ISSN 1880-8468

Technical Report of
International Development Engineering
国際開発工学報告

TRIDE-2010-04 March 15, 2010

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(English version of TRIDE-2010-01)

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Survey Report on Freight Transport in Landlocked Countries in Central Asia

March 2010

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1. Background and Purpose of Survey

(1) Background

Landlocked Countries (LLCs) have no seaport by their nature. For this reason, maritime transport, which, characteristically, has a low unit transport cost, cannot be used within their territories. Thus, land transport (truck, rail, etc.) must be used through Transit Countries (TCs) for accessing the seaport from LLCs. It is reported that the level of economic growth in LLCs is reduced by 0.5% because of their lack of seaports (Sachs et al., 2004); this lack also means that 14% of all export earnings have to be paid to TCs (Collier, 2007).

NELTI (2009) reported that transport operators working in LLCs are frequently charged an unofficial fee, which is not at all necessary, in order to transport the freight over the border. Since all LLCs, except in Europe, are normally surrounded by developing countries, the infrastructure conditions in TCs are sometimes insufficient for haulage. Moreover, these LLCs are exposed to several freight transport risks such as damage to their commodities, theft, and delay.

The problem of freight transport in LLCs has been a matter of concern voiced by several international organizations, as can be seen in documents such as Almaty Declaration[1], which was adopted in 2003. UNESCAP (2003) attempts to assist the decision-making of the LLCs in terms of their route choices and/or sea port access mode choices by presenting the graphs shown in Figure 1. However, this graph does not express the "real cost" of transporting through TCs, which is a significant risk factor for LLCs.

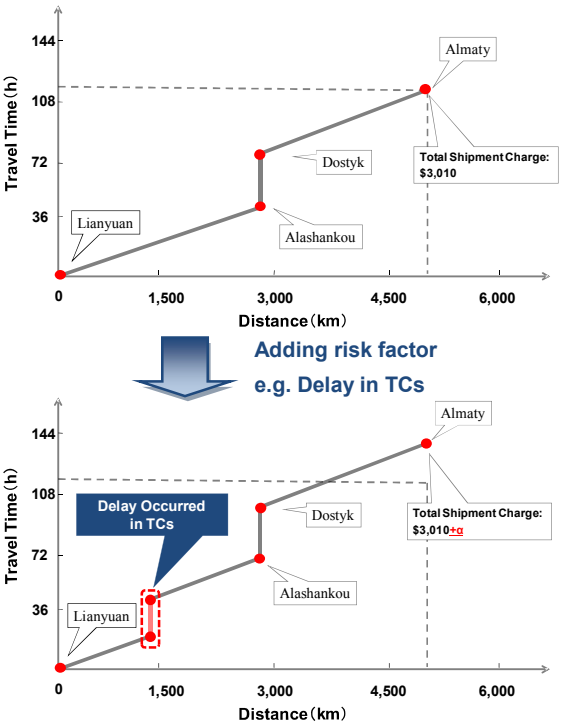


Figure 1: UN Methodology and Risk Factors
*Based on UNESCAP (2003)

(2) Purpose

In order to carry out a quantitative risk analysis, an interview survey was conducted in Uzbekistan and Kazakhstan. The routes that Uzbekistan and Kazakhstan are using and the treaties in place on their freight transport activities are assessed. Therefore, this study attempts to explore three aspects that affect LLC's transportation: (1) freight transport route, (2) related treaties, and (3) freight transport risks. The phrase "(*confirmation required*)" is added in the contents in cases where the evidence was inconclusive.

[1] The Almaty Declaration was adopted at the international ministerial meeting from August 25–29, in Almaty. This declaration contains recognition of the problems encountered by freight transport in LLCs, strengthens international cooperation, and highlights the importance of continuing discussions.

2. Survey Schedule

2009

September 27 (Sunday)

11:00–13:00 Visiting the Uzbekistan/Kazakhstan Border (Yallama)

September 28 (Monday)

10:00–11:00 State Customs Committee

11:40–13:00 State-Joint-Stock Railway Company

14:20–15:20 Uzbek Agency of Road and River Transportation

15:50–16:50 Association of International Road Carriers

September 29 (Tuesday)

10:00–11:00 Association of International Forwarders of Uzbekistan

11:30–12:00 Ministry of Foreign Economic Relations, Investments, and Trade

14:00–16:00 Visiting the Railway Container Terminal

17:00–17:30 JICA Uzbekistan Office

September 30 (Wednesday)

11:00–13:00 JICA Kyrgyz Republic Office

13:00–19:00 Visiting the Kyrgyzstan/Kazakhstan Border

October 1 (Thursday)

10:00–11:30 Kaden Transport Service / Almaty I Railway Container Terminal

13:00–14:00 Research Institute for Transport and Communications

October 2 (Friday)

10:00–11:30 Visiting the DAMU Logistics Center

October 3 (Saturday)

10:00–16:00 Visiting Khorgos (Cancelled)

3. Basic Data

3-1 Uzbekistan

(1) Population

27,606,007 (as of 2009)
Source: CIA (2009)

(2) GDP

Immediately after achieving independence from the former Union of Soviet Socialist Republics (USSR), Uzbekistan's level of economic growth declined. After passing through these difficult times, the country began, after 1996, to experience positive economic growth, and Uzbekistan finally achieved a +10% GDP growth rate in 2007. The GDP per capita in 2009 is estimated to have reached 2,805 USD (IMF, 2009). This indicates that the growth rate in 2009 against the previous year is +6.52%, which implies that Uzbekistan has not been widely affected by the recent economic crisis. On the other hand, the GDP growth rate in 2009 in Kazakhstan is expected to be negative because of the economic crisis.

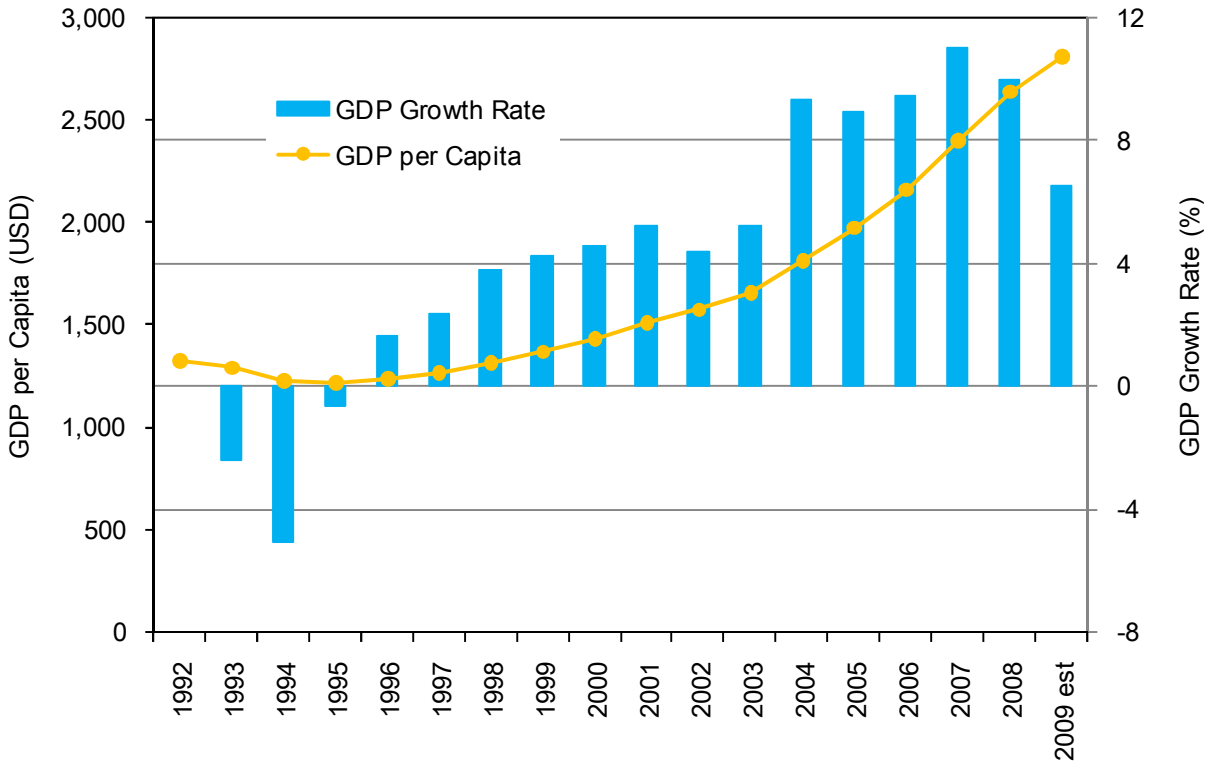


Figure 2: Change in GDP Per Capita and Economic Growth Rate in Uzbekistan
Source: IMF (2009)

(3) Trade Partners

(a) Export: 10.37 Billion USD (as of 2008)

Source: CIA (2009)

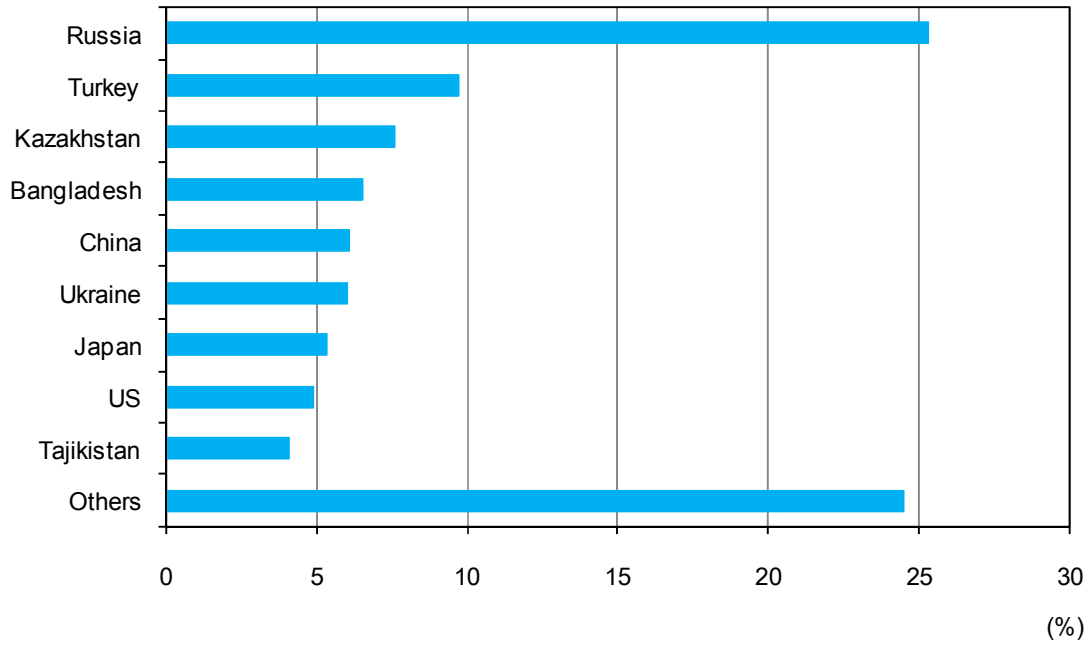


Figure 3: Trade Partners of Uzbekistan (Export)

Source: CIA (2009)

(b) Import: 7.07 Billion USD (as of 2008)

Source: CIA (2009)

