6 STRATEGIC CHALLENGES

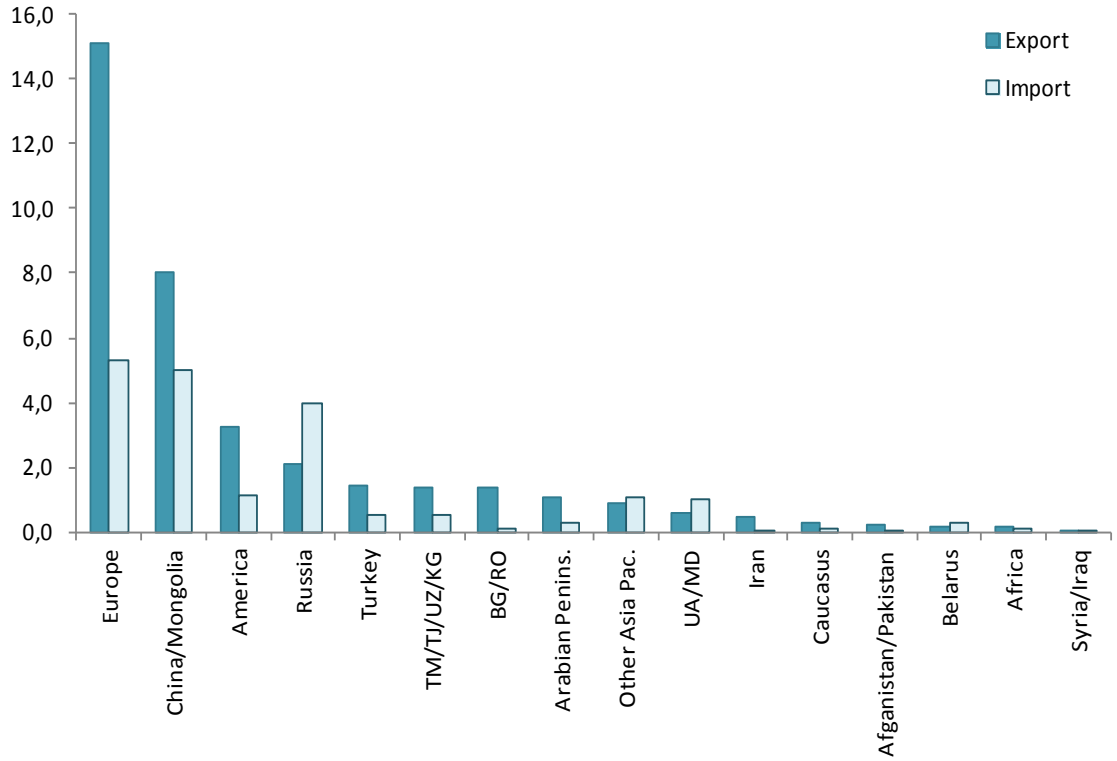
6.1 Market Challenges

6.1.1 National Trade: Exports and Imports

World Trade Partners

Thanks to its geographical location, Kazakhstan is advantaged in developing trade relations with China, Russia and a number of Central Asian and Middle East countries. On top of that, it also trades with Europe in a number of consumer and industrial goods. Northern and Southern Americas are also among potential trade markets for Kazakhstan, however, this usually depends on the external context, namely, the trade regulations and exchange rate policy. In addition to this, Turkey could be mentioned as an important trade partner of Kazakhstan as well, since it appears to be equally important as a number of Central Asian countries (Turkmenistan, Tajikistan, Uzbekistan and Kyrgyzstan) taken collectively (see Figure 2 below).

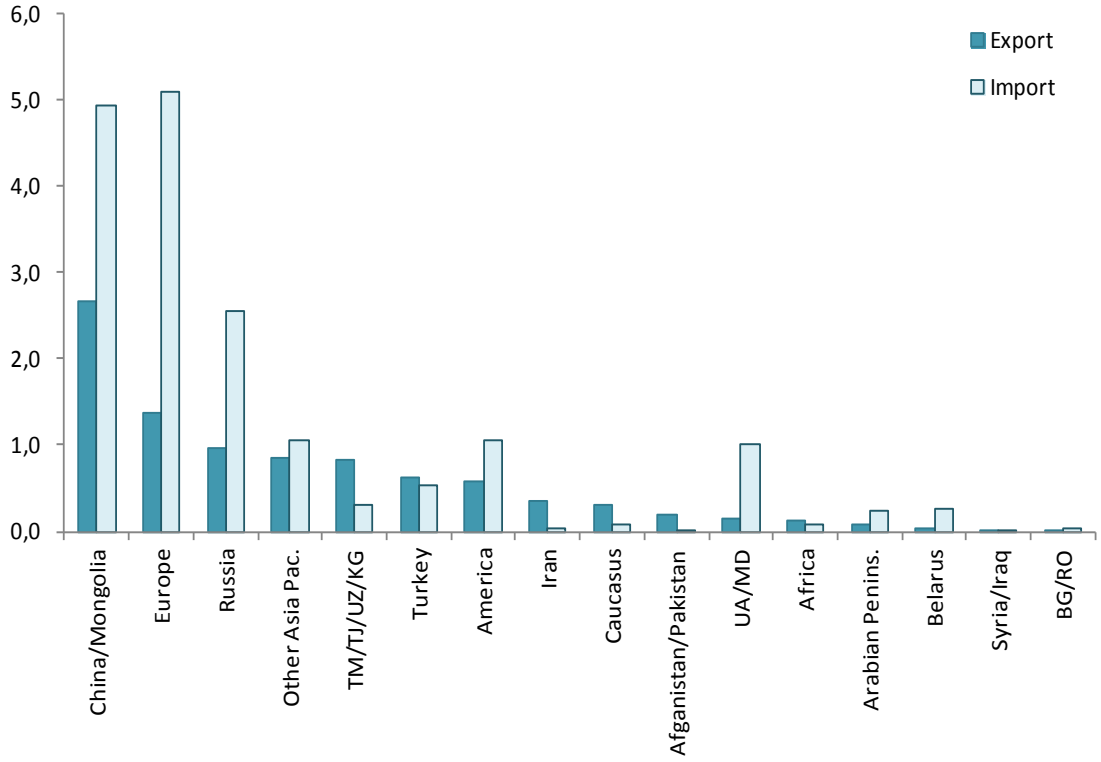
Figure 2: Kazakhstan Trade Partners, 2010, bn euros



Source: Computation based on Eurostat and UN Comtrade databases

As could be seen from the figure above, Kazakhstan holds strong position on international markets. In 2010, its exports dominated over the imports and, according to UN Comtrade, net export constituted 33.2 bn USD (or 25 bn euro). And this is a quite expected result, provided the production capacity of Kazakhstan in cereals, iron ore and other steel products. However, if to put aside oil, natural gas, coal and live animal stock, etc., which are transported in bulk only, figures will bring a different result (see Figure 3).

Figure 3: Kazakhstan Trade Partners, Potential Trade, 2010, bn euros



Source: Computation based on Eurostat and UN Comtrade databases

If to leave bulk goods aside of analysis, Kazakhstan will appear to be a net importer: according to Consultant, net imports of classified goods amounted to 8.1 bn euro in 2010 (the difference between imports and exports of relevant goods was almost twofold). The majority of these (non-bulk) goods are shipped from Europe, China/Mongolia, Russia, Ukraine and Moldova, Central Asia, but also other destinations. However, a key potential for LOGMOS project would be the trade of Kazakhstan with Europe (excluding CIS and TRACECA countries), Turkey, Caucasus, Bulgaria / Romania, Belarus, Ukraine / Moldova. The above mentioned countries contribute to 56% and 40% in estimated exports and imports of non-bulk commodities, respectively (refer to related trade in Table 4 below). This means that almost two thirds of non-bulk exports from Kazakhstan are targeted at TRACECA region; while the import geography of Kazakhstan in non-bulk goods is much more diversified and goes beyond TRACECA region.

