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Logistics Processes and Motorways of the Sea II

Country Profile

MOLDOVA

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LIST OF ABBREVIATIONS

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AETR	European Agreement concerning the Work of Crews of Vehicles engaged in International Road Transport
AGC	European Agreement on Main International Railway Lines
AGN	European Agreement on Main Inland Waterways of International Importance
AGR	European Agreement on Main International Traffic Arteries
AGTC	European Agreement on Important International Combined Transport Lines and Related Installations
ATP	Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for such Carriage
ATP	Autonomous Trade Preferences
CIS	Commonwealth of Independent States
CMR	Convention on the Contract for the International Carriage of Goods by Road
EBRD	European Bank for Reconstruction and Development
EDI	Electronic Data Interchange
EIB	European Investment Bank
EU	European Union
EUBAM	European Union Border Assistance Mission
FEZ	Free Economic Zone
GFC	Global Financial Crisis
GIFP	Giurgiulesti International Free Port
IDA	International Donor Agencies
IFI	International Financing Institution
ILC	International Logistic Centre
IWW	Inland Waterways
LOGMOS	Logistics Processes and Motorways of the Sea
MCC	Millenium Challenge Corporation
MOS	Motorways of the Sea
PAIES	Pre-Arrival Information Exchange System
SIDA	Swedish International Development Cooperation Agency
SWS	Single Window System
ТА	Technical Assistance
TEN-T	Trans European Network - Transport





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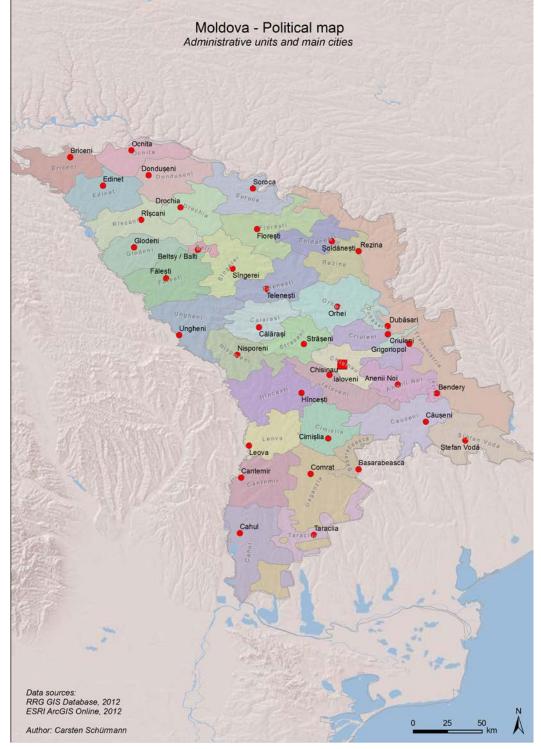
Logistics Processes and Motorways of the Sea II







Figure 1: General Map of Moldova



Source: TRACECA (2011)





1 INTRODUCTION

Moldova is a small south-eastern European country without any maritime borders. It borders Romania to the West and Ukraine to the North, East and South. The Country has an area of about 33,800 km². It is largely dependent on its agricultural sector, particularly on its wine exports. There are no major mineral deposits.

Almost 95% of Moldova's 9.344 km of public roads are paved, though still not in good condition compared to EU road standards. The currently operating length of railway lines of the State enterprise "Moldova Railways" is 1,157 km. Railway infrastructure is well developed and enables transit along the TRACECA corridor.

Two Moldovan inland waterways (Dniester and Prut Rivers) are of international importance. Similarly, Moldova has a stretch of the Danube River bank, with a length of 430 m. The inland waterways have always been used to transport goods and passengers. Navigable waterways for public use have a total length of 558 km.

The country's main international airport is located in Chisinau. It has an air cargo facility, the volumes are small: less than 2,500 t in 2008 including mail. The trend is strongly upward. Even in 2008, when the global financial crisis (GFC) was emerging, there was an increase in volume.

The freight transport and logistics sector is small and it has recently experienced rapid decline. In 2007 the total freight transport volume was 40.8 mln t. In 2009 the figures dropped to 25.9 mln t, as a result of the GFC. The road and rail shares in transport are 82% and 17% respectively. The total freight transportation was 5,865 mln t-km in 2007. In 2009 this had fallen to 3,773 mln t-km only, with rail accounting for 28%. The air and river modes together accounted for less than 0.4% of total freight transport traffic.

There are three TRACECA links important for Moldova: Giurgiulesti – Chisinau; Ilyichevsk – Odessa – Tiraspol (main city of Transdnistria) – Chisinau – Ungeny (across the border from Lasy, Romania); and Klimentovo (Ukraine) – Rybnitsa – Ungeny.

In addition, the following corridors pass through Moldova:

- 2 TEN-T corridors (corridor VII Danube and corridor IX road/railway)
- 2 OSJD corridors (corridors 5d and 12) rail

According to the World Bank Logistics Performance Index 2012, Moldova downgraded its ranking from number 106 in 2007 to number 132 out of 155 in 2012. The overall rank is composed of the following components:

Customs	rank 129
Infrastructure	rank 98
 International shipments 	rank 145
Logistics competence	rank 142
Tracking & tracing	rank 116
Timeliness	rank 126

With the completion of the railway link from Chisinau to Giurgiulesti, there are no significant missing links in Moldova's transport infrastructure network. However there are still some major bottlenecks which should be considered:

• There is an absence of high-quality logistics facilities and services all over the country.







- The road network needs rehabilitation and ongoing adequate maintenance. Upgrading is necessary on the north-south motorways (M13 Belsty-Chisinau and M3 Chisinau- Giurgiulesti). These needs are recognized and projects have been formulated and partially funded. Implementation is under way.
- A major bottleneck is the separation of Transdniestria, cutting off some of the most developed regions of the country and cutting traditional road and railway connections to Ukraine. The solution of this problem is subject to political decisions.







2 NATIONAL TRANSPORT POLICY

The policy of Moldova in the field of transport is set by the following documents:

- Concept for "The Establishment and Development of National Network of International Transport Corridors" (dated of April 5th 2002);
- Moldova Land Transport Infrastructure Strategy for the period of 2008-2017 (dated of February 1st 2008);
- Water Transport Development Concept (dated of March 24th 2008).

The **Concept for National Network of International Transport Corridors** (hereinafter the Concept) provides for the development of transport sector in Moldova till 2015. The Concept does not assign any particular priority to any transport mode, underlining only the importance of:

- water transport in terms of cost and safety of transportation;
- rail transport long-distance and bulk cargo (oil, fuels, ores, etc.) transportation;
- road transport small shipments, especially of valuable and perishable goods.

In particular, the Concept indicates the following development priorities:

(a) in *railway transport*.

- rehabilitation and modernization of railways infrastructure in order to increase the commercial speed of trains along TEN-T corridor IX;
- rehabilitation of existing border crossing stations;
- railways electrification;
- renewal and upgrade of rolling stock;

(b) in road transport.

