

Perspectives on Development of Transport and International Corridors in Armenia, Turkey and the Black Sea Region



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International Center for
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Perspectives on Development of Transport and International Corridors in Armenia, Turkey and the Black Sea Region

International Center for Human Development

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Foreword

With the current impasse in the political process of rapprochement between Armenia and Turkey, the business relations between the two countries seem to go on as usual. 'Usual' in a sense of the established practice of bilateral and transit trade which has shaped its own operational rules and regulations for over two decades. Mutually beneficial practices have historically underlain effective policies, which enhance these practices further. Today it is high time we understand what policies may facilitate the improvement of existing business practices across borders.

To outline viable policy options our research team undertook this study in an attempt to address milestone transportation issues, in which the involved stakeholders are keenly interested, specifically a) What are the actual transportation issues in need of coordination between Turkey and Armenia?; and b) Could the engagement of Georgian companies facilitate the relations between Armenia and Turkey, and what are the limitations here?

In the contemporary world policy research is perhaps one of the most effective instruments used to develop evidence-based policy options and to initiate informed advocacy campaigns. And hopefully the findings of this study will serve a similar end. One of the strongest assets of this study was the involvement of practitioners at various stages of the research, which has enhanced the validity of the findings and the subsequent recommendations. We do hope that the study will become a springboard for further research into business cooperation issues between the two countries, as consolidation of the stakeholder interests across borders may be the leverage necessary to break through the current political deadlock.

Tevan Poghosyan
Executive Director
International Center for Human Development

Despite the complicated political environment and the lack of state relations between Armenia and Turkey, during the implementation of Support to Armenia – Turkey Rapprochement project, UMBA has succeeded in creating the Association of Armenian and Turkish Travel Companies. Another platform formed in the result of the project is the cooperation between an Armenian NGO Women’s Forum and a Turkish counterpart DOGUNKAD, which has brought together businesswomen of Armenia and Turkey for the development of cross – border business initiatives.

In absence of diplomatic relations between Armenia and Turkey, as well as any official document, regulating the relations between the two countries, business ethic rules have become the only regulation mechanism between the two countries. Despite the closed borders and a number of other obstacles, hindering direct trade, the current volume of the trade between Armenia and Turkey is approximately 210 million US dollars. Businesses tend to overlook borders and religion differences, and the cross-border trade takes place through third countries. As a core source of tax collection and employment in both countries, businesses have a strong potential for lobbying for the removal of obstacles, hindering bilateral trade, such as opening of borders and authorizing direct trade.

UMB(E)A was one of the first NGOs that has established a joint platform for development of business relations between Armenia and Turkey. In 1997 UMB(E)A became the co-founder of Turkish – Armenian Business Development Council (TABDC) which has significantly contributed to the development of business relations between Armenia and Turkey. We do hope that this study will become another step towards improvement of these relations.

Arsen Ghazaryan

President

Union of Manufacturers and Businessmen (Employers) of Armenia

Our region already has a hard geological terrain, which makes any kind of transportation of goods, people and services rather challenging. As if not enough, political problems as well have complicated the free flow of trade and services and free circulation of people in the region. This study has shown the lost economic benefits for Armenia and Turkey, as well as the neighboring countries, due to the lack of establishing as well as using transportation routes that already exist for the benefit of our countries and the whole region.

Our foremost goal is to provide a starting platform for international projects, to show the feasibility of using the existing transit routes in Eurasia, which hopefully will bring prosperity to the underdeveloped regions in bordering provinces of Turkey and Armenia and will give them access to joint cross-border business facilities. Such cooperation may one day create interdependency, social, cultural and economic regional integration, and allow for passes through Free Transport Routes and Peace Pipe Lines.

We hope that this study will be one of the first steps to increase the awareness towards establishing economic links, and providing free flow of goods, services and people through open borders. We believe that it will contribute also to the resolution of the regional conflicts.

Kaan Soyak
Co-Chairmen
Turkish Armenian Business Development Council

Acknowledgements

The International Center for Human Development would like to express its special gratitude to USAID for their consistent support to the project Support to Armenia-Turkey Rapprochement (SATR) and certainly to UMB(E)A, which has been an invaluable resource throughout the study with their expertise, and helpful insights into the issue at hand. ICHD would like to especially thank UMB(E)A's Ms. Irina Belubekyan for her remarkable contribution and Mr. Athur Ghazaryan for his advice and inspiring ideas.

The Center is particularly grateful to all the discussants having participated in various events organized within the project framework, as they were absolutely essential in revealing the specific challenges complicating the transportation issues between Turkey and Armenia. Their suggestions for some viable ways out of these complications are highly appreciated. ICHD would like to thank Mr. Samvel Melikyan (Meltrans LTD), Mr. Makar Arakelyan (Sati Armenia), Mr. Rafik Sarkisyan (Apaven Ltd), Mr. Nazmi Gul (Hopa trans) and Mr. Murat Kaya (Gozde Nakliyat) for their feedback and insights on transportation and freight forwarding issues.

Finally, the Center would like to thank business associations across the borders for their visionary perspectives on how the current challenges can be addressed and expanded into future opportunities.

Introduction

In mid-2011 ICHD initiated this research, building up on earlier attempts by UMB(E)A and TABDC to establish cooperation around issues of transport and freight forwarding. This report is based on previous ICHD research and builds up on the findings of an UMB(E)A study Business Opinion Leaders, which focused on the issue of transport among others. The study provides a baseline snapshot of the perspectives of business leaders and their understanding of business cooperation in a variety of sectors in general, and six targeted sectors in particular, namely tourism, transport, agriculture, IT/communications, light industry and manufacturing, construction/building materials, and engineering. This particular study focused on the transport sector and all the related issues in more detail. It included broader layers of stakeholders in Armenia and Turkey to discuss these issues.

The report addresses road, railroad and multimodal transportation issues, in which stakeholders have expressed a key interest. It also looks into two possible development scenarios of transport interactions between Armenia and Turkey. It is based on the findings of a desk review, conducted by a team of local experts. The desk review included an analysis of data from various databases, analytical documents, reports, studies and other documents prepared by credible international and local institutions and experts. In addition to the desk review, ICHD experts have conducted several in-depths interviews with the primary stakeholders, such as Armenian and Turkish transportation business owners, freight forwarding companies, and carriers including Meltrans LTD, Sati Armenia, Apaven Ltd, Hopa trans, and Gozde Nakliyat.

Chapter I of this report provides an overview of the economic situation and trends in Armenia, Turkey and in the region in general against the background of the global financial economic crisis, to reveal the context in which the transport sector develops across the region. This section provides a profile of trade between Armenia and Turkey, as well as some details on the foreign trade dynamics in the two countries. Finally, it suggests an overview of the transport sector, including the description of the relevant infrastructure and circulation, passenger transport, transit of goods, transport costs, etc.

Chapter II considers possible alternative responses of economies and businesses of the two countries to the current situation of transport. In particular, the perspectives on the physical infrastructure are discussed in sections A.1. Development of Transit Routes under Status Quo and A.2. Opportunities for Turkey and

Armenia in Regional Transit Corridors and Trade. The discussion includes also an overview of relevant international legal instruments and takes into account the peculiarities of different scenarios of possible political developments. In sections B.1. Competition and Non-Tariff based Limitations in Transport Sector under Status Quo and B.2. Dynamics of Free Market and Competition of Transport Services the discussion focuses on perspectives related to the development of transport services under respective scenarios. In case of the Status Quo scenario the discussion exceptionally focuses on road and multimodal transport in section A.1., while railway connection opportunities are the highlights of section B.1., as no infrastructure currently exists and no practices are available.

The “second line” (A.2 and B.2 subsections) elaborates a phased strategy for sequencing infrastructure development upon border opening. Possible developments in transport sector have been discussed for both scenarios and development lines (status quo vis-à-vis alternative developments) while juxtaposing the emerging opportunities and challenges in the context of the scenarios.

Opportunities for Armenian-Turkish joint-ventures under various scenarios are discussed in sections C.1 and C.2. Section D Passenger Transport Development Opportunities focuses on key issues of tourism and shuttle trade. In section E the authors have also discussed the role of various international instruments supporting the development of international trade and transport in the region with a specific focus on Turkey and Armenia.

Chapter III summarizes the key observations from the study and subsequent recommendations.

Certainly, like similar studies, this one has some limitations as well and to overcome those a sector-specific larger scale research and analysis should be conducted to be able to address issues such as the development of existing and future transport corridors in the context of both open and closed borders; the necessity of refining arguments for the Turkish side to advocate for the import of Armenian goods; study of the legal leverages Armenia can use at the international level as a landlocked and blockaded country; and the possibility of creating an officially registered Armenian-Turkish joint transport companies in Armenia and Turkey.

Chapter I. Economic Situation and Trends

For the first time in 60 years the world economy experienced a steep downturn in 2009, mainly caused by the economic crisis in the developed countries. More than 89 countries recorded a decline, including Armenia, Turkey and the entire Eastern Europe and the South Caucasus region.

After consistent high growth rates for the past 16 years, Armenia, heavily affected by the global financial and economic crisis, experienced a 14.2% economic decline in 2009. The crisis affected almost all the largest sectors of the economy. Such a drastic decline in GDP was mostly conditioned by an unprecedented recession in the construction sector (42%). The decline was significant also in the processing industry (8.8%) and the energy sector (13.3%). Despite the high decline rates in the economy, the reduction in household consumption was quite modest - only 2.3%.¹ The Armenian economy and market are very small, which creates a number of serious barriers for trade and economic development.

Meanwhile for Turkey the recent crisis of 2008-2009 was the fifth in the past three decades. The country is quite familiar with financial crises and following recessions.² From the Second World War until the economic crisis of 2001 Turkey's attempts to catch up with the developed economies were weak and volatile. The volatile growth pattern culminated in the crisis of 2000-2001, which led to a contraction of GDP by 5.7% in 2001. Nevertheless, the crisis created a strong incentive for bold reforms, leading to five years of economic recovery during 2002-2007.³ However, the global economic crisis of 2008-2009 led to a sharp contraction of economic activity in Turkey, which probably exceeded that of 2001. Such an impact was conditioned mainly by the collapse in external demand, which affected Turkey's key exports, and the subdued domestic lending and capital inflows, which depressed the domestic demand. Although the deceleration of economic activity in Turkey started as early as mid-2006, the economy slid into a negative annual real GDP growth only in the last quarter of 2008, when the economy shrunk by 6.5%. Cumulative growth in 2008 amounted to only 0.9%, sharply down from the 6.8% real GDP growth recorded during 2002-2007.⁴

1 Armenia Economic Report 2010: The Necessity for Economic Diversification and Export Expansion. Ministry of Economy of the Republic of Armenia. Yerevan. October 2010.

2 Ercan Uygur. The Global Crisis and Turkish Economy. TWN Global Economy Series. Third World Network. 2010.

3 Mihai Macovei. Growth and economic crises in Turkey: leaving behind a turbulent past. European Economy. European Commission. Economic Papers 386, October 2009.

4 Ibid.

Despite the dramatic economic recession in both Turkey and Armenia in 2008-2009, the recovery was quite dynamic in 2010. Specifically, increase in both aggregate demand and international prices of energy sources and metals is expected to positively affect the economy of Armenia in the future. Revived economic growth in the main partner countries, particularly in Russia, is expected to lead to increased remittances, revenues generated by labor migrants and investment flows. Considerable changes are predicted in the GDP structure. The construction sector, which was considered to be a leading force of the economy before the crisis was paralyzed due to the crisis. In the near future, economic recovery and development will mainly be based on leading and productive sectors, in particular, the industry and service sectors.¹ The latest forecasts of IMF point towards an economic growth of 4% in 2012.² Meanwhile, it is clear that Armenia needs a new model of economic growth, based on the promotion of economic and export diversification, in addition to development of exports, which needs to become the main source of economic growth.

IMF growth forecasts indicates that the Turkish economy, which recovered after the sharp decline relatively faster, will also continue growing, though at much slower rates in 2011 and 2012 (6.6% and 2.2% respectively).³ Turkey enjoys an outstanding long-term growth potential. The main drivers of the continued development could be the people, a diverse and entrepreneurial human capital base, its strategic location as a turntable between Europe and Asia, and a relatively attractive business environment. According to projections by Goldman Sachs, Turkey has the potential to become a USD 6 trillion economy by 2050, making it the third largest in Europe. Turkey could also rapidly narrow the income gap with the EU and achieve a per capita GDP level of USD 60 000 or 75% of the projected EU average by 2050.⁴

1 Armenia Economic Report 2010: The Necessity for Economic Diversification and Export Expansion. Ministry of Economy of the Republic of Armenia. Yerevan. October 2010.

2 <http://www.imf.org>.

3 Bloomberg. <http://www.bloomberg.com/news/2011-09-20/imf-cuts-turkey-growth-forecast-calls-for-tighter-fiscal-policy.html> (accessed 22 Dec. 2011).

4 Ahmet O. Akarli. BRICs, the Next-11 and Turkey 2050: A Space Odyssey. Goldman Sachs International. July 2007. <http://www.tusiad.org>.

