

Մարդկային զարգացման միջազգային կենտրոն International Center for Human Development

Perspectives for Development of Transport and International Corridors in Armenia, Turkey and the Region

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The Research

- 1. ICHD initiated research in mid-2011
- 2. Building up on earlier efforts by the UMB(E)A and TABDC
- 3. Addresses road, railroad and multimodal transportation milestone issues
- 4. Looks into two possible scenarios of Armenia-Turkey transport interactions.
- 5. Prepared by the team of local experts
- 6. Methodology utilized various databases, analytical documents, reports, studies and other documents prepared by credible international institutions and experts; deep interviews with key primary stakeholders (Armenian and Turkish transportation businesses, freight forwarding companies, carriers)



The Report

- 1. Overview of economic situation and foreign trade dynamics in Armenia and Turkey and in the region.
- 2. Overview of transport sector (infrastructure and circulation, passenger transport transit of goods, transport costs)
- 3. Alternative responses of economies and businesses:
 - perspectives for physical infrastructure under Status Quo different scenarios of regional developments (Sections A1. and A.2)
 - perspectives for development of transport services under these scenarios (Sections B1. and B.2)
- 4. Phased strategy for sequencing infrastructure development upon border opening ("second line" of Sections A.2 and B.2)
- 5. The opportunities for Armenian-Turkish joint-ventures (Sections C.1 and C.2)
- 6. Tourism and shuttle trade (Section D)
- 7. International instruments supporting the development of international trade and transport (Section E)





Overview of Economic Situation and Trends

1. Armenia:

- High growth rates for the past 16 years
- 14.2% economic decline in 2009 caused by global financial and economic crisis
- Economy and market are very small

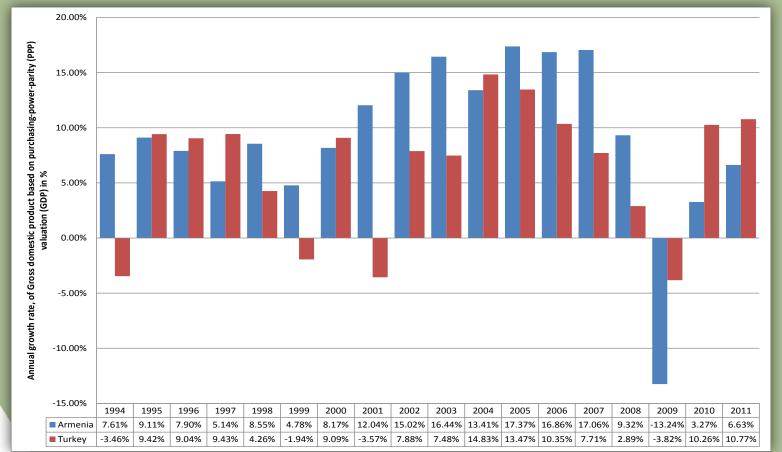
2. Turkey:

- Crisis and following recession of 2008-2009 fifth in the last 30 years for Turkey
- Deceleration of economic activity in Turkey started in mid-2006
- GDP growth in 2008 by shrunk by 6.5%.
- 3. Both economies recovered quite dynamically in 2010.
- 4. Turkey enjoys an outstanding long-term growth potential.
- 5. The main drivers of the continued development: people, diverse and entrepreneurial human capital base, strategic location, relatively attractive business environment.





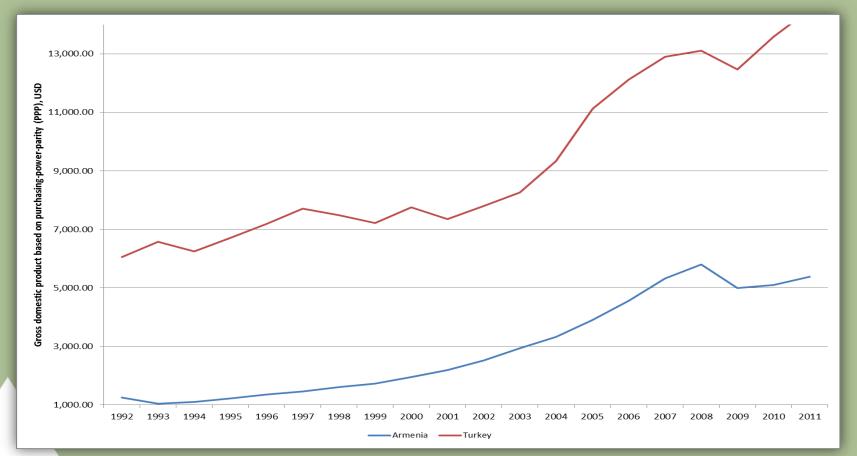
GDP annual growth rate for Armenia and Turkey for 1994-2010+ 2011