Table 4: Distribution of Kazakhstan Potential Trade Partners, 2010, % in trade value

Zones	All products		Total all products	No min. fuel & ores		Total no min. fuel & ores
	Import	Export		Import	Export	
Afghanistan-Pakistan	1%	0%	0%	2%	0%	1%
Africa	0%	0%	0%	1%	0%	1%
America	9%	6%	8%	6%	6%	6%
Arabian Peninsula	3%	1%	2%	1%	1%	1%
Area Nes	0%	0%	0%	n/a	n/a	n/a
Belarus	0%	1%	1%	0%	2%	1%
Bulgaria-Romania	4%	1%	3%	0%	0%	0%
Caucasus	1%	0%	1%	3%	0%	1%
China-Mongolia	22%	26%	23%	29%	29%	29%

Europe	41%	27%	37%	15%	29%	24%
Iran	1%	0%	1%	4%	0%	1%
KY-TJ-TM-UZ	4%	3%	3%	9%	2%	4%
Other Asia Pacific	2%	6%	3%	9%	6%	7%
Russia	6%	20%	11%	10%	15%	13%
Syria-Iraq	0%	0%	0%	0%	0%	0%
Turkey	4%	3%	3%	7%	3%	4%
Ukraine-Moldova	2%	5%	3%	2%	6%	4%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: Computation based on Eurostat and UN Comtrade databases

However, the above mentioned trade value indicators present only a part of a picture related to LOGMOS trade potential of Kazakhstan. For a grounded analysis one should consider the tonnage of export and import flows moving from/to Kazakhstan.

As could be seen from Table 5 below, the estimated tonnage of potential LOGMOS goods exported from Kazakhstan to Europe and other countries of TRACECA region exceeds that of imported to Kazakhstan goods almost threefold. This proves that Kazakhstan is important for TRACECA region in terms of trade generation, especially as far as Caucasus, Europe and Turkey are concerned. Some moderate perspectives exist also for trade with Belarus, Moldova and Ukraine.

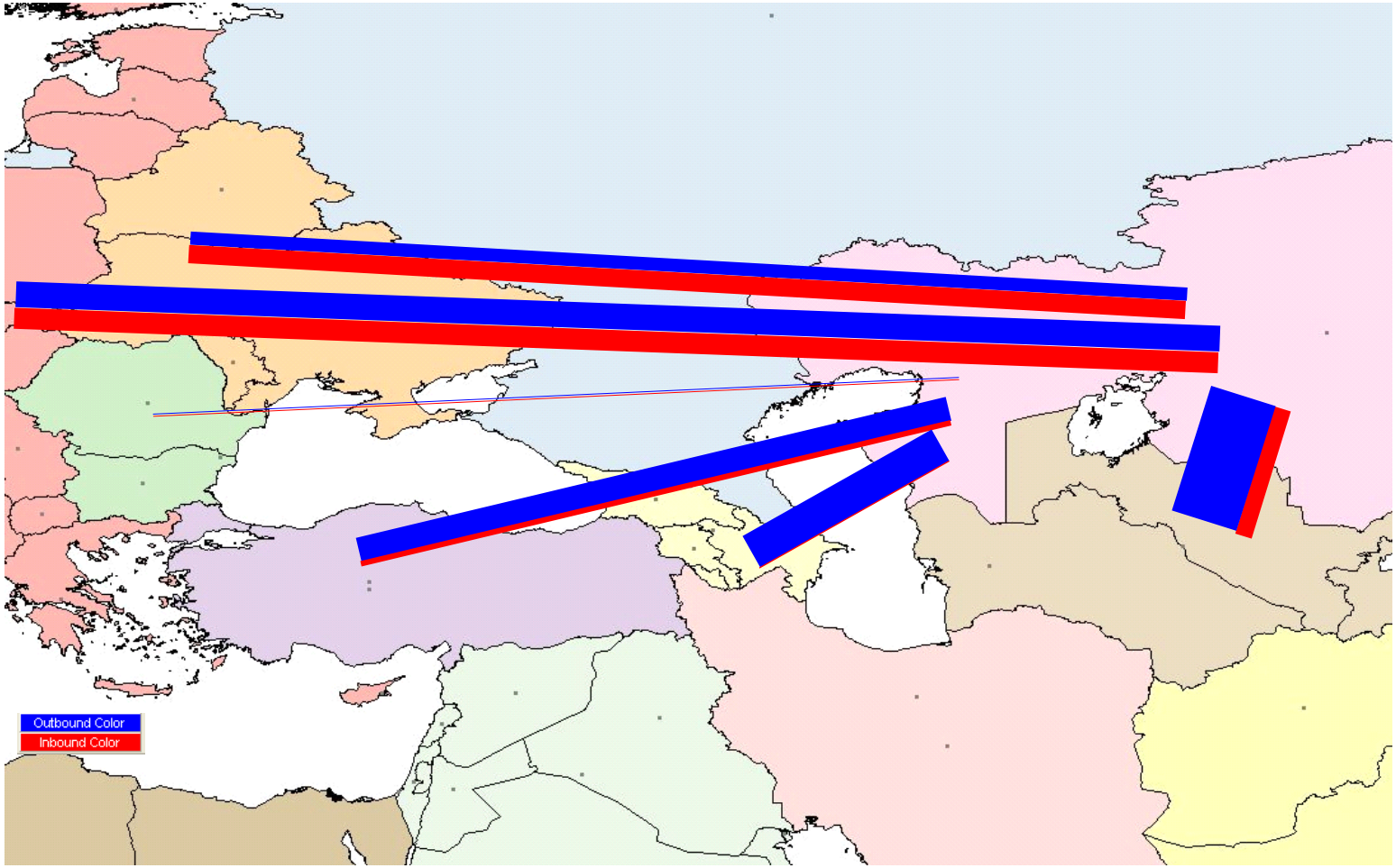
Table 5: Kazakhstan Potential Trade with TRACECA Countries and Europe, 2010, in tons and %

Zones	Tonnage		Share in trade with TRACECA countries and Europe	
	Export	Import	Export	Import
Bulgaria-Romania	32 868.9	9 917.0	0.41%	0.37%
Caucasus	1 513 557.0	48 696.1	18.84%	1.82%
Europe	1 073 022.8	871 176.7	13.35%	32.59%
KY-TJ-TM-UZ	2 812 168.5	709 149.8	35.00%	26.53%
Turkey	1 018 577.9	227 627.8	12.68%	8.51%
Ukraine-Moldova	558 813.0	761 387.7	7.0%	28.5%
Total	**8 035 709.5**	**2 673 422.1**	**100%**	**100%**

Source: Computation based on Eurostat and UN Comtrade databases

In general terms the potential LoGMoS trade of Kazakhstan with Europe and other countries of TRACECA region is unbalanced (see Figure 4 below). Based on this, one might doubt if the estimated potential for trade between Kazakhstan and other countries of the region could realize to full extent, first of all, due to considerations of equipment return. In particular, the problem of trade imbalance pertains the trade of Kazakhstan with Caucasus, Iran, Turkey, Bulgaria and Romania. The trade with Europe, Moldova and Ukraine is well balanced. The volumes of trade with Belarus, although unbalanced, are rather marginal, therefore, might not considerably affect the trade pattern.

Figure 4: Kazakhstan Potential Trade with TRACECA Countries and Europe, 2010, in tons



Source: Computation based on Eurostat and UN Comtrade databases

6.1.2 Regional TRACECA Trade

To complete the analysis of LOGMOS potential trade in TRACECA region, it is important to consider the commodity structure of particular trade flows.

