6 STRATEGIC CHALLENGES

6.1 Market Challenges

6.1.1 National Trade: Exports and Imports

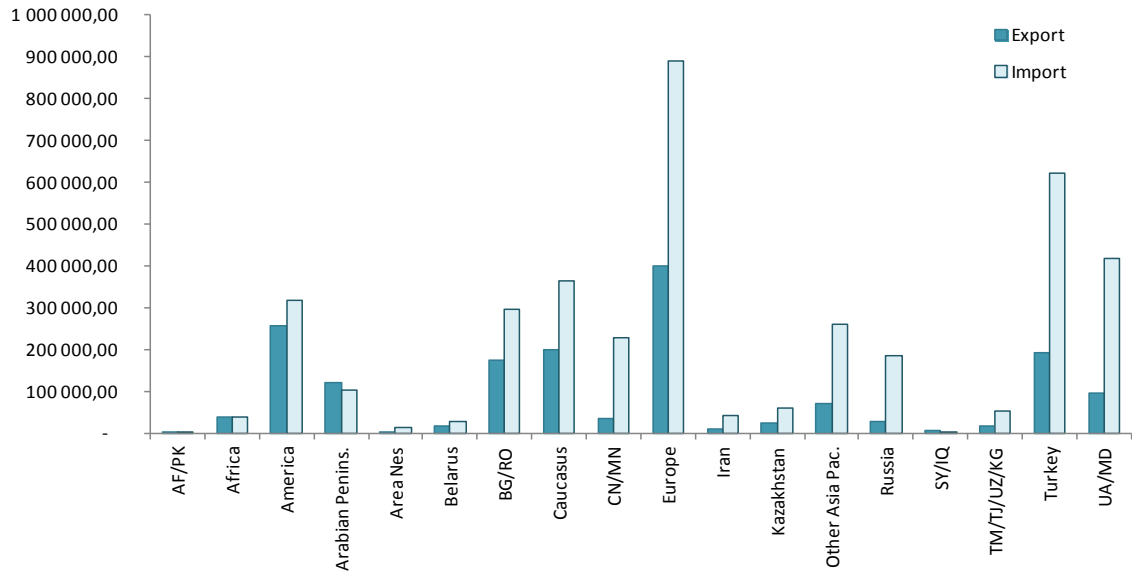
World Trade Partners

Thanks to its location in the heart of TRACECA main corridor, Georgia is a key transit state for trade among TRACECA states, and more broadly East-West trade all the way from Europe to China. Besides of being an important TRACECA market, the strategic importance of Georgia reinforced by the fact that the majority of all land trade to and from Armenia passes through Georgia. In 2010, exports to Georgia amounted to 1, 695 M Euros while imports reached 3, 935 M Euros.

Analysing the 2010 trade partners of Georgia (Figure 2 and Table 5), the following observations can be drawn:

- Georgia is a net importer. Imports dominate exports with every partner except those at destination to the Arabian Peninsula.
- Imports to Georgia come from Europe (22.63%), Turkey (15.85%), Caucasus (9.28%) and America (8.12%), using thus in majority western TRACECA commercial routes.
- Exports are also in majority westbound as the destinations of Georgian products are Europe (23.68%), America (15.14%), Caucasus (11.87%) and Turkey (11.28%).
- Trade with TRACECA countries account for less than half of Georgia global trade flow (46.14% of total imports and 41.64% of total exports). Among these countries, main partners are Turkey (14.47%), Caucasus (10.06%) and Ukraine/Moldova (9.12%). Trade with Central Asian countries (Kazakhstan + TRACECA South-East countries) is estimated at only 2.81%.

Figure 2: Georgia Trade Partners, 2010, th euros



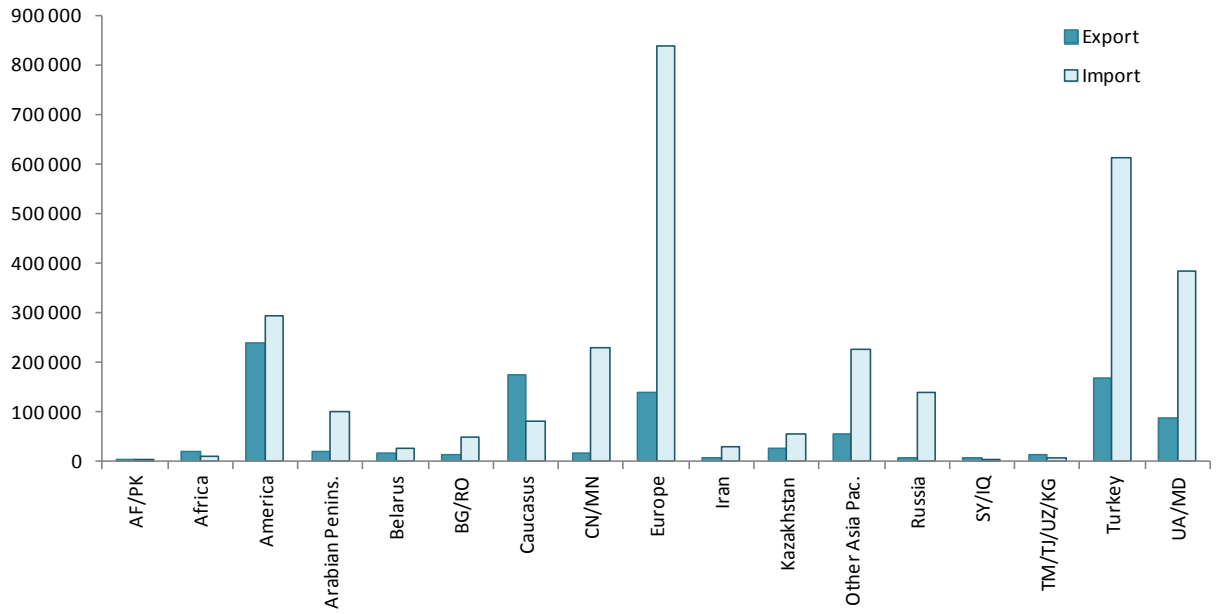
Source: Computation based on Eurostat and UN Comtrade databases

If to leave bulk commodities aside and focus the analysis on containerizable goods (figure 3 and table 5), it can be noticed that:

- Georgia is still a net importer. With the exception of the Caucasus countries, the rest of Georgia non bulk trade resulted in a negative merchandise trade balance. Armenia is the explanation for such a result as the majority of land trade to and from this landlocked country pass through Georgia.
- Bulk goods left aside, imports are three times more important than exports.
- Bulk products constitute an important part of Georgia exports (40.05%).
- Regarding only contenairizable goods, imports to Georgia come from Europe (27.14%), Turkey (19.77%), Ukraine/Moldova (12.43%) and America (9.52%).
- Destinations of exports are respectively America (23.52%), Caucasus (17.25%), Turkey (16.62%) and Europe (13.67%).

As could be seen from figure 2 and table 5, an important part of Georgia is targeted to North-West TRACECA, Turkey and Caucasus neighbouring states.

Figure 3: Georgia Trade Partners, Potential Trade, 2010, th. euros



Source: Computation based on Eurostat and UN Comtrade databases

Table 5: Distribution of Georgia 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	0.06%	0.02%	0.05%	0.08%	0.02%	0.07%
Africa	1.02%	2.36%	1.43%	0.33%	2.11%	0.77%
America	8.12%	15.14%	10.23%	9.52%	23.52%	12.98%
Arabian Peninsula	2.66%	7.18%	4.02%	3.31%	1.96%	2.98%
Area Nes	0.34%	0.15%	0.28%	0.00%	0.00%	0.00%
Belarus	0.76%	1.01%	0.83%	0.91%	1.63%	1.09%

Bulgaria-Romania	7.51%	10.23%	8.33%	1.60%	1.37%	1.54%
Caucasus	9.28%	11.87%	10.06%	2.61%	17.25%	6.23%
China-Mongolia	5.84%	2.02%	4.69%	7.42%	1.66%	6.00%
Europe	22.63%	23.68%	22.95%	27.14%	13.67%	23.81%
Iran	1.11%	0.62%	0.96%	0.94%	0.74%	0.89%
Kazakhstan	1.53%	1.55%	1.54%	1.83%	2.58%	2.02%
KY-TJ-TM-UZ	1.35%	1.08%	1.27%	0.28%	1.38%	0.55%
Other Asia Pacific	6.59%	4.17%	5.86%	7.27%	5.44%	6.82%
Russia	4.70%	1.61%	3.77%	4.50%	0.68%	3.55%
Syria-Iraq	0.03%	0.39%	0.14%	0.04%	0.62%	0.19%
Turkey	15.85%	11.28%	14.47%	19.77%	16.62%	18.99%
Ukraine-Moldova	10.62%	5.63%	9.12%	12.43%	8.77%	11.52%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: Computation based on Eurostat and UN Comtrade databases

To deepen the analysis, one should also look at the tonnage of imported and exported goods from/to Georgia (see table 6). It can be recorded that:

- The weight of goods traded with Turkey dominates extensively imports and exports (35.06% / 38.45%).
- Other significant trade in terms of tonnage is made with Ukraine/Moldova, Europe and Caucasus.
- Tonnage of imports are twofold more important than those of exports.

