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Central Asia as a Transcontinental Transport Bridge Based on the Transport and Logistic System of the Countries of this Region

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ABSTRACT

The purpose of this article is to study and describe the new features in the development of the transit potential of Central Asia. The authors used the scientific and methodological basis including theoretical and methodological studies of domestic and foreign scientists. In order to achieve the needed aim of this research, the researchers used the method of comparative analysis, studied the statistical data, including the reports of the World Economic Forum and the World Bank's ratings. The authors studied the current state of the transport and logistic system of each country of Central Asia. The research results show that geographical position of Central Asia allows creating a transcontinental bridge between Europe and Asia. The development of the transport system in Central Asia is also important from the point of view of the formation of the region as a transit bridge in the continental cargo transportation along the North-South and East-West routes.

JEL Classification: R42, K33.

Keywords: Central Asia, potential of transit, transcontinental bridge, logistic system, transport hub, New Silk Road, transitional opportunities, transit time, transport corridors.

“The link between economic development and the growth of international trade is well established. Increased trade leads to an expansion of global wealth. What is less appreciated is the role of transport in this complex phenomenon. Efficient transportation is a key to competitiveness in foreign trade. A backward transportation network is incompatible with the needs of an industrially advanced economy. The quality and

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sophistication of a country's transportation infrastructure is one of the strongest indicators of its economic development" (Prentice, 2016).

First, we decided to give a clear definition of the borders of Central Asia, because there are different opinions on the composition of the countries belonging to Central Asia. Our opinion is that Central Asia is part of the Asian continent, which stretches from the Caspian Sea in the west to China in the east and from Afghanistan in the south to Russia in the north, and includes these five republics: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. Geographer Alexander von Humboldt was the first in 1843, who singled out Central Asia as a single region of the world.

Historically, before the collapse of the Soviet Union the name of the region was "Middle Asia and Kazakhstan", because of fact that four Asian countries (Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan) were considered as the "Middle Asian economic region" of the USSR, while Kazakhstan stood up as a separate economic region.

After the collapse of the Soviet Union, at the summit of the Middle Asian states, the President of Kazakhstan Nursultan Nazarbayev proposed to abandon the definition of "Middle Asia and Kazakhstan" in favor of the concept of "Central Asia", covering all the former Soviet states of the region.

The study focuses on the transport and logistic system of the five countries of Central Asia acting as a transcontinental bridge: Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.

Many books and articles deal with the opinion that the geographical location of the region and the potential of its transport links make it possible to be a transcontinental bridge between east and west (Asia and Europe) (A Study of the Asian Development Bank Institute, 2014), as well as the north and south (from the Indian Ocean and the Persian Gulf to Russia and the Baltic countries), implementing the concept of the Eurasian land bridge traffic, which is especially important in view of the congestion of ports and the increased flow of material goods from Asia to Europe (Romanov and Romanova, 2015). Johannes F. Linn (2012) also considers that Central Asia lies in the heart of the Eurasian continental space, where Eurasia is defined as covering all of Europe and Asia, including the Middle East and the Arab Peninsula.

In order to examine the thinking of scholars and experts in the field of transportation and logistics, articles and publications were examined during the research.

S. Frederick Starr and Svante E. Cornell (2015) suggest in their article that a number of steps can be taken to further the development of continental transport system. A key question is the placement of logistics hubs in the region. Kazakhstan, being centrally located and bordering every Central Asian country, has considerable potential.

A lot of research is done in the field of the transport system and transit potential of Central Asia. Here are some examples of them: Isingar N.K. (1998), Bekmagambetov A. (2008), Aristova L.B (2009), Zadvornyi U.V. (2011), Malysheva D.B. (2010), Fedorenko V. (2013), Kudryvcev A.M. and Tarasenko A.A. (2014), Turayeva M.O (2014).

Central Asian countries have made a major effort to diversify their transport routes and energy links (especially through pipelines) and to connect their economies not only with the Russian Federation and the PRC, but also with the EU and other neighbors. Automobile and railway transport infrastructure development is coordinated regionally under the auspices of the Central Asia Regional Economic Cooperation (CAREC)

program. The CAREC program has been providing focused support to the development of transport and logistics in the region. The program, which was established in 1997, seeks to improve living standards in CAREC countries through more efficient and effective regional economic cooperation, mainly in the fields of transport, trade policy, trade facilitation, and energy (Asian Development Bank, 2009).

1. THE SCOPE AND METHODOLOGY OF THE STUDY

The preliminary scrutinization of the literature of our main topic we learnt that idea of transcontinental bridge role of Central Asian countries between Europe and China had not already been opened up. Neither the geopolitical research nor economic practice of these countries has not been investigated by researchers and as well as by policy makers. There is a need for analytical approaches.

We have to get another experience. There is no a uniform way and method of statistical fact-finding within these countries. The systems, the indicators, and interpretation of analytical datas and facts are extremely different. Due to the fact of this situation we must to cut the scope of our research. The extension of investigated countries should have been to limitate for five countries of the region. By our understanding “The Central Asian transcontinental bridge countries” in this paper are republic of Kazakhstan, Kyrgyzstan, Tadjikistan, Turkmenistan and Uzbekistan. Our focus is Republic of Kazakhstan – the New Silk Road country.

In alignment with the aims of the paper, the authors apply three main methodological tools:

1. In order to draw a picture of the background of recent actions regarding freight transport on railway and on road, we analysed mainly the publications and government documents of the last decade. These scientific papers and the documents of different projects have given insight in the international research results and they also have provided us with the necessary information about the development in the countries of Central Asia.
2. The last part of the paper is gives detailed introducing and analyzing the present role that Kazakhstan is playing and might play in the future as a transcontinental bridge.
3. The situation, plans and actions are analysed from the perspective of their relevance for the European Union countries and China, as a major trade partners.

As an important component of methodology used we present many of maps of geographical scope of this study. It makes a good combination of soft economic, management point of view and hard technical, engineering standpoints.