Figure 1. GDP annual growth rate for Armenia and Turkey for 1994-2010¹

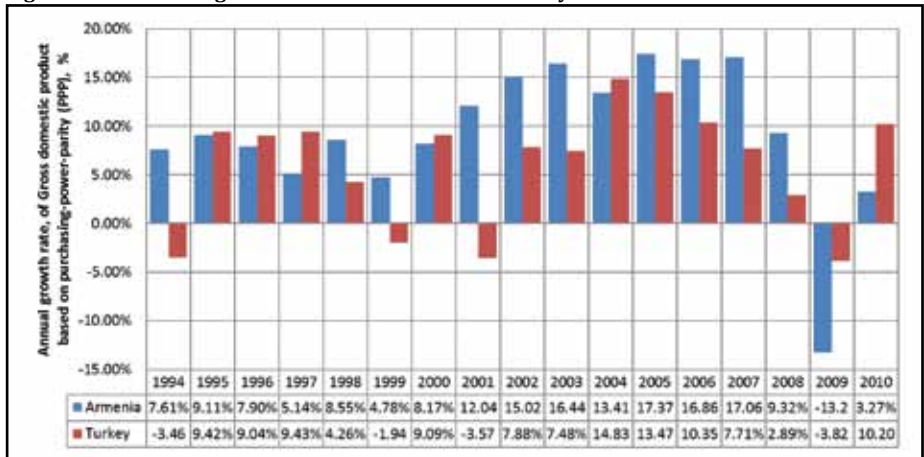
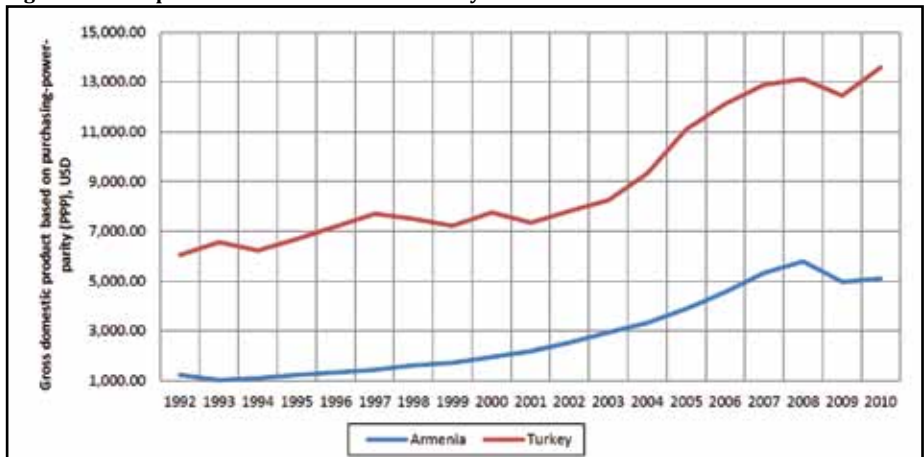


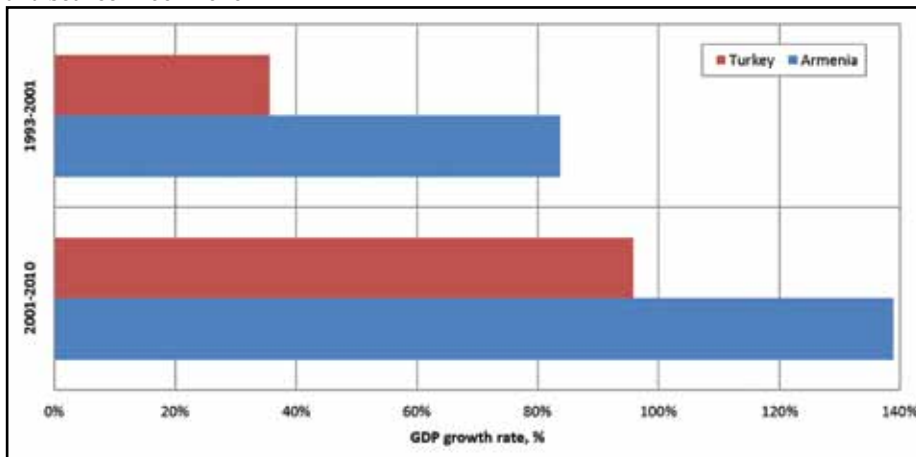
Figure 2. Per capita GDP for Armenia and Turkey for 1992-2010²



1 World Development Indicators. <http://data.worldbank.org>.

2 Ibid.

Figure 3. Relative variations of GDP growth rates for Armenia and Turkey between 1993-2001 and between 2001-2010¹



Overview of Trade in Armenia and Turkey

The global crises resulted in decrease of global trade volumes. In 2009, Armenia’s export and import volumes also decreased significantly, experiencing a decline of 32.8% and 25% respectively.

In 2009, both exports from and imports to Armenia declined sharply, by 32.8% and 25% respectively. 89% of exports went to 15 countries, with a visible geographic orientation to north-east. This comprised more than 90% of total exports. In late 2008, exports and overall external trade volumes started to decrease. The deepest decline in exports and imports were recorded in May 2009, by 48% and 30% respectively. From the second half of the year, recovery trends became visible. However, the annual numbers showed a considerable reduction: exports decreased by 32.8%, while imports by 25.0%. Nonetheless, since early 2010 significant recovery was observed in export and import volumes: exports grew by 56% and imports by 24% during the first half of the year.

Despite the decline in overall export volumes in 2009, export volumes to specific countries increased. The most prominent were exports to the USA, Canada, Switzerland, China and Austria. It is worth noting that the increase in exports to the listed countries was determined by the type of products exported, which were mostly metals, such as gold, copper, molybdenum, and aluminum (mostly

¹ Ibid.

unprocessed or processed through a simple technology or waste of such metals from other productions). However, exports of other goods to these countries decreased. Armenian export has been gradually concentrating on a few product lines since early 2000s.¹ In 2008 Armenia had a comparative advantage in trade with the EU for at least 150 products in various groups and with the world for over 300 products. However, this comparative advantage is not utilized adequately, as many of these products are not exported to the EU (over 100 cases).²

In contrast to exports, imports to Armenia in 2009 decreased from almost all partner countries, on average by 30%. Relatively low decline in imports was recorded from Russia and Brazil. In case of Russia, low rate of decline in imports was determined by the fact that Armenia imports such strategic goods as wheat and natural gas, which constitute 40% of total imports from Russia. Moreover, it imports non-processed aluminum, which constitutes 12% of imports from Russia, compared to 5.5% in 2008. Concerning imports from Brazil, 35% of imports from this country is sugar, which comprises 90% of total sugar imported to Armenia. Import through intermediary countries represents a large share in total imports to Armenia. Goods manufactured in the EU and CIS countries with total worth of about USD 1.9 billion were imported to Armenia; however only 74% of these goods were directly imported to Armenia. In turn, 75% of total imports from Georgia are not produced in that country. Exports and imports of services showed relatively stable trends, although some decline was observed in 2009.³

Table 1. Armenian exports and breakdown per destination countries, USD mln⁴

Country	2001	2007	2008	2009	Change from 2008, %
Germany	10.9	168.5	184.0	117.2	-36.3
Russia	57.7	198.8	214.6	98.7	-54.0
USA	51.5	49.1	52.9	68.2	28.9
Bulgaria	0.3	46.9	59.2	61.1	3.2
The Netherlands	1.2	156.0	131.1	53.3	-59.3
Georgia	11.9	69.1	81.4	54.0	-33.7
Belgium	46.5	100.1	89.9	47.6	-47.1
Canada	0.9	5.9	15.9	34.8	118.9
Switzerland	23.0	49.2	11.6	25.6	120.7

- 1 Armenia Trade Diagnostic Study. Poverty Reduction and Economic Management. Europe and Central Asia Region. The World Bank. June 2002. http://siteresources.worldbank.org/INTRANETTRADE/Resources/Pubs/Armenia_TDS.pdf (accessed 22 Dec. 2011).
- 2 Statistical Analysis of Armenian Export Competitiveness in 2004-2008. AEPLAC. Armenia. 2010. http://mis-souri.academia.edu/habetmadoyan/Papers/199632/STATISTICAL_ANALYSIS_OF_ARMENIAN_EXPORT_COMPETITIVENESS_IN_2004-2008 (accessed 22 Dec. 2011).
- 3 Armenia Economic Report 2010: The Necessity for Economic Diversification and Export Expansion. Ministry of Economy of the Republic of Armenia. Yerevan. October 2010.
- 4 NSS of RA. <http://www.armstat.am>

China	0.1	7.9	2.1	18.5	781.0
Iran	31.5	37.4	25.4	19.2	-24.4
Ukraine	10.9	46.2	22.2	12.8	-42.3
Austria	0.0	5.5	5.3	8.5	60.4
Spain	0.1	15.4	11.6	7.8	-32.8
Italy	6.0	29.8	27.5	7.1	-74.2
Total for the listed countries	252.5	985.8	934.6	634.2	-32.1
Total Exports	300.5	1152.3	1057.2	710.2	-32.8

Figure 4. Structure of Armenian exports per countries, USD mln

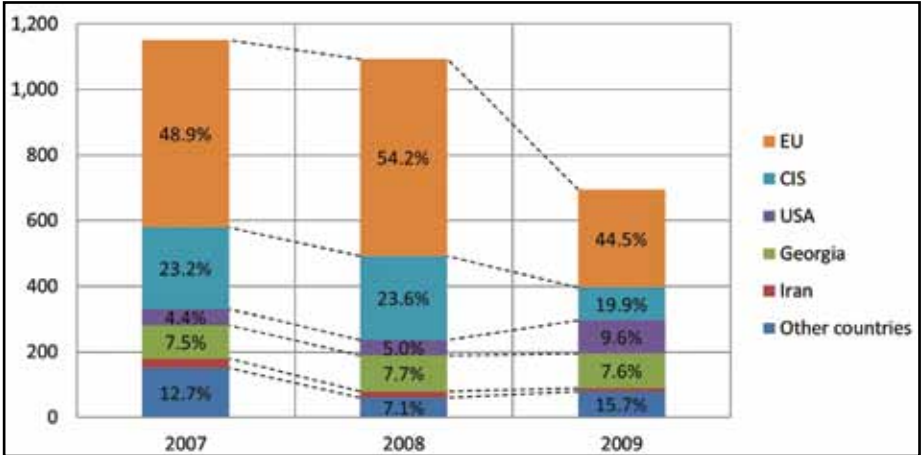
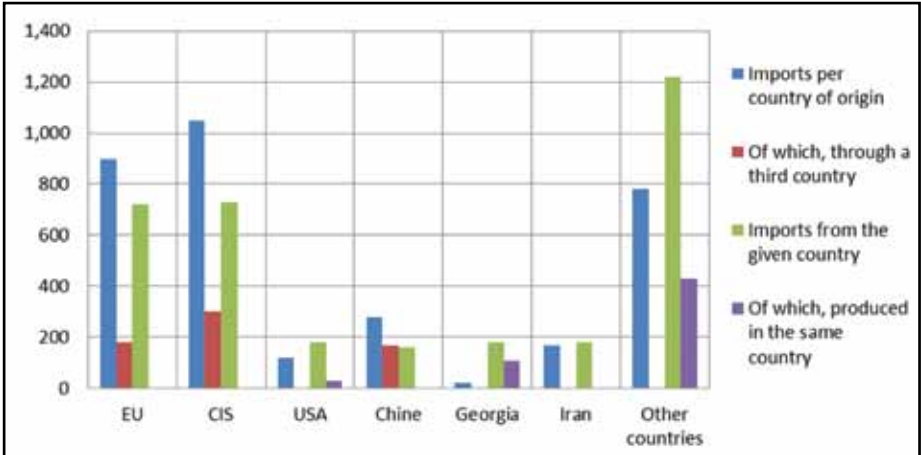


Table 2. Imports to Armenia and breakdown thereof per countries, USD mln

Country	2007	2008	2009	Growth from 2008, %	Share in imports, %	
					2008	2009
Russia	482.7	849.8	797.1	-6.2	19.2	24
China	192.4	380.6	288.9	-24.1	8.6	8.7
Ukraine	251.5	314.3	202.6	-35.5	7.1	6.1
Turkey	130.4	270.0	179.3	-33.6	6.1	5.4
Iran	141.0	203.6	136.2	-33.1	4.6	4.1
Germany	112.8	256.7	179.3	-30.1	5.8	5.4
Switzerland	22.3	17.7	122.9	594.1	0.4	3.7
Italy	112.6	159.3	112.9	-29.1	3.6	3.4
USA	129.3	216.9	122.9	-43.3	4.9	3.7
Korea	56.5	79.7	89.7	12.6	1.8	2.7
Bulgaria	87.5	119.5	86.3	-27.7	2.7	2.6
France	148.5	128.4	73.1	-43.1	2.9	2.2
Romania	68.4	101.8	73.1	-28.2	2.3	2.2
Belgium	116.4	92.9	59.8	-35.7	2.1	1.8

Brazil	26.2	57.5	56.5	-1.9	1.3	1.7
Total for listed countries	2078.5	3248.8	2580.5	-20.6	73.4	77.7
Total Imports	3267.8	4426.1	3321.1	-25.0	100.0	100.0

Figure 5. Imports to Armenia per countries of origin and trading countries, 2009, USD mln



Turkey's shares in the world markets rose from 0.15% in 1980 to 0.78% in 2007. Export levels increased from 2.9 billion US dollars in 1980 to 132 billion US dollars in 2008.¹ The membership of the World Trade Organization in 1995, arrival at the final stage of the Customs Union with the European Union in 1996 and its growing economy were the major reasons behind Turkey's rapid import growth rate during these years.

In total exports, the share of "machinery and transport equipment", a product group comprising high value-added and high-tech products, increased from 7.1 billion US dollars to 39 billion US dollars from 2001 to 2008.² Indeed, machinery and transport equipment have been the largest component of Turkish exports in 2004-2007, surpassing the traditional export leader, textiles and clothing. However, the exports of manufactured goods have become the dominant commodity component in Turkish exports since 2008.

The global financial economic crisis affected Turkish trade dramatically and the export from Turkey declined by 22.6% in 2009. Despite the recent increase to

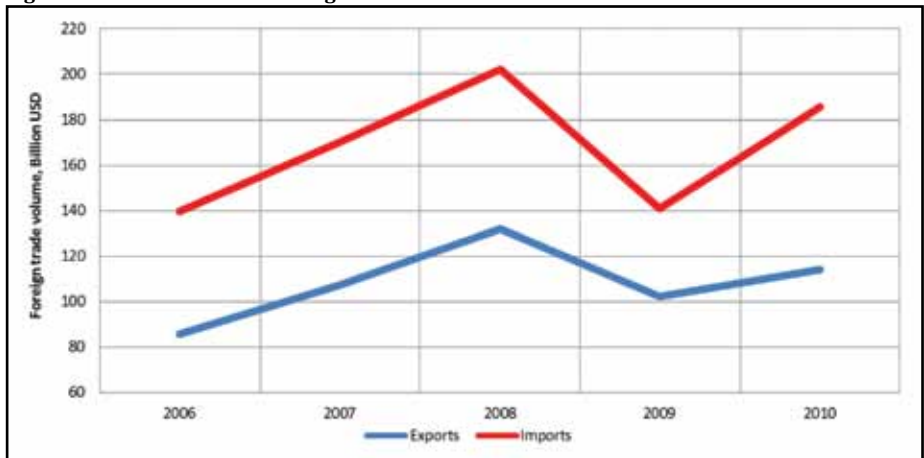
1 Undersecretariat of Foreign Trade. <http://www.dtm.gov.tr>

2 Turkey's Statistical Yearbook 2010. Turkish Statistical Institute. <http://www.turkstat.gov.tr>

about USD 114 billion (11.6%) in 2010, Turkish exports have not reached the pick level of 2008 yet. Nevertheless, the exports in manufacturing goods in 2010 exceeded the level of exports in 2007, constituting over 92% of Turkey's exports. In contrast, the exports of agricultural, mining and other goods have been gradually increasing even under overall economic recession caused by the global crisis.