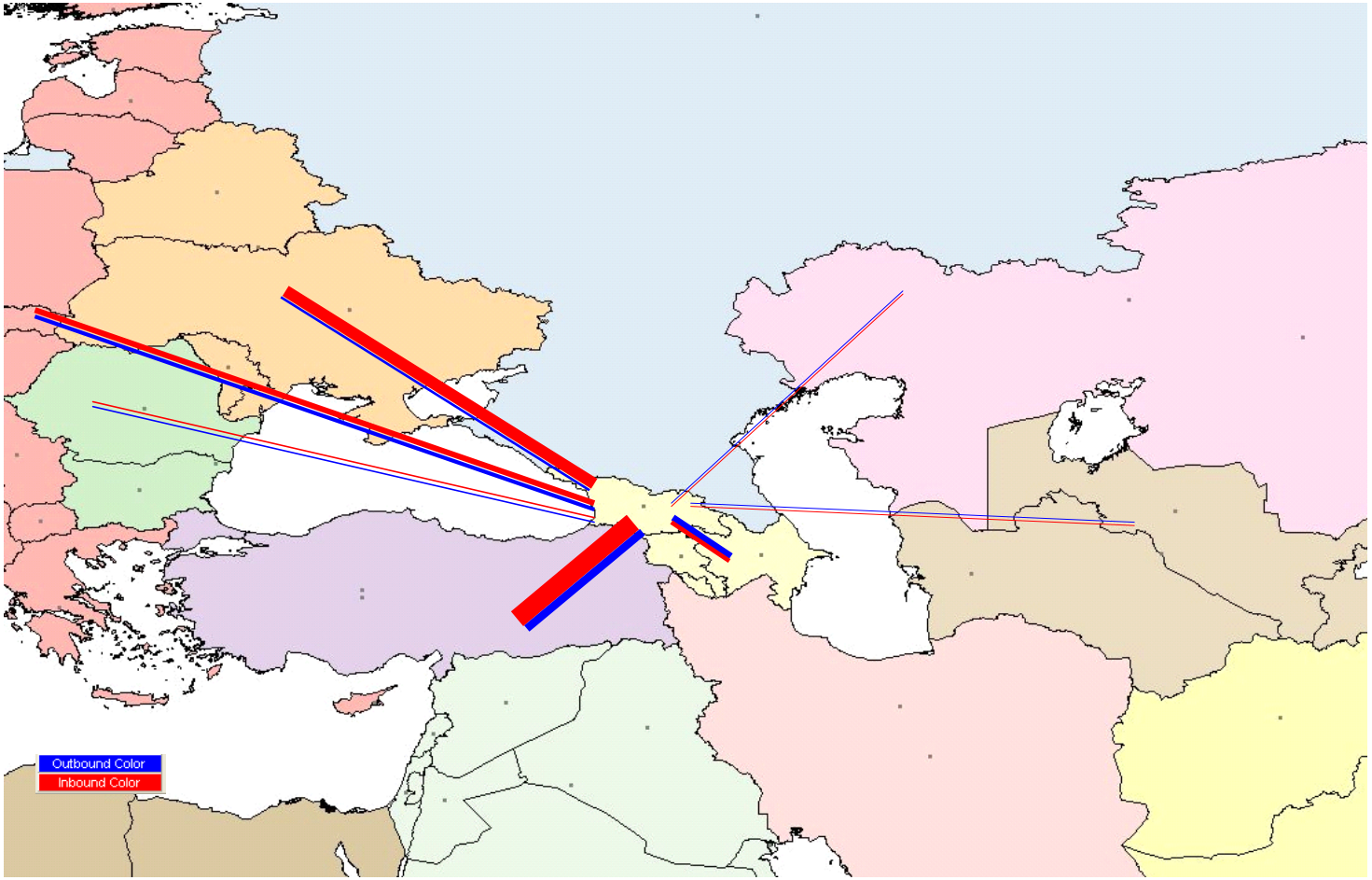
As demonstrated in the figure 4, there is an imbalance between East bound and West bound trade flows from and to Georgia. The latter concentrates almost 70% of the total trade.

Table 6: Georgia 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	59 220.1	61 410.8	6.43%	3.08%
Caucasus	256 836.9	175 716.3	27.87%	8.81%
Europe	159 450.9	234 329.3	17.30%	11.75%
Kazakhstan	15 812.0	261 955.3	1.72%	13.14%
KY-TJ-TM-UZ	6 421.8	20 974.9	0.70%	1.05%
Turkey	323 062.0	766 562.0	35.06%	38.45%
Ukraine-Moldova	100 724.2	472 768.5	10.93%	23.71%
Total	**921 527.9**	**1 993 717.1**	**100%**	**100%**

Source: Computation based on Eurostat and UN Comtrade databases

Figure 4: Georgia 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

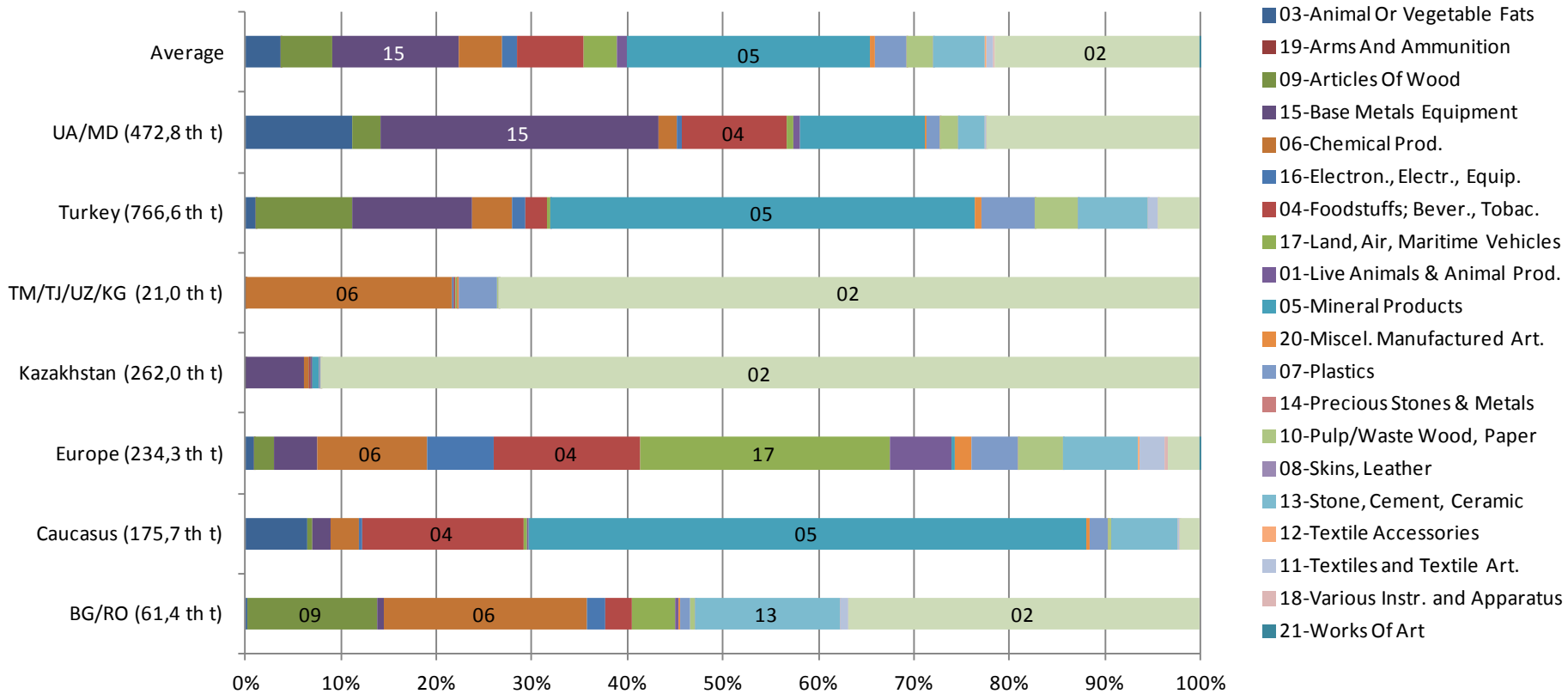
As far as imports from TRACECA countries and Europe are concerned, it may be noted that:

- "Mineral products" and "vegetal products" are, on average, the most important commodities in terms of tonnage.
- Mineral products come mainly from Caucasus and Turkey and as they comprise mostly construction material, they could be partially containerized.
- "Vegetal products" account for more than half of imports tonnage from Kazakhstan and TRACECA South East countries. They consist in cereals for the vast majority and could be also partly containerized.
- The commodity structure of imports from Europe is dominated by "Land, Air and Maritime vehicles". This commodity could also been transported in containers.

Regarding exports from Georgia, the following points may be underlined:

- The main commodities which structure exports from Georgia are "Base metal equipment", "chemical products" and "Foodstuffs, beverage, tobacco".
- "Base metal equipment" exported mainly to Ukraine and Turkey, most of it consisting in iron and steel product which is only very partly containerizable.
- "Chemical products", including containerizable goods, exported mainly to Europe, Turkey and Bulgaria/Romania. This category constitutes to 99.50% of all exports to Bulgaria/Romania.
- "Foodstuffs, beverage, tobacco" exported mainly to Europe, Ukraine, Kazakhstan and the TRACECA South-East countries also represent a potential for containerization.