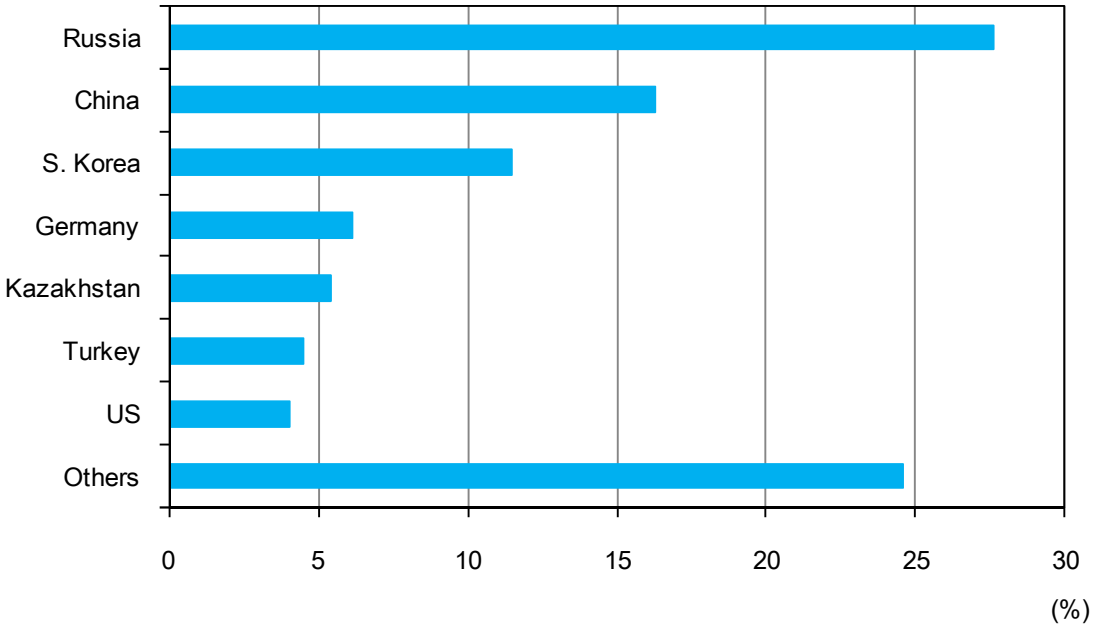


Figure 4: Trade Partners of Uzbekistan (Import)

Source: CIA (2009)

(4) Type of Goods (as of 2008)

Source: CIA (2009)

(a) Export

cotton, gold, energy products, mineral fertilizers, ferrous and non-ferrous metals, textiles, food products, machinery, automobiles

(b) Import

machinery and equipment, foodstuffs, chemicals, ferrous and non-ferrous metals

3-2 Kazakhstan

(1) Population

15,399,437 (as of 2009)

Source: CIA (2009)

(2) GDP

In a trend that is similar to Uzbekistan, in the years immediately after gaining independence from the former USSR, Kazakhstan's economic growth in terms of GDP was recorded as negative. Subsequently, the country managed to achieve continuously high economic growth because of its abundant natural resources, particularly oil. In 2000, it reached the 10% mark (12.44%), and maintained an economic growth rate of over 10% until 2007. Nevertheless, the growth rate drastically decreased until it reached 5.30% in 2008 and finally, a negative rate is expected to have occurred in 2009. One of the reasons for this decline in economic prosperity could be that their industrial sectors, which are highly dependent upon oil production, have been affected by the relatively low price of crude oil recently.

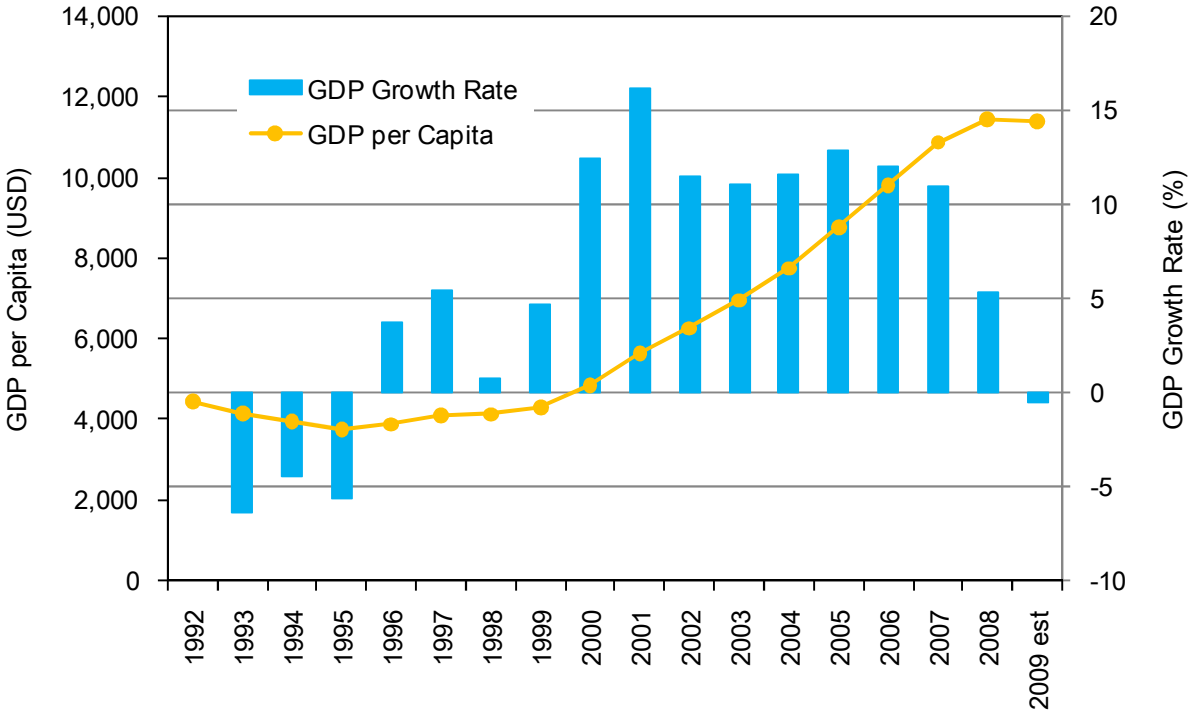


Figure 5: Change in GDP Per Capita and Economic Growth Rate in Kazakhstan

Source: IMF (2009)

(3) Trade Partners

(a) Export: 71.97 Billion USD (as of 2008)

Source: CIA (2009)

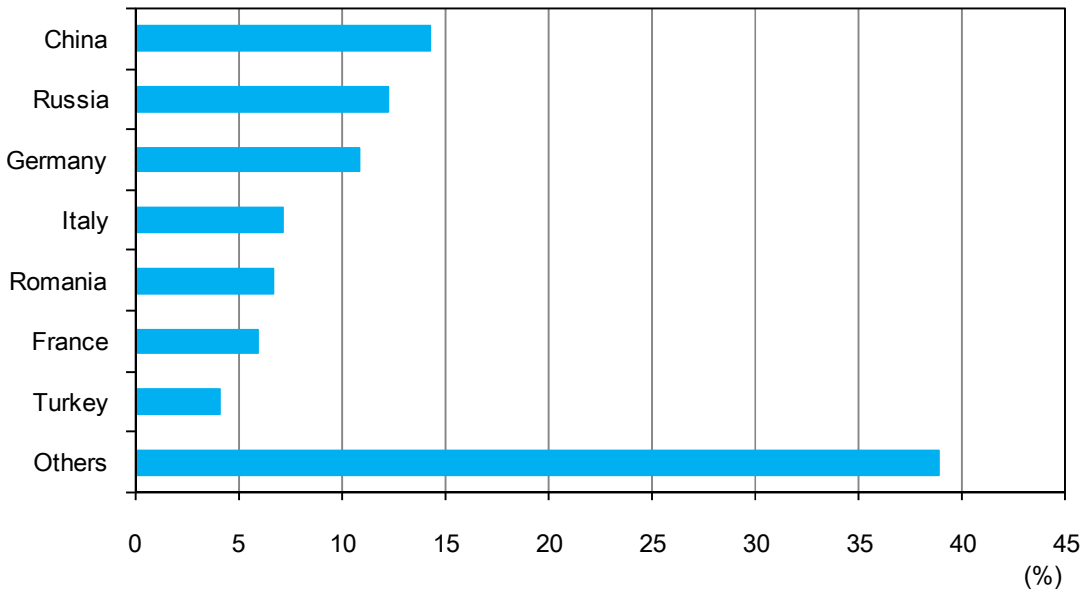


Figure 6: Trade Partners of Kazakhstan (Export)

Source: CIA (2009)

(b) Import: 38.45 Billion USD (as of 2008)
Source: CIA (2009)

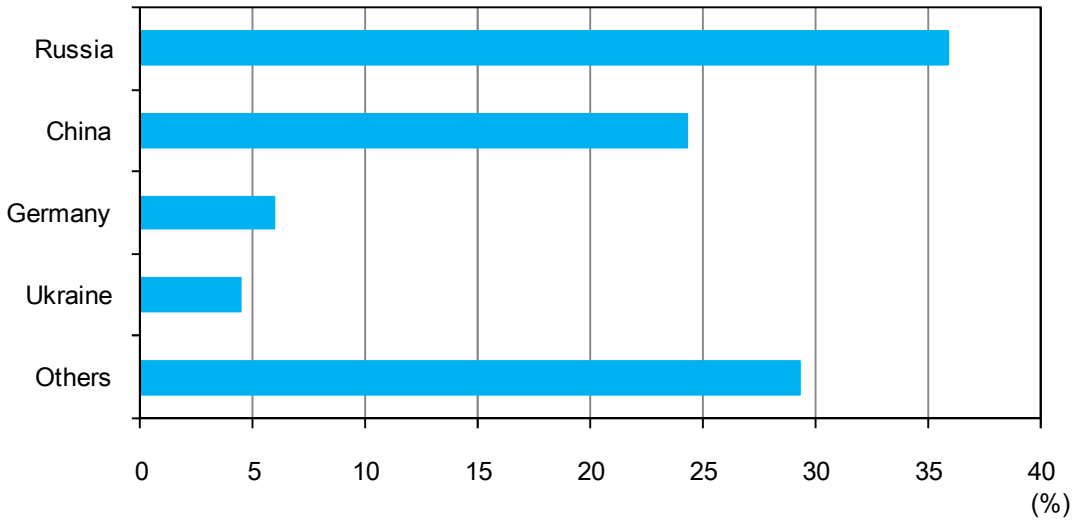


Figure 7: Trade Partners of Kazakhstan (Import)
Source: CIA (2009)

(4) Type of Goods
Source: CIA (2009)
(a) Export (as of 2001)
oil and oil products (59%), ferrous metals (19%), chemicals (5%), machinery (3%), grain, wool, meat, coal

(b) Import (year is unidentified)
machinery and equipment, metal products, foodstuffs

3-3 Logistics Performance Index

The Logistics Performance Index (LPI) is an indicator standardized by the World Bank (WB) representing the "friendliness" of countries where worldwide logistics operators operate and those with whom they trade (WB, 2010). This is evaluated by the following seven parameters: (1) customs, (2) infrastructure, (3) international shipments, (4) logistics competency, (5) tracking and tracing, (6) domestic logistics costs, and (7) timelines. A questionnaire form is distributed to operators on the ground worldwide (global freight forwarders and express carriers). In the questionnaire, interviewees are asked to rank each item for each country according to five levels. In 2010, according to the LPI, Uzbekistan and Kazakhstan are placed at 68th and 62nd place, respectively, out of 155 surveyed countries. Germany achieved the highest LPI score. Table 1 shows the 2010 LPI ranking and score of the top ten countries, together with the ten Asian LLCs, as defined by UN-OHRLLS (2009). The top ranking Asian LLC is Kazakhstan, at 62nd place (LPI: 2.83) and the lowest ranking is Nepal, at 147th place (LPI: 2.20). The average score for Asian LLCs is 2.46, which is quite low compared to the world average score (2.87). From these facts seen above, it can be inferred that being an LLC increases the number of disadvantages of each country with regard to freight transport.

