

# ALTERNATIVE TRANSPORTATION CORRIDORS IN CENTRAL ASIA: FACTORS, INTERDEPENDENCE, AND INTEGRATION PROBLEMS

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## ABSTRACT

**T**his article examines the problems of integrating the Central Asian states into the transportation and communication sphere, as well as the factors influencing this process. It analyzes the trends in building alternative transportation corri-

dors and reveals their development advantages and prospects.

It presents a comparative year-by-year analysis of the changes in the interdependence of the transportation sectors of the region's states.

**KEYWORDS:** *Central Asia, regional transportation system, alternative transportation corridors, international transportation projects, diversification of transportation routes, transportation interdependence, national transportation policy.*

## *Introduction*

Recently, the Central Asian (CA) states, which are striving to diversify their transportation routes, particularly in the China-Europe direction, are taking active steps to implement different projects. This also entails overcoming the transportation and communication deadlock some have found themselves in.

This situation is promoting economic development of the region's states, on the one hand, and is creating numerous problems, on the other. Differences in the foreign policy views and interests of the region's states are hindering the successful implementation of major projects. Due to the unpredictability of their efforts, assessing the development prospects for the regional transportation system is quite a difficult task.

## **Main Factors**

Globalization of the world economy is helping to strengthen relations among countries in all spheres; however, along with creating favorable additional conditions for development and progress, it is also giving rise to a great many negative consequences.

Today, the main factors influencing the development of transportation integration in the CA states are as follows:

■ *Contributing factors:*

- The natural and geographic location of the region, i.e. its potential to become a land bridge for movement between Europe and Asia;
- Existence of enclaves in the territory of the region's states;
- Interest of all the region's states in diversifying the existing transit-transportation corridors;
- Availability of the necessary conditions for meeting the states' need for cooperation in the context of the economic trade slump;
- Possibility of developing trade relations;
- Implementation of geo-economic projects by the world's developed countries related to the region's transportation infrastructure;
- Interdependence of transportation communications of the region's states.

■ *Hindering factors:*

- Lack of direct access to sea ports;
- Unofficial transit fees and artificially high duties;
- Lack of correspondence among the CA countries' transportation policies;
- Insufficient financial investments for implementing transportation projects in the region;
- Political instability in some countries of the region;
- Continuing instability in Afghanistan and Problem 2014 relating to this country;
- Lack of political integration and unsuccessful completion of all initiatives to introduce it in the region;

- Lack of a single mechanism (organization) for coordinating the region's transportation system;
- Underdevelopment of the industrial and production sectors in some countries of the region, and dependence of the economies of some of them on energy resource exports;
- Significant differences in the development levels of the transportation infrastructure of the region's states (see Table 1);
- Contradiction in the interests of the leading states of the world in implementing transportation projects in the region;
- Existence or construction of competitive transportation corridors that bypass the territory of the region.

According to the logistics performance index developed by the World Bank, the quality of trade and transport related infrastructure in the CA states does not correspond to current requirements. Moreover, the competence and quality of logistics services (e.g. transport carriers, customs brokers) are not sufficiently developed.

Table 1

**Ranking of CA States according  
to the Logistics Performance Index**

	2007	2010						
	General	General	Customs	Infrastructure	International shipments	Logistics competence	Tracking & Tracing	Timeliness
<b>Ranking of states (out of 155 states)</b>								
<b>Afghanistan</b>	<b>150</b>	<b>143</b>	<b>104</b>	<b>139</b>	<b>141</b>	<b>141</b>	<b>128</b>	<b>146</b>
<b>Kazakhstan</b>	<b>133</b>	<b>62</b>	<b>79</b>	<b>57</b>	<b>29</b>	<b>73</b>	<b>85</b>	<b>86</b>
<b>Kyrgyzstan</b>	<b>103</b>	<b>91</b>	<b>71</b>	<b>118</b>	<b>39</b>	<b>107</b>	<b>132</b>	<b>106</b>
<b>Tajikistan</b>	<b>146</b>	<b>131</b>	<b>147</b>	<b>128</b>	<b>127</b>	<b>125</b>	<b>141</b>	<b>98</b>
<b>Turkmenistan</b>	<b>n/a</b>	<b>114</b>	<b>119</b>	<b>101</b>	<b>137</b>	<b>111</b>	<b>126</b>	<b>65</b>
<b>Uzbekistan</b>	<b>126</b>	<b>68</b>	<b>107</b>	<b>70</b>	<b>83</b>	<b>89</b>	<b>63</b>	<b>50</b>

