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ABSTRACT

Шiao паньюй. New evolutionary model of the transport and communication interaction between Russia, China and Europe – Chelyabinsk: SUSU, EU-204, 91 pages, 12 tables, list of references – 50 names, 50 applications.

In the diploma I examined the basic directions of evolutionary development of transport and communication between Russia and China, including the formation of transit space. It is proved that the use of the Trans-Siberian main focus is to ensure an uninterrupted supply of raw materials from Russia to China and other Asia-Pacific countries.

I also observed the analysis of the level of socio-economic cooperation between Russia and China. Particular attention is given to the strategy of cooperation between Russia and China in the area of migration, taking into account the peculiarities of Chinese transnationalism and the potential demand for Chinese migrant workers in Russia and volume of their proposals.

I related approaches to problem solving evolutionary formation of new areas of transport communications between Russia and China, as with the participation of Chinese companies in the development of natural resources of Siberia and Far East.

In the field of road transport I proposed to make the mechanism of directed evolution of transport links within the international corridor “Europe-Western”.

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INTRODUCTION

Russia is connected to China through the world's maritime routes, Trans-Siberian railways, the Russian part of the Trans-Asian Railway in the North Asian corridor, a network of roads and other means of communication. Russian transport communications are used to export raw materials to China, imports of Chinese goods, as well as for transit goods to China-Europe and back [1]. Development of transit transport will supplement the income from resource rents transport and transit activities, and will help to solve many problems and promote sustainable development in the eastern part of Russian. The full using of communication lines reduces fixed costs for transporting goods.

A new evolutionary model of the development of transportation between Russia and China should consider the following factors in economic development of the country and around the world:

Russia's accession to the WTO;

Creation of a single economic space (SES);

Trends in the development of global manufacturing centers in China and Southeast Asia;

The economic situation in the European Union;

Development of transport and transit potential of the EEA;

Functioning of alternative routes China-Europe bypassing Russia;

prospects for increased transportation of hydrocarbons from the Arctic shelf in the Northern Sea Route .

The research for the study and modeling of the transportation and communications between Russia and China was used evolutionary-institutional approach [2]. As part of the system, assuming that the effects of all other variables are included and affected, it is necessary to discuss in the evolutionary-institutional approach the multiple systems of social and economic relations involving communication and transport systems. In this context, communication and transport system is no longer a closed, self-sustaining system, which characteristics of openness, social, adaptability, variability, flexibility [3]. Consider the action of the laws of economic evolution that are applied to the development of transport and communication between Russia and China.

The fundamental aspect of evolutionary development is the establishment of a spontaneous order and system, as evidenced by the evolution of trends and freight routes between China, Russia and Europe. For example, the market interests of subsidiaries of JSC "Russian Railways"-JSC "Trans Container" and OAO "Rzd-logistics" led to the development of transit goods and import-export goods in all possible directions, including Trans-Siberian railways, the North Corridor of TRAM, land border crossings on the Russian-Chinese border and seaport [4].

K. Zoidov indicates that "the power of today's developing countries effectively achieved by them, primarily because of the mechanism used intelligently directed evolution, and any country that is not able to work out the most suitable conditions for its civilizational democratically oriented model of directed evolution is doomed to lag uncompetitive and loss of prestige on the international level [5].

In this regard, it seems to be the main carrier of directional evolution. The

Russian-Chinese communication should be to eliminate unnecessary administrative and bureaucratic obstacles, particularly in the implementation of customs procedures and various border controls.

Innovation competition largely determines the acceleration of development or the opposite of economic back weakness, as innovation not only exceeds competitors in output, but also creates conditions for a profound change in the quality of the economy. The success of economic development is more than the given economic system to the acquisition and use of innovative attitudes than their development and application of greater contribution to choose the most suitable for production conditions (including its prospects) and the rejection of non-competitive [6].

The economies of Russia and other European economic union is easily receptive to the use of foreign advanced development projects in various transport and road services. Innovative products made in China also have an additional competitive advantage in the form of attractive costs, flexible configuration conditions and the provision of credit by bank.

In Russia, the creation of an integrated transport and logistics company (ITLC) prevailed EEA market, in contrast to the position of a number of ministries and officials, who insisted on the privatization of state-owned shares of JSC “TransContainer” for the sake of privatizaon, rather than the growth of exports of transportation services [6]. Examples of creating ITLC-vivid illustrations of ideas created under the initiative of national institutions must be organically "developed" through business development to promote their development and transform through their interests, goals and natural

trends. Thus, the underlying system in the evolution of market systems creates a comprehensive and highly active national support for the domestic operations of all national institutions [7].

Such activity can be seen by the development of the transport system. To the fore here is a kind of selection work to maintain positive institutional forms and interrupt negative inheritance. It would be necessary to supply the natural selection on the basis of market competition artificial selection institutional forms with predetermined properties.

The competition of business projects, services, companies and institutions, providing transport and communications cooperation between Russia and China, as well as the transit of goods to Europe preceded the creation of ITLC. Initially, emphasis was placed on the maximum use of transport and transit potential Trans-Siberian Railway (Transsib). However, economic development shows that the routes with market prospects have a China-Russia-European freight route and there are parameters indicating that they have significant competitive advantages in trans-Siberia.

Economic evolution of the transport sector is moving towards reducing the number of freight forwarding companies that do not have their own physical assets, rolling stock. In order to increase its competitive advantage, the company not only invests in the purchase of locomotives and vehicles, but also creates a large amount of infrastructure at ports and land border crossings, while developing terminal networks in Russia and other countries.

The evolution of the market system requires the state to play an evolving economic

role. In the implementation of transport and transit potential, increasing the efficiency of controlling the establishment of super countries and international companies, including on the basis of international agreements.

L. Zoidov pointed out that the transition economy was essentially an experimental laboratory of institutional reform. Continuously test ways, methods and means to promote the transformation of the mobilization and distribution agencies in the market start-up institutions [8]. The evolutionary methodology predisposes to limit interference with evolutionary processes minimum regulatory impacts, to understand that you can not spontaneously create evolution, and can only help to implement it without interfering with regulated objects. Government efforts should be aimed at promoting the evolutionary development of export services for transit of goods and passengers.

Only consideration of transport and transit between Russia and China from the perspective of evolutionary-institutional approach makes possible to determine the prospects for its development, both in the national and global context, to develop measures for its regulation and modified according to the processes of integration and globalization of the economy and society.

Thus, the main objective of this paper is to study the problem of the system, forming a new evolutionary model of the transport and communications between Russia and China and the development of scientifically proposals for the modernization of the industry in the modern period. Achieving this goal due to the solution of the following interrelated tasks:

1. consider the main directions of evolutionary development of transport and

communication between Russia and China, including the formation of transit space;

2.demonstrate competitive advantages and problems of functioning in the Trans-Siberian railway transport communication system between China and Russia

3.conduct a retrospective analysis of the development of socio-economic cooperation between Russia and China;

4. consider the main directions of the evolutionary development of transport and communications support new projects on the extraction of natural resources in Siberia and the Far East in order to increase exports to China;

5. provide guidelines for a new evolutionary model of the development of transport infrastructure of the Common Economic Space (Russia, Belarus and Kazakhstan), aimed at upgrading and implementation of transit potential of their territory with the most modern types of equipment and advanced transport technologies;

6.Develop proposals for the formation mechanism of the directed evolution of transit and transport links within the international corridor "Europe - Western China".

1. TRANSSIBERIAN RAILWAY IN VEHICLE COMMUNICATIONS BETWEEN CHINA, RUSSIA AND EUROPE: ADVANTAGES AND DISADVANTAGE

Chapter 1 discusses the competitive advantage and operating issues Trans-Biberian railway assessing its current and future use as a traffic and communications aspect of China-Russia-Europe. The evolution of transport links between Russia and China is moving towards the using different land and sea cargo shipments. Advantages and disadvantages of operation of the world shipping container services are related. According to the analysis, the directional evolution mechanism of Siberian transport should be aimed at ensuring the uninterrupted supply of Russian natural resources in China [9].

The development of transport in the direction of China-Europe is guided by the maritime routes. The use of ground communication occurs in a competitve states, regions, major transport companies offering shippers and consignees to take advantage of their natural and market advantages. The development of land pattern requires interstate agreement to address border and customs barriers, uniform transport law, common technical requirement and the formation of supernational entities [10].

Russia undoubtedly has a competitive advantage-Trans-Siberian Railway totaling about 10,000 km, which is a line along its entire length of the two-wire electrification line. Potential sales on the production line may be as high as 100 million tonnes per year, including shipments of twenty-food equivalent units(TEU) in 200,000 containers [11].

Crossing the Baikal-Amur Route (BAM) and the Chinese branches in the barren areas will not hinder their development in the distribution of free land and housing. However, alternative views of China-Russia-Europe has its advantage and weaknesses.

1.1 Advantage and disadvantages of alternative routes towards China-Europe

1.1.1 The northern route of Transasian railway.

The Trans-Asian Northern Corridor Asia Railway is also a competitor, and is the main thoroughfare of the Russian-Siberian railway. Route corridor China-Kazakhstan-Russia-Ukraine/Belarus-Western Europe route corridor is about 11,000 km from Lianyungang port in the East China Sea to the port of Rotterdam, Netherlands. After completion railway in 1990, corridor formed which connecting China and the Soviet Union to Aktogay-dostyk (DRUZHBA)-Urumqi, and launched the "Dostyk-alashankou" crossing point [12].

Transportation of goods along the northern corridor route Transasian railway China-Europe used the European part of the Trans-Siberian railway lines and other connecting Kazakhstan with Ukraine, Belarus, the Baltic ports and Russian ports in the northwest. Direction of flows of goods from Kazakhstan to Russia and other CIS and Baltic countries contributes primarily joint occurrence of all countries in the space of 1520 mm gauge railway [13].

Potential Northern Corridor of Transasian railway significantly increased after the opening of the border crossing "Khorgos-Altynkol"- the second railway crossing on the

border with China, the International Center for cross-border cooperation “Korgos” and railroad Korgas-Zhetygen length of 298 km. Development of the railway network in Kazakhstan promote efforts PRC government on in frastucture provision of advanced development Uygur-xinjiang autonomous Region and other regions along which the Chinese portion of Transasian railway [14].

1.1.2 Intenational transport of corridor Europe-Caucasus-Asia(TRACECA).

The education and development of the transport Corridor "Europe-Caucasus-Asia (TRACECA)" is largely political and meets the new economic needs of the post-Soviet Union, which pursues a diversified approach to shipping goods. TRACECA allows central Asia and the Caucasus countries to establish transport links to Europe, bypassing Russia and Iran [15].

Countries through whose territory extends MTC and its branches are: Armenia, Azerbaijan, Bulgaria, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Romania, Tajikistan, Turkey, Ukraine, Uzbekistan and Afghanistan.

Cargo transportation by ITC is multimodel in nature, involving rail rail-ferry ferries across the Caspian Sea (Baku-Aktau), as well as the transition projects to European standard norms in Dostyk (Kazakhstan), Varna (Bulgaria) and other countries [16].

Competitive advantages and problems in the functioning of ITC TRACECA are shown in Table.1.1

Table.1.1 Competitive advantages and problems in the functioning ITC TRACECA

Advantage	disadvantage
<p>Implementation in Kazakhstan ambitious existing program of reconstruction (Kungrad-Aktau) and the construction of new railways (Mangishlak-Bautino Yeralievo-Kuryk Beyneu-Zheskazgan) within the policy of diversification of transit routes. Practice container trains poti-baku-Almaty with the subsequent extension to China. Transportation corridor containers for NASA troops in Afghanistan. Completion of construction of the Baku-Tbilisi-Akhalkalaki-Kars, despite the fact that this route was not included in the TRACECA project, unlike inactive for political reasons, the Baku-Tbilisi-Gyumri-Kars. Favorable tariff policy caused, including political considerations.</p>	<p>It is a large length of passing several countries, which increases the customs barriers and political risks. Port infrastructure development is unbalanced, with overcapacity on the west coast of the Black Sea and eastern of the Caspian Sea. There aren't unrealized plans for the construction of railways European 1435mm in the countries of Central Asia and the South Caucasus. The actual operation of ITC mainly in the form of individual local transport directions. Reduction of European Union's design work in the project corridor and fund construction of railways.</p>

1.1.2 Central Asian railway route.

Central Asian railway route over 12 thousand miles is a direct competitor of Transsib. Corridor China- Kazakhstan - Uzbekistan - Turkmenistan - Iran - Turkey - Balkan countries in Europe opened after its completion in 1996 Railroad Valley - Sarahs - Mashhad and the border crossing " Sarahs " capacity to 3.5 million tons of cargo per year. Corridor may also play an important role in the passenger traffic and the realization of the Great Silk Road tourism [17].

In addition to defects of TRACECA (long length, passing through several countries, the difference orbital width, ect.), the necessary direction and the tunnel under the Bosphorus also needed to be built near the Turkish railway. The main drawback of this

route is Iran's military and political tensions and the imposition of economic sanctions on the Islamic Republic by the United States and its allies.

