

Azerbaijan

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The tradition of highly regionalized trade is becoming old-fashioned as the world becomes increasingly interdependent and globalized. International commerce is moving toward a globalized system in which continental trade between Europe and Asia is bound to gain significance.

In 2000, Eurasian trade turnover embraced some 300 million tons of goods, consisting of 72 million tons of European exports into Asia and 228 million tons of Asian exports into Europe.¹ By 2015 this trade turnover is expected to reach 460 million tons. Energy products from Middle Eastern and Persian Gulf countries remain the primary Asian import to Europe—making up approximately 60 percent of total imports—yet East Asia’s trade share of 20 percent will continue to grow in the coming years.

The volume of inland transportation, especially container trade, is expected to double from 65 million tons in 2002 to 135 million tons in 2015.² The number of goods and products shipped by container will increase as well, reaching 40 percent of total exchanged cargo by 2015. Today, almost all containers moving between Europe and Asia—95 percent—are transported by sea via the Suez Canal and the Mediterranean Sea. In 2005, the estimated number of containers shipped by sea from East Asia to Europe totaled over three million

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¹ See the remarks from the discussion table held during the 3rd Annual Eurasian Conference on Transport in Saint-Petersburg, September 11-12, 2003. Also available online at [http://www.eatu.ru/eatu.ru.page\(DOC\).doc\(4859\).folder\(64\).html](http://www.eatu.ru/eatu.ru.page(DOC).doc(4859).folder(64).html)

² Ibid.

units. By 2015, this figure is expected to triple, reaching 10 million containers per year.³

Eurasian land corridors are far shorter than the maritime routes, prompting European experts and government officials to suggest the development of new inland transportation corridors to carry the growing volume of maritime shipments between Europe and Asia. This will complement sea transport while enabling the transit countries to develop their infrastructure and become involved in continental trade.

Azerbaijan is a natural crossroads for the growing continental land - based trade and its geostrategic location is key to connecting the transportation networks and markets of Europe, Asia, the Middle East and the Mediterranean region. As a strategic intersection, Azerbaijan will accommodate the rapidly growing transit traffic from China and Central Asia to Europe, and from India and Iran to Russia.

There are two potential inland alternatives to the current Europe-Asia maritime transportation routes and both involve Azerbaijan: the East-West transport corridor and the North-South transport corridor. The former consists of a China-India-Central Asia-Caucasus-Europe route, while the latter would link the routes of the Asian continent, the Caspian region and Europe via an India-Iran-Russia axis. Both corridors have great potential for reviving the traditional Silk Road with container trade (see appendix 1).

The construction of the Baku-Tbilisi-Ceyhan oil and the Baku-Tbilisi-Erzurum natural gas pipelines through Azerbaijan will, in the next 20 years, bring over \$100 billion into the state budget,⁴ while enabling additional oil and gas from Kazakhstan and Turkmenistan to be shipped to Europe via trans-Caspian pipelines.

³ See report by European Conference of Ministers of Transport's "Globalisation: Europe-Asia Links Synthesis Report and Political Decision Required," April 26, 2005. Also available online at <http://www.cemt.org/online/council/2005/CM200501e.pdf>

⁴ According to *BP Azerbaijan Sustainability Report 2004*, potential Azerbaijan State revenues from the country's major oil and gas fields are estimated at \$107 billion (price of oil based on \$30 per barrel rate). The report is available online at <http://www.bp.com/>

This paper examines Azerbaijan's role in continental trade by means of the East-West and North-South transport corridors, with a focus on Azerbaijan's road, rail, maritime and energy networks, and customs system. It will assess current and potential projects in each of these sectors, as well as the impediments that hinder facilitation of Europe-Asia trade. In addition, it will consider the economic and strategic implications of specific projects for Azerbaijan and the Caspian region.

Road Networks and Customs Transit System

Connecting the separate countries' transit networks is critical if Azerbaijan is to become open to European, Middle Eastern and South Asian markets. Azerbaijan has an 18,800 km-long road network (excluding Nakhchivan), which consists of 52 percent paved road, 47 percent gravel road, and 1 percent dirt track.⁵ Roads carry 78 percent of all passengers and 28 percent of goods traffic. In general, the roads that run from Baku to Georgia are a part of the East-West "Silk-Road" highway corridor, and the roads that run along the Caspian Sea to connect Russia and Iran are a part of the North-South transportation corridor. Both road networks are part of the Asian Highway Network (see appendix 3).

Azerbaijan signed the "Main Multilateral Agreement on International Transport for the development of Transport Corridor Europe-Caucasus, Asia" (TRACECA) during the International Conference "TRACECA – Rehabilitation of the Historical Silk Route" in Baku in September, 1998. It also joined the North-South Transport Corridor in September 2005.

Launched in May 1993, TRACECA is a European Union initiative that aims at deepening regional and inter-regional cooperation between TRACECA member states and at integrating the TRACECA transport corridor into the Trans-European Transport Networks (TEN). Since 1993, the EU has

⁵ See the ADB Technical Assistance Report, "Republic of Azerbaijan: Preparing for Southern Road Corridor Improvement Project (Alat-Astara Road)," Project No. 39176, November 2005

invested more than €110 million for the realization of 53 technical and investment projects.⁶

According to Azerbaijan's State Statistics Committee, the volume of cargo transported through the TRACECA corridor increased by 34.2 percent between 2001 and 2003, reaching 40.9 million tons. This includes cargo shipped by all transportation modes: 46.7 percent (primarily oil and oil related products) was moved by rail, 28.2 percent was moved by road, and 25 percent was shipped by sea.⁷

Within the TRACECA project, East-West highways are being built to European standards. Construction and renovation work is supported by grants and loans from the World Bank, the European Bank for Reconstruction and Development (EBRD), the Islamic Development Bank (IDB) and the Kuwait Fund.⁸ A 40 km-long section of the Alat-Gazi-Mammed highway has been completed and the remaining segments of the Baku-Georgian border highway are under construction. This will mean that the entire Azerbaijani section of the Europe-Caucasus-Central Asia corridor, from Baku to the Georgian border, will meet European technical standards.

Before the Azerbaijani Ministry of Transport was established in 2003, national road maintenance was the responsibility of a state-owned company, Azeravtoyol. Since the early 1990s, roads in Azerbaijan have been poorly maintained and most still need significant modernization. According to the Asian Development Bank's (ADB) Technical Assistance Report:

[A]bout 75% of the network is in poor condition. Based on the road condition data available, 61% of the [East-West] and [North-South] highways, 76% of other republic roads, 66% of secondary roads, and 76% of rural roads require rehabilitation. In addition, projections of increased traffic

⁶ For more information visit <http://www.traceca-org.org>

⁷ This data is from the annual report "Development of Transport Infrastructure and International Transport Linkages in Azerbaijan Republic" prepared by the Azerbaijani Government for the UNECE and UNESCAP joint project "Developing Euro-Asian Transport Linkages (2002-2006)."