According to the estimates of U.N. ESCAP, inefficient border crossing procedures increase the time required to deliver commodities along the Silk Road routes by 40%, which encumbers a rise in trade volumes among countries of the Eurasian continent. In addition, unofficial payments imposed along the way and at the border crossings account for 30% of the freight costs.

The differences existing among the region's states are largely caused by particular features of their transportation strategies.

For example, the Turkmenistan National Development Program until 2020 places the priority on developing transit corridors that will connect the country with Pakistan (together with Iran).

Uzbekistan and Kyrgyzstan are interested in launching an Uzbekistan-Kyrgyzstan-China rail corridor. However, due to the shortage of internal financial investments in its Kyrgyz section, implementation of this project is currently on hold.

Keeping in mind that Tajikistan is experiencing a transport deadlock, the country's government is paying particular attention to the southerly direction; there are plans to use Afghanistan as a transit territory for reaching the Iranian ports without going through Uzbekistan.

It should be noted that the enclave factor plays both a positive and negative role in the region's integration processes. On the one hand, it bodes well for establishing friendly relations among the states, but, on the other, it promotes the emergence of disagreements among them. For example, some of the states might make use of the enclaves to realize their own interests, establish additional requirements for the entry and exit of citizens, cargo movement, and so on.

There is another factor that would seem to have two opposing aspects; this is building alternative transportation corridors that bypass neighboring countries. However, from the viewpoint of diversifying transportation corridors, the creation of new routes promotes competition and the development of infrastructure. There is also every reason to presume that the more independent the transportation spheres of the region's states become from each other, the less often disagreements will arise among them.

## Alternative Corridors

Today, several projects are being implemented to restore the Great Silk Road that envision building transportation corridors alternative to the traditional routes.

Within the CAREC program until 2017, there are plans to launch 68 projects totaling \$22,656 billion (see Table 2).

Table 2

**CAREC Projects and Investments until 2017  
in the Transportation Sphere**

Participating Country	Number of Projects	Cost of Projects, \$m
Turkmenistan	2	654
Azerbaijan	3	2,324
Tajikistan	5	1,146
Mongolia	5	2,497
Kyrgyzstan	8	819
Afghanistan	8	1,452
Pakistan	14	5,515
Uzbekistan	18	3,408
Kazakhstan	5	4,791
<b>Total</b>	<b>68</b>	<b>22,656</b>

Source: [<http://www.carecprogram.org/ru/index.php?page=11th-carec-transport-sector-coordinating-committee-meeting>].

These projects are primarily financed by six different multilateral partner institutions of the Program: the Asia Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), the International Monetary Fund (IMF), the Islamic Development Bank (IDB), the U.N. Development Program (UNDP), and the World Bank (WB).

A comparative analysis of the traditional and alternative corridors shows that the latter have certain advantages (see, Table 3).

Table 3

**Comparative Analysis of Several Traditional and Alternative Transportation Corridors**

TRADITIONAL (in use)	Description of Traditional/Alternative Corridors		ALTERNATIVE (planned for use in the future)
	Total Length (km)	Expenses on 1 Tonne of Freight (\$)	
Kashgar-Shanghai-Tehran	13,880 / 3,500	160 / 90	Kashgar-Osh-Termez- Herat-Tehran
Cheliabinsk-Nakhodka-Mumbai	17,140 / 6,500	150 / 110	Cheliabinsk-Tashkent- Herat-Chah Bahar-Mumbai
Tashkent-Dushanbe-Herat-Chah Bahar*	about 2,800-3,000 / 2,500-2,700	125 / 90	Tashkent-Termez-Herat-Chah Bahar*

\* The data on these corridors differ.