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



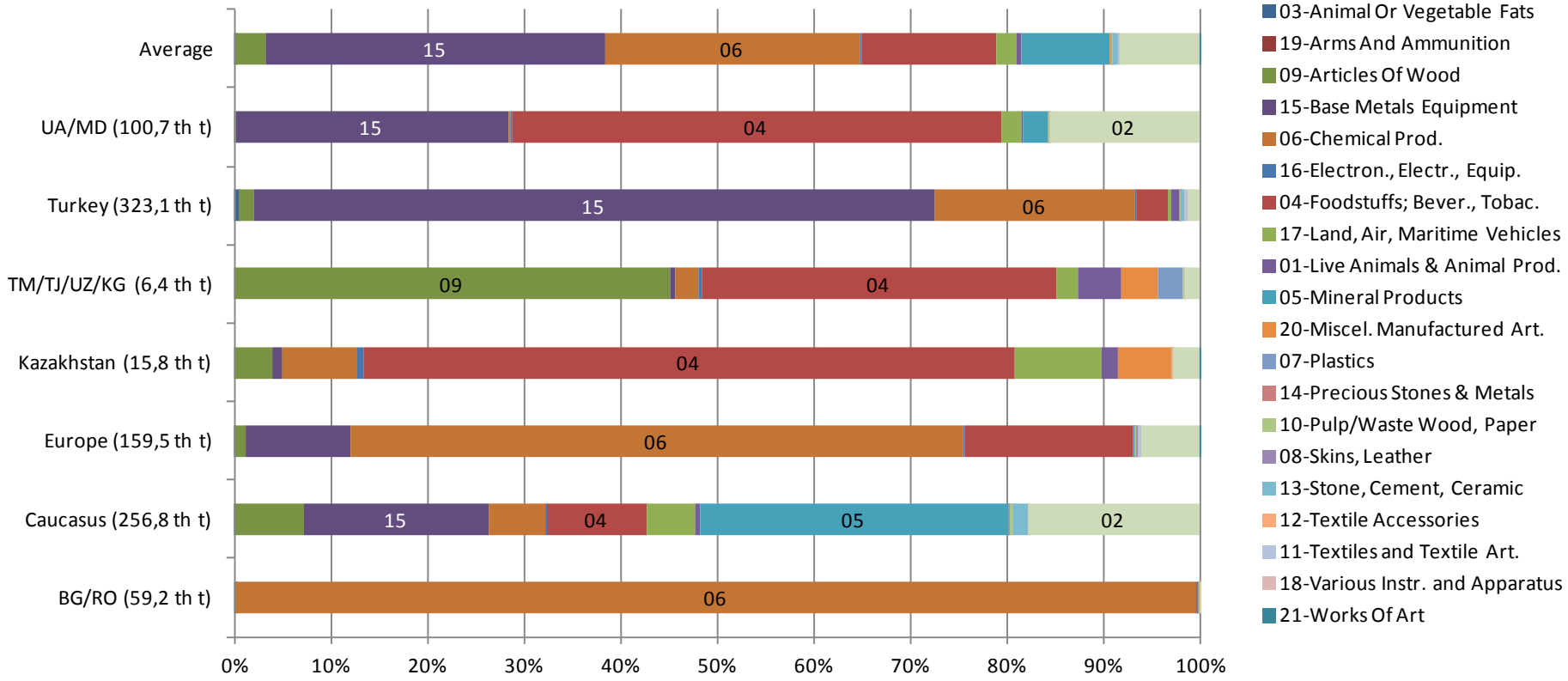
Source: Computation based on Eurostat and UN Comtrade databases

Table 7: Potential Trade with TRACECA Region – Commodity Structure of Imports to Georgia, 2010, in Tons

Commodity Groups	Bulgaria-Romania	Caucasus	Europe	Kazakhstan	KY-TJ-TM-UZ	Turkey	Ukraine-Moldova
Animal Or Vegetable Fats	64.70	11 503.86	2 097.30	n/a	n/a	7 726.77	53 066.76
Arms And Ammunition	n/a	n/a	85.60	n/a	n/a	35.14	n/a
Articles Of Wood	8 380.50	785.39	4 760.06	0.13	0.14	78 314.91	13 922.32
Base Metals Equipment	486.60	3 493.97	10 529.75	16 219.75	0.50	96 200.09	137 112.88
Chemical Prod.	13 003.90	4 936.03	26 909.26	1 148.44	4 538.96	32 110.00	9 270.47
Electron., Electr., Equip.	1 151.60	640.76	16 678.39	1.03	41.92	10 113.91	2 895.78
Foodstuffs; Bever., Tobac.	1 767.80	29 914.73	35 832.69	640.98	11.55	18 111.15	51 983.95
Land, Air, Maritime Vehicles	2 759.70	553.86	61 169.83	15.76	68.49	2 149.47	2 945.62
Live Animals & Animal Prod.	181.60	192.32	15 108.10	191.16	2.40	543.85	3 647.00
Mineral Products	0.00	102 865.83	995.50	2 099.96	n/a	340 337.15	61 229.19
Miscel. Manufactured Art.	153.70	381.04	4 086.87	5.96	6.69	4 759.94	1 460.39
Plastics	688.60	3 419.00	11 249.29	363.93	838.26	43 591.10	6 471.49
Precious Stones & Metals	n/a	0.34	5.10	0.00	0.00	4.51	0.90
Pulp/Waste Wood, Paper	300.90	653.60	11 116.90	0.66	58.39	34 650.40	9 147.78
Skins, Leather	1.90	25.38	38.95	0.01	0.00	165.15	15.14
Stone, Cement, Ceramic	9 269.10	12 126.14	18 500.36	21.11	0.68	55 664.13	12 659.01
Textile Accessories	4.90	36.78	186.16	0.05	0.00	424.43	17.48
Textiles and Textile Art.	517.30	370.85	6 214.61	1.18	5.28	7 659.59	923.98
Various Instr. and Apparatus	4.90	7.82	939.73	0.13	0.00	54.62	50.50
Vegetable Products	22 673.10	3 808.62	7 800.00	241 245.09	15 401.64	33 945.61	105 947.83
Works Of Art	n/a	0.01	24.80	0.00	n/a	0.05	0.00
Total imports	**61 410.80**	**175 716.32**	**234 329.27**	**261 955.33**	**20 974.90**	**766 561.97**	**472 768.48**

Source: Computation based on Eurostat and UN Comtrade databases

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



Source: Computation based on Eurostat and UN Comtrade databases

Table 8: Potential Trade with TRACECA Region – Commodity Structure of Exports from Georgia, 2010, in Tons

Commodity Groups	Bulgaria-Romania	Caucasus	Europe	Kazakhstan	KY-TJ-TM-UZ	Turkey	Ukraine-Moldova
Animal Or Vegetable Fats	n/a	135.09	47.90	n/a	n/a	1 337.58	n/a
Arms And Ammunition	n/a	n/a	0.00	n/a	n/a	2.53	n/a
Articles Of Wood	71.40	18 570.75	1 826.25	617.93	2 899.48	5 046.68	106.67
Base Metals Equipment	28.40	48 979.97	17 394.30	175.97	33.52	228 084.77	28 501.79
Chemical Prod.	58 921.30	15 049.15	101 042.01	1 209.57	153.08	66 885.29	209.91
Electron., Electr., Equip.	8.20	482.44	151.92	124.29	24.53	166.17	63.23
Foodstuffs; Bever., Tobac.	55.20	26 504.93	27 860.72	10 644.23	2 355.10	10 913.65	51 167.41
Land, Air, Maritime Vehicles	9.30	12 832.58	70.16	1 420.38	148.62	1 029.95	1 986.44
Live Animals & Animal Prod.	n/a	1 431.82	0.00	263.58	280.73	2 545.70	276.79
Mineral Products	0.60	81 725.34	198.70	n/a	n/a	6.69	2 531.15
Miscel. Manufactured Art.	37.70	96.45	54.96	876.30	240.26	14.39	0.39
Plastics	2.10	293.67	36.83	0.19	175.42	74.93	1.40
Precious Stones & Metals	n/a	0.17	23.50	n/a	n/a	0.44	0.00
Pulp/Waste Wood, Paper	0.60	1 053.45	97.30	0.06	2.45	473.84	108.23
Skins, Leather	n/a	15.25	391.32	0.51	n/a	268.21	0.01
Stone, Cement, Ceramic	18.00	3 767.30	69.49	17.21	n/a	963.18	1.00
Textile Accessories	0.00	6.32	1.26	1.01	0.04	4.81	0.02
Textiles and Textile Art.	17.20	53.26	500.11	8.98	0.10	894.69	3.74
Various Instr. and Apparatus	0.00	16.29	10.98	0.03	1.35	1.70	0.70
Vegetable Products	5010	45 822.72	9 672.73	451.78	107.11	4 346.86	15 765.30
Works Of Art	n/a	0.00	0.40	0.01	n/a	n/a	0.00
Total exports	**59 220.10**	**256 836.94**	**159 450.85**	**15 812.03**	**6 421.80**	**323 062.04**	**100 724.18**

Source: Computation based on Eurostat and UN Comtrade databases

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

The Georgian port system comprises 2 medium-size bulk, general cargo and container ports, Poti and Batumi, plus oil terminals at Supsa and Kulevi. A billion dollar investment is planned up to 2015 by private Georgian investors at Supsa. At 18 m this harbour has, by far, the greatest available depth along the Georgian Black Sea Coast. Economist observers however question the timing of building such a big facility when global economic crisis reduces the demand for freight transport.