The CAREC Program – a program bringing together eight Central Asian countries and six multilateral institutions, with a secretariat managed by the Asian Development Bank (ADB) – has developed a regional transport strategy which identifies the optimal routes for transport and transit. Although cross-border trade between CAREC members is dominated by rail, road traffic is increasing and has potential for further rapid growth. Most cross-border routes, however, so far have very little traffic due to inadequate border facilities, inefficient border management and hence serious delays (A Study of the Asian Development Bank Institute, 2014). If these obstacles are removed or ameliorated, there is plenty of opportunity for expanded trade. CAREC projections show that its members’ aggregate economy (which does not include the whole of China, only the Xinjiang region) could grow by 8.1 percent per year between now and 2018

to reach \$351 billion, and that foreign trade could increase by 9.1 percent per year to reach \$222 billion by 2018. Figure 1 shows Six Central Asia regional economic cooperation[†].



Figure 1: CAREC program

The authors pay special attention to the development processes of the logistic systems of the region. The effective useness of transport and logistic systems promotes the development of the economy in this region. Logistics has become an important factor influencing the competitiveness of production companies. The logistics functions of production cover activities such as the procurement of inputs, the supply of manufacturing processes and the distribution of finished products. It is essential that reliable data are available on the costs and performances of these logistics operations so that the management decisions affecting logistics issues in production systems can be supported more effectively (Zhao, 2014). Contemporary logistics operate in a newly framed and globalized environment where combined transport, information flows and innovation, and the concentration and integration of firms lead the market and each business within the market (Bandara et al., 2015). The development of modern transportation solutions has generally reduced transit times for international transport. Containerization, better logistics operations in general, economies of scale, improved technology for trucks, vessels and terminals, and the creation of

[†] CAREC program.

<http://www.carecprogram.org/index.php?page=carec-countries>

coherent transportation networks have shortened transit times for both domestic and international cargo (U.S. Chamber of Commerce, 2006).

The EU has established Partnership and Cooperation Agreements with each country of Central Asia, which encompass political dialogue, trade, economic relations, and cooperation in a variety of sectors, including energy, the environment, transport, security, and education.

One of the best example of partnership and cooperation between the European Union and Central Asia in the field of transport and logistic system is the EU's Transport Corridor Europe Caucasus Asia program, known as TRACECA. The program is designed to foster integration of the region's transport networks and markets to conform to EU and international legal and regulatory standards (Stevenson, 2012).

TRACECA is an east-west transport corridor stretching from Central Asia to Europe via the Caspian and Black Seas. Its 14 member countries (Armenia, Azerbaijan, Bulgaria, Georgia, Iran, Kazakhstan, Kyrgyzstan, Moldova, Romania, Tajikistan, Turkmenistan, Turkey, Ukraine and Uzbekistan), work together to develop efficient and reliable Euro-Asian transport links, and promote the regional economy as a whole. TRACECA is focused on five main fields: marine transport, air routes, roads and rails, transport infrastructure and transport security. The European Commission initially financed TRACECA, but since 2009 it has been financed by the member states. The fact that member states decided to finance TRACECA is a very important indicator that demonstrates their commitment to establish and manage trading routes between Europe and Asia. Figure 2 presents all the routes of this TRACECA program[‡].

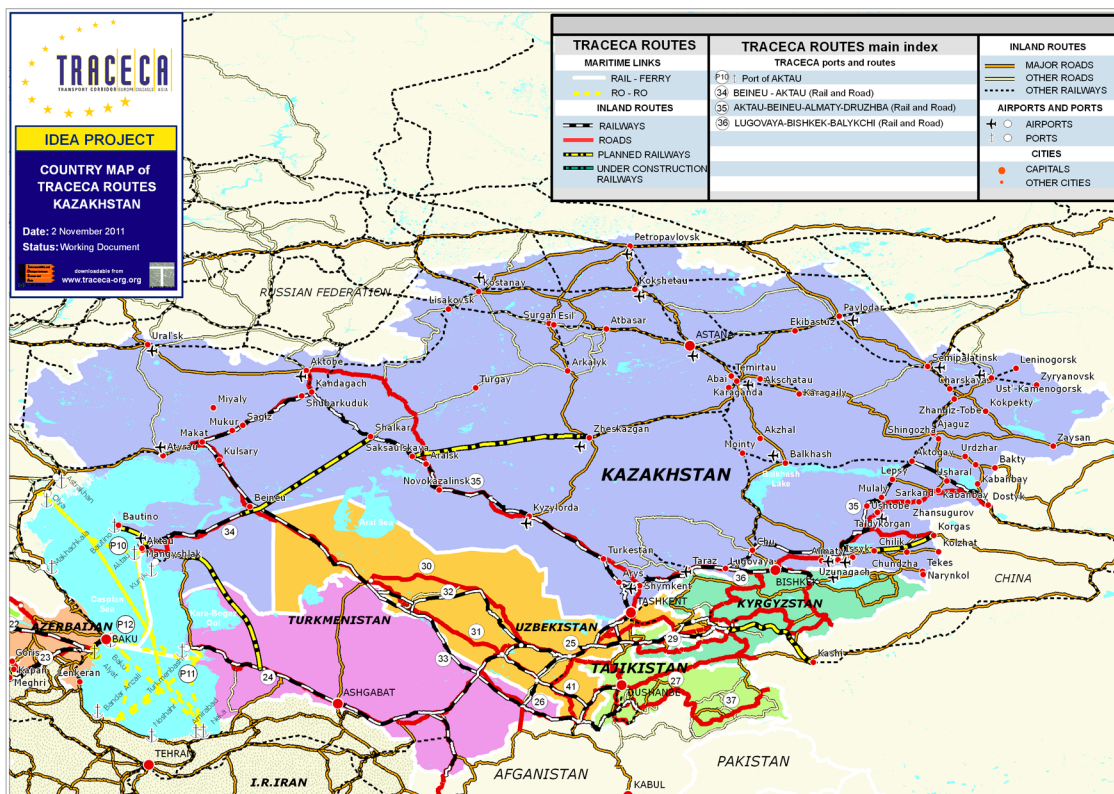


Figure 2: THE TRASECA routes

[‡] The TRASECA Program.