For example, if we compare the potential of the Trans-Afghan Transportation Corridor (TATC) and the traditional Uzbekistan-Turkmenistan-Iran route, the former provides the shortest route to the Persian Gulf. For example, the length of the Tashkent-Termez-Karachi route amounts to 2,500 km, while the Tashkent-Termez-Bander Abbas route is 3,100 km.

In addition, according to the preliminary estimates, the delivery of one tonne of freight to the Bander Abbas port via TATC costs \$10-12 less than via Serakhs through Turkmenistan.

The development of economic relations with Afghanistan will make it easier for Uzbekistan to reach the South Asian markets via the Khairaton–Mazar-i-Sharif rail routes.

The main link of the future route called upon to promote the development of socioeconomic and cultural relations between the two countries will be the railroad that joins Termez (Uzbekistan) and Mazar-i-Sharif (Afghanistan), which is a large economic center. Uzbek railroad workers completed its construction at the end of 2010.

Putting TATC into operation will make it possible, in particular, to increase the volumes of Uzbek export to Afghanistan, which, in turn, will lead to a further increase in commodity exchange between the two states.

The Uzbekistan-Kyrgyzstan-China rail road project has fairly good economic prospects in the Chinese direction. A Memorandum on Joint Research and Design Work for its construction was signed as early as 1997.

Completion of this rail road is associated with a significant increase in the participation of Uzbekistan and Kyrgyzstan in continental transit. According to experts' estimates, at the initial stage alone freight traffic could reach around 5 million tonnes a year, and later amount to 17-20 million

tonnes a year.<sup>1</sup> What is more, this transportation corridor will give the region's states an opportunity to link up the railroad networks of China by a shorter route. At the same time, the dependence of the Uzbek transportation system on that of Kazakhstan and Tajikistan will decrease, since building the Angren-Pap railroad will open a direct corridor from the PRC.

However, for a whole number of reasons, things have gone no further than project development so far.

Most of the planned projects are largely aimed at strengthening the independence of the region's states in the transportation sphere, with respect to both internal and external traffic. Building the Osh-Batken-Isfan highway, bypassing the Sukh enclave (Uzbekistan), is a good case in point. Another example is the Angren-Pap railroad corridor mentioned above, which will cross the Kamchik Pass (the project feasibility report will be complete in 2013 and construction will begin in 2014).

All of these projects will promote diversification of the regional transportation routes.

For example, the Tejen-Serakhs-Mashhad railroad built in 1996 provided the countries of the region with the opportunity to reach the open sea by the nearest route through the port of Bander Abbas, which reduced their dependence on the Russian transportation system.

An important route ensuring an alternative to the Trans-Siberian transportation corridor is the Dostyk-Khorgos-Alashankou rail crossing that links CA with China. In addition, implementation of the planned China-Kyrgyzstan-Uzbekistan corridor will make it possible to decrease transportation expenses on movement in the eastern direction.

Particular mention should be made of the Western Europe-Western China highway among those projects being planned or already under construction.<sup>2</sup>

In June 2013, construction of its separate sections that pass through the Zhambyl and South Kazakhstan regions of Kazakhstan was finished. In particular, 111.9 of the 494-km 4-lane highway with a reinforced concrete surface have been put into operation under the project in the Zhambyl Region, and another section (24 km) of this transit corridor has been completed in the South Kazakhstan Region.

Some analysts say that this highway is called upon to redirect some of the freight traffic between the EU and the PRC to Kazakhstan. This could turn the country into one of the most important international transportation and transit hubs.

At the same time, some experts are inclined to think that the difference in opinion of the sides interested in building this corridor on several essential issues and the problems this is causing could hinder final construction of the highway.

At the 12th sitting of the Council of Heads of Government of the SCO Member States held in November 2013 in Tashkent, Deputy U.N. Secretary General and Executive Secretary of ESCAP Noelin Heiser said that more efforts should be made to restore the Silk Road. She also noted that the CA states serve as a bridge between Europe and Asia and that their development is of critical significance for the entire Asian region. Restoration of the Great Silk Road will help to strengthen integration and cooperation in Eurasia.