Poti and Batumi

These ports are the Eastern Black Sea intermodal gateways westbound to Black Sea, Turkey and Europe and eastbound to the Caucasus and Asia.

Both ports are served by regular railferry and container services linking them with other Black Sea ports and Mediterranean ports.

They are geographically close; handle both containers but different types of non-containerized cargo (Batumi being more specialized in liquid and solid bulk and Poti in solid bulk and general cargo).

Poti has an advantage in terms of a shorter rail route to Tbilisi and Baku, whereas the rail link between Batumi via Poti has restricted train lengths.

Batumi, on the other hand, has greater depths and does not need permanent dredging as Poti where the Rioni river washes along sediments into the port aquatorium.

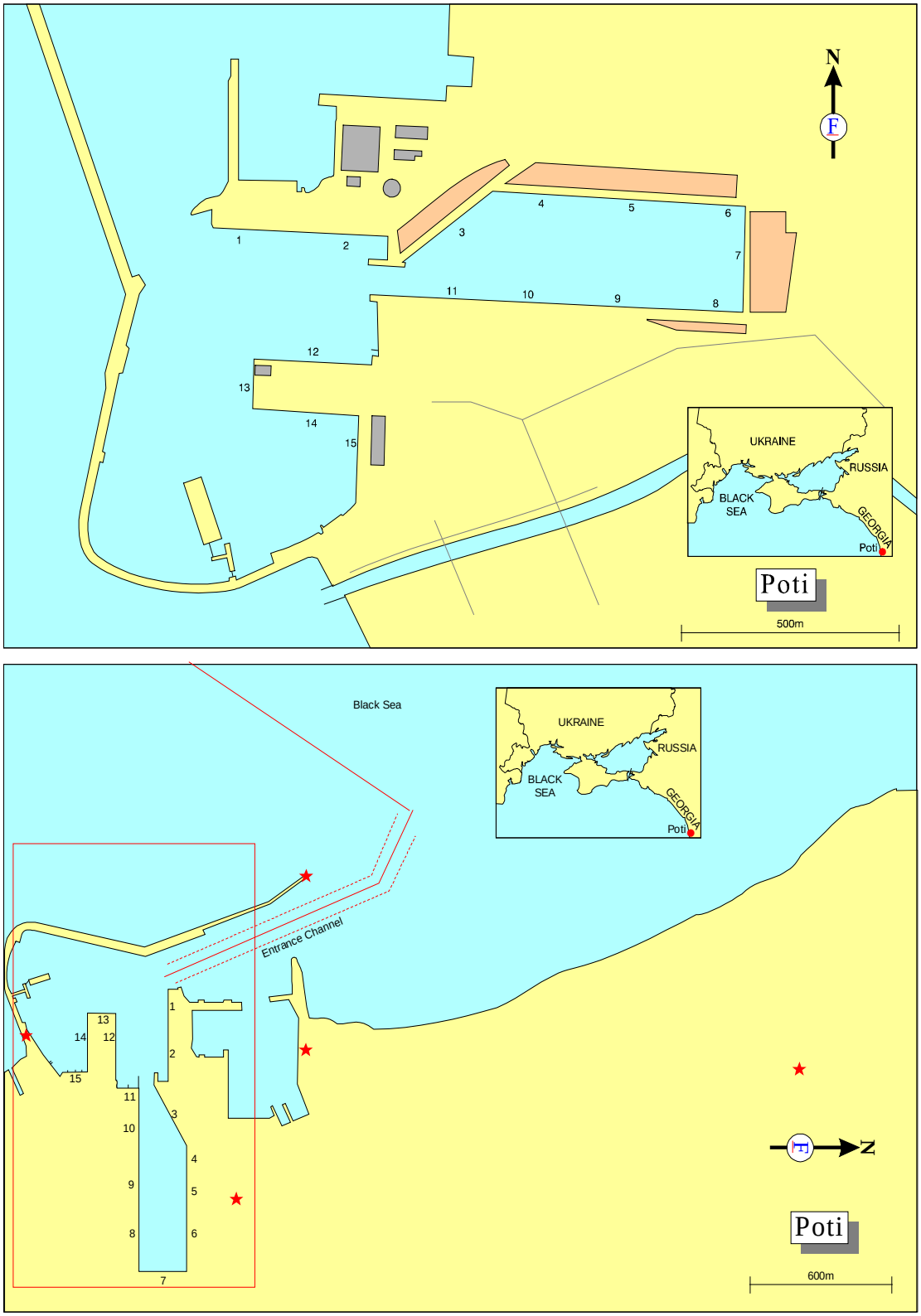
Port of Poti

The port of Poti is the largest commercial (predominantly non oil and gas) port on the Black Sea of Georgia.

In April 2008 the port was privatized. RAKIA (Ras Al Khaimah Investment Authority) signed a 49 years concession contract to operate the port and develop a Free Economic Zone. In April 2011 RAKIA sold 80% of its shares to global container terminal operator AP Moeller Terminals, a sister-company of Maersk Line.

RAKIA continues to operate the Poti Free Industrial Zone (FIZ), which occupies about 100 hectares adjacent to the port. RAKIA hopes to develop it into a major logistics and industrial centre, pledging a 200 M $ investment. Tax exemptions from profit, property as well as VAT, and exemption of customs duties for exports or national sales are granted to companies settling there.

Figure 7: Port of Poti



The port has 15 berths, with a total berth length of 2900 meters and more than 20 quay cranes.

Railferries are accommodated since 1999 at berth number 2. This berth cost 3.4 M Euros funded under the TRACECA Program. The ramp has a 1,520 mm Russian gauge. The complex includes a 10,000 sqm lorry park. The nominal cargo throughput is estimated at 700,000 T.

Container vessels are berthed at pier number 7 and pier 14 rehabilitated in 2009, thanks to EBRD funding, to accommodate 1,000 TEU feeder vessels.

Limited storage facilities in the port area so far compel the stevedore to evacuate discharged containers to 8 off-dock private terminals where empty containers are stored and wherefrom full and empty export boxes are brought for loading upon vessels' calls.

In a first move to integrate activities, a storage area in the port has been completed in 2010 for handling the second-hand car containerized traffic.

APM plans a 100 M USD investment which includes a new comprehensive container terminal, which is to be built over the next 5 years on a 100 ha site adjacent to the existing port. Dredging at 17m water depth is projected to receive container vessels up to 5,000 TEUs.

Poti is directly connected to the Georgian railway network. A block container train runs every other day to Tbilisi Georgian Railway Eastern Terminal.

Table 9: Relevant Berth Data of Poti Port

Berth number		Berth length (m)	Depth (m)
2	Rail ferry (Russian gauge)	183	12.5
7	Container terminal	211	8.2
13	Ro-Ro and passenger	97	6.5
14	Multifunctional container terminal	253	8.4

Throughput	2007	2008	2009	2010	2011
Containers TEU	184,792	209,614	172,800	209,797	254,000
Capacity					
Containers TEU			100,000 Additional capacity in RAKIA new terminal		

Maritime Services

LOGMOS relevant shipping services are of 2 types:

- those connecting directly one TRACECA port to another/other TRACECA port(s) – marked (a);
- those connecting one TRACECA port to non-TRACECA port(s) whose traffic, totally or partially, is destined to/originates from the ILCs and from other LCs/hubs/urban centres which could be selected for inclusion in the LOGMOS network. This traffic is all the more significant as it generates a greater use of specific hinterland connections which contributes to and enhances the corridor dimension of the network – marked (b).

Regular services calling at Poti include the following.

<u>Railferry</u>

- UkrFerry-NaviBulgar weekly joint service to/from Kerch (a)

- BMF, a subsidiary of RZD (the Russian Railways), weekly service from/to Port-Kavkaz (b)

Cargoes carried in wagons by these lines are mainly destined to Georgia and Armenia (especially to Armenia for BMF since the (Armenian) South Caucasus Railways are also a subsidiary of RZD) and to a smaller extent to Azerbaijan. There is practically no transit cargo to/from Central Asia.

Containers

- CMA-CGM feeder to other Black Sea ports, Mediterranean (a)
- Maersk feeder to other Black Sea ports, Mediterranean (a)
- MSC feeder to Romania and Turkey (a)
- NORASIA feeder to Turkey and Russia (a)+(b)
- UFS-Arkas feeder to other Black Sea ports (a)

Due to the port features only container feeders call at Poti relaying boxes from/to main hubs in the Black Sea (Constanza, Istanbul) or the Mediterranean (Malta, Port Said). The lines are run with vessels of up to 1200 TEU maximum capacity. The world 3 first Ocean Carriers, Maersk, CMA-CGM and MSC, dominate the container market in Poti with a market share in excess of 80%, MSC holding the lion's share with over 50% of the market both import and export.