The crisis affected Turkey's imports quite dramatically, which used to grow annually by about 20% on average in 2006-2008. After decreasing by 30.2% in 2009 the Turkish imports increased subsequently by 31.7%, reaching USD 185 billion in 2010, thus exceeding the level of imports in 2007. The manufacturing remains the leading sector absorbing Turkey's imports (78.3%).¹

Figure 6. Main indicators of foreign trade²



Foreign trade in Turkey is characterized with huge regional disparity. Thus, according to the tax numbers of the firms located in Turkish provinces, Istanbul is attributed with approximately half of Turkey's foreign trade, about 47% of exports and 53% of imports in 2010 (56% and 55% in 2008, respectively). Meanwhile, the exports from the North East Anatolia (Erzurum, Erzincan, Bayburt, Ağrı, Kars, Iğdir and Ardahan) was less than 0.2% of Turkey's exports, and the imports from this region was less than 0.05% of total imports in 2010. Similarly, foreign trade from Central East Anatolia was as low as 0.58% in exports and 0.1% in imports in 2010. The volume of annual foreign trade in several regions neighboring with Armenia has been extremely low: in 2010 exports from Kars, Tunceli, and

1 Ibid.

2 Ibid.

Erzincan was worth less than one million US dollar; from Ardahan, Bayburt and Bitlis less than five million US dollars; and from Van and Muş less than 20 million US dollars. Similarly, figures for imports into Ardahan and Tunceli were lower than a million US dollars, and for Kars, Muş, Bitlis, Bingöl and Bayburt those were lower than 3 million US dollars.¹ Thus, these areas can be considered as potential markets for Armenian exports. However, a detailed analysis of markets in Turkish provinces is required in order to estimate this potential.

EU member countries constitute the most important foreign trade partners for Turkey. However, the share of EU countries in Turkish exports declined from 56% in 2006 to 46.3% in 2010; and the share of EU countries in Turkey's imports declined from 42.6% to 38.9% in the same period. Turkey's exports to BSEC member countries which had reached about 16% in 2008, declined after the crisis. However, in 2010 it started to recover reaching 12.7% (about USD 14.5 billion). Respectively, Turkish import from BSEC countries was over USD 33.6 billion in 2010 (over 18% of total imports). The Turkish exports and imports with CIS countries reached 9% and 16.5% respectively in 2010. Country wise, Germany remains Turkey's most significant exports partner, with USD 11.5 billion (10.1% of total exports), while Russia is the primary imports partner, with USD 21.6 billion (11.3% of total imports).²

Table 3. First 10 countries by exports and imports, 2010³

Imports			Exports		
Total	USD million	%	Total	USD million	%
	185,535	100.0		113,976	100.0
Russia	21,600	11.6	Germany	11,485	10.1
Germany	17,548	9.5	United Kingdom	7,238	6.4
China	17,181	9.3	Italy	6,510	5.7
USA	12,319	6.6	France	6,055	5.3
Italy	10,203	5.5	Iraq	6,042	5.3
France	8,176	4.4	Russia	4,632	4.1
Iran	7,645	4.1	USA	3,769	3.3
Spain	4,840	2.6	Spain	3,565	3.1
South Korea	4,764	2.6	U.A.E	3,338	2.9
United Kingdom	4,681	2.5	Iran	3,043	2.7
Others	76,579	41.3	Others	58,300	51.2

Turkey has set a goal to attain USD 500 billion in exports by 2023, which will require a two-digit annual growth rate until the target date. This aim should be

1 Turkey's Statistical Yearbook 2010. Turkish Statistical Institute. <http://www.turkstat.gov.tr>.

2 Ibid.

3 Ibid.

seen as a driving force for a pressing need to diversify and extend the use of international transport routes.

The trade volume between Turkey and Armenia was estimated about USD 30 million in 1997, growing to at least USD 120 million in 2007. According to the estimations by various experts, including the World Bank, Armenian Chamber of Commerce and TABDC, the current trade volume between the two countries varies from USD 150 million to USD 300 million, with over 90% of trade attributed to Turkish exports to Armenia.¹ Armenia's official statistics on trade with Turkey is presented below, in Table 4.² The commodities of foreign trade between Turkey and Armenia comprise mainly textile, spare parts and construction materials.³

Table 4. Trade between Armenia and Turkey

	Export, in thousand USD	Import by, in thousand USD	
		country of origin	consignment
2011	983.40	218,244.28	184,703.41
2010	1,291.27	210,381.16	187,629.79
2009	1,197.49	177,648.75	158,240.65
2008	1,850.90	268,187.28	221,590.52
2007	3,033.03	130,631.25	125,382.97
2006	2,370.51	95,422.88	88,502.99
2005	2,473.38	66,928.03	61,217.65
2004	2,021.25	44,804.66	39,807.14
2003	1,154.67	40,886.69	36,736.24

Overview of Transport and Communication in Armenia and Turkey

Transport and communication accounted for 6.8% of Armenia's GDP in 2008, gradually increasing since 2004.⁴ In comparison, transport, storage and communication sectorial share of GDP at current prices reached 14.2% of Turkey's GDP in 2008, later declining to 13.3% through 2009-2010.⁵

A detailed description of the road, railway and air transport infrastructure and network in Armenia and Turkey is provided in several credible sources.⁶ We will

1 <http://www.worldbulletin.net/index.php?aType=haberArchive&ArticleID=53530> (accessed 22 Dec. 2011).

2 <http://armstat.am>.

3 Alin Ozinian. General Outlook on Turkish-Armenian Trade and Developing Possible Cooperation. TABDC. 2010.

4 National accounts of Armenia, 2010. <http://armstat.am/en/?module=publications&mid=6&id=1198> (accessed 22 Dec. 2011).

5 Turkey's Statistical Yearbook 2010. Turkish Statistical Institute. <http://www.turkstat.gov.tr>.

6 Such as: Armenia's Transport Outlook. Transport Sector Master Plan. Transport and Communications. Armenia 2011. Asian Development Bank. Republic of Turkey Prime Ministry. Investment Support and Promotion Agency of Turkey. Transportation & Logistics Industry Report. January 2010. <http://www.invest.gov.tr/en-US/infocent>

not specifically discuss these issues, however data provided by these sources and publications will be used for deliberation below. Here we would like to focus on basic indicators outlining the transport infrastructure in Armenia and Turkey, as well as to provide several comparative snapshots juxtaposing the infrastructures of the two countries.

The Global Competitiveness Index 2010 ranked Armenia's and Turkey's infrastructure at 90 and 56 out of 139 countries respectively, with the scores of 3.46 and 4.21 in a range of 1 (very bad quality infrastructure) to 7 (very good quality infrastructure). The neighbors in the region rank between 73 and 76 (Georgia ranks 73 with the score of 3.75; Iran ranks 74 with the score of 3.75 and Azerbaijan ranks 76 with the score of 3.69). Among the components evaluated, Armenia's roads ranked 87, its railway infrastructure ranked 79, the air transport infrastructure ranked 77 and the port infrastructure ranked 128. Respectively, Turkey's roads ranked 46, its railway infrastructure ranked 63, the air transport infrastructure ranked 44 and the port infrastructure ranked 72.¹

Picture 1. Armenia's transport infrastructure



[ter/publications/Documents/TRANSPORTATION.LOGISTICS.INDUSTRY.pdf](http://www.weforum.org/publications/Documents/TRANSPORTATION.LOGISTICS.INDUSTRY.pdf) (accessed 22 Dec. 2011).

1 The Global Competitiveness Report 2010-2011. 2010 World Economic Forum. Geneva. http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2010-11.pdf (accessed 22 Dec. 2011).

Roads

Armenia's primary roads total to 10,818 kilometers of which 1,686 km are international corridors. The road network serves as the backbone of the country's economic development, providing connectivity within the country, to neighboring countries, and to mainland Asia and Europe.¹

Turkish national and international transport is dominated by road transport. Turkey has an extensive network of approximately 64,236 kilometers of well-maintained main roads of which the 2,036 km are motorways and 31,271 km are state highways.² The approximate length of the international road network, important for international traffic running through Turkey, is about 9,000 km.³ 8,878 km of the main road network consists of E-Roads which connect the east and west through the Anatolian mainland and have high standards. International road transport operations are carried out with permits obtained in bilateral negotiations, or with licenses from the European Conference of Ministers of Transport. Around 200 000 truckloads per year (both directions) are operated by road, but the restricted number of permits granted to Turkish truckers along the transit corridors to Western Europe (particularly in Hungary, Austria, Italy and Slovenia) creates difficulties for international transport.

Although there has been a 138% increase in Turkish exports to the EU, this sector has seen only a 50% increase in the quota of permits received in the last 5 years. This problem is further aggravated by difficulties to obtain visas for Turkish truck drivers in a timely fashion, as well as transit border bottlenecks with high transit charges in countries along the Central Asian route. Hence, Turkish operators have started to buy companies in Europe to overcome permit problems and have developed Roll-on-roll-off (Ro-Ro) services to provide alternatives.⁴

Table 5. International Road Network in Turkey⁵

International Road Network In Turkey	Length (Km)
Trans European Motorway (TEM)	6,896
Agreement on Main International Traffic Arteries (AGR) E-ROADS	8,878
Black Sea Economic Cooperation - BSEC	4,472
Economic Cooperation Organisation - ECO	7,982

1 Armenia's Transport Outlook. Transport Sector Master Plan. Transport and Communications. Armenia 2011. Asian Development Bank.

2 Turkey's Statistical Yearbook 2010. Turkish Statistical Institute. <http://www.turkstat.gov.tr>.

3 Intermodal Transport. National Peer Review: Turkey. International Transport Forum. OECD/ITF 2009.

4 Ibid

5 Source: Turkish General Directorate of Highways

UN-ESCAP	5,247
TRACECA	1,500
Euro-Asian Linkages	3,020
Pan-European Corridors (Corridor IV)	261

Table 6. Fleet configuration of the international road haulage sector in Turkey, 2007¹

International Road Transport Fleet in Turkey	Number
Tractors + Trailer – trucks	43,618
Lorries	16,894
Trailers/Semi-trailers	53,902
Refrigerated	1,914
Conventional-Dry cargo	5,524
Textiles	735
Car carriers	883
Glass carriers	65
Low beds	190
Platforms	415
Silo tankers	59
Liquid fluid tankers	831
Liquid gas tankers	140
Total	125,170

Table 7. Transit Traffic by Road Vehicles in 2007²

BORDER GATES	NUMBER OF TRANSIT VEHICLES ENTERING IN TURKEY						NUMBER OF TRANSIT VEHICLES EXITING TURKEY					
	Empty			Loaded			Empty			Loaded		
	Turkish	Foreign	Total	Turkish	Foreign	Total	Turkish	Foreign	Total	Turkish	Foreign	Total
KAPIKULE	0	1,143	1,143	9,856	7,332	17,188	0	621	621	912	4,222	5,134
İPSALA	0	754	754	54	2,974	3,028	0	587	587	19	2,745	2,764
CİLVEGÖZÜ	0	1,055	1,055	6,847	4,555	11,402	0	984	984	3,354	2,188	5,542
GÜRBULAK	0	989	989	1,487	10,137	11,624	0	345	345	8,774	9,177	17,951
SARP	0	1,631	1,631	103	661	764	0	254	254	1,656	2,798	4,454
TÜRKGÖZÜ	0	38	38	12	0	10	0	0	0	55	8	63
TOTAL	0	5,610	5,610	17,994	25,160	44,016	0	2,791	2,791	14,770	21,138	35,908

Railway

Armenia's railway network, operated by South Caucasus Railway (SCR), a subsidiary of Russian Railways since mid-2008, has 23.5-ton axle loads and is wholly electrified. The infrastructure and fleet of cars, with most of the electric locomotives, are around 35 years old and in need of repair or replacement. Track speed is often limited to 30 km per hour, with rehabilitated sections allowing 60 km per

1 Source: Turkish General Directorate of Road Transport

2 Source: RODER

hour. About 370 km of the 732 km network are fully operational: the Yerevan–Georgian border line, the Yerevan–Yeraskh passenger line, and sections of the Yerevan–Azerbaijan/Vardenis lines. Much of the main Yerevan–Gyumri–Airum (Georgian border) line is in poor condition. The railway system transports more international than domestic freight. Almost 65% of all rail freight is international, of which about 45% consists of imports. The principal commodities transported by railways were cereals, oil and oil products, cement, and chemical and mineral fertilizers (commodities are listed in order of decreasing importance). Total freight transportation by railway increased from 2005 to 2007, declined in 2008, and then slightly increased in 2009.¹

The length of Turkey’s main railways is 9,083 kilometers² (of which 2,316 km are electrified), operated by the General Directorate of Turkish State Railways (TCDD). The network is predominantly single-tracked (95%) and is characterized by a mountainous terrain, tight curves and steep gradients. The permitted axle load is 20-ton on about 61% and 22.5-ton on about 37% of the network. The Turkish rail system is both jointed and welded, with concrete sleepers used on around 60% of the network. Turkey’s rail corridors include: Sirkeci (İstanbul)-Pehlivan köy-Greek border; Sirkeci-Pehlivan köy-Bulgarian border; Haydarpaşa (İst.)-Arifiye-Adapazarı; Haydarpaşa (İst.)-Arifiye-İzmit-Eskişehir-Ankara; Ankara-Kayaş-Irmak-Karabük-Zonguldak; Ankara-Kayaş-Irmak-Kayseri-Sivas-Samsun; Sivas-Çetinkaya-Erzincan-Erzurum-Kars-Akkaya; Sivas-Çetinkaya-Malatya-Yolçatı-Elazığ-Muş-Tatvan-Van-Iranian border; Malatya-Yolçatı-Kurtalan; Kayseri-Ulukışla-Adana; Adana-Toprakkale-İskenderun; Adana-Toprakkale-Fevzipaşa-Narlı-Gaziantep-Nusaybin-Syrian border; Eskişehir-Alayunt-Kütahya-Balıkesir; Bandırma-Balıkesir-Manisa-Basmane (İzmir); Manisa-Uşak-Afyon-Alsancak (İzmir)-Aydın-Goncalı-Denizli; Denizli-Goncalı-Karakuyu-Afyon; Afyon-Karakuyu-Gümüşgün (Burdur)-Bozanönü (Isparta)-Eğirdir; Eskişehir-Afyon-Konya-Karaman-Ulukışla-Adana.