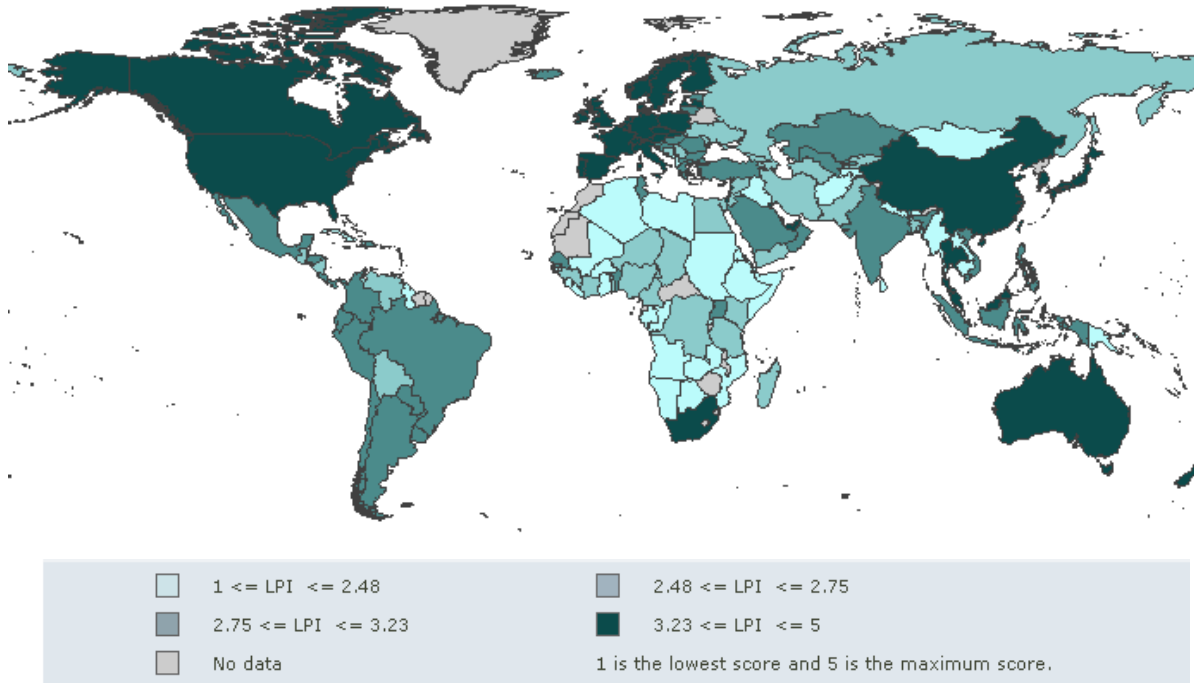


Figure 8: Logistics Performance Index in the World

Source: World Bank (2010)

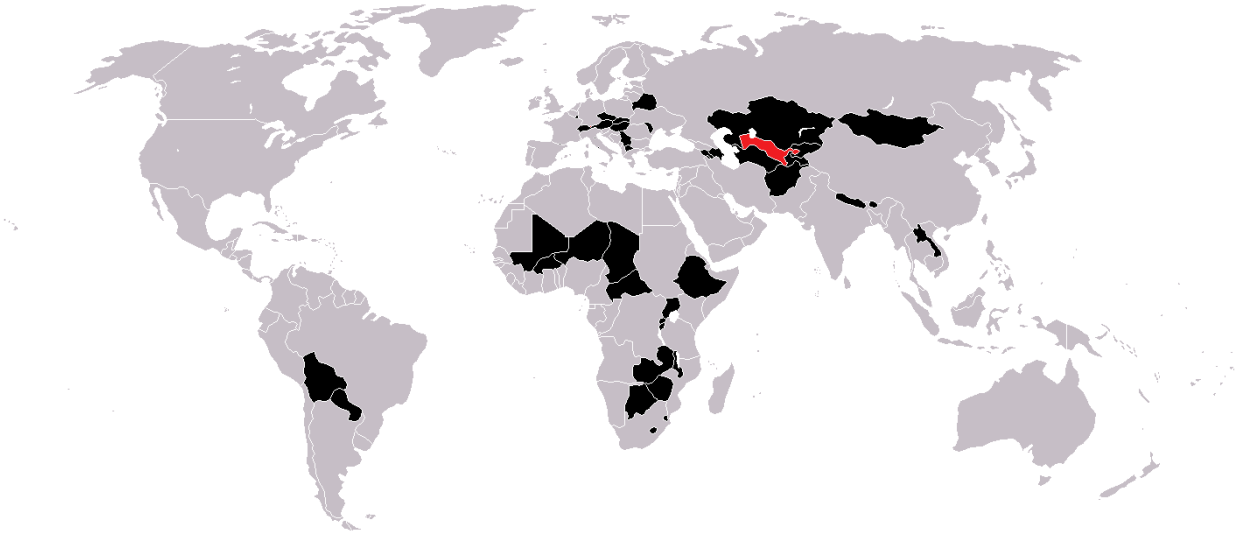


Figure 9: Landlocked Countries in the World (Red: Doubly Landlocked Country)

Source: CIA (2009)

Table 1: LPI Ranking of the Top Ten Countries in the World and the Top Ten Landlocked Countries in Asia in 2010

Top 10			Landlocked Country in Asia		
Rank	Country	LPI	Rank	Country	LPI
1	Germany	4.11	62	Kazakhstan	2.83
2	Singapore	4.09	68	Uzbekistan	2.79
3	Sweden	4.08	91	Kyrgyzstan	2.62
4	Netherlands	4.07	114	Turkmenistan	2.49
5	Luxembourg	3.98	118	Lao PDR	2.46
6	Switzerland	3.97	128	Bhutan	2.38
7	Japan	3.97	131	Tajikistan	2.35
8	United Kingdom	3.95	141	Mongolia	2.25
9	Belgium	3.94	143	Afghanistan	2.24
10	Norway	3.93	147	Nepal	2.20

Source: World Bank (2010)

4. Site Survey and Interview

4-1 Uzbekistan

(1) Uzbekistan/Kazakhstan Border (Yallama)

The site survey at Yallama, which is on the Uzbekistan/Kazakhstan border and is a crossing point exclusively used for trucks, was conducted from 11:00 to 13:00 on September 27. Yallama is located approximately 80km southwest from Tashkent (approximately 40 minutes by car), as Figure 10 shows. Two checkpoints had to be passed on the journey between Tashkent and Yallama.

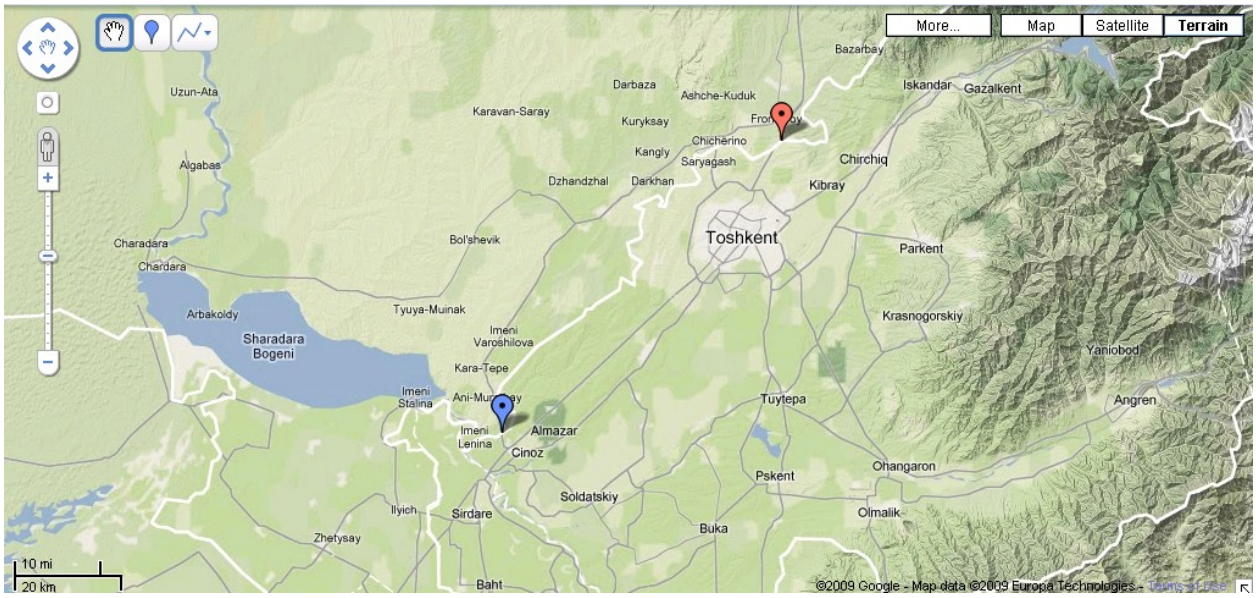


Figure 10: Location of Uzbekistan/Kazakhstan Border (Blue: Yallama, Red: Gisht-Kuprik)

Picture 1: Yallama (Uzbekistan Side)

The border crossing at Yallama is open between 8:00 and 20:00. According to the driver who was first in the queue on the morning of the survey, he had arrived at Yallama the evening before. He transported freight from Kazakhstan to Uzbekistan, and when he was surveyed, was returning to Kazakhstan. Thus, his truck was empty. As shown in Picture 1, approximately ten trucks were queuing in front of the border waiting for it to open. Officially, Yallama is reserved exclusively for trucks; despite this, it was observed that some local passengers were also using this border point to cross between the two countries. After visiting Yallama, we headed to the Gisht-Kuprik border, located at nearby Tashkent as shown in Figure10. However, the border was closed and protected by border guards. Gisht-Kuprik has been closed for approximately one year as it is undergoing renovation.

(2) State Customs Committee

The State Customs Committee was interviewed on September 28, between 10:00 and 11:00.

Cargoes that are bound for Europe from Uzbekistan are generally transported via Kazakhstan and Russia. Other routes to Russia are available, such as the route that goes via the Caspian Sea and Bandar Abbas seaport (see Figure 11). However, in general, seaports in Pakistan (e.g., Karachi seaport) are rarely used. Iran is not a member of the Agreement on Freight Transport, which is related to customs bonds in CIS (Commonwealth of Independent States) countries. In this agreement, procedures for border crossing and cargo inspection in CIS are exempted for haulages that take more than two border crossings. For example, on the route of Uzbekistan-Kazakhstan-China, under the agreement, cargo inspection is not required when entering Kazakhstan. However, cargo will be inspected at the border of Kazakhstan/China since China is not a member of this agreement. Due to the above agreement, customs duties, entrance/departure fees, and transit fees in CIS countries and Russia are comparatively lower than those levied when passing/entering China (*confirmation required*). However, in CIS countries, additional processing fees (e.g., filling invoices) are charged. This revenue is used for road construction and maintenance.