Per capita GDP for Armenia and Turkey for 1992-2010



Overview of Foreign Trade: Armenia

- 1. Decreased volumes of global trade
- 2. Armenia's export and import volumes also decreased significantly, experiencing a decline of 32.8% and 25% respectively in 2009
- 3. 89% of exports went to 15 countries, with a visible geographic orientation to north-east more than 90% of total exports
- 4. Direct access to the Mediterranean ports would reduce the trade deficit and would increase GDP by 30%.

Armenian exports and breakdown per destination countries, USD mln

Country	2001	2007	2008	2009	2010	2011	Change from 2008, %
Russia	60.5	201.5	208.2	107.4	160.5	222.3	6.8%
Germany	11.1	169.7	183.7	115.0	132.6	158.0	-14.0%
Bulgaria	0.3	46.9	59.6	60.0	156.6	152.2	155.5%
The Netherlands	1.3	156.0	130.9	52.2	98.6	117.2	-10.5%
Iran	31.9	38.5	25.1	33.0	84.8	106.3	324.0%
USA	52.3	51.4	52.8	67.0	82.7	100.7	90.7%
Spain	0.1	15.5	11.2	7.6	15.2	82.5	639.9%
Belgium	46.5	100.2	89.6	46.8	72.5	70.5	-21.3%
Canada	0.9	5.9	15.9	34.1	29.6	70.4	342.2%
Georgia	12.4	87.9	81.8	52.8	49.0	61.9	-24.4%
Switzerland	8.9	49.3	12.1	25.2	16.9	33.7	178.0%
China	0.1	7.9	1.8	17.9	30.9	16.3	796.2%
Korea	0.0	0.5	0.6	6.5	3.9	14.8	2,462.0%
Ukraine	11.0	46.3	21.9	12.6	12.1	11.1	-49.4%
Total for the listed countries	237.3	977.5	895.2	638.0	945.8	1,217.8	36.0%
Total Exports	341.8	1,152.3	1,057.2	710.2	1,041.1	1,334.3	26.2%



Imports to Armenia and breakdown thereof per countries, USD mln

Country	2007	2008	2009	2010	2011	Growth from	Share in imports, %	
Country						2008, %	2008	2011
Russia	720.4	851.2	792.2	835.3	890.9	4.7	19	21
China	194.8	382.2	284.6	404.0	404.2	5.8	9	10
Germany	221.1	255.2	176.0	210.7	245.1	-4.0	6	6
Turkey	130.6	268.2	177.6	210.4	240.2	-10.4	6	6
Ukraine	251.8	314.8	201.9	229.9	232.4	-26.2	7	6
Iran	141.7	203.0	162.4	199.9	216.8	6.8	5	5
Italy	113.9	157.2	113.7	122.2	169.6	7.9	4	4
UK	145.0	218.8	120.8	110.8	147.4	-32.6	5	4
Romania	68.4	100.2	72.8	85.7	105.0	4.8	2	3
Bulgaria	87.5	118.6	86.3	112.4	102.2	-13.8	3	2
Brazil	26.2	58.3	54.7	51.8	83.3	42.9	1	2
France	150.2	127.4	73.5	76.7	82.5	-35.3	3	2
Switzerland	22.3	19.7	123.0	69.4	78.3	298.3	0	2
Japan	104.9	168.9	76.2	83.3	72.4	-57.1	4	2
India	21.5	49.1	43.4	46.7	68.7	40.1	1	2
Total for listed countries	2,400.3	3,292.6	2,559.3	2,849.2	3,139.1	-4.7	74	76
Total Imports	3,267.8	4,426.1	3,321.1	3,749.0	4,144.8	-6.4	100	100



Overview of Foreign Trade: Turkey

- 1. Export of Turkey declined by 22.6% in 2009
- 2. Turkey's imports growing annually by about 20% on average in 2006-2008
- 3. Turkey's imports decreased by 30.2% in 2009 and increased subsequently by 31.7%, reaching USD 185 billion in 2010, thus exceeding the level of imports in 2007.
- 4. Manufacturing remains the leading sector absorbing Turkey's imports (78.3%).
- 5. Goal to attain USD 500 billion in exports by 2023 driving force for a pressing need to diversify and extend the use of international transport routes.