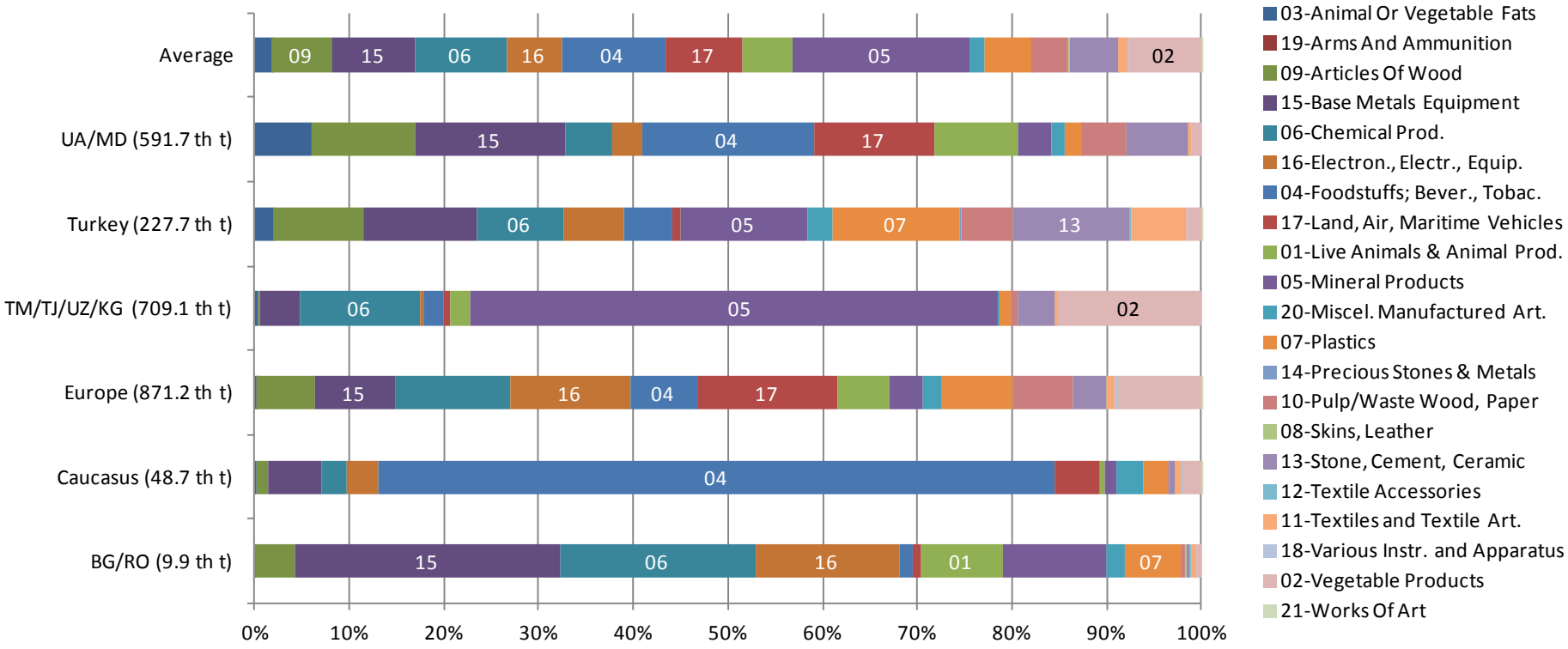
The volumes of potential LOGMOS imports from TRACECA region to Kazakhstan, although relatively small (2.7 M t), are quite dispersed (see Figure 5 and Table 6 below). The most significant import groups are wooden articles, foodstuff, beverages, tobacco, vehicles (air, land, maritime), but also vegetable products, base metals and equipment, mineral products. If to consider commodity structure, Kazakh imports from Europe, Turkey, Ukraine and Moldova are well diversified. Mineral products (salt, sulphur and construction materials) dominate the trade with Iran. Foodstuff, beverage and tobacco take an overwhelming part of imports from Caucasus to Kazakhstan.

Although the total volume of potential LOGMOS exports from Kazakhstan to TRACECA region is quite significant (8.0 M t), its structure is dominated only by several broad categories of goods: (see Figure 6 and Table 7 below

- vegetable products. This category includes cereals, which is one of key non-bulk commodities exported by Kazakhstan not only to TRACECA, but also worldwide;
- base metals and equipment, namely, iron and steel products; and
- mineral products, the core of which are formed by salt, sulphur and construction materials (cement, plaster, lime and stone).

Overall the above mentioned items contribute to more than 90% of exported goods from Kazakhstan. The commodity structure of Kazakh exports, however, varies from region to region. For instance, the exports to Caucasus are dominated by vegetable products (cereals). Base metals and equipment prevail in exports to Iran, Turkey, Europe and Belarus. Mineral products occupy a considerable share of exports to Ukraine and Moldova. Most of exports to Bulgaria and Romania consist of chemical products (fertilizers and non-organic chemicals).

Figure 5: Potential Trade with TRACECA Region – Commodity Structure of Imports to Kazakhstan, 2010, in tons and %



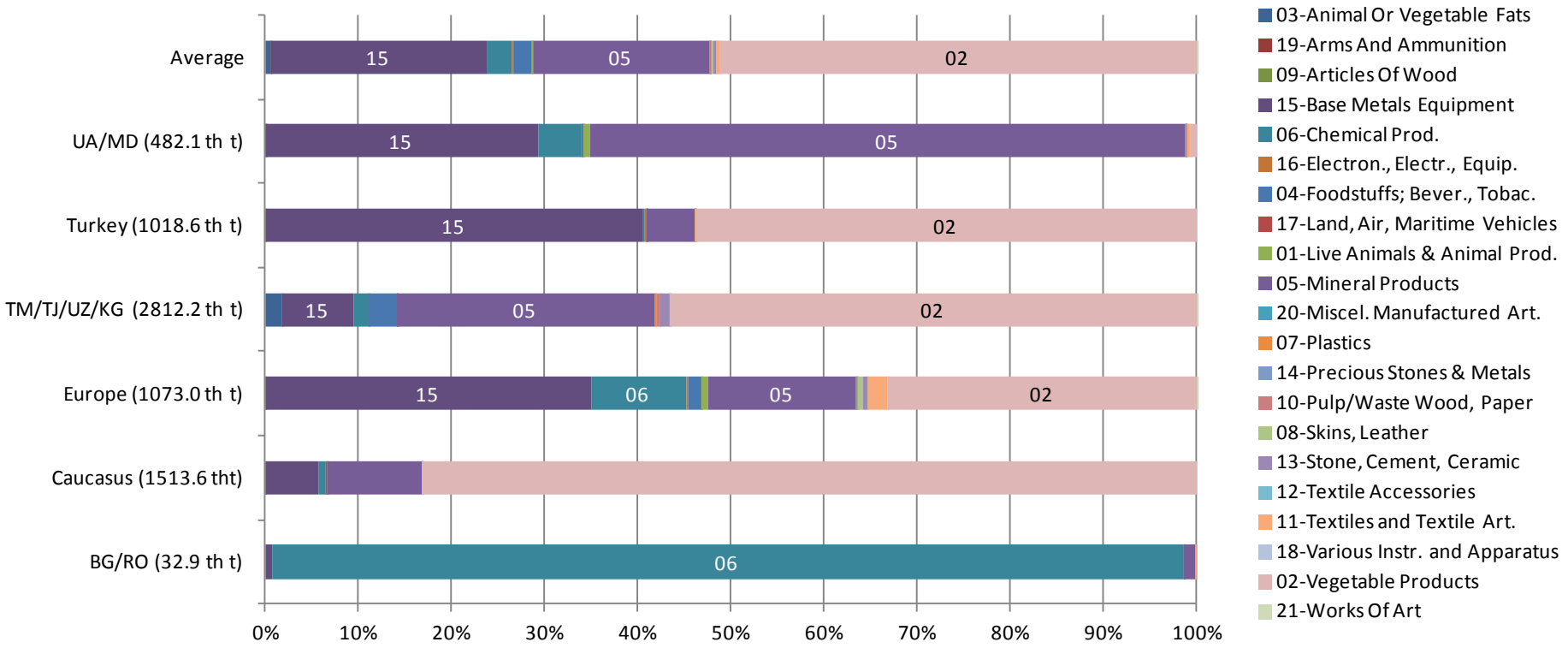
Source: Computation based on Eurostat and UN Comtrade databases

Table 6: Potential Trade with TRACECA Region – Commodity Structure of Imports to Kazakhstan, 2010, in tons