The transcontinental Lianyungang-St. Petersburg route is to be launched in 2017. It is to be equipped with the most up-to-date equipment, including an intelligent system and several logistics centers.<sup>3</sup>

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<sup>1</sup> See: "Rail Branches with a Transnational Trunk Line from China to Europe," available in Russian at [<http://www.tokmak.kg/nevkg/akonomkg/5307-zheleznodorozhnye-vetki-s-transnacionalnoj.html>], 12 January, 2010.

<sup>2</sup> This highway passes through the following cities: St. Petersburg-Moscow-Nizhny Novgorod-Kazan-Orenburg (RF)-Aktobe-Kyzylorda-Shymkent-Taraz-Kordai-Almaty-Khorgos (RK)-Urumqi-Lanzhou-Zhengzhou-Lianyungang (PRC). It is 8,455 km long, 2,233 km of which pass through the RF, 2,787 km through Kazakhstan, and 3,425 km through the PRC.

<sup>3</sup> [<http://www.12news.uz/news/2013/11/30/>].

According to expert assessments, the journey from the port of Lianyungang on the eastern coast of China to St. Petersburg and the borders of the European countries will take around 10 days (if the sea corridor through the Suez Canal is used the journey will take up to 45 days, while it will take 14 days via the Trans-Siberian Railroad).

The Kazakh side is also participating in the project to lay the Kazakhstan-Turkmenistan-Iran<sup>4</sup> (Uzen-Kyzylkaia-Bereket-Etrek-Gorgan) route; this corridor passes along the east coast of the Caspian Sea, bypassing Uzbekistan.

In May 2013, the Kazakhstan Temir Zholy National Company reported the opening of a direct rail route between Kazakhstan and Turkmenistan along the 146-km-long Bolashak (Kazakhstan)-Serkhetiaka (Turkmenistan) route.

In turn, Iran reported that it was putting the Gorgan-Inche-Barun section of the railroad into operation, which will link the country's mainlines with Turkmenistan and Kazakhstan, and further with Russia and China.

At present, the Turkmen Ministry of Railroad Transportation is working on connecting the town of Bereket and the etrap (district) center of Etrek on the country's border with Iran.

It was reported earlier that the length of the railroad leading from Bereket through Gyzyлгаia to the border with Kazakhstan, where Serkhetiaka is located, amounts to 444 km. This means that a 150-km section between Bereket and Etrek remains to be built. However, there is no information about the precise deadlines for completing this international railroad.

The Kazakhstan government is talking about its plans to restore the Great Silk Road, the main task of which will be to increase the carrying capacity of the country's railroads. This step by Astana is related to building the China-Kazakhstan-Azerbaijan-Georgia-Turkey-European countries transportation corridor.<sup>5</sup> It is expected that establishing multimodal transport under this project will significantly accelerate the carriage of goods from China to Europe.

For this purpose, two new railroads began being built in Kazakhstan in 2012. For example, on 3 July, 2012, during a direct national televised linkup, Kazakhstan President Nursultan Nazarbaev launched construction of the Arkalyk (the Kostanai Region)-Shubarkol (Karaganda Region) and Zhezkazgan (Karaganda Region)-Beyneu (Mangistau Region) rail branches. As Kazakhstan ex-minister of transport A. Kusainov noted, if the Zhezkazgan and Beyneu railroad stations are joined, the carriage of goods from the PRC will be ensured a shorter route for reaching the port of Aktau. The rail-ferry complex will make it possible to transport goods in train carriages to the port of Baku (Azerbaijan) and on to Georgia, Turkey, and Europe.

It should also be noted that Georgia and Turkey are hindering further development of this project to some extent. In particular, they have not signed an intergovernmental agreement on the Silk Wind multimodal block train. This halted implementation of the Memorandum on the Principles of Joint Activity for Developing the Transportation Network and Organizing Good Carriage using the Silk Wind multimodal block train signed in 2012.