Although trucking remains the dominant inland carriage mode, import containers into Georgia are increasingly railed owing to the implementation of drastically reduced tariffs and improvement in the service offered by Georgian Railway, particularly the launching of a fixed-day block-train service every other day to/from Tbilisi as from June 2011. This, in turn, has a positive effect on the containerization of exports which, thus far, were performed in breakbulk in closed wagons for further stuffing at Poti.

Containers to/from Armenia are mostly railed on the regular Block Container Train from Poti to Yerevan.

Owing to the non-competitiveness of rail tariffs, insufficient quality of service and Customs issues, trucking to Azerbaijan either in containers or after unstuffing at Poti is by far the preferred mode of transport except for heavy loads moving mainly in 20' containers. Due to the unavailability of logistics container services in Azerbaijan, containers, after devanning, are brought straight back to Poti, whether by rail or truck. As a result all exports from Azerbaijan – even containerizable goods – move either by truck or, for heavy cargoes, in closed wagons or gondolas.

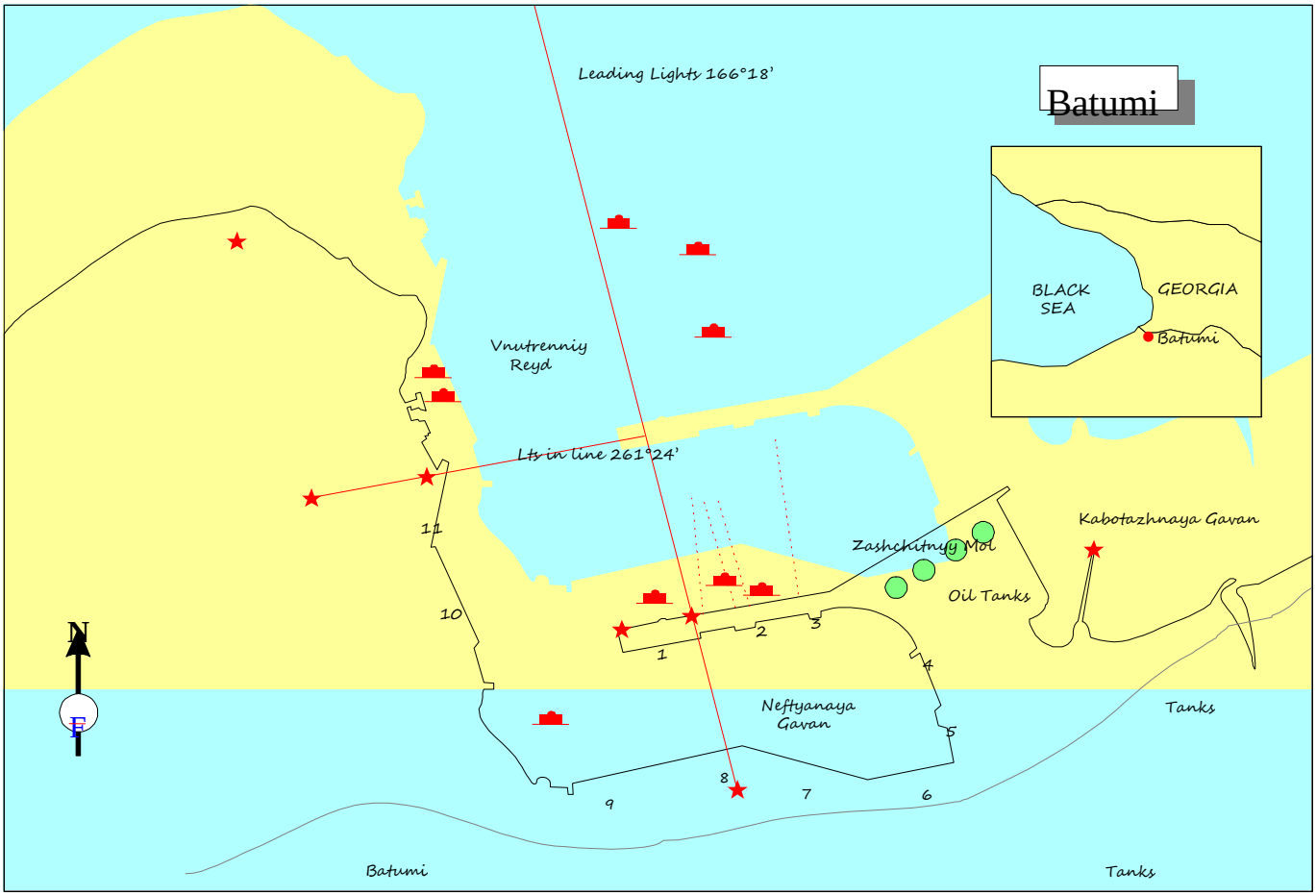
Export/import flows through Poti remain very imbalanced with a ratio of 1 to 2,5.

Port of Batumi

In February 2008 KazTransOil, the main operator in transportation of Kazakh oil both for export and domestic market and a member company of the Kazmunaygaz Group, acquired the exclusive management right of Batumi Sea Port.

Over 8 M USD had already been invested by 2009 in purchase of new equipment (such as an 18-32 T portal crane – the first bought in Georgia in over 30 years, a new mooring tug), repair and up-grading of the existing equipment, port buildings, berths and development of modern IT systems. Works are going on to pull down old dilapidated warehouses in order to increase open storage area capacity and meet better the needs for the dry bulk traffics moving via Batumi.

Figure 8: Port of Batumi



Batumi is predominantly a liquid bulk terminal. Depending on the years, crude oil and oil products represent 80 to 90% of the total turnover.

The port consists in 5 terminals: the oil terminal (berths №1, №2, №3 and CBM-conventional Buoy mooring, which can accept 4 tankers simultaneously), the multi-purpose container terminal (berths №4, №5), the railway ferry terminal, the dry cargo terminal (berths №6, №7, №8, №9) and the passenger terminal (berths №10, №11). Maximal throughput is 18 MT at the oil terminal, 2,3 M T at the dry cargo terminal and 0,7 M T at the railferry terminal. The prospective throughput of the container terminal is 300,000 TEUs per year.

In September 2007 the container terminal (including the railferry bridge and berth number 6) began to be operated by Batumi International Container Terminal, a subsidiary of ICTS.

ICTS set up the Batumi International Container Terminal on a plot of 13,6 ha, investing 15 M USD. Modern container handling equipment such as prime-movers, reachstackers and 2 x 100 MT SWL capacity mobile harbour cranes, a customs warehouse, container freight station and other state-of-the-art facilities formed part of this investment.

The Batumi International Container Terminal is handling the planning process for the first phase of a new project to increase its operational space and capacity.

The project involves several million dollars of investments in infrastructural improvements and creation of additional material and technical bases, in order to provide an enhanced quality of service for high-value goods with reduced handling times.

Figure 9: Container Feeder under Operations at Batumi International Container Terminal

Table 10: Relevant Berth Data of Batumi Port

Berth		Berth Length (m)	Depth (m)
4, 5	Container terminal	284	11,7
6	Dry cargo and rail ferry terminal (Russian gauge)	187	8

Throughput	2008	2009	2010	2011
Containers TEU	44,197	8,813	16,318	45,400
Capacity				
Storage inTEU	2,500	2,500	2,500	2,500
Handling in TEU	100,000	100,000	100,000	100,000

Maritime Services

LOGMOS relevant shipping services are of 2 types:

- those connecting directly one TRACECA port to another/other TRACECA port(s) – marked (a);
- those connecting one TRACECA port to non-TRACECA port(s) whose traffic, totally or partially, is destined to/originates from the ILCs and from other LCs/hubs/urban

centers which could be selected for inclusion in the LOGMOS network. This traffic is all the more significant as it generates a greater use of specific hinterland connections which contributes to and enhances the corridor dimension of the network – marked (b).

Regular services calling at Batumi include the following.

Railferry

- UkrFerry-NaviBulgar weekly joint service to/from Varna and Ilyichevsk (a)

Figure 10: Rail Ferry under Operations at Batumi International Container Terminal

Cargoes are mainly destined to Georgia and Armenia and to a smaller extent to Azerbaijan. There is practically no transit cargo to/from Central Asia.

Containers

- MSC feeder to Romania and Turkey (a)

Container traffic started in Batumi in 2008 only and was severely hit by the global financial crisis. The closeness of Poti and longer road and rail distances to Tbilisi and further on to Azerbaijan also bear on BICT development. Batumi port however offers better drafts and, in an effort to compensate its less favorable geographical location, the Port is proposing more attractive tariffs than Poti's (users in 2011 reported a D/A difference of up to 4,000 USD per call).

Negotiations are going on with Georgian Railway for the set-up of a block container train to Tbilisi. Furthermore existing and planned rail and road infrastructure projects will allow shortening the distances and equalizing tariffs with those from/to Poti in a not too distant future.

