8%. At the same time it should be noted that the option will get up to the project level also coking coal production at the biggest production field Elegest, which is located in the area of the railway Kyzyl–Kuragino.

Pic.3. Silk Road economic belt.

The bigger transport and economic effect will be provided by the appearance of the railway line «Northern latitudinal way» with the length of 707 km through Salekhard and Nadym [13]. Together with the section Kyzyl–Shanghai cargo will go through the centers of transshipment and processing in Shanghai, Rotterdam, Ust-Luga, Kyzyl. The volume of transported goods on the optimized route will be 20% of the total turnover. The average length of the route is 16200 km, travel time – 45 days, average speed – 15 km / h.

The effect is based on increasing the efficiency of the rail traffic on the problem railway section Tyumen–Vologda, which is possible thanks to a substantial redistribution of the flows through a newly emerged railway corridor Tyumen– Nadym–Salekhard–Yaroslavl, which will include the Northern latitudinal way with the section Korotchaevo–Nadym–Salekhard–Obskaya. This site will link western and eastern parts of Yamal-Nenets Autonomous District. The savings are expected to be approximately $2,7 billion per year with an increase in the transit of goods by 15%. The project will provide a direct access of importers to oil and gas resources in Western Siberia and gas chemical production of enterprises of Tyumen region.

The maximum effect can be achieved in the implementation of all previous versions of transport development, along with the construction project of the railway line connecting the current line Obskaya–Bovanenkovo to the port of Sabetta. Loads are distributed partly to traditional and optimized routes with processing centers in Shanghai, Rotterdam, Ust-Luga, Kyzyl. The new centers will appear on the route using the Northern Sea Route and the multimodal port Sabetta. The volume of cargo at the same time will increase to 25% of the total turnover. The average length of the route is 10200 km and the travel time of 30 days and an average speed of 14,2 km / h (Pic. 5).

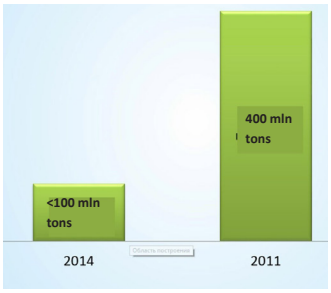
The economic impact is based on the optimized route Shanghai–Rotterdam–Ust-Luga –Kyzyl– Shanghai with the redistribution of 12% of the total traffic to it, and the effect that appeared on the redistribution of goods and resources of transit countries to the route Shanghai – Sabetta – Kyzyl – Shanghai that will total about $12 billion annually and provide 40 per cent reduction in delivery times of goods in comparison with the conventional one[1]. The new route will accelerate the development of mining and processing of hydrocarbons in Yamal peninsula by companies such as «Gazprom», «Rosneft» and «Sibur» and will give an impetus to the center of the liquefied natural gas produced with the participation of Chinese partners.

Conclusions. *The logic of implementation of these infrastructure projects corresponds to agreements of the leaders of the partners and the goals of created Eurasian development institutions – Asian Bank of infrastructure investments, BRICS Development Bank, Silk Road Foundation. All this means that partner countries will have to bear a huge responsibility in working through projects that receive funding from these sources.*

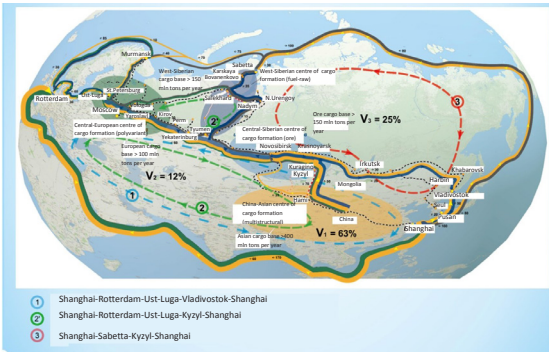
Of course, in the construction of new transport corridors, Russia will face a need to solve a lot of technological, organizational and financial problems, starting with the formation of cross-border transport and logistics complex designed to eliminate the problem of different rail gauge in Russia and China, and ending with the extension of the carrying capacity of the most difficult section of the railway through Yekaterinburg and Korotchaevo.

Agreements of recent years and, of course, of May

1 In all calculations we used average route, average tariffs of sea, land transportation, as well as averaged rate of passage through customs and warehouse terminals. The resulting value is 1 euro per cent for ton / kilometer excluding VAT.



Pic.4. Evaluation of freight turnover volume between China, countries of Southeast Asia and Russia to 2030.



Pic.5. Promising corridors of freight transportation China–Europe–Russia–China.

this year between Russia and China point to the correctness of the chosen way of two countries and to the fullest extent meet the interests of other partners. In this regard, we cannot miss a unique opportunity and have to use our competitive advantages and growth potential to give a new impetus to social and economic development of Russia.

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Article received 18.05.2015, accepted 22.06.2015.