Huge regional disparity of foreign trade in Turkey

- 1. Istanbul gets about the half of Turkey's foreign trade and about 53% of imports in 2010.
- 2. Exports from the North East Anatolia (Erzrum, Erzincan, Bayburt, Ağri, 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.
- 3. The annual foreign trade for several regions neighboring with Armenia has been extremely low:
 - < 1 million USD exports from Kars, Tunceli, Erzincan in 2010;</p>
 - < 5 million USD exports from Ardahan, Bayburt and Bitlis;</p>
 - < 20 million USD exports from Van and Muş.</p>
- 4. Potential markets for cross-border trade with Armenia



First 10 countries by exports and imports, for Turkey 2011

Imports			Exports			
Total	USD million	%	Total	USD million	%	
IOtal	240,838	100.0	iotai	134,969	100.0	
Russia	23,953	9.9	Germany	13,959	10.3	
Germany	22,985	9.5	Iraq	8,314	6.2	
China	21,693	9.0	United Kingdom	8,156	6.0	
USA	16,034	6.7	Italy	7,854	5.8	
Italy	13,450	5.6	France	6,808	5.0	
Iran	12,461	5.2	Russia	5,995	4.4	
France	9,230	3.8	USA	4,959	3.4	
India	6,499	2.7	Spain	3,920	2.9	
South Korea	6,298	2.6	U.A.E	3,708	2.7	
Spain	6,196	2.6	Iran	3,591	2.7	
Others	102,039	42.4	Others	68,069	50.4	

Trade between Armenia and Turkey

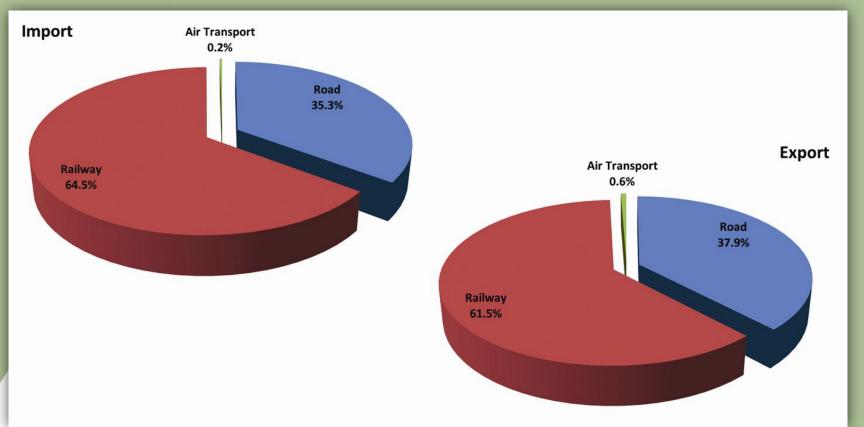
	Francist in the coord LICD	Import by, in thousand USD			
	Export, in thousand USD	country of origin	consignment		
2011	1,049.36	240,754.80	205,290.16		
2010	1,291.27	210,381.16	187,629.79		
2009	1,197.49	177,648.75	158,240.65		
2008	1,850.90	268,187.28	221,590.52		
2007	3,033.03	130,631.25	125,382.97		
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		



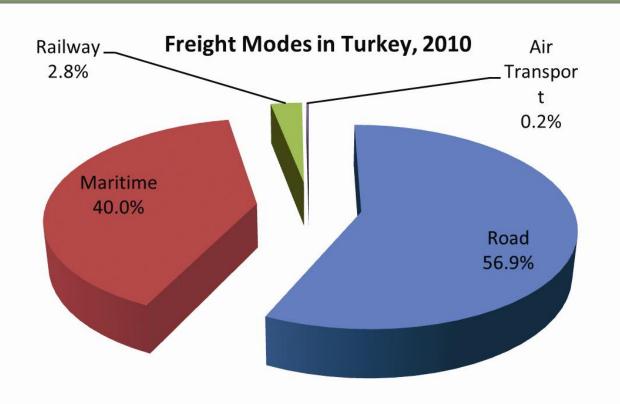
Trade between Armenia and Turkey

- 1. Transport and communication accounted for 6.8% of Armenia's GDP in 2008, gradually increasing since 2004.
- 2. Transport, storage and communication sectors share of GDP at current prices reached 14.2% of Turkey's GDP in 2008, later declining to 13.3% through 2009-2010.