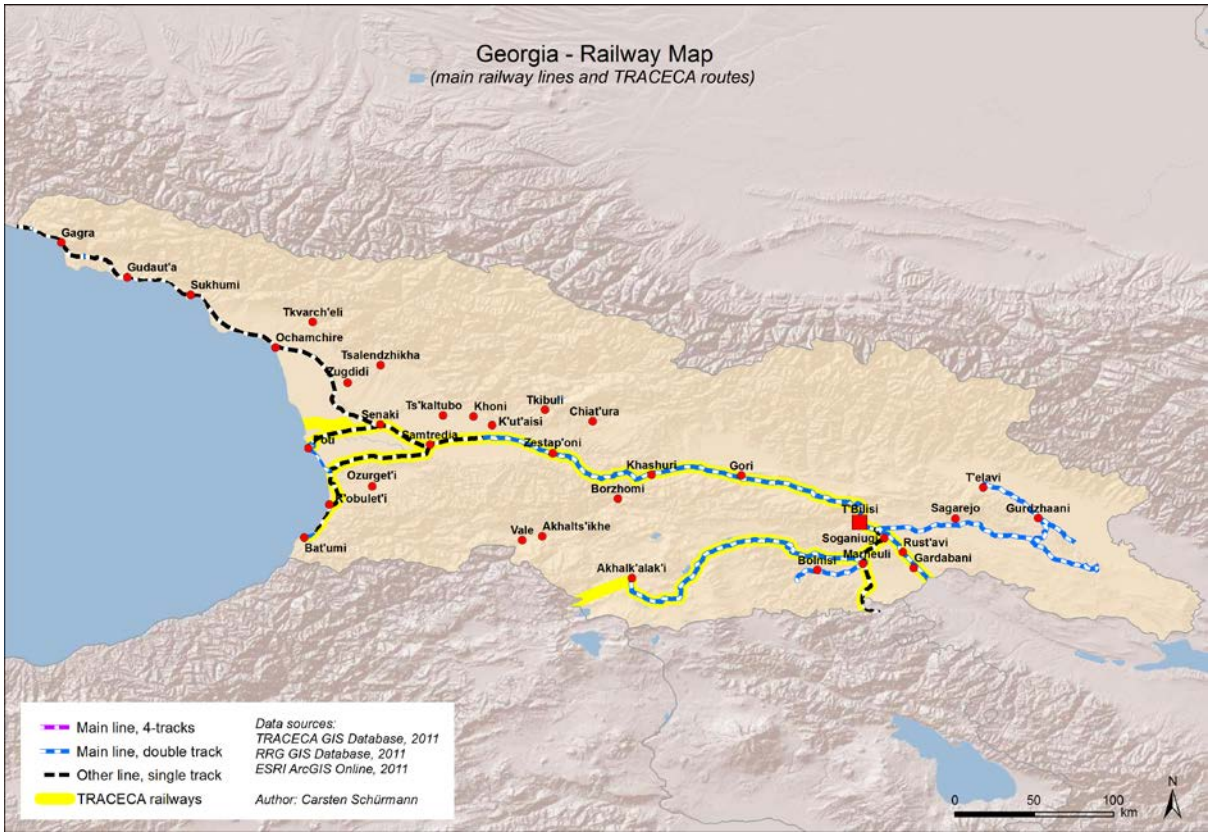
BICT has meantime developed a specialty in handling of second-hand car traffic which represents about 85% of its import flow.

Figure 11: Container Stripping at Batumi International Container Terminal

As in Poti, export/import flows are heavily imbalanced.

6.2.2 Inland Transport Mode: Railways

Figure 12: Georgia Railway Map



Source: TRACECA (2011)

Georgia is strategically placed between the Black and Caspian Seas, with Russia to the North and Turkey to the South.

Its Black Sea ports and its road and rail networks are vital TRACECA links between Europe, the other South Caucasian countries and Asia. Transit services are provided to and through Georgia's neighbours. These services include carrying oil and oil products via the pipelines that link Baku to the oil terminal of Supsa.

A strategic development plan initiated in 2004 led to restructuring of Georgian Railways (GR) as a state-owned joint stock company. The 'Georgian Railway' JSC operates under the public law of the Enterprise Management Agency, part of the Ministry of Infrastructure and Regional Development of Georgia. It is in charge of both the management and maintenance of the rail infrastructure, as well as all operations of passenger and freight services. Nevertheless GR is free to set its own tariffs and grant discounts on the basis of a commercial negotiation with the user. Over half of GR traffic and revenue is provided by oil and by-products transit moving from Kazakhstan, Turkmenistan, and Azerbaijan to Batumi and Poti. This profitable traffic provides the financial backbone for all GR operations.

In an attempt to privatise GR, in 2007, the government tried to reach an agreement for a PPP with British private equity company Parkfield, under which Parkfield would have the concession to operate the network, but the negotiations failed.

The Georgian Government still intends to privatize it separating the ownership/management of infrastructure from the operation of passenger and freight services.

In 2010 GR established a subsidiary, Georgian Railway TransContainer Ltd (GRTC) to take care of container operations and more particularly of the management of railway container terminals.

In 2011 GRTC took over all container operations from previous GR's sub-contractor InterTrans and transferred the handling of all containers incoming to or outgoing from Tbilisi by rail, from the city centre to a new 25,000 TEU capacity container terminal at Varketili, an Eastern Tbilisi suburb on the way to the airport.

The railway network consists of 1,683 km (not counting industrial lines), electrified on a west-east axis linking the Black Sea coast through Tbilisi to Azerbaijan and south to Armenia through no less than 1,422 bridges and 32 tunnels. Besides, about 80% of the network is in mountainous terrains.

Table 11: Main Features of the Georgian Railway Network

Total route length (km)	Gauge (mm)
1,583	1,520
37.4	912
Electrified lines (km)	**Electrification system**
1,523.6	3kV DC

The main route is the electrified double-track from close to the border with Russia on the Black Sea coast via Sukhumi, Ochanchire, Samatredia, Zestafoni, Khashuri and Gori to Tbilisi where it divides. One line runs to Baku in Azerbaijan, the other to Yerevan in Armenia. The connection with the Russian network in the northwest side was closed in the early 1990s due to political unrest in the Abkhazia region.

Two sections depart from the main line and arrive in the ports of Batumi and Poti. The terrain is usually difficult and in particular the section Zestafoni-Khashuri has a 2.9 per cent gradient and tight radii (even 160 m). Train weight is restricted to 2,500-3,000 T with 3 locomotives. From

Poti to Senaki the line is single track, from Senaki to Samtredia double track. From Batumi to Samtredia a single track line is in place, from Samtredia to Zestaphoni double track. From Zestaphoni to Khachuri only 4 km are single track while the remaining section is double track.

There is a double track from Khachuri to Tbilisi, from Tbilisi to the Azerbaijani Border (Gardobani) and from Tbilisi to the Armenian border (Sadakhlo).

The route between Poti and Batumi ports and Tbilisi carries most of the traffic (about 30 train pairs per day out of which 20 of freight trains and 10 of passenger trains).

A fixed-day block container train, departing every other day, has been launched in June 2011 between Poti and Tbilisi. In May 2012, the first scheduled container trains were started to Baku.

Transport modes for the inland dispatch of the container traffic are as follows:

Table 12: Containers Handled by Sea Ports and on Carried by Railway and Truck

Poti Sea Port	2010	2009	2008	2007
Total handled containers by Poti Sea Port	209 797	172 800	209 614	184 792
Transported by truck	91 944	84 056	77 310	62 690
"Backing"	71 976	59 098	98 120	86 230
Transported by railway	45 877	29 646	34 184	35 872
Batumi Sea Port	**I-XII'2010**	**I-XII'2009**	**I-XII'2008**	
Total handled containers by Batumi Sea port	16 318	8 813	44 197	
Transported by truck	2 776	1 742	12 830	
"Backing"	13 496	5 990	25 434	
Transported by railway	46	1 081	5 933	

Table 13: Containers Transported by Railway from/to Poti and Batumi by Countries (TEUs)

From Poti Sea Port/To Poti SeaPort					
Years	**Georgia**	**Armenia**	**Azerbaijan**	**Central Asian Countries**	**Afghanistan**
I-IX'2010	12 872	16 487	8 736	717	7 065
I-IX'2009	11 120	10 880	5 699	437	1 510
I-IX'2008	14 444	15 086	4 092	562	0
I-IX'2007	16 080	15 156	4 048	588	2
From Batumi Sea Port / To Batumi SeaPort					
Years	**Georgia**	**Armenia**	**Azerbaijan**	**Central Asian Countries**	**Other countries**
I-IX'2010	38	0	0	0	8
I-IX'2009	284	664	107	12	14
I-IX'2008	2 177	2 510	1 118	56	72

The main on-going or planned railway projects in Georgia are the following:

- Tbilisi by-pass project

The railway section which runs through Tbilisi is the major thoroughfare for freight on the East-West Corridor. A significant part of this traffic is crude oil and refined products from Central Asia

and Azerbaijan, i.e. hazardous cargo, moving via a densely populated area to Black Sea ports (in 2008 the oil and product traffic amounted to 10 ml, representing half of the total GR freight traffic). Besides, the heavy railway infrastructure hampers the smooth urban development of parts of the capital.

GR selected the Ukrainian consultancy company KievGiproTrans for carrying out the basic design which was completed in 2009. The estimated cost of the project as at September 2010, stands at 277,3 M Euro. GR applied for a loan and was granted 146,220,000 CHF in March 2010 by the EBRD. Co-financing by the EIB was contemplated then dismissed. GR, instead, issued 250 M USD Eurobond notes in July 2010. The EU Neighbourhood Investment Facility provided another 8.5 M Euro for reducing the environmental impact of the project. The remaining funding will be provided directly by GR from the cash-flows it generates.