1.1.3 International sea container lines.

The most extensive shipments from China to Russia are the following supply chains: to the nearest port inlet ship-ocean shipping routes, to provide international container lines-ship-road transport services to the consignee.

Goods destined for Moscow and the North-West of Russia are usually transport by sea through Europe. The Ural and Siberian goods transported by rail and road, including goods transported directly from China. Send goods by rail is advisable if a Chinese manufacturer located in the northern part of the country and shipping ports to take a lot of time-consuming and can run into bandwidth limitation of the transport infrastructure in China. In addition, better rail transport cargo containerization poorly responsive. Containerized cargo in Zabaikalsk quickly processed and shipped with JSC “TransContainer” [18].

1.1.4.1 Strengths international sea container lines.

1.Cargo flow Container-Innovative technologies aimed at improving the efficiency of transport and logistics processes and reduce transport costs, which stipulate:

- using of standard size containers;

- using the same type of high-performance and does not require a large number of workers handling equipment;
- insufficient stage for reload;
- the ability to store containers in multiple layers;
- facility of different modes of transport;
- improving the congestion in ports;
- Use of different standard container trains, transition from one track to overload during standard gauge;
- reduce the likelihood of theft due to invisibility and inaccessibility of goods, Using modern control methods.

2. Under the influence of economic conditions, reducing the cost of shipping, as well as the development and use spacious container ships. Improving the efficiency of maritime transport by applying new technology, increasing capacity and container ships performance. In terms of TEU ocean-going vessels are divided into classes, are presented in Table. 1.2.

Table. 1.2 – Classification of container vessels

No	Type of container	Container-capacity(TEU)
1	Handysize Class	260-1000
2	Handymax Class	1000-1700
3	Feeder Class	1700-2500
4	Sub-Panamax Class	2500-4000
5	Panamax Class	4000-7000
6	Post-Panamax Class	7000-13000
7	Super-Post-Panamax Class/E-class	13000-18000
8	Triple E-class	>18000

Dimensions of container ships Panamax Class determined by the size of crossing

the Panamax Canal locks. Shipping efficiency will be further improved with the structure of the channel belt for additional container capacity exceeding 7,000 TEUs. Container Post-Panamax Class are designed to operate on sea routes that passing through the Panama Canal [19].

The largest of the existing container ships are Super-Post-Panamax Class / E-class. The use of which contributed to the deepening of the Suez Canal and the lack of locks on it. The first such vessel was Emma Maersk Container 15.5 thousand TEU.

Company Maersk Line ships scheduled construction of 20 Triple-E class containers for up to 18 thousand TEU in 2011. In 2013, ships began to be delivered by the deadline. Those Court not intended for playing through Suez Canal and used, mainly, to the transportation of goods route Asia – Europe [20].

During 1985-2008, the energy efficiency of container ships increased by 35%. The automation of management and computer facilities are widely used in container ships. But their crews usually have only 10-26 people.

Forecast of annual growth of container to the marine park in 2016 is 7.5% per year. All this leads to the potential for overcapacity in the shipping market and the further reduction in freight rates.

3. Shippers who are interested in a lot of traffic can quickly generate ship parties. Carriers conduct an active marketing policies on the cargo base to attract additional goods. Shipping by large multinational corporations and public transport companies in China-the origin of the flow of goods. In addition, the traditional maritime direction-the development of transport communication system framework formed in Central Europe.

4. Development of port infrastructure in Finland and other Baltic states in the south and north-west Russia to provide services for the transport of goods along the Russian-Chinese border. One of the largest ports in Finland, which is used to ship goods from China to Russia, is the Kotka port and can take 700-1000 container boxes. Delivery time of goods by sea from China to Moscow on the route Shanghai - Kotka - Moscow is 35-50 days depending on weather conditions. Modernization of the port had increased its capacity to 900000 TEU per year. By 2015, it is planned to complete construction of road from the port of Kotka to the Russian border [21].

Ust-Luga and Primorsk port in the Russian also planned to build a new container terminals for receiving huge displacement vessels that will take ocean container without overloading on feeder vessels. Consider the construction of container terminals in Kaliningrad. The development of the port infrastructure in southern Russia has been achieved by expanding the capacity of existing and construction of new port. Compared with the route through the Baltic port, geographical location of Novorossiysk that capable of receiving containers can up to 15000 TEUs, transport goods more favorably from China [22].

It has been built to a new port container terminal capacity of 450 TEUs. In addition, build deep-water berth in the southeastern region, as well as reconstruction the specialized container terminals on the basis of JSC "Novoroslesexport" and JSC "NCSP", with a capacity of 700 TEUs per year each. Construction of the terminal for transshipment of containers to be implemented in the new port of Taman [23].

As port infrastructure development needs to be taken into account, for example, the

increased capacity and modernization level of Novorossiysk port has strengthened competitive advantage of shipping lines compared to land transport corridors through the territory of the European Economic Area. However, freight high-speed container trains from Novorossiysk in their infancy.

1.1.4.2. Disadvantages of international maritime container cargo transportation lines on the China – Russia.

1. In large ports, it is necessary to overload ocean-going vessels to provide services for the goods entering the ship. In the case of shipments through Northwest Russia overloading may be twice, for example, in Singapore and one of the largest ports in Europe (Rotterdam, Hamburg, Bremerhaven, etc). The next feeder ship container is delivered to St. Petersburg, Kotka (Finland), the Baltic Sea port.

2. Possible delivery conditions for non-marine carriers. For example, the declaration of goods through Hong Kong-Kotka is 45 days. However, due to delays caused by ship formation, free container expectations, weather conditions, additional customs checks etc.

3. The complex nature of the formation of tariffs for international container operators. At the same time, freight rate has a number of additional fares and charges.

4. Due to long and complex customs clearance procedures, Russian Northwest cargo seaport and land border crossings were delayed. M. Kanaeva pointed out that "despite all the easy-using containers and the economic benefits of their use, confusing

paperwork and further shipping containers as in the implementation of Customs formalities greatly reduced their attractiveness [24]." Clearly, despite its good geographical location, this is one of the main reasons why Russia is not interested in transit container traffic. "Shipments of goods from China to Vladivostok, Nakhodka or eastern ports, and then to central Russia by rail for an average of 25-30 days. Traffic volumes depend on the capacity of the Port railway, the availability of rolling stock, and the market behaviour of railway operators." Movement and receiving vessels at sea lines Chinese ports-ports in the Russian Far East and could prevent adverse weather conditions (typhoons), in turn, timely unsuitable vessels leads to the emergence of "abandoned " trains on the railway [25].

In Russia, there is no effective policy to promote the implementation of Russian and Russian corporate courts in maritime transport. As the flag of the Russian Federation 2012 ships, Russia's foreign trade volume of goods not exceeding 6%. One result of the implementation of the Russian Federation's transport strategy should be to increase the proportion of foreign trade vessels under the Russian flag in 2030 to 40% percent.

For this purpose, the federal level has amended the national legislation on the priority of the transport of strategically important goods of the Russian Federation under the flag of the Russian Federation: military goods, technical and military humanitarian assistance, government goods and other materials for public use.

Therefore, the development of container transport between China and Russia will depend on the carrier of economic development. It is estimated that by 2020

China-Europe will transport about 17 million TEUs, compared with 11.7 million standard box transfers in 2010 (growth of 10 years, 45%) [26]. Russia and other EEA countries are making efforts to establish a mechanism for directed evolution in order to bring into its territory, as much as possible the volume of transit cargo. For example, Kazakhstan plans to draw on its territory for about 8% of traffic in the direction of China - Europe, it's about 1.5 million TEUs.

1.2 Disadvantage Trans-Siberian Railway as a transport bridge between Russia,China and Europe

1.2.1 Multimodal nature of cargo on the route China - Europe throws the Trans-Siberian route.

The use of trans-Siberian cargo transport in China and Russia mostly involves the use of multiple modes of transport, as well as in different countries. The routes include the marine areas that connects Russian Far East ports to Chinese ports, as well as the ports of Northwest Russia and the Baltic states of Europe's main ports.

The cost of transport affects the tariff policy of shipping companies, ports, stevedoring companies, freight forwards, rolling stock, JSC“Russian Railways, ”carrier and government of Belarus, Ukraine and Europe.

Necessary (but not sufficient) condition for full utilization of the transit potential of the Trans-Siberian is to provide a competitive level "through" tariff rate and the total duration of delivery of goods, which is the sum of the different modes of transport, of

the transfer operations, customs procedures, the terms of formation of structures and ship consignments.

Increasing the competitive advantage requires the development of the railway line to the ports (port stations) and land border crossings, finding sources of funding for their modernization, free land and their redemption from the owners.

Due to trans-Siberian movement difficulties, especially the lack of membership in the port transport process, inadequate port capacity, transport and communications capacity reducing and so on, emerging the transport of blood clots, "abandoned" trains [27]. The presence of a small port stevedoring companies hinders the use of effective routing methods to send cargo handling teams train with weights for such companies, which require additional diversion operations .

Even before the onset of the global financial and economic crisis, container volumes in the Far East Russian ports began to fall. As a result, the volume of transit cargo in Port Vostochny was 141,000 TEUs in 2005 compared to 31,000 TEUs in 2008. The shipment of container cargo from Finland to the Far eastern port of Siberia was halted in 2011.

Reasons for the reduction in transit traffic of containers are growth rates and simultaneous decrease in the cost of sea freight. High railroad rates lead shippers to try using other modes of transportation (primarily marine), or reduce the rail route through Russian territory. Therefore, transportation in China cargo left the Russian Far East territory of the restricted zone and the Trans-Baikal Railway.

1.2.2 Unsettled and weak infrastructure of railway crossings between Russia and China.

"Barrier" position and way of reconstruction of railway crossings between Russia and China (including through Mongolia) are shown in Table. 1.3.

Table. 1.3 – "Barrier" position and way of reconstruction of railway crossings between Russia and China

№	Name of border crossing	Traffic volumes in 2012 (mln tones)		"Barrier" positions	Way of reconstruction
		In China	In Russia		
1	Zabaikalsk -Manzhouli	16.7	1.75	Insufficient development of transshipment facilities at the station. Zabaykalsk widespread With manual labor, the monopoly position of JSC "Trans Container"	Complex reconstruction and electrification of the direction Karymskaya - Zabaikalsk ",Karimskaya st. and Zabaykalskst, and mechanization transfer operations, the development of border and customs control.
2	Naushki - Suhe Bator (Mongolia)	1.8	/	Insufficient transportation capacity of Ulan Bator Railway, lack of coordination of supervisory authority	Construction of the border checkpoint at the junction Sentinel, the inspection of the new park, park at the station sorting Sukhbaatar of Mongolia, the introduction of electronic declaration of goods.
3	Grodekovo -Suifenhe	8.1	/	Weak development of track facilities Grodekovo st., low carrying capacity of the line Ussurijsk -Grodekovo	Modernization of the permanent art. Grodekovo, Ussuriisk, Pine Pad, Pad placer and approaches device welded rail with the Chinese side.
4	Kamyshovaja-Hunchun	/	/	Mismatch requirements for border crossing facilities	Construction of rail infrastructure border post in accordance with the regulations, construction

					of a cargo terminal at the st. Kamyshovaja, the development of facilities for handling containers.
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Let's consider the strengths and weaknesses of the railway border post on the borders of Russian and China in more detail.

Border posts Zabaikalsk-Manchuria. The volume of goods transported through transformation accounted for about 80% of the total turnover in Russia and China. In the current structure, Russia exports coal, metal ores, timber and wood products, mineral fertilizers. The volumes of increasing coals exports displace oil since 2010. China imports from Russia represented by containerized cargo, ferrous metals, steel, coke and construction materials.

The border crossings of the cargo base depend on Russia's national policy to regulate the export of logs and wood products, China's demand for wood, the competitive advantage of Russian coal, the tariff policy on railway transport and the market situation in China. On the one hand, Russian coal compete with domestic coal. On the other hand, logistics movement of Australia and Indonesia coal is more effective. Russia's mining industry to expand exports and coking coal development will reduce transport workload and improve the transport links between Russia and China.

The excessive development of overloaded infrastructure, a considerable proportion of manual labor, leads to the fact that it may take about a week for a single car to wait for overloading. JSC "Trans Container" Zabaikalsk has its own dock, which implements customs clearance through electronic information, from China to Russia. On the one hand, this causes the delivery time from the Zabaikalsk to the Moscow node to be

reduced from 15 days to 7 days [28].

On the other hand, there is evidence that monopolistic behaviour can be achieved through the service of transporters that do not use containers and locomotives.

