ENPI 2011 / 264 459

Logistics Processes and Motorways of the Sea II

LOGMOS Master Plan – Annex 9.1

Country Profile

TURKMENISTAN

October 2013

This project is funded by
the European Union

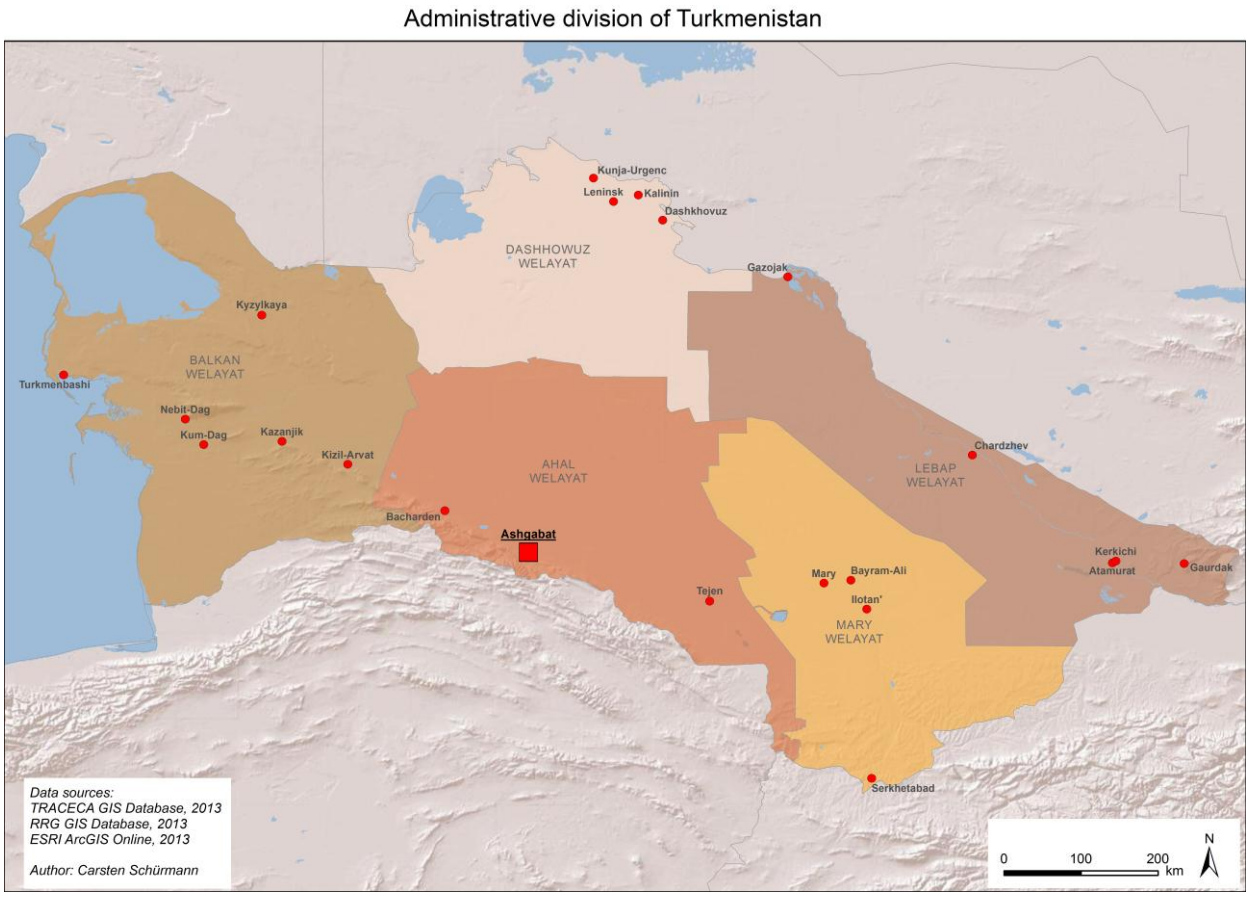
A project implemented by
Egis International / Dornier Consulting

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Figure 1: General Map of Turkmenistan



Source: TRACECA (2013)

1 INTRODUCTION

Turkmenistan is located in the South-West of Central Asia. It borders Kazakhstan in the North, Uzbekistan in the North-East, the Islamic Republic of Afghanistan in the South-East and the Islamic Republic of Iran in the South. Turkmenistan also possesses a maritime façade with the Caspian Sea to the West. The country is administratively divided into five regions (welayatlar) Akhal, Balkan, Dashoguz, Lebapand Mary and the district for the capital-city, Ashgabat.

The transport network in Turkmenistan is limited due to geographical morphology: over 80% of the country is covered by the Karakum dry desert. The approximately 3,500 km railway network is composed of two main lines stretching from West to East and two North-South lines. The road network comprises 24,000 km of roads that connect the five regions together. Turkmenbashi is the main international port for the country and serves as an important gateway for all Central Asia countries. It is therefore of great importance for TRACECA interests.

Due to its strategic location, Turkmenistan is crossed by several international transport corridors:

- TRACECA corridor
- OSJD corridors VI and X
- CAREC corridors II and III

The TRACECA Program was launched in 1993 as one of the components of the intergovernmental TACIS programme. In spite of the fact that Turkmenistan did not join TRACECA, and did not sign the Basic Multilateral Agreement (MLA) on the development of transport corridor Europe–Caucasus–Asia, it took and continues to take an active part in TRACECA activity.

Since 1995, Turkmenistan has been involved in 26 technical assistance projects that deal with technical and institutional issues. Three investment projects, financed by the European Union, were implemented in Turkmenistan:

- Container services between Baku and Turkmenbashi, 1998-1999 (EUR 2.65 M).
- Cargo and container handling equipment for the cotton export logistics centre near Bukhara (Uzbekistan), and for the seaports of Baku (Azerbaijan), Turkmenbashi (Turkmenistan), Poti (Georgia) and Iliychevsk (Ukraine), 1998-1999 (EUR 56.825 M).
- Supply of navigational aid equipment, 2003 (EUR 1.6 M).

2 NATIONAL TRANSPORT POLICY

In Turkmenistan the key stakeholder is the Cabinet of Ministries, which not only monitors the other state organisations involved in the transport sector but also issues decrees and rules that frame the initiatives taken at the highest governmental level.

The State organisations more involved with the LOGMOS Project are:

- Ministry of Railway Transport.
- Ministry of Road Transport under the authority of the Turkmen transport Inspection, which controls all import, export and transit cargo crossing the national state borders.
- Ministry of Water Industry.
- The State Service of Maritime and River Transportation of Turkmenistan in charge of the International Sea Port of Turkmenbashi and the Production Association for Maritime and River Transport services.
- State Customs Service of Turkmenistan.
- Main State Inspectorate (Turkmenstandartlary), which delivers licences for the transportation of certain type of goods.
- Turkmenavtoellary is the state regulation body for public works and transport infrastructure.

The national transport policy of Turkmenistan is defined in five main documents the “National Socio and Economic Development Program of Turkmenistan up to 2030”, the “Socio and Economic Development Program of the country on the period 2012-2016”, the “National program on the transformation of social and living conditions in villages, townships, towns and districts centres up to 2020”, the “Main Orientations of Development of Industries of the Provinces” and the “Program of development of the transport - communication complex for the period 2012-2016”

In the maritime sphere, the General Development Plan of Turkmenbashi International Sea Port and the Merchant Fleet of Turkmenistan (until 2020) provides:

- The development and improvement of maritime transport
- The set-up of a sea trade fleet for Turkmenistan
- An increasing role of sea transport in the country international trade
- The implementation of a competitive, developed and improved sea transport system

The development of Turkmenbashi port aims to achieve these aims. In the final stage the whole area of Turkmenbashi up to Avaza along the Caspian Sea shoreline will be turned into a Free Economic Zone (FEZ).

The guidelines for the development in the railway transport sphere were included in the “Railway Transport Development Program of Turkmenistan for the years 2000-2005 and for the period from 2006 till 2010”. In 2012, a new Master Plan for railway transport for 2012-2016 was adopted. It comprises numerous projects (detailed in section 6.2.2.) aimed at modernising the sector, bridging the regions of Turkmenistan together and linking the national network to the ones of bordering countries.

Turkmenistan accessed the Agreement on International Rail Freight Communications (using SMGS consignment note), which is managed by OSJD and adapted for rail track networks of a 1520mm. gauge.

The development of the road transport sector is included in the “National program on the transformation of social and living conditions in villages, townships, towns and districts centres up to 2020” and the “Master Plan for the Ministry of Road Transport for the period 2012-2016”. The programme plans to double the road network and to pave 70% of all roads by 2020.

Turkmenistan being a counterpart of one of six UNECE transport conventions is still in the early stages of implementing European standards for road and railway transport.

This is possible due to its physical remoteness from European territory and restrictions to connect with Europe by road.

Turkmenistan ratified 10 conventions of the International Maritime Organization (IMO) designed to have a positive impact on the transport of oil products:

- The International Convention on Civil Liability for Oil Pollution Damage (CLC), 1969. The Convention places liability for damage on the owner of the ship that caused the pollution.
- The CLC Protocol, 1992, which changed the entry into force requirements (number of tankers) for large tanker-owning countries. The Protocol establishes higher limits of liability than the 1969 Convention.
- The International Regulations for Preventing Collisions at Sea, 1972 (COLREG).
- The International Convention on Load Lines, 1966 (LL).
- The MARPORT Protocol which amends the International Convention for the Prevention of Pollution from ships, 1978.
- The International Convention for the Safety of Life at Sea, 1974 (SOLAS).
- The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (SWTC).
- The Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, 1988 (SUA).
- The SUA Protocol, which amends the SUA Convention by adding to the convention the safety of Fixed Platforms located on the Continental Shelf, 1988.
- The International Convention on Tonnage measurements of Ships, 1969 (TONNAGE).

On the contrary, the non-accession to the following legal instruments is not favourable for the facilitation of multimodal transport within/through the territory of Turkmenistan:

- Customs Convention on Containers, 1972.
- European Agreement on Main International Traffic Arteries (AGR), 1975.
- International Convention on the Harmonization of Border Controls of Goods, 1982.
- European Agreement on Important International Combined Transport and related Installations (AGTC), 1991.
- TRACECA Agreement on the Development of Multimodal Transport, 2009.