Commodity Groups	Bulgaria-Romania	Caucasus	Europe	KY-TJ-TM-UZ	Turkey	Ukraine-Moldova
Animal Or Vegetable Fats	3.4	53.4	1 743.7	2 654.0	4 450.9	35 378.3
Arms And Ammunition	n/a	n/a	125.2	0	42.8	n/a
Articles Of Wood	422.7	624.4	53 517.0	652.6	21 583.5	64 599.7
Base Metals Equipment	2 772.1	2 793.4	73 318.2	30 850.6	27 258.3	94 002.3
Chemical Prod.	2 052.6	1 232.7	106 776.4	89 834.7	20 986.8	29 269.6
Electron., Electr., Equip.	1 497.9	1 675.9	110 788.5	1 944.2	14 639.7	19 031.9
Foodstuffs; Bever., Tobac.	149.2	34 824.0	60 977.1	15 794.6	11 438.1	107 133.6
Land, Air, Maritime Vehicles	82.9	2 236.9	130 046.7	4 586.6	1 935.3	75 831.9
Live Animals & Animal Prod.	862.2	263.6	47 515.4	15 589.2	175.4	52 288.6
Mineral Products	1 080.0	649.1	30 460.9	394 852.1	30 422.7	20 072.0
Miscel. Manufactured Art.	186.6	1 368.6	17 179.6	753.6	6 228.1	8 894.5
Plastics	599.1	1 262.4	65 456.3	9 668.6	30 508.1	10 285.9
Precious Stones & Metals	n/a	1.9	13.9	0.1	52.9	4.1
Pulp/Waste Wood, Paper	46.6	138.5	55 539.4	4 653.9	12 465.7	28 552.2
Skins, Leather	1.0	0.5	244.2	13.3	55.2	1.3
Stone, Cement, Ceramic	47.3	255.5	29 839.4	26 962.2	28 360.6	38 402.3
Textile Accessories	12.1	1.1	870.8	54.5	246.8	205.2
Textiles and Textile Art.	52.3	350.1	7 523.4	3 537.9	13 487.9	2 025.3
Various Instr. and Apparatus	9.5	22.8	2 796.2	4.3	91.8	121.8
Vegetable Products	39.5	941.4	76 440.3	106 692.9	3 196.9	5 639.9
Works Of Art	n/a	0.0	4.1	0	0.5	0.0
Total imports	**9 917.0**	**48 696.1**	**871 176.7**	**709 100.0**	**227 627.8**	**591 740.4**

Source: Computation based on Eurostat and UN Comtrade databases

Figure 6: Potential Trade with TRACECA Region – Commodity Structure of Exports from Kazakhstan, 2010, in tons and %



Source: Computation based on Eurostat and UN Comtrade databases

Table 7: Potential Trade with TRACECA Region – Commodity Structure of Exports from Kazakhstan, 2010, in tons

Commodity Groups	Bulgaria-Romania	Caucasus	Europe	KY-TJ-TM-UZ	Turkey	Ukraine-Moldova
Animal Or Vegetable Fats	n/a	n/a	n/a	48 478.4	n/a	80.6
Arms And Ammunition	n/a	n/a	0.1	0.0	n/a	n/a
Articles Of Wood	n/a	155.2	35.2	1253.1	36.5	1.0
Base Metals Equipment	217.8	86 159.0	375 177.8	217 836.3	412 977.0	140 895.6
Chemical Prod.	32 177.5	10 410.6	109 144.3	41 949.6	2 620.2	22 729.3
Electron., Electr., Equip.	30.9	463.0	1 743.3	1 921.1	170.9	235.9
Foodstuffs; Bever., Tobac.	n/a	1 769.7	16 075.6	83 409.3	40.0	142.9
Land, Air, Maritime Vehicles	5.7	101.6	518.9	2 056.2	23.9	263.6
Live Animals & Animal Prod.	n/a	466.2	7 644.7	1 102.3	797.5	3 893.6
Mineral Products	398.7	153 249.6	170 664.3	774 977.3	52 043.7	308 076.9
Miscel. Manufactured Art.	0.0	40.3	80.3	86.6	26.3	1.9
Plastics	0.1	1 065.3	125.9	6 362.5	410.1	68.9
Precious Stones & Metals	n/a	0.0	358.2	0.1	1.0	0.5
Pulp/Waste Wood, Paper	0.0	25.5	3.8	12 871.8	35.4	30.1
Skins, Leather	n/a	1.2	6 604.1	104.0	368.1	2.0
Stone, Cement, Ceramic	n/a	44.4	5 662.1	27 824.7	5.0	439.5
Textile Accessories	n/a	8.4	2.4	21.7	0.0	0.0
Textiles and Textile Art.	38.2	22.5	23 504.6	684.5	935.2	1 894.9
Various Instr. and Apparatus	0.0	30.0	50.4	69.6	7.7	3.3
Vegetable Products	n/a	1 259 544.5	355 626.1	1 591 190.0	548 079.4	3 325.2
Works Of Art	n/a	0.0	0.9	0.8	0.0	0.0
Total exports	**32 868.9**	**1 513 557.0**	**1 073 022.8**	**2 812 200.0**	**1 018 577.9**	**482 085.7**

Source: Computation based on Eurostat and UN Comtrade databases

Based on above observations, we can conclude that:

- there is a considerable potential for transporting containerizable and partially containerizable goods between Kazakhstan and TRACECA countries;
- the potential for developing this trade exists in both directions (outbound and inbound trade);
- the outbound flow is much bigger in volume and more concentrated in terms of trade nomenclature than the inbound flow. This provides good perspectives for the utilization and return of containers and other equipment over the Caspian;
- although the trade flows between Kazakhstan and other TRACECA countries generally are unbalanced, the trade with certain sub-regions, on the opposite, is well balanced. E.g., the trade between Kazakhstan, on one side, and Europe, Ukraine, Moldova and Belarus, on the other side, balanced at 1.63 M tons in 2010. For other regions, it is important to plan shipments well in advance in order to ensure to ensure a due utilization and return of containers and other equipment to/from Kazakhstan.

6.2 Intermodal Maritime Based Transport Challenges

6.2.1 Port System and Maritime Links

Note: More information and data concerning the national port system (including port maps and technical descriptions as well as the regular maritime services operated are found in separate specific reports. The following is a brief summary of this information.

Aktau International Sea Commercial Port (AISCP) is the only commercial sea port in Kazakhstan. Bautino (north of Aktau) is the North-East Caspian oil fields supply base.

- The majority of the cargo handled is the export of crude oil by tanker and rail tank cars on rail ferries predominantly to Baku. Export of grain, steel and steel products (inter-governmental contracts) to Iran, Russia and Baku make up much of the remaining cargo traffic.
- Rail ferry and Ro-Ro ferry services operate between Aktau/ Baku and Aktau/ Makhachkala (Dagestan, Russian Federation).
- The railferry terminal was rehabbed under a previous TRACECA project (2 M euros). Technically it operates efficiently.

The port in general is currently operating close to full capacity. The Ro-Ro berth is shared with the grain loading berth, which is itself also operating virtually at full capacity. This causes an ongoing conflict with the generally unscheduled Ro-Ro vessels.

Container handling is performed without specialized container handling equipment. The volume of containers handled is low and does not currently warrant other equipment.

Table 8: Throughput Datas of Aktau Port

Throughput	2006	2007	2008	2009	2010	2011
Containers, TEU	716	846	700	3638	9970	3402
Ro-Ro, thousands T	310,6	237,8	227,5	221,6	603	1 433

- There are plans to build an extension to the north of the current port. This had originally been scheduled to be completed in 2012/13. Owing to the global financial crisis this has currently been put on hold.
- Aktau port has an integrated management system incorporating compliance with ISO 9001:2000 and ecological management system compliant with ISO 14001:2004.

Liner Services

CASPAR is the only ferry and Ro-Ro operator in and out of Aktau. The service is performed with railferries of 28 or 52 wagon capacity and small, out-dated Ro-Ros of 33 truck capacity on an unscheduled basis, subject to inducement. Due to the nature of the main exports from Kazakhstan (commodities), the rail trade is imbalanced.

NATO containers (bound for Afghanistan) are transported from Baku to Aktau in regular cargo vessels (in shipments of about 100 TEUs).