In June 2010, a Georgian-Chinese joint-venture has been awarded the construction contract under design-build contract conditions. Works were started in July 2010 for completion in July, 2013.

The bypass railway is 38.6 km long from Zahesi Station to Tbilisi-Sortirovochny Station with a broad gauge track 1520mm and electrified with direct current of 3.3 kV.

More in detail the project includes:

- the construction of a new 28.73 km double track railway “Zahesi” – “Lilo 1”;
- the construction of 5 tunnels with a total length of 3.52 km;
- the construction of 10 bridges at the new double track section;
- the construction of a new freight station “Lilo 1” and Sualeduri station “Kvirike”;
- the upgrading of “Zahesi” station;
- the upgrading of an existing 10 km section of “Lilo I – Tbilisi Marshalling Station”, which includes rehabilitation of the existing single track and construction of an additional new single track;
- Tbilisi – Poti/Batumi Modernisation Project.

The target is to upgrade the line to a speed of 120 km/h. It is at a pre-feasibility stage. No change of the electrification system is foreseen. The estimated budget is 350 M USD. Negotiation with the WB and the ADB will start for the financing.

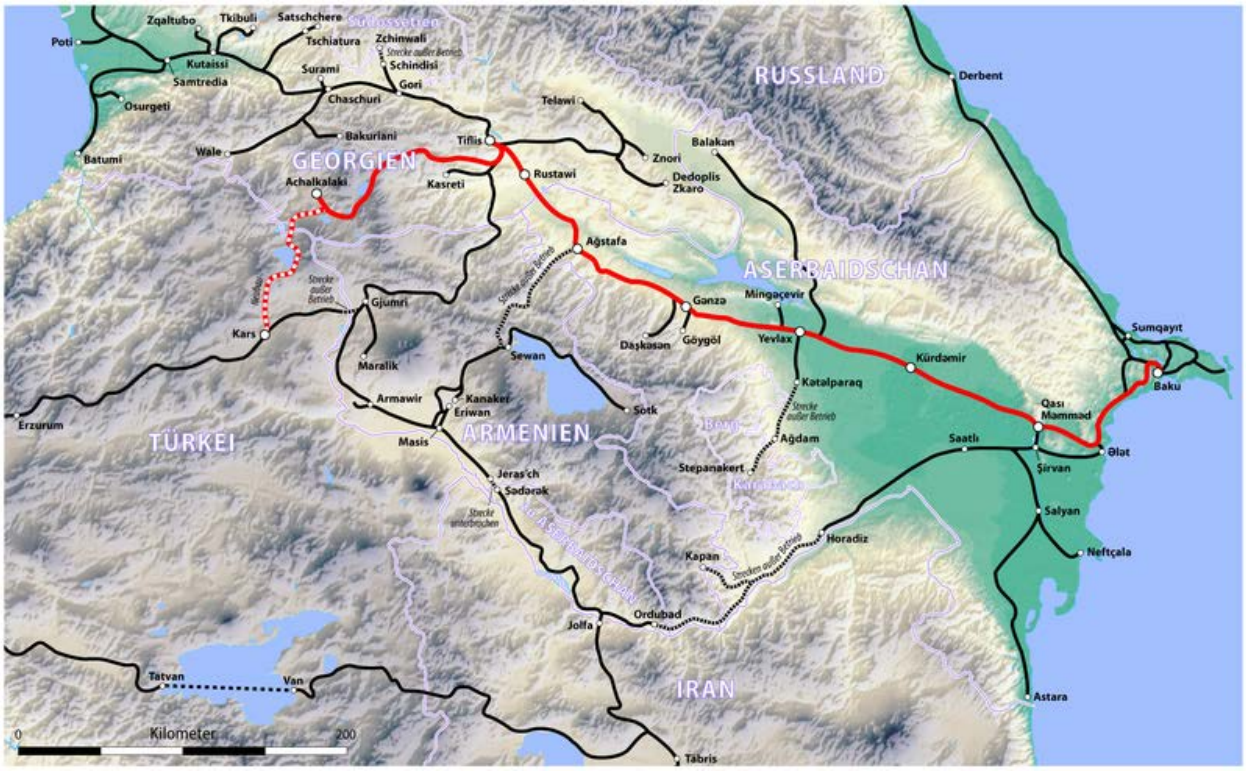
The critical section of the line is between Zestaphoni and Khachuri which has very small radii of curves (200m) and high gradients (up to 2.9%) in the mountain section.

Further, mainly in connection with the Poti Industrial Free Zone project, the railway line from Senaki to the junction Poti/Kulevi should have a second track.

- Kars-Tbilisi-Baku Project

The Project is a result of a multilateral agreement signed in January 2005 between Azerbaijan, Georgia and Turkey. Technical agreements on the construction of the Baku - Tbilisi – Kars new Railway Connection were signed on 7th of February 2007. At this stage, Azerbaijan provided a 200 M USD loan to Georgia then an additional one of 575 M USD, repayable in 25 years with an annual interest rate of 1% for the construction of the railroad on the Georgian territory. The project is due to be completed in 2013.

Figure 13: Baku – Tbilisi – Kars Railway Project



The total length will be 826 km, allowing the transport of 1 million passengers and 6.5 M T of freight in the beginning. At a later stage the capacity should reach 3 million passengers and 15 M T freight.

The construction of 25 km of new tracks and rehabilitation of further 160 km of existing tracks (as part of the modernization of the whole section from Akhalkalaki to Marabda and Tbilisi to Baku) are planned in Georgia.

Due to the different of rail gauge standards between Turkey one one hand and Georgia and Azebaijan on the other hand, a bogie exchange and cargo transshipment point is under construction at Akhalkalaki (Georgia) railway station .

The promoters of the Baku – Tbilisi – Kars Railway projects see it as a part of bigger project that foresees the connection of the South Caucasia railroads to Europe through the Republic of Turkey via the “Marmaray” tunnel under the Bosphorus Channel.

- Rehabilitation of Tbilisi-Yerevan

In 2008-2009 the EU, within the frame of TRACECA, financed a project aiming at assessing the possibility of rehabilitating the railway line between Tbilisi and Yerevan in accordance with international standards of safety for the carriage of passengers and goods.

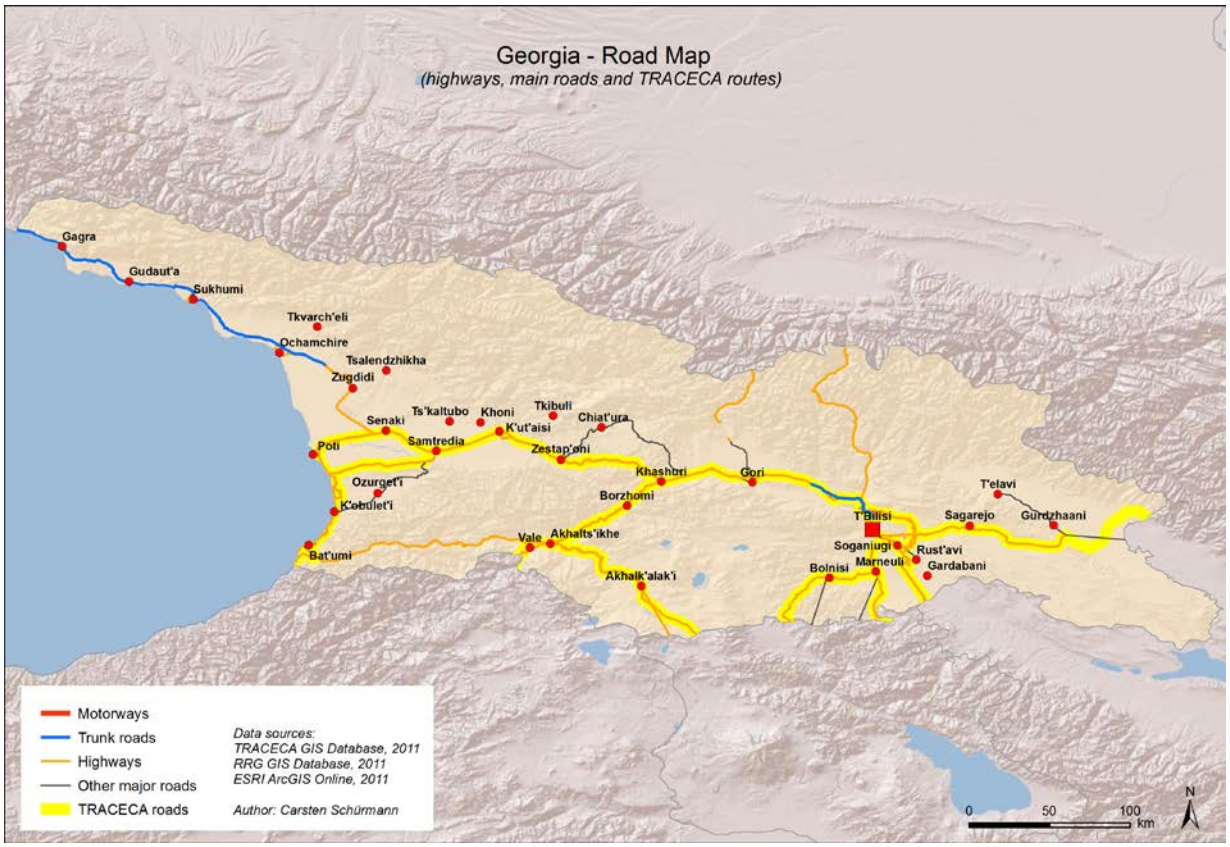
The line suffers from a severe backlog of maintenance and modernisation resulting in speed restrictions due to insufficient track quality.