Turkmenistan is neither a party to the International Convention for the Unification of Rules of Law Relating to Bills of Lading (The Hague-Visby Rules), nor to the Brussels Convention for the

Unification of Rules relating to Bills of Lading of 1924 and the Convention on Carriage of Goods by Sea of 1978 (Hamburg Rules).

Turkmenistan is also member of the CAREC programme, an ADB-supported initiative established in 1997 that strives to encourage economic development and cooperation between its members in the Central Asian region since 2010. The CAREC programme mainly focuses on 4 priority areas: energy, trade facilitation, trade policy and transport. The CAREC international transport corridors aim to connect Central Asian landlocked countries to the global market.

3 LEGAL ENVIRONMENT IN THE FIELD OF TRANSPORT

The legislation of Turkmenistan is based on the Constitution approved on May 18, 1992 No.691-XII. On September 25, 2008 a revised national Constitution was adopted.

The key legal instruments related to LOGMOS are the following:

- Law of Turkmenistan "On Road Transport" (02.03.2013)
- Customs Code (01.01.2011)
- Presidential decree "About international principles of accounting cargo transportations" (12.04.1994)
- Letter of State Tax Inspection of Turkmenistan "About permit system for CIS-countries for transit to third countries through the territory of Turkmenistan" (03.09.1996)
- Presidential decree "About passport of Turkmenistan seafarer" (13.03.1997)
- Presidential decree "About charges imposed from foreign vehicle owners for the reimbursement of price difference for motor fuel" (20.11.1997)
- Law of Turkmenistan "On Railway Transport" (15.09.1998)
- Tax Code (25.10.2005)
- Trade Shipping Code (23.10.2008)

As far as international legal aspects are concerned, Turkmenistan signed the following bilateral agreements (see Table 1) and multilateral agreements (see Table 2) regarding transport and customs issues:

Table 1: Bilateral Agreements with LOGMOS Beneficiary Countries

Countries	Transport issues				Customs
	Maritime	Road	Railway	General	
Armenia		On international road transport 27.06.1995		On general principles of cooperation in the field of transport 15.10.1992	On cooperation and mutual assistance in customs issues 30.07.1993 On general principles in the field of customs 24.08.1993
Azerbaijan	On merchant shipping 18.03.1996	On international road transport 19.05.2008		On general principles of cooperation in the field of transport 16.10.1992	

				On international combined transport 19.05.2008	
Bulgaria					
Georgia		On international road transport 17.08.1993			
Kazakhstan	On usage of ports for the handling and transport of transit cargoes 27.02.1997	On road services 10.05.1992 On international road transport for passengers and goods 27.02.1997		On general principles of cooperation in the field of transport and communication 19.05.1993	On cooperation and mutual assistance in customs issues 05.07.2001
Kyrgyzstan		On international road transport for passengers and goods 29.11.1995			
Moldova					
Romania		On international road transport for passengers and goods 16.11.1994			
Tajikistan		On international road transport 09.12.2007			
Turkey	On maritime activities 23.12.1997	On international road transport 02.05.1992			
Ukraine		On cooperation		On general	On cooperation

		in the field of international road transport 25.02.1993		principles of cooperation in the field of transport 10.10.1992 On processing of import, export and transit cargo of Turkmenistan 11.05.1993	and mutual assistance in customs issues 29.01.1998
Uzbekistan	On international river communication for passengers and goods 27.11.1996	On international road transport of passengers and goods 16.01.1996	On cooperation in the field of international railway transport 16.01.1996 On cooperation in the field of regular transit railway transport 21.09.2000	On general principles of cooperation in the field of transport and communication 14.04.1993	On general customs relations 28.08.19993 On cooperation and mutual assistance in the field of customs 16.01.1996

Table 2: Multilateral Agreements with LOGMOS Beneficiary Countries

Signatory countries	Title of the agreement	Place and date of signature
Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan	On Principles of Cooperation and Terms of Relations in Transport Area	Bishkek, 23.04.1992
Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan	On Coordination of the Activity of Railway Transport	Bishkek, 23.04.1992
Azerbaijan, Georgia, Turkmenistan, Uzbekistan	On Coordination of the Activity of Railway Transport	Sarakhs, 13.05.1996
Azerbaijan, Georgia, Turkmenistan, Uzbekistan	On Cooperation in the Area of Transit Transportation	Sarakhs, 13.05.1996

Ferry connections are governed by the specific agreement between Ministries of Transport of Azerbaijan and Turkmenistan on organisation of international rail-ferry cargo transportation via ports of Baku and Turkmenbashi, exploitation of rolling stock and containers, record of volumes carried and estimation on their use (28.11.2008).

Furthermore, Turkmenistan engages actively with various Caspian countries. Among them, the annual meeting of Caspian littoral states port managers (bringing together Russia, Azerbaijan, Iran, Kazakhstan and Turkmenistan) is of significant importance for the implementation of

security, safety and environmental issues as well as commercial measures linked with sea transport (fire-fighting, rescue and search of sailors at sea, prevention of and dealing with pollution accidents, especially oil spills, control and inspection of ships, advanced exchange of technical and commercial information and set up of common data bases).

4 NATIONAL POLICY AND LEGISLATION IN TRADE AND TRANSIT

The main regulatory body in the trade and transit fields is the National Customs Service of Turkmenistan. It determines and enforces the national custom policy and surveys the application of all international agreements.

Transport of goods in transit through the territory of Turkmenistan is regulated as per the corresponding provisions of the customs code.

A new customs code was adopted on January 1st 2011, replacing the previous one that dated from 1993.

In certain cases it is compulsory to use the convoy regime in accordance with the regulations about customs transit cargo rules approved by Order of State Customs Service of Turkmenistan No.5, 05.03.1999.

The main documents related to transit are:

- The letter of the State Tax Inspection of Turkmenistan “About charges for permits for entering Turkmen territory and passing in transit, imposed from foreign vehicle owners” No.1416/1 (19.12.1995).
- The letter of the State Tax Inspection of Turkmenistan “About charges for entrance to Turkmen territory and transit through its territory” No.899/1 (27.07.1995).

It is worth noting that Turkmenistan is not a member of the World Trade Organization (WTO) but is a member of the World Customs Organization (WCO).

5 INVESTMENTS IN TRANSPORT AND LOGISTICS SECTOR IN TURKMENISTAN

Most IFI funded projects in Central Asia are today completed under the framework of the CAREC programme, which gathers 6 IFIs. As Turkmenistan only joined the CAREC partnership in 2010, the North-South Railway project up to 2011 is the only project carried out within this framework.

The Asian Development Bank is one of the most active IFIs in Turkmenistan. At present ADB supports the North-South Railway Project, which deals with improving the technical capacity of railway transport links between Turkmenistan and Kazakhstan, and further with Russia to the North and Iran to the South. The project funding covers USD 350,000 for TA assistance (approved in May 2010) and USD 125 M as a capital resource (approved in March 2011).

Earlier in 2002, the ADB supported the Atamyrat-Imamnazar Road Rehabilitation project in Turkmenistan.

In the coming years, it also plans to support:

- Transport Development Project (two capital tranches, each of USD 150 in 2013 and 2015)
- Railway Expansion Project (USD 50 M in 2012)

It is part of the EBRD strategy to support the country's transition towards an open market oriented economy. The EBRD's core priority in Turkmenistan is to foster the growth of the private sector in the country, strengthen the financial sector and encourage the country's international integration through trade and regional transport infrastructure.

The World Bank has not been lending to Turkmenistan recently.

Table 3: IFI Supported Projects in Turkmenistan

Title of project	Year of approval	Sub-sector	Total project cost	IFI funding
North-South Railway project	2011	Railway	USD 166.7 M	USD 125 M (**ADB**)
Atamyrat – Imamnazar Road rehabilitation project	2002	Road rehabilitation	N/A	N/A **(ADB)**
Turkmenbashi Port Development	1997	Maritime	ECU 39.4 M	ECU 27.5 M (**EBRD**)

The Turkmen Government also finances itself thorough numerous national transport projects.

In the maritime and logistics sectors, investments are dedicated to the development of Turkmenbashi International Sea Port. The works concern:

- the construction of a new Ro-Pax terminal;
- the acquisition of two Ro-Pax ferries;
- a Logistics Centre in the port new terminal with 6 berths for dry bulk and general cargo and a 3-berth container terminal;
- a dry bulk terminal for cement;
- a special berth for polypropylene;

- a ship-repairing-building complex;
- a shipyard;
- the rehabilitation of traffic and lighting buoy/control system;
- the control tower;
- a submarine emergency service;
- the dredging and enhancement of the access channel and navigation canal;
- a new building for the Turkmen trade sea fleet and Authorities of the International Sea Port of Turkmenbashi (completed).

6 STRATEGIC CHALLENGES

6.1 Market Challenges

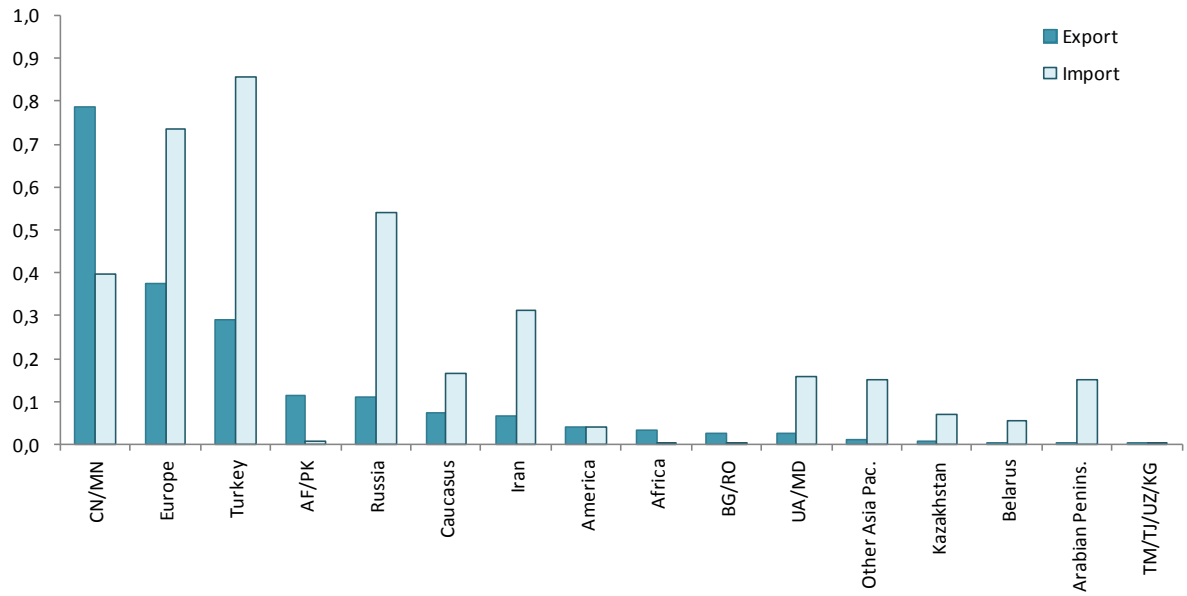
6.1.1 National Trade: Exports and Imports

World Trade Partners

Turkmenistan provides access to the Caspian Sea for a number of landlocked countries in Central Asia, which gives the country an undeniable advantage and a wealth of possibility in terms of enhancing its role in regional and transit trade. Although official statistics for Turkmenistan are absent, it is possible to estimate its exports and imports based on figures reported by its trade partners. For the purpose of this analysis, it was decided to use UN Comtrade and Eurostat data.