<http://www.traceca-org.org/tr/countries/kazakhstan/map/>

The TRACECA program involves the Silk Wind initiative, which aims to construct new high-speed multimodal container transit routes between the countries of Europe, Caucasus and Central Asia, along with advanced technological implementations such as electronic exchange of information, simplification of border crossing procedures and reduction of transportation time. The countries that participating in the project are Kazakhstan, Georgia, Turkey and Azerbaijan (Fedorenko, 2013).

The Viking Railroad is a railway project supported by the EU that connects Scandinavia with China via Caucasus and Central Asia. It is an intermodal project that uses both railroad and maritime routes. The Viking Railroad was initiated in 2003, but gained momentum in 2007. On October 2011, Kazakhstan expressed interest to join the Viking project. The Viking Railroad is expected to produce new economic opportunities and to advance political relations among participating states (International Transport Corridors in Kazakhstan, 2014).

In recent years, intentions of China and the Central Asian republics to build another transcontinental transport corridor named the “New Silk Road” (which runs well south of the Trans-Siberian Railway, and forms along it an economic zone) are actively discussed (Emerson, 2009). It runs from China across Central Asia and then through the Russian fan-shaped territory it reaches the European Union.

The “New Silk Road” is regarded as the “Second Eurasian Land Bridge” between the economic poles of the continent. According to Chinese experts, it is the longest, and potentially it could be the most important road in the world. Regarding the very large scale of the economy and foreign trade turnover of China and of the European Union, high economic density almost throughout the considered geospace, the high potential importance of this corridor is undeniable. The length of the route from Lianyungang to Rotterdam (Holland) is 10900 km and, estimated by China, the New Silk Road will generate an economic zone, realizing up to 23 per cent of world exports, covering more than 30 countries in Eurasia, a massive market with huge potential and a population of about 3 billion people.

In parallel to the high-speed railway a highway will be built with a length of about 8.5 thousand km - from Lianyungang to St.Petersburg (including 2233 km in Russia, 2787 km in Kazakhstan, and , 3425 km in China). In Russian territory the highway passes through Moscow, Nizhny Novgorod, Tatarstan and the Orenburg regions, and its completion is planned in 2018. The Chinese part of the road corridor has already been built, and active construction is under way in Kazakhstan (Romanov and Romanova, 2015).

In the context of globalization and world competition there is a new perception of time and space. In this regard, it can be expected that the creation of the “New Silk Road” will be a big step in securing new opportunities for all participants in this project, first of all, for China, the EU and Russia. Figure 3 illustrates the new vision for the Silk road[§].

The completion of its construction will promote the stable and healthy development of the economy in Eurasia, and it will lead to a significant reconfiguration of the Eurasian and global geoeconomic maps. However, a larger profit from this global project can be expected in the rehabilitation of the geopolitical situation in Eurasia, which is especially important in the present strained geopolitical situation in the world (Nazarbayev’ project to investors, 2012).

[§] New Vision for the Silk Road: New Action for Common Development

<http://www.veteranstoday.com/2015/10/29/neo-silk-road-project-implementation-is-around-the-corner/>



Figure 3: New Vision for the Silk Road.

According to the opinions of experts, the creation of the Eurasian transcontinental transport corridors “Silk Road” and “Transsib” involves not only the creation of conditions for high-speed transport of goods between China, Russia and the European Union, but also - the conditions of advancing the development of economic centers throughout their length, and, above all, their source links or oriental “outposts”.

Creating a powerful transcontinental bridge is dictated by the need to strengthen transport to support the development of the economies in the region. The economy of Central Asia demonstrates the accelerated pace of integration into global economic relations, increasing their trade with other continental markets. In this regard, the growth rate of their potential transport capacity should not only keep up with the indicators of economic development of Central Asian countries and their trade with regional partners, but for some items they excel them, creating an additional reserve for the future.

2. TRANSPORTATION AND LOGISTIC ROLE OF THE COUNTRIES OF CENTRAL ASIA

Central Asia plays an important role as a bridge between Europe and Asia. The five countries are striving to turn their region into an magnificent transport and logistic centre. Being one of the most dynamic economic regions in the world, Central Asia pays great attention to the development of its transit potential.

We confirm this claim by citing the World Economic Forum, which gives the assessment of the quality of transport infrastructure. In its annual survey of global competitiveness every few years, the latest available report is a study of 2013-2014. (Table 1), which does not cover all countries in the region.

Table 1
Evaluation of the quality of road infrastructure in Central Asia in 2013-2014.
(Place in the ranking of 142 countries)

Country	Overall quality of the infrastructure	Quality of roads	Quality of railway infrastructure	Quality of port infrastructure	Quality of air transport infrastructure
Kazakhstan	85	125	33	104	103
Kyrgyzstan	93	116	61	142	136
Tadjikistan	83	88	41	140	98

Source: The Global Competitiveness Report 2013-2014
(No data about Turkmenistan and Uzbekistan)

A similar assessment about Logistics Performance Index – LPI is given by the World Bank. According to the latest data of 2014, out of 163 countries of the overall logistics efficiency index, Kazakhstan took the 88th place, Tajikistan - 114, Uzbekistan - 129, Turkmenistan - 140 and Kyrgyzstan - 149 place (Table 2). In terms of cargo tracking and timely delivery, the highest rates, according to the World Bank, have Uzbekistan and Kazakhstan.