- identification of clear priorities for the rehabilitation and maintenance of existing roads;
- upgrading technical characteristics of national roads to international requirements;
- improving conditions for transport operation along existing roads, including new road facilities, increased safety and reduced transport costs;

(c) in *inland water transport*.

- upgrading inland waterways infrastructure (IWW) along the Dniester and Prut Rivers to international requirements;
- carrying out the construction of an oil terminal in Giurgiulesti port;
- construction of port facilities for passenger and cargo traffic in the estuary of the Prut River;

(d) in air transport.

• upgrading airport facilities to meet international requirements;

(e) in *combined transport*.

 establishment of cargo processing and storage capacities, including multimodal transport terminals, which will provide a complete package of custom clearance and cargo handling services;





• establishment of national intermodal transport operators capable of providing a full set of services based on through rates and control of cargo shipments along the whole route.

The Land Transport Infrastructure Strategy provides for practical measures to support:

- road and railways infrastructure rehabilitation;
- elaboration and implementation of infrastructure development plans; restructuring of the national railways operator;
- reforming road maintenance sector.

The **Water Transport Development Concept** details further the priorities for the water transport of Moldova for the period of 2008-2011. In particular, the document addresses:

- improving shipping conditions along IWW;
- development (upgrade and renewal) of transport means;
- reconstruction of port facilities;
- development of port industry by means of attracting investments;
- improved interoperability with other modes of transport; ensuring safety of shipments along IWW, etc.





3 LEGAL ENVIRONMENT IN THE FIELD OF TRANSPORT

The core of **national legislation** in transport sector of Republic of Moldova includes:

- the Law On Transport
- the Regulation On the Public Institution "Giurgiulesti Port Administration"
- the Railways Transport Code
- the Road Transport Code
- the Commercial Maritime Shipping Code.

Also the Domestic Shipping Code has been recently drafted.

Moldova strives at active membership with international transport organizations. As a matter of fact, the country is a member of UNECE. Until now it has adopted 19 UNECE conventions, including AETR, AND, ADR, AGC, AGN, AGR, AGTC, ATP, CMR, TIR, and Convention on Road Traffic.

The Republic of Moldova is a member of the Danube Commission and makes its contribution towards improved connectivity between the Danube Region and other European countries in terms of infrastructure and systems. As indicated in the EU-Moldova Action Plan (version dated of 2005), the country also plans to adopt key international conventions in the field of international maritime transport.

Moldova has well established bilateral relations with LOGMOS beneficiary countries (see Table 1) in road, rail and maritime transport, and has also developed a strong cooperation in the Customs field.

Countries	Maritime	Road	Railway	General	Customs
Armenia		On international road transport 30.10.1996			On cooperation and mutual assistance in customs issues 15.02.1996
Azerbaijan		On international road transport 27.11.1997			On cooperation and mutual assistance in customs issues
Bulgaria			On principles of cooperation in the field of railway transport 15.09.1998	On international carriage of goods and passengers 12.12.1994	22.05.2006 On cooperation and mutual assistance in customs issues 16.01.2003
Georgia			On principles of cooperation in the field of		

Table 1: Bilateral Agreements with LOGMOS Beneficiary Countries







		railway transport	
		26.12.1999	
Kazakhstan	On international road transport 15.07.1999		
Kyrgyzstan	On international road transport		On cooperation on customs issues
	10.06.1996		10.06.1996
Romania	On international road transport 28.10.1992		On cooperation and mutual assistance in customs issues 24.04.2000
Tajikistan			
Turkey	On international road transport 03.06.1994		On cooperation and mutual assistance in customs issues 04.06.2003
Turkmenistan			
Ukraine	On international road transport	On activities of railway transport	On cooperation and mutual assistance in customs issues
	20.03.1993	20.03.1993	18.08.1999
Uzbekistan	On international road transport 21.11.1995		On cooperation and recognition of customs documents and customs duties 30.03.1995





4 NATIONAL POLICY AND LEGISLATION IN TRADE AND TRANSIT

The Customs Service is defined as a central public administration body. Its role and work are prescribed in a number of laws passed during 1997-2002. In furtherance of its mission the Customs Service operates eight Customs houses three on the Romanian border, one on the Ukrainian one and four in major urban centres. (see Figure 2 below).

The Customs service has introduced significant changes (EDI and e-declarations). There is a 'traffic light' risk management system in place; clearance times are reasonable; and operational meetings between the Customs Service and private operators' representatives ensure that any problems are dealt with quickly.

However a special report by Transparency International indicates that corruption is widespread and frequent, albeit at a level bearable by the Trade.



Figure 2: Location of Moldovan Customs Houses

Source: Customs Service of the Republic of Moldova website





Key documents regulating trade and transit operations in Moldova include:

- The Customs Code (dated of July 20th 2000);
- The Law "On State Regulation of the Foreign Trade Activity" (dated of June 8th 2000);
- The Regulation "On the Rules for Transit System Application at the Territory of the Republic of Moldova" (dated of December 20th 2005).

According to private operators, the Customs Service fulfils its mission well. Electronic data interchange (EDI) is in place. In 2008 Moldova introduced a "single window" system (Regulation No 1073 dated of September 19th 2008), which allowed to save passing through the sanitary-veterinary and phytosanitary controls. Besides, in 2005, Moldova adopted a risk-management based approach to Customs checks (Regulation No 1144 dated of November 3rd 2005).

Many of the above mentioned initiatives have been implemented within the frames of EU-Moldova Action Plan, the effective version of which was adopted in 2005. Also in 2005 the EU launched the Border Assistance Mission to Moldova and Ukraine (EUBAM). The objective of EUBAM is to improve the cooperation between Moldavian and Ukrainian Customs and bordercrossing agenciesand bring them in line with standards and procedures applied in the EU. Thanks to EUBAM, since April 2008 Customs authorities of Moldova and Ukraine share a single Pre-Arrival Information Exchange System (PAIES). PAIES allows both countries to exchange and coordinate import and export operations, speed up the border-crossing formalities, but also fight smuggling and fraud.

In complement to this, the EU also targeted the implementation of an integrated approach to border management. For this purpose, in 2009-2011 it supported the purchase of special fixed and mobile communication equipment to improve communication between the border guard and Customs services of Moldova.