Evolutionary development of this area of transport communications between Russia and China includes: (1) a comprehensive reconstruction and electrification Karymskaya - Zabaikalsk , which would allow for trains weighing 6,300 tons to the border with China ; (2) reconstruction of the station Karimskaya, processing capacity should reach more than 120 trains a day ; (3) reactivation of previously closed stations, building on dispatching Congresses Karymskaya - Zabaikalsk; (4) reconstruction Zabaikalsk, including construction of exhibition and connecting paths, places and reloading freight yard , construction grading system 1435 mm in order to improve congestion , sorting and storage of goods; (5) reconstruction of the park border and customs control, border crossing railway equipment "Zabaykalsk" two stationary inspection and Inspection complexes, construction of ramps for control of oil cargo, the inspection equipment park surveillance systems [29].

Zabaikalsk development is carried out by means of "Russian Railways", its subsidiaries, primarily JSC "Trans Container", the state budget and private investors[30]. The development project involves the construction of village Zabaykalsk airport, the new train station, as well as online travel sites. It is expected that the shuttle bus will be trained between the Zabaikarsk station and Manchuria station to bring tourists from China back to Russia and return.

The reconstruction of Manchuria station in China included the increase in the

length of routes and transshipment sites, the overloading of forest areas and the conversion of oil spill points in the event of overloading. All this has increased the capacity of the station to receive Manchuria bulk cargoes up to 500 wagons per day [31].

Route through Mongolia Naushki-Zamyn-Ude-Erenhot reduces distance from Russia to a number of Chinese provinces border crossing Naushki - Sukhbaatar (Mongolia). It is shorter routes through the Trans-Baikal region and Far East. Throughput potential transition Naushki - Sukhbaatar 14-15 pairs of trains per day, 4 million tons per year. In 2012, the railway border crossings missed four pairs of trains per day. The structure of export traffic is mainly timber and mineral fertilizers. The adverse impact of traffic: the East Siberian-Pacific start-up, as well as stricter state requirements for the export of roundwood [32].

Owing to the lower tariff policy of the Ulan Bator Railway, the competitive advantage of the transport direction between Russia and China but the cyclical shortage of railway vehicles, failure to provide vehicles and the time delay in delivering the goods. The JSC "Ulaanbaatar Railway" requires a serious modernization of infrastructure, particularly from Ulaanbaatar to China's border areas, including electrification.

The inconsistencies in work of Naushki station complicate by uncoordinated behaviour of regulatory authorities (border guards, customs, quarantine services, etc). Timeframe processing trains do not conform to current regulations and the average pass trains took 316 minutes in 2012 instead of standard 235 minutes.

Directions reconstruction Naushki border crossing-Sukhbaatar are: (1) Construction of an inspection team with appropriate infrastructure, sanitary and quarantine deadlock, inspection and installation of stationary ray inspection systems, rebuilding of freight yards, lighting and surveillance stations, etc. (2) Improvement of the software of electronic declaration of goods (3) construction of the park at the station sorting Sukhbaatar Mongolia (4) Sources of financing the reconstruction of railway border crossing "Naushki" are means of "Russian Railways" and the federal budget for the federal target program "State Border of the Russian Federation (2012-2017 gg)[33]"

In 2012, for increased traffic volume in the area of Ulan-Ude - Naushki - Ulan Bator on Nauski opened new maintenance of locomotive. In 2013, movement in the Naushki - Sukhbaatar area decided to establish a solid road map for the nine pairs of trains, as well as the control length and weight of all transmitted and received trains.

As a result of the development of the Government of the Republic, the crossing point began to establish a modern transport and logistics Centre (TLC) in Ulan-Ude and subsequently to be integrated into the transport and logistics network of JSC "Russian Railways". However, the project Buryat TLC may be one of many items that exist only on paper[34]. The idea of a specialized checkpoint (eg, "Zabaikalsk" for processing exports to China, and "Naushki"-imports) does not solve the problem of locomotive return loading.

Bandwidth Grodekovo border crossing-Suifenhe is 12 million tons. The main types of goods are: timber, lumber, metal ore, fertilizers, coal, etc. Freight traffic between Russia and China in 2016 increased by 19% in the first half of this year compared to the

same period last year.

Using of border crossing at the shipping in China depends on the railway tariffs, whose growth is forcing shippers to use railway border crossing " Zabaikalsk ". The shift in utilization is related to the expansion of ore and coal exports to China, which allows mining companies to Primorye territories, in particular of " Primorskugol ", to compensate for the loss of the internal market caused by the transition of local energy and housing facilities for the use of natural gas [35].

Disadvantages functioning transition include: (1) low capacity of single-track, Ussurijsk-grodekovo length of 100 kilometers electrified lines, which have been laid on the wood sleepers on the area, the lack of automatic control of the technical state of motor vehicles; (2) underdevelopment track facilities Grodekovo station; (3) difficulties with the rolling stock on the Russian side.

Under an international agreement with the China JSC "Russian Railways" is obliged to carry the car with imported cargo and reload it into the Grodekovo station in the Russian rolling stock and send to destination station. However, during the reform of the railway JSC "Russian Railways" almost lost his own fleet of cars, and the use of empty wagons after reloading export goods depended on the intentions of the railway owners, whose coordination required additional work. Partially solves the problem of involvement in the organization of transportation of imported construction materials, equipment and food products of JSC "Russian Railways Logistics", which, in collaboration with other companies , impersonal forms of wagons of different owners.

Reconstruction of the border crossing was carried out in the following areas:

Overhaul of combined path of 1435mm and 1520mm with the laying on concrete sleepers on the site Grodekovo-state border with China is 21km long, with increased the speed of trains from 25 to 40km/h [36].

Extension of the three ways to capacity in 71 conventional station wagon Ussurijsk drafting of direct movement of passenger trains on routes: Vladivostok - Grodekovo -Suifenhe (China) and Vladivostok - Grodekovo - Harbin. Border crossing Kamyshovaya-Hunchun. Potential capacity of the transition up to 3 million tons per year. Main types of goods: a coal ore and timber. Through the transition through in transit using passenger ferry route Sokcho (South Korea)/Niigata (Japan)-Port Trinity Bay-Hunchun used until mainly for tourism purposes.

In the 1990s for carriage on line Makhhalino-Kamyshovaya-Hunchun with the Russian Ministry was created of "The Golden Link", which belonged to the railway section 20.3km length, Kamyshovaya border station, a small number of wagons, locomotive [37]. First of transportation in line began in 2000, but transportation of goods through the transition is not implemented. Since 2011, the owner of the railway infrastructure of the border crossing reed-Hunchun is JSC "Russian Railways".

The weakness of border crossings is the mismatch requirements of transit facilities in ensuring communication at checkpoints, lighting systems, video surveillance, installation of loading and unloading agencies, etc.

In case of opening of traffic through the border crossing Makhhalino - Hunchun is expected that traffic volumes in the first phase amounted to 2 million tons of coal for the needs of industry in China with a gradual increase to 8-15 million tons. Near the city of

Hunchun area allocated for the construction of the plant for the enrichment of the Russian coal capacity of 10 million tons per year.

Shifting perspectives are also associated with its use for the transit of Chinese goods to the Russian ports as part of the international transport corridor "Primorye -2" : Hunchun -Kraskino (Kamyshovaya) - Trinity Bay port - ports south- eastern China and other Pacific Rim countries.

The main problem is the lack of a development-oriented money-back guarantee (estimated at 2.5 billion rubles), which has to be sent to transport through the border crossing points due to uncertainties in its cargo base. For example, the transition could be used to JSC the "Siberian Coal Energy Company" (SCEC), which is exported to China's coal-use checkpoints and Zabaykalsk Grodekovo[38]. Traffic can reach 4.5 million tonnes. However, these plans depend on the timing of the resumption of traffic on the line Makhhalino-Hunchun. Recognized prospects for return Transition: competition with the transition Grodkovo-Suifenhe to China for the supply of goods, and in the future with the railway border crossing Hassan-Tumen River in the transit transport in East Asia.

On the competitiveness of rail checkpoints influences and the fact that the functioning of automobile checkpoints provides the Federal Agency for State Border Infrastructure Development, and the maintenance and development ZHDPP located on public infrastructure to a large extent financed by its owner - JSC "Russian Railways" [39]. Therefore the problem of interaction between different owners and contractors.

1.2.3 Difficulties in the maintenance, repair, renovation and construction of railway infrastructure in Siberia and the Far East.

The railway infrastructure in the eastern landfill is not always scheduled for maintenance in accordance with current maintenance and repair routes. Therefore, on the East Siberian railway line, the road for overdue repairs is more than 17,000 kilometres. In the Trans-Baikal railway line, the overdue maintenance distance of nearly 1000 kilometers, turnout wear, equipment automatic lock, power system. Highway congestion in some areas does not allow even the intermediate repairs and preventative bearing of ways.

The quality of overhaul is not always consistent with the ideal. Maintenance at a single route in the eastern landfill will require working at night, as productivity and the number of production track machine stations are reduced. This requires increasing the number of orbital machines and providing them with qualified personnel. The complex climatic conditions of Siberia and the Far East require the construction and reconstruction of railway infrastructure (usually expensive) technology and materials.

Overhaul the manner and other work carried out by the contractor to win competition, resulting in poor quality, compliance deadlines, lack of equipment and lack of training. Capacity contractors in the region lack the capacity and the right to obtain the construction and transformation of railway infrastructure, the decline of production and technical discipline and the training of staff contractors. Under these conditions, in

the near future, the development and modernization of traffic and communication will be joined by foreign companies including China.

Daylight precinct system maintenance and repair path requires the formation of teams for the full implementation of preventive work, which hampered by the lack of workers and fitters way other specialties. Providing transport requires not only representatives of railway specialties, but also working in the utility and contractor organizations: turners, welder, blacksmith, ect.

The main part of the economically active population is concentrated in the narrow vicinity of the Siberian Railway. Low prestige work on tele-radio does not even attract young professionals to work in managerial positions. Work on the current content path (repair work) attracts foreign workers from the CIS countries (Tajikistan, Uzbekistan, Ukraine, etc.). Displacement method is widely distributed work. However, it is not appropriate to use seasonal or rotational means to ensure reliable transportation throughout the year.

Staffing functioning railways in Siberia and Far East should be based on an awareness of the fact that social objects are part of the production process.

In the transition to the precinct system maintenance and repair problems ways to ensure consolidated brigades vehicles for delivery to the job site. Cars tend to have a long service life, maintenance-free, threaten the safety of passengers. As a result of a large number of service sites, lack of or inadequate roads, the existence of wetlands can not use all terrain vehicles, the situation becomes complex.

1.2.4 Difficulties of securing the cargo because of unfavorable socio-economic situation in the regions passing of Transsib.

Problems in ensuring the safety of the goods transported by the Trans-Siberian, arising from the action of the following factors: Depressed socio-economic situation in the region of the trunk and branches in China, high unemployment, lack of a stable income, poor life prospects, social degradation, the spread of passengers among the population, and the tendency of individual residents to thefts cargoes and railway property.

1. Degradation of the transport infrastructure, increasing traffic due to the elimination of discrimination and the reduction of inter-regional and suburban traffic, inconvenient timetables remaining trains.

2. Frequent stops, long term parking, low speed of freight trains, the advent of “abandoned” trains at small stations.

3. Low income of railway works, departmental security staff Railways and private security companies, some of which themselves become complicit in theft.

4. The presence of a positive correlation between the increase in container cargo on the Trans-Siberian and increasing theft.

5. The lack of an effective mechanism to compensate shippers and forwarders damage and loss of containers, insurance protection of transported goods.

1.3 Competitive advantages of Trans-Siberian Railway as a transport bridge between Russia, China and Europe

1.3.1 Reconstruction of railway infrastructure in order to provide export-import cargo traffic.

Modernization of the railway infrastructure of East landfills includes railways, especially the reconstruction of major station-transportation hubs, modernization of the station management. Main directions of the reconstruction of East landfills stations are shown in Table 1.4. Also provided straightening curves of small radius on order to increase the speed of precinct, increasing opportunities to pass the railway passenger and container trains [39].