Carriage by major transport means in Armenia for 2010



Carriage by major transport means in Turkey for 2010





Passenger Transportation by Modes of Transport for 2010, million passenger kilometers



A1. Development of Transit Routes under Status Quo (including international legal instruments)

- 1. Black Sea Ring Highway
- 2. Ro-Ro and Ferry Services in Black Sea Region
- 3. Baku-Tbilisi-Kars Railway
- 4. North-South Corridor





Black Sea Ring Highway







Black Sea Ring Highway

- 1. Black Sea Ring Highway (BSRH) opportunity for developing regional road infrastructure
- **2. We see that the second of the second o**
- **What:** BSRH length is approximately 7000 km around the Black Sea.
- 5. Will secure Armenia's access to adequate quality for up-to-date traffic ensuring safety, speed and comfort Will facilitate economic and social development to the benefit of Armenia.
- 6. Vibrant platform creating further opportunities for enhancing Armenia-Turkey economic cooperation

Ro-Ro and Ferry Services in Black Sea Region

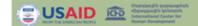




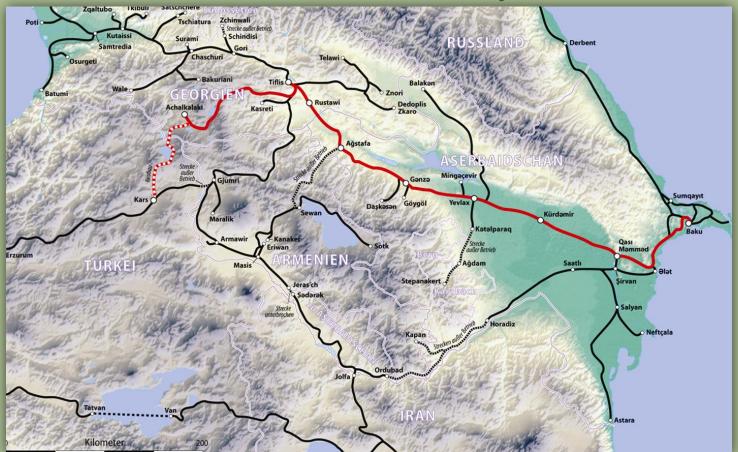


Ro-Ro and Ferry Services in Black Sea Region

- 1. Ro-Ro traffic is very active in the Black Sea region
- 2. Turkey gradually increases its capacities to offer Ro-Ro services through various ports in Black Sea
- 3. Armenian transport companies extensively use Ro-Ro services in Black Sea exceptionally from port Poti
- 4. Total cargo weight of about 1 million tones shipped to and from Armenia by road in 2010
- 5. The considerable share of this volume requires intermodal freight transport provided by Black Sea Ro-Ro services.