5 INVESTMENTS IN TRANSPORT AND LOGISTICS SECTOR IN MOLDOVA

IGC TRACECA recognizes the trade and transit potential of Moldova and actively supports technical assistance projects in the country. More details of the projects could be found here: <u>TRACECA projects for MO.doc</u>

Besides TRACECA, the World Bank (WB), EBRD, EIB, SIDA, EU and other IFIs contributed to the development of transport infrastructure in Moldova

Title of project	Year of approval	Sub-sector	Total project cost	IFI funding
Moldova Road Rehabilitation III	2010	Road (rehabilitation)	183 M €	75 M €(EBRD)
Moldova Roads II	2010	Transport (national roads modernization)	n/a	75 M € (EIB co- funding)
TA to the Chisinau Airport Modernization Project II – Addendum No1 (EBRD - implementing agency)	2010	Air transport	n/a	122.5 th € (EU)
EBRD – 12 Lead IFI remuneration for the project "Chisinau Public Transport Project"	2010	Transport policy and management	n/a	200 th €(EU)
MD-03 Chisinau Public Transport Project	2010	Transport policy and management	n/a	3 M €(EU)
EBRD – 12 Lead IFI remuneration for the project "Moldova Road Rehabilitation Project"	2009	Road transport	n/a	240 th €(EU)
Moldova Regional Development	2009	Roads (rehabilitation)	12.5 M USD	12.5 M USD (WB)
Second Social investment Fund – Additional Financing	2009	Roads (rehabilitation)	5.85 M USD	5 M USD (IDA)
TA to the Chisinau Airport Modernization Project II (EBRD - implementing agency)	2009	Air transport	n/a	1.75 M € (EU)
Chisinau Airport Modernisation Project II	2008	Airport infrastructure	46.25 M €	25.5 M € (EBRD) 20 M € (EIB)
MD-02 Moldova Road	2008	Road transport	n/a	12 M €(EU)

Table 2: IFI Supported Projects in Moldova







Rehabilitation Project				
Moldova European Roads	2007	Transport (rehabilitation of trunk roads)		30 M € (EIB)
Social Investment Fund 2 project	2004	Roads (rehabilitation)	29.17 M USD	20 M USD (IDA) 3.7 M USD (SIDA) 200 th USD (Soros Foundation)





6 STRATEGIC CHALLENGES

6.1 Market Challenges

6.1.1 National Trade: Exports and Imports

World Trade Partners

Located between Romania and Ukraine, Moldova is the only country among European TRACECA countries without maritime borders. The use of this term can nevertheless be discussed as the port of Giurgiulesti, situated at the confluence of the Prut and the Danube, is of maritime importance. Moldova, along with Ukraine, belongs to the "North-Western TRACECA countries" group.

In 2010, Moldova total external trade amounted almost 4.3 billions Euros composed of 30% of exports and 70% of imports, resulting thus in a negative merchandise trade balance. Figure 1 and table 1 show the repartition of trade between partners. Regarding imports, main trade partners are other European Countries (35%), Bulgaria-Romania (17%), Ukraine (16%) and Russia (11%). Together, they account for almost 80% of all imports. The same proportion of total exports (80%) is divided into three trade partners: other European Countries (36%), Russia (24%) and Romania-Bulgaria (12%).

It is worth noting that the great majority of trade flows from and to Moldova do not use TRACECA East-West main corridor. Imports from Caucasus and Central Asia countries account for 0.9 % of total imports while exports to these regions amount to 3.3 %. Conversely, trade with Turkey is much more important (4.5 % of total imports and 5.4 % of total exports) but constitutes a North-South trade flow.

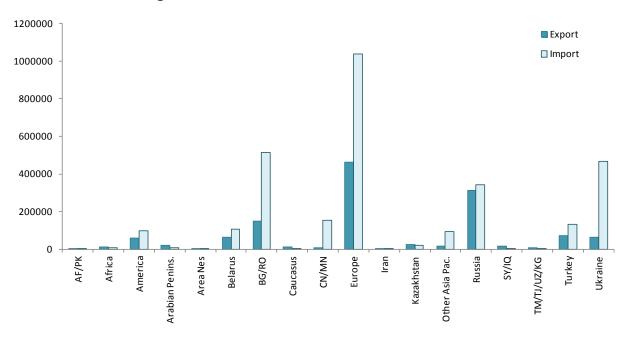


Figure 3: Moldova Trade Partners, 2010, th euros

Source: Computation based on Eurostat and UN Comtrade databases

The analysis of Moldova potential trade, taking into account only partially and totally containerizable products, does not show any significant changes in the geographical repartition and the volumes of Moldova trade flows. The most remarkable difference is the drop of imports



LOGMOS Country Profile





from Russia from 11.4% to 7.4%. It can also be underlined that little trade is transported in bulk as containerizable products represent 97% of Moldovan exports and 83% of imports.

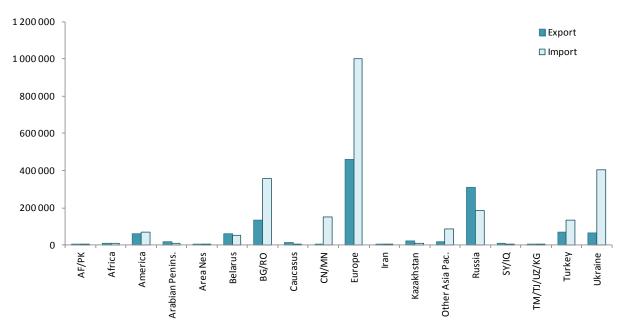


Figure 4: Moldova Trade Partners, Potential Trade, 2010, th euros

Source: Computation based on Eurostat and UN Comtrade databases

	All products		Total all	No min. fuel & ores		Total no
Zones	Import	Export	products	Import	Export	min. fuel & ores
Afghanistan-Pakistan	0.07%	0.04%	0.06%	0.09%	0.02%	0.06%
Africa	0.30%	0.83%	0.46%	0.36%	0.62%	0.44%
America	3.23%	4.66%	3.66%	2.81%	4.79%	3.48%
Arabian Peninsula	0.28%	1.42%	0.62%	0.33%	1.34%	0.67%
Area Nes	0.09%	0.00%	0.07%	0.11%	0.00%	0.07%
Belarus	3.58%	4.81%	3.95%	2.07%	4.94%	3.04%
Bulgaria-Romania	17.14%	11.63%	15.48%	14.47%	10.63%	13.18%
Caucasus	0.14%	1.00%	0.40%	0.17%	1.03%	0.46%
China-Mongolia	5.08%	0.43%	3.68%	6.01%	0.44%	4.14%
Europe	34.68%	35.64%	34.97%	40.33%	36.49%	39.04%
Iran	0.02%	0.19%	0.07%	0.03%	0.20%	0.08%
Kazakhstan	0.61%	1.79%	0.97%	0.44%	1.84%	0.91%
KY-TJ-TM-UZ	0.16%	0.52%	0.27%	0.15%	0.54%	0.28%
Other Asia Pacific	3.08%	1.26%	2.53%	3.56%	1.29%	2.80%
Russia	11.38%	24.22%	15.25%	7.44%	24.67%	13.23%
Syria-Iraq	0.04%	1.22%	0.39%	0.05%	0.75%	0.28%
Turkey	4.46%	5.41%	4.75%	5.34%	5.38%	5.35%
Ukraine	15.64%	4.93%	12.41%	16.25%	5.03%	12.47%
Total	100%	100%	100%	100%	1 00 %	100%



Regarding the tonnage of potential trade of Moldova, the following features may be observed:

- Imports are 1.7 more important than exports in tonnage while the difference in values is almost twofold.
- Domination of trade with the European Union in exports (40.5%) and with Ukraine in imports (39%).