⁸ See TRACECA website, TA Project No 37, Rehabilitation of Caucasian Highways, Jacobs Gibb, November 2002.

indicate that the current capacity of the [North-South] highway will be insufficient and that widening and upgrading is needed.⁹

The Azerbaijani government spent \$14.4 million on road maintenance in 2004, a sizable increase over the \$6.7 million spent in 2001.¹⁰ Yet this falls short of the estimated \$260 million required to maintain roads country-wide. The government acknowledges this gap and is developing a ten-year program to achieve this needed investment.

Sixty percent of trucks crossing the Azerbaijani-Georgian border are transit traffic.¹¹ Most cargo transport between Europe and Asia via Azerbaijan is performed by automobiles from some 40 countries. About 20,000 Iranian vehicles, 8,000 Turkish vehicles and 3,500 Russian vehicles pass through every year.¹²

A similar situation exists for the North-South corridor, where daily traffic volume is around 8,100 vehicles (an estimated 62 percent being freight vehicles).¹³ Traffic is expected to increase significantly once the work on Alat-Astara road to the Iranian border and the northern portion of the North-South corridor (connecting Baku to the Russian border) is completed.

In the view of the projected high traffic volumes on the [North-South] corridor, the [Road Transport Services Department] intends to upgrade this road to Category I with dual carriageway and four lanes. Based on initial feasibility work, the proposed road will be constructed on over 80% new and improved alignment in order to avoid major resettlement along the original corridor and to reduce the length (to about 200 km).¹⁴

⁹ ADB Technical Assistance Report, op cit, note 5.

¹⁰ Ibid.

¹¹ See the World Bank study "Trade, Transport and Telecommunications in the South Caucasus: Current Obstacles to Regional Cooperation." Available online at <http://www.worldbank.org>

¹² See "Azerbaijan Transport Sector, Sector Development, Review and Update," - a part of the review of

Transit and International Multi-Modal Transport Integrated Border Management Corridor Transport and Trade Information by the TRACECA National Secretary, A. Mustafayev, July 2004. Available online at <http://www.worldbank.org>

¹³ See annual report, op cit, note 7. Annex 1

¹⁴ ADB Technical Assistance Report, op cit, note 5.

The Iranian government agreed to sponsor a feasibility study for the 243 km-long Alat-Astara connection that links Azerbaijan's coastal roads with roads in Iran. The main purpose of this project is to "construct a part of the road from Alat [a town near Baku] to Astara [a town near the Azerbaijan-Iran border], develop the cross-border facility at Astara, improve local roads to provide accessibility to poor areas in the South, and enhance the road network's sustainability by supporting policy and institutional reforms in the [Road Transport Services Department]."¹⁵

This road is key to the North-South transport corridor linking the road networks of Russia, Azerbaijan and Iran. The northern section of the North-South corridor that stretches from Baku to the Azerbaijan-Russia border is operational, but needs modernization. The total length of the route from the Azerbaijan-Russia border to the Azerbaijan-Iran border is 521 km,¹⁶ and the road link is part of the Asian Highway project, a 140,000 km network of standardized roadways promoted by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). 1,500 km of the Asian Highway route is located in Azerbaijan, 17,000 km is in Russia, and 11,000 km is in Iran.¹⁷

One of the major challenges to facilitating trade between states is the issue of improved integration of national customs services. The Trade Facilitation Program sponsored by the ADB within the Central Asia Regional Economic Cooperation (CAREC) Program is one of the few initiatives that seeks to develop a common customs transit system throughout Greater Central Asia. The six CAREC member countries—Azerbaijan, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Uzbekistan, with the addition of China, a TIR Convention member—have tried to accelerate continental trade and economic growth by facilitating international transit of goods under the TIR Transit System.¹⁸ Participating countries have signed bilateral and

¹⁵ Ibid.

¹⁶ See annual report, op cit, note 7.

¹⁷ UNESCAP Press Release No: G/13/2004. Available online at <http://www.unescap.org/unis/press/2004/may/g13.asp>

¹⁸ "TIR Carnet is a Customs transit document permitting facilitation of international trade and international road transport, under cover of which transport of goods from

multinational agreements to standardize and harmonize their custom services.

The TIR Transit System is used by 55 states around the world and is the only international customs transit system that provides “a single procedure from the point of departure to the point of destination, with an international guarantee chain.”¹⁹ In addition to SafeTIR procedures that involve international electronic data interchange (EDI) control system for TIR Carnets, the TIR Transit System has five principles: secure vehicles or containers; international guarantees; TIR Carnet; mutual recognition of custom controls; and controlled access.²⁰

Azerbaijan became a signatory to the TIR Convention in 1996; the Azerbaijan International Road Carriers Association (ABADA) is the national association responsible for oversight and operation of TIR procedures. Supporting and advancing the TIR Transit System is a priority of Azerbaijan, the SafeTIR system having already been implemented on its territory. Azerbaijan issued 600 TIR Carnets in 1998 and 3,900 in 2004,²¹ with strong increases likely in the years to come.

A joint initiative started in 1999 by the United Nations Development Program (UNDP) and the State Customs Committee led to the creation of the Data Transmission Network, which improves coordination between various custom checkpoints around the country. Thanks to this system, the

(a) Customs office(s) of departure to (a) Customs office(s) of destination is carried out under the procedure called “TIR procedure” laid down in the 1975 Convention on the International Transport of Goods under Cover of TIR Carnets (TIR Convention).”

For further information visit <http://www.adb.org/Projects/TradeFacilitation/>

¹⁹ See the paper by Jeffrey Liang and Dorothea Lazaro “TIR Customs Transit System: Experiences and Initiatives of CAREC Participating Countries,” *Asian Development Bank*, January 2006. Available online at

<http://www.adb.org/Projects/TradeFacilitation/>

²⁰ Ibid.

²¹ Ibid.