The rates of customs duty are determined according to the weight and volume loaded, as stipulated in the agreement mentioned above. Nothing is charged for trucks with a cargo weight of less than 40 tons. Since there is no customs duty charge levied when good are transported by rail haulage, regardless of their weight and volume, total cargoes of more than 40 tons per haulage tends to be transported by railway. As stipulated in the agreement, permission for transporting by truck in Kazakhstan and Russia is not required. Permission is also not necessary when transporting along the Iranian route, even though Iran is not a member of the agreement. Thus, Uzbek trucks can be driven in Iran. The border for the rail crossing is open 24 hours, and the processing time is comparatively shorter. On the other hand, the border crossing for trucks is

only open between 9:00 and 18:00, and there is a longer processing time required than there is for rail. The types of export goods that are transported are mainly daily goods, cotton, and automobiles, which are mainly exported to Russia, China, and Europe. On the other hand, import goods are mainly oil, electrical goods, and daily goods. Similar to the case of exportation, they are imported from Russia, China, and Europe.

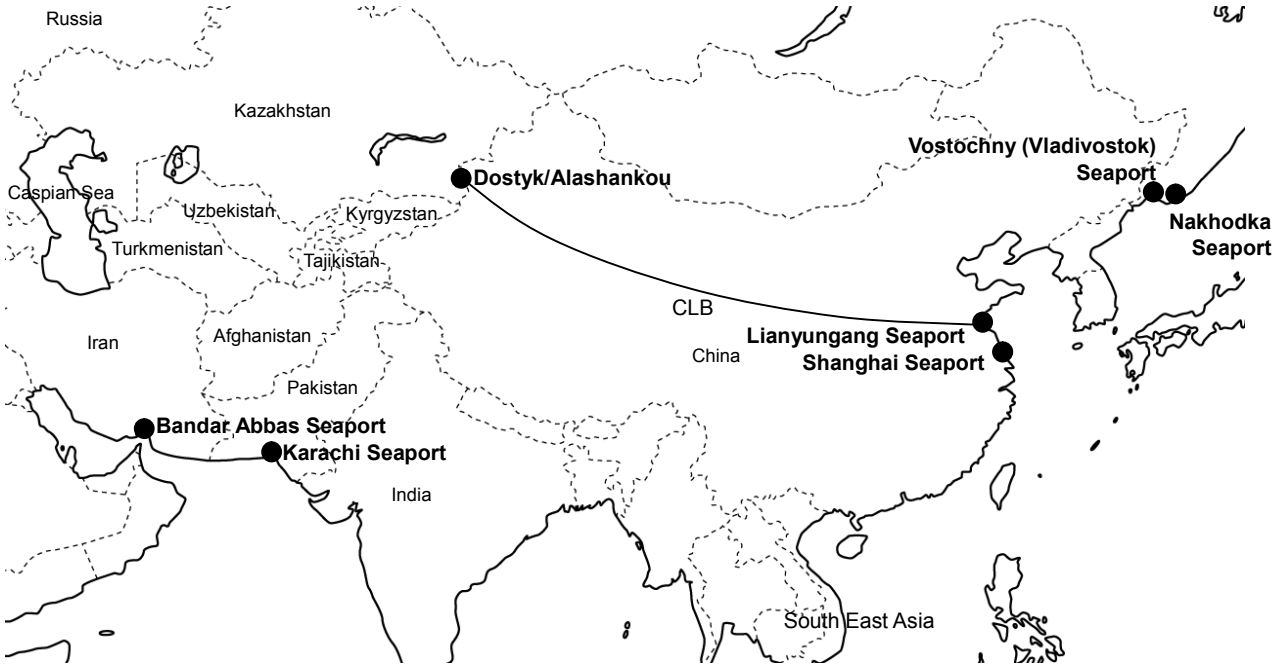


Figure 11: Location of Each Point

In the case of haulage between Uzbekistan and Japan, the China Land Bridge (CLB) via Dostyk/Alashankou (Kazakhstan/China border) is generally the land route used to access the seaport of Lianyungang. For haulages bound for South East Asia, maritime transport via the seaport of Bandar Abbas is chosen, due to high cost of land transport via China.

Several procedures and inspections are conducted along the way. In the case of exports, they are conducted at the departure stations of the other country and border crossing points. In the case of imports, the inspections and procedures are conducted at the border crossing points and the arriving stations in the country. Suspicious cargo is usually inspected at the border crossing point. An infrared scanner is installed at the Uzbekistan border. For imported cargo from China, inspection is always carried out using radial rays. For cargo from Afghanistan, a very strict check is undertaken in order to prevent dangerous objects from being imported into Uzbekistan (e.g., drugs and guns).

(3) State-Joint-Stock Railway Company

The interview with the State-Joint-Stock Railway Company (SJSRC) was conducted from 11:40 to 13:00 on September 28.

The modal share of rail haulage accounts for approximately 80% of all Uzbekistan's container freight transport (*confirmation required*). The remaining 20% are transported by truck, which accounts for the high modal share in Uzbek domestic short-distance freight transport. Thirty percent of exported goods of Uzbekistan are natural resources (mostly oil) that are exported to Europe and China. Some of their goods are exported to Afghanistan. On the other hand, there is relatively little import volume for natural resources.

Table 2: Trade Partners and Corresponding Goods of Uzbekistan According to SJSRC

	Partner	Goods
Export	1. Europe (via Bandar Abbas) 2. China (via Dostyk/Alashankou) 3. Kazakhstan, Russia, Europe 4. Afghanistan 5. Kyrgyzstan, Turkmenistan, Tajikistan	1. cotton, oil, crops 2. oil, cotton, silk material, plastic, bottle (secondary goods) 3. For Russia: crops, automobile For Europe: cotton, fertilizer, oil 4. food (wheat, beans), metal, oil 5. metal, cement, oil, fertilizer, construction material
Import	1. China (via Dostyk/Alashankou) 2. Europe 3. Russia 4. Korea (via Lianyungang and Dostyk/Alashankou)	1. electrical goods, construction material, machinery 2. food (unavailable food in Uzbekistan), machinery 3. Russian food, timber 4. automobile parts (shortage of production in Uzbekistan)

The current railway network in CIS countries is mostly a product of the USSR. Thus, it is widely recognized that the railway system is designed with none of the current border lines in mind. Rail haulage from the Fergana basin to Samarkand, for example, must pass through Tajikistan. Even on a short journey (approximately 100km) through Tajikistan, 280–300USD per wagon must be paid to Tajikistan. In order to avoid this, haulage by truck is widely used within this Origin and Destination (OD). Daily goods and food are the main goods transported in this OD.

Rail haulage transports an approximate average of 30,000 tons/day by 10-car train. Goods such as automobiles, oil, and material are transported by rail, and the volume of exported goods is larger than that of imported goods. In 1992, the Central Soviet Union Railway Company was established. This company established a treaty in CIS countries that regulates freight transport. CIS countries are making efforts to reduce empty haulage in CIS countries. Locomotives cannot cross a border, on the other hand, wagons can. As the volume of cargo that is transported increases, the accident rate also successfully decreases, due to modernized rail facilities. There are data that suggest theft occurs in both import and export by rail haulage.

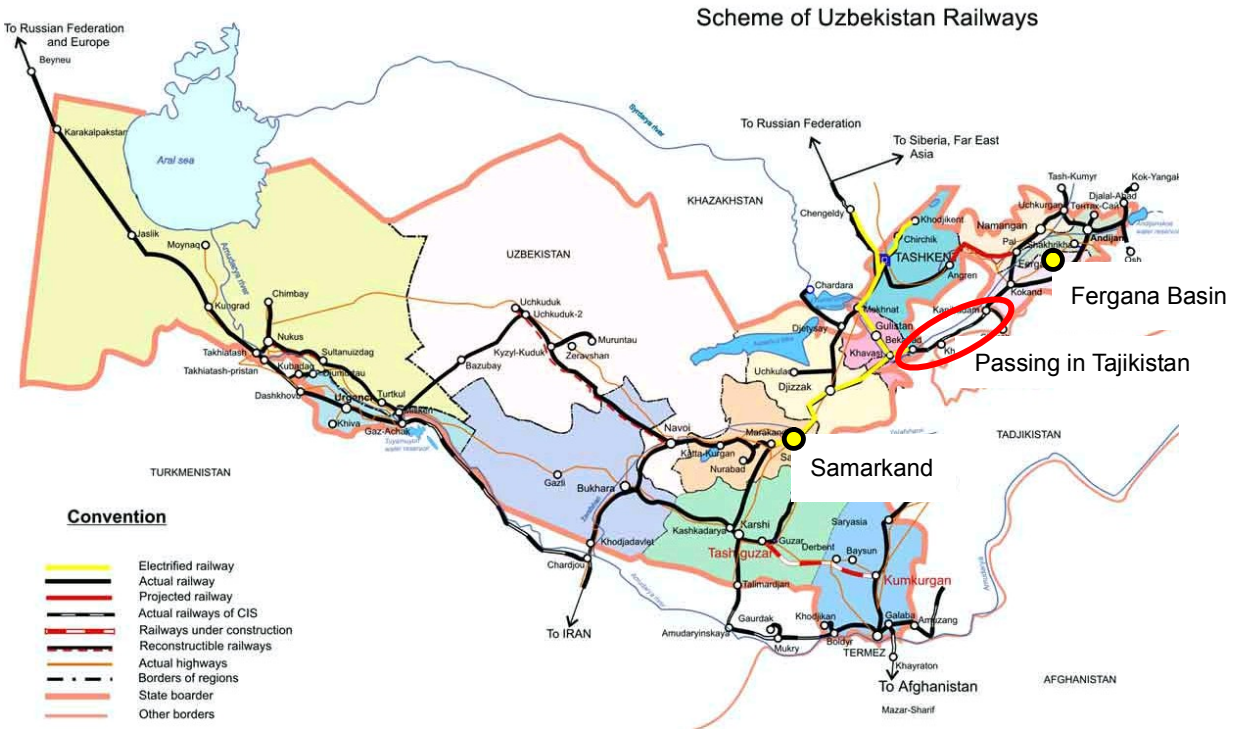


Figure 12: Transport Network of Uzbekistan (Red Circle: Passing in Tajikistan)

In terms of the haulage from Uzbekistan that is bound for Japan, the cargo volume itself is relatively low. However, in the case of transporting to Japan a route via Russia (using the seaport of Vladivostok on the Trans-Siberian Railway (TSR)), Kazakhstan (Dostyk/Alashankou), or China (seaport of Lianyungang using CLB) is generally used. Similarly, in the case of haulage from/to Korea, the seaport of Lianyungang is used via Kazakhstan and China. The seaport of Bandar Abbas is only chosen for cargo transported from /to South East Asia and India. Three routes are predominantly used for connecting Uzbekistan and Europe by rail: (1) Iran (Bandar Abbas seaport), (2) Black Sea, and (3) Latvia (Riga seaport[2]). The seaport of Saint Petersburg is not used when accessing seaports in Europe.

Due to the difference between the rail gauge size of the CIS (wide) and that in Iran and China (standard), approximately three to four days are needed for processing at the border. Once procedures for exportation (e.g., filling documents) are completed, no more requests for other procedures are required until arrival at the final destination. In most cases, the inspection process for cargo takes around three hours. However, this time will vary according to the type of goods that are being loaded into the wagons. Military goods bound for Afghanistan are transported by rail, as it is adjacent to Uzbekistan. The border between Uzbekistan and Afghanistan is open between 8:00 and 17:00. Iranian wagons cannot enter CIS countries. On the contrary, CIS wagons can enter Iran (*confirmation required*). Two to three hours are required to change the

[2] Riga seaport mostly deals with coal. Most ships overwhelmingly deal with dry bulk. (Freeport of Riga Authority, 2009)

wagons at the border.