Flows concerning LOGMoS East-West corridor represent only 4.4 % of exports and 1.4 % of imports. North-South flows with Turkey, Bulgaria and Romania amount to 46.4% of total exports and 32.5% of total imports. This predominance of West bounded and North-South oriented trade flows, is clearly illustrated in the Figure 5 below.

Table 4: Moldova Potential Trade with TRACECA Countries and Europe, 2010, in tons and%

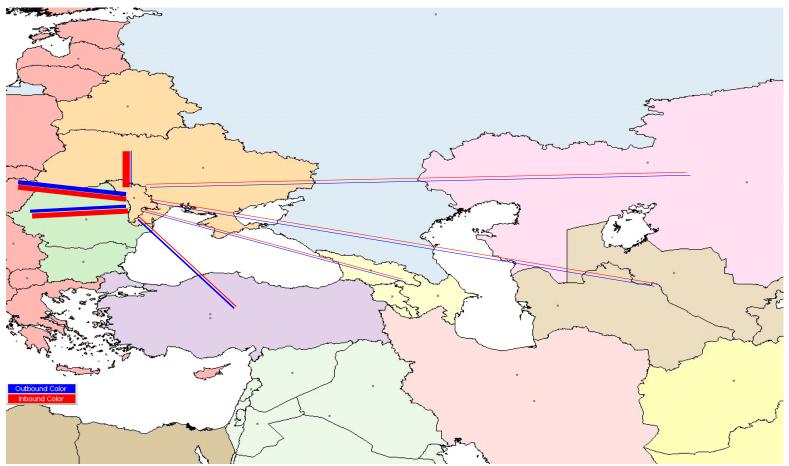
Zones	Ton	inage	Share in trade with TRACECA countries and Europe		
	Export	Import	Export	Import	
Bulgaria-Romania	243 391.3	376 959.4	30.73%	27.42%	
Caucasus	12 453.9	3 834.9	1.57%	0.28%	
Europe	320 976.4	373 140.8	40.52%	27.15%	
Kazakhstan	18 767.5	10 848.3	2.37%	0.79%	
KY-TJ-TM-UZ	3 540.9	5 115.0	0.45%	0.37%	
Turkey	124 151.1	69 001.7	15.67%	5.02%	
Ukraine	68 784.1	535 689.5	8.68%	38.97%	
Total	792 065.1	1 374 589.5	100%	100%	

















6.1.2 Regional TRACECA Trade

In the perspective to develop transport infrastructures and logistics centres to enhance trade between TRACECA countries, it is essential to look also at the commodity structure of trade flows. Based on the available data, the following Figure 5 and Table 4 detail the composition of imports to Moldova from others TRACECA countries and Europe.

Thus the following comments may be drawn:

- On average, the three main commodities are mineral products (20.6%) originating from Ukraine, Bulgaria/Romania and Turkey, base metal equipment (12.7%) imported from Ukraine, Turkey, Bulgaria-Romania and Europe and vegetal products (12.4%) transported from every trade partner.
- Imports from Caucasus, Kazakhstan and TRACECA South East countries are in a vast majority (over 70%) composed of only one commodity, which are respectively "Foodstuffs, beverage and tobacco", "Base Metal Equipment" and "Chemical products".

As far as exports are concerned, the commodity structure mainly consists in "Vegetal Products", proceeding chiefly from Europe, Turkey, Bulgaria-Romania and Ukraine and representing almost 43% of total exports. Far behind, the second most exported commodity (16%) is "Foodstuffs, beverage and tobacco" followed by "Base metal equipments" (11%) and "Stone, cement, ceramic" (almost 10%). If to add "Animal or Vegetal Fats" (6.2%) and "Mineral products" (5.5%), the above six commodities totalize over 90% of all exports from Moldova.







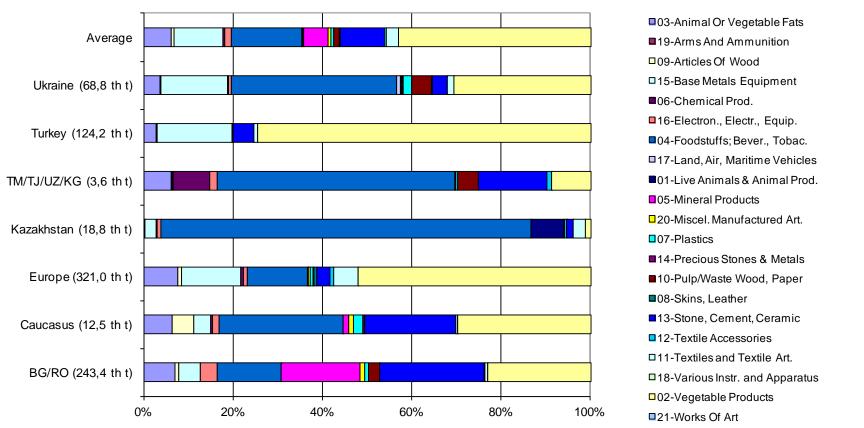


Figure 6: Potential Trade with TRACECA Region – Commodity Structure of Imports to Moldova, 2010, in tons and %

Computation based on Eurostat and UN Comtrade databases

Source:







Table 5: Potential Trade with TRACECA Region – Commodity Structure of Imports to Moldova, 2010, in tons

Commodity Groups	Bulgaria-Romania	Caucasus	Europe	Kazakhstan	KY-TJ-TM-UZ	Turkey	Ukraine
Animal Or Vegetable Fats	321.90	n/a	965.90	n/a	n/a	33.23	9 357.63
Arms And Ammunition	n/a	n/a	24.90	n/a	n/a	12.25	n/a
Articles Of Wood	25 565.50	n/a	25 334.41	n/a	n/a	1 320.18	60 565.20
Base Metals Equipment	21 494.70	0.79	19 375.33	7 606.04	0.85	7 992.78	118 456.30
Chemical Prod.	40 394.90	29.58	23 342.55	1 631.84	3 957.81	6 118.22	25 743.19
Electron., Electr., Equip.	10 532.10	2.13	19 883.56	4.44	0.52	1 346.45	3 437.94
Foodstuffs; Bever., Tobac.	30 398.70	2 936.58	47 200.26	13.38	57.64	1 737.46	57 454.66
Land, Air, Maritime Vehicles	2 814.00	35.55	35 305.12	n/a	122.76	496.96	592.45
Live Animals & Animal Prod.	1 707.60	n/a	24 180.20	n/a	n/a	14.21	9 720.25
Mineral Products	142 462.90	503.66	4 575.03	n/a	n/a	8 011.35	127 930.08
Miscel. Manufactured Art.	4 373.60	0.03	3 881.04	0.55	n/a	720.79	3 419.05
Plastics	17 731.50	0.07	24 342.74	n/a	16.00	6 614.57	11 394.38
Precious Stones & Metals	0.00	n/a	8.80	n/a	n/a	Січ.50	1.58
Pulp/Waste Wood, Paper	8 268.90	2.10	15 051.33	29.47	45.42	7 926.11	13 187.99
Skins, Leather	230.10	0.01	1 207.34	1.97	n/a	103.09	71.41
Stone, Cement, Ceramic	42 666.40	19.55	28 283.90	n/a	n/a	3 147.33	45 103.68
Textile Accessories	584.70	0.02	1 010.53	0.00	n/a	76.86	85.71
Textiles and Textile Art.	2 859.90	0.50	20 252.99	843.77	194.18	5 890.30	738.72
Various Instr. and Apparatus	85.10	0.38	974.78	0.00	n/a	20.36	44.33
Vegetable Products	24 466.90	303.96	77 939.98	716.80	719.80	17 417.72	48 384.87
Works Of Art	n/a	n/a	0.10	n/a	0.03	n/a	0.07
Total imports	376 959.40	3 834.90	373 140.79	10 848.26	5 115.01	69 001.70	535 689.49