Table 1.4 – Destinations of reconstruction of East landfills major station Railways

Station	Types of works on reconstruction	Result of the reconstruction	State of the work
Trans-Baikal Railway			
Karimskaya	Construction of a new park on the 10 tracks.	Capacity growth of large hub station	Reconstruction is not completed
Chita	Construction of bypass Cheats-line-Chernovskaya a Antipiha 27km long and two bridges	Improving transit traffic crossing the China and back.	Work will begin in 2016
Taydut	Elongation receiving-departure paths for receiving train length of 71 and 100 conventional cars	Growth of the bandwidth area of Transsib Khilok-Chita	Reconstruction was completed
Bada	Elongation receiving-departure tracks, modernization of equipment, construction of additional Congresses and exhaust paths, laying turnouts	Improved processing abilities, improving the reliability of the station in case of breakdowns trains.	Reconstruction was completed.
East-Siberian Railway			

The end of table 1.4

Station	Types of works on reconstruction	Result of the reconstruction	State of the work
Sludyanka-2	Construction of new two-departure tracks, accommodating 75-91 conditioned car, extension and rebuilding of existing paths	Providing reception and departure of trains with a long composition, separation of odd and even flow of trains between stations Sludyanka-1 and Sludyanka-2.	2012-2015 yy.
Nizhneudinsk	Elongation of the ways in odd park for receiving trains to 120 conventional cars, construction of additional ways for parking cars, reconstruction sorting park	Differentiation shunting and train operation, increasing the capacity in an odd direction station at least 20%.	2012-2015yy.
divisionnaya	Elongation ways westbound trains to receive up to 89-95 conventional cars.	Unobstructed reception even with a change of trains locomotive crews in case of congestion station in Ulan-Ude, increasing the capacity portion Sludyanka-Ulan-Ude	/
Tayshet	Reconstruction of the transit fleet and increase the capacity of odd park	Improving the crossing of even trains flow	2012-2015yy
Krasnoyarsk Railway			
Ilanskaya	Construction of two ways to receive trains of 100 conventional cars, and three ways to receive trains in 71 conventional car	Increasing the capacity of the Trans-Siberian together with the construction of the connecting loop Awda-Gromadskaya.	2013y.
Jeb	Elongation receiving-departure tracks, construction of a fourth way, neck reconstruction station, increasing the radius of the curves	Increase speed of trains, increasing the capacity portion Mezhdurechensk-Taishet.	2013 y.
Abakan	construction of the even park.	Part of the program "Integrated development area Mezhdurechensk-Taishet."	2012-2014 yy.

Far Eastern Railway			
Izvestkovaya	Elongation receiving-departure paths for receiving long trains for 71 conventional cars.	exports products to China Kim-Sutarsky mining and processing plant	2013-2014 yy.

1.3.2 Release of freight and bandwidth East landfill railways.

Release and freight rail capacity Eastern landfill occurs in the following areas:

1. Completion of construction of Eastern Siberia-Pacific Ocean. In 2011, the commissioning of the first stage of the East Siberia - Pacific Ocean oil reduced loading on the East Siberian Railway by 40.2%. At the same time, Skovorodino Transbaikal railroad sent 15.4 million tons of crude oil terminal in Kozmino. Loading oil at this station was 48.1 % of the total cargo-handling on the road [40].

Commissioning of the second stage of the Eastern Siberia – Pacific Ocean allowed to redirect into the pipe about 80% of traffic Skovorodino, resulting in the release of bandwidth Transbaikal railway and Far Eastern Railway can be up to 10 pairs of trains a day.

2. Development of new mineral deposits in Transbaikalia, Yakutia and the Far East, the transport arm from which to ports and border crossings with China shorter than from natural deposits in Western and Eastern Siberia.

3. The transition of power generating capacity of the Far East from coal to natural gas. Release of railway infrastructure occurs during export growth seaside coal to replace coal from Kuzbass.

4. Cancellation of the passenger trains, the following long-distance and suburban

trains. Under the conditions of insufficient government subsidies of " Federal Passenger Company " planned in 2013 to cancel 235 unprofitable trains, part of which runs along the Trans-Siberian and other areas within the international transport corridors.

5. Development of water transport on the rivers Amur, Ussuri and others in the event of hydraulic respective events.

1.3.2 The program of "Russian Railways" for the development of container traffic "Transsiberian in 7 days" and regular movement of container trains

A new evolutionary model of the transport and communication between Russia and China, as well as the realization of transit potential of the country require high-traffic goods, mainly containers. The volume of container traffic on the Trans-Siberian export-import direction were:

- in 2009 - 373 thousand TEU
- in 2010 - 527 thousand TEU
- in 2011 - 564 thousand TEU

In 2012, Trans-Siberian Railway on international traffic carried 638 thousand TEU. Transportation of imported goods in containers prevailed over the transportation of export. In 2012, 7323 were sent to container trains(average of 20 trains per day), of which 3340 trains (45.6%) the formation of "Trans Container". China commissioned the Chongqing-Xinjiang-Europe railroad line, which would go from Chongqing to Duisburg (Germany) in 16 days, and in 2013 opened a direct rail freight route that goes from

Chengdu to Lodz (Poland) in 12 days [41].

In transit cargo observed the following trends:

- increased traffic between Korea - Uzbekistan (and vice versa), Korea - Kazakhstan ;
- Formation of cargo vehicles from Austria and Poland to China ;
- reduction of container from the U.S. to Kazakhstan and Kyrgyzstan ;
- an increase in traffic from Germany to China .

Container transport by rail between China - Russia in 2011 amounted to 339.8 thousand TEU, an increase of 53 % more than in 2010 In 2012 (according to A. Bezborodova), the rail transport of containers along the route China - Europe amounted to 25 thousand TEU.

In 2011 the station Vladivostok Far Eastern Railroad went up to 10 speed container trains per week, which transported 64% of the total number of containers shipped to Vladivostok Commercial Seaport on the railway. In 2012, on the East Siberian Railway night were up to five container trains JSC "Trans Container", as well as the band wagon in transit from the European part of Russia in the Asia-Pacific region and back.

Transportation is carried out not only by the Trans-Siberian Railway, but also using alternative routes , such as through Kazakhstan (border crossing Dostyk - Alashankou). Thus,co-transport and logistics company JSC "Trans Container" and the Chinese company CRIMT transports cargo from China to Russia via three routes :

- by rail through the border crossing Zabaikalsk - Manchuria ;
- border crossing Dostyk - Alashankou ;

- sea from Chinese ports Tianjin , Dalian , Qingdao, Xingang , Shanghai and other Russian ports in the Far East and further along the Trans-Siberian .

1.3.4 Expansion of the Russian standard gauge in order to improve the competitive advantages of Transsib.

Ways to improve the competitiveness of Russian Railways promotes the expansion of the Russian standard gauge(1520mm). Areas of expansion are:

1. Reconstruction of the railway section Hasan (Russia)-Rajin (DPRK). As of mid-2012 traffic volumes through the border Hassan-Tumen were minor, mainly transported goods for the reconstruction of the railway. In October 2011, on the Hassan-Rajin was held the first demonstration train. The design capacity of the transition up to 100 TEUs per year. In the longer term, it is estimated that traffic volumes will increase to 1 million TEUs per year.

2. Construction of the railway track Russian standard Kosice (Slovakia)-Vienna (Austria) with a length of over 500 km . In Eastern Europe, there are some parts of the combined gauge and Russian standard gauge , built in the days of the socialist camp. It is assumed that construction of the railway Kosice - Vienna will take place in 2013-2016 gg [42]. Perspective traffic volume in 2050 will be between 16 to 24 million tons of cargo a year . The construction of the railway broad gauge road to Vienna can join the Czech Republic and Hungary .

3. Active use , primarily for the development of market competition, the railways

of the Baltic states as a branch of the transport corridor "East - West ". The key point increase efficiency of the transportation process in the direction of China - Russia - Europe is the development of market competition between the numerous branches of the transport corridor "East - West ". In this regard, we can not agree with the opinion of the representatives of JSC " Lithuanian Railways " that " healthy competition in the transport corridor EU - China -pledge to improve its effectiveness . Corridor without branches - a monopoly for transportation and corridor with branches - it is a competition for carriers , which is always beneficial effect on the quality, speed and safety delivery. Therefore Klaipeda - Kaliningrad direction , it is an offshoot of the transport corridor , has certain advantages , in particular, ice-free ports , no problems at the border of the EU/CIS , additional transport logistics network for freight traffic service public logistics centers ."

4. Multimodal rail-ferry on the western section of the corridor "East - West". Since 2007, the ferry service is open Ust-Luga - Baltiysk (Russia) - Sassnitz/Mukran (Germany), since June 2012 the ferry service on this route has become a regular.

Key conclusions and suggestions to chapter 1

1. Operation of Trans-Siberian Railway in Eastern Siberia, Transbaikalia and the Far East, as well as BAM and other railroads in the direction of the Pacific performed in difficult climatic conditions associated with: (1) the presence of mining and crossover with steep slopes, avalanche, mudflow areas and locations of flooding; (2) The existence of roadbed railway in permafrost; (3) a large number of man-made structures

built on out-date design standards; (4) low temperatures in the winter, which complicate the content welded way, increase the fragility of the metal, increasing the likelihood of occurrence of cracks in the train casting.

2. Analysis of industrial-technological, organizational and economic issues in the operation Trans-Siberian railways to the following conclusions: (1) Transportation by highway complicated significant depreciation of rolling stock and insufficient quantity and quantity of the new locomotives and wagons, including the latest types. (2) The extended distance, difficult climatic and geotechnical conditions in Seberia and the Far East, require a cautious approach to the reform of the maintenance and repair of railway infrastructure and additional financial costs. In particular, it is an issue of the integrated delivery teams travel to the place of work, to ensure their conditions of work and rest. (3) Reform of railway, a large amount of cars owners and traffic growth on the East landfill railways led to the fall average speed of trains, inefficient use of locomotives and locomotives crews, the formation of “barrier” place on the railway infrastructure. Overcoming limitations requires not only improve the organization structure of the transportation process, but additional investments in the modernization of the railway infrastructure. (4) There is an urgent problem in transporting goods. The main reason is that the depressed stated of the economy in those regions, along which the Trans-Siberian Railway. Changing difficult demographic condition in Siberia and Far East by building is not as easy as it seems. There are evidences suggesting, for example, young professionals refuse to go to remote stations for leadership positions, preferring to occupy the lowest position in major cities. (5) Infrastructure constraints on Transsib

smoothed to divert freight traffic on the Baikal-Amur Mainline (BAM) ,which, needs to be modernized. Traffic growth requires an expansion of “barrier” places at BAM. Construction of the second track and electrification of railway. While funding only from the JSC “Russian Railways” is not enough.

4. To ensure proper delivery of goods, a second line of BAM should be consideration, which will increase the capacity of transportation cargoes from 15 to 100 million tons. The cost of modernization of the Russian railways is estimated at 4.3 trillion rubles until 2020, including the Trans-Siberian and BAM-1 trillion rubuctureles.

5. In 2018, about 80% of the investment of OAO “ Russian Railways” is spent on the construction of expressways between cities of the 2018 World Cup.

2. CURRENT STATUS AND PROSPECTS OF SOCIO-ECONOMIC COOPERATION BETWEEN RUSSIA AND CHINA

2.1 Financial and economic cyclical crisis for China and its influence on the logistic processes

Experts Academy of Social Sciences of China in his work, offered the following proposals for public policy acyclic macro-control in 2008:

- reduce the excessively high rate of economic growth, particularly investment;
- see in mitigating inflationary pressures and stabilize the price level priority macro-control;
- consistently consider ways to save energy and reduce emissions of harmful substances as a third priority for macro regulation

But the dependence of the Chinese economy from the main importer of its products - in the midst of the U.S. financial crisis is cyclical, the same could not, would not affect the economic performance of China.

In particular, in the fourth quarter of 2008 decreased economic growth and significantly slowed the growth rate of industrial production. Reduced demand for energy, raw materials, transportation, expensive types of consumption, in particular commodity housing and automobiles. Decreased volume of foreign trade. Enterprises increased economic difficulties associated with the reduction of orders, sales volumes and profits. Acute problems in employment. All this significantly slowed the growth of state revenues.

But against the background of zero or negative growth dynamics of the USA, Japan and Europe, China's economy yet maintained its growth even though slowing slightly.

Impact of the global crisis on the cyclic dynamic economy in China that was not as severe as for the developed economies like Europe and Japan. Firstly, tightness of financial market provided it greater strength and security deposit from external influences. Secondly, it is a great opportunity of self-regulation for Chinese economy. China's GDP grew by 6.1% in the first quarter of 2009 and in the second quarter reached to 7.9% compared to the same period in 2008.

Anti-crisis measures of the Chinese government. Chinese project to combat the economic crisis actually implemented from autumn 2008 and including a measure in several ways (for more detail see Table. 2.1).

Based on the following block diagram shows that the expansion of domestic consumption amid the global decline in demand is an important element of the government's anti-crisis strategy in China. Therefore, China's government has allocated a total of 4 trillion yuan (about 586 billion U.S. dollars) in 2008-2010. The basis of these funds was the federal budget, and the residual part was formed from local budgets. It should be emphasized that the use of its own funds, the public and private sectors of the economy, the Government of China also imposes certain expectations, due to challenging and incentive measures for enterprises introducing innovations (Table 2.1).

According to some Chinese economists, the cause of the economic crisis is the result of China's economic structure and it has nothing to do with the financial crisis in

the USA cyclical.

Table 2.1 – Volume and structure of China's anti-crisis funds

Purpose of funds	billion yuan	percentage
Construction of transport infrastructure	1500	37.5
Recovery from the effects of earthquake in Sichuan	1000	25
Construction of social facilities in cities	400	10
Social facilities in the village	370	9.25
Environment saving natural resources	210	5.25
Education and public health	150	3.75
other expenses	370	9.25
Total	4000	100

Financial cyclical crisis USA is responsible only for the reduction of Chinese foreign exchange reserves, but it is, in any case, is not associated with the Chinese economic crisis. China's economy drove itself into such a hopeless situation throughout its system, both political and economic.