After it became clear that the PRC government was focusing its attention on building the Uzbekistan-Kyrgyzstan-China international railroad, the Tajikistan-Kyrgyzstan-China project became less urgent. Nevertheless, the Tajik side is trying to actively advance road and rail transportation

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<sup>4</sup> The total length of the route is 934.5 km, 130 km through Kazakhstan, 722.5 km through Turkmenistan, and 82 km through Iran. This railroad will make it possible to optimize the movement of petroleum products from the Caspian Basin to the countries of the Middle East and reduce the journey length by more than 600 km and travel time by two days compared to the existing route. The carrying capacity of the railroad amounts to 400,000 passengers and 10 million tonnes of freight a year.

<sup>5</sup> The route is a total of 4,192 km with an estimated travel time of 12 days. The project presumes implementing new infrastructure facilities: a straightened Zhezkazgan-Beyneu (Kazakhstan) railroad, Aliat international sea port (Azerbaijan), Baku-Tbilisi-Kars (Azerbaijan, Georgia, Turkey) railroad, and a project for the Marmara railroad tunnel line (Turkey).

projects in the southerly direction. It should be emphasized that such initiatives so far remain at the level of talks and various statements.

In particular, on 20 March, 2013 in Ashgabad, the presidents of Afghanistan, Tajikistan, and Turkmenistan signed a memorandum on mutual understanding regarding the Turkmenistan-Afghanistan-Tajikistan railroad construction project.<sup>6</sup> In June 2013, Turkmenistan began building its section of the railroad, but this in no way testifies to further implementation of the project.

Despite the striving of certain CA republics to implement transportation-communication projects in their territories, Uzbekistan remains one of the main transit states both for regional and for non-regional countries.

Moreover, work has begun in Uzbekistan on building a new electrified Angren-Pap railroad route,<sup>7</sup> which is to be completed in 2016.

## Transportation Interdependence of the Regional States

The level of interdependence among the regional states in the transportation sphere during the first two decades of this century has changed and will continue to change as follows (see Table 4):

*Table 4*

**Changes in the Level of Interdependence of  
the Transportation Sector of the CA States  
in the Last Two Decades**

Vector of Bilateral Dependence	Level of Bilateral Dependence at Specific Times		
	Before 2000	At present	Before 2020
Uzbekistan's dependence on Tajikistan	High	Average	Low <sup>a</sup>
Tajikistan's dependence on Uzbekistan	High	High	High
Uzbekistan's dependence on Kyrgyzstan	Low	Low	Average <sup>a</sup>
Kyrgyzstan's dependence on Uzbekistan	Average	Average	High <sup>a</sup>
Uzbekistan's dependence on Kazakhstan	High	High	Average <sup>a</sup>
Kazakhstan's dependence on Uzbekistan	High	Average	Low <sup>b</sup>
Uzbekistan's dependence on Turkmenistan	High	Average	Low <sup>c</sup>
Turkmenistan's dependence on Uzbekistan	High	Average	Low <sup>b</sup>
Kyrgyzstan's dependence on Kazakhstan	High	High	Average <sup>a</sup>

<sup>6</sup> The length of the route amounts to around 640 km, the Tajik section is 50 km, the Turkmen section is 90 km, and the Afghan section is 500 km long.

<sup>7</sup> The new electrified Angren-Pap railroad route will pass through the Kamchik Pass at more than 2,200 meters above sea level.



Table 4 (continued)

Vector of Bilateral Dependence	Level of Bilateral Dependence at Specific Times		
	Before 2000	At present	Before 2020
Kazakhstan's dependence on Kyrgyzstan/Tajikistan	Low	Low	Low
Kazakhstan's dependence on Turkmenistan	High	Average	Average <sup>bc</sup>
Turkmenistan's dependence on Kazakhstan	Average	Average	Average
Tajikistan's dependence on Kazakhstan	High	High	High
Tajikistan's dependence on Kyrgyzstan	Low	Low	Average <sup>a</sup>
Tajikistan's dependence on Turkmenistan	High	High	Average <sup>c</sup>
Kyrgyzstan's dependence on Turkmenistan	Average	Average	Low <sup>ac</sup>
Kyrgyzstan's dependence on Tajikistan	Low	Low	Low
Turkmenistan's dependence on Kyrgyzstan/Tajikistan	Low	Low	Low

<sup>a</sup> In the event of successful implementation of the Uzbekistan-Kyrgyzstan-China project, including the Angren-Pap section of this project.  
<sup>b</sup> In the event the Kazakhstan-Turkmenistan-Iran project is launched.  
<sup>c</sup> In the event the Trans-Afghan transportation corridor is completed and launched.

