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Linking Eurasian Integration with the Silk Road Economic Belt in the Context of Water Transport

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***Abstract*— In the present study we discusses the concept of the project for laying and organizing the Volga-Pechora Way as one of the options for effectively linking Eurasian integration with the Silk Road Economic Belt. Its essence lies in the organization of through ship traffic along the route: Caspian - Volga - Kama - Pechora - Arctic Ocean (Northern Sea Route), which separately requires the laying (construction) of the Kama - Pechora shipping canal, allowing passage of river-class vessels Sea, with a displacement of at least 5 thousand tons. As a result of this project, it will be possible to connect the water and land parts of the North-South international transport corridor (ITC) with the Northern Sea Route. The unification of the Northern Sea Route with the ITC "North-South" will allow access to the Northern Sea Route for the EAEU countries - Belarus, Kazakhstan, Kyrgyzstan, and will form a new Eurasian transit route.**

Keywords: Silk Road Economic Belt, international transport corridors, Eurasian Economic Union, Eurasian Economic Commission, integration, infrastructure, transit potential, transport services

I. INTRODUCTION

The idea of large-scale infrastructural construction of the Eurasian transport corridor within the framework of the historical Silk Road found its understanding and embodiment at the beginning of the 21st century.

In 2004, President of Kazakhstan Nursultan Nazarbayev, during his visit to the People's Republic of China, signed an agreement with the President of the People's Republic of China Hu Jintao on the "efficient connection of transport networks."

In 2013, the new Chinese leader Xi Jinping at the international forum "One Belt, One Road" in Kazakhstan announced the creation of the Silk Road Economic Belt [1]. In such strategic documents as the "Plan of Socio-Economic Development for 2015" and the "Report on the Work of the Government", the creation of the "One Belt, One Way" was included in the list of the most important tasks assigned to the Chinese government.

In 2015, Silk Road Economic Belt was included as one of the components in the Chinese project "One Belt - One Way", which involves the full-scale transformation of the logistics

network of all Eurasia, including the arrangement of sea routes in the Indian Ocean (Sea Silk Road, "Pearl String") implementation of logistics projects in Southeast Asia, Mongolia, Russian Primorye, and even, possibly, the development of the Northern Sea Route.

In 2015 —2016 As part of the "One Belt - One Way" initiative, several international documents have been signed. The most significant of them was the joint statement of the Russian Federation and the People's Republic of China on cooperation in conjunction with the construction of the Eurasian Economic Union and the Silk Road Economic Belt, published May 8, 2015 [2].

The implementation of this statement will contribute to the integration of the Eurasian Economic Union countries into the transport and logistics network of the Eurasian region and the development of their transit potential. At the same time, discussing possible options for its development, they primarily pay attention to rail and road routes [3], losing sight of the transit potential of inland waterways. At a meeting of the Supreme Eurasian Economic Council (Council of Heads of State of the Eurasian Economic Union) held in Sochi on May 14, 2018, President of Kazakhstan Nursultan Nazarbayev urged to discuss the project of connecting the Caspian and Black basins by water, i.e., the shipping canal (including the Sea of Azov. This geopolitical problem was raised at different periods of history. Now is the right time to solve it in the technological, economic and political aspects [4]. The main goal of a large-scale transport project, the interest in which has returned today, is the possibility of using a potential powerful transport resource based on a renewable natural energy source, taking into account the tasks of economic development that are relevant and achievable today.

The essence of the project is the laying of the Eurasian Canal (Eurasian Transcontinental Canal), the value of which can be more or less similar to the value of Suez and the Panama Canal [5].

No less interesting is the project for laying and organizing the Volga-Pechora Way as one of the options for effectively linking Eurasian integration with the Silk Road Economic Belt. The concept of this project will be discussed in this article.

II. Conceptual Features of the Project and the Main Stages of its Development

The goal of the project is to organize ship traffic on the route: Caspian - Volga - Kama - Pechora - Arctic Ocean (Northern Sea Route), which separately requires the laying (construction) of the Kama - Pechora shipping canal, which allows passage of river-class vessels sea ", with a displacement of at least 5 thousand tons [6].

The idea to connect the rivers Pechora and Kama existed in imperial times. But its implementation began only in Soviet times.

The construction of the Kama - Pechora canal was part of the Volga radical reconstruction plan, which was called the Big Volga. Its main provisions were developed in 1931-1936. with the participation of the State Plans of the RSFSR and the USSR, the Supreme Economic Council of the USSR, the People's Commissariat of Heavy Industry, the Academy of Sciences of the USSR.

The project was launched much later. On March 23, 1971, a series of atomic explosions were carried out on the watershed of Pechora and Kama to eject the soil for the construction of the future canal.

The explosion was carried out in the Perm region, Cherdansky district, 1.5-2 km northeast of the village of Vasyukovo. The second explosion - 20 km north of the village of Chusovsky. The third - 10 km from the border of the Trinity-Pechora region of the Komi Republic. The third explosion with a total capacity of 45kT called "Taiga".

Later it was decided that the construction of the canal in this way is impossible, since hundreds of nuclear explosions would be required, and the "nuclear option" for the construction of the canal was abandoned. For various reasons, the construction of the canal was never completed, and in 1986, by a resolution of the Central Committee of the Communist Party of the Soviet Union, work was stopped.