Reportedly Turkmenistan is a net importer (see Figure 2). In 2010 its import volumes amounted to EUR 3.6 bn (merchandise trade balanced at EUR 1.68 bn), out of which Turkey constituted 24%, Europe 20%, Russia 15%, China/Mongolia 11% and Iran 9%. Within the structure of exports 40% of goods were transported to China in 2010, 19% to Europe and 15% to Turkey.

Figure 2: Turkmenistan Trade Partners, 2010, in bn EUR



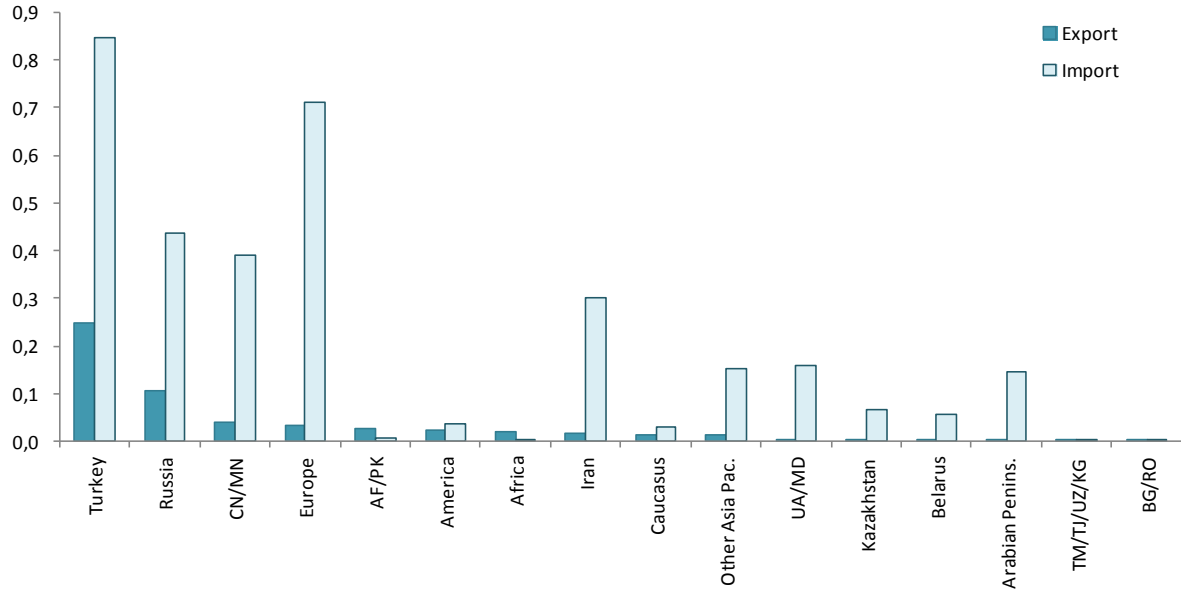
Source: Computation based on Eurostat and UN Comtrade databases

Leaving aside the analysis bulk cargo trade (see Figure 3), a number of conclusions for the development of potential LOGMOS trade in Turkmenistan can be drawn:

- General and containerizable cargo dominates Turkmenistan imports (almost 92%) but constitute slightly less than 25% of total Turkmenistan exports;
- In 2010, most of the regional non-bulk trade of Turkmenistan resulted in a negative merchandise trade balance;
- The most considerable inflow of non-bulk goods to Turkmenistan was due to Turkey (EUR 0.8 bn), Europe (EUR 0.7 bn), Russia (EUR 0.4 bn), China (EUR 0.4 bn) and Iran (EUR 0.2 bn).

Given the pattern of direct trade in non-bulk cargo, Turkmenistan could be classified as an important value attractor on the TRACECA route.

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



Source: Computation based on Eurostat and UN Comtrade databases

Table 4: Distribution of Turkmenistan 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	6%	0%	2%	5%	0%	1%
Africa	2%	0%	1%	4%	0%	1%
America	2%	1%	1%	4%	1%	2%
Arabian Peninsula	0%	4%	3%	0%	4%	4%
Area Nes						
Belarus	0%	2%	1%	0%	2%	1%
Bulgaria-Romania	1%	0%	1%	0%	0%	0%
Caucasus	4%	5%	4%	2%	1%	1%
China-Mongolia	40%	11%	21%	7%	12%	11%
Europe	19%	20%	20%	6%	21%	19%
Iran	3%	9%	7%	3%	9%	8%
Kazakhstan	0%	2%	1%	1%	2%	2%
KY-TJ-UZ	0%	0%	0%	0%	0%	0%
Other Asia Pacific	1%	4%	3%	2%	5%	4%
Russia	6%	15%	12%	19%	13%	14%
Syria-Iraq						
Turkey	15%	24%	20%	45%	25%	28%
Ukraine-Moldova	1%	4%	3%	1%	5%	4%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: Computation based on Eurostat and UN Comtrade databases

To make the analysis complete, it is necessary to take into account the related tonnage of exported and imported goods from/to Turkmenistan (see Table 5 below). Figures show that:

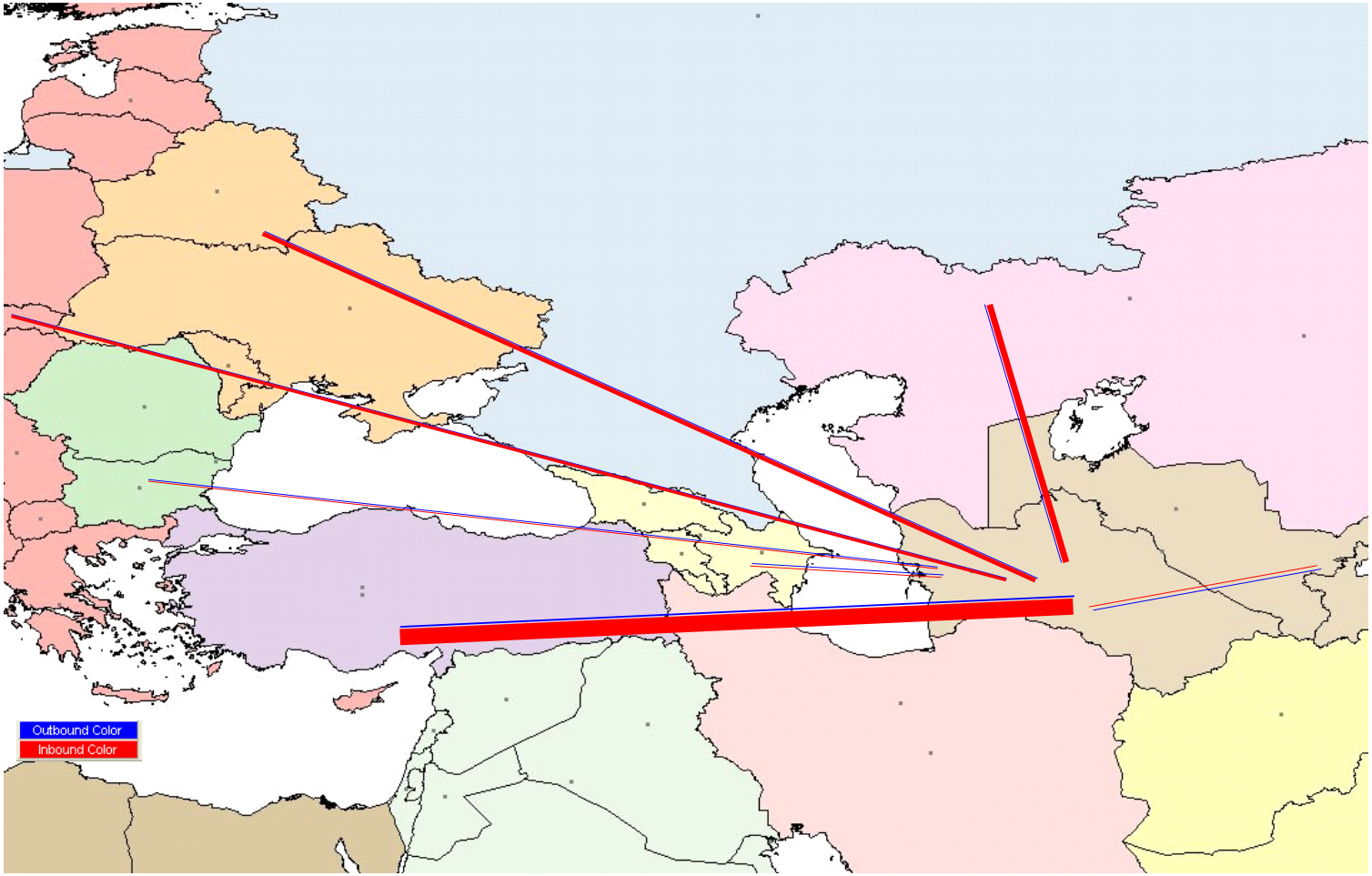
- the most significant trade exchange of Turkmenistan (more than 75% of exports and imports) is with Iran and Turkey (see Figure 4);
- the tonnage of exported and imported non-bulk goods is considerably unbalanced: potential exports constitute only 5% of related trade turnover. This implies that to realize existing potential in trading (partially and completely) containerizable goods, it will be necessary to attract westbound transit cargo to Turkmenistan.