Figure 13: Location of Each Point

Table 3: Gauge Size in Each Country

Gauge Size	Country
Wide (1,524mm)	CIS, Russia, Mongolia
Standard (1,435mm)	Iran, Turkey, China
Narrow (1,067mm)	Japan

All changes in the freight transport rules are arranged by the Central Soviet Union Railway Company in Moscow, and notifications are immediately sent to member countries so that transport operators can make the required adjustments without confusion. Thus, sudden changes in the freight transport regulations are unlikely to be a cause of trouble. In addition, regulations over the transport of hazardous material are also managed in this office.

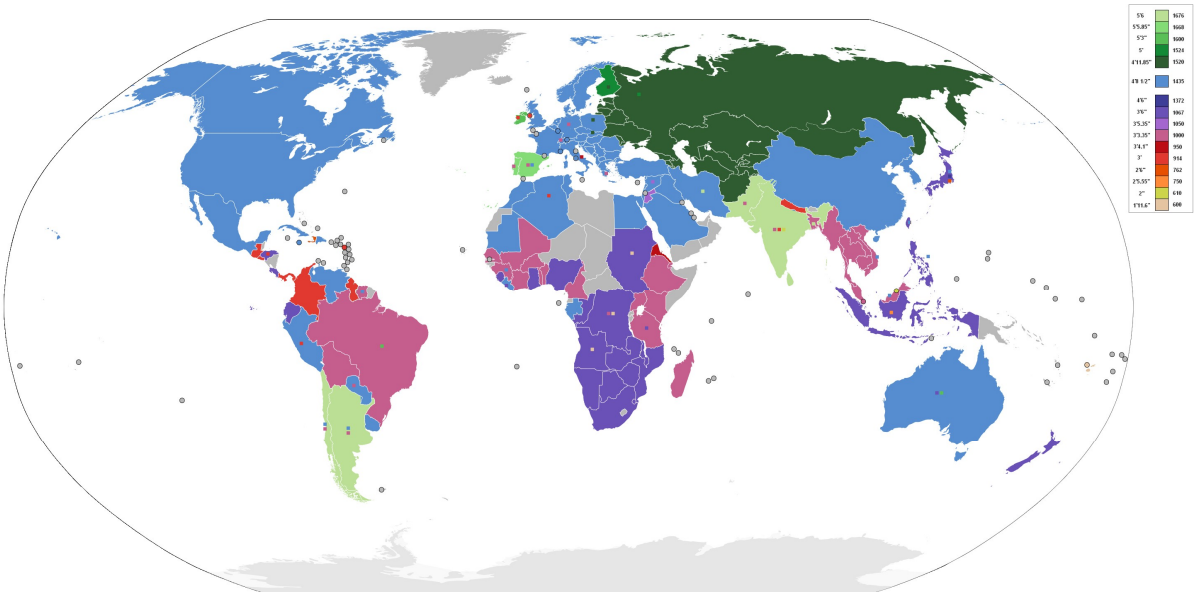


Figure 14: Gauge Size in the World

Source: CIA (2009)

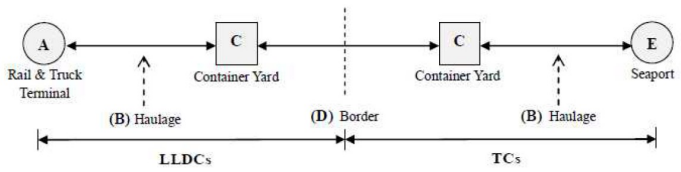
The freight transport risks that are encountered during haulage were assessed using a questionnaire, which is shown in Figure 15. There are few instances where damage to commodities occurs during rail haulage; however, in case damage does occur, insurance can be applied. During the winter season, special containers are used to prevent goods from freezing. No damage to the commodity due to leaking water was reported; this is probably because the containers are of sufficiently high quality. In short, damage is not a serious concern. If the transport regulations are carefully followed, then vibration is also not a serious problem. Furthermore, a rule for liquid cargo handling is also in place.

Wagons are in short supply, particularly during peak period of a year. In this case, wagons are rented from Russia or Kazakhstan to cover the shortage. Theft does sometimes occur. In cases where cargo is stolen, insurance will be paid out to compensate for the loss. The railway company bears the responsibility for any theft that occurs. Since the capacity of the railway terminal is sufficient, lack of space is not an issue. Although the railway itself is not broken, locomotives are themselves sometimes out of order. During the period between the beginning and end of September 2009, there were approximately 20 breakdowns for every 24 billion tons of haulage in the Uzbek domestic cargo flow. Rail transportation is relatively punctual. However, there is sometimes unnecessary waiting time because 5% of the locomotives do not follow their timetables. Language differences at the border crossing point do not cause a problem. For example, at the border between China and Kazakhstan, Russian speakers can be found. For Uzbek domestic haulage, when the transport distance is less than 300km/day, a penalty (30% of cargo price) is levied.

Section C: Transport Risks:

Please consider freight transport (both export and import) in following **hypothetical route between LLDCs and seaport in TCs**.

Hypothetical Route



Risk sources:

(A) Rail and Truck Terminal (in LLDCs) (C) Container Yard (in LLDCs and TCs) if any (E) Seaport (in TCs)
(B) Haulage (in LLDCs and TCs) (D) Border

Question: (a) Please **check transport risks** if you consider that it affects on the haulage between LLDCs and Seaport

***Please fill out the likelihood of occurrence of the risk at the same time**

*If **checked**, please answer extra two questions relating to who is affected and its severity of risks:

(b) If you checked (a), please check **who is affected** from its transport risks among:

1-[People in LLDCs], 2-[Freight forwarder], 3-[Transport operator], 4-[Shipper], 5-[Environment], 6-[Others]

(c) If you checked (a), Please put its **severity** on each transport risk among:

1-[Very High], 2[High], 3-[Medium], 4-[Low], 5-[Very Low]

Example:

(a) Transport Risk	(b) Sufferers (*If you checked (a), Please answer) **1-People in LLDCs, 2-Freight Forwarders, 3-Transport Operators, 4-Shippers, 5-Environment, 6-Others** (*You can check more than one)	(c) Severity of Risks (*If you checked (a), Please answer) **1-Very High, 2-High, 3-Medium, 4-Low, 5-Very Low**
☒ Theft *likelihood:___13___%	1-☒ 2-☒ 3-☒ 4-☒ 5-☐ 6-☐: please specify(_____)	1-☒ 2-☐ 3-☐ 4-☐ 5-☐

(B) Haulage (in LLDCs and TCs)

(a) Transport Risk *Required to answer	(b) Sufferers (*If you checked (a), Please answer) **1-People in LLDCs, 2-Freight Forwarders, 3-Transport Operators, 4-Shippers, 5-Environment, 6-Others**	(c) Severity of Risks (*If you checked (a), Please answer) **1-Very High, 2-High, 3-Medium, 4-Low, 5-Very Low**
☐ Traffic congestion *likelihood:_____%	1-☐ 2-☐ 3-☐ 4-☐ 5-☐ 6-☐: please specify(_____)	1-☐ 2-☐ 3-☐ 4-☐ 5-☐
☐ Traffic accident (crash, turning over) *likelihood:_____%	1-☐ 2-☐ 3-☐ 4-☐ 5-☐ 6-☐: please specify(_____)	1-☐ 2-☐ 3-☐ 4-☐ 5-☐
☐ Traffic accident with hazardous material *likelihood:_____%	1-☐ 2-☐ 3-☐ 4-☐ 5-☐ 6-☐: please specify(_____)	1-☐ 2-☐ 3-☐ 4-☐ 5-☐
☐ Vibration (poor condition of road and rail) *likelihood:_____%	1-☐ 2-☐ 3-☐ 4-☐ 5-☐ 6-☐: please specify(_____)	1-☐ 2-☐ 3-☐ 4-☐ 5-☐
☐ Theft *likelihood:_____%	1-☐ 2-☐ 3-☐ 4-☐ 5-☐ 6-☐: please specify(_____)	1-☐ 2-☐ 3-☐ 4-☐ 5-☐
☐ Leakage of rain and snow *likelihood:_____%	1-☐ 2-☐ 3-☐ 4-☐ 5-☐ 6-☐: please specify(_____)	1-☐ 2-☐ 3-☐ 4-☐ 5-☐
☐ Suspension of service due to damage to railway line *likelihood:_____%	1-☐ 2-☐ 3-☐ 4-☐ 5-☐ 6-☐: please specify(_____)	1-☐ 2-☐ 3-☐ 4-☐ 5-☐
☐ Unofficial payments *likelihood:_____%	1-☐ 2-☐ 3-☐ 4-☐ 5-☐ 6-☐: please specify(_____)	1-☐ 2-☐ 3-☐ 4-☐ 5-☐
☐ Security checks *likelihood:_____%	1-☐ 2-☐ 3-☐ 4-☐ 5-☐ 6-☐: please specify(_____)	1-☐ 2-☐ 3-☐ 4-☐ 5-☐
☐ Others:	1-☐ 2-☐ 3-☐ 4-☐ 5-☐	1-☐ 2-☐ 3-☐ 4-☐ 5-☐

Figure 15: One Part of Questionnaire Form for Freight Transport Risks (Distributed in Russian)

(4) Uzbek Agency of Road and River Transportation

An interview with the Uzbek Agency of Road and River Transportation was conducted from 14:20 to 15:20 on September 28. The Deputy Head of the agency, Mr. Shaalim Sh. Shavakhabov kindly agreed to be interviewed.

Picture 2: Picture with Mr. Shavakhabov (3rd from right)

The agency's mission is predominantly focused on management and coordination in relation to freight transport, and it has branches in 12 states. It is currently focusing on non-profit works, which include the development of regulations and the provision of permission for undertaking haulage in Uzbekistan. The permission for transit cargo to be transported is provided by the state customs committee. When concluding an agreement on road transportation, this organization acts as a representative of Uzbekistan. It is also involved in the privatization of automobile industry, a road development program with regard to the registration of vessels, and capacity development.

There are three types of routes used to export to Europe: (1) via Turkmenistan and Bandar Abbas seaport, (2) via Kazakhstan and Russia, and (3) to Georgia via the Caspian Sea by ferry and Black Sea. There are three other routes, although only a small amount of transport travels on these routes: Kazakhstan-Russia-Belarus/Ukraine(-Europe), and Iran-Turkey(-Europe). Uzbekistan has an agreement with Turkey regarding transit. There is also a trilateral agreement between Kazakhstan, Uzbekistan, and Turkmenistan. According to this agreement, other countries' trucks must declare their route when entering these three countries. Trucks are forbidden to take any other route besides those that they have declared. Uzbekistan, Kyrgyzstan, and China also have this type of agreement.

A state-owned-company is in charge of road construction and maintenance in Uzbekistan. There is no ministry for construction and transportation. The budget that is allocated to this comes from the national budget (*confirmation required*). There is no tollway in Uzbekistan. Truck operators in Uzbekistan are either large-scale companies (100–200 vehicles owned, 30%) or small-scale companies (10–20 vehicles owned, 70%). Large-scale companies own containers and use full

trailers for 20 tons. Those trucks are expected to have obtained permission from their destination country and the drivers should own an international driving license for international haulage; this is not necessary for domestic haulage.