State Customs Committee, and the Baku Chief Customs Department, most regional customs checkpoints can effectively coordinate with each other.²²

There are 18 regional custom bodies and 58 custom posts (28 are border posts) in Azerbaijan. The country's custom administration oversees and screens about 19.2 million tons of imported and exported freight, valued at over \$5 billion.²³ In 2003, custom duties accounted for \$215 million, most of which (67.4 percent) were collected as a Value Added Tax (VAT), followed by import taxes (24.1 percent) and excise taxes (4 percent).²⁴

Azerbaijan seaport fees are the lowest along the TRACECA corridor and three to four times lower than the fees charged at the Caspian ports of Aktau (Kazakhstan) and Turkmenbashi (Turkmenistan). (For other tariff schemes, see appendix 4).²⁵

The East-West Railway Networks

The Aktau-Baku-Tbilisi-Poti/Batumi Railway System (TRACECA)

One of the East-West projects within the TRACECA transport corridor is the Aktau-Baku-Tbilisi-Poti/Batumi railway network. Azerbaijan, Georgia and Kazakhstan are working to advance the TRACECA route from Aktau to Baku and onward to Poti or Batumi (the distance from Aktau to Baku is 468 km; the Azerbaijani rail section measures 503 km and the Georgian rail section measures 360 km) (see appendix 3). The railway system between Baku and the Georgian port cities of Poti and Batumi has been equipped with fiber optic cable; the European Commission financed the laying of fiber-optic cable along the Azerbaijani section of the railway.²⁶

Oil is the primary export product delivered along the Baku-Tbilisi-Poti route. In 1995, the export of oil and oil products via this route was about 335,000

²² See <http://www.scc-undp.org/eng/>

²³ See Asian Development Bank's Azerbaijan Country Report, April 2004. Available online at <http://www.adb.org/Projects/TradeFacilitation/ictcountryreports.asp>

²⁴ Ibid.

²⁵ See review by A. Mustafayev, op cit, note 12.

²⁶ See annual report, op cit, note 7.

tons; this grew to 5.2 million tons between 2000 and 2002, and reached roughly 13 million tons in 2003.²⁷

The Aktau-Baku-Tbilisi-Poti/Batumi rail network is part of the planned China-Central Asia-Caucasus-Europe railways transport corridor promoted by the United Nations and supported by participating states. One of the routes of this railway network is a 7077 km-long corridor that will link the rail lines of four countries—China, Kazakhstan, Azerbaijan, Georgia and Turkey—directly to European transportation networks. The operational Kazakh portion of the rail system is 3850 km long and starts in the city of Dostik (Druzhba) near the Kazakh-Chinese border, passes through Astana, Orsk, Kandagach, and ends in the Kazakh seaport of Aktau.²⁸

An alternative route from Europe to China branches off in Baku and goes through Turkmenistan, across Uzbekistan, and terminates in Dostik (the Turkmenbashi-Ashgabat-Tashkent-Almaty-Dostik route is 6861 km) (see appendix 2). This route is 415 km shorter than the Trans-Asian railway route that passes through Iran, although the latter promises access to India.²⁹

The transport cost from Western Europe to Baku in 1999 was \$3,000 for a 40-foot container and \$2,000 for a 60-ton wagon, according to a 2000 World Bank study.³⁰ To lower costs and expand the rail network to Central Asia and China, ministers from Azerbaijan, Georgia and Kazakhstan signed a trilateral protocol on October 28, 2005 in Aktau, Kazakhstan. The protocol set tariffs for container shipments via the Poti-Baku-Aktau-Almaty railway: tariffs for import shipments into Kazakhstan were set at \$0.28 per container/km, while export container tariffs were set at \$0.22 per container/km. Similar charges will apply in Azerbaijan and Georgia, where tariff for transit cargo was set at \$0.28 per container/km.³¹ Signatories also

²⁷ See review by A. Mustafayev, *op cit*, note 12.

²⁸ *Ibid.*

²⁹ This data is from the background report by the Azerbaijan's Ministry of Transport dated September 29, 2005.

³⁰ See paper by Evgeny Polyakov, "Changing Trade Patterns after Conflict Resolution in the South Caucasus," *the World Bank*, Washington DC, 2000.

³¹ This Protocol was signed by Minister of Transport of Azerbaijan, Minister of Economic Development of Georgia and Minister of Transport and Communication of

started a pilot program by running a container track along the route on December 25, 2005. In the future, cargo from China will be shipped to Aktau, where it will travel 468 km by railway ferries to Baku, and then will be shipped directly to Istanbul and onward to Europe either by sea from Georgia or by rail via the potential Baku-Tbilisi-Akhalkalaki-Kars-Istanbul railway system.

The Baku-Tbilisi-Akhalkalaki-Kars Railway Connection

(UNECE/UNESCAP)

The Baku-Tbilisi-Akhalkalaki-Kars (BTAK) railway is a section of the Trans-European Railway networks that will connect Azerbaijani, Georgian and Turkish railroads. The route is a strategic project for Azerbaijan, although it is a UNECE/UNESCAP-sponsored initiative and is not yet part of TRACECA (see appendix 3).

Azerbaijan views the BTAK as a missing link—a link that will eventually connect the railway systems of China-Central Asia-South Caucasus-Turkey and the EU. The realization of this project depends on the construction of a 98 km-long rail segment from Kars in Turkey to Tbilisi in Georgia (68 km in Turkey, 30 km in Georgia). The project is estimated to cost around \$400 million.

The length of the BTAK and the Kars-Istanbul rail sections are 826 km and 1933 km, respectively. Once completed, cargo from the EU can be shipped directly by rail to China through Turkey, Georgia, Azerbaijan and Central Asia, increasing the volume of container traffic through Azerbaijan and providing a more secure and shorter route to China. (The distance from Istanbul to Dostik could be further shortened to 6297 km if Kazakhstan constructs its Trans-Kazakhstan route, the Aktau-Beineu-Aktogay-Dostik railway.)³²

Kazakhstan on October 28, 2005 in Aktau, Kazakhstan. A copy of this document was provided by Azerbaijan's Ministry of Transport.

³² Data provided by the Ministry of Transport of Azerbaijan.

The idea of connecting Azerbaijani, Georgian and Turkish railways was first discussed during the Joint Transport Commission meeting in July, 1993. The initiative was later integrated into the UNECE sponsored Master Plan on the Trans-European Railway (TER) networks. In July 2002, the Ministers of Transport of Azerbaijan, Georgia and Turkey signed a protocol confirming the route and agreed to conduct a feasibility study at a February, 2005 meeting.³³ UNECE lists this route as a Priority I project, indicating that it could be funded and implemented by 2010. Stakeholders hope to begin construction late in 2007. Most forecasts suggest that during the first two years of operation, transport will reach 2 million tons, and will then grow to 8 to 10 million tons over the following three years.³⁴

The construction of the BTAK railway will also open markets in the Mediterranean region. Goods and products could be shipped directly to Mersin, a coastal Turkish port at the Mediterranean Sea; from there they could be transported by sea to the United States, Israel, Egypt or other North African and South European states.

The project also has a geopolitical significance. It bypasses Armenia, with which Azerbaijan is still at war. Armenia has voiced disapproval of the BTAK route and proposed instead the use of the century-old Russian-built Kars-Gyumri (Armenia)-Tbilisi railway. Azerbaijan argued that this rail link has not been used since the collapse of the Soviet Union and that its renovation may cost more than the construction of the new line.³⁵

It is unlikely that Azerbaijan will consider using the Kars-Gyumri rail link as an alternative to the Kars-Akhaklakali railway. Due to the “no peace, no

³³ Ibid.