2.2 Trade and economic cooperation between Russia and China

Sino-Russian trade in 2010, according to Russian customs statistics increased by 50.3% and amounted to 59.3 billion Russian exports to China - U.S. \$ 20.3 billion, an increase of 21.8% , Russian imports from China – 39.0 billion (+71.2%). The negative balance of Russia –\$ 18.7 billion.

In 2010, Russia ranked 13th among China's trade partners. China ranked first among foreign trade partners of Russia, including the sixth and the first expor import. China's

share of Russia's foreign trade amounted to 9.6% (Table 2.2).

Table 2.2 – Trade between Russia and China in 2006-2012

Year	2006	2007	2008	2009	2010	2011	2012
Trade turnover	28.7	40.3	55.9	39.5	59.5	83.5	87.5
Growth rate%	141.2	140.6	138.7	70.6	150.3	140.8	105.2
export	15.8	15.9	21.1	16.7	20.3	35.2	35.7
Growth rate%	120.8	100.9	133.0	78.8	121.8	173.4	102.0
import	12.9	24.4	34.8	22.8	39.0	48.3	51.8
Growth rate%	177.8	189.1	142.4	65.7	171.2	123.9	107.6
balance	2.8	-8.5	-13.6	-6.2	-18.7	-13.1	-16.1

According to the FCS of Russia in 2012, Russian-Chinese trade turnover increased by 5.2% and amounted to 87.5 billion Russian exports to China amounted to \$ 35.7 billion (2%), while imports from China - 51.8 billion (+7.6%). Russia was a negative balance of \$ 16.1 billion since 2010, China is the first trade partner of Russia.

China's share of Russia's foreign trade in January-March 2013 was 10.8% (+ 0.3% compared to January-March 2012). Russia in the ranking of the major trading partners of China retained in 9th place in 2012, accounting for 2.3% of China's foreign trade turnover (Table 2.3-Table. 2.4).

Table 2.3 – China's trade turnover with major trade partners in 2012

(According to the State Investigation Department of the PRC, \$ mln.)

countries	Coast (mln.dollars)			Increase(%)		
	Trade turnover	export	import	Trade turnover	export	import
Total	3866760.33	2048934.76	1817825.57	6.2	7.9	4.3

The end of Table 2.3

countries	Coast (mln.dollars)			Increase(%)		
	Trade turnover	export	import	Trade turnover	export	import
1.USA	484682.52	351796.17	132886.35	8.5	8.4	8.8
2.Japan	329451.38	151642.64	177808.74	-3.9	2.3	-8.6
3.HK	329451.38	151642.64	177808.74	-3.9	2.3	-8.6
4.Korea	256329.18	87681.37	168647.81	4.4	5.7	3.7
5.Taiwan	168962.98	36779.08	132183.90	5.6	4.8	5.8
6.Germany	161129.72	69217.53	91912.19	-4.7	-9.4	-0.9
7.Australia	122300.65	37740.11	84560.54	4.9	11.3	2.3
8.Malaysia	94813.05	36518.02	58295.03	5.3	31.0	-6.2
9.Russia	88158.04	44057.53	44100.51	11.2	13.2	9.2
10.Brazil	85715.69	33414.89	52300.80	1.8	5.0	-0.2

Table 2.4 – Services trade between Russia and China in 2006-2012

(According to the Bank of Russia, thousands of dollars)

	2006r	2007r	2008r	2009r	2010r	2011r	January-September2012
turnover	1740115	2114539	2464451	1815321	2374295	3292481	2619757
export	636259	748523	869622	824204	100096	131779	1128111
import	1103856	1366016	1594829	991117	1373299	197402	1491646
balance	-467597	-617493	-725207	-166913	-372303	-656923	-363535

2.3 Investment cooperation between Russia and China

Russian Central Bank statistics indicate that Chinese direct investment of all types

amounted to \$645 million in 2015 and \$350 million in 2016. This information is based on Russia's balance of payments. Thus, we can calculate the exact overall figure of investment in Russia from all over the world (\$32 billion in 2016, including \$19 billion in the form of shareholdings).

The main priorities of China's investment activities in Russia are energy, mining, forestry, light and textile industry, household electrical appliances, communications, construction and services.

50% increase in the volume of executed Chinese companies contract construction and labor services. In 2010, Chinese companies in Russia performed the work in the amount of \$1.5 billion against \$ 1.0 billion in 2009 signed new contracts for \$ 1.19 billion. By the beginning of 2011 the total volume of completed work reached 8.36 billion from \$ 6.86 billion at the end of 2009, the total volume of contracts - 13.18 billion dollars (since 2009 - 11.99 billion dollars).

Russian direct investment in China in 2010 increased by 10.0% to 34.97 million against \$31.77 million in 2009 Contractual investment decreased by 33.4% to \$ 120 million Number of newly registered projects with Russian direct investments - 59 (in 2009 - 94 projects).

By the end of 2010 the total volume of Russian direct investment in China reached 786.77 million (+4.6%), contractual investment - 2.31 billion dollars (5.4%). Total number of Russian direct investment projects in China - 2328 (2.6%) (Table 2.5).

Table 2.5 – Direct investment in China and Russia in 2006 and 2012

	2006	2007	2008	2009	2010	2011	2012
China's investment in Russia	0.470	0.438	0.24	0.41	0.594	0.303	0.212
Russian investments in China	0.067	0.052	0.06	0.032	0.035	0.31	0.043

According to the Ministry of Commerce of China, China's total direct investment in Russia during 2011 amounted to 303 million (-49%). The main priorities for investment of China in Russia continued to be a mining, forestry, energy, light and textile industry, household electrical appliance, communications, construction and services.

Russian direct investment in China in 2011 amounted to 31.02 million against \$ 34.97 million in 2010 (-11.3%). Number of newly registered projects with Russian direct investments – 51 (in 2010 – 59 projects). Main directions of Russian investments: manufacturing, construction, transportation.

In 2012, the volume of incoming Chinese investment in Russia amounted to 739.6 million (60.8% decline compared to 2011), including direct - 212.2 million (- 64.1%). In 2012, the volume of incoming Russian investment in China's economy amounted to 1.6 billion dollars (an increase of 137.9% compared to 2011), including direct - USD 42.9 million (an increase of 536.5%).

Regarding investment in 2016, there are several controversial statements from the Chinese side. In December 2016, a representative of the PRC Ministry of Commerce talks about a bright moment of 2016 being investment of over \$14 billion into Russia. At the same time, in December he named a number of \$34 billion, not mentioned before. At the end of 2016, the Chinese ambassador to Russia said \$10 billion. The Chinese

Minister of Commerce in February 2017 said that Chinese accumulated investment into Russia is at \$42 billion.

Thus, the Sino-Russian relationship is the best in its history and are characterized by high dynamics of sustainable development, a strong legal base and active relationships at all levels. Relations between Russia and China are in the nature of both global and regional scale. Russian-Chinese economic cooperation is characterized by progressive and dynamic development. Russia seems to developing China , whose economy is largely dependent on exports, a very promising potential market. At the same time, a partner capable of providing cross-border regions of China required a significant amount of raw materials. For Russia, China - a promising market of energy resources , the possibility of the development of border areas, a potential source of investment in the economy. The rapid development of Sino-Russian economic cooperation contributes to economic growth in Russia and China.

2.4 Chinese Labor Market: Background and forms of interaction with the labor market of Russia

Chinese immigration in Russia has been existed for many decades and Chinese have always regarded Russia as a territory of its geopolitical interests. Given the growing integration processes in Eurasia, Russia will have to revise its immigration policy in the direction of greater openness, while don not forget their own geopolitical interests in the region of Central and Middle Asia. Its main opponent in the migration

policy could be China, which does not disguise its imperial ambitions in Russia and expects loyalty Moscow against foreign labor, showed that negotiations on Russia's accession to the WTO.

Reliance on overseas Chinese in neighboring states is part of the socio-economic development strategy in China at the present stage. Chinese transnationalism is seen as part of the modernization project of the PRC, and the territory of the Russian Federation.

As a key area of migration policy in China. It announced the promotion of Chinese labor exports in 2004, and as a tool for optimizing these processes, it was proposed to establish a special training center for workers going abroad. In 2004, a license issued for such activities to specialized agencies.

At the level of bilateral cooperation, China was one of the first countries with which the Russian Federation has concluded an agreement on temporary employment of citizens of the Russian Federation in the People's Republic of China and the People's Republic of China citizens in the Russian Federation. If we consider the level of multilateral cooperation, in the framework of the Shanghai Cooperation Organization migration policy priorities until only in the context of problems with illegal migration.

As a border region of China, Russia is a priority for low-income Chinese and their families, while China's top workers are marching to the European Union and North America as well as Australia.

In my opinion, on the volume of emigration of works from China in favor of Russian influence or be influenced in the near future by several factors. Moreover, their

action can be multidirectional.

External market factors include economic, social and political conditions that result from the competition of the global labor market. In the developed countries, based on the post-industrial economy, there is a substantial lack of jobs. This is due to the cost of use of transnation labor. Offshoring is a consequence of transnationalization and promotes the transfer of jobs from development countries to developing countries.

In the last two or three years we can talk about the changes in the strategy of the developed countries on the use of cheap labor in China. This is due to two reasons. The first reason is related to the post-crisis growth of unemployment in developed countries, these government blamed on the failure to creat new jobs. So, Barack Obama in his keynote speech ("American's Job Act") in the Senate in September 2011, said the need for an additional 2 million jobs in the industrial sector in the U.S. , despite the fact that resources for this in the USA is not. Jobs deficit Americans suggest to eliminate due to the introduction of such a mechanism of tax payments for large American businesses , which stimulates the latter to return jobs to the U.S. from China . In addition, recent developments in the economic and trade relations between China and the United States , suggest that Chinese business , trying to overcome the anti-dumping laws of the United States, will be the very place production capacity in the United States , depriving their citizens jobs.

Factor motivating the Chinese to move to Russia, can be considered the transformation of the migration regime within both intensifying integration process in Eurasia and Russia's WTO accession, implying including liberalization of the migration

regime with WTO member countries.

The Chinese are known to be taken a very strong position with regard to the employment of its citizens in the Russian Federation. The Chinese demanded the establishment of national treatment to all Chinese service providers to remove barriers that hinder the entry of Chinese workers to the territory of the Russian Federation, carrying out work without registration and license the opportunity to occupy positions previously unavailable to foreign nationals.

Reducing the working-age population in China is directly related to negative trends in fertility. The birth rate in China successively lowered from 6 children per women in 1960 to 1.6 children per women in the moment, which is comparable with the European trends in fertility. This was due to many factor (new forms of marriage, leaving the marriage, but the most seriously influenced by the policy of “one family-one child”), as well as the effect of deferred birth and marriages. As a result a considerable gap between the segments of the working population and have an adult young population.

Thus, we can say that China’s role in labor migration in Russia will remain significant because of economic and social consequences of China’s economic destabilization for the poorer segment of the population, who are mostly source of labor migrants.

Key conclusion and suggestions to the chapter 2

Currently increasingly important component of economic cooperation between Russia and China by increasing mutual trade, increase investment flows, the

intensification of cross-border and interregional economic exchanges and contracts between businessmen of the two countries. In this regard, the Russian-Chinese relationship is the best in its history and is characterized by stable high growth dynamics, strong legal base and active relationships at all levels. Relations between Russia and China are in the nature of both global and regional scale.

Russian-Chinese economic cooperation is characterized by progressive and dynamic development. Russia seems to be developing China, whose economy is largely dependent on exports, a very promising potential market and at the same time a partner capable of providing cross-border regions of China required a significant amount of raw materials. For Russia, China is a promising market for energy, the possibility of the development of border areas, a potential source of investment in the economy. The rapid development of Russian-Chinese economic cooperation contributes to economic growth in Russia and China.

After Russia's accession to the WTO, which was ratified in August 2012, we can expect to optimize the structure of the Russian-Chinese trade. Furthermore, the quality of trade and economic cooperation between Russia and China will increase after the expansion of cooperation in areas such as aviation, aerospace, biotechnology, etc.

At the same time, as noted above, for Russia are the most important projects related to the creation of a unified transport and energy corridors. During the negotiations between the SCO member states started work on the creation of a single transport space with the inclusion of the SCO transport corridors such as the "North-South" and the Trans-Siberian Railway. In contrast to the project corridor from

Europe to Asia TRACECA (TRACECA, Transport corridor Europe Caucasus Asia), which is supported by the EU and the U.S., the SCO adopted its transport corridor project from Shanghai to St. Petersburg, runs through the territory of member states .