When trucks come from Iran to Uzbekistan, any gasoline that they have over the permitted limit of 500 liters will be confiscated since the price of gasoline in Iran is lower than it is in CIS countries. In Iran, Iranian trucks are given priority over other countries' trucks. For example, Iranian trucks can pass the border without waiting in a long queue. In Uzbekistan, trucks must queue regardless of their nationality. The Iranian border is open between 9:00 and 16:00.

To access the seaport of Bandar Abbas, ferries must be used for crossing the Am Darya River in Turkmenistan. Only one ferry operates on this line and it can only take 20 trucks. It operates between 9:00 and 17:00, and the fare is 100USD/vehicle. Since this ferry is quite inconvenient, Uzbekistan, Ukraine, the EU, etc. are proposing to construct a new bridge. Nevertheless, there has been no response from Turkmenistan so far. During the winter season, rail is used as an alternative transportation mode, since the river is frozen.

Figure 16: Location of Am Darya River

Trucks of Russia, Kazakhstan, and Kyrgyzstan are not required to pay any fee when entering Uzbekistan (*confirmation required*). However, Turkmenistan and Tajikistan have to pay an entrance fee since they are not member of the agreement. Accordingly, trucks from Uzbekistan also have to pay an entrance fee when entering Turkmenistan and Tajikistan. Up to 800 vehicles from Turkey can be in Uzbekistan at any one time, without paying a fee (*confirmation required*). In case more than 800 vehicles are in Uzbekistan, an extra fee is levied.

The TIR (Transport International Routier), an international treaty on freight transport, outlines effective regulations for border crossing. Under the TIR, once cargo is inspected at the departure

point, the freights are bonded and the TIR sticker is put on the trucks. This sticker means that the trucks will not need to be inspected again in transit countries. Trucks with the TIR sticker can pass other customs clearance points automatically.

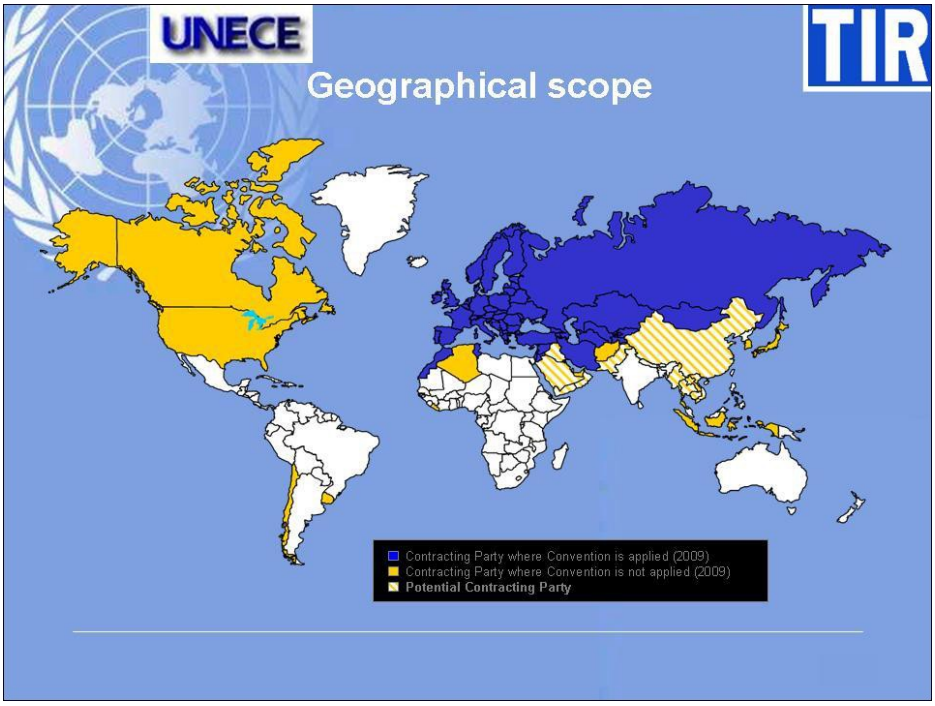


Figure 17: Member of TIR
Source: UNECE (2009)

Normally, when cargoes are damaged, insurance is paid out to cover the loss. Currently, there are insufficient scanners for cargo inspection at border points. This is one of the causes of delay.

For truck haulage, there are several possible final destinations, such as Finland (14 days), Kashgar (three to four days), Bandar Abbas (three to four days, 3,000–4,000USD/20 tons truck) and Turkey (seven to ten days, 2,000USD/truck).

(5) Association of International Road Carriers

An interview with the Association of International Road Carriers took place from 15:50 to 16:50 on September 28. Prof. Kakhramon M. Sidiknazarov, the president of this association, kindly agreed to be interviewed. This association is an NGO to which approximately 30 companies belong; it is conducting a monitoring survey in conjunction with the IRU (International Road Transport Union) to facilitate truck haulage. This is one of ADB's CAREC (Central Asia Regional Economic Cooperation) programs. Afghanistan is also included in this program. The main missions of the association are (1) supporting cross-border procedures, (2) proposing revised amendments that are related to automobile bills, and (3) educating drivers.

The exportation of cotton and importation of dairy goods are the dominant goods that are traded with China. For Russia, the exportation of crops is the dominant good and the importation of electrical goods is dominant in Turkey. The dominant destinations for Uzbek truck companies are Iran, Turkey, Russia, and Kazakhstan. Some goods are also transported to Ukraine, Belarus, Poland, Germany, and Italy. A route to Urumqi via Kyrgyzstan is currently under construction, funded by Uzbekistan, Kyrgyzstan, and China. There is some cargo flow between Uzbekistan and Tajikistan; however, Tajikistan is not used as a TC

Since Kazakhstan is very vast, it is difficult to manage and maintain the country's roads. The lack of facilities for drivers (e.g., rest areas) has often been pointed out. They have a list of difficult locations to cross the border point. The sandy desert also causes problems for the engines, which sometimes break down. Unexpected delays at the border can cause serious problems. When entering Uzbekistan, the only payments that are made at the border are the departure and entrance fees. The fees that are collected are allocated to the road fund of Uzbekistan. Kazakhstan has the same system as Uzbekistan. Another risk factor is the problem of expiring visas while drivers are waiting for the ferry to Mersin seaport in Turkey.

In Tashkent, there is no large truck terminal except for the logistics center, which is used to store exporting cargoes, such as cotton and dairy goods. The factors affecting the route choices can be summarized as follows: (1) Unexpected delays and inconvenient procedures at the border (the average speed of the truck is only 26km/h), (2) infrastructure conditions, (3) the time required to acquire a visa (in Iran, the process is very time-consuming), and (4) the time required for the acquisition of import permissions.

(6) Association of International Forwarders of Uzbekistan

An interview with the Association of International Forwarders of Uzbekistan took place from 10:00 to 11:00 on September 29. Mr. Davronbek Kh. Khamraev, a General Director of this association, kindly agreed to be interviewed. Mr. Davronbek Kh. Khamraev kindly prepared six problematic routes before the interview survey and offered us material (in Russian). This association is a member of the FITA (The Federation of International Trade Associations), which works predominantly to protect carriers' right to transport and the adherence of international standards. This association cooperates with CAREC.

Picture 3: Picture with Mr. Khamraev (2nd from left)

Risk can be divided into avoidable and unavoidable. The inflow of drugs from Afghanistan is almost unavoidable. There are some risks, however, which are not impossible to avoid, for example, (1) delay at border, (2) visa procedures, (3) commodity damage (not only in central Asia), (4) unofficial payments (charged by the border guard) and (5) lack of rest facilities for drivers.

With these factors in mind, the seaport of Bandar Abbas is often chosen as the seaport to access Europe. CLB is used on the east side of Uzbekistan for accessing to seaport over TSR because CLB has a shorter transport time and a lower fare (half of TSR). In the case of transporting goods to South East Asia, the seaport of Karachi is preferable since it is the fastest route from Uzbekistan. Nevertheless, it is now impossible to pass through Afghanistan due to the security problem.

Carriers in central Asian countries are allowed to travel in China for up to 300km. Traveling more than 300km is forbidden. In order to facilitate procedures at the border, JICA has installed scanners at Uzbek border points. In central Asia, containers are not popular. One of the reasons for this is that lack of containers; further, there is a difference in rail gauge size at the border between China and Kazakhstan. However, they are relatively popular on the Iranian route. Due to this, transshipment must be done by changing wagons. This factor can adversely affect transport time.

As for routes bound for Europe, trucks are generally used via Kazakhstan and Russia, a journey that takes five to seven days. Transport costs are about 4,000–5,000USD/truck. For the Iranian route, transport time is approximately 20 days and the transport cost is 2,500–3,000USD/truck. On this route, the final destinations in Europe are Greece, Bulgaria, and Italy. One route does run to France via the Caspian Sea; however, it is very rarely used. For transporting to North America, there is a route via the Caspian Sea and the Black Sea (using rail) and this is sometimes used. International transport routes are used subject to the political situation. In the case of using rail

transport to the seaport of Bandar Abbas, the transport time increases by approximately 30% due to the transshipment at the border of Turkmenistan/Iran, which is necessary due to the difference in gauge size (wagons needed to be changed). Transport costs are reduced by 20–30% when using haulage rather than truck. On the route of Dubai-Iran-Uzbekistan, container transport is used.

To transport from non Central Asia to Central Asia, plenty of procedures are necessary. In addition, permission by FITA is required. In any instance where the cargo passes through a country that is not a member of FITA, the carrier needs to be changed at every border.

Since the procedure for custom clearance takes very long time, it becomes quite a burdensome process for carriers. Unofficial payments (kickback) are also a serious problem, particularly at the Uzbekistan border with Kazakhstan and Kyrgyzstan. The condition of the road infrastructure in Kazakhstan does not satisfy international standards. On unpaved roads, it is not even possible to travel at the speed of 50km/h. In order to improve this situation, road maintenance is being planned by ADB and WB. Foreign carriers are complaining about the poor conditions and the lack of facilities (e.g., rest area and communication facilities) along the roads of Uzbekistan.

For rail and truck usage, as the following decisions normally apply: (1) rail is chosen when cargo volume is high, (2) rail is chosen of the case shipper or forwarder is sensitive to transport cost, and (3) truck is chosen when a shorter transport time is required. The most attractive benefits of truck haulage are the short transport time and point-to-point transport.

In Uzbekistan, the carrier's market (truck and air) had been liberalized, which has led to severe competition in terms of transport fare. However, the number of trucks is still insufficient. Most of them have been in use since the time of the former USSR; thus, the trucks themselves should be renovated. Moreover, only 10% of all trucks comply with the Euro II emission standard. On the other hand, there are 100 times more truck operators in Iran than there are in Uzbekistan and the Iranian trucks are more up-to-date.

The main problem in the rail services is that of monopoly. However, there are alternatives to this monopolized Uzbek route. Since international carriers are able to choose other routes, it is difficult for the Uzbek railway company to raise their rates.

The transport time from Uzbekistan to Iran is approximately seven to ten days (*confirmation required*). When China is the final destination, the usual land transport route passes through Kazakhstan. The total transport time from Uzbekistan to the seaport of Lianyungang using CLB takes around 14–20 days.