³⁴ This data is from the Information Paper prepared by the Azerbaijani, Georgian, Turkish delegates for the 1st Meeting of the EU-Black Sea-Caspian Basin Expert Working Group on Transport Infrastructure on December 13, 2005 in Kiev, Ukraine.

³⁵ According to the information provided by the Ministry of Transport of Azerbaijan, the Armenia-proposed Kars-Gyumri-Tbilisi railway passes through a mountainous terrain and the railway has not been used for more than a decade. During this time the route's condition worsened and it needs extensive repair. Thus, its rehabilitation cost could exceed the construction cost of the Tbilisi-Akhalkalaki-Kars link.

war” situation on the ground and Armenia’s refusal to withdraw troops from occupied Azerbaijani lands in return for re-establishment of communications between Baku and Yerevan, Azerbaijan has no other option but to move ahead with the Kars-Akhaklakali project. Azerbaijani officials have repeatedly stated that they cannot delay strategic and economic projects until the Karabakh conflict is resolved. Thus, construction of this project is likely to advance even if the Karabakh peace process does not.

Caspian Sea Ports and the North-South Railway System

There are eleven seaports on the Caspian Sea, including five that belong to Iran, three to Russia, and one each to Azerbaijan, Turkmenistan and Kazakhstan.³⁶ The capacity of the four main Iranian ports on the Caspian exceeds the total combined capacity of the six ports in Azerbaijan, Kazakhstan, Turkmenistan and Russia.³⁷ Even with such a disparity, the Baku port utilizes only 13 percent of its total capacity.³⁸

Baku’s International Sea Port is one of the three TRACECA seaports, the other two being Aktau port in Kazakhstan and Turkmenbashi port in Turkmenistan. The Baku seaport has four main revenue-generating divisions: the Main Cargo Terminal, the Ferry Terminal, the Oil Terminal and Shipping Services.³⁹

Port traffic has grown 19 percent a year since 1993. An ongoing \$16.2 million project sponsored by the EBRD will expand the port’s freight cargo handling capacity to 30 million tons a year⁴⁰ and allow Azerbaijan to increase the number of cargo and ferry services to and from Aktau and Turkmenbashi, as well as potential shipments from Iran and Russia as a part of the North-South Transport Corridor.

³⁶ See Allister Maunk, “International Transport Corridor South – North,” *AIA News*, April 24, 2005. Also available online at <http://www.axisglobe.com/article.asp?article=48>

³⁷ See Alekander Sobyenin, “North-South: Will it work? (*MTK «Sever-Yug»: budet li tolk?»*,” *Journal Container Business (Jurnal Konteynerniy Biznes)*, No. 1, January 2006.

³⁸ See the World Bank study, op cit, note 11.

³⁹ See Azerbaijan Export and Investment Promotion Foundation’s website at <http://www.azerinvest.com/eng/>

⁴⁰ Ibid.

According to the Ministry of Transport of the Russian Federation, the volume of transport via the North-South corridor, excluding oil and oil related products, could reach 30 to 40 million tons by 2008.⁴¹ In 2001, the transport volume was 5.4 million tons and reached 8 - 9 million tons in 2003.⁴² Russia hopes to add some \$15 billion to its state budget from transit shipment, with an average 15 million tons of cargo.⁴³ This is precisely why Azerbaijan is interested in the North-South corridor and in transporting some of this increased future cargo volume through its national railways, roads and seaport.

The initial agreement on the North-South corridor was signed between Russia, Iran, India and Oman in Saint Petersburg, Russia in September 2000. The agreement proposes the shipment of goods and containers from India to Russia via Iran and the Caspian Sea. Azerbaijan officially joined the corridor project on 10 September, 2005, when President Ilham Aliyev signed a bill approving Azerbaijan's decision to join the North-South project.

Russian experts estimate that, when compared to routes from South Asia to Northern European and Baltic ports via the Mediterranean and the Suez Canal, the North-South route through the Caspian Sea will shorten delivery periods by 10 to 20 days and reduce shipment costs by \$400 to \$500.⁴⁴ For example, if shipping a container from Germany to India via the Suez Canal costs about \$3,500 and takes 40 days, it will cost \$2,500 and take 15 to 20 days if shipped through the North-South corridor.⁴⁵

Russia is improving its internal infrastructure in the Astrakhan region, with a focus on the transportation capacity and networks of Russia's Caspian ports, including Astrakhan, Olya and Makhachkala. Between 1999 and 2002

⁴¹ *Rossiyskaya Gazeta*, September 16, 2003.

⁴² *Rossiyskaya Gazeta*, May 13, 2003.

⁴³ *Izvestia.ru*, July 28, 2004

⁴⁴ See Regine A. Spector, "The North-South Transport Corridor," *The Analyst*, July 03, 2002

⁴⁵ See Daniel Shipkov, "Russian Transport Today (*Rossiyskiy Transport Segodna*)," July 2, 2004. Also available online at <http://www.novopol.ru/article172.html>

Russia spent \$29 million⁴⁶ on improving its three ports and plans to spend another \$250 million within ten years on Astrakhan's regional ports.⁴⁷ Iran, on the other hand, devoted \$40 million to upgrades in its Amirabad port alone.⁴⁸ On 28 July, 2004 Russian officials inaugurated a 47 km railway that connected Yandiki to Olya.⁴⁹ It is predicted that Olya's port will handle about 8 million tons of cargo by 2010.⁵⁰

In February 2005, Baku, Moscow, and Tehran endorsed the construction of a 375 km railway—the Kazvin-Rasht-Astara connection—to join the railways of the three countries (see appendix 3). According to the Azerbaijani state railway administration, the North-South railway network could transfer 5 million tons of cargo during its first year of operation, gradually increasing shipment volume to 20 million tons annually.⁵¹ Some experts have argued that the shipment by rail will improve delivery time by an additional five to seven days when compared to ferry shipment via the Caspian Sea.⁵²

Most construction will take place in Iran, with an approximately 15 km-long segment to be built in Azerbaijan. The estimated cost of the entire project is about \$600 million.⁵³ Tehran hopes to finish its segment of the railway in four years.⁵⁴ The northern part of the North-South railway network that runs from Baku to the Russian border is already in place, but needs renovation. Azerbaijan requires additional investment to modernize and upgrade its roads and railways to accommodate increased transit cargo volumes.⁵⁵

⁴⁶ See Andrei Milovrozov, "Baku and Yerevan Couldn't Share the Corridor (*Baku i Yerevan ne podelili koridor*)," *Utro.ru*, March 3, 2005. Also available at <http://www.utro.ru/articles/2005/03/03/413489.shtml>

⁴⁷ Maunk, op cit, note 35.