In general, the development of transport and energy component integration cooperation in the Central Asian region will help ensure full Russian presence in the region, enhance the ability of cross-border trade and economic cooperation with the countries of the region. While Russia does not share the position of China to reduce trade barriers, as well as many other members of the SCO, as national markets are not ready for the smooth expansion of goods, services and labor from China.

3. DEVELOPMENT OF TRANSPORT COMMUNICATION TO ENSURE GLOBAL ECONOMIC TIES BETWEEN RUSSIA AND CHINA

In Chapter 3, the basic directions of the evolutionary development of transport and Far East in order to increase exports to China. Particular attention is given to project for development of mineral resources in Russia, implemented with the participation of Chinese companies and financial institutions. The feasibility of attracting China's transport development, including transit, the Northern Sea Route. Arguments pointing to the absence of evolutionary perspectives transport communications through the Republic of Yakutia and the railway China – Kyrgyzstan – Uzbekistan as a route of cargo flows in the direction of China – Europe .

Length of the border between Russia and China is more than 4 thousand miles. To China accounted for over 70% of the turnover of Siberia and the Far East, and in the Trans-Baikal Territory, the Amur Region and the Jewish Autonomous Region , the share is 93% to 97%.

Thus, if in the East Siberian regions of Russia , economic activity is concentrated in the major cities (Irkutsk, Chita, Ulan-Ude), in the adjacent northern China, it has moved beyond the centers (Manchuria , Suifenhe , Qiqihar , Harbin), which leads to an increase in population , create thousands of new productions annually .

Russian regions bordering China are at the center of public policies aimed at leveling the rates and levels of socio-economic development of the country. The Russian leadership is also focused on addressing the socio-economic development of Siberia and

the Far East. This coincidence vectors of development makes it possible to implement the scenario of joint interaction with China. Pairing development programs adjacent territories of the two countries may also include involvement of Chinese construction companies with the aim of building social and community facilities and infrastructure.

Until recently, mutual investments between Russia and China remained insignificant. However, the recent increase in Chinese penetration into the Russian economy. Chinese interests are mainly in obtaining raw materials and supplies to the Russian machinery and equipment.

Development of transport and communication infrastructure in Siberia and Far East, it is necessary not only to ensure the exports of Russian enterprises in China, but also for the operation of industrial facilities created with Chinese capital.

3.1 Participation of Chinese companies in the development of natural resources of Siberia and the Russian Far East and construction of transport infrastructure

Consider the basic transport infrastructure projects in Eastern Siberia and Far East, implemented on a public-private partnership (PPP) and their influence on the evolution of the transport and communication engagement with China. Results of the study are shown in Table 3.1.

Table 3.1 – Major development of railway infrastructure in Eastern Siberia and the Far East and the development of transport links with China

No.	Railway infrastructure being built of the PPP project	The main problems and difficulties of the project	Prospects for the development of transport communications with China
1.	Construction of the railway line Kyzyl - Kuragino (402km) in conjunction with the development of the mineral resource base of the Republic of Tuva	Changing the initiators of the project, the owners of licenses to develop coal deposits, debt problems, complex construction conditions	Extending the road in Mongolia and China, creating a new international transport corridor
2.	Berkakit - Tommot - Yakutsk (802.6km), Integrated Development of South Yakutia	Difficult terrain, permafrost, poor safety, limited financial resources	Formation of a new multi-modal transport corridor along the route China -Europe.
3	Reconstruction of the Komsomolsk-on-Amur - Sovetskaya Gavan	The project was successfully implemented	Increasing transport capacity of BAM for carriage of goods exported to China.

Joint construction of new lines and increasing freight traffic transit potential of Siberia and the Far East is possible with the active participation of Chinese companies. Direction of transport support Chinese investment projects is presented in Table. 3.2.

Table.3.2 – Transport to ensure the participation of Chinese companies in the development of mineral resource base in Siberia and the Far East.

№	name of project	Maximum capacity (per year)	competitive benefits	transport support	Investor forth PRC	timeline for Implementation
1	Construction Kimkano-Sutarsky GOK OAO	20 million tons of iron ore	Proximity Market compared to Major concurents	Construction of the bridge and border Crossing Nizhnelenins koye-Tongjiang	Means of Chinese banks	Till 2020 year.

The end of table 3.2

№	name of project	Maximum capacity (per year)	competitive benefits	transport support	Investor forth PRC	timeline for Implementation
2	Development of Gerbikano-Ogodzhinsky carboniferous area (Amur region)	30 million tons of coal	Near the north-eastern region of China's largest coal deposit in Russia	Construction of the railway Ogodzha - the February railway to Blagoveshchensk bridge across the Amur and railway border crossing "Blagoveshchensk-Heih"	Coal corporation "Shenhua"	Till 2019 year.
3	Development of the mineral resource base of Sakhalin, the construction of the refinery	unknown	Favorable geographical location for the organization of maritime transport	Development of port infrastructure east of the island	Dandong Corporation. Not define	Not defined

In general, China's steel industry consumes about 750-800 million tonnes of iron ore concentrate per year, the main suppliers are companies from Brazil, India and Australia. It is believed that the competitive advantages of Russian project are lower transport costs, particularly in the case of the further development of cross-border infrastructure. According to the plans by 2020 China will be shipped about 20 million tons of iron ore per year. Delivery of machinery, equipment building materials for the construction should be carried out through the GOK railway checkpoint Grodekovo - Suifenhe.

In October 2009, between HC "Petropavlovsk" and the China National Machinery state corporation signed an agreement of general contracting and investment banks in

the Chinese on construction of a bridge across the Amur . In addition , it is planned to open a new railway checkpoint Nizhneleninskoye (Russia) - Tongjiang (China) and build hiking to it.

Thus, the main part of the production will be exported to the GOK China by the shortest route over the railway bridge Nizhneleninskoye - Tuntszyan Lime Station (Far Eastern Railway), located near the plant under construction. Distance from Izvestkovaya to Nizhneleninskoye is 245 km. For comparison, the distance from the loading station to the border crossing Zabaikalsk - Manchuria - 2.3 thousand km, Grodekovo - Suifenhe - more than one thousand kilometers. Construction of the bridge will shorten the route of almost 1,500 km. This is the only crossing on the border length of 3,000 km.

3.2 Yakutia in the transport links between Russia and China (prospects route China – Russia (Yakutia) – the Northern Sea Route – European ports)

One of the projects to increase the transit potential of the Republic of Sakha --Yakutia, included in the "Strategy of socio-economic development of the Far East and the Baikal region for the period up to 2025" , is the route Mohe (China) – Dzhalinga – Skovorodino – Tynda – Neryungri – Yakutsk – North sea Route – the ports of the Russian North and Western Europe.

The key conditions for its successful operation are:

1. Completion Berkakit – Tommot – Yakutsk (with the construction of a bridge across the Lena River).
- 2 . Construction of a bridge across the Amur River between the

village Dzhalinda in the Amur Region and the Chinese village of Mohe. 3. Development of transportation along the Northern Sea Route.

The total length of Berkakit (Nenyungri - cargo) – Tommot – Lower Bestyakh is 802.6km. In 2004, the movement began in the area Berkakit – Aldan – Tommot organized by OJSC"AK" Yakutia Railways . " Opening movement of trains on the site Tommot - Lower Bestyakh (right bank of the Lena River in front of Yakutsk) totaling 439 km to happen before the end of 2013.Construction of a bridge across the Lena will:

a) forming in Yakutsk major transport hub , including the railroad , Yakutsk river port , highways "Kolyma " , " Vilyuy " , " Mayya ";

b) Connect the Trans-Siberian , Baikal-Amur Mainline and the Northern Sea Route .

The strengths of the project are:

1. Availability of specialized contractors with experience in the construction of large bridges, and freed in 2012 after the completion of the construction of transport infrastructure for the APEC summit in Vladivotok.

2. Load growth of railways, railways served Yakutia, which minimizes the fixed costs per unit of cargo in transit. As of 2012 the company's traffic volumes were about 2 million tons of cargo and more than 100 thousand passengers a year. Development strategy of rail freight in the country provides growth to 14.4 million tonnes by 2020 will contribute to this northern delivery switching to rail and growth of mining in South and Central Yakutia.

3. Held railways Yakutia work to reduce operating costs by replacing outdated engines for locomotives upgraded engines of General Electric. Especially for zhdy

company GE Transportation is going to start production in Kazakhstan locomotives adapted to the conditions of the Far North.

On the other hand, increase the role of river transport of freight transport on the Lower Lena, especially in the case of attraction of transit cargo on the Northern Sea Route.

Weaknesses of the route are:

1. Backlog of work in the construction of the station Nizhny Bestyakh caused insufficient funding, late preparation of design estimate, the problems in the construction companies.

2. Limited functionality of a bridge across the Lena River near Yakutsk 3km in length ,which will initially only by road and only the future will be supplemented by rail tier.

3. The need to attract investment to finance the construction of the bridge on a concession basis due to lack of state budget funds.

3.3 China's participation in the development of freight traffic on the Northern Sea Route

The development of transport along the Northern Sea Route (NSR) is necessary for:

- providing new export products of oil and gas production facilities in the Far North, primarily gas fields of the Yamal peninsulas products plants LNG , as well as deposits in the Barents and Kara Seas;

- expand its presence in the Russian Arctic zone on the background of the increasing interest in it from other states;

- improve transport accessibility Russian territory up to the border with China, Mongolia and Central Asia through the use of large Siberian rivers.

In 1987 the volume of freight traffic along the NSR was 6.7 million tons, in 1998-1.4 million tons during 2005-2008. Traffic volumes were kept at 2 million tonnes per year. In 2012, income was about 4 million tons, including 1.2 million tonnes-transit.

Amid the global financial and economic crisis increase in traffic along the NSR slowed large-scale projects in the region associated with the export of hydrocarbons, or are in the initial stage of implementation. However, according to the Ministry of Transport of Russia, in the next decade is expected to significantly increase cargo traffic along the NSR: 2016-up to 29 million tons by 2020-to 63 million tons.

It is assumed that by 2030 the volume of freight through the NSR will increase to 50-80 million tons per year. Transit through the NSR may rise to 2015-2016 years 5 million tons, which will require the implementation of more than 100 transaction per year ice breaking.

Transportation in SMP (from the Bering Strait to the Barents Sea) can reduce the traditional route of delivery of goods from Asia to Europe (through the Malacca Strait) on the 2.5-4 thousand nautical miles and for 10-14 days. Melting ice enhanced the sea navigation on SMP: if this route passed two vessels in 2010, up to 46 ship in 2012.

3.4 Railroad China – Kyrgyzstan – Uzbekistan in the system of transport communications in the direction of China-Europe

Russia and China, the construction of the China-Kyrgyzstan-Uzbekistan railway, were scheduled to be implemented within the framework of the development of the TRACECA transport corridor. Impetus for beginning the project was completed in 2000, construction on the territory of the PRC railway Charles – Kashgar. If Kyrgyzstan will build his site, China will build a railroad to the Kyrgyz border Kashgar – Torugart length of 165km. It is expected that during the construction of the railway in Kyrgyzstan will create 20 thousand jobs in the operation of the road will be involved 2.7 thousand people. Expected freight in the first year of the railway will be 4.5-5 million tons in the future - 15 million tons per year, passenger traffic - up to 250 thousand people. It is assumed that the railway will be repaid in 10 years. Strengths and weaknesses of the project are listed in Table 3.4.

Table 3.4 – The project's strengths and problems of the railway China – Kyrgyzstan – Uzbekistan

Strength of project	Weakness of project
Shortening the distance trans traffic towards the "East - West". Infrastructural support development of mining industry of Kyrgyzstan, primarily developing coal mine Karakeche. Political importance of the project for Uzbekistan. Feasibility study of the project in accordance with the agreements of the Kyrgyz Government and Chinese Corporation for the construction of roads and bridges. Existing contacts with Chinese companies of Uzbekistan in the field of railway transport development.	Difficulties with the choice of the route of the railway-Alpine terrain. The high cost of the project(according to preliminary estimates, \$4 billion), the problem is finding sources of funding. The danger of Chinese expansion, primarily in Kyrgyzstan. China's desire to link the railway construction with external investments in the development of Xinjiang, replacing public funding for development of the district. The presence of potential and actual "hot spots" in areas passing Xinjiang, Fergana valley, Afghanistan.

3.5 Development of transport and communication infrastructure in China: Opportunities and Challenges for Russia

The total length of railways in China exceeded 91 thousand km up to 2012, by 2015 this figure will increase to 120000 kilometers. China Railways do not play such a significant role in international transportation, maritime transport. This is explained by the fact that: (1) China's main production facilities are concentrated in the eastern and southern region; (2) geographical location of China's main trading partners: USA, EU and Japan require the use of overland routes.

Despite the rapid development of the north-western provinces of China, the prospects for land transit depend on logistics policy of enterprises located in the most industrialized south-eastern China (cities such as Shanghai or located near the port of Hong Kong to Shenzhen).