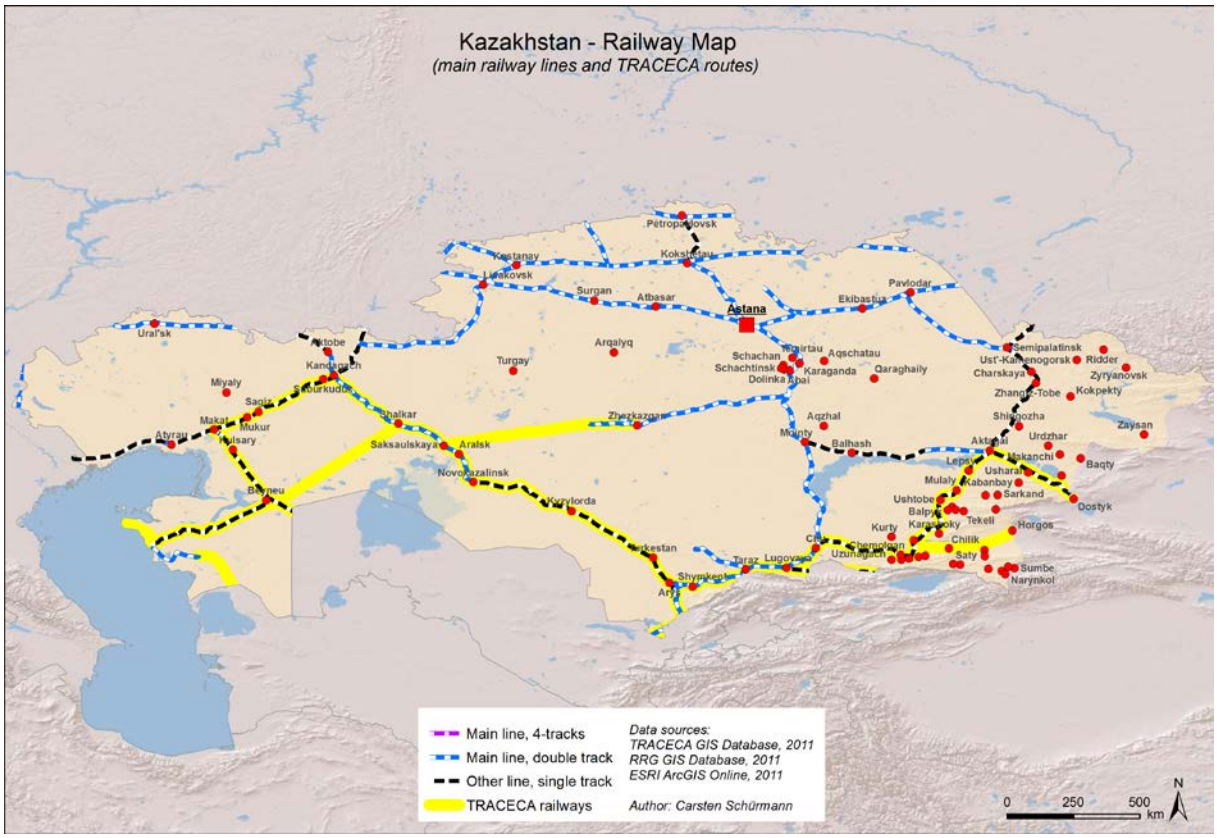
Kazakhstan has a shipping Company (Kazmortransflot) which at present operates crude oil tankers and plans to purchase bulkers for grain transportation only. The fleet of "Kazmortransflot" consists of 19 ships, including: 6 bulk-oil tankers freight-carrying capacity of 12-13 thousand tons, 8 barges-platforms freight -carrying capacity of 3600 tons, 5 tows.

Khazar Shipping Company, a subsidiary of IRISL, the national Iranian shipping company, operates breakbulk and semi-containerized services between Aktau and the Iranian ports of Anzali, Amirabad and Nowshahr.

There are no container vessels operating in the Caspian.

6.2.2 Inland Transport Mode: Railways

Figure 7: Kazakhstan Railway Map



Source: TRACECA (2011)

The Ministry of Transport & Communication (MoTC) in Astana has overall responsibility for the transport sector, covering road, rail, inland waterway, maritime and aviation. The main task in the Program on development of a transport infrastructure in Republic of Kazakhstan is its integration with the Eurasian transport system taking advantage of the country geo-strategic location bridging Europe with Asia.

As a matter of fact, main railway lines connecting Europe and Russia with countries of the Asia-Pacific region, Central Asia and Middle East go through the territory of the Republic of Kazakhstan. Railways of Kazakhstan border and interact with railways of Russia, Uzbekistan, Kyrgyzstan, China and Azerbaijan (through rail ferries).

There are 3 main east-west international transport corridors crossing the country, which are subject to infrastructure upgrading within a large investment programme. The corridors are identified as follows:

- Central Corridor (TRACECA): Europe – Central Asia via the Black Sea, Caucasus and the Caspian Sea (section seaport of Aktau - Beineu - Makat - Kandyagash - Arys - Almaty - Aktogai - Dostyk border with China).
- Northern Corridor, part of Trans-Asian Railway Network (TARN): Western Europe – China, Korean Peninsula and Japan via Russia and Kazakhstan (section Dostyk – Aktogai - Sayak - Mointy – Astana - Petropavlovsk).
- Southern Corridor of TARN: South-Eastern Europe - China and South-Eastern Asia via Turkey, Iran, Central Asian states and Kazakhstan (section Dostyk - Aktogai -

Almaty – Chu–Arys– Saryagash) the same section in Kazakhstan is also part of the TRACECA Network.

Another corridor connects Central Asia to Russia crossing the Western region of the country from South towards North through Saryagash - Arys - Kandyagash - Ozinki.

As can be seen from the map (Figure 7), the network keeps, to this day, the pattern inherited from the Soviet times with a general North-West-South-East orientation and no one track really stretching across the country from west to east (out of 16 railway border crossings 11 are with Russia, 3 with Uzbekistan, 1 with Kyrgyzstan and 1 with China. A new border crossing point "Altynkol" is planed to open at Khorgoz).

Over 72% of the total freight volume transported in the country moves by rail. Meantime a number of rail connections are missing (Aktau to eastern and southern Kazakhstan for instance) as the railway network remains primarily assigned to the transport of export commodities and raw materials. On the whole, the network is poorly maintained and the rolling stock is ageing and in need of replacement and modernization (Chinese-built wagons in use in Kazakhstan cannot be operated in Russia for instance).

The Kazakh railways are managed by the National Joint Stock Company "Kazakstan Temir Zholy" (KTZ), which is the 1st employer in the country (156,000 employees in 2012). In 2002 KTZ was converted in a closed joint-stock company, a move intended to improve management and accounting methods. KTZ is entrusted with the management and maintenance of the rail infrastructure, as well as operations of passenger and freight services. The state retains ownership of the railway's infrastructure and rolling stock. KTZ acts as a holding company, with 26 wholly owned subsidiary joint-stock companies providing key functions such as the management of passenger and freight services, infrastructure maintenance, traction and rolling stock provision and maintenance and telecommunications.

Among them, Kaztemirtrans operates the freight rolling stock and is responsible for the transportation of cargoes and Kaztransservis is responsible for planning of transportation of cargoes in containers and freight cars, and for coordination with other railway administrations.

While the state intends to retain ownership of the railway's infrastructure and rolling stock, competition is foreseen in the freight sector.

KTZ is organized in five operating regions which have the status of state enterprises under the close supervision of Kazakhstan State Railways.

The network comprises 14,200 km of lines:

Table 9: Main Features of Kazakhstan Railway Network

Total route length (km)	Gauge (mm)
14,200	1,520
Electrified lines (km)	Electrification system
4,100 *	25kV AC
* some sections are electrified at 3kV DC	

The Kazakhstan system has many long stretches of single track while over one third of the network is double track (about 4.800 km).

The main route is the 1,507 km Trans-Kazakhstan Railway running from Petropavlovsk on the Trans-Siberian Railway through Kokshetau, Astana and Solonichki to the Karaganda coalfield. This was later extended to Cho, on the Turkestan-Siberian route, and Lugovoy where it connects with lines into Kyrgyzstan and Uzbekistan.