At present, when the Eurasian Economic Union countries are faced with the task of forming a modern innovation infrastructure, creating conditions for realizing the transit potential, developing international transport corridors, introducing a "digital environment" in the transport sector (using advanced IT technologies), it seems advisable to return to this project as part of the Intelligent Multimodal Transport of the Eurasian Economic Union System.

III. Features of the Methodology of Economic Evaluation of the Project

Considering the international transport corridors as an independent category of investment projects, we can distinguish the following characteristic features of their implementation, limiting the nature of the assessment:

- coordination of processes for the development of transport infrastructure in the interest of integrating international transport systems for unhindered movement of passengers and goods across borders;
- optimization of transport processes that provide improved quality of transportation, including lower transportation costs, leading to increased attractiveness of international transport corridors;
- harmonization of the relationship between different modes of transport in intermodal transport chains;
- assistance in the development of new territories, the development and development of new international markets for goods and services;
- increasing the mobility of the population, including the development of international tourism and cultural ties, by increasing the transport accessibility of the regions.

When analyzing the factors determining the assessment of the effectiveness of the implementation of projects for the creation of international transport corridors, an analysis was

made of the development programs of transport systems in the Russian Federation. The analysis of the socio-economic efficiency of the functioning of international transport corridors was carried out on the basis of the federal target programs: “Modernization of the transport system of Russia (2002 - 2010)” and “Development of the transport system of Russia (2010-2015)”.

When analyzing the factors determining the assessment of the effectiveness of international transport corridors assessment criteria indicated in Table I were additionally identified and systematized in seven directions [7].

TABLE I. EVALUATION CRITERIA OF THE EFFECTIVENESS OF INTERNATIONAL TRANSPORT CORRIDORS [7]

№	Explanation
1. evaluation criteria	- the level of development of the technical equipment of the international transport corridors , which determines the potential of their throughput; - balanced development of the transport infrastructure of the international transport corridors ; - Duration of cargo transportation along the international transport corridors from the manufacturer to the consumer of the product in comparison with competitive routes; - competitive transportation prices on the entire international transport corridors route; - the level of quality of transportation, including safety, timely delivery, cargo safety, as well as the completeness, reliability and timeliness of information on delivered goods; - level of logistic efficiency of intermodal transportation.
2. Integration into the global economic system	- change in the share of international transport corridors passing through the territory of the Russian Federation in the total volume of international transport traffic; - the level of coordination of the created transport communications with the integrated development areas of the international transport corridors formed by the international community; - the extent to which international transport corridors contributes to the development of new international markets;
3. Cost effectiveness	Assessment of the effectiveness of the project as a whole: 1) Socio-economic (public) project effectiveness: a) immediate results and costs of the project; b) "external": costs and results in related sectors of the economy; 2) Commercial effectiveness of the project: - project effectiveness for participating enterprises; - the effectiveness of investing in the shares of the enterprise implementing the project; - the effectiveness of participation in the project of structures of a higher level in relation to enterprises participating in the project; - regional and national economic efficiency of the project; - sectoral effectiveness of the project; - budget efficiency of the project
4. Territory Development	- the degree of assistance in the development of new territories; - increasing the mobility of the population; - improving transport accessibility of regions; - degree of assistance in the development of international tourism and cultural ties.
5. Social	- the amount of additional social services, - change in the consumer price index, - increase in housing provision, - reduction of unemployment, - increase in fertility and decrease in mortality
6. Environmental	- soil movement, disturbance of the natural landscape, creating drainage systems, etc. during construction; - the level of environmental pollution by acoustic, by electromagnetic and thermal fields, toxic exhausts, various toxic chemical compounds, in the operation of vehicles; - level of measures to ensure environmental safety;
7. National security	- military security - economic security, - Industrial Safety, - technological safety, - food security, - demographic security.

When considering and designing the international transport corridor, other types of effect that are not amenable to direct cost estimation should also be taken into account. It is, first of all, about increasing the transportation potential of communication lines, which should increase due to the higher throughput of the international transport corridor and accelerating the passage of freight and passenger traffic [8, 9].

At the Solomenko Institute of Transport Problems of the Russian Academy of Sciences is actively working on the development of the intellectual multimodal transport system of Russia [10, 11, 12, 13] and its integration into international transport corridors passing through the territory of the Russian Federation [14, 15, 16, 17, 18].

IV. CONCLUSION

As the analysis showed, domestic and foreign authors, discussing possible options for implementing the Silk Road Economic Belt project, pay attention exclusively to rail and road routes, losing sight of the transit potential of inland waterways. They do not even discuss existing inland waterways as possible routes, not to mention the construction of new ones.

This study proposes the use of the Volga-Pechora route as part of the Silk Road Economic Belt. These proposals are unconditionally innovative proposals, and may be of interest not only to domestic but also to foreign experts in the field of international logistics and transportation.

The implementation of this project will provide convenient access to the Northern Sea Route to such Eurasian Economic Union countries as Belarus, Kazakhstan, and Kyrgyzstan, and will form a new Eurasian transit route [19].

The laying and organization [20] of the Volga-Pechora waterway is in good agreement with the global geopolitical project (supported by the Republic of Kazakhstan), which consists in the construction of the transcontinental Eurasian channel of the Caspian-Azov direction.

These water routes can be technologically [21] interfaced in the Middle Caspian region, realizing the “European water ring”.

When implementing these projects, it will be possible to close the waterway, as well as its other communications, of the North-South international transport corridor to the Northern Sea Route directly.

There will also be an opportunity to effectively link the North-South international transport corridor with the Silk Road Economic Belt.

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