Feasibility studies have been completed (but for the Georgian section the rehabilitation concerns the signalling system only) including for a new link which would shorten the current route by some 100 km.

SWOT analysis for the Poti Port Railway Station and the Poti-Azerbaijan Border Railway have been elaborated and can be found here: SWOTanalysis_Georgian Railway projects.doc.

6.2.3 Inland Transport Mode: Roads

Figure 14: Georgia Road Map



Source: TRACECA (2011)

The road network consists of 1,528 kilometres of main or international highways in good to fair condition, out of which 68 km have concrete pavement and 1,444 are asphalted, 5,307 kilometres of secondary roads of which only 132 km have concrete pavements and 3,406 are asphalted and 13 000 km of local roads.

The following are European road sections :

- border of Turkey – Sarpi – Batumi – Kobuleti – Poti (E70),
- Poti – Senaki – Samtredia – Kutaisi – Khashuri – Gori – Tbilisi – Rustavi (E60), which is also known as a West-East highway,
- Stepantsminda – Mtskheta – Tbilisi – Marneuli (E117).

Restrictions on weight per axle and IMO cargoes are quite similar to the standard European ones. The permitted vehicle dimensions should not exceed 2.5 m in width, 4 m in height, 20 m (24 m for articulated vehicles with a trailer) in length for trucks and articulated vehicles, 7-10 t per axle load and up to 44 t in total weight. The oversize and overweigh vehicle are charged upon entry in the country. The two tunnels of Rikoti and Tsipi are operated on pay-as-go principle at 3 USD and 1.5 USD, respectively.

After a severe reduction in the resources allocated to road maintenance from the early 1990s to 2003 (from 59.5 M USD in 1988 to 12.4 M USD in 2002, in nominal terms), and following the change of government, funding provided to the sector has increased substantially while road maintenance and construction have been fully privatized. In a previous TRACECA Investment project Red Bridge was rehabbed and a new “TRACECA bridge” constructed (€2.5m).

Simultaneously the WB financed a number of projects:

a) The up-grading of the East-West highway

- First phase 19 M USD approved in 2006 for upgrading the 13 km Agaiani to Igoeti section of the E60 Highway from two lanes to four lanes (completed),
- Additional financing of 28 M USD in November 2009, to scale up the original Project to rehabilitate the Rikoti Tunnel (completed) and repair its by-pass road (completed),
- Second phase 50 M USD approved in 2007 for upgrading the Igoeti to Sveneti section of the E60 Highway from two lanes to four lanes (24 km section), rehabilitating the existing 2 lanes and building 4 bridges (completed)
- Third phase 147 M USD approved in 2009, for upgrading a 15 km segment of the E60 East-West Highway from Sveneti to Ruisi to a dual carriageway (on-going).
- The third phase (additional financing) 53 million USD approved in 2012 for upgrading Risi-Agara Section (on-going)
- All the above include the implementation of facilities along the E60 (ambulance services, police, first aid training, etc.) aiming at improving the safety, reduce road congestion and travel times.

b) The rehabilitation of secondary and local roads

- 20 M USD approved in 2004 for 250 km, carrying out also drainage improvements and providing access to adjacent properties (completed),
- additional financing of 70 M USD approved in March 2009, for a further 450 km, as well as to strengthen the capacity of local units in managing and maintaining the local and secondary road network (completed),
- SLRP II – financing of 70 M USD approved in 2012 for a further 225 km, as well as to strengthen the capacity of local units in managing and maintaining the local and secondary road network (on-going, scheduled for completion in 2014)

c) Kakheti Regional Roads Improvement Project

- 30 M USD approved in 2009 mainly for the rehabilitation of 65 km of the Vaziani-Gombori-Telavi road (completed).

d) The improvement of selected municipal infrastructure (which local roads are part of) is also for the benefit of conflict-affected people following the 2008 war. It goes together with the WB assistance in the improvement of the vocational education of road engineers, development of new road geometric design, implementation of road and traffic safety programs, and in-depth amendments in the management and governance of the accountable state-agencies.

Other donors include the Millennium Challenge Georgia (funded by a US-Government 396 M USD grant out of which 100 allocated for the construction and rehabilitation of local roads) while negotiations are on-going with other IFIs such as the JBIC.

In December 2010, Georgia Road has also received a loan of 500 M USD from ADB through a Multitranche Financing Facility for implementing its part of the Road Corridors Development Program which aims at rehabilitating, improving or constructing several roads in the South Caucasian region. In Georgia it includes the 48.4-km Adjara Bypass around Kobuleti and Batumi.

These investments, combined with the already mentioned anti-corruption policy, have brought about drastic changes in the road transport sector. The share of road mode has increased versus other modes while the trucking companies (mostly small-size family businesses) have been able – until the crisis – to dramatically up-grade their fleet.

Unofficial payments to Ports, Customs, railways and police departments in Georgia have been virtually eliminated. However there is still a heavy bureaucracy which penalizes and fines even minor paperwork irregularities.

Moving containers by road to Azerbaijan remains a problem due to the inevitable unofficial payments to the customs and other state entities in Azerbaijan. Though, recent reports show that the situation is rapidly improving there in particular with the introduction of compulsory EDI between the users and the Customs and acceptance of electronic signature. According to users, the much stricter anti-corruption policy implemented by the Azerbaijani Government in the first few months of 2011 resulted in a very significant decrease of the individual amount of each informal payment and even in the disappearance of the 'collection' in some cases.

The uncertainty about the services, tariffs, administrative and other conditions keep on preventing the Georgian trucking industry from operating beyond the Caspian Sea into Central Asia.

On the Black Sea side the closure of the Russian border and absence of competitive and reliable Ro-Ro-services compel them to cross Turkey to reach Western European countries with significant delays on the Turkish side of the Georgian-Turkish border-crossing and (moderate) dignity issues with the Turkish Customs.

It seems reasonable to assume the recent membership of Russia in the WTO will bring about drastic changes this situation. It may, in particular, prompt a resumption of the (formerly huge) flow of Georgian exports by all three transport modes, road, rail and sea to its Northern neighbour.

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 shop 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 Georgia.

Table 14: SWOT Analysis in Trade and Transit Facilitation Procedures

STRENGHTS	• WTO member and EU Free Trade Agreement • Trade facilitation strategy including streamlining, harmonizing and improving transit framework, transport methods and Customs procedures: UN ESCAP/ITIS Trade Facilitation Framework, electronic documentation methods, partnership between public sector and private industry • Facilitation Committee GEOPRO (since 2003) using UN-CEFACT Recommendation and having identified challenges needing attention • Since January 2011 – new and unified Tax and Customs Code • From 2011 import procedures require only 2 documents • Creation of Customs Clearance Zones Advance declaration - Advanced review and preparation of documents • Risk management system, Risk profiles, Random selection • TRACKER 7 and integrated tariff – issuing of certificates and permits in accordance with the "One Stop Shop" principle; the economic agent has the possibility to acquire information concerning all legislative requirements for export-import operations, types and rates of the taxes, permissions and licenses, prohibitions and restrictions based on an integrated law • Simplified customs procedures and target customs control and modern infrastructure • Electronic administration system has been established • "One Stop Shop" border crossing point management method and Single Window System Customs administration re-structured (2007) • Customs using ASYCUDA World automated computer system. Golden List and 4 colour channels based on trust degree • 85% Customs clearance within 2 hours • Reduced border crossing point transit times for trucks • Quotas eliminated and many tariffs on imports abolished • No export Customs duties • Successful implementation of single window concept in Batumi sea border crossing
WEAKNESSES (BARRIERS)	• Expectations with regard to the progress in implementing ISO Standards, UN Layout Key for Trade Documents initiative, single administrative document (SAD) • Modern customs administration has yet to be realised on a country wide level • Need to implement on country wide level Risk Management using the new risk analysis department for selectivity and to reduce the number of physical inspections

	• Use of central transport corridor hampered by transit obstacles such as use of paper documents instead of electronic documents, border crossing points along the road and rail route each with separate procedures, lack of joint Customs controls at border crossing points with Azerbaijan • Pre alert used by clients and their Customs brokers but not by Customs administration resulting in lack of risk management
OPPORTUNITIES	• Trade facilitation strategy led by one Ministry and coordinating with GEOPRO • Completing and speeding implementation of a series of planned actions such as: o UN Layout Key for Trade Documents initiative o single administrative document (SAD) initiative o Risk Management using risk analysis and selectivity o "One Stop Shop" border crossing point management method o electronic Single Window System (SWS) o electronic pre alert export and import declaration
THREATS	• Lack of consistent Customs and other border crossing and trade facilitation procedures • Delays in implementing transit improvements on TRACECA central corridor countries