⁴⁸ Milovrozov, op cit, note 45.

⁴⁹ See National Container Company's Press Release: Opening of the port Olya railway station, July 28, 2004. Available online at <http://www.container.ru/English/Company/News/20040728.html>

⁵⁰ *Nezavisimaya Gazeta*, January 26, 2004

⁵¹ Data provided by the Ministry of Transport of Azerbaijan.

⁵² Ibid.

⁵³ *RIA Novosti*, May 3, 2005

⁵⁴ Milovrozov, op cit, note 45.

⁵⁵ See interview with Head of the Azerbaijani State Railway Administration, Arif Askerov, on *Trend.az*, December 20, 2005

The East-West Energy Pipelines

The Baku-Tbilisi-Ceyhan Oil Pipeline

The East-West energy projects are the main economic, political and strategic components of Azerbaijan's foreign and transportation policy. The intertwined, complex relationship between energy, security and economic issues in the Caspian region is the major reason for which existing and potential energy pipelines are so important for Azerbaijan.

The recently constructed Baku-Tbilisi-Ceyhan (BTC) oil pipeline and the Baku-Tbilisi-Erzurum (BTE) natural gas pipeline epitomize the close relationship between the pipeline politics and regional security. These pipelines and their routes, which bypass Russia and Iran, were widely discussed throughout the 1990s; both are considered part of the East-West Energy Transport Corridor. These pipelines have allowed Azerbaijan to export energy to Western markets independently of Russia, and created an opportunity to incorporate potential trans-Caspian pipelines from Kazakhstan and Turkmenistan into this corridor.

The construction of the 985 km-long Baku-Supsa oil pipeline in 1998 marked a significant shift in Azerbaijan's energy policy and was a milestone in developing the East-West energy corridor. The Baku-Supsa pipeline was the first pipeline that bypassed Russia. Although the pipeline has a limited capacity (115,000 barrels per day⁵⁶ or 5 million tons of oil annually⁵⁷) and its initial purpose was to transport "early Azeri oil," its completion was a remarkable achievement for Azerbaijan, Georgia and international energy companies. Not only did the Baku-Supsa lessen the Yeltsin administration's political pressure on Baku, it also helped Azerbaijan and its partners to progress on the BTC project.

⁵⁶ Jennifer DeLay, "The Caspian Oil Pipeline Tangle: A Steel Web of Confusion" in *Oil and Geopolitics in the Caspian Sea Region*, in Michael P. Croissant and Bulent Aras, eds., *Oil and Geopolitics in the Caspian Sea Region*. (Connecticut: Praeger Publishers, 1999), p. 73

⁵⁷ Nassib Nassibli, "Azerbaijan: Oil and Politics in the Country's Future" in Michael P. Croissant and Bulent Aras, eds., *Oil and Geopolitics in the Caspian Sea Region*. (Connecticut: Praeger Publishers, 1999), p. 116

There was only one available energy transport route to the West before the construction of Baku-Supsa in 1998 and the BTC pipeline in 2005. That route, the Baku-Novorossiysk pipeline, was constructed during the Soviet era and passes through Russia on its way from Baku to Russia's Black Sea port of Novorossiysk. The 1996 bilateral agreement signed between Baku and Moscow permitted 5 million tons of Azerbaijani oil to be shipped per year via this pipeline, giving Russia considerable leverage over Azerbaijan's internal politics and economy.

By 2004 Azerbaijan was shipping only 2.6 million tons of oil through the Baku-Novorossiysk pipeline. This route became even less appealing after the BTC pipeline opened, since the tariffs for oil shipments using Baku-Novorossiysk are four times higher than tariffs for oil transports via the Baku-Supsa pipeline (\$15.67 versus \$3.40 per ton).⁵⁸ The fate of Baku-Novorossiysk remains unclear—it may stop functioning in the near future or could be reversed to pump Russian and Kazakh oil to Azerbaijan.

The major breakthrough came in 1994 when the Azerbaijani government and a consortium of international energy companies signed the production sharing agreement to develop the Azeri-Chirag-Guneshli (ACG) offshore field (with an estimated 4 to 6 billion barrels of oil reserves). The agreement proposed \$8 billion invested over 30 years for exploitation of the ACG field alone. In November 1999, Azerbaijan, Georgia and Turkey agreed on the route for the Baku-Tbilisi-Ceyhan pipeline that would carry oil from the ACG field. The construction of the 1,730 km BTC pipeline began in 2002, and was completed in 2005. This pipeline marked a major turning point in Azerbaijan's recent history.

Thanks to revenues from the BTC project, Azerbaijan is expected to double its economy by 2008. Oil export revenues in 2003 were nearly 50 percent of the total state budget and accounted for over 86 percent of Azerbaijan's total exports.⁵⁹ In 2005, state income from energy exports was projected to increase

⁵⁸ See *Interfax-Azerbaijan* interview with First Deputy Prime Minister of Azerbaijan, Abbas Abbasov on August 2, 2005.

⁵⁹ *EAI*, Azerbaijan Brief, June 2005.

by about 65 percent, and an average of over 128 percent from 2006 to 2009.⁶⁰ In 2005, the Azerbaijan's State Oil Fund (SOFAZ) added some 660 million manats-AZN to its assets in 2005.⁶¹ As of January 1, 2006, SOFAZ's funds stood at about AZN 1.3 billion or roughly \$1.4 billion.⁶²

President Ilham Aliyev has approved a long-term oil and gas revenue management strategy that aims to ensure balanced economic development of the non-oil sector by investing a portion of oil and gas revenues generated in SOFAZ.⁶³ The strategy also calls for reducing the country's need for external borrowing and also the current external debt, which is 20.7 percent of GDP or 47.6 percent of exports.⁶⁴ By 2010, these numbers are projected to be 15 percent and 24 percent respectively. SOFAZ revenues are expected to grow from 11 percent of GDP in 2002, to 80 percent of GDP in 2010, improving Azerbaijan's net asset position.⁶⁵

The Baku-Tbilisi-Erzurum Natural Gas Pipeline

The Shah-Deniz offshore field is the major source of natural gas in Azerbaijan. The field holds 600 billion cubic meters (bcm)⁶⁶ of natural gas and 101 million tons of condensate, with potential to contain up to 1 trillion cubic meters of gas and 400 million tons of condensate.⁶⁷

Turkey in 2001 has agreed to buy 6.6 bcm of Azerbaijani natural gas annually. The current delivery schedule calls for 2 bcm is to be delivered in 2006, which will slowly ramp up to an average of 6.3 bcm per year by 2009.⁶⁸ With additional infrastructure upgrades, the Shah-Deniz field will be able to

⁶⁰ Ibid.