Direct international freight transportation by railways are feasible through the following border crossing points: to Bulgaria and other European countries through Kapıkule border connection; to Greece and other countries through Uzunköprü; to Iran and the Central Asian countries through Kapıköy border connection; to Syria and Iraq through İslahiye border connection; and to Syria and Iraq through Nusaybin border connection.³

1 Armenia’s Transport Outlook. Transport Sector Master Plan. Transport and Communications. Armenia 2011. Asian Development Bank.

2 Turkey’s Statistical Yearbook 2010. Turkish Statistical Institute. <http://www.turkstat.gov.tr>

3 Intermodal Transport. National Peer Review: Turkey. International Transport Forum. OECD/ITF 2009.

Picture 2. Turkey's Priority railway projects¹



Air Transport

Armenia has three main airports: Zvartnots, Shirak, and Erebuni. Zvartnots (or Yerevan) International Airport is the principal gateway to the country. Armenian International Airports manages and maintains the airports in Zvartnots and Shirak under a 30-year concession.² Turkey has many modern airports that are open to international and domestic flights. The major international airports are Atatürk in Istanbul, Antalya international terminals, Esenboğa in Ankara and Adnan Menderes in Izmir. There are 45 airports, 16 of which serve for international flights. Turkey has a large airspace (982,096 km²) with a total length of controlled ATS routes of 50,797 km, situated among the three continents, Europe, Asia and Africa. Due to its special geographical location, Turkish airspace includes cross-roads of north-south and east-west traffic flows between Europe-Asia and the Middle East. The overall traffic increase in the Turkish airspace during 2005 approached 15%, well above the European average.³

Maritime Transport

Maritime transport is one of the most significant transport modes in Turkey with a strong private shipping sector. All of the major ports are accessible by railways with a storage capacity of 2 million tones and total throughput around 46 million

1 Intermodal Transport. National Peer Review: Turkey. International Transport Forum. OECD/ITF 2009.

2 Armenia's Transport Outlook. Transport Sector Master Plan. Transport and Communications. Armenia 2011. Asian Development Bank.

3 Intermodal Transport. National Peer Review: Turkey. International Transport Forum. OECD/ITF 2009.

tons per year. With over 8000 km of coastline, Turkey has five ports, which have been registered as international ports/ferry links and container terminals by the European Agreement on Main International Combined Transportation Lines and Related Facilities (AGTC). In recent years, container traffic at the ports showed a 20% increase annually.¹

Access to the Black Sea ports is important for the landlocked Armenia. According to estimations, such access would reduce the trade deficit by a third to a half, and would increase GDP by 30%.² Without the trade generated by access to these ports, Armenia will have a relatively modest annual GDP increase in the upcoming years.³ Armenia needs access to as many ports as possible. Dependence on only one or two outlets to the sea poses the risk of Armenia becoming a “captive shipper”.⁴

Transport Logistics and Communication

A multimodal logistics network is key to building an efficient distribution system. About 30,000 containers (70% of them 40 feet long) are imported to Armenia annually through Georgia's port of Poti on the Black Sea. Railway transport handles about 30% of them. Potentially, however, 800,000 tons worth of international containers could be imported. A German company is currently establishing a multimodal block train from Western Europe to Bulgaria that will connect with the ferry service to Poti. This train-ferry route will strengthen Armenia's multimodal logistics network.⁵

Freight villages and multimodal terminals are logistic nodes with differing functions. In order to establish such a system in Turkey, to ensure the enhanced attractiveness of combined transport, an increase in the customer satisfaction and the share of freight transportation as well as the prevention of pollution, TCDD has included in its priorities the transformation of six locations into freight villages, namely Halkalı (Ýstanbul), Köseköy (Ýzmit), Boðazköprü (Kayseri), Gelemen (Samsun), Hasanbey (Eskişehir), Gökköy (Balýkesir). This initiative reflects Turkey's willingness to facilitate multimodal operations by enhancing the logis-

1 Ibid.

2 E. Polyakov. 2001. Changing Trade Patterns after Conflict Resolution in the South Caucasus. World Bank Policy Research Working Paper Series No. 2593. Washington, DC: World Bank.

3 Armenian-European Policy and Legal Advice Center. 2005. Study of the Economic Impact on the Armenian Economy from Re-Opening of the Turkish-Armenian Borders.

4 T. Snow, M. Faye, J. McArthur, and J. Sachs. 2003. Country Case Studies on the Challenges Facing Landlocked Developing Countries. UNDP Human Development Report Office Occasional Paper. New York: United Nations Development Programme (UNDP).

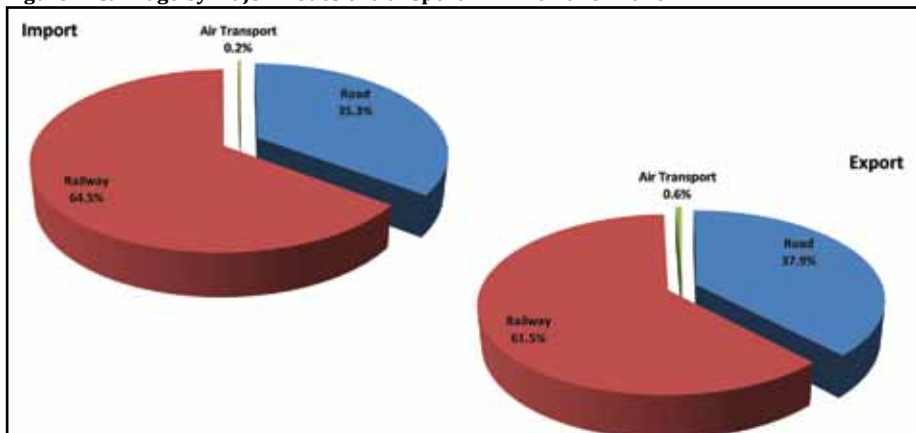
5 Armenia's Transport Outlook. Transport Sector Master Plan. Transport and Communications. Armenia 2011. Asian Development Bank.

tics supply and demand chain.

The transportation and logistics sector, broadly defined to include airlines and airfreight, shipping, road and rail transport and the associated infrastructure and services, generated USD 3.4 trillion of revenue globally in 2007. It has grown with a Compound Annual Growth Rate (CAGR) of 6.2% between 2003 and 2007. By 2012, the global transportation industry is forecast to reach USD 4.5 trillion growing with a CAGR of 5.4%.¹

Armenia exported 554.4 thousand tons of goods by road (210.3 thousand tones), railway (340.80 thousand tones) and air (3.3 thousand tones) in 2010. In the same year, Armenia imported 2,210.7 thousand tons of goods (about four times more than exported) by road (779.3 thousand tones), railway (1,425.9 thousand tones) and air (5.5 thousand tones).² Figure 7 shows the share of each of the mentioned mode of transport:

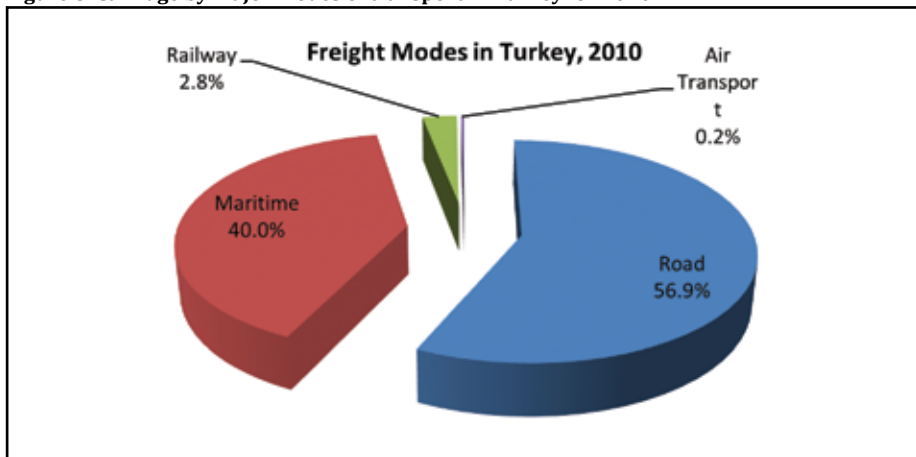
Figure 7. Carriage by major modes of transport in Armenia for 2010



Road transport has the highest modal share of bilateral and transit markets in east-west and north-south connections.

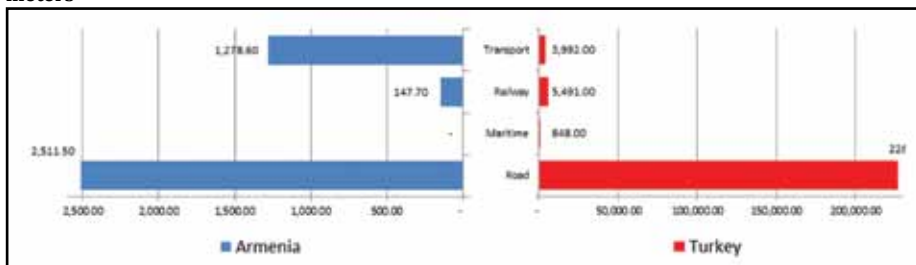
1 Republic of Turkey Prime Ministry. Investment Support and Promotion Agency of Turkey. Transportation & Logistics Industry Report. January 2010. <http://www.invest.gov.tr/en-US/infocenter/publications/Documents/TRANSPORTATION.LOGISTICS.INDUSTRY.pdf> (accessed 22 Dec. 2011).
2 Social-Economic Situation in Armenia in January-December 2010. Statistical Report. http://armstat.am/file/article/sv_12_10a_124.pdf (accessed 22 Dec. 2011).

Figure 8. Carriage by major modes of transport in Turkey for 2010



Road transport is the major mode of passenger transportation in both Armenia and Turkey as measured by traffic. Figure 9 below illustrates the traffic of passenger transport by main modes in 2010. The overall passenger traffic in Turkey (about 237,000 million passenger/km) exceeds the passenger traffic in Armenia (about 3,940 million passenger/km) over 60 times. In Turkey 96% of passenger traffic is by road and the other modes share the other 4%, with railway and air transport being almost equal (about 2%).¹ In Armenia the road transport bears about 64% of the passenger traffic, while air transport is another significant mode of transport for Armenian passengers (about 32%).² While in Turkey the maritime transport has a minor share of passenger traffic, about 0.36 percent, in Armenia there is no maritime traffic of passengers at all.

Figure 9. Passenger Transportation by Modes of Transport for 2010, million passenger kilometers³



1 Summary Statistics on Transportation 2010. Turkish Statistical Institute. <http://www.turkstat.gov.tr>

2 Social-Economic Situation in Armenia in January-December 2010. Statistical Report. http://armstat.am/file/article/sv_12_10a_124.pdf (accessed 22 Dec. 2011).

3 The data for Air Transport in Turkey is for 2005, as no later data is available to the authors of this report.

Chapter II. Reponses of Economies and Businesses to Status Quo Development vis-à-vis Alternative Developments

A.1. Development of Transit Routes under Status Quo

An important opportunity that enables further utilization of the regional road infrastructure by the Armenian transport sector is the Black Sea Ring Highway (BSRH). The twelve governments of BSEC member-states have signed a Memorandum of Understanding for the coordinated development of the BSRH in April 2007, intending to promote cooperation in the development of multimodal transport infrastructure in the BSEC region and to create adequate road interconnections with the Trans-European, the Pan-European and the Euro-Asian Transport Networks in coordination with the EU. The BSRH length is approximately 7000 km around the Black Sea. Though economic cooperation is the key objective, the highway could attract tourists to this region as well. While the cost of the project and the date of completion were not set, the main route and its connections have been outlined and may include the following cities: Istanbul (Turkey), Samsun (Turkey), Trabzon (Turkey), Batumi (Georgia), Poti (Georgia), Yerevan (Armenia), Baku (Azerbaijan), Novorossiysk (Russia), Rostov-on-Don (Russia), Taganrog (Russia), Mariupol (Ukraine), Melitopol (Ukraine), Odessa (Ukraine), Chisinau (Moldova), Bucharest (Romania), Constantza (Romania), Haskovo (Bulgaria), Sofia (Bulgaria), Nish (Serbia), Belgrade (Serbia), Tirana (Albania), Edirne (Turkey), Komotini (Greece), Alexandroupolis (Greece), and Istanbul (Turkey). Funding of the BSRH construction and reconstruction is envisaged out of national funds and budgets, as well as through engagement of private sector stakeholders, EU funds and loans by transnational banks and funds. Under this project the existing roads will be upgraded and linked up.¹ Twelve trucks, one from each country, were sent to test the current state of roads and make recommendations. The highway is of extreme importance, as it will both facilitate economic cooperation and promote conflict resolution in the Black Sea region.

BSRH is believed to be very important for the development of Armenia's transport sector under Status Quo scenario, as it will secure access to adequate quality for up-to-date traffic, ensuring safety, speed and comfort and, thus, will facilitate economic and social development to the overall benefit of Armenia. It will also serve as a vibrant platform for development and will create further opportunities for enhancing Armenia-Turkey economic cooperation.

Source: Republic of Turkey Prime Ministry. Investment Support and Promotion Agency of Turkey. Transportation & Logistics Industry Report. January 2010. <http://www.invest.gov.tr/en-US/infocenter/publications/Documents/TRANSPORTATION.LOGISTICS.INDUSTRY.pdf> (accessed 22 Dec. 2011).

1 Memorandum of Understanding for the Coordinated Development of the Black Sea Ring Highway. <http://www.blacksearing.org/index.php?id=153> (accessed 22 Dec. 2011).