Table 5: Turkmenistan Potential Trade with TRACECA Countries and Europe, 2010, in tonnes and %

Zones	Tonnage		Share in trade with TRACECA countries and Europe	
	Export	Import	Export	Import
Bulgaria-Romania	126.9	4,630.5	0%	0%
Caucasus	11,244.5	29,275.7	8%	1%
Europe	8,367.7	129,500	6%	5%
Kazakhstan	1,869.7	264,609.8	1%	11%
KY-TJ-UZ	825.2	1,154.1	1%	0%
Turkey	69,137.6	677,311.1	52%	27%
Ukraine-Moldova	2,085.9	175,346.9	2%	7%
Total	**132,758**	**2,499,530.4**	**100%**	**100%**

Source: Computation based on Eurostat and UN Comtrade databases

Figure 4: Turkmenistan Potential Trade with TRACECA Countries and Europe, 2010, in tonnes



Source: Computation based on Eurostat and UN Comtrade databases

6.1.2 Regional TRACECA Trade

The structure of potential LOGMOS trade of Turkmenistan with other TRACECA countries is considerably unbalanced. In 2010 imports from TRACECA to Turkmenistan dominated exports both in terms of value and volume of trade. It is estimated that in 2010 the volume of potential exports from Turkmenistan to TRACECA region equaled 0.5 M tones.

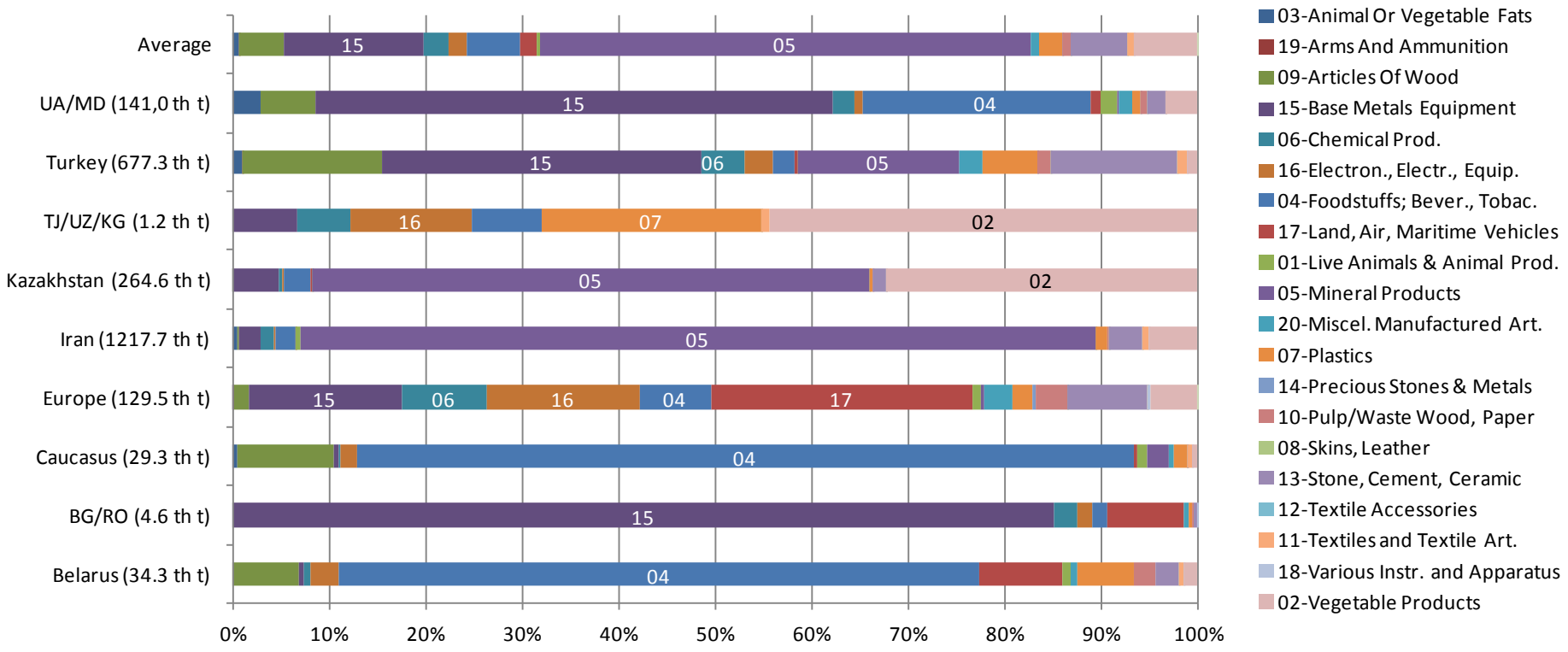
Within the structure of Turkmenistan imports non-bulk goods occupy more than 90% (see Figure 5 and Table 6 below) and cover the following categories:

- mineral products (51%), including salt, sulphur, etc., which are mainly imported from Iran, Kazakhstan and Turkey;
- base metals and equipment (15%) include iron and steel materials/articles imported from Turkey, Ukraine/Moldova, but also from Europe and Kazakhstan;
- vegetable products (7%) from Iran and Kazakhstan.
- construction materials (6%), including stone, plaster, lime, cement, etc.

The commodity structure of exports (see Figure 6 and Table 7 below) included three key broad categories of goods:

- textiles (56%) mainly consisting in cotton. Textiles constitute more than 90% of exports to Turkey;
- foodstuff, beverages, tobacco (26%) – fruits and vegetables, animal by-products and fodder, etc. This group of products prevails in exports to Iran (87%); and
- plastics (10%) namely destined to Caucasus and to a lesser extent to Belarus, Kazakhstan and Central Asia.

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



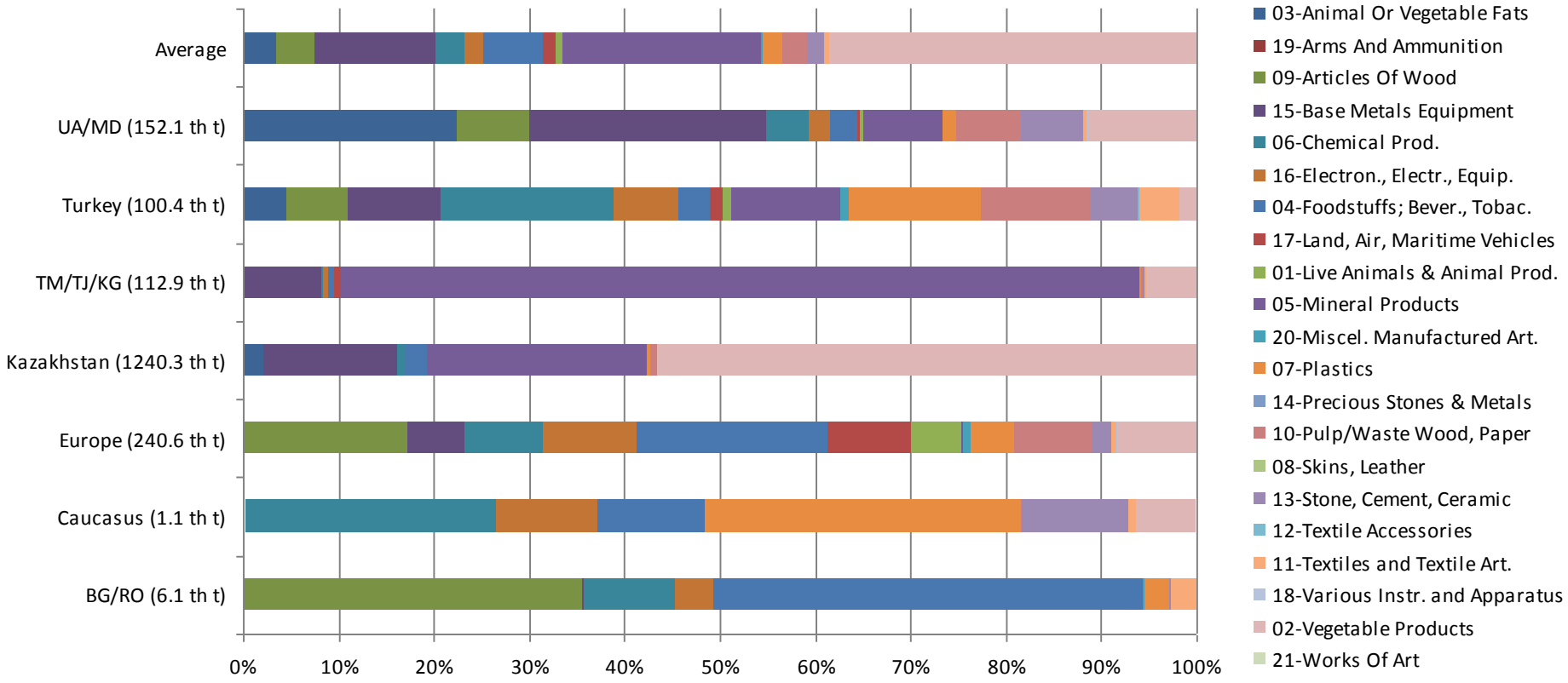
Source: Computation based on Eurostat and UN Comtrade databases

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

Commodity Groups	Bulgaria-Romania	Caucasus	Europe	Kazakhstan	KY-TJ-UZ	Turkey	Ukraine-Moldova
Animal Or Vegetable Fats	n/a	158.2	29.5	n/a	n/a	6,574.6	4,101.7
Arms And Ammunition	n/a	n/a	27.0	n/a	n/a	0.0	n/a
Articles Of Wood	n/a	2,910.3	2,077.8	0.3	n/a	98,544.0	8,046.8
Base Metals Equipment	3,943.5	162.3	20,503.5	12,459.2	77.2	223,677.2	75,568.1
Chemical Prod.	108.6	57.7	11,544.9	1,201.3	64.0	30,173.0	3,095.1
Electron., Electr., Equip.	71.0	474.8	20,413.8	500.5	144.0	20,440.0	1,385.4
Foodstuffs; Bever., Tobac.	79.0	23,573.9	9,599.7	6,971.8	85.4	14,993.2	33,180.8
Land, Air, Maritime Vehicles	364.5	131.2	35,062.3	696.9	n/a	1,924.6	1,405.9
Live Animals & Animal Prod.	n/a	283.1	1,292.7	85.4	n/a	578.0	2,630.6
Mineral Products	n/a	649.2	279.1	152,812.7	n/a	112,670.3	210.7
Miscel. Manufactured Art.	24.8	173.2	3,962.4	20.7	n/a	17,030.7	1,924.2
Plastics	17.0	379.7	2,678.4	672.0	261.1	38,578.9	1,158.1
Precious Stones & Metals	n/a	8.8	275.9	n/a	n/a	2.0	1.2
Pulp/Waste Wood, Paper	2.0	2.4	4,365.4	127.7	0.2	8,830.7	1,017.8
Skins, Leather	n/a	n/a	3.7	0.0	0.0	26.4	0.1
Stone, Cement, Ceramic	20.0	25.1	10,630.4	3,466.6	n/a	88,727.3	2,612.7
Textile Accessories	0.0	0.1	16.8	0.2	n/a	304.4	2.9
Textiles and Textile Art.	0.0	136.9	116.3	9.4	11.3	6,932.6	117.4
Various Instr. and Apparatus	0.1	1.2	237.0	46.5	n/a	88.3	20.3
Vegetable Products	n/a	147.6	6,381.9	85,538.5	511.0	7,215.0	4,545.6
Works Of Art	n/a	n/a	1.5	n/a	n/a	0.0	n/a
Total imports	**4,630.5**	**29,275.7**	**129,500.0**	**264,609.8**	**1,154.1**	**677,311.1**	**141,025.5**