In order to determine the integral level of transportation dependence of the individual regional states, each of the dependence levels was given an index. High dependence corresponds to 1, average to 0.5, and low to 0.

Then the transportation dependence of each of the countries will look as follows (see Table 5):

Table 5

**Level of Integral Transportation Dependence of Each of the Countries and Its Change during the First Two Decades of the 21st Century**

State	Overall Index of Dependence Level of State at Specific Times		
	Before 2000	At present	Before 2020
Kazakhstan	2	1.5	1
Turkmenistan	1.5	1	0.5
Uzbekistan	4	2	1
Kyrgyzstan	2	2	1.5
Tajikistan	3	3	3.5

Table 5 shows in particular that in terms of level of dependence on other regional states, Uzbekistan is, on the whole, at an average level. In so doing, it retains its dependence on Kazakhstan (see Table 6).

Table 6

**Main Transportation Corridors Used  
by the Republic of Uzbekistan**

Destination Point	Transit Countries	Distance, km
Far Eastern ports of Russia	Kazakhstan	8,610
Northeastern districts of China, South Korea	Kazakhstan, Russia	7,160
Western and central districts of China, ports in the east of the PRC	Kazakhstan	6,402
Baltic states	Kazakhstan, Russia	3,849
Port of Mersin in Turkey	Turkmenistan, Iran, Turkey	3,800
Ukraine and Belarus, East European countries	Kazakhstan, Russia	2,978
Port of Ilichevsk, Ukraine	Kazakhstan, Russia	2,964
Trans-Afghan corridor to the ports of Iran	Afghanistan	2,176
Turkey and European countries via Baku-Akhalkalaki-Kars railroad	Turkmenistan, Azerbaijan, Georgia, Turkey	2,158
Southeast Asia, Persian Gulf, and India via the port of Bandar Abbas in Iran	Turkmenistan, Iran	2,109
Transcaucasian corridor to the ports of Poti and Batumi	Turkmenistan, Azerbaijan, Turkey	2,025
Western China via the Andijan-Osh- Kashgar railroad	Kyrgyzstan	439

*Source:* [[http://www.mfer.uz/transport\\_i\\_logistika/mejdunarodnie\\_transportnie\\_koridori/](http://www.mfer.uz/transport_i_logistika/mejdunarodnie_transportnie_koridori/)].

The most dependent states of the region are Tajikistan and Kyrgyzstan.

### *In Lieu of a Conclusion*

Whereas in 1990-2000, the level of interdependence of the transportation sectors of the CA states was rather high, several projects implemented during 2001-2010 promoted a reduction in this interdependence to an average level. Moreover, when the Kazakhstan-Turkmenistan-Iran railroad, soon to be launched, goes into operation, Turkmenistan and Kazakhstan will acquire alternative corridors in all directions.

On the whole, before 2020, there will be an abrupt drop in the transportation dependence of Kazakhstan and Turkmenistan (when the Kazakhstan-Turkmenistan-Iran route is launched), as well as of Uzbekistan (when the Uzbekistan-Kyrgyzstan-China, particularly the Angren-Pap railroads and

the Trans-Afghan in the long run are launched). Kyrgyzstan will have the opportunity to connect directly with China by rail. As for Tajikistan, it still does not have any real opportunities to decrease its dependence on Uzbekistan in the transportation sphere.

It should be noted that the above-mentioned transportation projects are alternatives; they can promote both an increase in transit freight movement through CA, as well as diversification of the routes leading to the sea ports.

Putting alternative routes into operation in CA may at first cause disintegration in the transportation sphere. But in the future, competition should improve the transportation infrastructure in the region.

It is possible that the above-mentioned projects will create threats to regional security and give rise to new disagreements among the CA countries, but in the long term each of them will be able to choose the transport route that best serves their export-import and transit operations.

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