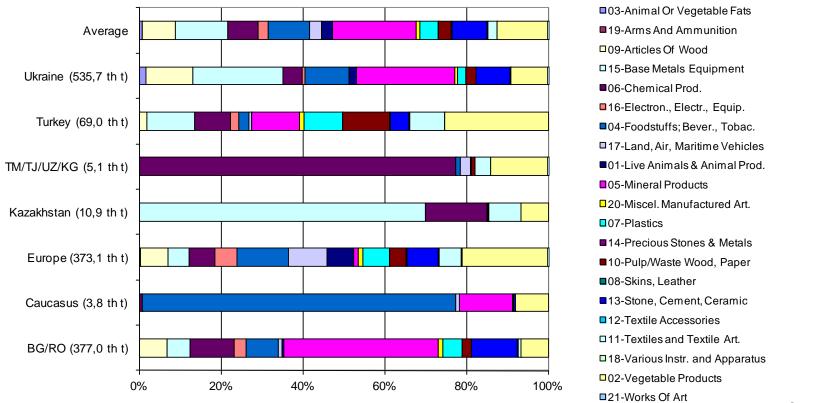


Figure 7: Potential Trade with TRACECA Region – Commodity Structure of Exports from Moldova, 2010, in tons and %

based on Eurostat and UN Comtrade databases

Source: Computation







Table 6: Potential Trade with TRACECA Region – Commodity Structure of Exports from Moldova, 2010, in tons

Commodity Groups	Bulgaria-Romania	Caucasus	Europe	Kazakhstan	KY-TJ-TM-UZ	Turkey	Ukraine
Animal Or Vegetable Fats	16 909.20	805.42	24 789.49	53.82	217.09	3 532.83	2 553.53
Arms And Ammunition	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Articles Of Wood	2 259.10	584.77	2 673.75	9.05	10.55	169.81	56.98
Base Metals Equipment	11 562.20	491.51	42 633.76	459.09	8.70	20 855.82	10 326.15
Chemical Prod.	371.30	49.60	2 015.95	60.60	291.14	4.54	172.88
Electron., Electr., Equip.	9 075.00	184.72	2 515.38	128.96	57.51	17.27	468.15
Foodstuffs; Bever., Tobac.	34 686.00	3 441.90	43 014.54	15 563.29	1 886.78	68.27	25 495.92
Land, Air, Maritime Vehicles	156.60	14.97	847.69	2.07	0.04	11.08	494.25
Live Animals & Animal Prod.	102.10	0.26	123.77	1 408.64	n/a	n/a	150.46
Mineral Products	42 948.20	146.08	24.60	n/a	n/a	n/a	203.54
Miscel. Manufactured Art.	2 688.20	142.06	1 534.83	29.75	7.62	1.02	60.06
Plastics	1 835.00	246.49	1 863.60	70.70	12.25	64.35	1 344.60
Precious Stones & Metals	n/a	0.00	7.10	0.00	n/a	0.44	0.00
Pulp/Waste Wood, Paper	5 974.80	55.00	475.07	0.92	160.98	26.39	3 084.42
Skins, Leather	23.80	0.19	2 182.44	0.03	n/a	128.58	31.11
Stone, Cement, Ceramic	56 984.90	2 541.04	9 041.39	279.04	544.64	5 926.83	2 330.81
Textile Accessories	396.10	0.09	3 214.80	0.40	36.69	13.53	40.84
Textiles and Textile Art.	1 477.50	64.79	17 432.81	506.04	0.08	945.27	943.85
Various Instr. and Apparatus	39.20	0.88	25.30	0.95	0.62	n/a	11.78
Vegetable Products	55 902.10	3 684.07	166 560.08	194.16	306.25	92 385.01	21 014.75
Works Of Art	n/a	n/a	0.00	n/a	n/a	n/a	n/a
Total exports	243 391.30	12 453.85	320 976.36	18 767.52	3 540.94	124 151.05	68 784.09



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

Moldova Waterways System – Main Features

The water transport system of Moldova includes two key inland waterways (IWW) – the Dniester and Prut Rivers as well as a 430-meter bank on the Danube River. The Dniestr and Prut Rivers are suitable for waterborne transport at certain segments only due to the natural sedimentation and lack of regular dredging works.

At present, the Dniester River is actively used for local transport needs; international (passenger and freight) traffic is limited to two ferry stations at Soroki and Koseuts. The Prut River is used for transporting construction materials, e.g. sand, ballast, gravel and coal.

The naval conditions of the Dniester and Prut Rivers allow for the transportation of cargos on barges or barge convoys with a total DWT of 1`000 T and 600 T, respectively.

According to the data of the Water Transport Direction of the Ministry of Transport and Road Infrastructure of the Moldovan Republic for the year 2012, 50 vessels were operating along Moldavian IWW. In total 378 vessels navigate along Moldavian IWW and at sea under the Moldavian flag. Most vessels are in poor technical condition and do not meet the effective international norms and standards.

The water transport infrastructure of Moldova includes 1 sea-river (on the Danube) and 3 river ports on the Dniester which currently do not propose loading services, plus 1 cargo area at Varnitsa (located on the Dniester River which also does not propose loading services) and one river port in Ungheni (located on the Prut River).

The major port hub of Moldova is located in Giurgiulesti thereby providing access via Danube to the Black Sea region, open seas and international destinations. (see also the Inland waterways report of the LOGMOS project for Danube – [web link])

Moldovian Shipping Companies

Moldavian shipping and freight industry is represented by a number of international and local companies, which includes but is not limited to the following ones: Cargo-Partner SRL, Elia, ELIA LTD, Itia-Sped International Srl, Iumbo-Trans L.T.D., MD-TRANS, Megatrans S.R.L., Moldcontainer Ltd, Movers-Auto S.R.L., Politrans, POLITRANS LOGIST, Pro-Logistic s.r.l., Quehenberger-Hellmann Moldova Srl, Rg-Cargo, Simplextrans Ltd, Simplextrans Ltd, Tbn Interlog Srl, Translogistic Ltd.