The Turkestan-Siberian route runs 1,445 km from Semipalatinsk via Aktogai to Almaty and Chu. From Aktogai the line to the Chinese border at Dostyk now forms part of a route from Beijin to Russia.

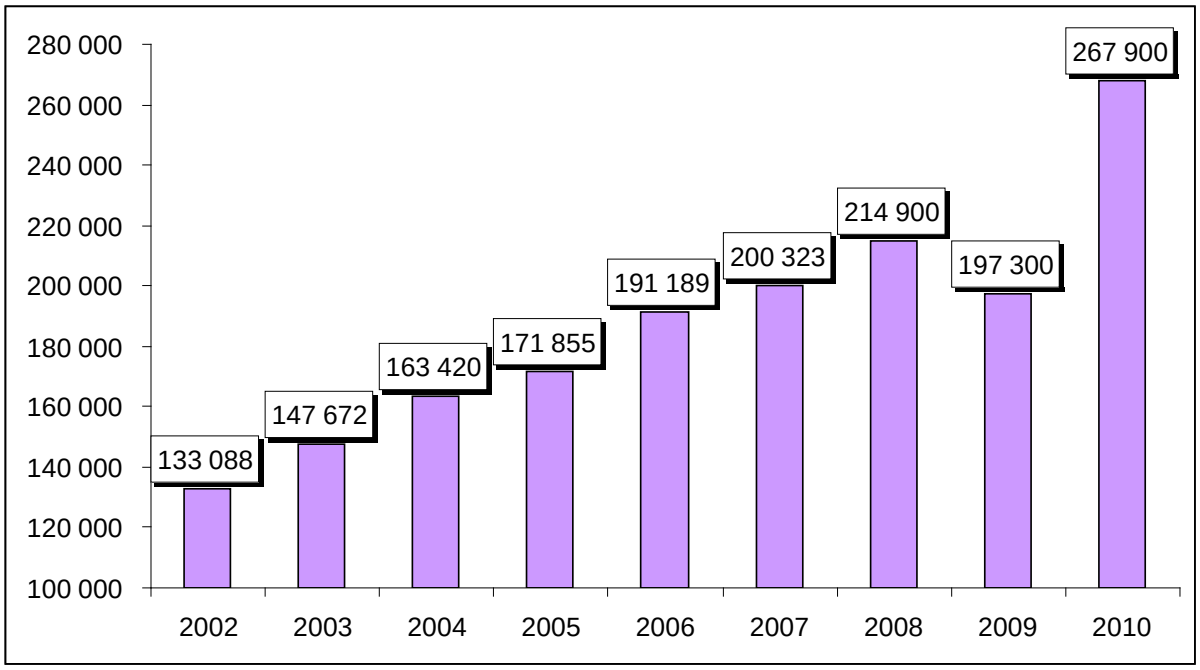
A third main line in the west of the country (1,850 km) links Tashkent, in Uzbekistan, with Orenburg in Russia, via Aralsk and Kandagach. This line is also connected to Aktau port from Kandagach via Beineu.

To create a more consistent national network many new sections have been built during the last ten years to avoid domestic traffic to pass through neighbouring countries.

The station Dostyk (Druzhba) at the border between Kazakhstan and China, where the change of track gauge from 1520mm to 1435mm is performed, has been subject to special attention of the KTZ. In 2004 9,5 M T of cargo transited through this station.

The total volume of freight transportation of KTZ in 2010 amounted to 267,9 M T out of which 33 % were export, 53 % - domestic, 9 % - import and 5 % - transit. The evolution of the freight turnover from 2002 to 2010 is presented in the Figure below:

Figure 8: Dynamics of Freight Turnover from 2002 to 2010, M T-km



KTZ is responsible of the organization of the route of container trains.

In 2007, 1006 container trains were organized on the routes Almaty-Alashankou (Dostyk), Nakhodka (Russia) - Locot' - Almaty, Nakhodka - Locot' -Saryagash (Kazakh-Uzbek border) - Assake (Uzbekistan), Lianyungang (China) - Almaty, Lianyungang - Assake, Tianjin (China) - Almaty.

In 2007 the following new routes of container trains were organised:

- 4 container trains Lianyungang (China) – Moscow new route. These container trains transported 192x40' containers (cargo - loading equipment).
- 3 container trains Jindao (China) – Chelyabinsk (Russia) route which transported 149x40' containers (cargo - loading equipment).

- 1 container train Urumqi (China) – Novorossiysk (Russia) route composed of 96x20' containers stuffed with apricot paste.
- a demonstration container train consisting of 46 wagons with 106 containers stuffed with ferroalloy was launched from Aksu (China) – to Klaipeda.

In 2011 KTZ in cooperation with Deutsche Bahn organized 14 container block trains from China to Europe (Chongqing – Duisburg).

Two projects for new lines are on-going:

- Zhetygen-Korgas – 293 km of double track railway line to the China border; works are on-going and it will be ready for operation in 2012; this will shorten the TRACECA route by some 500 km; the section in China is also almost finished.
- Uzen-Turkmenistan border – 146 km of new line which will link the Kazakh rail network to the border with Turkmenistan (from Aktau). This is part of a new line which will connect Kazakhstan, Turkmenistan and Iran. Total length is 686 km (470 km in Turkmenistan, 146 km in Kazakhstan and 70 km in Iran). For the Kazakh section works have started in 2009 and have been completed in 2011. In Turkmenistan, the line is still under construction. For the Iranian section, the technical design is going on.

There is also a plan to build a new line from Beineu to Zhezkazgan to reduce the distances between central and west regions of the country and the route from China to Aktau port. This new line will be a 988 km double track railway line which will shorten the route from Central to West Kazakhstan by about 1000 km (transit-time should be reduced by 3 to 5 days); implementation of this project is expected in the period 2012-2016.

Some years ago KTZ planned the construction of a 3,038 km standard-gauge railway (1,435 mm) to connect China with Aktau and Western Europe, to eliminate the necessity of transhipment to 1.520 mm vehicles at the China-Kazakh border. This huge project has been dropped.

The priority transport projects in Kazakhstan for the Ministry of Transport, as well as the site of future logistics centres in the country are focused on the China – Russia transit corridor; there are a total of 12 proposed logistics centres included in the MoTC's strategy.

It is often said there is a lack of export cargo suitable for containerization in Kazakhstan which, in turn, makes import container shipments difficult. This is true but to a very limited extent only. First there are cargoes shipped already out of the country in containers by rail (foodstuff to China and, via Russia, ferro-alloys to Riga and rebars to Ukraine for instance). And there are potentially containerizable cargoes such as grain and seeds.

Furthermore part of the empty container stock may be repositioned to other near-by export areas such as Uzbekistan for stuffing with cotton. All this, so far, does not provide for a balanced traffic and containerized imports therefore remain limited due to the cost and time of returning back the empty equipment. However the main reasons preventing the growth of containerization stem from specific socio-cultural traits.

The Kazakh State retains a firm grip on the economic system and a majority of the biggest enterprises are still state-owned, having evolved out of the soviet system practically untouched. As a result, the rather young civil servants running them, though willing, have little knowledge of modern trade practices and features. Trade, in a commonly-shared understanding, comes down to inter-state long-term large-volume contracts. Marketing, striving to expand the clients' base so as to reduce the exposure and better cope with the commodity market fluctuations through a number of small or medium-size contracts and notions alike are simply unknown.

From the transport angle, it implies massive cargo movements in standard rail wagons (hoppers for the grain or box for minerals for instance). And in the few cases of shipment in containers, these enterprises use to apply to their public railway company, KTZ, to get the (public) equipment, never to private companies, such as the container shipping lines. Another consequence is that the State is bound to spend heavily on (locally-produced) standard closed railcars while, following an economic policy closer to international practice, these would be platforms (of which there is an overall shortage) to carry containers.