Baku-Tbilisi-Kars Railway

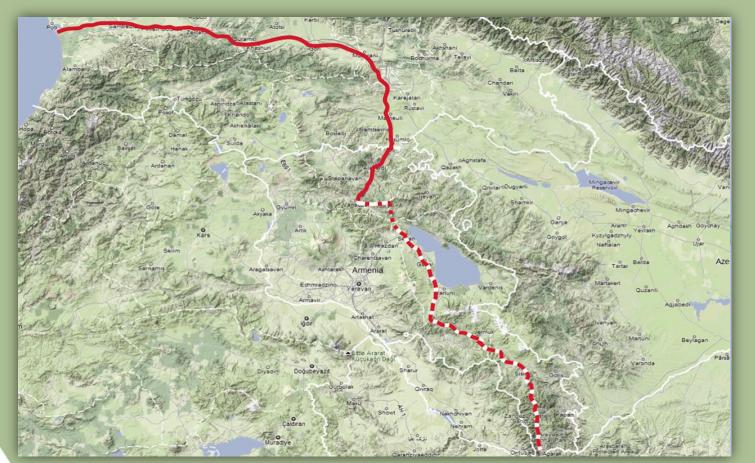


Baku-Tbilisi-Kars Railway

- 1. First discussed in July 1993, after the Kars-Gyumri-Tbilisi railway was closed
- 2. In February 2007 trilateral agreement signed and in November, 2007 construction inaugurated
- 3. expected to be complete by the end of 2012
- 4. 105 km of railway line, including railway line segments in Turkey and Georgia.
- 5. 160 km section of Akhalkalaki-Tbilisi railway line to be modernized, substantially improving its carrying capacity
- 6. a million passengers and 6.5 million tons of cargo in early operation and estimated 17 million tons of cargo and about 3 million passengers by 2030
- 7. Proper transport strategies and infrastructure development projects between Armenia, Russia, Iran and Georgia may well benefit from KTB.



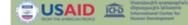
North-South Corridor





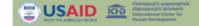
North-South Corridor

- 1. Armenia-Iran railroad envisaged by Transport Strategy of the Republic of Armenia for 2009-2019.
- 2. Engaging TRACECA framework is an opportunity
- 3. approximately 470 km in length
- 4. Cost: around 1.5-2 billion USD
- 5. Shortest access for Armenia to the sea ports linked to Europe and Russia (70% of Armenian trade are made through this route).
- 6. Connects Georgian ports on the Black Sea (Poti, Batumi) with Vanadzor (currently operational)
- 7. 47 km Vanadzor-Dilijan railroad will be constructed
- 8. Dilijan-Gagarin section will be rehabilitated
- 9. 423 km Gagarin-Iranian border in Meghri will be constructed



A2. Opportunities for Turkey and Armenia in Regional Transit Corridors and Trade

- 1. Alternative railway corridors connecting South Caucasus region with Turkey and Russia.
- 2. Direct railway connection route Russia-Azerbaijan-Armenia-Turkey
- 3. Kars Gyumri Nakhijevan Meghri Baku railroad
- 4. Logistic HUB
- 5. Network of Turkish State Railways (TCDD)



Alternative railway corridors connecting South Caucasus region with Turkey and Russia



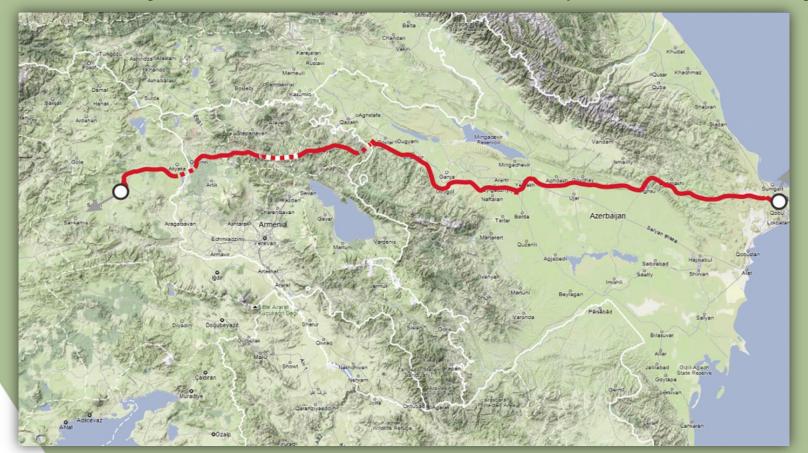


Alternative railway corridors connecting South Caucasus region with Turkey and Russia

- 1. Juxtaposing existing infrastructure: alternative railway corridors connecting South Caucasus region with Turkey and Russia
- 2. BTK 826 km, BTGK 780 km
- 3. Prerequisites: Armenia-Turkey border opening + minor rehabilitation of infrastructure
 - less than 10 km Akhurian (Armenia) Dogukapi (Turkey) with capacity of 6 million tons/year.
- 4. In a long-term perspective these two alternatives, currently perceived competing, will become mutually complementing and will provide enhanced capacities of international corridors.
- 5. Indicative case: thermal coal import to Turkey around 15 million tons (2010) and growing 10% annually.