(7) Railway Container Terminal

A site survey of the railway container terminal managed by Sarq Trans Servis (Transport International Forwarding) was conducted on September 29 for about one hour from 14:00. Mr. Abdugaffar Mirzaev (director) and Mr. Sadikov Surat (manager) kindly allowed us to survey the terminal. This terminal was established in 1995 as a state-owned-company and it was eventually privatized in 2002 as a joint venture. This company owns another railway terminal in Tashkent, which is a public terminal run as joint venture with a Russian company. The choice regarding which terminal is used out of the two possibilities is undertaken by the clients themselves. The terminal usage fee is almost the same at each terminal but the fee at the terminal in Tashkent is slightly higher. The terminal in Tashkent is slightly bigger. Moreover, bonded warehouses are available in the public terminal where clients can process their customs clearances.

Picture 4: Container Terminal in Tashkent

All domestic haulage in Uzbekistan departs from this terminal by truck. Chinese and Korean containers are the most numerous, and there are relatively few European or Japanese containers There are 200–250 TEU numbers of rail operations from China per week (15–20 times/week). Empty haulage accounts for approximately 30% of Uzbek importation. Most exportation from Uzbekistan is empty haulage. China sometimes requests to return empty containers that are in

Uzbekistan. In this terminal, the maximum cargo volume is 12,000TEU/year; this makes it the largest terminal in Central Asia, in terms of the cargo volume being dealt with. Wagons are mostly Russia- and Uzbekistan-registered. If one country wishes to use other countries' wagons, a rental fee per container is levied.

(8) Ministry for Foreign Economic Relations, Investments and Trade

A courtesy visit to the Ministry for Foreign Economic Relations, Investments and Trade of Uzbekistan was conducted on September 29, between 11:30 and 12:00. Mr. Rustam T. Azimboev (Director of Department for the Transport Maintenance of Foreign Economic Activities) and Mr. Khamidulla F. Rakhmatullaev (Senior Officer of Department for the Transport Maintenance of Foreign Economic Activities) kindly assisted our survey in Uzbekistan. During this visit, cooperation with further data collection and the submission of a report regarding this survey was promised.

(9) JICA Uzbekistan Office

A brief interview regarding economic condition of Uzbekistan to JICA Uzbekistan Office was also conducted. The JICA Representative Mr. Naoki Nihei kindly agreed to be interviewed.

4-2 Kyrgyzstan

(1) JICA Kyrgyz Republic Office

An interview with the JICA Kyrgyzstan Office took place for one hour from 11:00 on September 30. The JICA Resident Representative Mr. Hideaki Maruyama and Representative Mr. Seiju Imai kindly introduces JICA expert Mr. Toshio Kimata, who is dispatched as an expert for road maintenance. An interview was conducted with Mr. Kimata for one hour from 12:00. Several resources such as trade data, the Kyrgyz domestic road network, and a report on Kyrgyz urban planning that had been written by Mr. Kimata were provided by Mr. Kimata.

In Kyrgyzstan, rail haulage is not common, and it accounts for only 5% of all cargo flow. On the other hand, haulage by truck accounts for 95%. As for haulage bound for Tajikistan, rail is normally used to transport fuel. The road conditions in Kyrgyzstan and Tajikistan are extremely poor. The training of road engineers is an urgent issue, since few engineers are comfortable with USSR-era technology nowadays. The route between Bishkek and Torugart (the check posts on the Kyrgyzstan/China border) is an arterial road for large trucks. This route is currently under sidewalk maintenance paid for by ADB and a loan from China.

According to the National Bank of the Kyrgyz Republic (2006), the largest trade partner of Kyrgyzstan in 2006 in monetary terms is Russia for both import and export. In the case of export, Uzbekistan, Kazakhstan, Afghanistan, and China follow Russia in turn. The types of goods that are exported are mostly noble metals (pearl, precious stone) and minerals (including energy). In the case of import, China and Kazakhstan follow Russia in turn. Types of goods are mainly mineral (including energy), followed by automobiles.

(2) Kyrgyzstan/Kazakhstan Border

We crossed the Akzhol/Kordai (the Kyrgyzstan/Kazakhstan) border in the afternoon of September 30. Akzhol was very crowded, as is shown in Picture 5, thus it took one and a half hours to cross the border. There were several facilities at Kordai (Kazakh side), for example, a gas station, and a rest area. There were a few trucks, but there were mostly local passengers. After entering Kazakhstan, we drove eastwards along the border for 20 minutes, and finally arrived at Akty-lek/Karasu (Kyrgyzstan/Kazakhstan) border. This check-post is supposed to be for the exclusive use of trucks; however, we observed many passenger cars, as Picture 5 shows. The traffic volume on the Akty-lek/Karasu border was much lower than that on the Akzhol/Kordai border. There was nothing there other than facilities used for the border check-post.

Figure 18: Kyrgyzstan/Kazakhstan Border (Blue: Akzhol/Kordai, Red: Akty-lek/Karasu)

Akzhol (Kyrgyzstan Side)

Kordai (Kazakhstan Side)

Karasu (Kazakhstan Side)

Picture 5: Border of Kyrgyzstan/Kazakhstan

4-3 Kazakhstan

(1) Kaden Transport Service / Almaty I Railway Container Terminal

An interview with Kaden Transport Service and a visit to Almaty I container terminal was conducted for an hour and a half from 10:00 on October 1.

In this terminal, Russia and China cargo make up a high proportion of both import and export. On the other hand, the container terminal near Almaty station deals mostly with cargoes bound for Europe and North America. Exportation to Russia mainly passes through Novosibirsk, this is usually done by railway. The goods that are transported are predominantly food goods (normally juice). There is route via Astana, however, it is rarely used. The final destinations in Russia are mostly big cities such as Moscow, and Saint Petersburg. Goods from China are mainly construction materials. Haulage bound for East Asia and India does not use the Bandar Abbas seaport but Lianyungang seaport in China. The seaport of Nakhodka, Vladivostok (Vostochny), and Shanghai are also used (see Figure 11). The condition of all the railways in countries that used to be in the former USSR are about the same since they were constructed in the era of former USSR.

The UN Special Programme for the Economies of Central Asia (SPECA) promotes regional cooperation in Central Asia. The missions of SPECA are to strengthening economic cooperation in Central Asia and encourage integration of the Central Asian economy into a world economy. There are currently seven members of SPECA: Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan.

Transshipment time at the Kazakhstan/China border is approximately one to three days for 500–600 train-cars, because of the difference in gauge size. The border is open from8:00–20:00. The Kazakhstan/Russia border is open 24 hours. Due to the congestion in Dostyk, there are plans to increase the capacity in Khorgos. It is relatively easy to pass through the border and to complete the requisite procedures for customs clearance. Automatic scanners for cargo inspection are installed at the border of the Semipalatinsk route. Thanks to this equipment, procedures at the border can be completed in a few hours.

The Union for Customs Clearance began operating among the three countries of Kazakhstan, Russia, and Belarus on January 1, 2010. Subsequently, from June 2010, this will become fully effective. It is hoped that this will mean that any custom clearance procedure will have to be completed only once, and therefore freight will be able to travel freely among member countries. Tajikistan and Kyrgyzstan are now only observers in this union, although they are expected to become members in the future.

Picture 6: Almaty I Container Terminal

The Almaty I container terminal was operated by a state-owned-company until 1998, after which it was privatized. Thirty percent of the capital is held by the railway company. It takes up an area of 17.9 ha and the volume of containers that it deals with is 1,500TEU/month. The frequency of the rail operation is twice per day. Cargo bound for Russia leaves at noon and those bound for China leave at night. Approximately 50 wagons are carried in one operation. Empty haulage is mainly haulage that is bound for Russia. Haulage between Kazakhstan and Turkey is transported mainly via Central Asia by truck. When entering Turkmenistan, it is necessary to obtain a visa. There is another route to Turkey, which goes via Novosibirsk and the Black Sea by ferry.

Figure 19: Location of Each Point

(2) Research Institute for Transport and Communications

An interview with the Research Institute for Transport and Communications was conducted for one hour from 13:00 October 1. The Head of Complex Transport Problems Department, Ms. Gulnara Bekmagambetova and Mr. Roman Andrutskiy kindly agreed to cooperate with our survey.

In the case of transport to Russia (Moscow), the route via Petropavlovsk is the fastest. The most popular routes in Russia are the six routes, including the route discussed above (via Petropavlovsk) that are shown in Figure 20. The Eurasian Economic Community (EurAsEC) designates corridors for both international and domestic transportation. In Figure 20, the international corridors are highlighted in red and domestic are highlighted in blue.

Figure 20: Main Corridors in Kazakhstan by EurAsEC
(Red: International, Blue: Domestic Corridor)
*Courtesy of Research Institute for Transport and Communications

The highest traffic volume section in Kazakhstan is found between the area approaching the Chinese border and the Kyrgyzstan border via Almaty. Most of the traffic on this route is transit. The volume of container cargo is relatively high between China and Almaty. The other Kazakhstan/China border, other than Khorgos, is located in the Northeast. Cargos that use this border are mostly bound for destinations inside Kazakhstan. The national road of Kazakhstan, which is runs between Kazakhstan and Russia via Aktobe is very long and in bad condition. In particular, the western parts of Kazakhstan and the road to the Caspian Sea are in poor condition.

ADB plans to renovate these roads. For Kazakhstani cargo that passes through Uzbekistan, the shipment charge that is levied is relatively high, but a visa is not required. From Kazakhstan to Turkey, there are routes that go via central Asia and Russia, but the former is rarely used. The latter route uses a ferry to cross the Black Sea. For haulage in Turkmenistan, Kazakh drivers must obtain a visa. The customs clearance fee is high.