Present rules regulating the containerized transport – inherited from the Soviet Union – represent another, more serious, obstacle. At the time, containers at sea or abroad were the 'property' of the Soviet shipping lines while containers within the territory of the USSR were the 'property' of the railways. 'Consignees', being state enterprises and fast always large industrial plants, were 'obliged' to return their equipment to the railways. This was all the more easy as each and every entire factory being rail-connected, everything moved by rail (there were very few trucks available and practically none fit for container-carriage anyway). Though, time passed and the nature of trade and consignees changed, the rule – in Kazakhstan as in many other TRACECA ex-Soviet countries - remains the same in that it is still the consignee, and he only, who can return the container to the nearest rail station (railway bills are filled in accordingly). However there is no penalty foreseen in case he does not. Where KTZ can easily retaliate when their equipment is at stake, foreign shipping lines can't. Painful losses thus spurred a number of the major container carriers not to send their equipment any longer in Central Asia.

Users also report big difficulties and delays on boundary railway stations due to:

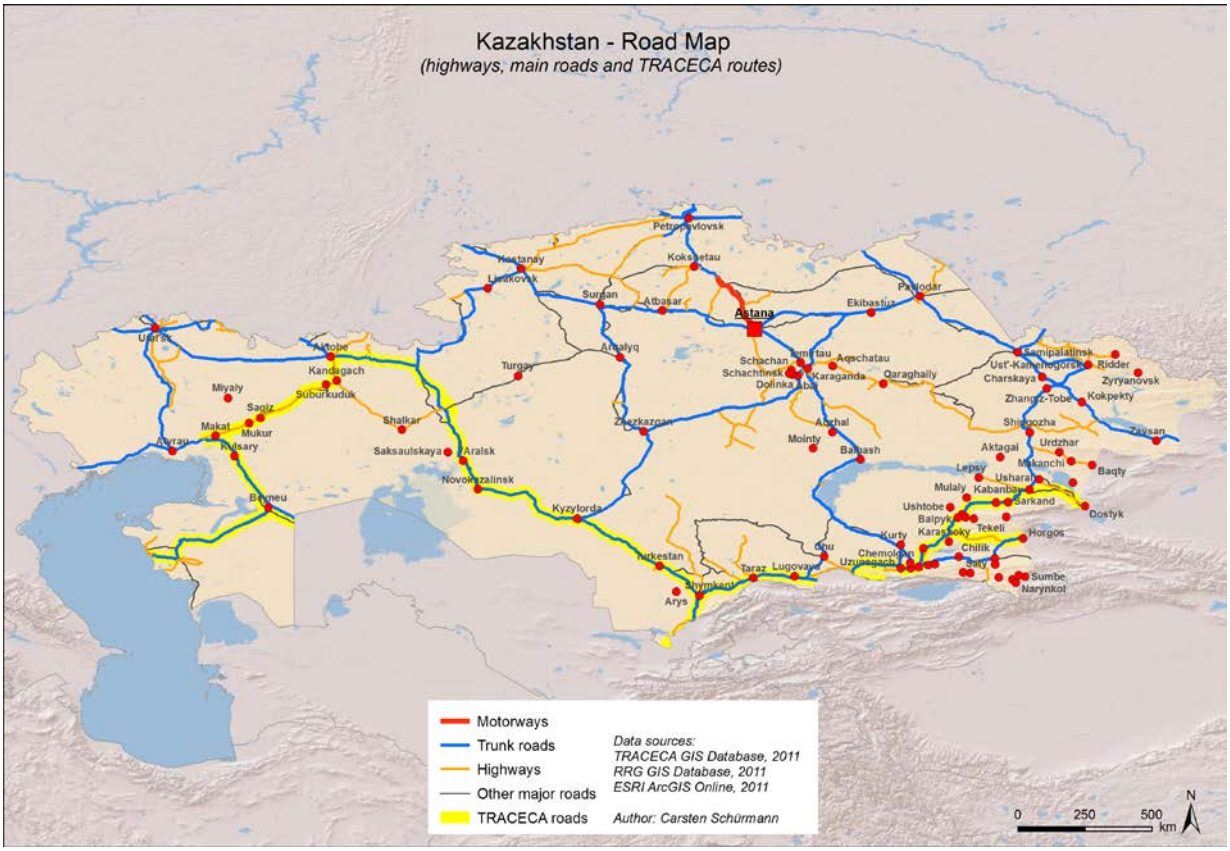
- a bad and untimely coordination between the railways, the customs, the forwarding agents and the customs brokers
- the tremendous number of documents required
- long registration procedures with numerous state highly bureaucratic agencies
- the absence or poor level of information technology means
- the integrity issues

Besides rules are often unclear or not existing (for instance the liability scheme for expenses linked to customs inspections, damages or shortage during such operations).

The case study for Aktau port railways system is presented here Aktau Port Railway System.doc

6.2.3 Inland Transport Mode: Roads

Figure 9: Kazakhstan Road Map



Source: TRACECA (2011)

The road network comprises 88,400 km (6.2% are unpaved). This relatively small figure yields a road density indicator of 31.4 km per th. sq. km.

International roads cover 12,300 km. The main international road connections lay in North West-East (from Russian border at Samara and Cheliabinsk to China border at Khorgos) and North-South (Astrakhan/Russia – Atyrau – Aktau – Turkmenistan border) directions.

Table 10: List of European Roads Crossing Kazakhstan

Main European roads in Kazakhstan		Other European roads in Kazakhstan	
No	Route	No	Route
E38	Russian border – Uralsk – Aktobe – Karabutak – Aralsk – Novokazalinsk – Kyzylorda – Shymkent	**E004**	Kyzylorda – Uchkuduk/Uzbekistan - Buchara/Uzbekistan
E40	Russian border – Atyrau – Beineu – Uzbekistan border – Shymkent – Taraz – Kyrgyz border	**E012**	Almaty – Kokpek – Chundzha – Koktal – Khorgos
E121	Russian border – Uralsk – Atyrau – Beineu – Shetpe – Zhetybai – Fetisovo – Turkmen border	**E016**	Zapadnoe – Zhaksy – Atbasar – Astana
E123	Russian border – Podgorodka – Kostanai – Zapadnoye – Esil – Derzhavinsk –	**E018**	Zhezkazgan – Karaganda – Pavlodar – Uspenka

	Arkalyk – Zhezkazgan – Kyzylorda – Shymkent – Frontovoy – Uzbek border		
E125	Russian border – Petropavlovsk – Kokshetau – Shchuchinsk – Astana – Karaganda – Balkhash – Burubaytal – Almaty – Kyrgyz border	**E019**	Petropavlovsk – Zapadnoe
E127	Russian border – Karaman – Pavlodar – Semey – Georgiyevka – Maikapshagai at China border		

The Road Development Program of Kazakhstan Republic for 2006-2012 focuses on the following strategic corridors which were identified by the Government of Kazakhstan:

- Uzbekistan border – Shymkent – Taraz – Bishkek – Almaty – Korgas – border of China
- Uzbekistan border – Shymkent – Kyzylorda – Aktobe – Uralsk – border of Russia
- Almaty – Karaganda – Astana – Petropavlovsk
- border of Russia – Atyrau – Aktau – Turkmenistan border
- border of Russia – Pavlodar – Semipalatinsk – Maikapshagai – border of China
- Astana – Kostanai – border of Russia

The length of the above mentioned corridors totals 8,258 km. The highest traffic intensities are observed on the road segments from the Uzbek border to Korgas (over 7,000 vehicles per day) and Uzbek border to Ural (over 3,000 vehicles per day). The capacity of these particular segments reaches 100%. At the same time on some other segments, for instance from Russia to Turkmenistan via Atyrau and from Astana to Russia via Kostanai, the road traffic can hardly reach 50% of their design capacity.

In view of the current traffic intensity and its anticipated increase, the Government of Kazakhstan (GoK) plans to upgrade the quality of roads along the above mentioned international transport corridors. At present it is planned that the reconstructed international roads should be upgraded to meet the requirements for III category (up to 10 t per axle). In the future it is expected that the international roads will be upgraded to meet the requirements for II category (at least 13 t per axle). In 2005 the roads of I and II categories constituted 5.5% of public road network in Kazakhstan and III category – 40%.

The network is however poorly maintained, especially in rural areas. Poor signage is common, as well as potholes which are often dangerously deep whereby driving at night is perilous.