Most of the above mentioned companies provide land transport services; some are involved in multi-modal (land-ocean or air-ocean) transport. Only local operators – SE "Bacul Malovata" and private companies, which have been established due to privatization, JSC Neptum-M, Gelecom Ltd and Laromalex Ltd provide shipping services. Most of these companies do not own any vessels, but rather lease them from the Sstate; the operated fleet is obsolete and cannot be renewed in a foreseeable future due to the low financial capacity of operators.

SE "Bacul Malovata" provides Ro-Pax services to connect two settlements on Dniester River, Old Malovata and New Malovata (Dubossary region), 7 days a week. The company is 100% Stae-owned; it operates one single ferry vessel, which was produced in the 70ies in





Krasnoyarsk (Russian Federation). This vessel makes up to 7 round trips per day; it is capable of transporting ca. 100 transport units and ca. 400 passengers. According to ferry users, the service is operated free of charge and is very much preferred by passengers travelling between Chisinau and Dubossary. To make the service operational, the Ministry of transport infrastructure and roads (MTIR) of the Republic of Moldova supports the company "Bacul Malovata" in terms of ensuring regular operational maintenance of ferry vessel, and covering the cost of fuel and spare parts.

Port of Giurgiulesti

The Giurgiulesti International Free Port (GIFP) has a territory of 120ha and the status of a free economic zone (FEZ). It consists of a petroleum terminal, cereal cargo handling and storage facilities and an industrial free zone. The petroleum and grain terminals are operational, a new general cargo and container handling facilities was put in operation in 2011 and handled its first container ship early in 2012.



Figure 8: GIFP Master Plan

Due to its location on the Lower Danube with available water depths of up to 7m, GIFP is capable of receiving both River and sea going vessels (up to about 10,000 DWT). It is promoted as:

- The only direct sea/river-borne transshipment and distribution point to and from the Republic of Moldova.
- A regional logistics hub on the border of the EU with access to road, rail, river and sea.
- A good location for business development, because of its strategic location, trimodal transport infrastructure, low-cost environment and a unique Customs and tax regime.

The port is situated at km 133.8 (nautical mile 72.2) of the River Danube in the South of Moldova, between Romania (and therefore the European Union) and Ukraine. GIFP benefits from its location on international trade and transportation routes such as the Rhine-Main-





Danube waterway corridor. It links the European standard and Russian railway systems and the international road network. It is connected by feeder services with the Commercial Sea Port of Constantza (Romania) and Marport (Istanbul), the leading port of the Black Sea Basin for container transshipment.

The master plan (see Figure 8 above) forms the basis and guideline for the further planning and development of GIFP. There will be four different functional areas:

- The Oil terminal (operating now).
- The Dry cargo terminal and storage.
- The Industrial Free Zone.
- The Administration centre.

The Oil Product Terminal (see Figure 9 below) consists of one berth, a tank farm consisting of eight tanks; tanker truck loading facilities (this refers to the loading infrastructure and storage of petroleum products, including equipment for the loading of petroleum products in road transport); and, as from mid-2008, rail tank car loading/ unloading facilities. The berth can accept sea vessels and river barges with draughts of 7m and can load/unload up to three different types of oil products simultaneously. Its technical parameters are as follows:

- A tri-modal transport infrastructure consisting of a jetty with a water depth of minimum 7m, road access and a planned railway link.
- A total storage capacity of 63,600m³, divided between 8 tanks with capacities ranging between 4,200 and 12,600m³.
- A maximum transshipment capacity in excess of 2 million tonnes per annum.

Figure 9: GIFP Oil Terminal Facilities



In 2008-2010 the EBRD-supported port operator, Danube Logistics, constructed the first part of a multi-purpose Dry Cargo Terminal, which, once completed, will accommodate up to six berths, capable of handling typical bulk cargo such as grain and construction material as well as containers.

Gantry cranes are used for the transshipment of bulk cargo and containers. In 2007 Danube Logistics' business partner Trans Cargo installed specialized equipment to load grain onto vessels as well as grain cargo storage facilities with a total storage capacity of 45,000 tonnes.

The water depth at the six berths varies – one berth with a water depth of 7m is dedicated to sea vessels and the others with a water depth of 3-5m will be dedicated to river vessels.





It has the following technical parameters:

- A tri-modal transport infrastructure consisting of up to six berths, road access and railway links to CIS countries and Russian and European gauge railway systems
- A storage capacity with a warehouse of 2,000m².
- A bulk Cargo open storage area 160m x 35m = 5,600m².
- A container and general cargo open storage area 60m x 45m = 2,700m².

Figure 10: GIFP Container Handling Facilities (Preliminary Design)



The Customs regime and services are designed to be attractive to potential users:

- Exports Goods originating from GIFP¹ and exported from GIFP to the rest of Moldova or abroad are exempt from any form of Customs duties, except for a nominal Customs procedure fee.
- Imports Goods imported to GIFP from the rest of Moldova or from abroad are exempt from any form of Customs duties, except for a nominal Customs procedure fee.
- Autonomous Trade Preferences Since the 1st of March 2008 the Republic of Moldova benefits from the new scheme of trade preferences granted by the European Union, known as Autonomous Trade Preferences (ATP). ATP allows virtually all products originating in the beneficiary countries to enter the EU without quantitative restrictions and Customs duties, the only exemptions being imports of wine, veal and some fishery products to which tariff quotas apply.
- Custom services at the Port have been reported as being highly professional, efficient and transparent.

Danube logistics offers a range of optional services to its clients, including residents of the planned Industrial Free Zone:

¹ Goods originating from GIFP mean any goods fully produced or sufficiently processed within GIFP, provided that they have changed their Customs position according to the classification code at the level of one of the first four figures, or the final value of the goods exported from GIFP exceeds the initial value of the goods imported to GIFP by at least 35%, due to the value added.





- Logistics Transshipment, storage, distribution and other transportation services for oil products, dry bulk cargo, containerized cargo and general cargo.
- Port services Vessel services include but are not limited to the supply of drinking water and food, agent, tug boat, pilotage services, communication and waste removal services, etc.
- Land and office leasing Short- to long-term leases of land within GIFP, which is connected to the electricity, gas, water, and telecommunication grids, road infrastructure as well as in close proximity to rail and port infrastructure.
- Administrative services Short- to long-term lease agreements for fully furnished or unfurnished office space (see below).



Figure 11: GIFP Office Facilities (Photo March 2009)

The port management displays a high level of professionalism, abiding by international security and environmental standards. It complies with all relevant EU Conventions, Regulations and Directives, which are strictly enforced by the Company's security personnel 24 hours per day.