⁶¹ See "SOFAZ's Revenue and Expenditure Statement for 2005." Available online at <http://www.oilfund.az/>

⁶² Ibid.

⁶³ Decree of the President of the Azerbaijan Republic on the Approval of "The Long-Term Strategy on the Management of Oil and Gas Revenues," from September 27, 2004. Available online at http://www.oilfund.az/doc/neft_str_en.pdf

⁶⁴ Azerbaijan Country Assistance Strategy, *World Bank Report* No. 25790-AA, April 29, 2005

⁶⁵ Ibid.

⁶⁶ EIA, 'Azerbaijan: Production-Sharing Agreements', June 2002

⁶⁷ *Interfax*, 'Shah-Deniz consortium, GIOC sign gas export deals', October 31, 2003

⁶⁸ Ibid.

produce 8.4 bcm of natural gas and 40,000 bpd of condensate in the short term.⁶⁹

Azerbaijani natural gas will be shipped to Turkey and onward to Europe via the South Caucasus Pipeline, also known as the BTE natural gas pipeline. The \$4 billion BTE pipeline project runs parallel to the BTC pipeline; starting in Baku, it passes through Georgia and ends at the Turkish city of Erzurum. The BTE pipeline is 680 km long with an annual transfer capacity of 6.6 bcm⁷⁰ that could be expanded. The BTE is the first pipeline to carry Caspian gas to Europe that will bypass Russia and Iran (see appendix 4)

Turkey and Greece will be the main consumers of the exported Azerbaijani natural gas in the initial stage of the BTE project. Both countries' demand for natural gas has increased dramatically in the recent years; Turkish gas demand is expected to triple by 2010 and the Turkish Natural Gas company BOTAS estimates that by 2020, the country will demand 43 bcm of natural gas yet supplies will only be about 41 bcm.⁷¹ Likewise, Greece's natural gas demand had grown from 0.03 bcm in 1996 to 2.2 bcm in 2001.⁷²

New opportunities for boosting Caspian natural gas exports to Europe are being created by ongoing projects between Turkey, Greece and Italy. A sub-sea pipeline between Greece and Italy with a 11.3 bcm capacity will allow Greece to transfer roughly 10 bcm of natural gas to Italy per year.⁷³ Another 285 km natural gas pipeline from Turkey to Greece⁷⁴ will make it possible to ship natural gas from Azerbaijan, and potentially from Turkmenistan, to Greece and other South European states.

Ankara and Ashgabat have signed an agreement to deliver 10 bcm of Turkmen gas to Turkey per year.⁷⁵ The agreement with Turkmenistan called

⁶⁹ *EIA*, Country Analysis Brief: Azerbaijan, June 2005

⁷⁰ *Ibid.*

⁷¹ See natural gas supply and demand scenarios from BOTAS (Petroleum Pipeline Corporation) web site. Available online at <http://www.botas.gov.tr/>

⁷² *EIA*, Country Analysis Brief: Greece, July 2003

⁷³ *Baku Today*, September 15, 2005

⁷⁴ A Memorandum of Understanding was signed between DEPA and the Turkish company BOTAS, providing for the interconnection of the Turkish and Greek gas networks. Available online on DEPA Official Web site at <http://www.depa.gr/>

⁷⁵ *IEA*, 'Flexibility in Natural Gas Supply and Demand', 2002

for a sub-sea trans-Caspian pipeline across Azerbaijan and Georgia, but the project remains stalled. The recent Russia-Ukraine gas dispute that caused panic among many European states may have the effect of reviving this project, which could be implemented in the mid-term.

Trans-Caspian Sub-Sea Pipelines

Azerbaijan's oil production has increased over the years and yet is still not enough to utilize fully the BTC pipeline. The annual capacity of the BTC pipeline is 50 million tons or 1 million bpd, but Azerbaijan's oil production has not yet reached 1 million bpd. 23.7 million tons of oil is expected to be exported in 2006, followed by 40.2 million tons in 2007 and 54.8 million tons in 2008.⁷⁶ Without new field discoveries, oil production will top out at 65 million tons per year around 2011; by 2018 production is expected to be half that amount and a quarter of the peak level by 2024.⁷⁷

This creates an opportunity for Kazakhstan and international energy companies—and a strategic necessity for Azerbaijan—to export Kazakh crude oil via the BTC pipeline, initially by oil tankers and eventually via a potential Aktau-Baku trans-Caspian sub-sea pipeline. Although Azerbaijan and Kazakhstan have yet to finalize an agreement on transporting Kazakh oil via the BTC, Azerbaijani and Kazakh officials have declared that Kazakhstan will join the BTC project and export as much as 30 million tons of oil each year through its pipeline.⁷⁸

The shipment of Kazakh oil to Azerbaijan will develop in three stages that coincide with the development of schedule of Kazakhstan's huge Kashagan field, with its estimated reserve of 13 billion barrels. Initially, some 7.5 million tons of Kazakh oil will be shipped to Baku by oil tankers, followed by 20 million tons around 2010, and 30 million after that.⁷⁹ In the meantime, oil

⁷⁶ *525ci Newspaper*, November 2, 2004.

⁷⁷ Azerbaijan Country Assistance Strategy, *World Bank Report* No. 25790-AA, April 29, 2005.

⁷⁸ *The News Bulletin of the Embassy of the Republic of Kazakhstan*, August 10, 2005. Available online at <http://www.kazakhembus.com/081005.html>

⁷⁹ Vladimir Socor, "Trans-Caspian Export Option Now Available To CPC Companies in Kazakhstan," *Eurasia Daily Monitor*, Vol. 3, No. 52, March 16, 2006.

production from Kashagan will reach 21 million tons annually before 2010, 42 million tons between 2010 and 2013 and 56 million tons by 2016.⁸⁰

Four international energy companies—Eni, Conoco Philips, INPEX and TotalFinaElf—involved in the construction of BTC are also stakeholders in the Agip Consortium that is developing the Kashagan field. Other companies, including BP, Chevron, ExxonMobil, and Shell, also operate in Azerbaijan. The decisions of international energy companies will influence the future of the trans-Caspian sub-sea pipelines. Transit tariffs to the Caspian Pipeline Consortium pipeline running from Kazakhstan to Russia's Novorossiysk port have already reached \$30.83 per ton, which will increase in the absence of alternative routes in the region.⁸¹

Some experts have suggested that the shipment of around 20 million tons of Kazakh oil would make the trans-Caspian sub-sea pipeline from Aktau to Baku commercially viable.⁸² This is the same amount that Kazakhstan is projected to be delivering to Azerbaijan by 2010-2011. Hence, it is likely that the decision on building a trans-Caspian sub-sea pipeline could come during the Kashagan field's second stage of development (2011-2013), when Azerbaijan's production will start to decline. Construction of the trans-Caspian natural gas pipeline from Turkmenistan to Azerbaijan will depend on several factors, including the resolution of disputes between Baku and Ashgabat, the availability of foreign direct investment, political will, support from the EU and the United States, of the existence of relevant infrastructure, and market demand in Turkey and Southeast Europe.