Table 2
Global rating of LPI 2014 (place in the ranking of 163 countries)

Country	Logistics Performance Index	Custom Clearance	Infrastructure	Organization of international transportation	The quality and competence of logistics services	Tracking of goods	Timely delivery
Kazakhstan	88	121	106	100	83	81	69
Kyrgyzstan	149	145	147	127	151	145	155
Tadjikistan	114	115	108	92	113	119	133
Turkmenistan	140	122	146	116	134	134	153
Uzbekistan	129	157	148	145	122	77	88

Source: LPI Global Rankings 2014.

Figure 4 shows the importance of Central Asia in the global transport system and the integration of the region into the International corridors¹.

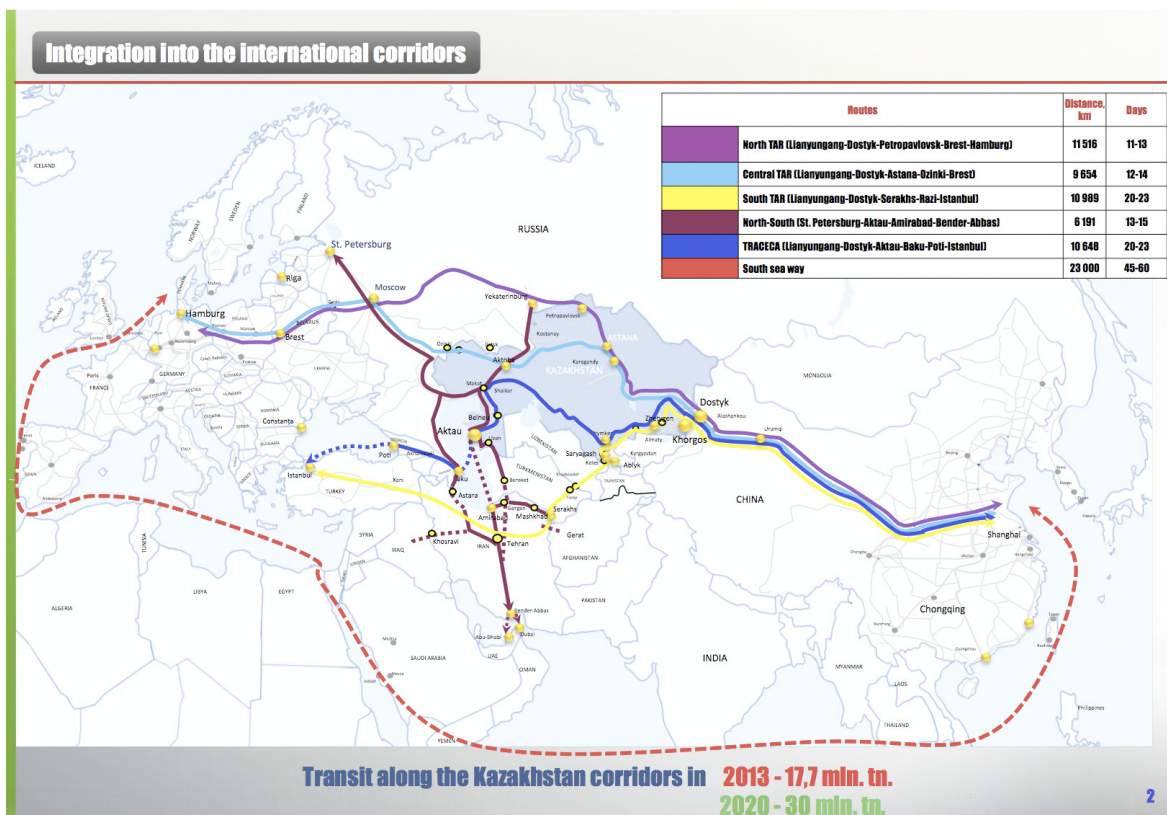


Figure 4: Integration of Central Asia into the International corridors

¹ The role of Central Asia in the Global Transport system. <http://www.nineoclock.ro/the-bright-road-of-kazakhstan>

Although Kazakhstan's landlocked location is often seen as an obstacle to development, the country's authorities believe that its central location at the hub of a dynamic Eurasia represents a great opportunity. Infrastructure development is therefore one of Kazakhstan's top national priorities. WTO membership is also considered a major element in Kazakhstan's integration into the international economy.

Over the past ten years, Kazakhstan has invested \$3 billion into its infrastructure. It has built 4,000 kilometers of new roads and upgraded more than 13,000 kilometers of motorways. Kazakhstan's government invested \$30 billion into infrastructure in 2015 with the aim of building 1,600 kilometers of railroad and 50,000 new motorways. The objective is to transform Kazakhstan into a transit hub for all of Europe and Asia.

It is very important to highlight that Kazakhstan is eager to realize its national vision of the New Silk Road. At the 25th plenary session of the Presidential Council of Foreign Investors, President of Kazakhstan Nursultan Nazarbayev said, "Today I'd like to suggest that you all to start the project of the New Silk Road. Kazakhstan should revive its historic role and become a business transit hub for Central Asia. As the result of implementation of this project, by 2020 the volume of transit goods passing through Kazakhstan should double with further plans of achieving 50 million tons of cargo" (Nazarbayev' project to investors, 2012).

Turkmenistan is another fast-growing economy in Central Asia. Being rich in oil and natural gas resources, Turkmenistan hosts several important pipelines: the Central Asia-China Gas Pipeline that connects Turkmenistan-Uzbekistan-Kazakistan-China for 1,139 miles (1,833 km), the Dauletabad-Sarakhs-Khangiran pipeline that connects Turkmenistan and Iran for 113 miles (182 km); and the Korpeje-Kordkuy pipeline connecting Turkmenistan to Iran for 120 miles (200 km). Construction on the domestic East-West Pipeline, the length of which is 476 miles (766 km), which finished in 2015.

Additionally, there are two important proposed gaspipelines: the Trans-Caspian Gas Pipeline and the TAPI pipeline (Turkmenistan-Afghanistan-Pakistan-India).