Picture 3. Black Sea Ring Highway



In recent years, due to the problems in the road transport, Ro-Ro transport has increased to a significant level.¹ Ro-Ro traffic is very active in the Black Sea region:² Ro-Ro vessels are operating between ports in Turkey, Ukraine and Russia and Georgia as described below in Picture 4. Container and Ro-Ro traffic play a key role for the flow of manufactured and high value-added goods, especially in port traffic with Europe and other neighbors of Turkey.³ Turkey gradually increases its capacities to offer Ro-Ro services through various ports in the Black Sea.

Armenian transport companies also use Ro-Ro services quite extensively in the Black Sea. Currently only Ro-Ro routes from the port of Poti to Russia, Ukraine and Bulgaria are available for Armenia. Armenia is a landlocked country, and therefore predominantly uses opportunities provided by multimodal freight transport. Direct land roots pass to Russia and Iran through north-east corridors as described above. However, under severe weather conditions, particularly at

1 Atılgan, C. (2005). Sustainable Transport through Intermodality. Palermo 18-19 March 2005.

2 Hülya Zeybek. Intermodal Freight Transport and Logistics Research in European Union And Turkey.

Turkish State Railways, Ankara,06330 Turkey.

3 Zeybek, H (2006). Ports in Turkey and Perspectives for Cooperation in the EuroMediterranean Region 15-06-2006 Available online: <http://www.turkishmaritimeneews.com/index.php?sayfa=yazar&id=10>.

the Verkhniy Lars-Kazbeki border crossing between Russia-Georgia, trucks have no other alternative but use Ro-Ro services from Russian ports to Poti. Cargo of total weight of 1,037 thousand tones¹ has been shipped to and from Armenia by road in 2010. The considerable share of this volume requires intermodal freight transport provided by the Black Sea Ro-Ro services.

Picture 4: Map of Ro-Ro and Ferry Services in Black Sea Region²



Table 8. Ro-Ro operations in 2010³

Port in Turkey	Port in other countries	Turnover
Samsun Port	Novorossiysk (Russia)	15,145 vehicles
Zonguldak Port	Ukraine Ports	19,573 vehicles
Rize Port	Poti (Georgia)	0 vehicles*
Trabzon Port	Sochi (Russia)	5,078 vehicles

* - 5,372 in 2003 and 0 since 2007.

Another critical regional transport project opening up opportunities for the development of transit routes under Status Quo scenario is the Kars-Tbilisi-Baku railway construction. The Kars-Tbilisi-Baku railway, or Kars-Akhalkalaki-Tbilisi-Baku railway, is a regional rail link project to directly connect Turkey, Georgia and Azerbaijan. The project of a railroad between Azerbaijan and Turkey through Georgia was first discussed in July 1993, after the Kars-Gyumri-Tbilisi railway, which goes through Armenia, was closed. The new railway link is intended to provide an alternative route to the existing Kars-Gyumri-Tbilisi railway line, which

1 <http://www.customs.am>.

2 Ferry Services in the Black Sea Region. UkrFerry Shipping company

3 By Hacer Uyarlar. TRACECA LOGMOS, Tbilisi 3-5 October 2011. UTIKAD

has been out of use since 1993 when Turkey closed its border with Armenia to support Azerbaijan in its conflict with Armenia following the Nagorno-Karabakh War. A multi-lateral accord to build the link was signed by the three countries in January 2005. Because of a lack of funding at the time, this project was more or less abandoned.

However, during the inauguration of the Baku–Tbilisi–Ceyhan pipeline on May 2005, the Presidents of Azerbaijan, Georgia and of Turkey evoked once again the possibility of building a railroad between the three countries.¹ In February 2007 Azerbaijan, Georgia and Turkey signed a trilateral agreement to launch the construction of the railroad the same year. On November 21, 2007, the leaders of three countries inaugurated the construction of the railroad and the first rails in Kars, Turkey began to be laid in July 2008.² The project was previously scheduled to be completed by 2010, but was delayed due to certain technical problems and the conflict between Georgia and Russia in 2008. The railway line is now expected to be complete by the end of 2012.³

A total of 105 km of railway line, including railway line segments in Turkey and Georgia will be constructed as part of the project. In addition, the 160 km section of Akhalkalaki-Tbilisi railway line will be modernized, substantially improving its carrying capacity. Experts forecast that the Kars–Tbilisi–Baku railway line will transport a million passengers and 6.5 million tons of cargo in its initial stage of operation in 2011.⁴ By 2030, this railway line would carry an estimated 17 million tons of cargo and about three million passengers.⁵

While the objective of the project is to improve economic relations between the three countries, some believe that the project is inconsistent with Armenia's economic and political interests. The key concerns in these arguments focus on the fact that the route bypasses and somewhat marginalizes Armenia from regional economic projects, as the route through Armenia was politically impossible due to the unresolved conflict over Nagorno-Karabakh. However, proper transport strategies and infrastructure development projects between Armenia, Russia, Iran and Georgia may well benefit from Kars–Tbilisi–Baku railway by offering further regional integration opportunities to all stakeholders in the region and beyond.

1 Aydin Suleymanli. The Baku-Tbilisi-Kars railway connection as an important section of the Trans-European Railway network. Workshop Rail Transport Between Europe And Asia. Istanbul, Turkey. June 09-10, 2009.

2 http://eria-online.org/5_5.html (accessed 22 Dec. 2011).

3 Baku-Tbilisi-Kars Line. Railway Technology com. <http://www.railway-technology.com/projects/baku-tbilisi-kars/> (accessed 22 Dec. 2011).

4 Kars-Tbilisi-Baku Railway Project Freight Demand Analysis and Forecasts. Yüksel Domanç. Republic of Turkey Ministry of Transport General Directorate of Railways, Harbours and Airports Construction. August 2006.

5 Baku-Tbilisi-Kars Line. Railway Technology com. <http://www.railway-technology.com/projects/baku-tbilisi-kars/> (accessed 22 Dec. 2011).

Picture 5. Baku-Tbilisi-Kars Railway



Under Status Quo scenario another opportunity for a new railway corridor providing transport connectivity for Armenia to regional networks is considered under Transport Strategy of the Republic of Armenia for 2009-2019. Specifically, Armenia considers a possibility of including a project on building Armenia-Iran railroad in the TRACECA agenda as a priority.¹ The mentioned railroad would create a direct railway communication between Iran and Armenia. It will have a great significance for the mining industry of Armenia and will promote sustainable opportunities for transit.² The construction of the projected railroad of approximately 470 km in length will cost around 1.5-2 billion US dollars.

The proposed route ensures efficient, safe and sustainable road network for connecting the Black Sea countries, Armenia and Iran, which can later be extended to Persian Gulf, thus promoting the overall regional transport operation. Later, it can be further connected to the East – West Railway of Georgia, which leads to Poti and Batumi at the Black Sea. This route provides Armenia with the shortest access to the sea ports linked to Europe and Russia (70% of Armenian trade is made through this route).³ The project will append the existing railroads with newly constructed sections in Armenia. In particular, the railroad will connect Georgian ports on the Black Sea (Poti, Batumi) with Vanadzor (currently operational),

1 Armenian Railway Infrastructure Rehabilitation. Priority Project Fact Sheet. Transport Dialogue and Interoperability between the EU and its Neighbouring Countries and Central Asian Countries. First TRACECA Investment Forum. Brussels. 12th October 2010. http://www.traceca-org.org/fileadmin/fm-dam/Investment_Forum/BOOKLET_FINAL.pdf (accessed 22 Dec. 2011).

2 Ministry of foreign Affairs of the Republic of Armenia.

3 Transport Sector in Armenia. Ministry of Transport and Communication of the Republic of Armenia. Druskininkai, Lithuania. 4-5 April 2011.

heading further to Dilijan (47 km Vanadzor-Dilijan railroad will be constructed),¹ Gagarin (Dilijan-Gagarin section will be rehabilitated) and finally to the Iranian border in Meghri (423 km will be constructed).

Picture 6. North-South Corridor



A.2. Opportunities for Turkey and Armenia in Regional Transit Corridors and Trade

The open Armenian-Turkish border and newly established diplomatic relations between the two countries will offer to the entire region various significant opportunities for further integration and development of regional transit corridors and international trade. Specifically, such opportunities will anchor at utilization of currently existing capacities and infrastructure and thus will make the construction of new and expensive infrastructures redundant. Additionally, the alternatives of transport corridors will be enriched.

To support the above-mentioned argument, we will juxtapose the existing though currently not completely utilized infrastructure with various projects. Picture 7 depicts the alternative railway corridors connecting the South Caucasus region with Turkey and Russia.. The total length of the railroad corridor Baku-Tbilisi-Kars is 826 km,² and the Baku-Tbilisi-Gyumri-Kars runs 780 km.³ However, the

1 Technical-economic justification (feasibility study) of the construction of Vanadzor-Dilijan railroad is ongoing under the frameworks of TRACECA.
2 Samuel Lussac. The Baku-Tbilisi-Kars Railroad and its Geopolitical Implications for the South Caucasus. *Caucasian Review of International Affairs*. From Vol. 2 (4) - Autumn 2008. http://cria-online.org/5_5.html (accessed 22 Dec. 2011).
3 Атлас схем железных дорог СССР (1976). <http://atlasrussia.ru/atlas-shem-zheleznih-dorog-sssr-1976> (accessed 22 Dec. 2011).

second alternative can become functional upon Armenian-Turkish border opening. It will require only, minor rehabilitation of the infrastructure of the cross-border section Akhurian (Armenia) - Dogukapi (Turkey) with a total length of less than 10 km and with a capacity of 6.0 million tons/year.¹ Meanwhile, construction of 105 km of railway and reconstruction of 160 km will be required for the Baku-Tbilisi-Kars project, as mentioned above. In a long-term perspective these two alternative railroad projects, currently perceived as competing, will mutually complement the railroad network in the region and will provide enhanced capacities of international corridors.

Moreover, both projects are of significant interest to the major economic players in the region, as they offer high capacity and cost effective railway connection between Russia and Turkey. An illustrative example of such an interest is the case of transportation of the Russian coal to Turkey. Turkey imported around 15 million tons of thermal coal in 2010,² and it seems that this volume will gradually increase in the upcoming years for at least 10 percent annually. Currently this general cargo is shipped from Kuzbas to the Turkish Black Sea ports by vessel via Russian or Ukrainian ports. The capacity and efficiency of this route is inadequate vis-à-vis direct railway transportation of this cargo via Azerbaijan, Georgia and Armenia. The later routes provide an opportunity to avoid problems related to seasonal delays of vessels, major pollution of all ports engaged, as well as losses during vessel loading/unloading operations.³

Picture 7. Alternative railway corridors connecting the South Caucasus region with Turkey and Russia.



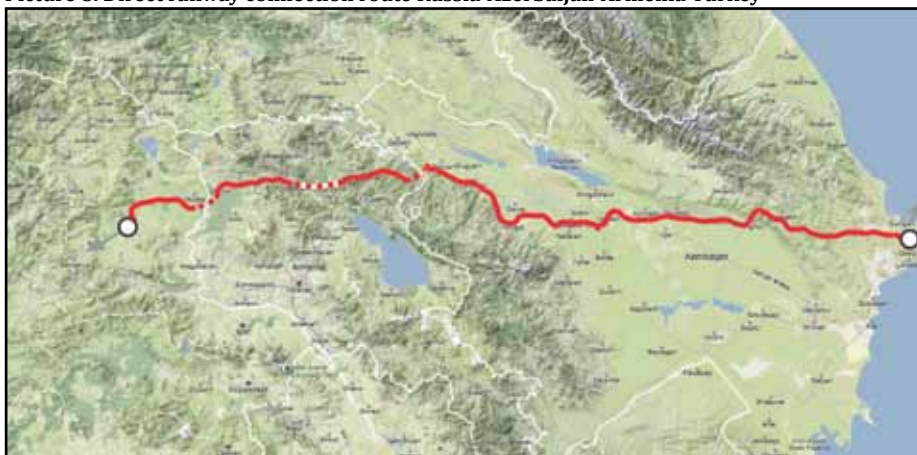
■ existing infrastructure (section crossing Armenia-Turkey border non-functional since 1993)

- 1 Report on Transport in The Black Sea Region. The Twelfth Plenary Session of the PABSEC General Assembly, The Economic, Commercial, Technological and Environmental Affairs Committee. Parliamentary Assembly of the Black Sea Economic Cooperation. Istanbul, 22 December 1998. <http://www.pabsec.org/pabsec/aksisnet/file/pdf/rep29.98.pdf> (accessed 22 Dec. 2011).
- 2 Russia boosts railed coal volumes on Turkish demand. Monday, 13 Jun 2011. <http://leeuniversal.blogspot.com/2011/06/russia-boosts-railed-coal-volumes-on.html> (accessed 22 Dec. 2011).
- 3 Транзитный потенциал Армении по перевозкам каменного угля из России в Турцию.