Transport by rail way can reduce the delivery time of goods via China-Europe. First of all, we are talking about products with high added value in the newest samples of audio, video, home appliance, computers, cell phones, seasonal things and fashionable clothes. In the transportation of such goods ground transportation can realize their competitive advantage, despite higher costs. For example, the estimated cost per containers by sea route Shanghai-Munich is 3500 dollors compared 6800 dollars by rail, depending on the type of submission. At same time, there are opportunities to reduce the cost of rail transport by optimizing the route of movement and providing feedback load.

Thus, the German company BMW uses rail links between the plant in Germany and assembly site in northern China, the distance of transportation is 1100 km, journey time of 20 days. If we can reduce this period to 12 days, competitive advantages of rail transport will increase substantially.

After the reform of railway transportation in China may decline in construction of high-speed lines, with the expansion of the construction of conventional rail. Russia is devoting to a test mode of high-speed line Harbin-Dalian in 2012, which length is 921 km, the speed will reach 350km/h. Main line of the route linking Chinese provinces of Heilongjiang, Jilin and Liaoning, is part of SCM Beijing-Harbin. Enter SCM will increase freight transportation by 50-60 million tonnes per year, due to the release of capacities conventional railway. China is considering building a highway in Beijing-London on two ways -through Russia, what interested in JSC "Russian Railways" or bypassing its territory. At the level of Russian government decided to build high-speed rail in Moscow-Kazan. In this case, the prospect of extending the line appears to Yekaterinburg, Chelyabinsk and beyond towards China. It is estimated that the breakeven line operation will require government subsidies for four years in the amount of 130 billion rubles per year, while the ratio of public and private funding will be 30% to 70%. Transit potential SCM lead to its speedy payback.

Key conclusions and suggestions to chapters 3

1. Attracting investment from China in the development of and the Far East requires infrastructural support new industries. Development of transport infrastructure includes:

- (1) Increased capacity and carrying capacity of public railways , especially the main

thoroughfares (Transsiba and BAM); (2) reconstruction of existing and construction of new railways to the Russian-Chinese border; (3) construction and modernization of mining and processing in order to reduce transportation costs.

2. Even large companies are not capable of solving all the problems of modernization and increase the carrying capacity of Transsib and BAM. For shipments from the Kuznetsk Basin and other regions of Siberia to be further developed heavy traffic. Development of transit will reduce the proportion of fixed costs in the cost of transport services, which is especially important in the removal of most Russian regions of the external borders and cheap transport communications. In terms of reducing transport costs, the greatest prospect is starting construction and modernization of mining and processing plants in the coal-mining regions.

3. Expedient participation of Chinese companies in the modernization of the Russian railways linking the Trans-Siberian Railway with the Russian- Chinese border, construction of bridges across the Amur and Ussuri rivers.

4. Development of China's railway infrastructure (built in China by 10 thousand km of roads per year) will have dual consequences for the new transport and communication between the two states. This can reveal how new prospects for the development of transit through the territory of the EEA countries and lead to a reorientation of the flow of goods in the direction of the sea ports on the southeast coast of China.

5. In the circumstance, the idea gets a special urgency to develop new routes linking Russia and China, for example, Suifenhe corridor that begins in Russian ports of

Vladivostok, Nakhodka and Vostochny, passes through the border town Grodekovo -Suifenhe and Harbin, then through the border crossing Zabaikalsk - Manchuria goes to Chita and Trans-Siberian. In the international trading port of Dalian begins another interesting for Russian transport direction, which passes through Harbin and then through the border crossing Zabaikalsk - Manchuria overlooks the Transsiberian.

6. Evolutionary perspectives route China - Russia(Yakutia)-the Northern Sea Route -European ports look doubtful, primarily because of the nature of multimodal transport delays and financial difficulties of construction of the railway bridge across the Lena River in Yakutsk region and across the Amur River near Mohe and limited period of sea and river navigation.

7. Development of the Northern Sea Route as a transit artery requires solving the problem of reducing the cost of transmission and ice pilotage on this route, taking into account the adverse climatic conditions, the need for construction, reconstruction and the resumption of navigation infrastructure. The key here is to minimize fixed costs on the passage of each vessel. This can only be achieved through extensive use of NSR to ensure then implementation of projects for the extraction of hydrocarbons and other minerals in the Arctic, on the shelf of the northern seas, in the basins of major Siberian rivers.

8. Railway project China-Kyrgyzstan-Uzbekistan make prospects for its successful implementation is very questionable, at least in the near future. Evolutionary development should follow the path using a market advantages of road transport using the transitions on the Sino- Kyrgyz border.

9. Promising idea of building a high-speed railway in Russia (SCM) Moscow-Kazan with its subsequent extension to Yekaterinburg, Chelyabinsk and beyond towards China. In this case, it may be part of the Eurasian SCM Beijing - London .

4. NEW MODEL OF FORMATION OF EVOLUTION TRANSPORT LINKS CHINA, EUROPE AND THE COMMON ECONOMIC SPACE

Chapter 4 discusses guidelines for a new model of development of the transport infrastructure of the Common Economic Space (Russia, Belarus and Kazakhstan), aimed at upgrading and implementation of transit potential of their territory with the most modern types of equipment and advanced transportation technologies. Shown that the development of transport corridors associated with increased levels of cargo containerization, running container trains, electronic registration of shipping documents.

Particular attention is given to improving transport links and joint projects with the participation of government agencies, public and private companies of countries - potential members of the EEA: Ukraine, Armenia , Kyrgyzstan, as well as interaction with the neighboring countries, especially Lithuania for the full use of transit capabilities of the Kaliningrad region. In road transport, the emphasis is on the creation of an international corridor“Europe - Western China”as a key element in the development of the transport system on the high- EEA basis.

State Common Economic Space (Russia , Kazakhstan and Belarus) use other countries. For example, the transport links between Russia and Uzbekistan , Kyrgyzstan, Tajikistan and other Central Asian states are carried out through the territory of Kazakhstan.

Another example is the use of Kazakhstan in Russia to implement the export grain supply. Republic exports grain to more than 70 countries, including the countries of

Central Asia, Afghanistan and Iran. Kazakhstan also uses Russian territory as an additional channel of exports through the ports of Russia, Ukraine and the Baltic countries.

About half of Kazakhstan grain transiting through Russia, transported through shallow water ports on the Black and Azov Seas, in particular through the Azov port elevator. One of the areas of transport infrastructure development is the construction of the EEA or purchase of Kazakhstan companies grain terminals in the Russian ports . Handling of Kazakhstan grain and carried through the grain terminal in the Latvian port of Ventspils deep (Ventspils Grain Terminal, VGT), which is a joint Kazakh-Latvian company , and 50% owned companies in the Grain Union of Kazakhstan .

State policy of Kazakhstan aimed at reorientation of export flows of grain from the port of Aktau, which caters for the transshipment of grain in Iran, in the ports of Ukraine, the Baltic States, as well as Russian ports Yeisk and Azov. Another object is reduce transport cost export grains which can reach to 50%.

To solve these problems, the state bodies of Kazakhstan subsidize grain exports through Russia to the ports of the Black, Azov and Baltic Seas. Partially offset the subsidy costs for the use of Russian exporters hoppers grain carriers and transportation network of JSC "Russian Railways". So it was decided to allocate compensation cost of transportation costs of large grain companies in the amount of \$20 per ton in 2009. In 2010, the amount of compensation was increased 2-fold to \$40 per ton.

New evolutionary model of the organization of the transportation process requires the creation of a grain pool with companies in Russia, Kazakhstan and Ukraine. At the

heart of its operation should be based on the principle of mutual substitution, for which, for example, Russia and Ukraine grain exports to Europe and other countries, and supplying them with his Kazakhstan wheat. There by creating a joint management mechanism of grain reserves. Another direction of evolutionary formation of new transport and logistic model is the creation of the joint venture "Rusagrotrans" and JSC " Kazakhstan Temir Joly " (JSC "KTZ") the organization of transport of grain cargoes within the EEA .

According to the first vice-president of JSC "Russian Railways" Vladimir Morozov, the total transit potential of EurAsEC is estimated at 230 million tons per year, but currently it is only half.

Formation of a new evolutionary model of the functioning of the transport system requires further containerisation of freight. Despite the growth in container traffic, the level of containerization in Russia remains low - 37 containers per 1 thousand people, while in Europe the figure is 172 container.

Reindustrialization economy and expansion of industrial cooperation between companies from EEA will objectively contribute to the growth component in transport containers. On the other hand, after the formation of the Customs Union and Russia's WTO accession, efficiency of foreign trade would lead to the increase of imported freight containers with all their shortcomings : lack of feedback boot dominance of road transport, etc.

The new model of development of transport infrastructure in the EEA requires solving the problem of " barrier " places on the rail network or in case of a fall in traffic,

insufficient dissemination of dual operations. This requires the formation of a joint fleet of cars, including through its consolidation into one company.

Unified management and use of freight wagons of various forms of ownership is design to coordinate the movement of private cars and inventory on the market conditions. The concept of the Unified System of management and use of freight wagons of various forms of ownership was approved in 2010 at a meeting of the Council for Rail Transport in Vilnius. The main problem lies in determining the amount of rates and charges for the use of rolling stock. Only when the rate of use for cars close to market conditions, the third part can be created. Until 2014, it is necessary to develop methods for determining payment rates for the use of freight cars owned by other states in relation to the cars of a single park and changes in the rules of complex calculations between the railway administrations.

The combined efforts of companies and government agencies of the Common Economic Space shippers must provide such conditions that the transportation route China - EEA countries - Europe was profitable exercise on land than by sea.

4.1 Main directions of transport services and rail infrastructure between Russia and Kazakhstan

Improving transit potential of Russian will contribute to the popularization of multi-modal route from China via the shortest geographical direction through Kazakhstan, and other parts of the Trans-Siberian line in Russia, and the Baltic Sea with

a minimum number of borders crossed. Using block rail container trains and high-speed, large-capacity sea ferries on an agreed schedule will allow the transit time on the route China-Germany for 10-12 days at a minimum cost of transport services.

Path of the Northern Corridor of Trans, which is used to transport goods from China to Europe via Dostyk – Alashankou in Kazakhstan are already stretched capacity . There are cases of train delays at the borders of Russia and Kazakhstan.

In 2011, the group of companies "Bazis" started to construct strategically important object - the railway line Zhetygen – Horgos(293km) under formation of a new railway line China-Europe. In 2012, between China and Kazakhstan opened a new border crossing Altynkol - Khorgos. In this regard, the company JSC "KTZ" plans in the first half of 2013 to organize the route running of China - Europe up to two container trains a day and further increase the volume of traffic, including with the participation of Russian companies.

After the completion of major projects Uzen – the state border with Turkmenistan (146 km) and Zhetygen - Khorgos Kazakh President Nursultan Nazarbayev instructed to build a new 2015 line Arkalyk – Shubarkol (214 km) and Zheskazgan – Beyneu (1200 km). The latter must not only connect direct services center and west of the country, but also to become part of the Transport Corridor Europe -Caucasus-Asia (TRACECA, bypassing the rest of the Customs Union (CU) . On the line will be organized as a cargo and passenger traffic. In these circumstances, Russia and Belarus should make every effort to enhance the competitive advantages of Railways, passing through their territory .

Under the proposed EU scheme portion of the international transport corridor from China to Central European countries will also touch on the direction in Russia – Astrakhan Port Kavkaz. Thus on rail-road ferry lines from Russia to Varna (Bulgaria) will deliver the goods in the Danube Region.

Another example of a possible expansion of the transit capacity of the Russian territory is the railway construction project White Sea – Komi – Ural (Belkomur), which was supported by China and Kazakhstan. The line will connect the Scandinavian countries and North-West Russia and Asia by the shortest route.

However, "Belkomur" was not included in the list of public-private partnership, involving the allocation of funds from the state budget. As a financial mechanism for its implementation is requested to provide a private investor railway priority access to the built infrastructure, which reduces the transport arm for carriage of goods to the ports and their charging at a level not exceeding the payment Price List.

In 2012, for the organization of container trains Chongqing (China) – Duisburg (Germany) of Kazakhstan, Russia, China and Germany formed a joint venture, which participants, in particular, have become "Kaztransservice" and "Railways Logistics." Co-founder of the Chinese joint venture is working to reduce the impact of seasonal climatic factors on the transport of computer and office equipment through the use of special materials.

Regular container train transportation routes are organized from Chinese port of Qingdao through Kazakhstan. Therefore, it is not only about goods from Northwest China and the central region, but also related to China's eastern coastal port cargo base.

One of the projects of development of transit potential of Kazakhstan is building its own terminal infrastructure in the Chinese port of Lianyungang to consolidate cargo flows to Southeast Asia and back. Lianyungang port connects Chinese railways ports Tianjin, Shanghai and Qingdao, sea line with the Korean port of Busan and the Japanese port of Osaka, which opens up new markets for products of Kazakh companies. The reconstruction project auto corridor Western Europe-Western China also connects Lianyungang to St.Petersburg , which will allow service cargo flows to Europe.