Since its independence, Turkmenistan has been constantly investing in railroad construction and modernization. In April 1992 Turkmenistan started construction of the Tejen-Saraks-Mashhad railroad that was completed in May 1996 (The program of the development of the Turmen railroad, 1991). Another important railroad is the UzenGyzylgaya-Bereket-Etrek-Goran railroad, which will connect Kazakhstan, Turkmenistan and Iran. This railroad is going to be an important part in the "North-South" corridor and will be 600 km shorter than the current route (CASA-1000 Project, 2016). The aim of this North-South international transport corridor is to provide backhaul cooperation of North European countries and Russia with the countries of the Persian Gulf, the Indian Ocean and South-East Asia through Iran. The North-South international transport corridor, which is an alternative to the sea route through the Suez Canal, primarily deals with container cargo traffic.

Tajikistan is trying to streamline and systematize transit policy instruments to make it more attractive and customer-oriented. The country is a member of many transit transport global conventions and a signatory to regional partnership agreements and accords regulating customs transiting, third-party insurance, border controls and information and communication technology infrastructure.

In Tajikistan 6 CAREC Corridors have been developed:

- Corridor 1: Europe-East Asia
- Corridor 2: Mediterranean-East Asia

- Corridor 3: Russian Federation–Middle East and South Asia
- Corridor 4: Russian Federation–East Asia
- Corridor 5: East Asia–Middle East and South Asia
- Corridor 6: Europe–Middle East and South Asia

Geographically four of the six CAREC transit corridors run through Tajikistan's territory, although traffic volumes vary sharply from corridor to corridor.

Kyrgyzstan has been an active member of TRACECA since the Brussels Conference in May 1993 where the TRACECA programme started. Another important fact about Kyrgyzstan's transport role is Kyrgyzstan's partnership in trade with China. Being the immediate neighbor of China and a member of WTO since 1998, Kyrgyzstan is a gateway for China to Eurasia and then to Europe. China is eager to support Kyrgyzstan in the construction of new international railways that will connect Asia to Europe. The construction of a new Uzbekistan-Kyrgyzstan-China railway is under way, and this project will be a significant part of the new Silk Road initiative (Rickleton, 2013).

Uzbekistan is actively developing existing railway projects and is working on new ones. Uzbekistan borders with Afghanistan, Kazakhstan, Kyrgyzstan, Turkmenistan and Tajikistan; therefore, it is an important link for most of the routes that connect Asia and Europe. Uzbekistan is part of the Trans-Caspian railroad, which was built during the Russian Empire along the ancient Silk Road. The railroad connects the Caspian Sea to Kazakhstan and Russia. A long segment of this railway passes through the Uzbek cities of Bukhara, Samarkand and Tashkent. The railway has already had a significant economic impact on the Uzbek economy, enabling the country to increase its amount of traded goods such as cotton.

Central Asia announced a \$6.7 billion programme of investments in major transport projects in the region, including a Western China-Western Europe corridor, which crosses Kazakhstan with key road and rail routes, to which the World Bank is contributing its biggest ever loan of \$2 billion. The complete set of corridors is listed below:

1. Europe-East Asia, from China across to west Kazakhstan, with over \$3 billion of funding from ADB, World Bank, EBRD and IsDB (Islamic Development Bank) for 2,715 km of roads in Kazakhstan
2. Mediterranean-East Asia, road and rail networks from China into Kyrgyzstan, Uzbekistan and Turkmenistan, and then across the Caspian Sea into the South Caucasus and Black Sea, with support from the same IFIs
3. Russia-Middle East and South Asia, with a north-south route running from Siberia across all Central Asian states into Afghanistan and Iran
4. Russia-East Asia (without passage through Central Asia)
5. East Asia-Middle East and South Asia, with road connection from China into Kyrgyzstan and Tajikistan, and then on into Afghanistan and Pakistan
6. Europe-Middle East and South Asia, with road and rail networks from west Kazakhstan and Uzbekistan to be extended into Afghanistan.

3. ANALYSIS OF THE TRANSPORT AND LOGISTIC SYSTEM OF KAZAKHSTAN

During the research, we decided to consider in more detail the state of the transport and logistics system in Kazakhstan, because European leaders consider that within Central Asia Kazakhstan occupies a unique position in at least three ways. First, by virtue of geography, Kazakhstan forms a one-country link between China and the Caspian Sea, ensuring it will play a dominant role in any land links between Europe and China. Second, Kazakhstan is the Central Asian country that has gone the farthest in terms of deepening institutional cooperation with the EU, as evidenced by the signing of an enhanced EU-Kazakhstan Partnership and Cooperation Agreement in 2015. Third, in a regional context Kazakhstan offers an improving business environment crucial to the establishment of a trading hub: In the World Bank's Doing Business 2016 ranking, Kazakhstan jumped 12 positions from 53rd the previous year up to 41st (Starr and Cornell, 2015).

4. KAZAKHSTAN HAS VERY UNIQUE TRANSITIONAL OPPORTUNITIES:

- The territory of the Republic of Kazakhstan is situated in the direction of a terrestrial bridge for cargo flows between the basic macroeconomic poles - EU countries and Asian-Pacific Ocean Region countries, America and Eurasia;
- Reduction of transit cargoes delivery time.

The rapidly growing economy of China and its main trading partner, the European Union paves the way for the development of transit and export-import capabilities of Kazakhstan. In this case, Kazakhstan should use their unique geographical features: the central position in the Central Asian region and proximity to China. In general, transit flows in the direction of South-East and East Asia - Europe are estimated at about 330 - 400 billion US dollars, where 20% of these flows can pass through the territory of Kazakhstan.