- infrastructure as per Kars- Tbilisi-Baku (partly existing sections, completion foreseen by 2013)
- functional railroad corridor upon open Armenia-Turkey border (rehabilitation needed)

Another perspective international corridor with huge potential for enhancing regional economic cooperation and integration is the opportunity of operating direct railway connection from Azerbaijan (Baku) to Armenia (Gyumri) upon further resolution of regional conflicts and opening of the border between Armenia and Azerbaijan.¹ On the technical side, the operation of this route requires construction of 47 km Vanadzor-Dilijan section of the railroad as described above, as well as rehabilitation of the border crossing sections between Armenia and Turkey in the north-west, and Armenia and Azerbaijan in the north-east (48.3 km Dilijan-Ijevan-Kazakh). This project provides with a challenging option for the Transcaucasian Network, by creating important traffic flows of oil products and raw materials between the Black Sea and the countries located on the Silk Road's West-East railway corridor² extending further beyond Baku to Aktau (Kazakhstan). This route also seems more competitive vis-à-vis the Kars-Tbilisi-Baku route in several dimensions.³

Picture 8. Direct railway connection route Russia-Azerbaijan-Armenia-Turkey



In an east-west direction, Armenia has even more significant potential for trans-

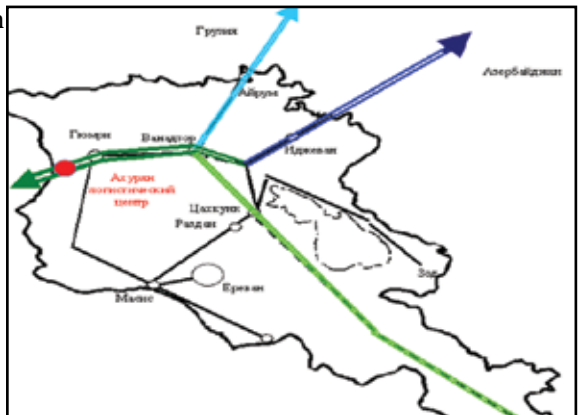
- 1 Transport Sector in Armenia. Ministry of Transport and Communication of the Republic of Armenia. Druskininkai, Lithuania. 4-5 April 2011. <http://www.osce.org/eea/76425> (accessed 22 Dec. 2011).
- 2 Armenian Railway Infrastructure Rehabilitation. Priority Project Fact Sheet. Transport Dialogue and Interoperability between the EU and its Neighbouring Countries and Central Asian Countries. First TRACECA Investment Forum. Brussels. 12th October 2010. http://www.traceca-org.org/fileadmin/fm-dam/Investment_Forum/BOOKLET_FINAL.pdf (accessed 22 Dec. 2011).
- 3 Poti to Baku and Turkmenbashi Transport Route. UNECE Euro-Asian Transport Route Meeting. Turkmenbashi, 7-8 December 2010.

shipments between Turkey, Russia and Central Asia. Routes through Armenia are as short as or shorter than the alternative routings and need to negotiate fewer natural barriers (i.e. mountain ranges).¹ The expediency of the rehabilitation of Kars-Gyumri-Nakhichevan-Meghri-Baku railway and its regional role has been officially communicated by Armenia to TRACECA,² and other multilateral players.³

Picture 9. Kars – Gyumri – Nakhijevan – Meghri – Baku railroad.



Further, upon implementation of new international railway corridors in the region, a need for a logistic HUB with stronger capacity will arise. Responding to this need, a project on constructing an International Logistic Center (ILC) in Akhuryan has been formulated.⁴ The center will be capable to handle over 215,000 tons of goods in 2012 according to a skeptical scenario (minimum sce-



1 Richard Beilock, Karine Torosyan. A Phased Strategy for Opening Armenia’s Western Border. <http://www.aiprg.net>.
 2 Ministry of foreign Affairs of the Republic of Armenia.
 3 Transport Sector in Armenia. Ministry of Transport and Communication of the Republic of Armenia. Druski-ninkai, Lithuania. 4-5 April 2011. <http://www.osce.org/eea/76425> (accessed 22 Dec. 2011).
 4 Ibid.

nario). This volume will reach over 310,000 by 2021, according to the same scenario.¹ The center will offer comprehensive services through an “one-stop shopping” system, including the ‘door to door’ scheme. It will contribute to consolidation of customers and may attract international forwarding companies eventually increasing the transit capacities in the region substantially.

Upon opening of the Armenian-Turkish border, regional transport corridors will extend to the Turkish Mediterranean ports such as Mersin and Izmir. Turkey uses standard gauge track (1,435mm), while Armenia, Azerbaijan and Georgia use broad gauge track (1,520mm). At all cross-border railway stations, a special area should be constructed for trains to convert from one gauge to another. Turkish State Railways (TCDD) currently has many network extension and modernization projects planned. TCDD is seeing the largest investment since the 1930s and with these investments is constructing new lines, primarily high-speed lines.²

Picture 10: Network of Turkish State Railways (TCDD)³



B.1. Competition and Non-Tariff based Limitations in Transport Sector under Status Quo

In 1993 Turkey imposed an embargo on humanitarian cargos meant for Armenia⁴ and in general, on trade with Armenia. However, in 1996, the two countries agreed on opening an air corridor and a direct air connection be-

1 ЗАО «ЮКЖД» представило проект создания МЛЦ на станции Ахурьян. <http://www.transportweekly.com/pages/ru/news/articles/81189> (accessed 22 Dec. 2011).
 2 A Short History of Turkish Railways. <http://www.trainsofturkey.com/w/pmwiki.php/History/History> (accessed 22 Dec. 2011).
 3 Ibid.
 4 Declaration by the Government of Turkey of 3 April 1993. Quoted from: “The Stakes of the Opening of Turkish-

tween Istanbul and Yerevan was established.¹ In the following years “suitcase trade” mushroomed, and the overall volume of imports from Turkey to Armenia increased. Thus, there emerged a need for consolidating the cargo, and seeking for cheaper transport alternatives for growing volumes. Turkish tracking businesses responded to this need quite energetically and a practice of transportation of goods from Turkey to Armenia has been established and developed.

Entrepreneurs import these goods from Turkey to Georgia providing two invoices: one for a Georgian intermediary consignee company, and another for the actual Armenian consignee. While leaving Turkish customs border, both invoices are stamped by the customs authorities and the one with the Georgian consignee is later included in the Turkey-Georgia trade statistics. Entering Georgia, the transport agent provides the invoice for the Armenian consignee to the Georgian customs authority. Thus, these goods pass Georgia as transit, and the further exit from Georgia and entrance to Armenia of the transport runs quite smoothly, as no embargo of Turkish goods exists in Armenia.

The practice of transit of goods via Turkey from third countries to Armenia was established in 2002, by the efforts of Armenian transport businesses supported by Turkish business associations. TABDC played a critical role in facilitating this process. The transit of goods via Turkey to Armenia by various international trucking companies runs smoothly and freely, and no need for quasi-legal procedures for international trucking companies has emerged ever since 2002.

The above-mentioned descriptions of transport and transit practices equally refer to multimodal transportation used for the shipment of cargo by containers to Armenia using international carriers. In particular, multimodal transit of goods by various international carriers via the hub port in Istanbul also functions smoothly, without any quasi-legal facilitation and a need for third party mediation.

Overall, it seems that the success in establishing cooperation and promoting services in the transport sector can be largely credited to the practical approach of Armenian and Turkish businesses. Additionally, certain parallel practices have proved effective as well, namely engaging other stakeholders, including business associations, media and civil society at large in the process, keeping low profile and carrying on track two negotiations to address practical needs and extend businesses.

Armenian Border: The cross-border contacts between Armenia and Turkey”. By Dr. Burcu Gültekin.
1 Ibid.

A number of emerging opportunities, challenges and constraints should be considered if the current status quo of the closed border and absence of diplomatic relations between Armenia and Turkey on one hand, and the established business practices on the other continue in short- and mid-term perspectives, including those related to competition and current non-tariff based limitations in the transport sector.

Firstly, the current transport facilitation practices will face challenges, emerging from the new initiative of Georgia and Turkey on customs modernization. As a result of the Customs Union with EU, and as a requirement to harmonize the external tariff with the third countries, Turkey, signed a Free Trade Agreement (FTA) with Georgia 2008.¹ Further, in the framework of customs modernization efforts by Turkey under the auspices of the Turkey-EU Customs Union,² Turkey and Georgia signed an agreement on joint management of customs checkpoints on the border of the two countries (Sarpi, Vale, Kartsakhi checkpoints) in early October 2010. The first joint checkpoint officially opened in Sarpi on May 31, 2011.³

Though according to some Turkish officials, this initiative will reduce the burden of procedures at the customs gates by 40 percent,⁴ this modernization initiative will, perhaps, negatively affect trade and transport opportunities from Turkey to Armenia through Georgia, as the current quasi-legal mechanism cannot be applied further and businesses should seek new ad hoc solutions. Specifically, at the customs checkpoints managed jointly by Turkish and Georgian customs authorities, the customs freight procedures are simplified and drivers fill out their customs declarations at a checkpoint only once.⁵ Thus, the “miracle” procedure with double invoices will no longer be viable. Currently, the checkpoints in Vale and Kartsakhi operate according to the former customs procedures, yet in near future this transit “gate” will also become reconstructed and transport companies will face similar problems in these locations, too.

Under the status quo scenario the above-mentioned challenge can be addressed if the Turkish customs authorities accept and register invoices for Turkish goods

1 Free Trade Agreement Between the Republic of Turkey and Georgia. <http://www.economy.ge>.

2 Cahit Gökçelik. Turkey's Customs Reform Experience Under the Auspice of Turkey-EU Customs Union. Prospects of Georgia's Integration In The EU Customs Union Project funded by The Black Sea Trust, a project of German Marshall Fund of United States. http://www.pmcg.ge/files/Publications/6_%20Prospects%20of%20Georgia%C3%87%C3%96s%20Integration%20in%20the%20EU%20Customs%20Union_%20Turkish%20Experience.%20Report.pdf (accessed 22 Dec. 2011).

3 <http://commercial.ge/05/georgia-and-turkey-to-open-new-sarpi-border-checkpoint> (accessed 22 Dec. 2011).

4 <http://www.worldbulletin.net/index.php?aType=haber&ArticleID=64944> (accessed 22 Dec. 2011).

5 http://208.75.229.2/news/news_text.php?id_news=38920&ct=4&im=main&ddd=&ddd2=&month=12&year=2011&srch_w=&srch_w=1&wth=1223&rec_start=0&rec_start_nav=0&ddd2=27-11-11&month=12&year=2011 (accessed 22 Dec. 2011).

with a final destination to Armenia, by introducing Armenia's international AMD code in the documentation of the Turkish customs service. This will make the practice of double invoicing redundant and will further ensure the integrity of transport and transit operations in all three countries engaged in the transport cycle: Turkey, Georgia and Armenia. Such an approach would considerably reduce the vulnerability of transport agents, drivers and clients vis-à-vis the procedures and the impact of local discretionary actions at all borders. Further, such a step bears a significant anti-corruption potential through reducing corruption risks, closing loopholes and preventing corruption cases in international trade and transport.

Secondly, under the Status Quo scenario the transport businesses and the regional governments could face additional challenges related to unexpected developments of road permission quota for third countries, negotiated by the Georgian government with these countries bilaterally. Thus, transport businesses may remain hostage to these negotiations and would dramatically suffer from undesirable negotiation results.

To support the business interests of stakeholders in the transport sector, to balance the asymmetries in these contexts and to ensure the sustainability of at least the current practices and results, the businesses and transport associations should support the negotiations between Armenian and Georgian governments, aiming either at revising the methodology of calculating the number of transit trucks under the established quotas with third countries, or at considering specific quota based on the maximum number of transit trucks with destination to Armenia.

The cost of transport for Turkish trucks from Turkey to Armenia through Georgia is estimated based on a rate provided by a Turkish transport company. The rate incorporates inter alia the insurance of the transport means in Turkey, Georgia and Armenia, as well as the transit road tax charged in Georgia (USD 120 per truck) and entry tax charged in Armenia (USD 320 per truck). Specifically, for trucking the rate for a full truck with approximate cargo weight of 20 tons from locations in the main trade areas (e.g. Istanbul, Izmir, Denizli) to Yerevan is about USD 4,000. The rate depends on the cargo weight and the place of loading in different regions of Turkey, and varies from USD 3,600 to USD 4,300 for a full truck.

The above mentioned rates refer to the trucks that enter Georgia within the limits of the established annual quantity of quotas which refer to the number of trips

of the trucks from the country of origin (e.g. Bulgaria) to Armenia via Georgia.¹ If a truck needs to cross Georgia, though the road permission quota for the specific country has expired, additional charges incur. This charge was GEL 500 (USD 300) by November 2011, yet it has increased by 1000% and is now set at GEL 5000 (USD 3,000). Meanwhile, Georgian authorities count both transit trucks from third countries going to Armenia and trucks with a final destination to Georgia under the same quota. Thus, the transit cost jumps dramatically if the current quota for all trucks (both transit and non-transit) from the specific country of origin has expired.

As for the multimodal shipment, the rate for a 20 ft. container with cargo of the same weight FOB Istanbul to Yerevan is about USD 2,400. For a 40 ft. container the rate for the same route and cargo weight is about USD 3,600. The later cost seems to be less competitive vis-à-vis the trucking cost for the same destinations, as it is considered to take longer transit times and incur additional pre-carriage costs from the location of loading to FOB Istanbul.²

Transit of Goods through Turkey to Armenia

The average rates of transit for a full truck from Turkish ports to Russia and Ukraine by Ro-Ro services and similar costs from Poti to these destinations are provided below in Table 9.

Table 9. Ro-Ro service average rates for a full track

Port of Shipment	Port of Destination	Service rate, USD	Service rate for excise goods, USD
Poti (Georgia)	Novorossiysk (Russia)	2,000	2,500
Poti (Georgia)	Kerch, Ilichevsk (Ukraine)	1,700	1,700
Novorossiysk (Russia)	Poti (Georgia)	1,500	1,500
Kerch, Ilichevsk (Ukraine)	Poti (Georgia)	2,000	2,000
Samsun (Turkey)	Novorossiysk (Russia)	800	800
Zonguldak (Turkey)	Kerch, Ilichevsk (Ukraine)	1,000	1,000
Trabzon (Turkey)	Sochi (Russia)	800	800
Novorossiysk (Russia)	Samsun (Turkey)	800	800
Yevpatoriya, Skadovsk (Ukraine)	Zonguldak (Turkey)	900	900
Sochi (Russia)	Trabzon (Turkey)	800	800

Considering that the current status quo could be sustained in short- and mid-term period, the Ro-Ro services connecting Russian and Ukrainian ports with Turkish Samsun, Trabzon and Zonguldak ports could be extended as a cost effective

1 Such quotas are negotiated between Georgia and third countries bilaterally.

2 Source: official websites of Turkish transport companies.

tive alternative to Ro-Ro services from the same ports to Poti (Georgia). Such an alternative offers various advantages, including about USD 1,000 saving on Ro-Ro service costs, substantial reduction of waiting days at Poti port (heavy delays at Poti are due to bad weather conditions, insufficient port facilities, port congestion and closure).¹ While this alternative extends the driving distance by about 500 km and driving time by about 24 hours, as well as results in additional transport costs, the benefits offered seem to be substantially more attractive. International trucks widely practice this alternative. The Armenian carriers might wish to consider these practices to increase cost effectiveness of their operation, including the cycle transit through Turkish ports.

Armenian International Road Carrier Association (AIRCA) requested the Union of Road Transport Associations in the Black Sea Economic Cooperation Region (BSEC-URTA) to organize a free transit of Armenian trucks holding BSEC Permit across the territories of Turkey with a view to benefit from the Ro-Ro services between Turkey and Russia in March 2011. BSEC-URTA and BSEC initiated various contacts and discussions with the Turkish authorities in order to seek positive consideration of the AIRCA's request in mid-2011.² Thanks to the active role and efforts of Armenia's representative in BSEC, as of July 1, 2011 Turkey allowed the holders of the actual BSEC permit, including 200 Armenian trucks, to transit through its territory. Permissions were officially commissioned to AIRCA in September 2011.