Impediments and Challenges

The realization of East-West and North-South transportation projects that cross Azerbaijan requires effective intergovernmental collaboration, infrastructure building, foreign direct investments, and the resolution of political obstacles.

⁸⁰ *Zerkalo*, February 26, 2004.

⁸¹ Socor, *op cit*, note 78.

⁸² *Ibid.*

The Karabakh Conflict. The Karabakh conflict between Armenia and Azerbaijan is the major impediment to long-term peace, cooperation and stability in the region. Because of this conflict Armenia and Azerbaijan have no economic or political ties. Azerbaijan cannot transport its goods and products to the Nakhchivan Autonomous Republic, an Azerbaijani exclave separated from Azerbaijan proper by Armenian territory. Armenia, for its part, is isolated and has no access to either Eastern or Western markets through Azerbaijan and Turkey. All roads and railways that connect Armenia, Azerbaijan and Turkey are currently closed; instead, both Armenia and Azerbaijan use Georgian and Iranian transportation networks to ship goods and products to world markets.

A significant portion of the Soviet-era railway from Azerbaijan to Turkey via Armenia (Baku-Alat-Julfa-Masis-Qumri-Kars) passes through Armenian-occupied Azerbaijani territory. Some 240 km of Azerbaijan's railway and about 4498 km of road networks lie in the occupied territories.⁸³ Moreover, 132 km of the Azerbaijani-Iranian border is also currently occupied and out of the control of the Azerbaijan government. This creates a security threat, since much of the occupied territory is a haven for the trafficking in drugs and illicit materials.

According to a 2000 World Bank study, the economic benefit of potential peace would be greater for Armenia than Azerbaijan. Yet, a peace agreement could reduce the cost of trade between Azerbaijan and Turkey by 10 percent and could boost overall exports by \$100 million and possibly increase GDP by about 5 percent.⁸⁴ Nonetheless, Baku and Yerevan have failed to agree on a framework agreement in 2006, which made the resolution of the Karabakh conflict less likely in the next two- three years and raised the possibility of a military conflict between Armenia and Azerbaijan in the mid-term.

Infrastructure and Lack of Investment: Roads and railways in Azerbaijan require serious investment and improvement. The TRACECA highway will significantly improve the quality of roads in Azerbaijan, yet road maintenance will require additional resources; some sections of the newly

⁸³ Data provided by the Azerbaijan's Ministry of Transport.

⁸⁴ See the World Bank study, op cit, note 11.

built highway have already begun to crack. The government is now developing short- and mid-term maintenance plans and assembly necessary capital for keeping the roads in good condition.

A similar situation exists with the railway system. Antiquated tariffs and a lack of essential maintenance on rail lines hamper efficient use of the country's railway networks.⁸⁵ And the realization of international projects, such as the trans-Caspian sub-sea pipelines, will require international political and financial assistance. To achieve this, Azerbaijan's government will have to collaborate with international donor organizations and create better conditions for foreign direct investment.

Corruption and Standardization: Rent seeking and corruption are endemic in all South Caucasus and Central Asian states, Azerbaijan being no exception. Bureaucratic obstacles created by public or recently privatized agencies contribute to the creation of local monopolies, reduce competitiveness and increase transit costs. According to a World Bank report, it takes ten to twelve days and \$700-\$800 to ship a container by road from Bandar Abbas (on the southern coast of Iran) to Baku; moving the same container from Baku to Poti in Georgia takes only three to five days, yet costs \$2,200.⁸⁶ In addition, a portion of the collected payments go as "an ex ante 'facilitation payment'" which can vary between \$500 and \$1500 per shipment.⁸⁷

The harmonization of regional quality management systems with the International Standards Systems (ISS) is another important issue for all regional parties involved in the Trans-European and the Trans-Asian transport corridors. Standardization is needed in all areas of transport operations, including law, procedures, infrastructure, tariff regulations, and security oversight.

To facilitate trade and the efficient shipment of goods along the TRACECA and North-South corridors all participating countries will have to form similar policies on trade and corruption. Continental trade makes transit countries interdependent, so that procedural failures or delays in one state

⁸⁵ Ibid.

⁸⁶ Ibid.

⁸⁷ Ibid.

will impact others, disrupting international shipments and extending delivery times.

Security: Providing security for inland container transport, track transit, or oil and gas export pipelines remains the most significant challenge. During the 2004 European Conference of Ministers of Transport held at Ljubljana the participants discussed transport security, counter-terrorism measures and risk assessments involving international trade.⁸⁸ In particular, two container scenarios “hijacked” and “Trojan horse” were debated. The “hijacked” scenario involved insertion of an illegal or harmful consignment into a container during its voyage, while the “Trojan horse” scenario envisioned a legitimate trading company with a good reputation transporting illegal shipments. The participants concluded that by enhancing security and screening mechanisms, local transport authorities can counter “hijacked” containers, but they have “considerably less scope for action in thwarting a “Trojan horse” shipment. In the latter case, effective customs control is of paramount importance.”⁸⁹

Azerbaijan uses X-ray devices and other equipment to monitor the shipment of large-size freight at the Baku international airport,⁹⁰ but border crossings around the country lack these technologies. One method to better monitor transit cargo was initiated by the ADB’s CAREC program, and involves developing a regional system that allows participating states to share intelligence and customs data. Such an intelligence sharing mechanism would help national customs enforcement agencies fight drug trafficking and illicit trade.⁹¹

To improve the security of the BTC and BTE pipelines, Azerbaijan, Georgia and Turkey signed a trilateral security agreement in 2001. This initiative will

⁸⁸ See European Conference of Ministers of Transport Annual Report 2004, *Joint OECD/ECMT Transport Research Centre*, p. 55. For more information visit <http://www.cemt.org>

⁸⁹ Ibid.

⁹⁰ See Asian Development Bank’s Azerbaijan Country Report, op cit, note 22.

⁹¹ See Discussion Paper “Regional Trade Facilitation and Customs Cooperation Program: Progress and Future Directions,” *Asian Development Bank*, April 2004. Available online at <http://www.adb.org/Projects/TradeFacilitation/>.

have to be expanded to cover other transportation areas, such as interstate highway and railway projects.