Source: Computation based on Eurostat and UN Comtrade databases

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



Source: Computation based on Eurostat and UN Comtrade databases

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

Commodity Groups	Bulgaria-Romania	Caucasus	Europe	Kazakhstan	KY-TJ-UZ	Turkey	Ukraine-Moldova
Animal Or Vegetable Fats	n/a	n/a	n/a	n/a	401.8	n/a	n/a
Arms And Ammunition	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Articles Of Wood	n/a	n/a	n/a	n/a	n/a	2.5	n/a
Base Metals Equipment	n/a	n/a	11.2	41.0	n/a	12.6	2.3
Chemical Prod.	n/a	117.5	20.3	56.7	1.7	3.1	582.7
Electron., Electr., Equip.	n/a	0.1	86.7	71.0	n/a	77.6	1.8
Foodstuffs; Bever., Tobac.	n/a	n/a	2.6	n/a	n/a	n/a	n/a
Land, Air, Maritime Vehicles	n/a	n/a	3.7	3.7	n/a	9.3	n/a
Live Animals & Animal Prod.	n/a	2.4	n/a	n/a	n/a	174.7	n/a
Mineral Products	n/a	4,491.5	n/a	37.1	127.5	n/a	n/a
Miscel. Manufactured Art.	n/a	0.1	4.9	15.9	n/a	0.1	0.6
Plastics	n/a	6,374.7	3.6	939.3	294.2	4,762.8	114.4
Precious Stones & Metals	n/a	n/a	0.0	0.0	n/a	n/a	n/a
Pulp/Waste Wood, Paper	n/a	n/a	0.3	n/a	n/a	n/a	0.0
Skins, Leather	n/a	n/a	n/a	n/a	n/a	688.1	n/a
Stone, Cement, Ceramic	n/a	n/a	0.1	n/a	n/a	54.9	2.1
Textile Accessories	n/a	0.0	0.2	n/a	n/a	n/a	n/a
Textiles and Textile Art.	126.9	106.8	8,105.7	4.9	n/a	63,327.2	687.2
Various Instr. and Apparatus	n/a	n/a	0.5	3.1	n/a	0.1	0.0
Vegetable Products	n/a	151.4	127.9	697.0	n/a	24.6	11.2
Works Of Art	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total exports	**126.9**	**11,244.5**	**8,367.7**	**1,869.7**	**825.2**	**69,137.6**	**1,402.2**

Source: Computation based on Eurostat and UN Comtrade databases

Based on above observations, it can be concluded that:

- the trade of Turkmenistan in non-bulk goods (potential trade), is extremely unbalanced. Potential exports constitute only minor share (5%) in potential trade turnover;
- non-bulk goods are rather imported to Turkmenistan from Europe, Turkey and other important origins outside of TRACECA region. This makes Turkmenistan a key attractor of potential trade in East TRACECA;
- more than 90% of potential exports from Turkmenistan include completely containerizable goods. At current stage this volume of trade (about 0.5 M tonnes) is not enough to develop a sustainable container service over the Caspian. This could happen only if long-distance westbound containerizable traffic, e.g., from China/Mongolia could be attracted;
- therefore, in the mid-term perspective there is an opportunity for developing Ro-Ro service between Turkmenistan and TRACECA region, covering Caucasus, Turkey and Europe as a key service region.

6.2 Intermodal Maritime Based Transport Challenges

LOGMOS aiming at developing seamless door-to-door intermodal services, all components of the transport chain may be considered as possible segments of LOGMOS projects, depending on their relevance for potential LOGMOS trade flows.

Port interfaces for operations, services, procedures etc. between land and sea are among the most critical points.

6.2.1 Port System and Maritime Links[1]

The port of Turkmenbashi is located 305 km East of Baku, at a short distance from the Western coast of the Caspian Sea, and approximately 550 km from the capital of the country, Ashgabat. The two cities are linked together by roads and railway lines.

The Turkmenbashi International Sea Port located at the crossing point of cargo traffic flows following the routes from Europe to Asia and from Asia to Europe serves as one of the so-called “sea gates” of Central Asia. As part of the TRACECA trade route the port plays an important part in geopolitics of Eurasia.

Turkmenbashi port is a key point on the way to and from several central Asian countries and on the strategic TRACECA transport route at the end of a Trans-Caspian railway line. The port is connected to the railway and road systems which are reaching the main locations of the country.

In the context of the growing role of the Europe – Caucasus – Asia corridor, the importance of the Turkmenbashi Sea Port has been significantly increasing and a dynamic development of maritime transport has therefore been observed. Nine vessels belonging to the maritime fleet of Turkmenistan include four bulk carriers with the cargo carrying capacity of more than 13

[1] More information and data concerning the national port system (including port maps and technical descriptions as well as the regular maritime services operated can be found in the separate maritime report of the LOGMOS Master Plan.

thousand tonnes, and five river-sea oil carrier vessels with the total capacity of 23.6 thousand tonnes.

It is planned to launch the construction of additional berthing and ship repair facilities, and create a logistics centre. Furthermore, oil carriers, Ro-Pax and passenger ships will be purchased. The port of Turkmenbashi intends to develop into the largest port in the Caspian basin. Establishment of a competitive maritime fleet in line with the international standards is meant to strengthen the position of Turkmenistan in international transport.

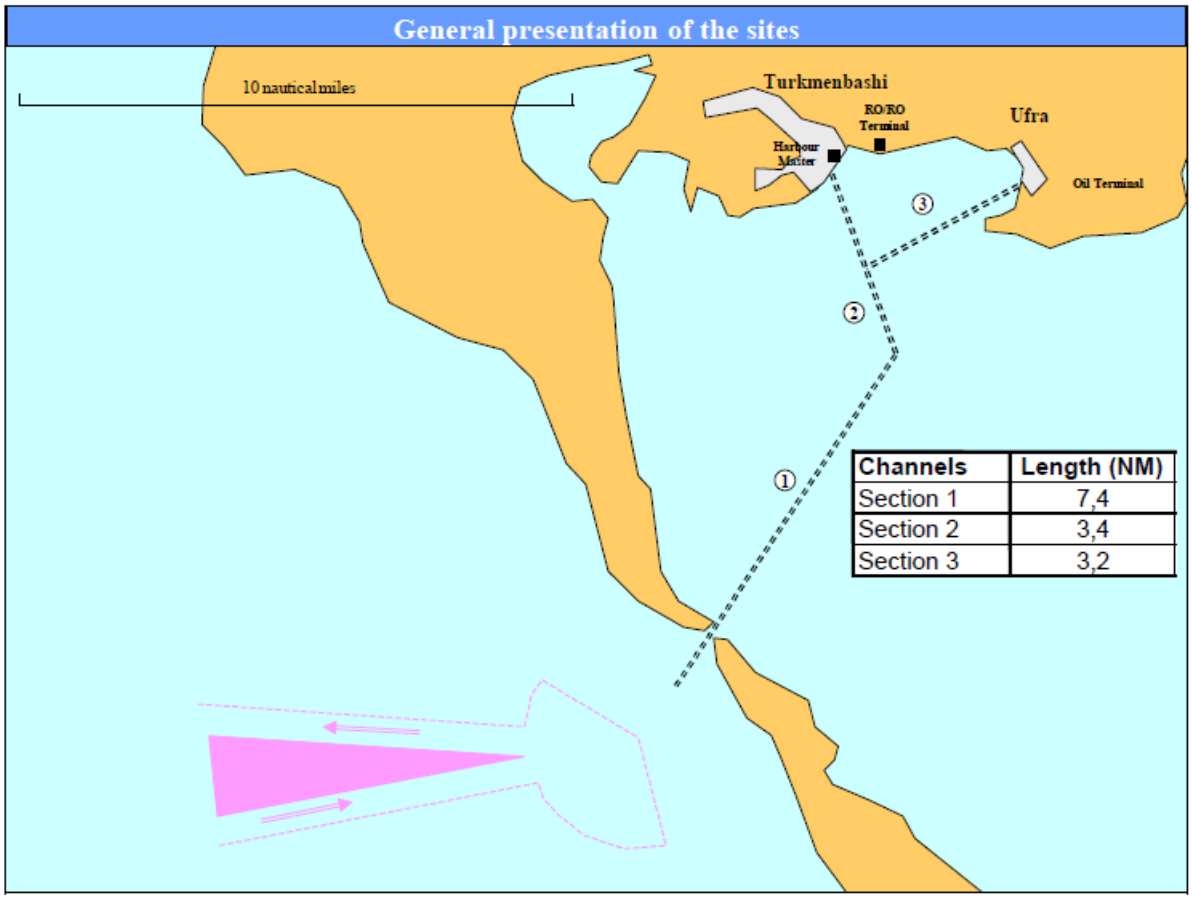
Increasing traffic flows of miscellaneous goods demonstrate the scale of industrialisation of the national economy. Export and import goods, transit cargoes, and goods of national economic significance are transported via the port of Turkmenbashi.

Infrastructure

The 22-km, 140 to 200 m wide, one-track access channel has been last dredged in 1968 and as a result of siltation the maximum acceptable draft has been decreased to 5.1 m.