Based on the above mentioned example of creating and promoting precedent based practices, two TIR trucks of an Armenian carrier with non IMO, non-ex-cise, non-heavy cargo disembarked from a Ro-Ro vessel in Samsun (Turkey) and passed through Turkey, using the established quota. AIRCA and BSEC-URTA facilitated the process in real time and secured the implementation of the quota by providing hands-on solutions to some minor issues that emerged during the process. Thus, a practice has already been established, the details of the relevant procedures under the current state of affairs have been fine-tuned and the BSEC-URTA permits mechanism has become operational. Later, in November 2011, it was agreed to continue the permit quotas till 2012.³

We recommend a proper sequencing of activities for extending the current practice under the established permit quota for transit operations from Armenia to final destinations (e.g. in Russia and Ukraine) via Turkish ports. Firstly, we con-

1 United feeder services ltd. 6th April 2011. Newsletter nr.11. <http://www.utdfeeder.com/file/92UFS%20News-letter%20Nr.11.pdf> (accessed 22 Dec. 2011).

2 Activity Report. 19th Meeting of the BSEC-URTA General Assembly. Bucharest-Romania. Monday, 16 May 2011.

3 <http://www.bsec-urta.org>.

sider engaging other stakeholders, including Armenian and Turkish business associations and think tanks working closely with local authorities, namely, AIRCA, UMBA, TABDC, TEPAV, as well as BSEC-URTA, which can help ensure the smooth and gradual extension of the current practice, specifically through tracking the border crossing process, assisting the facilitation of the process, and responding to emerging problems.

Secondly, we recommend extending the current practice over trucks with excise cargo (e.g. Armenian brandy). Specifically, Armenian carriers (trucking companies and truck owners) could send the first Armenian truck under the established BSEC-URTA permission quota via the Sarpi checkpoint to the Turkish ports Trabzon or Samsun, with excise cargo to Russia, making bank deposits according to the Turkish regulation for alcohol transit. At the same time as mentioned above key stakeholders should be informed and engaged to follow and facilitate transit and border crossing.

Upon successful implementation of the above-mentioned recommendations and steps, we consider that under the Status Quo scenario a window of opportunity for introducing a new practice of shipment of cargo by truck or by other multimodal option from Armenia to Turkey will open. Based on the lessons learned from the success stories and failed attempts solving the issues politically, we consider that such an opportunity should be used by creating another practical precedent.

B.2. Dynamics of Free Market and Competition of Transport Services

As discussed in section A.2, the scenario of developing international transport corridors upon opening the Armenian-Turkish borders leads to a number of emerging opportunities for the development of markets in Armenia and in the region at large. The message of such a sequence is straightforward: the political breakthrough and Armenia-Turkey rapprochement will boost the economic development in the entire region. At the same time, it seems that currently the existing economic ties and business interests are still not adequate to trigger a political breakthrough.

Meanwhile, further development of economic and infrastructural cooperation in the region and specifically between Armenia and Turkey (both direct and mediated), will lead to enhanced economic interdependences and development of multifaceted mutual interests between businesses and economies at large. Moreover, economic and infrastructural integration of Armenia to the regional and global markets and networks would consolidate a political support for Armenia-Turkey rapprochement and would leverage positive changes.

The bricks of the above mentioned dynamics might seem small. Each of these bricks might seem not attractive if juxtaposed with the major regional projects, such as pipeline and other transit route construction currently on the regional agenda and backed by multilateral actors and transnational investors. Each of these bricks might also seem less feasible if considered standalone vis-à-vis the political situation characterized with closed borders and unresolved conflicts in the region. However, these bricks consolidate into a pillar that might support the infrastructure fabric of development of individual economies and the place of the region globally.

In a nutshell, the vision of the above mentioned integration lies beyond consolidation of various alternative infrastructures, both existing and planned, and their capacities for more extended participation of the region in the global economy. Though in a short-run these alternatives might seem mostly competing in the context of attracting investments and political gains of winning in the sequencing derby, in a long-run these alternatives will eventually serve as branches of the developed regional network and a center of gravity for neighboring economies. The above mentioned vision can be illustrated through several examples.

Thus, the minor advantages of using alternative routes are presented below. The current modus operandi of transit of goods through Georgia incurs additional opportunity costs for transport companies in several terms. Firstly, the transit route from Turkey to Armenia via Georgia seems to be longer vis-à-vis a direct transport route, for example, through Margara-Alican. Thus, the road distance between Istanbul and Yerevan through Georgia (Sarpi) is about 1920km, while the direct distance is about 1625 km (about 300 km shorter). Though the road through Vale-Türkgözü is 1800 km and the one through Kartsakhi is shorter by 85 km, these two roads cross a number of difficult mount-passes in Turkey.

Secondly, respective direct transit times are shorter by about 48 hours. Indeed, the average non-stop driving time from Istanbul to Yerevan via Sarpi is approximately 40-50 hours with average truck road speed 48 kph for over 600 kilometers from Poti to Armenia.¹ Though some dual carriageway exists, the road is mostly single lane. In addition, mountain roads slow traffic causing congestion, safety hazard and CO2 emission. Turkey-Georgia Sarpi BCP entry to Batumi and Tbilisi is heavily used by Turkish trucks: more than 100 trucks on average impact the road surface per day. Trucks carry cargo for Azerbaijan, Armenia and Kazakhstan mainly for oil industry projects. Road tunnel renovation results in trucks taking a

1 Poti to Baku and Turkmenbashi Transport Route. UNECE Euro-Asian Transport Route Meeting, Turkmenbashi, 7-8 December 2010.

mountain bypass road with an inevitable impact of increasing fuel consumption, spending extra time, wearing off the vehicles and addin up the volumes of CO₂ emission.¹ Thus, the total transit time is approximately 5-6 days (with two border passes).² The average non-stop driving time via Margara-Alican is approximately 30 hours (a border pass only), which results in total transit time of 3.5-4 days.

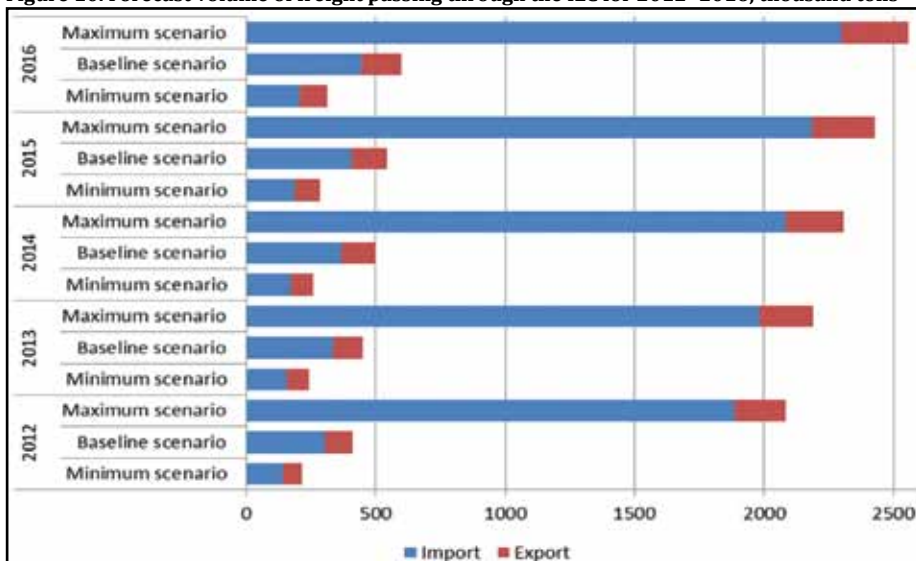
Further, the southern transit route seems to offer a more reliable and all-season choice vis-à-vis the northern routes. The latter are frequently closed under severe weather conditions in winter. Finally, the total transport cost will be substantially reduced, as no extra transit costs, charges for transit permits and road taxes of a third country, which are applied to the route via Georgia (relevant to all three Turkey-Georgia checkpoints) will incur in case of the direct route.

The example below illustrates how the competitive advantages of the above mentioned route, if consolidated, might offer a significant interest for regional trade and transit of goods from the Far East to the West. The construction of the ILC in Akhuryan (Armenia) as mentioned in section B.2 is an implicit illustration of such an opportunity. Thus, the South Caucasus Railways Company projected larger volumes of cargo, based on various scenarios as presented in Figure 10.

1 Ibid.

2 The total transit time includes non-stop driving time, border crossing time, break period, and daily and weekly rest periods. For this scenario, we consider the EU standards and best practices for drivers' working hours, given the overall process of aligning national legislations in our region with EU acquis. In the European Union, drivers' working hours are regulated by EU regulation (EC) No 561/2006, which entered into force on April 11, 2007. The non-stop driving time may not exceed 4.5 hours. After 4.5 hours of driving the driver must take a break period of at least 45 minutes. However, this can be split into 2 breaks, the first being at least 15 minutes, and the second being at least 30 minutes in length. The daily driving time shall not exceed 9 hours. The daily driving time may be extended to at most 10 hours not more than twice during the week. The weekly driving time may not exceed 56 hours. In addition to this, a driver cannot exceed 90 hours driving in a fortnight. Within each period of 24 hours after the end of the previous daily rest period or weekly rest period a driver must take a new daily rest period. Source: "EUR-Lex - 32006R0561 - EN". [Eur-lex.europa.eu](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006R0561:EN:HTML). Accessed 2010-10-07. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006R0561:EN:HTML>.

Figure 10. Forecast volume of freight passing through the ILC for 2012- 2016, thousand tons



The example below illustrates how the potential of the developed infrastructure might enhance the economic networks across the region. The transit of Russian coal to Turkey discussed above might almost fully utilize the potential capacity of the northern railway of Tbilisi-Kars on the route Kuzbas-Kars, as per estimated prospective annual demand of coal in Turkey. Meanwhile, the growing needs of coal transit could be addressed by parallels, utilizing the capacity of southern routes as discussed in section B.2. The total capacity of these routes could become increasingly attractive for transit of other goods, such as grain and cotton, due to competitive advantages - cost effectiveness, reduced congestion and transit times - of parallel operation of northern and southern routes.

These transit schemes will extend opportunities for the development of the Armenian transport market, will develop direct markets for Turkey, as well as will create new transit opportunities for Turkey to become a unique HUB for East-West transit from Fareast and Central Asia to Europe and Middle East. Anatolia will regain its historical mission as a connection node on the Silk Road.

The opening of the above-mentioned railway corridors will particularly provide new opportunities for extending export of Armenian low cost construction and row materials to neighboring countries thanks to the increased cost effectiveness of the transport. The increased flow of goods through Turkish railways will, on the other hand, attract new investments for modernization and reconstruction of

the network of the Turkish railways.

C.1. Opportunities for Armenian-Turkish Joint-Ventures under the Status Quo

In this section we will discuss the opportunities for Armenian-Turkish joint ventures providing transportation services within the two development scenarios mentioned earlier in Sections A.1. and A.2.

The findings on transport and trade situation under status quo suggest that all the road transportation carrying Turkish goods destined for Armenia is being catered only by Turkish trucking companies. This circulation is possible only through Georgia. Similarly, even international trucking companies which prefer to transport goods to Armenia via Turkey have to go through Georgia. For multi-modal shipments by containers Georgia and Iran remain the main transport routes. Armenian transport companies already have quite a successful practice of mutually beneficial cooperation with respective companies in Georgia and Iran.¹

This situation has triggered a demand for establishing representative offices of both Turkish and international carriers in Armenia, in order to improve the quality of the provided services and to better understand the needs of local customers. For example, since 1996 several international carriers have opened up their representative offices in Armenia. What is interesting about these representatives is their preference for using Armenian human resources; the carriers tend to nominate local Armenian transport companies as their agents. The same tendency can be observed with several Turkish carriers that established their offices in Armenia for the last three years. As mentioned earlier, since 2011 Armenia gained the opportunity to provide a transit service via Turkey for 200 Armenian trucks.

Obviously, these facts have necessitated mutual cooperation of Armenian and Turkish transport companies, and in prospect, creation of joint ventures. The opportunities are already being discussed among Armenian and Turkish businessmen in conferences² and round-tables in the framework of the Armenia-Turkey Rapprochement Project implemented by UMB(E)A³ and TABDC⁴ since 2010.

1 Narmania, D. and Grigoryan, S. (2010) Cross-Border Co-operation between Georgia and the Republic of Armenia: Existing Problems and Challenges. Care International. Available online at http://www.entwicklung.at/uploads/media/20101115_Cross_Border_Study_FINAL.pdf (accessed 22 Dec. 2011).

2 <http://www.panorama.am/en/economy/2011/07/22/conference/> and <http://www.rferl.org/content/turkish-armenian-business-leaders-meet-in-yerevan/24399475.html> (accessed 22 Dec. 2011).

3 www.umba.info.am

4 <http://www.tabdc.org>

C.2. Opportunities for Armenian-Turkish Joint-Ventures under the alternative development scenario

Given the development tendencies of the open border scenario, when the main transport corridor and international trade will become direct between Armenia and Turkey, and new transit options via Armenia will be available, the margins of market opportunities for transport companies will significantly increase. The demand for joint ventures will still exist, but the nature of the demand will change: it will target profit making, rather than mutual assistance, which was the dominant interest in the previous scenario.

For instance, if the anticipated economic development creates a demand for increased industrial activities in the region (textile industry currently being the most discussed sector), establishment of transport joint ventures may respond to the needs of textile industry more efficiently. Effectiveness of goods transportation will increase in case the import of textiles from Turkey to Armenian clothing manufactures, and the proceeding export of their products to Russia, will be carried out by one Armenian-Turkish joint venture, instead of at least two different Turkish and Armenian ones. A joint venture will naturally offer a more attractive rate policy and more consolidated services.

D. Passengers Transport Development Opportunities

In terms of passenger transportation between the two countries, it makes sense to distinguish between two sectors: tourism and shuttle trade, as this is where Armenia has the most passenger flow. Tourism to Turkey is firstly driven by the demand of Armenians to visit the old Armenian monuments and churches in Turkey. The two other main destinations of tourist flow from Armenia to Turkey are Istanbul and Antalya sea resort. The main mode of transport for the tourists is airplane, though the air fare is significantly higher than the bus travel rates. The data on passenger transportation are provided in more detail in Chapter II.

