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NEW PROJECTS OF JOINT-STOCK COMPANY RZD IN THE SOUTH DIRECTION OF RUSSIA

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Abstract. This article is devoted to the recent projects of joint-stock company RZD in the South direction of Russia. We will propone on the reconstruction of the existing lines as well as on the building of completely new lines for high-speed traffic, which is undoubtedly one of the most perspective directions of passenger transportation. The article deals with both advantages and disadvantages of these projects.

Keywords: RZD, South direction, high-speed lines, development.

The theme of our article is the construction and development of railways in the South of our country. And our objectives are:

- 1) to inform about new projects of joint-stock company RZD.
- 2) to analyse line construction and further development.

Many countries around the world use high-speed railways to transport passengers as quickly as possible across the country. Development of new railway line in Russia became the most important aim of RZD. New lines must allow not only the quickest delivery of passengers and cargo but their safety too, and fulfillment of these requisitions is necessary in the quickly changing world.

The head of joint-stock company "RZD" Vladimir Yakunin said in the interview to "Rossiyskaia gazeta" that a new railway line to the south of the country leaving out Ukraine's territory was to be constructed in Russia.

New part of railroad is to replace the existing one with a length of 26 km passing through the territory of Ukraine. Vladimir Yakunin also noticed that the length of this line would be significantly bigger because of terrain's relief and other reasons (about 60 km). Using of double-decker cars on the south direction will allow to compensate charges of passenger transportation and the cost of seats in compartment cars will be reduced by 30 percent.

Nowadays trains from the center of our country to its south direction have to cross Ukraine's territory in areas of Voronezh and Rostov regions.

According to the Minister of Transport Maxim Sokolov the construction of line leaving out Ukraine was planned earlier as long as repeated crossing of border of another state by trains going on the territory of our country to the south caused inconveniences. However, constantly escalating conflict in southeast Ukraine sped up discussion and consecutive decision to construct a new line. The project under discussion is a new railway Prokhorovka – Zhuravka – Chertkovo – Bataisk.



Map 1. A planned line via Zhuravka (Журавка) and Chertkovo (Чертково)

There is no doubt that the building of new line is essential. First of all, it is worth noting, that the priority goal of "RZD" is safe transportation of passengers and cargo and the construction of a new route as far as possible from the

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centre of conflict will help to increase safety. Secondly, construction of another road will allow to increase trans' speed and quality of service.

It is planned to invest into the project 7 billion rubles from budget in 2015, 18.5 billion rubles in 2016 and 31.1 billion rubles in 2017. The total cost of the project is 56.6 billion rubles.

Furthermore, there is a project of construction of a high-speed line Moscow-Adler with potential extension to Crimea, but this project is rather a distant prospect - we are talking about the upcoming 15 years. Now JSC RZD has a more topical problem of finding funds to construct a high-speed line Moscow-Kazan.

Advantages of building HSL Moscow-Adler are rather obvious. First of all, these are speed and comfort. It is assumed that the speed of the trains will be around 300-350 kph what will enable trains to cover 1500 km distance for less than 5 hours. High-speed trains arrive at the stations, which are situated, as a rule, in the center of the cities, while airplanes, which are the main competitor to high-speed trains, land at the airports located far away from the cities.

Secondly, this is a high traffic capacity. High-speed trains carry ten millions passengers every year on the average. For instance, traffic capacity at the line Moscow-Saint-Petersburg is planned as 10-14 million passengers a year. 10 million passengers is a one third of the tourist flow in the Russian south.

Thirdly, it is a low cost because the ticket for a high-speed train is cheaper than the ticket for plane. Considering the expenses for the trip from the city to the airport and back this sum gets even lower.

But there is a significant number of disadvantages as well. Such as necessity of modernization of outworn infrastructure for high-speed trains, lack of production of trains and equipment for high-speed lines, low logistic preparation and traffic management, ecological problems associated with noise pollution. Burning issue is the organization of high-speed train traffic. There are no separate lines for them in Russia. High-speed trains are supposed to use the existing upgraded lines. That is why high-speed trains have to be included in the general schedule and run in pairs to make the services rational.

But there are other projects on the future plan of the joint-stock company.

The first one is creating a new concept of passenger's transportation to Crimea involving the passengers crossing the strait remaining in the rolling-stock, as Maxim Sokolov said.

The first vice president Vadim Morozov said about another one. He said that RZD was asking to bring closer the assignment of funds from the budget to the project of restoration the part of the railroad "Maxim Gor'kiy – Kotel'nikovo – Tihoretskaya – Krymskaya" leaving out Krasnodar, to complete main part of the construction by 2018. It had been planned to finance this project from 2014 to 2020.

Development and upgrade of southern network of our country may largely contribute to the increased efficiency of transport system of our country in general and improve competitiveness of railways compared to other kinds of transport. Constructing new high-speed lines or modernizing the existing ones requires considerable expenses but the main aim is to give passengers an opportunity to get from one point to another as fast as possible.

REFERENCES

- 1. http://expert.ru. «РЖД предлагает построить дорогу Журавка-Чертково в обход Украины» от 28.03.2014
- 2. www.kommersant.ru. «Южную ВСМ включили в расписание» от 21.10.2014.
- 3. www.lenta.ru. «Россия построит железную дорогу в обход Украины» от 22.01.2015;
- 4. www.ria.ru; «Россия приступает к строительству железной дороги в обход Украины» от 21.01.2015;
- 5. www.rzd.ru.
- 6. www.tvzvezda.ru. «Россия начала строить железную дорогу в обход Украины» от 21.01.2015

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НОВЫЕ ПРОЕКТЫ ОАО «РЖД» НА ЮЖНОМ НАПРАВЛЕНИИ РОССИИ

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Аннотация. Статья посвящена новым проектам ОАО «РЖД» на южном направлении России. Авторы рассматривают переустройство существующих магистралей, строительство совершенно новых линий для высокоскоростного движения, которые, несомненно, являются одним из наиболее перспективных направлений в перевозке пассажиров. Статья затрагивает как преимущества, так и недостатки этих проектов.

Ключевые слова: «РЖД», южное направление, высокоскоростные магистрали, развитие.