This halved the lifting capacity of the 12,000 Dwt tankers and hampered moves with the rail ferries under windy conditions. In 2012, the navigation channel was entirely modernized with new light buoy of international standard with AIS system (Automatic Identification System) enabling vessel moves at night.

Figure 7: Map of Turkmenbashi and Ufra Port Accesses



Source: EGIS

There are two bulk-oil piers at the nearby UFRA terminal on the Eastern side of the bay.

The 1963-built double 2-railtrack ramp cargo ferry terminal (PPK2) used for the handling of both waggons and trucks is occupying 41.7 hectares. This includes the parking area for outgoing trucks and the maritime station for ferry passengers. There is a customs post in the maritime station, in charge of the ferry freight + pax traffic only.

The gates from the parking area into the terminal are equipped with scanning equipment for the trucks. The landward ramp has been rehabilitated through an EBRD loan; the seaward ramp should be repaired in the near future through a USD 62 M WB loan.

From the ramps, the rail tracks lead to a marshalling yard located half a kilometre away behind the dry cargo port. The marshalling yard is in poor condition and only part of the original 12-track network is operational.

The underground electric cable network was once automatic but has been operated manually since it was flooded by the Caspian Sea. The main road from the port entrance to the truck parking area and rail-ferry terminal has been up-graded in 2010-2011 and now a 500 truck parking-slot is available. The main rail track to the ferry ramps has also been revamped. Two additional separate road accesses leading from the port directly to the Ashkhabad highway are planned/under construction.

A new building is under construction for Customs and other Governmental Agencies to implement a one-stop shop for border-crossing procedures.

The port also consists of a strong 430-m general/dry 3-berth cargo facility (PPK1) designed for the handling of very heavy lifts.

Lifting gears include 11 berth cranes of 6 to 100 T, 3 Liebherr mobile crane including one of 150-200 T and 2 of 64 T (installed in October 2012), 2 top loaders of 35 T lifting capacity plus a number of tug masters and mafi-trailers.

Furthermore, the port fleet was expanded, and the following equipment was purchased: KAMAZ and MAZ, mobile complex for oil spill response, mobile multicomputer diving system, vacuum truck), tank capacity of 10 cubic metric with the vacuum pump, mobile mechanical repair truck, repair car with special fitting and a, fire tanker

Equipment and Other Facilities

There are 2 warehouses in the port, one of 5,000 sqm for general cargoes and another, dedicated for the storage of PP, measuring 12,000 sqm. Another 4,000 sqm area is allocated for the handling and storage of containers.

The cranes at the port railway station have a 5 T lifting capacity only. Therefore, when discharging from the vessels, containers, which have to be dispatched inland by rail, are trucked to better geared private terminals where they are reloaded onto rail platforms. The reverse procedure applies for full export containers.

The volume of containers and cargo remains very low compared to the potential of the Turkmen economy and it is made up in its vast majority of last voyage boxes.

A significant quantity of oversized and heavy parcels shipped to Turkmenistan (as well as other Central Asian Republics) and mainly destined to the oil and gas industry are moving via Turkmenbashi. Users however complain that the afore-mentioned port means are not enough equipped and powerful for the sizeable quantity of super-OOG/very heavy lifts imported at Turkmenbashi and at times additional lifting gears have to be brought from other locations around the Caspian.

Maritime Services

The main maritime link is the ferry service linking Baku and Turkmenbashi, established in 1905 and now provided by CASPAR, the Azerbaijan state-run shipping company.

In the Caspian CASPAR deploys in total 7 x 28 waggon (over 30 year-old) and 2 x 52 waggon (new) ferries and (also rather old and technically out-dated) 2 x 33 trailer capacity Ro-Ro. The bigger type may alternatively accommodate 58 x 16 m trailers (and up to 200 pax if no IMO/oil products on board).

Vessels are loading waggons as well as trucks and few containers (on platforms). The Baku-Turkmenbashi line represents about 50% of the rail-ferry/Ro-Ro general cargo trade carried by CASPAR in the Caspian Sea. The schedule of this service is not regular along the liner service standard terms, owing mainly to waiting times for loading waggons back from Turkmenbashi to Baku, which seemingly is due to the late arrival of the waggons, delays at the marshalling yard and lengthy export customs inspections. Vessel delays at Turkmenbashi road+berth average 3 up to 5 days. Besides, the first priority given by CASPAR to the rail traffic heavily penalizes the road traffic and results in waiting times of up to 10 days for the trucks on both sides of the Caspian Sea.

Other shipping links include Russian voyage-chartered sea-river vessels and Iranian coasters of Khazar Shipping Company, plying irregular services to and from Iran (Anzali, Amirabad) and Russia (Astrakhan, Olya), and ferries carrying LNG to and from Makhachkala (Russia).

Inland Waterways

The inland waterways system in Turkmenistan comprises the Amu Darya River between the Afghan border and Turkmenabat and a 450 km section upstream from the Caspian of the 1,400 km Karakum Canal, which is mainly designed for irrigation purpose. These are of no economic importance and relevance for the transport industry.

General Development Plan of Turkmenbashi International Sea Port and the Merchant Fleet of Turkmenistan until 2020

Forecasting a high and long term national economic growth and the development of maritime transport in the Caspian Sea, the State Service of Maritime and River Transportation of Turkmenistan (SSMRT) adopted, in a presidential decree of June 8th 2011, a General Development Plan (GDP) of Turkmenbashi International Sea Port and the merchant fleet of Turkmenistan until 2020.

The objective of this plan is to create a modern port and maritime fleet responding to international standards which would enable to sustain and improve the increasing economic potential of the country by offering better service and develop the maritime infrastructure of the international Turkmenbashi seaport.

Consequently, an international tender for design and construction of the international auto-passenger sea terminal, container terminal, shipyard, terminal general cargo, bulk cargo terminal, a terminal for receiving vessel with deadweight of 5,000 tons for shipment polypropylene production and reconstruction of the left ramp existing rail-ferry terminal was announced on August 17th, 2012. The 1.5 bn USD contract was awarded to Turkish company Gap Insaat. The plan aims also at obtaining independence from foreign maritime companies. According to national statistics, in 2010, only 17% of oil products were exported by national vessels. Turkmenistan does not possess the adequate transport infrastructure to master its maritime trade. Throughout this plan, it is therefore sought to lower the transport costs Turkmenistan is exposed to. The measures included in the General Development plan are scattered from 2012 to 2020. They include the acquisition of 6 oil tankers (5 of which were already purchased and already in operation by October 2012), 1 vessel for LPG transportation, 2 passenger-and-truck ferries, 4 tugs, 1 crane vessel. In that sense, an international tender for the purchase of 4 tugs and the design and construction of buildings and facilities for salvage, rescue and underwater technical operations with acquisition of environmental equipment and appropriate vessels was announced on July 31st 2012. Furthermore, in 2012 a contract with the

Croatian shipyard «ULJANIK brodogragiliste» was signed for the construction and delivery of a trucks (53 units) and passengers (200) carrier.

The 6 new oil tankers will allow controlling 50% of the total export. Oil tankers will follow the following selected route:

- Turkmenbashi – Makhachkala
- Turkmenbashi – Baku
- Turkmenbashi – Neka/Enzeli/Nowshahr

The purchase of one LPG carrier vessel is expected to boost the export and master 88% of national production. The calculated benefit is USD 4 M.

Betting on a high development of the Awaza touristic zone, the strategy also plans to purchase 2 truck ferries for passenger and road transport. Proposed routes according to Japanese and Korean led pre-feasibility studies for this today non existing service are:

- Turkmenbashi – Baku – Enzeli
- Turkmenbashi – Aktau – Astrakhan

It is also ambitioned to acquire 4 supply vessels for oil platforms in the Caspian Sea as today this service is ensured only by foreign companies.

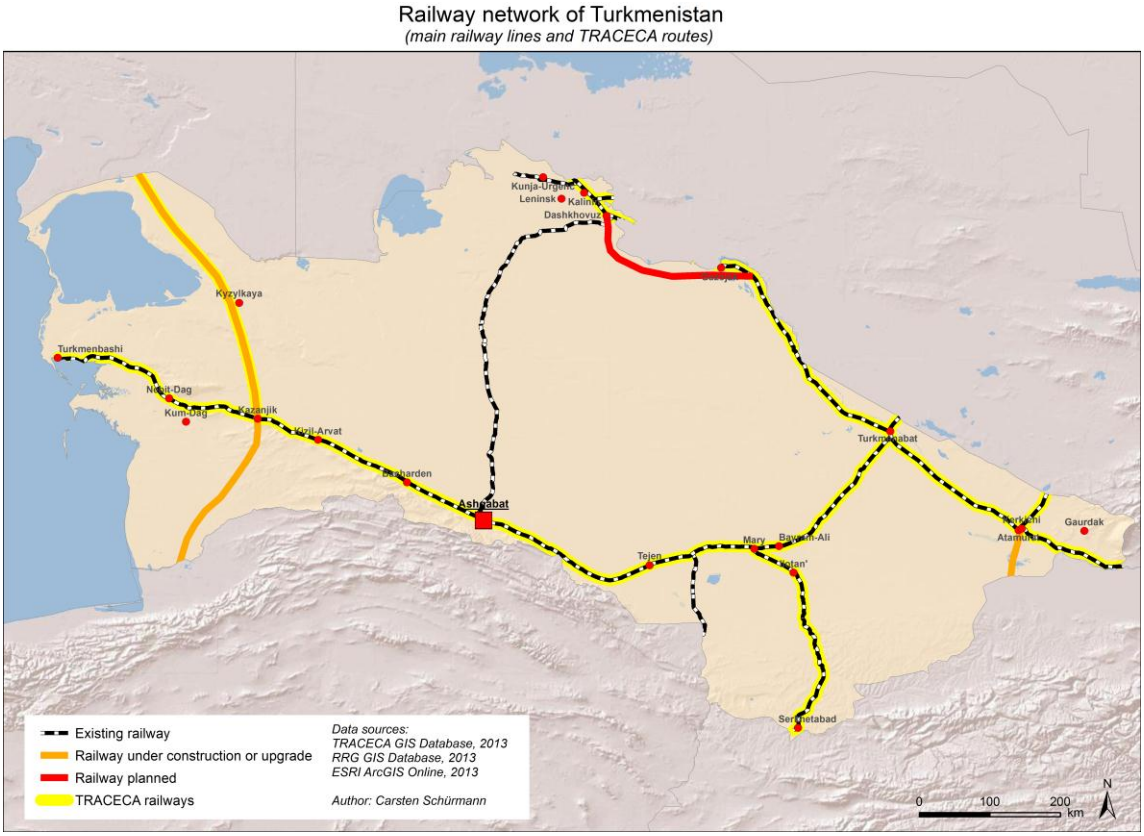
Table 8: Acquisitions Planned in the General Development Plan of the Merchant Fleet

	2012 - 2015	2016 - 2020	TOTAL
Tankers	4	2	6
LPG Transportation tanker		1	1
Truck-passenger ferry	1	1	2
Supply vessel	2	2	4
Crane Barge		1	1
Dredger	1		1

Source: General Development Plan of the Marine Merchant Fleet of Turkmenistan until 2020.