Another focus of evolutionary development for transportation and communication between Russia and China through Kazakhstan is the organization of container traffic Urumchi (China) – Dostyk (Kazakhstan) – Kartali(Chelyabinsk region). Container handling

station Chelyabinsk-cargo JSC "Trans Container" has two container platforms, two gantry cranes and two truck " Squid ."

Under the 2013 agreement between the Chelyabinskaya Oblast government and the Xinjiang government, a 180-hectare multi-functional logistics Park "Yuzhnouralsky", located between the M36 Formachevo Expressway. Such a complex will be built in Urumqi. The shipping base of the route should provide the Chinese company Haier and Xinjiang International logistics Company "Eurasia Bridge".

4.2 New evolutionary model of development of transportation in China and EEA states with the Baltic countries

Presence at CES Baltic makes promising development of transport links participate countries with Lithuania (which borders Belarus) and the other Baltic countries. Belarus is actively using the Baltic ports (Klaipeda, Ventspils) to export their products (especially potash) and the implementation of import operations.

Lithuanian government aims to make the country attractive for transit. Important role in these plans play Klaipeda seaport and Kaunas, through which goods are moved in the direction of “North-South and “East-West”. Most of the EU funds allocated for the reconstruction of the railway junction is the port of Klaipeda.

Ports of Kaliningrad and Klaipeda are competitors by virtue of its geographical position. International transport corridor No.9 (with branches B and D) ends with two seaports: Port of Klaipeda, which is the northernmost ice-free port of the Baltic Sea and Kaliningrad port situated in the territory of the Russian Federation. In evolutionary development while leading the Lithuanian port. In particular Swiss shipping company Mediterranean Shipping Company (MSC) is planning to establish in Klaipeda region's largest container hub.

Development of the port of Kaliningrad is constrained by long control procedures at border crossings and high transit tariffs Lithuania and Belarus on rail freight. The main problem for Kaliningrad Railways (HDC) is the lowest load, road uses no more than 50% of its capacity due to declining attractiveness Kaliningrad direction as transit transport hub.

In 2008, the Lithuanian authorities increased rail tariffs to Kaliningrad, which made unprofitable freight to the Russian port and increased competitive advantage of

Klaipeda. The cost of one car transit network Lithuanian railways (236km) was 22 thousand rubles. At the same time, Belarus for a pass of the same car at almost twice the distance (513km) charged 21 thousand rubles.

As a consequence, in the first half of 2009 volume transported in the direction of the Kaliningrad transit goods fell sharply. In order to restore the CFL cargo flows and BDZ introduced additional discounts on freight in this direction. However, the use of exclusive tariffs can not fix the whole situation. Currently, the cost of transportation in the territory of Lithuania towards Kaliningrad ports for some types of goods exceeds the cost of transit towards the Lithuanian port of Klaipeda in 1.5–3 times.

In May 2010 between JSC " Lithuanian Railways " and JSC " Russian Railways " signed an agreement on cooperation in the field of intermodal rail traffic on the route Klaipeda /Kaliningrad-Moscow. Harmonized tariff policy was to combine the two ports into one transport corridor. However, the scheme of "2K" to ensure parity development of Kaliningrad and Klaipeda ports does not work. The reason lies in the weakness of the Russian state institutions are not able to resist, as the interests of private companies and focused efforts of the Government of Lithuania and JSC " Lithuanian Railways " to bring goods to the port of Klaipeda and the establishment of high tariffs for transportation of goods to Kaliningrad. Despite the fact is contrary to the requirement of the World Trade Organization.

To solve this problem, in addition to holding bilateral talks with Lithuania and the EU as a uniform level of tariffs for transit traffic through the territory of Lithuania in all directions, including Kaliningrad, transfer work bilateral commissions tips on long-term

cooperation in the trilateral Russia-Lithuania-Belarus to unify all tariffs roads at the intergovernmental level. Furthermore, it should respond to higher transit tariffs increase download ferries route Ust-Luga - Kaliningrad.

4.3 Direction "North - South" in the system of transport links between Russia and China

Another focus of the evolutionary development of the transport infrastructure of the EEA is to create the necessary infrastructure in the transit transport corridor “North-South”, especially overland routes, passing east of Caspian Sea.

Currently, transport is provided by the eastern branch of corridor “North-South” through Kazakhstan and other Central Asian countries using the border crossing valley. So train was made a demonstration run of a container train on 3756km distance route by Bandar Abbas-Almaty crossing 150 hours (6.25 days). Furthmore, it is the route Buslovskaya (border with Finland) – Aksarajskiy (border with Kazakhstan) corridor "North – South " which is a list of the main rail routes. As a priority, it will develop the Eurasian Economic Communnity.

The most promising is the new route of the eastern branch of the corridor “North -South”, which opens after completion Uzen (Kazakhstan) – Kyzylkaya – Bereket – Etrek (Turkmenistan) – Gorgan (Iran), which is over 670 km.

The advantage of this route is the relative stability of the political situation in the countries through which it passed, and that the financing of the construction of the road

is carried out by the member states that do not allow Russia to bear the risks associated with the return on the rail road. On the route of introducing innovative solutions, in particular, the movement of trains on the section Uzen – Bolashak Kazakhstan provides advanced systems interval regulation, allowing to increase the capacity of the railway, to reduce the costs of installation and maintenance of outdoor equipment.

If Iran build rail road Gorgan–inche–Barun, it will link the countries of Central Asia to the Persian Gulf and will provide them access to the oceans. However, in autumn 2012 the President of Turkmenistan Gurbanguly Berdimuhamedow made a decision on the termination of the contract for construction included in the ITC“North - South" area Bereket - Etrek with the Iranian company Pars Energy, which is unable to complete the construction of the railway for economic reasons. Now Turkmenistan will build their own railroad.

As for the western branch of the transport corridor “North - South”, passing through the states of the South Caucasus, there is need to pay special attention to the direction of Iran-Armenia, due to the possible occurrence of this country in the EEA. Armenia’s participation in this integration education should forter the necessary cargo base for the effective functioning of the corridor.

In addition, with the construction of the Armenian-Iranian line is connected is in the further development of the concession from OAO " Russian Railways " JSC " South Caucasus Railway". According to the former Russian Minister of Transport Igor Levitin, "rail link between Armenia and Iran fits into the North - South corridor, and access to Iran through Armenia to Russia is an important part of the corridor. In the Caspian Sea

is not enough capacity to carry traffic not only in Iran but also in the Gulf countries".

In October 2011 at the level of heads of government of Russia and Armenia discussed the issue of financing the construction of the Iran-Armenia Investment Fund of the Russian Federation, however, specific decisions were made. China were invited to take part in the construction of the Iran-Armenia.

Due to the fact that trade between Armenia and Iran is at a minimum, to provide meaningful traffic by rail Iran-Armenia must attract shippers from Georgia, Pakistan, India, Eastern Europe, China and countries of the EEA.

Value of the Iran - Armenia for transit traffic will increase after the opening of the Abkhazian section of the railroad through Georgia . However, the improved transport facilities Iran is not in the interests of Europe and the United States, toughening economic sanctions against the Islamic republic.

Key conclusion and suggestions to chapter 4

1. The study showed that the formation of a single transport space EEA is predominantly market-based and enhances competition in the economy. The state's role in this process is to eliminate non-economic barriers to the movement of goods and passengers. Government efforts should be aimed primarily at eliminating redundant forms of control over the borders and territories of the participating countries.

2. Strategic direction of the integration process should be the creation of large transport companies and joint implementation of the agreed projects in the field of infrastructure transport system and providing innovative transport services: the

implementation of transit, container, piggyback and other modes of transport. More important is to expand and reconstruct existing and new routes for freight and passengers, especially in the direction of China-Europe.

3. Formation of the Customs Union provides that a rail carrier of one country can carry out their activities in another EEA country. This will facilitate the creation of a competitive environment in the market of transport services in the provision of locomotive traction. In this regard, we can agree with the proposal of the Director of LLC " Balt Trans Servis " V. Prokofiev allocate a single component of the locomotive railway tariffs for the carriage of goods within the EEA.

4. The new model of transport infrastructure EEA requires: (1) equipment of border crossing on high-tech basis; (2) introduction of electronic pre-declaration of export, import and transit of goods (3) simplification of customs clearance and customs control of goods transported in containers

5. Transfer of customs controls at the external borders of the EEA required the development of transport and logistics infrastructure. In 2015, Belarus created 50 logistics centers of the state budget is planned to invest about \$850 million centers will be built on the main directions of cargo flows: in Brest, Grodno, Gomel, Mozyr, Orsha, and on the border with the Baltic countries.

7. The Customs Union makes transport and logistics centers in Kazakhstan(including Almaty) in real alternative distribution hubs in Moscow, St. Petersburg and other Russian cities in the distribution of goods in the territory of the CIS. There are prerequisites for the development of a Unified transport and logistics

systems in the framework of EurAsEC and penetration Kazakhstan warehouse operators on the markets of neighboring countries.

8. Particular attention should be given to the establishment of an integrated transport and logistics companies in the Single Economic Space. It could be a serious competitor to the single transit operators on the Trans-Siberian Railway. The presence of several major transportation and logistics companies operating throughout the EEA, will provide the necessary competitive environment in the transport market, will contribute to choosing the most effective direction of economic evolution.

CONCLUSION

The paper concludes that the most promising direction of the evolutionary development of transport communications in the direction of China - Europe is the maximum utilization of capacity in the territory of transit countries of the Common Economic Space (Russia, Belarus and Kazakhstan), as well as potential members of the EEA (Ukraine, Kyrgyzstan, Armenia). In the field of road transport I proposed to make the mechanism of the directed evolution of transport links within the international corridor "Europe – Western China".

The competition of business projects, services, companies and institutions, providing transport and communications cooperation between Russia and China, as well as the transit of goods to Europe preceded the creation of integrated transport and logistics company (ITLC). Initially, emphasis was placed on the maximum use of transport and transit potential Trans-Siberian Railway (Transsib). However, the economic evolution revealed that the market prospects are alternative routes cargo route China - Russia - Europe and a number of parameters they have significant competitive advantages over the Trans-Siberian .

Economic evolution of the transport sector is moving towards reducing the number of freight forwarding companies that do not have their own physical assets, rolling stock. During the evolution of the market increases competitive advantages transport companies investing not only in the purchase of rolling stock, but also involved in the creation overload infrastructure in ports and land border crossings, with the development of the terminal network in Russia and other countries.

The evolution of market institutions requires the evolving role of the state in the economy. In the implementation of transport and transit potential of increasing the effectiveness of the controls show supranational and international companies setting, including on the basis of international agreements.

RECOMMENDATIONS

1. The analysis of competitive advantages and problems in the functioning Trans-Siberian railways allowed to determine the main directions of its evolutionary development, as a transport communication between Russian and China. Further more, the transit route should take into account the action of internal and external factors. The most important issues of modernization and realizing the potential of the Trans-Siberian as transport communication between Russia and China and transit bridge between Europe and Asian are: (1) Increasing the competitive advantage of Transsib compared to the alternative route through Kazakhatan. (2) Overcoming the threat of impact difficult climatic conditions in the transportation process on the eastern portion of the Trans-Siberian Railway through the application of new technologies, strict adherence to production and technological process.

Long distance and harsh climatic conditions require a careful approach to the reform of the maintenance and repaire of railway infrastucture and additional financial costs. In terms of demographic crisis in Siberia and the Far East, it is necessary to ensure proper conditions of work and rest for railway workers. There is a phenomenon of competition projects of natural resource extraction and railway companies for scarce labor. Improving technology, accelerating border and customs control of goods in transit,

checkpoints modern equipment inspection and further development of electronic document are our goals.

2. Management efforts of state agencies and state-owned companies should be aimed at stimulating the development of Trans-Siberian evolution as the main channel of export supplies of Russian natural resources in China. Such policies include the modernization of the state participation highway, construction of new cargo-lines, improving the efficiency of the transport process through the development of industry in the primary processing of natural resources(mining and processing, woodworking, ect.)

3. Development of Trans-Siberian transit must be achieved by the market evolution in the competition with other routes in the direction of China-Europe. It should be borne in mind that almost all major transport infrastructure projects in Siberian and the Far East contain a unique opportunity to combine growth in production of raw materials to for significant transport and transit potential of the area in th direction of China-Russia -Europe. Continues to be the actual construction of the railway Kyzyl- Kuragino and its extension to Mongolia and China.

4. Transsib prospects as a transit line is largely due not to cargo service from China and with the expansion of the space of the Russian railway gauge in the territory of the North Korea(reconstruction of the railway Khasan-Rajin), construction of the bridge to the island of Sakhalin and its subsequent connection with Japan. Promising areas in the west are the extension of the Russian standard gauge railway to Vienna , promotion of market competition between the arms transport corridor " East - West" , including through the Baltic countries.

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