Kazakhstan's transport system comprises about 88,400 kilometers (km) of roadways; 14,205 km of railways; 3,900 km of waterways; and up to 61,000 km of air routes. Its road and rail systems carry nearly 90% of its total cargo load. Compared to its neighbors, Kazakhstan has superior rail infrastructure. Tracks are better maintained due to the availability of more funds for maintenance and to the recent purchase by the government of new locomotives and railway tracks. The rail system has 5,192 locomotives and 59,954 rail wagons. It also has container block trains. Its volume of freight has grown steadily from 2000 to 2006 by an annual average of 6.4%. Freight consists mainly of heavy machinery and bulky commodities (high volume and low value) (Myrzakhmetova, 2015).

Kazakhstan's roads are mainly Class III. Freight volume transported through these roads is 6.4 times more than that by rail, and has increased by an average of 8.3% annually. Significant for road transport in Kazakhstan is the planned Western Europe–Western Asia project measuring 2,624 km that starts from Orenburg (Russian Federation) and ends at Korgas (the PRC), passing through five Kazakh oblasts. This T920-million project will be implemented from 2009 to 2016.

Kazakhstan's aviation industry is considered one of the best, if not the best, in the CAR. It has relatively well-established air hubs at Astana, Almaty, and Atyrau, which together with four other domestic airports now meet the requirements of the International Civil Aviation Organization.

The most promising areas for the realization of the transit potential of Kazakhstan are:

- Through Russia to the EU;
- China, Japan, South-East Asia;
- Through the countries of Central Asia and the Caucasus to Iran and Turkey.

For each of these areas there are already well-established transport corridors, both on land and on the waterways. In addition, large-scale projects are being developed to create new transport routes.

- Our research shows that transit through Kazakhstan has a number of advantages:
- Reduce the time and distance from the producer to the consumer from Asia to Europe. In contrast to the sea route in this direction, where the cargo is on the way for 35-40 days, the land delivery time is reduced by 2-3 times (Figure 5)**.

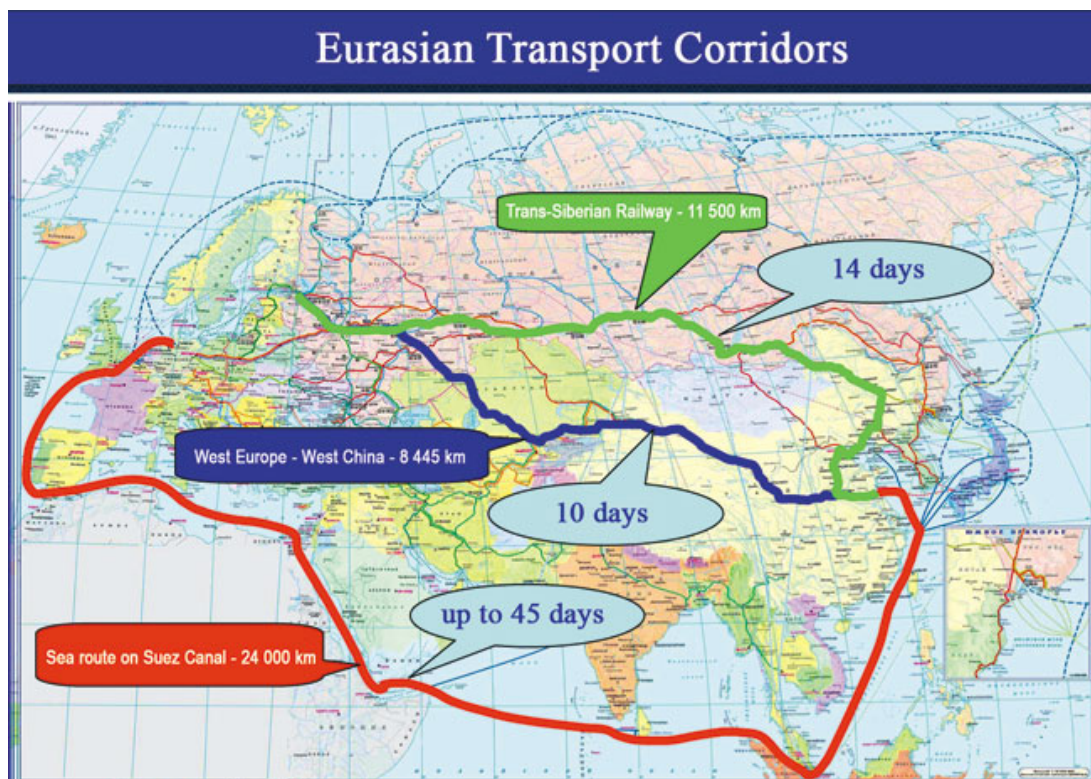


Figure 5: Overview of transport corridors through Kazakhstan

- A stable political situation and a favorable investment climate in the country.
- Formation of the Customs Union and later - the EEU, which allowed to create a single customs border between China and the EU. This fact greatly facilitates the procedures of customs clearance.

The construction and launch of promising infrastructure projects should make a significant increase of transit through Kazakhstan

** Overview of transport corridors through Kazakhstan

https://vlast.kz/jekonomika/kazahstan_gotovitsja_k_sdache_esshe_odnogo_uchastka_novogo_transportnogo_koridora_iz_zapadnoj_evropy_v_zapadnyj_kitaj-951.html

At the moment, 6 existing international transport corridors lay through Kazakhstan:

1. Northern Corridor of Trans-Asian Railway (TAR): Western Europe - China, Korean Peninsula and Japan through Russia and Kazakhstan (section Dostyk - Aktogay - Sayak - Mointy - Astana - Petropavlovsk (Presnogorskovskaya));
2. Southern Corridor TARM: South-Eastern Europe - China and South-East Asia through Turkey, Iran, Central Asia and Kazakhstan ((section Dostyk - Aktogay - Almaty - Shu - Arys - Saryagash);
3. TRACECA: Eastern Europe - Central Asia via the Black Sea, the Caucasus and the Caspian Sea (section Dostyk - Almaty - Aktau);
3. North-South: Northern Europe - Gulf States via Russia and Iran with the participation of Kazakhstan in the sections: sea port Aktau - Ural regions of Russia and Aktau-Atyrau. 6. Central Corridor TAR in the direction of Saryagash - Arys - Kandagach - Ozinki that is most in demand in the regional transit.