The quality of road coats is an issue. One half of republican roads require maintenance/ rehabilitation; the quality of 40% of local roads is considered to be poor. The effective traffic regulations provide for the following vehicle dimensions: up to 4 m in height, 2.55 m (2.6 m for insulated bodies) in width and 12-20 m (12 m for buses, trucks and trailers; and 20 m for articulated vehicles and road trains) in length. The weight restrictions are: 18-32 t for trucks, 18-28 t for buses, 36-38 t for articulated vehicles and 36-44 t for road trains. According to effective regulation, the velocity of oversize and overweight vehicles should not exceed 50 km/h on the public roads and 10 km/h – on artificial structures. The oversize and overweigh transport is charged a fare, which varies depending on the weight and size parameters of the vehicle and the distance of trip. The transport routes for oversize and overweight vehicles should be accorded with the relevant institutions and are authorized for either a single trip or up to 3 months.

Road construction standards are not matching the actual vehicle loadings. Existing weight limit and axle load limitations, which are less than the European standard ones, cause a lot of difficulties and are by-passed.

As a result, road transport safety has become a major problem with about 3,500 people killed each year in the road accidents (about 180 persons per 1 M inhabitants – versus 52 in UK for instance) and an annual increase of road accidents of 10 to 15% over the past 5 years. The road conditions and a number of missing connections also compel truck drivers to long detours which increase mileage and add to expenses. In addition, it is worth of mentioning that soon the motor vehicles will be also charged for the use of toll motorways. Currently it is planned to set the following roads and segments into toll operations: Astana – Burabai, Astana – Karaganda, Almaty – Kapchagai and Almaty – Korgas. One of them (Astana – Burabai) is already set into operation. The remaining three road sections should be reconstructed in 2012.

On top of the problems already mentioned with regard to rail transport, users report the following:

- trucks wait several days at the border waiting for the convoy to be formed
- documents are checked again – regardless of the regime under which the goods are carried – at each of the numerous mobile checkpoint of the State Road Inspection, which brings about further delays (this long-standing issue is however under review at parliamentary level)
- considering the usually long distances to be covered into and out of Kazakhstan, the 5-day delay for registration for foreign drivers is too short (a draft proposal to extend it to 14 days is under consideration)
- Customs demand additional documents for cargoes transported with TIR Carnet
- the already mentioned weakness of the shipping service between Aktau and Baku brings about as long as 7-day delays for drivers crossing the Caspian Sea and discourages many trucking companies to use this route.

All the above mentioned has a negative impact on the enhancement of the railway and road transport and does not allow Kazakhstan to make the most of its very favourable geostrategic location at the heart of the Eurasian continent. Nevertheless, a huge program of communication network development, encompassing the whole Central Asia, has been launched with the support of ADB through CAREC Program.

One of the key infrastructure projects, supported now by the WB, deals with the improvement of South – West roads (Western China – Western Europe international transit corridor CAREC 1B and 6B). The project shall help the GoK to upgrade and reconstruct the road sections within Kyzylorda oblast and the neighboring South-Kazakhstan oblast (till Shymkent), which is one of the most stringent sections in the country. The total length of the corridor is 8445 km, out of which 2787 km pass through the territory of Kazakhstan. The Kazakh part of the corridor is split into 37 lots; 33 out of them will be reconstructed at the expense of public lending, two – funded by concessioners (Almaty – Khorgos and Uzbek border – Shymkent – border of Zhambyl region) and the remaining two – at the expense of the republican budget. 50% of the route will be upgraded up to the category I; the remaining sections – up to the category II.

Among the other key infrastructure projects of the WB are the rehabilitations of the following sections: Almaty – Kapchagai (104 km) and Astana – Karaganda (238 km including the bypass of Karaganda).

6.3 Trade and Transit Facilitation

6.3.1 General Presentation

- **Procedures and formalities** are among the **main barriers** that are hampering the development of Motorways of the Sea:
  - several **border points** must be crossed, mostly in ports but also on land routes e.g. along the central land corridors: minimum 2 points in a single / one sea service, up to 5 points in inter-seas services linking western Black Sea Countries and Eastern Caspian Sea Countries, and possibly more in the case of longer multicountry transit and transshipments trades;
  - several physical mode transfers, handling movements and intermediate storage are taking place along the sea based transport chains: commonly 3 transfers and minimum 6 handling plus 2 storage in the case of a single sea leg, and several more handling operations in the inter-seas services
  - previous and ongoing experiences of Motorways of the Sea in other regions as well as the global worldwide transport system of containers have demonstrated that the resolution of difficulties in this field is an essential success factor.
- The procedural process in ports and at other border crossing point are **dominantly related to Trade Laws and Regulations**, but actors of the transport and transit chain are responsible for their fulfilment. A significant part of their activities is to deal with these complex issues and they are drawing the corresponding revenues out of their capacities.
  Relationships between institutions on one side, - Customs first, but also other Ministries and inspection bodies - operators and users on the other side, are affected by these functions which are mixing with the physical transit and transport operations.
- The **impacts of administrative and regulatory barriers** are generally more important when there is a sea leg since:
  - maritime transport and port transits require more formalities than land transport modes, including specific exchange of information, paper documentation etc. which are rightly perceived as a factor of complexity
  - this adds to the weakness of intermodal sea based transport, particularly when compared to the most simple unimodal road transport
  - transit times are increased if and when formalities and operations are mismatching, e.g. when the transport means of one mode is not coordinated with those of the next mode, which is a frequent situation between the maritime and railways legs in the TRACECA Region
  - costs are not only direct but also indirect, and not only formal but also informal, and unofficial transit levies and other transaction costs are adding to the sum of official tariffs, taxes and dues.
- **Common Weaknesses / barriers** have been identified in all LOGMOS project Countries to various extents and at different degrees. This diagnosis has been shared under the key word "Facilitation" by Country stakeholders and at bilateral and regional levels. Barriers in this field are referred to in the "W" (Weaknesses) list of the various SWOT analyses summarized in the following project documents:
  - Country profiles, as synthesized hereafter

- Presentations for workshops and meetings

- Among the **solutions** discussed in the diagnosis phase, the following is a series of common **recommendations and targets** that are partly implemented, planned, or contemplated for the future LOGMOS projects and more generally for the development of intermodal transport including port / border crossing points:
  - I.T. systems and solutions electronic solutions / EDI for:
    - information (for users and operators)
    - declarations
    - pre-alert (for Customs and other)
    - duties, taxes and fees
  - One stop scheme and extension to Single Window System (SWS)
  - Risk management system and methods
  - IT interchange solutions between MoS port / communities
  - Tracking and Tracing (in coordination with operators)
  - Upgrading / redesigning border points layouts
  - Training (management, IT organization…)

6.3.2 SWOT Analysis

The following table summarizes key-findings for national SWOT analysis in trade and transit facilitation procedures that have been adopted in Kazakhstan.

Table 11: SWOT Analysis in Trade and Transit Facilitation Procedures

STRENGHTS	• Customs Administration strategy. • WCO and Kyoto Conventions ratified by Parliament. • World Bank Customs equipment and infrastructure project.
WEAKNESSES (BARRIERS)	• Customs Codes changes and lack of consistency for importers and exporters e.g. in tariff method. • Long procedure times for exporters and importers to prepare documents and for controls adding days to operation waiting time • Recent new law requiring Customs brokers to have high capital liability reducing market access on broking market. • Integrity issues at border crossing points and at inland clearance depots and inland logistics centres.
OPPORTUNITIES	• IT solutions for pre-import and pre-export declarations, electronic exchange of ships manifest complying with the provisions of IMO FAL Convention. • Implementation of Single Window System. • “One Stop Shop” pilot project at border crossing points, and Integrated Border Management (IBM) / Combined Border Management pilot. • Possible extension of above joint pilot project to border crossing points including Caspian ports. • National trade and transport trade facilitation strategy linking Customs, transport providers and border crossing point agencies in regional strategy. • Facilitation "KAZPRO" forum

THREATS	• No or slow implementation of policy measures to reduce weaknesses / barriers • Improved facilitation along competing land corridors