6.2.2 Inland Transport Mode: Railways[2]

Figure 8: Turkmenistan Railway Map



Source: TRACECA (2013)

Turkmen Railways (TDY) is the state enterprise that owns and operates the railway network. On the basis of the Law "On Railway Transport" and its Statute, the Ministry of Railway Transport remains the main provider of railway transportation services in the country and is also responsible for design and construction of rail projects.

The ministry makes it uncertain to establish commercial relations due to its bureaucratic structure, but an in-depth reform of the management system is going on. The network comprises 3,550 km of lines out of which about 1,300 km were constructed since the independence in 1991. 34.5 km of lines are, at the moment, double-track. The network is not electrified.

Table 9: Main Features of Turkmenistan Railway Network

Total route length (km)	Gauge (mm)
3,550.9	1,520
Electrified lines (km)	**Electrification system**
0	-

[2] More detailed information on the railway sector of Turkmenistan, figures and state of projects can be found in the separate railway report of the LOGMOS Master Plan

The main route is the 1,141 km Trans-Caspian line linking the port of Turkmenbashi, the capital Ashgabat and Turkmenabat near the border with Uzbekistan on the TRACECA route.

There is a branch line from Mary to Towrgondi on the Afghan frontier, and another branch connects this line to the Iranian network at Serakhs.

Serakhs is the rail crossing point with Iran where waggons are switched from the broad to the standard gauge. Gypchak railway station (7 km from Ashgabat) handles 40' containers and it is an important point for the dispatch of containers all over Turkmenistan.

The Tedzhen-Serakhs-Mashad line with five new railway stations and extension up to 308 km is in operation since 1996 and it is becoming a vital link between the Central Asian, Russian and European railroad systems and South Asia and the Persian Gulf.

The construction of the 203 km Turkmenabat-Atamyrat track was completed in 1999. This branch line connects five regional centres of the Lebap area with the city of Turkmenabat and with the capital Ashgabat. After the construction of the bridge with parallel highway and railway, the new 215 km branch line Turkmenabat-Atamyrat-Kerkichi is becoming a core of the Central Asian transport system.

The 540 km North-South TransKarakum railway Ashgabat-Karakumy-Dashoguz across the Karakum desert operated since 2006 halves the transit between two of the largest areas of the country - Akhal and Dashoguz.

As in most CIS countries the investment needs to renew and modernize rolling stocks have been much delayed and are suffering from a general shortage. In 2011, CSR signed a USD 395 M contract to provide 75 locomotives to Turkmenistan. Under the agreement CSR will deliver ten diesel locomotives for freight trains and 40 shunting locomotives and will also supply spare parts for the railcars. In 2012, Turkmenistan also purchased 350 diesel-powered drive engines in China. In 2012, the British company Stock Plaza completed a number of supplies for the Ministry of Railway Transport of Turkmenistan for several batches of special freight waggons for transportation of cement, mineral fertilizers, grain and mineral products, as well as self-unloading waggons. New passenger cars are imported from China and, as of 2012, the fleet has been almost completely renewed and increased by 271 cars. The locomotive fleet received 36 units. The freight waggon fleet has been significantly upgraded by more than 1,000 units.

The Master Plan for railway transport for the period 2012-2016 foresaw national investments in the following projects:

- Construction of the railway line Atamyrat-Imamnazar

Turkmenistan will be connected to Afghanistan when the railway line Atamyrat – Imamnazar/Aqina – Andkhoy will be completed. Works have started in 2013 and should be completed in 2015. The Turkmen section is 85 km long and includes the construction of 5 new stations and 2 bridges.

- Construction of the line Gazachak-Shasenem-Dashoguz.

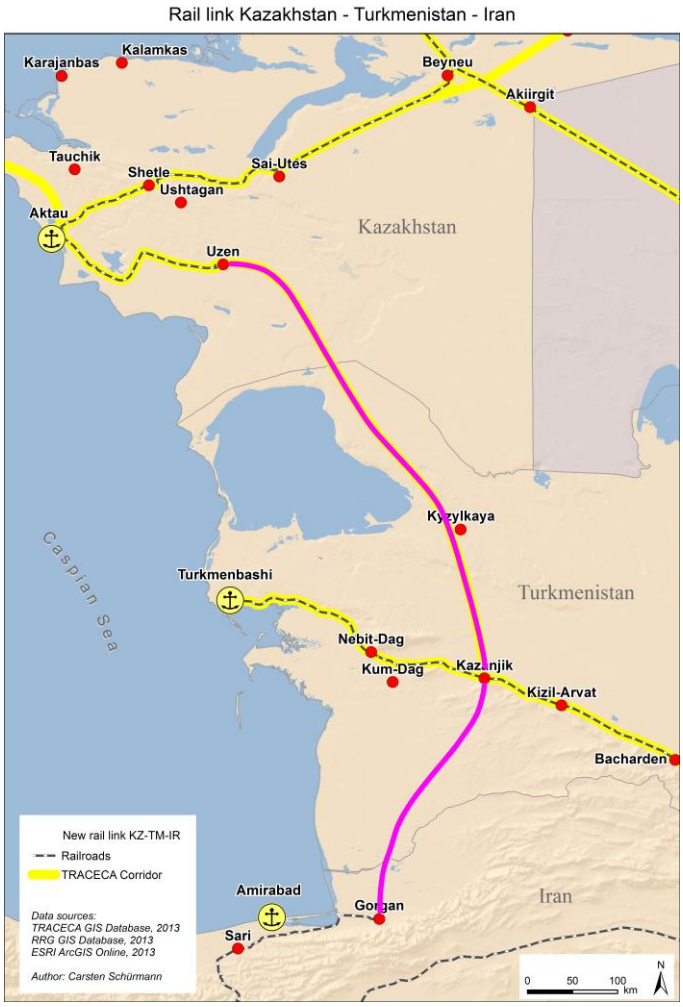
Through this project, Turkmenistan aims at bypassing Uzbekistan and unifying its railway network as currently, Gazachak and Dashoguz are connected by rail only via Urgench in Uzbekistan.

- The continuation of the "North-South" corridor from border of Kazakhstan to Iran border with the construction of new stations and the acquisition of locomotives.

Turkmenistan launched the construction of its portion of the international Uzen – Gyzylgaya – Bereket – Etrek – Gorgan line, passing through Kazakhstan, Turkmenistan, and Iran at the end of 2007. Over 700 km of this 900 km line pass through Turkmenistan. The Asian Development

Bank agreed to co-finance the project (75% of project cost) and provided a USD 125 M loan to Turkmenistan for 25 years with a 5-year grace period. It is expected that by 2016 the capacity of the rail line will reach 10 M tons. The construction of the section from the Kazakh border to Bereket (444 km) is today completed but the electrification of the line is not yet finished. The remaining section from Bereket to the Iranian border at Etrek (325 km) is under construction.

Figure 9: North-South rail corridor



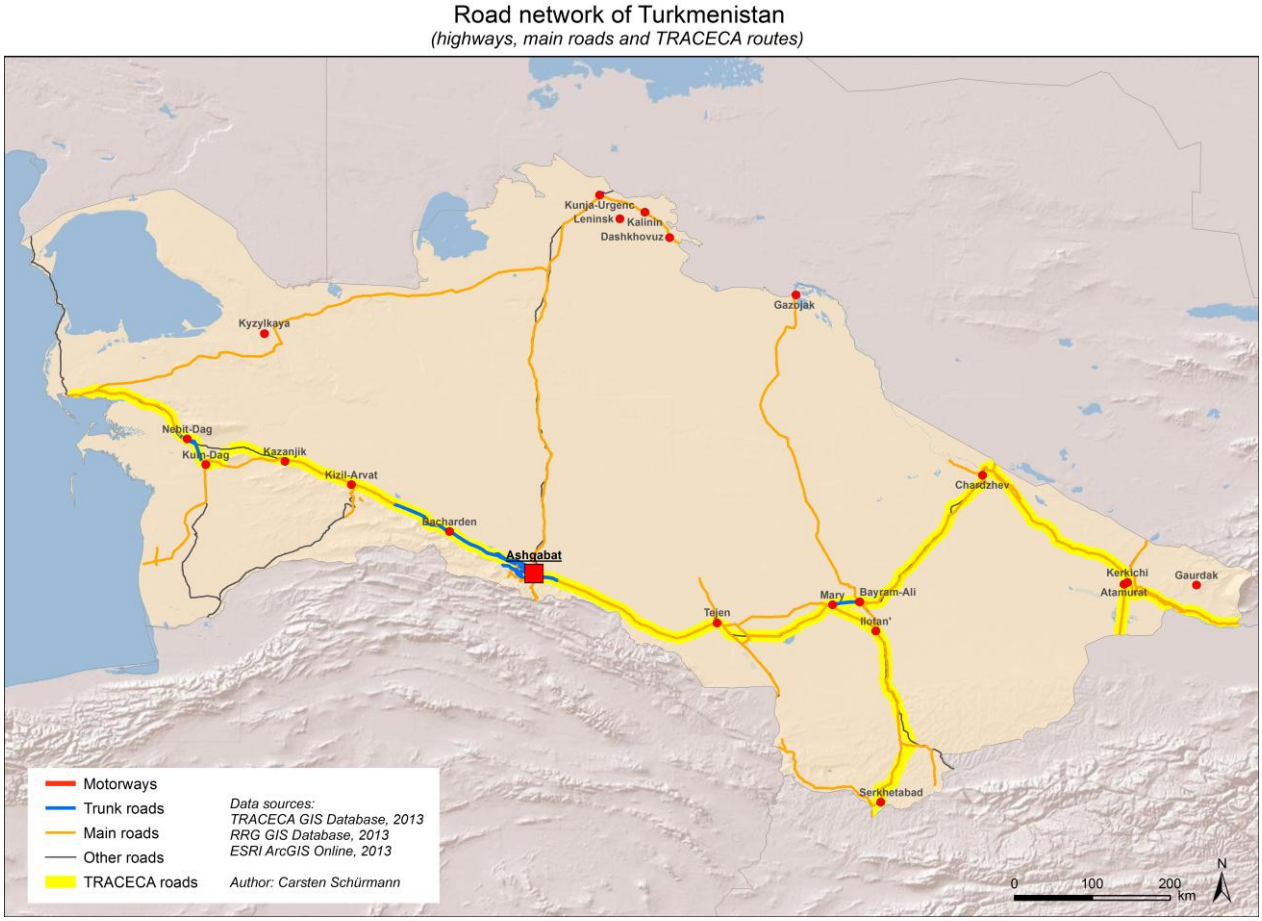
- The construction of a rail Bridge over the Amur Darya as part of the Turkmenabat-Farab line.