Land transport corridors allow reducing the time of delivery by reducing distances in East-West route (Nurlanova and Kaliyeva, 2015).

One of the largest projects in the Eurasian region deserves special attention - the road corridor “Western Europe - Western China”, which shows Kazakhstan’s cooperation with Europe, China, Russia. Implementation of this project in the country began in 2009, and its completion is planned for 2015-2016. Figure 6 shows, that this transcontinental road corridor will provide the shortest route for Chinese goods to the countries of Western Europe, and in the opposite direction the supply of process and vehicle machinery to the PRC. It will allow reducing the delivery time of goods between Western Europe and China, about 3.5 times^{††}.

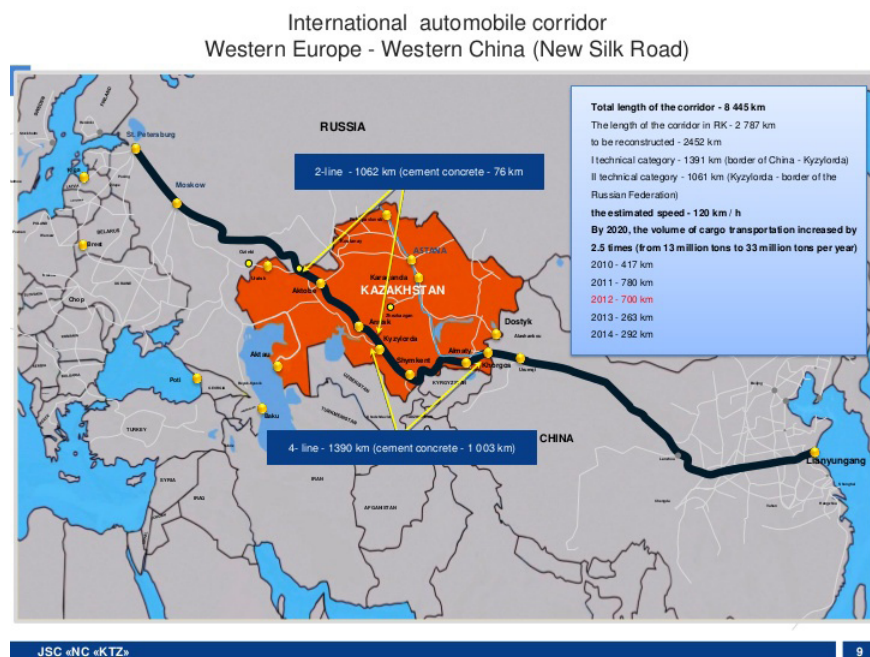


Figure 6: Western Europe-Western China

^{††} The advantages of The International automobile corridor Western Europe-Western China (New Silk Road)

<http://www.slideshare.net/RobMactier/international-automobile-corridor-western-europe-western-china-new-silk-road>

The transit possibilities of Kazakhstan could be used in all areas of transit corridors. The transport complex of the country is represented by all modes of transport: rail, road, pipeline and water and air. The main mode of transport in Kazakhstan is the railway transport, which accounts for 44% of total turnover.

In general, over the last decade, huge investment was directed to the development of transport in Kazakhstan, even during the global financial crisis in 2009 it managed to send \$4.2 bln. to the transport sector through loans. In 2010, the share of investment in transport was 15.8% from the total investment in fixed assets, and in 2012 there was an increase in investment to 19%. This was mainly due to the implementation of major infrastructure projects. In the Republic of Kazakhstan, it is planned to upgrade and increase all kinds of vehicles and facilities of transport infrastructure. Solving these problems will significantly change the transport system of the country, in line with international standards of quality and safety.

Kazakhstan's main trading partner and the largest consumer of goods and services in the world is the European Union. In the EU countries through the Customs Union (and now EEU) trade flows from China and other Asian countries by land. In 2014, 28 million 668 thousand tons of cargo by all modes of transport there were sent to the Customs Union of the European Union, which is 11.8% less compared with 2013 year. The decrease was due to the low import of goods to the Russian Federation.

Kazakhstan has 73 enterprises offering logistics-related services. Service providers are express and courier companies, customs brokers and freight forwarders, or manufacturers and traders. Express and courier companies are mainly multinational corporations. They have representative offices that maintain liaison with overseas offices and oversee domestic distribution. They own warehouses and a fleet of trucks. On the other hand, local-licensed customs brokers, freight forwarders, and multimodal transporters are competent in providing integrated solutions for customers and usually offer services that involve shepherding cargo through customs clearance and sending it by rail or road to final destinations. Meanwhile, the manufacturers or traders run their own fleet of trucks and self-operated warehouses for managing the supply chain. Kazakhstan has a number of logistics centers, free-trade zones, and exhibition marketplaces to facilitate the production, warehousing, transportation, and final sale of products. Its two famous logistics centers are the High Tech Logistics Centre in Almaty and the DAMU logistics center. It also has exhibition complexes, the biggest of which is Adem Park in Almaty (Myrzakhmetova, 2015).

To become a transcontinental transport bridge between Europe and Asia, there are some obstacles that prevent fully disclosing the transit capacity of Kazakhstan:

- First of all we highlight the low level of transport infrastructure, where there is a significant wear of its facilities and the vehicle fleet - from 40 to 100%
- The second main problem is the number of days required for export and import registration procedures in the country, which demonstrates their high level of bureaucracy.
- The third issue is the slow implementation of modern transport technologies,
- The fourth obstacle is the poor condition of regional and district roads
- The fifth problem is that the transport system of Kazakhstan is underdeveloped, and transport logistics is inefficient, which brings about higher prices of transport and, ultimately, the prices of goods.

At the present stage of world economy development, the quality of transport services - is one of the main indicators of the vigorous activity of the transport industry.