Direct railway connection route Russia-Azerbaijan-Armenia-Turkey

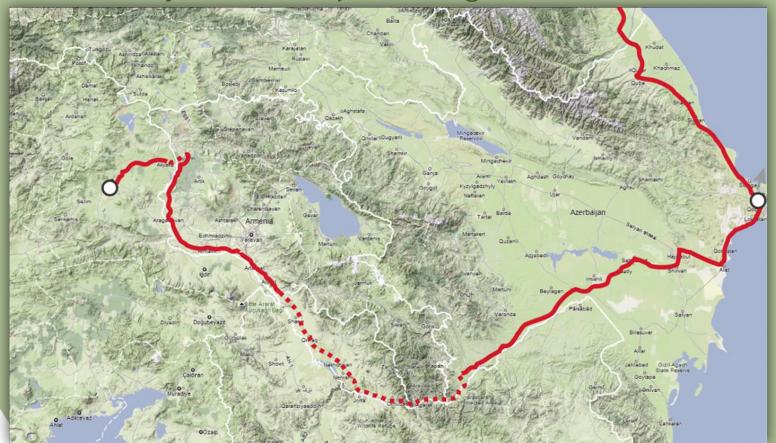




Direct railway connection route Russia-Azerbaijan-Armenia-Turkey

- 1. direct railway connection from Azerbaijan (Baku) to Armenia (Gyumri) upon further resolution of regional conflicts and opening of border between Armenia and Azerbaijan.
- 2. operation requires construction of 47 km Vanadzor-Dilijan section + rehabilitation of border crossing sections between Armenia and Turkey and Armenia and Azerbaijan in the north-east (48.3 km Dilijan-Ijevan-Kazakh).
- 3. important traffic flows of oil products and raw materials between the Black Sea and the countries of the Silk Road's West-East railway corridor extending further beyond Baku to Aktau (Kazakhstan).

Kars – Gyumri – Nakhijevan – Meghri – Baku railroad



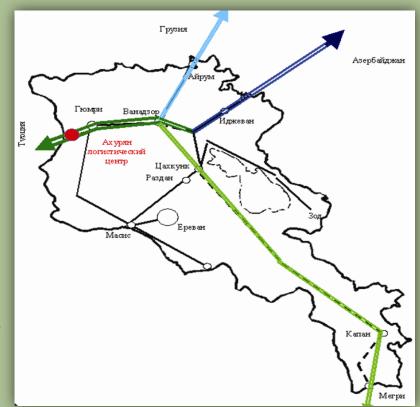
Kars – Gyumri – Nakhijevan – Meghri – Baku railroad

- 1. potential for transshipments between Turkey-Russia and Central Asia.
- 2. Routes through Armenia are as short as or shorter than alternative routings and have to negotiate fewer natural barriers (i.e. mountain ranges).
- 3. The expediency of the rehabilitation of Kars-Gyumri-Nakhichevan-Meghri-Baku railway officially communicated to TRACECA.



Logistic HUB

- 1. operation of new international railway corridors in the region require a stronger logistic HUB
- 2. International Logistic Center (ILC) in Akhurya capable to handle over 215,000 tons of goods in 2012.
- 3. Will reach over 310,000 tons by 2021.
- 4. one stop shopping system, including the door to door scheme





Network of Turkish State Railways (TCDD)







Railways

- 1. Upon opening of Armenian-Turkish border, regional transport corridors will be extended to Turkish Mediterranean ports such as Mersin and Izmir.
- 2. Turkey uses standard gauge track (1,435mm), while Armenia, Azerbaijan and Georgia use broad gauge track (1,520mm).
- 3. At all cross-border railway stations, a special area should be constructed for trains to convert from one gauge to another.

B.1. From embargo to "suitcase trade" and beyond

- 1. 1993 Turkey laid embargo for Humanitarian Cargos passing to Armenia and in general on trade with Armenia.
- 2. 1996 air corridor has been agreed and became functional between Armenia and Turkey and a direct air connection between Istanbul and Yerevan has been established.
- 3. "Suitcase trade" mushroomed and the overall volume of imports from Turkey to Armenia increased.
- 4. Trade between Armenia and Turkey increased six-fold since 2003



Consolidating cargo: Practice of transport of goods from Turkey to Armenia

- 1. Direct Import Two invoices: one for Georgian intermediary company and another for Armenian consignee.
- 2. Transit of goods no need for quasi-legal procedures (tracks since 2002)
- 3. Success and breakthrough largely credited to the practical approach of Armenian and Turkish businesses