As to shuttle traders, it should be noted that they prefer to travel to Turkey by bus, as it is considerably more inexpensive than air travel (Bekin, 2005). Goods to Istanbul are transported on buses owned by nearly 20 Turkish bus companies on a 36-hour route. Because of border disputes between Turkey and Armenia the transportation is carried out via Georgia. Shuttle traders purchase goods in Istanbul to bring back to Armenia, for which they then arrange cargo truck transport in Istanbul, before they return home on passenger buses. The trucking companies provide services such as changing the commercial invoices and transport documents on the Turkish-Georgian border, and ensuring the customs clearance in

Armenia as a final destination.

However, shuttle trade faces a few serious challenges. First, it should be noted that the transportation of cargo from Turkey is arranged by Armenian travel agencies, which in a way act as intermediaries. The latter contract the above-mentioned Turkish bus companies for providing passenger transport to Turkey and back to Armenia, since access to Turkey for Armenian modes of transport is restricted to passenger cars and mini buses with no more than 17 seats. Why such restriction has been enforced remains unclear, and the issue is currently being researched by UMB(E)A, ICHD, TABDC, and TEPAV.

The second challenge is the fact that Armenian tourist agencies have monopolized this business, thus controlling the rate policy. For instance, in early 2011 they increased the prices for both cargo transportation from Turkey and the customs clearance in Armenia.¹

A possible solution to the mentioned challenges can be the establishment of an Armenian-Turkish joint venture, a travel agency, which will use Armenian big buses on the territory of Armenia and Georgia and, Turkish buses to provide passenger transportation in Turkey. Such an enterprise will address the issue of monopoly as well.

Finally, another relevant issue that has triggered discussions among Armenian and Turkish businesspeople is the initiation of an air route Van-Yerevan, as the tourist flow to Van keeps increasing. The Turkish side has also acknowledged an increased interest in tourism in Armenia. To launch mutual cooperation, a memorandum of understanding was signed between the Chamber of Commerce and Industry of Van and UMB(E)A, highlighting the necessity of founding an "Association of Armenian and Turkish Travel Agencies".²

All the above-mentioned development options are relevant to the status quo scenario, whereas in case the closed borders open up, the redundant practice of commercial invoice change will become unnecessary, as the need for intermediary travel agencies, which raises the costs of services, will disappear. Open borders will suggest a few other advantages as well, such as decreased bus fares and enlarged tourist flows especially in bordering regions in both countries.

1 <http://web.hurriyetdailynews.com/n.php?n=armenian-shuttle-traders-hurt-by-monopolistic-price-hike-2011-02-01> (accessed 22 Dec. 2011).

2 <http://m.mediamax.am/en/news/4/1852> (accessed 22 Dec. 2011).

E. International Instruments Supporting Further Development of International Trade and Transport

There are several key international conventions on international trade and transport to which both Armenia and Turkey are signatory and which may become a viable platform for further development of the current practices under status quo.

Turkey is a contracting party of many important organizations which significantly simplify international road transport, such as the United Nations Economic Commission for Europe (UNECE), the Customs Transit Convention (TIR), the European Agreement concerning the Work of Crews of Vehicles Engaged in International Road Transport (AETR) and the Agreement on the International Occasional Carriage of Passengers by Coach and Bus (INTERBUS).

Some of these conventions, such as TIR and CMR were signed by Armenia as well, in 1993 and in 2006 respectively. However, the current practice shows that both countries have breached the clauses of these conventions. Still, none of the sides seems to be willing to change the status quo, as the violation, aka the change of commercial invoices and transport documents, is the only open window for the arrangement of cargo transportation from Turkey to Armenia. Transportation of international cargo via transit routes in Turkey continues operating according to TIR carnet and CMR transport document: no changes are made in these documents. In case of open borders direct TIR and CMR conventions will be fully operative in all cases, allowing direct trade between Armenia and Turkey.

Another international instrument is the European Conference of Ministers of Transport (ECMT), currently renamed into the International Transport Forum (ITF) at the OECD. It is an intergovernmental organization with 53 member countries. It acts as a strategic think tank for transport policy, and organizes an annual summit of ministers.¹ Annually it provides multilateral quota for each member country. The significance of this quota is the permission for a free entry for the trucks from one member country to another in accordance with the decided truck quantity.

At the moment Armenia and Turkey do not have bilateral quota assignments. Turkish trucks entering Armenia do not enjoy any quota, but pay full entry fees worth USD 320, as mentioned above. In contrast, Armenian trucks are forbidden an entry to Turkey at all. Given the realities of the status quo, it is in the interest of

¹ <http://www.internationaltransportforum.org/IntOrg/quota/> (accessed 22 Dec. 2011).

both countries to apply to ITF for mediation in order to enhance quota exchange practices.

Another international convention which seems to directly address the land transportation needs of Armenia is the UN convention on Transit Trade of Land-locked States. The United Nations Convention on the Law of the Sea defines a “land-locked country” as a “state that has no sea coast. In practical terms, landlocked countries are located in the interior of continents, hundreds or even thousands of kilometers from maritime ports”. According to the UN definition, there are 31 landlocked developing countries in the world and Armenia is one of those.¹ The UN addressed the issue of land-locked countries in order to support the expansion of international trade, as these countries, especially the least developed and developing ones, were facing significant challenges in trade and transport.

Trade and transport challenges faced by the landlocked least developed countries can be classified into two broad categories: those due to internal factors, requiring interventions at national level and those due to external factors, which are beyond the jurisdiction of the national government. Given the focus and the scope of the current study, we will discuss the external factors, among which regional infrastructure.

The condition of the roads, railway lines, and bridges, the border infrastructure capacity and port facilities are crucial for keeping the costs down for landlocked countries. Certain transit routes are more preferable, than others, despite the distance, simply because of the state of the road and other border facilities. For example, transit time from Bandar-Abbas to Yerevan is 7-9 days for the distance of 2750 km, though Iran has many restrictions for transit, specifically relative to transporting cigarettes and alcohol. In contrast, Georgia offers a faster and shorter route by road and rail: 680 km to the sea port at Poti. However, during the war in August 2008 all roads were closed and Armenia had not alternatives. For Armenia these are essentially the only two access points to the sea.

Interestingly, among the countries which provide a regional infrastructure in the South Caucasus, only two are signatories to the Convention on Transit Trade of Land-Locked States: Turkey, which joined it in 1969, and Georgia, which signed the Convention in 1999. According to the Article 2 of the Convention, “Freedom of transit shall be granted under the terms of this Convention for traffic in transit and means of transport. (...) Consistent with the terms of this Convention, no discrimination shall be exercised which is based on the place of origin, departure,

¹ <http://www.unctad.org/templates/Page.asp?intItemID=4540&lang=1> (accessed 22 Dec. 2011).

entry, exit or destination or on any circumstances relating to the ownership of the goods or the ownership, place of registration or flag of vessels, land vehicles or other means of transport used". Article 3 takes up customs and transit dues, stating that "traffic in transit shall not be subjected by any authority within the transit State to customs duties or taxes chargeable by reason of importation or exportation nor to any special dues in respect of transit".¹

Thus, were Armenia to join the Convention on Transit Trade of Land-locked States, it could fully be in a position to defend its rights, when it comes to free transit of goods. The Convention will grant Armenia a chance to seriously negotiate with Turkey on opening up the borders.

Another opportunity in case borders between the two countries open, is the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).² At a regional seminar organized by the TRACECA LOGMOS project in October, 2011 the General Secretary of UTİKAD association announced that Turkey will join ADR in 2012.³ Joining this agreement is significant for Armenia as well, particularly in case of open border scenario.

Both Armenia and Turkey are members of the World Trade Organization (WTO) since 2003 and 1995 respectively. This is an international platform with rich resources, which both countries seem not to use quite efficiently. Though both countries are members of the Organization, Turkey made reservations regarding Armenia and lifted the application of WTO rules in respect to Armenia, when the latter joined the organization (Hoekman and Mavroidis, 2007).⁴ However, how the latest developments in Armenian-Turkish relations will affect the further developments of trade relations remains yet to be studied. Business associations and other relevant civil society organizations can support research into the possibilities that this platform offers to the two countries, and these findings may serve as necessary prerequisites to project the development in transport and trade sectors in Armenia and Turkey under the two scenarios in discussion.

Finally, the recent developments in the relations between the European Union and Armenia suggest another platform that potentially can affect the trade and transport relations between Turkey and Armenia, free trade agreements which permit making trade faster and cheaper between the signatories. Turkey and the

1 <http://www.unctad.org/templates/Page.asp?intItemID=4540&lang=1> (accessed 22 Dec. 2011).

2 http://www.unece.org/trans/danger/publi/adr/adr_e.html (accessed 22 Dec. 2011).

3 http://www.traceca-org.org/en/events/single-event/n/logmos_regional_seminar_to_determine_action_plans_in_caucasus_and_central_asia/ (accessed 22 Dec. 2011).

4 Hoekman, B. and Mavroidis, P. (2007) *The World Trade Organization: law, economics, and politics*. Routledge. New York

EU have signed a Customs Union agreement in 1995, pursuant to the 1963 EU-Turkey Association Agreement.¹ Armenia has started negotiations with the EU over signing a deep and comprehensive free trade agreement (DCFTA) with the European Union.² One of the key issues on the negotiation table is the development of customs operations on the borders with Turkey, Georgia and Iran as part of an integrated border management framework.³ This implies common customs procedures and standards in compliance with the EU benchmarks. This instrument seems to be a viable leverage to bring the two countries together at the negotiation table to facilitate the national trade.

Chapter III. Key Observations and Recommendations

The following key observations summarize the findings of the study:

- The two scenarios discussed in the study offer different opportunities for the two countries. The developments projected under the 1st scenario (Status Quo), regardless all the current challenges and issues revealed, still can provide a logical transition to the 2nd scenario (Open Border). As a consequence, both countries have to be ready for implementing innovative logistics strategies, planning for transformation of trade flows and transport channels, using new technical equipment.
- Regardless political disputes and restrictions, trade between Armenia and Turkey has found a certain functional leeway of operation, particularly through establishing a practice of semi-legal documentation. The basis of this operational practice is the business ethics and mutual trust among business representatives across the borders.⁴
- Given the nature of the developments in Armenian-Turkish relations, the realities described in the 1st scenario may change so drastically, that the projected developments under status quo may simply become redundant. Thus, the focus will shift to the development tendencies predicted for the 2nd scenario.

1 <http://ec.europa.eu/trade/creating-opportunities/bilateral-relations/countries/turkey/> (accessed 22 Dec. 2011).

2 <http://www.euadvisorygroup.eu/trade> (accessed 22 Dec. 2011).

3 <http://www.euadvisorygroup.eu/customs> (accessed 22 Dec. 2011).

4 <http://www.todayszaman.com/news-266656-trade-between-turkey-armenia-goes-on-amid-legal-woes.html> (accessed 22 Dec. 2011).

- The dual causality of trade and transport is reflected in the transport situation of the region: on one hand, a good transport system facilitates trade, and on the other, trade brings about the necessity of developing the routes and services. Thus, the new transport corridors discussed in the study can be both the cause and the consequence of the market development and regional integration.
- The developments in trade for the recent decade have revealed a tangible need for establishment of joint-ventures between Armenian and Turkish companies, especially in the field of goods and passenger transportation. If under status quo the establishment of Armenian-Turkish joint ventures can be considered an opportunity to facilitate the existing practice, in case of open borders, this will become a necessary prerequisite for increasing mutually beneficial business interactions.
- Both Armenia and Turkey are signatories of major international organizations and conventions on trade and transport, such as WTO, BSEC TIR, CMR and ECMT. However, the potential of these instruments for enhancing cooperation between Armenia and Turkey has been underestimated and little researched.

Based on the findings and the key observations, several recommendations are offered:

- Businesses and policy makers should consider all the transport corridors, either existing or currently being constructed under status quo, as possible opportunities for development of both national and transit trade. Under the open border scenario such opportunities will be anchored on utilization of currently existing capacities and infrastructure and will make the construction of new and expensive infrastructure redundant, as well as will enrich the alternatives of transport corridors, by investing in the reconstruction of “older” corridors.
- The developing trade relations between the two countries call for a review of the current practice of quasi-legal documentation regulating the trade flow between the countries. It is recommended that business associations in Armenia and Turkey lobby for acceptance and registration of commercial invoices of Turkish goods with a final destination to Armenia by introducing Armenia’s international AMD code in Turkey’s custom service document circulation. Such a step bears significant anti-corruption potential as it may

reduce corruption risks, close loopholes and prevent corruption cases in international trade and transport.

- Armenian transport companies should take advantage of the free transit of Armenian trucks using BSEC permit across the territories of Turkey. This practice was established in November, 2011, and it was agreed to continue with the permit quotas until 2012. Proper sequencing of activities for extending the current practice of transit operations from Armenia to final destinations (e.g. in Russia and Ukraine) via Turkish ports is required. The same practice should be extended to the trucks with excise cargo (e.g. Armenian brandy).
- Other stakeholders, including Armenian and Turkish business associations and think tanks working closely with national authorities, such as, AIRCA, UMBA, TABDC, TEPAV, as well as BSEC-URTA should be actively engaged in facilitation of the processes to ensure smooth and gradual extension of the current practices, specifically tracking the border crossing process, assisting facilitation of the process, and responding to emerging problems.

The final recommendation is based on the consolidation of the outcomes of the above-mentioned recommendations pertinent to the status quo. Such consolidation will create a strong platform and augmentation of business interests for sustainable and irreversible cooperation within the South Caucasus region, thus turning it into a unique HUB for East-West transit from Fareast and Central Asia to Europe and Middle East. It will have a specific advantage: each country will enjoy a unique role in this cooperative HUB. Additionally, open borders will provide a better environment for the two countries to utilize the existing and future international instruments towards the satisfaction of their mutual interests.

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The current study focuses on the challenges and opportunities of development of transport and international corridors in Armenia, Turkey and the entire Black Sea Region. The study addresses road, railroad and multimodal transportation issues. It also looks into various development scenarios of transport interactions between Armenia and Turkey.

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