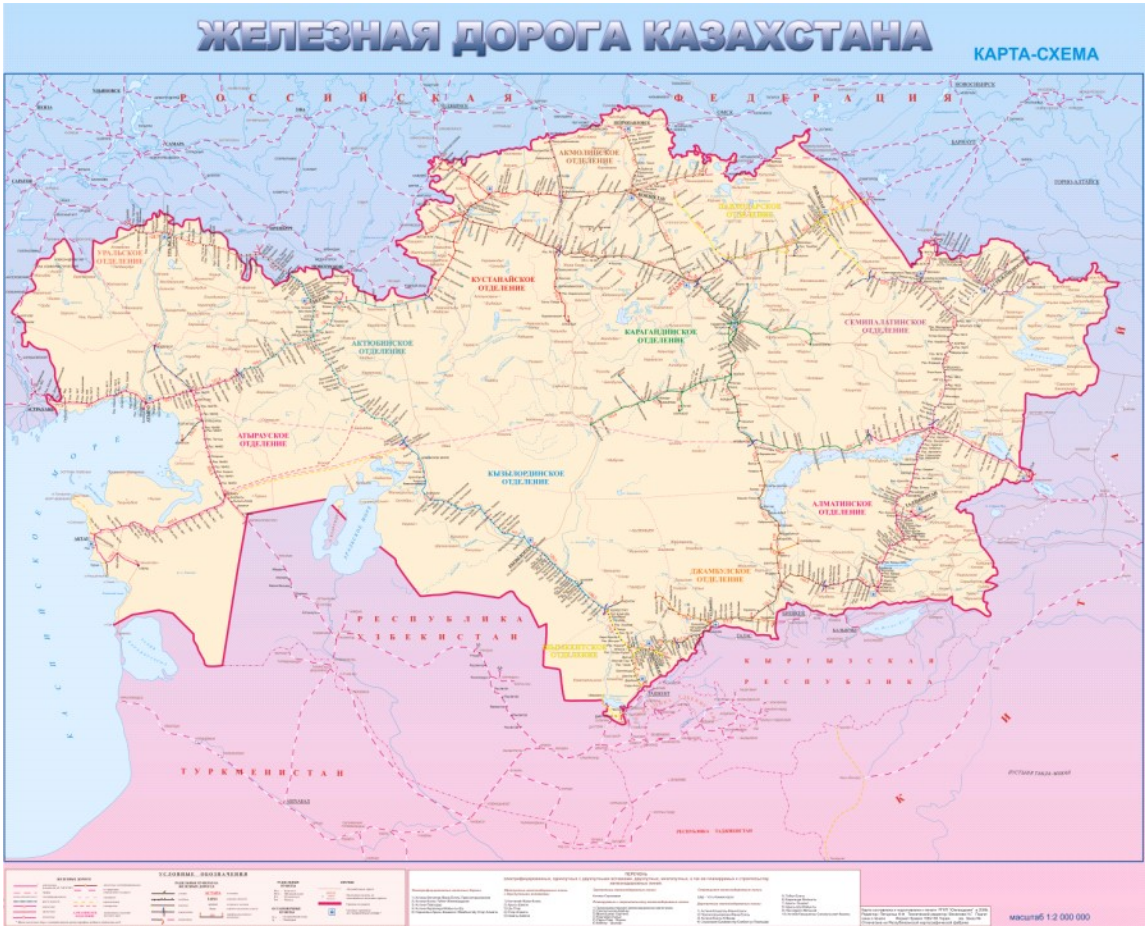


Figure 21: Railway Network in Kazakhstan

*Courtesy of Research Institute for Transport and Communications

Kazakh organization is bureaucratic, thus, the facilitation of information exchange among each organization (border guards, customs clearance, transport-related organizations, sanitation-related organizations, quarantine-related organization) is important. The government is willing to manage all of the above organizations except border guards, to ensure that the procedure facilitation is efficient. Legislation is examined by the government. The systems that are in place to deal with customs clearance are insufficient both in terms of hardware and software.

For border crossing by truck, trucks with the TIR sticker are exempted from cargo inspection at the border (China is not a member of TIR). Trucks that originate from China and are en route to Europe are changed to TIR trucks in Kazakhstan. Kazakh trucks are permitted to travel up to Urumqi because of a bilateral agreement with China. Chinese cargo is transshipped at Khorgos (a border cooperation center, and a neutral place managed by both countries). The distance between Almaty and Moscow by truck is 4,000km and the transport time is three to four days. The transport cost is about 1.5USD/km; however, this depends on carriers and insurance, etc. The transport time by rail between Almaty and Moscow is 4,000km and it takes around 10–12 days, whereas the route between Shanghai and Dostyk takes about one week. In rail haulage, traveling more than 300km/day is forbidden under the international treaty. However, the journey does take more than ten days due to waiting time. Transport time between Almaty and Moscow depends on transit stations. The rail fare is different depending on whether a private or a state-owned company is being used. In the case of container cargo, the higher price is one and half times higher than that of normal cargo. For the exportation of daily goods being transported approximately 2,000km, 1,400USD/20' is charged in Kazakhstan and 2,900USD/20' in Russia.

In the era of former USSR, theft was quite common. However, this does not occur frequently nowadays and neither does commodity damage. If this does occur, insurance can be used to compensate the costs. The actual conditions of unofficial payment were surveyed by the union of small and medium enterprises. According to this survey, the situation is better now than it has been before.

(3) DAMU

An interview with DAMU was conducted for an hour and a half from 11:00 on October 2. The chief of the railway terminal Mr. Zharlkasn Aitbaev and Mr. Abzal Shakual kindly agreed to be interviewed and allowed us to survey the site.

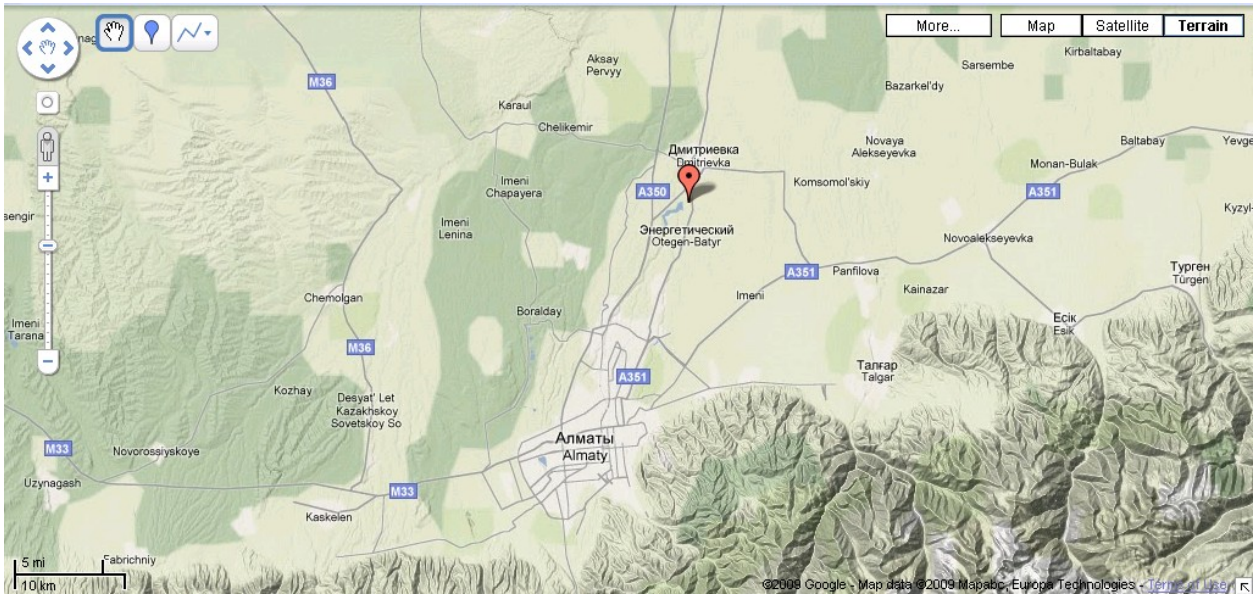


Figure 22: Location of DAMU

DAMU's large-scale logistics terminal is located in the suburban area of Almaty, which is shown in Figure 22. This logistics terminal extends 210ha, and includes their own energy supply system and an electric power plant as well as several logistics related facilities, such as customs house, warehouse for customs clearance (10ha), and bonded area. The operation of this terminal was started in 2007, and it opened officially on July 24, 2008. The president of Kazakhstan, Mr. Nazarbayev, attended the opening ceremony. Half of the terminal is used as a depot (110ha) and the other half is used as industrial zone. The infrastructure required for the site's energy and water, which is underground, has already been completed, while the ground-level part was completed six months later (as of October 2009). This terminal is located 1km from Jetisu station and faces onto Horgos road. Horgos road is quite an important arterial road that is part of ADB's project. The railway in this terminal extends 15km. None of the construction has been funded publicly and all the vehicles are privately owned.

This logistics terminal is the largest in Kazakhstan. DAMU owns another warehouse in the city of Almaty, and it has plans to construct similar logistics terminals in Astana (60ha) and Aktobe (240ha). Transit cargo from Russia and Europe is expected to use Aktobe, an important border crossing, whereas Astana is expected to be used by cargo bound for central Russia. Construction of a logistics terminal, which is the same size as the terminal at Almaty, is being planned for Tula (approximately 160km south of Moscow, see Figure 13). It is considered a relay point that will be used from Aktobe due to high volume from Aktobe. The warehouse of DAMU is sometimes rented out only for the storage of commodities. This terminal mainly deals with cargoes bound for Central Asia, Mongolia, and China. Trade (import and export) from/to China passes through Dostyk and Khorgos. Daily goods are imported/exported to/from the US and Africa using the seaport of Bandar Abbas. Used cars are imported from US.

Approximately 600km of railway construction has been started that will run between Turkmenbashi and Beineu (near the Kazakhstan /Uzbekistan border) by the Kazakh Railway Company. The Kazakh government is funding this project. In addition, railway construction between Beineu and Simkent is also planned. For transport between Simkent and Turkmenbashi, the cargo has to be relayed through Uzbekistan; however, after the completion of these railways, haulage without relaying Uzbekistan will be possible by using the route via Beineu.

There is a plan to construct a new railway at the Khorgos border to China. Khorgos is currently exclusively used by trucks and passengers. The Chinese side (between Yining and Urumqi) has already been connected by railway (see Figure 19). However, the Kazakh side is not connected yet. The current route between Dostyk and Almaty is 1,000km long and takes three days. When this route becomes fully connected by railway, Khorgos and Almaty will be connected by only 300km, and the journey will only take one day. For haulage to/from Japan, the China route is used; the Russia route that uses Vladivostok is very time-consuming.

DAMU's Gantry Crane for Lifting Containers

Left: Railway, Right: Warehouse

DAMU's Logistics Terminal Model

Survey in DAMU

Picture 7: Survey in DAMU

According to JICA (2007), the logistics terminal in Dostyk started operations in 1992. In 2005, approximately 1,100 tons/year was handled. In this terminal, importation from China to Kazakhstan accounts for 82%, whereas exportation to China accounts for only 18%. Seventeen percent of all cargo is transit cargo. In recent years, an increase in the importation from China and a lack of wagons can be observed.

In DAMU, 150–200 trains/day (1,200 containers/day) are handled. Eighty percent of trucks from China use DAMU. There is enough space to stand four gantry cranes, which can operate simultaneously.

(4) Kazakhstan/China Border (Khorgos)

A site visit to Khorgos that had been planned; however, it was cancelled because a blockade of all Chinese borders had been implemented due to the Anniversary of the Founding of China on October 1. This was only found out after entering Almaty. Thus, we finally cancelled the plan to visit Khorgos, since high traffic volume and security problems would have probably made the visit untenable. This is an example of risks faced by LLCs that we experienced unexpectedly. Once a transit country that owns a seaport closes its border, the LLCs' operators must change their route if they are to arrive successfully to the seaport.

5. Questions

From the interview survey above, the following questions arose; it is hoped that they will be answered by a later survey:

(1) Should trucks that are heavier than 40 tons be required to pay tariffs in the CIS? According to the State Customs Committee, they are required to pay. However, it seems clear that they should not be required to pay in cases where their freights are bonded by a treaty (e.g., TIR).

(2) Should entrance, departure, and transit fees be levied in any country of the CIS? According to State Customs Committee, these payments are required. However, according to the Uzbek Agency of Road and River Transportation, some are exempt from these fees, according to an agreement or treaty.

Acknowledgements

This work was supported by the Global Environment Research Fund (S-6-5) of the Ministry of the Environment, Japan. This survey made possible with the tremendous help offered by the Uzbekistan Ministry for Foreign Economic Relations, Investments and Trade; Mr. Rustam T. Azimboev and Mr. Khamidulla F. Rakhmatullaev, and the United Nations Economic and Social Commission for Asia and the Pacific; Mr. Madan B. Regmi. Our deep gratitude also goes to Mr. Akitoshi Iio and Mr. Naoki Nihei (JICA Uzbekistan Office) and Mr. Hideaki Maruyama and Mr. Seiju Imai (JICA Kyrgyzstan Office) for arranging the appointments with their related counterparts. Last, but not least, our special thanks goes to the Research Institute for Transport and Communications; Ms. Gulnara Bekmagambetova, who kindly arranged the survey in Almaty, Kazakhstan.

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