- Comprehensive Security Response Plan.
- Comprehensive Fire and Disaster Response Plan (the whole area and offices are a "non-smoking/open fire" restricted area).
- 3rd Tier Environmental Disaster Response Plan (in progress).
- In-house training programmes for all employees.

GIFP has started a regular weekly feeder service between Giurgulesti and Marport (a Turkish container hub in the Marmara Sea). This is meant to attract all the containerized import and export Moldovan foreign trade which used to move via the ports of the Odessa region and Ukrainian territory at huge overall transit and transport costs.

LOGMOS Project will follow-up to bring its support to the implementation of this MoS Project based on feedering containers directly to and from Moldova and development of Moldovan export trade in containers.

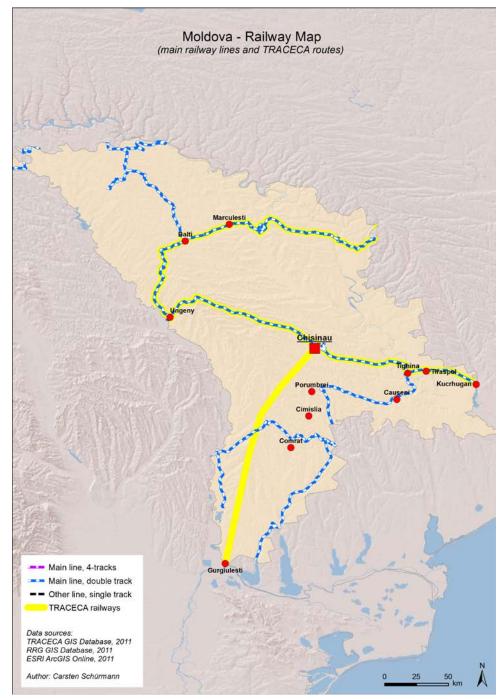






6.2.2 Inland Transport Mode: Railways

Figure 12: Moldova Railway Map



Source: TRACECA (2011)

The Moldovan railway network, as presented on the figure 12 above, covers 1,157 km of exploited tracks (including the Cahul – Giurgiulesti section). It includes three railway lines crossing the territory of the country from East to West and two others going from South to North-East:

• Northern: from Ungheni on the Romanian border through Beltsi (Moldova's second city) to Slobidka in Ukraine;





- Central: from Ungheni through Chisinau and Tiraspol (in Transdniestria) to Odessa and Ilyichevsk in Ukraine;
- Southern: from Kantenir on the Romanian border to Bessarabia on the Ukrainian border, and thence to Ilyichevsk and Odessa from the South;
- Port Giurgiulesti Cahul;
- Galati (Romania) Giurgiulesti (Moldova) Reni (Ukraine) Căuşeni (Moldova) Novosavitscaia (Moldova) – Kuchurhan (Ukraine).

The railway network in Moldova is generally in good technical condition. However works carried out 3 years ago to up-grade the track between Chisinau and GIFP have proven not to be at the required level of quality. As a result the weight of trains, number of wagons have been reduced as well as the operational speed which on certain segments does not exceed 10 to 15 km/h.

The diesel locomotive park is mainly old, recently measures have been taken to reduce illegal trade with fuel.

Railway tariff in Moldova are generally high when compared to neighbouring countries and road transport.

Most of railway tracks have CIS gauge (1,520 mm). However, in 2006 Moldova built a 14 kmstretch of standard (1,435 mm) gauge track. At GIFP there is a dual railway track (both of 1,520 mm and 1,435 mm in width) allowing goods going through the port to arrive or depart to either of its neighbouring countries without subsequent bogey exchange or unloading/reloading. For other traffic a bogey exchange operates at Ungheni, near the Romanian border. There is capacity to handle 20' containers at Ungheni and Chisinau, but currently no container trains are operated for transit cargoes and there is virtually no intermodal movement.

The Southern railway route (via Bessarabia to Ukraine) is important since it provides a link to Ukrainian ports of Odessa and Ilyichevsk and the mineral regions of Ukraine. The route via Tiraspol (through the separatist territory of Transdniestria) was closed for many years, then reopened in 2008 thanks to an EU mediation.

The ongoing extension of the Cantemir-Cahul line South to Giurgiulesti is also important since it provides Chisinau with a direct connection to GIFP.

Only one major infrastructural development is planned: the conversion of the line from Chisinau to Ungheni to standard gauge.

Railway Freight Terminal, Chisinau

The terminal is extensive and reasonably well-equipped. It has gantry cranes capable of lifting 20' containers. Some are inoperable at present but could be repaired or replaced. There is a Soviet-era warehouse with a rail line to allow goods to be loaded onto and unloaded from railway wagons. There is no special provision for temperature controlled cargoes or hazardous cargoes.

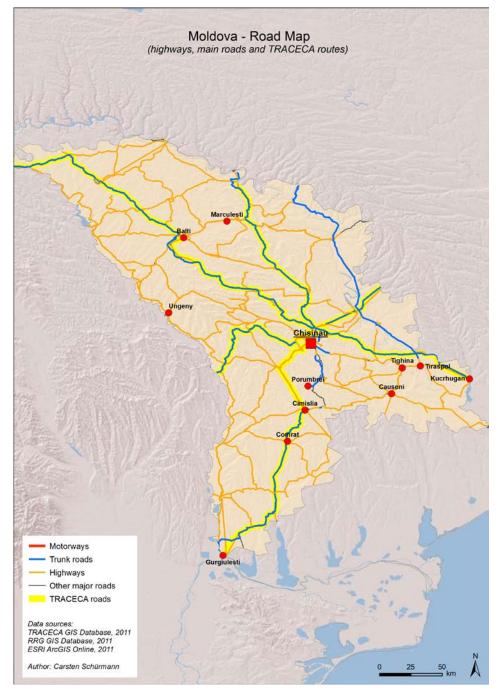






6.2.3 Inland Transport Mode: Roads

Figure 13: Moldova Road Map



Source: TRACECA (2011)

The motorway network is essentially cruciform with Chisinau at the centre of the cross. From Chisinau the M14 runs to the North past Beltsy; the M3 runs to the South to Giurgiulesti; the M1 runs to the West in the direction of Bucharest; and the M21 runs eastward through Transdniestria and into Ukraine to join the M5, which links Kiev to Odessa and Ilyichevsk.

The top investment priorities in the road sector are by order of importance:

• Rehabilitation of the M3 from Chisinau to Giurgiulesti. A feasibility study has been completed, with TRACECA funding and construction on some sections is under





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way. The estimated cost of the rehabilitation works is 750 M.€ The northern half of the road (Chisinau–Comrat) is to be funded jointly by the Moldovan Government and the EBRD; the southern half (Comrat–Giurgiulesti) by the Millennium Challenge Corporation (MCC, an US Government agency) from a total budget of 300 M \$ for the Moldovan road sector.