Emerging opportunities and challenges and responses x 2

- 1. Challenge: New customs modernization initiative of Georgia and Turkey.
- 2. Response: Turkish custom authorities accept and register invoices of Turkish goods with final destination to Armenia by introducing Armenia's international AMD code in Turkey's custom service document circulation.
- 3. Challenge: uncertainties related to road permission quota for third countries negotiated by Georgian government.
- 4. Response: businesses and transport associations should support negotiations between Armenian and Georgian governments aiming either at revision of the methodology of calculating the number of transit trucks under established quotas with third countries or at considering specific quota based on the maximum number of transit tracks with destination to Armenia.
- 5. Opportunity: Ro-Ro services connecting Russian and Ukrainian ports with Turkish Samsun, Trabzon and Zolgundak ports could be extended as cost effective alternative to Ro-Ro services from the same ports to Poti (Georgia).
- 6. Opportunity: Armenian International Road Carrier Association (AIRCA) request to BSEC-URTA to facilitate free transit of Armenian trucks (under quota of 200 trucks).
- 7. Response: proper sequencing of activities and visa facilitation through Turkish Embassy in Georgia.
- 8. Response: extending the current practice over the trucks with excise cargo (bank deposits to be enforced).





B.2. Vision of integrated vision: consolidation of small wins

- 1. Political breakthrough will boost economic development in the entire region.
- 2. Existing economic ties and business interests are still not adequate to cause political breakthrough.
- 3. Further development of economic and infrastructure cooperation will lead to enhanced economic interdependences and stronger mutual interests between businesses and economies at large.
- 4. Consolidation of various alternative infrastructures, both existing and planned, and their capacities for more extended participation of the region in global economy.
- 5. Through, 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, however in long-run these alternatives will eventually serve as branches of the developed regional network and center of gravity for neighboring economies. The above mentioned vision can be illustrated on several examples.

Minor advantages of using alternative routes

- 1. Transit routes from Turkey to Armenia via Georgia seems to be longer vis-à-vis direct transport route (e.g. Margara-Alican)
- 2. Direct transit times are shorter by about 48 hours.
- 3. Southern transit route offers more reliable and allseason choice vis-à-vis northern routes
- 4. Total transport cost will be substantially reduced if direct route is used.

Dynamics of Free Market and Competition of Transport Services

- 1. Transit schemes will extend opportunities for Armenian transport market development,
- 2. Transit schemes will develop directs markets for Turkey, as well as will create new transit opportunities for Turkey to become as unique most HUB. Anatolia will regain its historical mission as a connection node on the Silk Road.
- 3. The increased flow of goods through Turkish railways will, on the other hand, will attract new investments for modernization and reconstruction of Turkish railways network.

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

- 1. both road transportation of Turkish goods to Armenia and transit via Turkey
- 2. have to go through Georgia.
- 3. catered only by Turkish tracking companies (transportation of Turkish goods)
- 4. Main transport routes for multi-modal shipments Georgia and Iran
- 5. representative offices of both Turkish and international carriers in Armenia established
- 6. in prospect the creation of business joint ventures.



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

- 1. the margins of the market opportunities for transport companies will significantly increase.
- 2. The demand for joint ventures will still exist,
- 3. but the nature of this demand will be targeted to profit making rather than mutual assistance
- 4. joint ventures will offer a more attractive rate policy and a more coordinated services

D. Passengers' Transport Development Opportunities

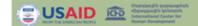
- 1. Armenia has the most passenger flow in tourism and shuttle trade
- 2. Tourism to Turkey:
 - Armenian cultural heritage in territory of Turkey;
 - Istanbul and the Antalya sea resort
 - main transportation mode by air or by bus.
- 3. Shuttle traders:
 - prefer to travel to Turkey by bus: 36-hour route via Georgia
 - cargo truck transport for goods.
 - services (changing invoices and transport documents on the Turkish-Georgian border, and ensuring the customs clearance in Armenia as a final destination).