This 2,300 m long Rail Bridge should replace the current old rail bridge constructed in 1901 which limits the crossing of the Amur Darya River for large cargos due to its fragility. The project should increase the speed and the volume of transit cargo. Construction started in 2013 and should last until 2016.

- The construction of HSP rail lines between Turkmenbashi city and Balkan Province and Turkmenabat city to Lebap Province.
- Train management single center in Ashgabat.
- Autoblock system and electric centralization including power supply and controllers for the section of railway “Bereket-Gyzylkaya-Uzen”.

6.2.3 *Inland Transport Mode: Roads*[3]

Figure 10: Turkmenistan Road Map



Source: TRACECA (2013)

Road is the main transport mode in Turkmenistan. The total length of the road network of Turkmenistan is 24 000 km (18% of which are unpaved). The road density equals 49.2 km per 1,000 sq km, which is somewhat high considering that 90% of the territory of Turkmenistan is covered by deserts. The key Asian highways pass through the territory of Turkmenistan (AH5, AH70, AH75, AH77, AH78) with a total length of 2 204 km.

Most paved ways have 2 or more lanes. The main "E" European roads crossing Turkmenistan are:

- E121 (border of Kazakhstan at Bekdash – Turkmenbashi – border of Iran at Gudriolum)
- E60 (Turkmenbashi - Gyzylarbat – Ashgabat – Tedjen – Mary – Chardzhu)
- E03 (Uzbek border – Dashoguz – Ashgabat – Iran border at Gaudan)

The maximum size and weight of vehicles traveling through the territory are: 4 m in height, 18 m length for trailer, 20 m for truck + trailer, and 24 m for road train, 2.5 m in width, 6.9 t per axle

[3] More detailed information on the road sector of Turkmenistan, figures and state of projects can be found in the separate road report of the LOGMOS Master Plan

and 38 t in total weight. The maximum speed on key motorways (category I) 90 km / hour for freight vehicles.

In 2012, according to the government figures, 89% of all cargos were transported by road. The transported volume increased by 60% on the period 2000-2011.Turkmenistan has 13 road border crossing points (BCP). As far as imports are concerned, the busiest BCPs are Serakhs and Gudriolum, both located on the border with Iran. The majority of exports by road go through Gudriolum and Artyk BCPs with Iran. Artyk and Sarakhs have respectively 45% and 50% of their traffic in transit through Turkmenistan. The routes Artyk – Farab and Sarakhs – Farab represent 70% of all road transitMost

Turkmenistan has the ambition to build a network of highways meeting international standards throughout the country. By 2020, the total length of the road network should reach 23.9 th. km.

The following highways are under construction currently:

- Ashgabat-Turkmenbashi (574 km)
- Ashgabat-Mary (352 km)
- Mary-Turkmenabat (255 km)
- Turkmenabat-Farab (36 km)
- Ashgabat-Karakum-Dashoguz (546 km)

The planned reconstruction of old and new construction for 2012 – 2016 are:

- Ashgabat by-pass
- Turkmenbashi-Bekdash-Kazakhstan border (240 km)
- Mary-Serkhetabat (330 km)
- Turkmenabat-Gazachak-Dashoguz (541 km).

It is planned to upgrade some road sections to the first category increasing the maximum design speed to 120 km/h. For instance, the Ashgabat – Turkmenabad road section (600 km) should be upgraded into a 6-lane road with elevated segments and interchanges.

Delivery by truck to Kazakhstan via Bekdash (in the north-west) is limited due to the very poor road condition, but there is a rehabilitation plan.

The most important project is the reconstruction of the pontoon bridge across the Amu Darya at Farab leading to Uzbekistan and further to Kazakhstan. As much as 2,500 000 t cargos are transiting there every year in Turkmen, Turkish, Iranian, and Russian, Kazakh or even Afghan and Pakistani trucks.

The building and reconstruction of highways in Turkmenistan is under the management and control of the State business concern «Turkmenavtoyollary».

Main Features of the Existing Transport Service

Owing to its geographical location, Turkmenistan is a most important link on the TRACECA route between Europe, Central Asia and further China. Crossing the Caspian Sea from Baku (and in the future from Alyat) to Turkmenbashi and back saves 1,400 km of driving through Iran (at an estimated USD 600 of fuel cost, notwithstanding other transit expenses in Iran) and is by far the shortest and cheapest way for trucks from Turkey and Caucasus into Central Asia. Likewise Turkmenbashi is the entry point of the main railroad network into Uzbekistan and further Kazakhstan, all other landlocked ‘stan’ countries and China.

The maritime service between Baku and Turkmenbashi is therefore of paramount importance for the TRACECA program as a whole.

The present offer by CASPAR, the National shipping line of Azerbaijan, is far from meeting users' expectations for reasons seemingly connected with the modus operandi at Turkmenbashi port. Apart from the technical problems identified above in this report, the main bottleneck for the rail-ferry operation is the poor coordination between the various governmental transport agencies.

The Turkmen government intends to acquire two new ferries which should improve the frequency, space availability and regularity of the sailings for the road traffic.

Further, the combination of the following weaknesses has a very negative impact on the container trade via Turkmenbashi and entails its deviation by sea to Bandar-Abbas and, from there, through one of the four road crossing points disseminated along the border and into Turkmenistan by truck:

- inadequate shipping services (at least regular, if not by specialized vessels) from/to Turkmenbashi,
- inadequate handling equipment at the Turkmenbashi Port Railway Station,
- shortage of fitting platforms,
- lengthy traditional administrative and commercial procedures as well as regulatory set-up (railways and consignee liability regime as well as the railway consignment note),
- heavy delays resulting from the above in delivering imported cargo to consignees, as well as in returning empty equipment back to shipping lines and, in both cases, subsequent heavy additional demurrage and other expenses.

The following other non-physical issues have to be addressed at the same time:

- Handling tariffs for containers have to be adjusted and simplified in order users may be quoted 'flat' rates. The Turkmenbashi Port is aware about this problem and ready to tackle it in order to increase the flow of TRACECA cargo through their facility;
- Rules of customs' clearance, cargo and container documentation have to be revised in order to decrease costs, speed up cargo delivery and facilitate the trade.

6.3 Trade and Transit Facilitation

6.3.1 General Presentation

- **Procedures and formalities** are among the **main barriers** that hamper 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. There is a minimum of two points in a single/one sea service, up to 5 points in inter-seas services that link 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 take place along the sea based transport chains: most commonly 3 transfers and a

minimum of 6 handling plus 2 storages in the case of a single sea leg, and several more handling operations in the inter-seas services
  - Previous and ongoing experience 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 factor in finding success.
- The procedural process in ports and at other border crossing points 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 dealing with these complex issues and drawing the corresponding revenues out of their resources. Relationships between institutions on one side (Customs first, but also other Ministries and inspection bodies) operators and users on the other, are affected by these functions which mix with the physical transit and transport operations.

- The **impacts of administrative and regulatory barriers** are generally more important when there is a sea leg, because:
  - 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 mismatched, 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 add 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 summarised in the following project documents:
  - Country profiles, as synthesised 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 organisation etc…)

6.3.2 SWOT Analysis

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

Table 10: SWOT Analysis in Trade and Transit Facilitation Procedures

STRENGHTS	• Membership in various regional and international organisations (CAREC, CIS, ECO, IMO, OSJD, UNECE, UNESCAP) • Agreement on International Rail Freight Communications (using SMGS consignment note) • Counterpart of six UNECE transport conventions • Bilateral agreements regarding transport and customs issues with LOGMOS beneficiary countries • Numerous national projects on transport infrastructure improvement
WEAKNESSES (BARRIERS)	• Non-accession to the major international conventions and legal instruments • Perceived uncertainties with commitment to Customs and trade facilitation reform and modernization • Border crossing points not designed for high volume traffic flows, which does not facilitate selectivity based on electronic risk analysis by Customs and other border crossing agencies • Mistrust between Customs and trade facilitation agencies and private industry because of integrity issues and lack of complete Customs and trade facilitation • Heavy bureaucratic and time consuming documentation requirements • Absence of electronic pre alert import and export declaration
OPPORTUNITIES	• Start developing a trade and transit facilitation strategy • Increasing trade relations
THREATS	• Hesitance in joining international conventions on trade and transportations issues • Continued delays and costs owing to inconsistent Customs and other border crossing agency decisions

	and integrity issues • Delays in implementation of transit / transshipment procedural improvements in ports and inland border crossings

7 PILOT PROJECTS SELECTED FOR MOS I AND ILC PROJECTS

To address the existing challenges for MOS and ILC promotion, two TRACECA projects ran a pre-screening for potential pilot projects. The pre-screening was based on the multi criteria analysis of the proposed pilot, which helped to narrow down the pilot projects list.

The list of retained pilot included the following projects:

Table 11: Selected Pilot Projects in Turkmenistan

Pilot project	Service proposed	Countries involved directly	Concerned TRACECA project
CS2 Baku – Turkmenbashi Rail Ferry Line	Improving existing rail / Ro-Ro / container intermodal transport	Turkmenistan Azerbaijan	MOS project
Turkmenbashi Port ILC	International Logistics Centre at Turkmenbashi Port	Turkmenistan	ILC project

As a result of the first phase of MOS I and ILC implementation, for the 2 above mentioned pilot projects, feasibility studies were elaborated. Short summaries of these projects can be found here.