- Improvement of the M13 from Beltsy to Chisinau, a distance of 135 km. This is the busiest highway in Moldova, carrying 15,000 vehicles per day. The improvement works are expected to be financed by the EBRD.
- For the longer term, consideration is being given to developing a road transport link through Moldova linking western Ukraine to the ports of Odessa and Ilyichevsk, offering a more direct route than via the Ukrainian city of Vinnitsia (240 km South-West of Kyiv).

The condition of Moldova's road network is far from being uniform. Some links are good and others are bad or very bad. The problem of road maintenance has been addressed in previous reports. For example the World Bank's Moldova Transport Strategy Update in 2002 classified most of the network as either 'poor' or 'extremely poor'; reported that annual funding for maintenance was equivalent to only 1% of the value of road assets. Another World Bank report in 2004 and background information for a road sector support project in 2007 indicate that the problem has persisted.

6.3 Trade and Transit Facilitation

6.3.1 General Presentation

- **Procedures and formalities** are among the **main barriers** that are hampering the development of Motorways of the Sea:
 - several border points must be crossed, mostly in ports but also on land routes e.g. along the central land corridors: minimum 2 points in a single / one sea service, up to 5 points in inter-seas services linking western Black Sea Countries and Eastern Caspian Sea Countries, and possibly more in the case of longer multicountry transit and transshipments trades;
 - several physical mode transfers, handling movements and intermediate storage are taking place along the sea based transport chains: commonly 3 transfers and minimum 6 handling plus 2 storage in the case of a single sea leg, and several more handling operations in the inter-seas services
 - previous and ongoing experiences of Motorways of the Sea in other regions as well as the global worldwide transport system of containers have demonstrated that the resolution of difficulties in this field is an essential success factor.
- The procedural process in ports and at other border crossing point are **dominantly** related to Trade Laws and Regulations, but actors of the transport and transit chain are responsible for their fulfilment. A significant part of their activities is to deal with these complex issues and they are drawing the corresponding revenues out of their capacities.

Relationships between institutions on one side, - Customs first, but also other Ministries and inspection bodies - operators and users on the other side, are affected by these functions which are mixing with the physical transit and transport operations.





- The **impacts of administrative and regulatory barriers** are generally more important when there is a sea leg since:
 - maritime transport and port transits require more formalities than land transport modes, including specific exchange of information, paper documentation etc. which are rightly perceived as a factor of complexity
 - this adds to the weakness of intermodal sea based transport, particularly when compared to the most simple unimodal road transport
 - transit times are increased if and when formalities and operations are mismatching,
 e.g. when the transport means of one mode is not coordinated with those of the next mode, which is a frequent situation between the maritime and railways legs in the TRACECA Region
 - costs are not only direct but also indirect, and not only formal but also informal, and unofficial transit levies and other transaction costs are adding to the sum of official tariffs, taxes and dues.
- Common Weaknesses / barriers have been identified in all LOGMOS project Countries to various extents and at different degrees. This diagnosis has been shared under the key word "Facilitation" by Country stakeholders and at bilateral and regional levels. Barriers in this field are referred to in the "W" (Weaknesses) list of the various SWOT analyses summarized in the following project documents:
 - Country profiles, as synthesized hereafter
 - Presentations for workshops and meetings
- Among the **solutions** discussed in the diagnosis phase, the following is a series of common **recommendations and targets** that are partly implemented, planned, or contemplated for the future LOGMOS projects and more generally for the development of intermodal transport including port / border crossing points:
 - I.T. systems and solutions electronic solutions / EDI for:
 - information (for users and operators)
 - declarations
 - pre-alert (for Customs and other)
 - duties, taxes and fees
 - One stop scheme and extension to Single Window System (SWS)
 - Risk management system and methods
 - IT interchange solutions between MoS port / communities
 - Tracking and Tracing (in coordination with operators)
 - Upgrading / redesigning border points layouts
 - Training (management, IT organization...)

6.3.2 SWOT Analysis

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

Table 7: SWOT Analysis in Trade and Transit Facilitation Procedures

STRENGHTS

• Serious, constructive attitude and support of the government towards transport sector and waterborne transport in particular





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•

Highly qualified personnel

	 Applying international best practices and engaging European experts (EU Policy Advice Team) in creating and implementing the country's transport sector development strategy
	• Creating the Free Economic Zone as a legislative initiative and economic incentives to boost development of the transport sector and its infrastructure
	 Government's willingness to bear costs to ensure operation of Giurgiulesti International Free Port (construction of a stand-alone railway, motorway upgrade)
	 Thorough studies have been made, state of the main motorways has been reviewed, rehabilitation and construction plans and programs have been prepared, costs have been estimated
	Giurgiulesti International Free Port's Administration has been granted a separate office in Chisinau
	• Using international relations mechanisms to implement the waterborne transport development strategy (increasing clearance heights of the bridges linking with Romania in order to create an opportunity for port development and upstream cargo transportation along the river Prut to Ungheni)
	 Danube Logistics' professional attitude towards establishment, construction and development of the Free Economic Zone and Giurgiulesti International Free Port, including usage of the state-of-the-art technologies and a priority development focus on high- tariff freight
	 Flexibility and attractiveness of freight flows (two types of rail tracks, tariffs, etc.)
	 Danube Logistics' investments of own money into development and construction work at the port
	 Joint compromise solutions of the port administration and the operator as to the work arrangements and development of the transport hub
	Transparent information on port operations
	 Highly professional and internationally recognized consultants and contractors hired by Danube Logistics.
WEAKNESSES (BARRIERS)	No modern logistics centres
	 No special storage regime for temperature-controlled and dangerous goods
	 The strategy does not provide for the need to involve major international logistics operators (combined, intermodal transport)
	• Transnistria's influence on rail transit (at the end of





	March 2012 Transnistria President Yevgeniy Shevchuk and Moldova Prime-Minister Vlad Filat agreed to resume rail communication)		
	 No study has been made on the part of Moldova to objectively and comprehensively analyse advantages and drawbacks, as well as financial results of intermodal transport (including causes of cargo traffic decrease). 		
OPPORTUNITIES	Increase in earnings from intermodality and rail transit		
THREATS	• Recently started closing up of railroad and crane facilities in the Port of Reni may be indicative of Ukraine's discontinuing operating the port in the future. Putting operation of the Port of Reni at a standstill will lead to decrease in Moldova's railroad potential and income from transit, loss of jobs, etc.		





7 PILOT PROJECTS SELECTED FOR MOS I AND ILC PROJECTS

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

The list of retained pilot included the following projects:

Table 8: Selected Pilot Projects in Moldova

Pilot project	Service proposed	Countries involved directly	Concerned TRACECA project
ILC at Free International Airport Marculesti	Cargo Facilities, warehousing, Customs terminal and other logistics related investment	Moldova	ILC project

As a result of the first phase of MOS I and ILC implementation, for the above mentioned pilot project, a feasibility study was elaborated. Short summary of this project can be found here: LOGMOS pilot projects MOL.doc