Challenges and Responses for tourism and shuttle trade

- 1. access of Armenian vehicles to Turkey restricted to passenger cars and mini buses (< 17 seats)
- 2. Intermediary cargo services are monopolized dramatically affecting prices
- 3. Armenian-Turkish joint venture travel agency would facilitate a competitive process
- 4. Van-Yerevan air route would offer alternative route for cross-border trade and tourism
- 5. Status Quo vis-à-vis Open Border Scenarios (no need for invoice change and intermediaries, reduced bus fares and increased tourist flows, especially in bordering regions)



E. International instruments supporting the further development of international trade and transport

Turkey's and Armenia's Commitments

1. Turkey:

- United Nations Economic Commission for Europe (UNECE),
- Customs Transit Convention (TIR),
- European Agreement concerning the Work of Crews of Vehicles Engaged in International Road Transport (AETR)
- Agreement on the International Occasional Carriage of Passengers by Coach and Bus (INTERBUS)

2. Armenia:

- TIR signed by Armenia in 1993
- 3. CMR signed by Armenia in 2006





Implementation, Compliance and Consistency

- 1. Current practices show that under status quo both countries do not fully comply with the provisions of their commitments
- 2. international cargo transportation via transit routes in Turkey continue operating according to TIR carnet and CMR transport document: no changes are made in these documents.
- 3. In case of open borders direct TIR and CMR conventions will be fully operative.

Free Entry Quotas

- 1. International Transport Forum (ITF) at the OECD (former European Conference of Ministers of Transport (ECMT)) intergovernmental organization with 53 member countries
- 2. Strategic think tank for transport policy
- 3. provides annual multilateral quota for each member country
- 4. permission for a free entry for the trucks from one member country to another.
- 5. Armenia and Turkey do not have bilateral quota assignments
- 6. Under status quo both countries could apply to ITF for mediation to enhance a quota exchange practices.





Free Access to Sea

- 1. UN convention on Transit Trade of Land-locked States.
- 2. United Nations Convention on the Law of the Sea defines a "landlocked country"
- 3. 31 landlocked developing countries in the world and Armenia is one of those.
- 4. Armenia have only two access points to the sea currently -
 - Poti and Batumi (Georgia) approx.. 680 km (rail and road)
 - Bandar-Abbas (Iran) approx. 2750 km (only road)
- 5. Signatories in the region: Turkey (1969) and Georgia (1999)
- 6. Joining the Convention would offer Armenia better instruments to promote its rights and interests related to free transit of goods



Other International Instruments

- 1. European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
 - Turkey will provisionally join ADR in 2012
- 2. World Trade Organization (WTO) -
 - Armenia (2003) and Turkey (1995) are members
 - Turkey made reservations regarding Armenia and lifted the application of WTO rules in respect to Armenia when the latter joined that organization.
- 3. European Union Framework
 - Turkey and EU have signed a Customs Union agreement in 1995
 - Free trade agreements (faster and cheaper trade between signatories)
- 4. Armenia's negotiations with the EU over signing a deep and comprehensive free trade agreement (DCFTA) with the European Union.





Key Observations and Recommendations

Key Observations

- scenarios offer different opportunities for the region
- •Status Quo scenario offers currently underutilized opportunities and smooth transition to wider regional cooperation under Open Borders scenario.
- •Countries should facilitate innovative logistics projects, planning for the transforming trade flows and transport channels, using new technical equipment.
- •Businesses and cross-border trade paved their ways through current Status Quo by establishing quasi-legal practices based on mutual trust and business ethics.
- •New transport corridors can be both the cause and the consequence of the market development and regional integration.
- •Armenian and Turkish joint-ventures, particularly in goods and passenger transportation would significantly help to address challenges for trade and business development under both scenarios.
- •Armenia and Turkey are signatories of major international instruments on trade and transport, and the opportunities for using these instruments is yet underutilized



Key Observations and Recommendations

Key Observations

- •The new initiatives on transport developments should consider the existing corridors and routs to the best extent
- •Business association in Armenia and Turkey should lobby for acceptance and registration of commercial invoices of Turkish goods with final destination to Armenia by introducing Armenia's international AMD code in Turkey's custom service document circulation.
- •Armenian transport companies should utilize the BSEC Permit across the territories of Turkey for free transit of Armenian trucks.
- •Armenian and Turkish Business Associations and think tanks working closely with local authorities (AIRCA, UMBA, TABDC, TEPAV, BSEC-URTA) should be largely engaged to ensure facilitation of the trade and transport processes.
- •Small and shot-term wins should be further consolidated into a strong platform of promoting business interests for sustainable and irreversible cooperation within the South Caucasus region and turning the region into a unique HUB for East-West transit.