Currently, the transit potential of Kazakhstan is not fully operated. The majority of cargo is carried out within the country, and the volume of transit traffic is negligible. The need for the implementation of the transit potential of the country in the international transport system is very important for the economy.

5. CONCLUSION

The authors of this study fully share the importance of the transit role of Central Asia, but in order to act as a transcontinental bridge it is necessary to settle the internal problems of the transport and logistics system of each country in the region. Countries should view and pursue their activities as a whole, whether they are meant for short-mid- or long-term implementation. Taking small steps, while keeping larger goals in view, is the most beneficial and viable way for all Central Asian countries to succeed.

The main proposal is finding solution to the low quality of transport and logistics systems, first of all, rail and other transport networks need modernization and improvement that is possible with close cooperation in the region and the removal of barriers that arise between them.

The next main step in the development of transport and logistic system of Central Asia should be the governmental regulation in connection with physical barriers within the transit processes. Different transport and transit fees in every country of Central Asian and excessive control on checkpoints and other border crossings complicate the whole process of transportation.

The European Union (EU) and Central Asia are increasingly becoming neighbours. Through the EU Strategy for Central Asia that was established in 2007, Brussels has been stepping up engagement with Central Asia on many policy areas: security, energy, economic development, trade, transport routes, human rights, the rule of law and education.

We decided to highlight the significant mutual interest in increased economic cooperation:

The interest in Central Asia as a transcontinental transport bridge between two great economic partners – the European Union and China. China is the EU's number 1 supplier of goods and its third largest export market. In turn, the EU is China's largest trading partner. Going by current trends, the EU-China annual bilateral trade could grow by close to 1.5 times in a decade's time, to EUR 660 bln. The annual trade amounts to more than \$ 2 trillion, while the share of transport costs is \$ 200 billion. The effective use of transit potential of Central Asia could reduce the economic costs and delivery times because of the geographical location of the region. European countries on board with China's "One Belt, One Road" ambitions this will usher an unprecedented level of development across Europe and Asia. Major economic trade routes such as: China-Mongolia-Russia, New Eurasian Land Bridge, China-Central and West Asia, China-Indo-China Peninsula, China-Pakistan, and Bangladesh-China-India-Myanmar will interconnect the Eurasian continent in an unprecedented manner. Details emerged that the Chinese Development Bank has planned to invest a massive \$890 billion USD in over 900 projects, in which across 60 countries China will invest in coal and gas, mining, electricity, telecommunications, infrastructure, agriculture and the flow of trade and capital.

Sea transport will continue to be a key player in the Europe-Asia transport market in the future, but transit routes are already heavily loaded and allow Central Asia to become an alternative transcontinental

transport bridge. There are nonetheless two factors currently driving the diversification of routes and the opening of new inland links between Europe and Asia: the virtual monopoly of sea transport, a source of increasing problems for land access to ports; and the need to meet the demands of regional trade developing along Europe-Asia corridors. Economic analysis shows that in a number of cases land links can offer a viable alternative to sea transport, substantially improve the accessibility of the countries they pass through and absorb quite a substantial portion of the strong growth in traffic, particularly container traffic, that has been forecast (Transport links between Europe and Asia..., 2006). It causes a huge interest of the European Union in transport corridors of Central Asia.

The “TRACECA” corridor offers a number of itineraries along what was once the Silk Road. A central route includes a Black Sea crossing to Georgian ports and then a crossing to the Caspian Sea. From there, it is possible to go farther east, towards China for example. Another, more southern itinerary runs through Turkey to Georgia and Azerbaijan.

Another option for railway shipment to China is through Kyrgyzstan, along a route that has less traffic than the more northern route through Kazakhstan, via the border station of Druzhba. In connection with the corridors mentioned previously, a number of projects have been developed for this trans-Asian rail corridor, particularly in Kazakhstan: a European gauge investment has been planned from the Caspian Sea to China over nearly 3 000 km. The line runs along the Caspian Sea, with a north-south branch over 700 km across Turkmenistan making it possible to link up with the Iranian network with 70 km of new track – all of which represents an investment estimated between seven and eight billion dollars. Economic analyses would appear to prove that the land haulage alternative is viable and could free up significant capacity (several million TEU) at competitive costs on a large number of links between Europe and Asia. The first point to bear in mind is that distances by land between Europe and Asia are generally shorter than distances by sea, especially if the origin/destination points on both continents are inland (by as much as half the distance, in some cases). While on the Trans-Siberian route, transport between Europe and the Pacific can take 9 to 10 days, potentially, rail services could be provided that would take no more than 20 or so days from China to Europe via central Asia rather than the 6 weeks or more that ship transport would take. The road transport sector, for its part, estimates that Europe-Asia hauls could be done in two weeks (The European External Action..., 2012).

The European Union also has a strong interest in the effective transportation of natural resources of Central Asia. There is a common interest in diversifying export routes, demand and supply structures and energy sources. Besides oil, gas and electricity, water management is a decisive aspect of energy cooperation with Central Asia. The development of resources in oil and gas has significantly increased the role of Central Asian States as energy producers and transit countries. Increasing oil and gas exploitation will contribute to better world market supplies and will be conducive to diversification. Gas deliveries from the region are of special importance to the EU. The EU, for its part, is ready to consider all options for the development and transportation of these resources, in cooperation with other interested partners (The European External Action..., 2012).

Good quality infrastructure is a key ingredient for sustainable development of the region. Good quality roads, railways, ports and airports are essential for the smooth running of many key economic sectors in the developing world including agriculture, industry, mining and tourism. Efficient transport infrastructures can also improve the delivery of and access to vital social services, such as health and education. The

Commission aims to help partner countries improve transport as a means of achieving the broader goals of reducing poverty, sustaining economic growth and stimulating social development. There is no doubt that improved transport infrastructure will also help developing countries to integrate into the global economy (Transport Cooperation between the EU., 2011).

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