The legal status of the Caspian Sea is probably the most challenging issue impacting the future sub-sea pipeline projects from Kazakhstan and Turkmenistan to Azerbaijan. Russia and Iran will oppose the construction of trans-Caspian pipelines without their consent. Sovereignty over the Caspian's surface remains unresolved despite the trilateral agreement signed by Russia, Kazakhstan and Azerbaijan that determined the seabed boundaries on the basis of the median line approach. Russia has proposed 24 km national sectors, while Azerbaijan and Kazakhstan suggest that the division of the sea surface should be similarly to the seabed divisions. Iran does not recognize the trilateral agreement between Baku, Moscow and Astana and proposes that each state should be allocated an equal 20 percent share. And, as has been noted, Azerbaijan and Turkmenistan have unresolved disputes regarding the ownership of several oil fields in the middle of the Caspian Sea.

Some Russian officials have recently stated that Moscow will oppose the construction of a trans-Caspian Aktau-Baku sub-sea pipeline as long as the legal status of the Caspian Sea remains unsettled.⁹² Similarly, Iran will oppose the construction of trans-Caspian sub-sea pipeline from Turkmenistan to Azerbaijan. But it is naïve to expect a full resolution of the legal status issue in the near future, as Iran's recalcitrance will surely delay the permanent settlement for many years. Nonetheless, the major obstacle for a potential trans-Caspian oil pipeline from Kazakhstan to Azerbaijan would be removed if Baku, Moscow and Astana agreed on the partitioning of the sea surface. Hence, cooperation and collaboration with Russia could speed the resolution of issues impacting the Aktau-Baku sub-sea pipeline.

Engagement by regional powers, the EU and the United States will speed the development of certain projects, while interrupting and delaying others. For example, the converging American and European interest on the need for trans-Caspian sub-sea pipelines could attract investment and political support for these projects. At the same time, Iran's nuclear program—and

⁹² See Taleh Ziyadov, "Europe Hopes To Revive Trans-Caspian Energy Pipelines," *Eurasia Daily Monitor*, Vol. 3, Issue 38, February 24, 2006.

potential sanctions or military action against Iran—could delay some projects along the North-South direction. Likewise, while Moscow strongly supports the North-South projects, it is likely to try to impede East-West projects that bypass Russia.

Conclusions and Implications

The significance of the East-West and the North-South corridors is increasing as the Trans-European and Trans-Asian transportation networks become more integrated. There is no question that Azerbaijan will play an important role in both the East-West and the North-South transport corridors. Compared to its neighbors, Azerbaijan's relatively stronger economy and mid-term cash flow potential will make the country capable of accommodating all international projects involving the South Caucasus. Suffice it to note that over the next 20 years Azerbaijan will receive over \$100 billion in revenues from the two major oil and gas pipelines.

The East-West TRACECA highway project will upgrade road standards to international levels. Renovation projects will initially be subsidized by international donors, who view these projects as a part of a global road network. As transit traffic grows and the state budget begins receiving transit revenue, the Azerbaijan government will be able to maintain and upgrade road networks without outside assistance. Between 2006 and 2009 the Azerbaijani government intends to spend half a billion dollars to modernize and rehabilitate its national highways and railways.

Likewise, the seaports and railway networks need funding to increase capacity. The modernization of the Baku International Sea Port is critical—with upgrades, the port's freight cargo handling capacity could be boosted to 30 million tons a year, enough to accommodate the transit cargo from Kazakhstan and Turkmenistan in the short-term. While the cargo deliveries from Aktau to Baku will likely increase and make the China-Kazakhstan-Azerbaijan-Georgia-Europe route more efficient, the development of the complementary route through Turkmenbashi port will require political will from Turkmenistan that is now lacking.

The Baku-Tbilisi-Poti/Batumi and the Baku-Tbilisi-Akhalkalaki-Kars railways will play a strategic role in the Asia-Europe transportation corridor.

While the Baku-Poti/Batumi link could accommodate cargo for Central and North European countries, the Baku-Tbilisi-Akhalkalaki-Kars connection could be used for shipments of goods towards South-East and Western Europe. Moreover, these railways will strengthen the transportation routes of Azerbaijan, Georgia and Turkey, leading to further integration of their transportation, customs and security systems.

Azerbaijan is likely to continue building and renovating its North-South transportation links between Russia and Iran. This corridor is one of the few areas where the interests of Azerbaijan, Iran and Russia converge. Azerbaijan is interested in moving some of the transit cargo shipments from Iran or India towards Russia through its highways and railways—failure to do so would be costly. And holding both ends of this strategic transportation corridor connecting two regional powers will give Azerbaijan leverage over Iran and Russia, leverage which Azerbaijan currently lacks. Yet these projects have some potential risks, such as possible delays in the construction of the Kazvin-Rasht-Astara railway connection or the disruption of shipping in the event of economic embargo or a military attack against Iran.

Although Azerbaijan will profit economically from container transit via the Europe-Asia corridor, it is the strategic aspect of these projects that will be the most beneficial for Baku. By linking transportation networks with Europe, modernizing and standardizing infrastructure to European standards and adapting to legal and procedural requirements of continental trade, Azerbaijan will move closer to the Euro-Atlantic community. Interstate highways and railways will raise the issue of common security threats, while providing the opportunity to work jointly to overcome them. Azerbaijan, Georgia and Turkey will further integrate their security agencies as Azerbaijan and Georgia pursue membership in the North Atlantic Treaty Organization.

Azerbaijan will garner the most economic and strategic benefits from the current and potential energy pipelines in the region. The completion of the BTC and the BTE projects creates a suitable ground for the construction of trans-Caspian pipelines from Kazakhstan and Turkmenistan. The trans-Caspian projects are feasible, but require substantial political and financial international backing. As noted earlier, the Aktau-Baku sub-sea oil pipeline is

likely to be realized after 2010, when the production from the Kashagan field exceeds 20 million bpd and Azerbaijan's oil production will be peaking. This pipeline will resolve the full capacity utilization problem for the BTC in the long run and guarantee the westward flow of Caspian oil. Similar to the BTC pipeline, construction of the trans-Caspian pipelines will stipulate further security cooperation between Azerbaijan and Kazakhstan. Both states are involved in the U.S.-sponsored Caspian Guard initiative, which will likely lay the foundation for future pipeline security structures.

APPENDIX -1

Potential volume of container trade in the East-West direction

Year	Total Volume of Trade, mln/ton	Export of European countries into Asia, mln/ton	Export of Asian countries into Europe, mln/ton
2002	8,5	4,3	4,2
2010	13,9	6,5	7,4
2015	17,9	8,0	9,9

Potential volume of container trade in the North-South direction

Year	Total Volume of Trade, mln/ton	Export of European countries into Asia, mln/ton	Export of Asian countries into Europe, mln/ton
2002	3,5	2,4	1,2
2010	5,7	4,0	1,7
2015	7,3	5,2	2,1

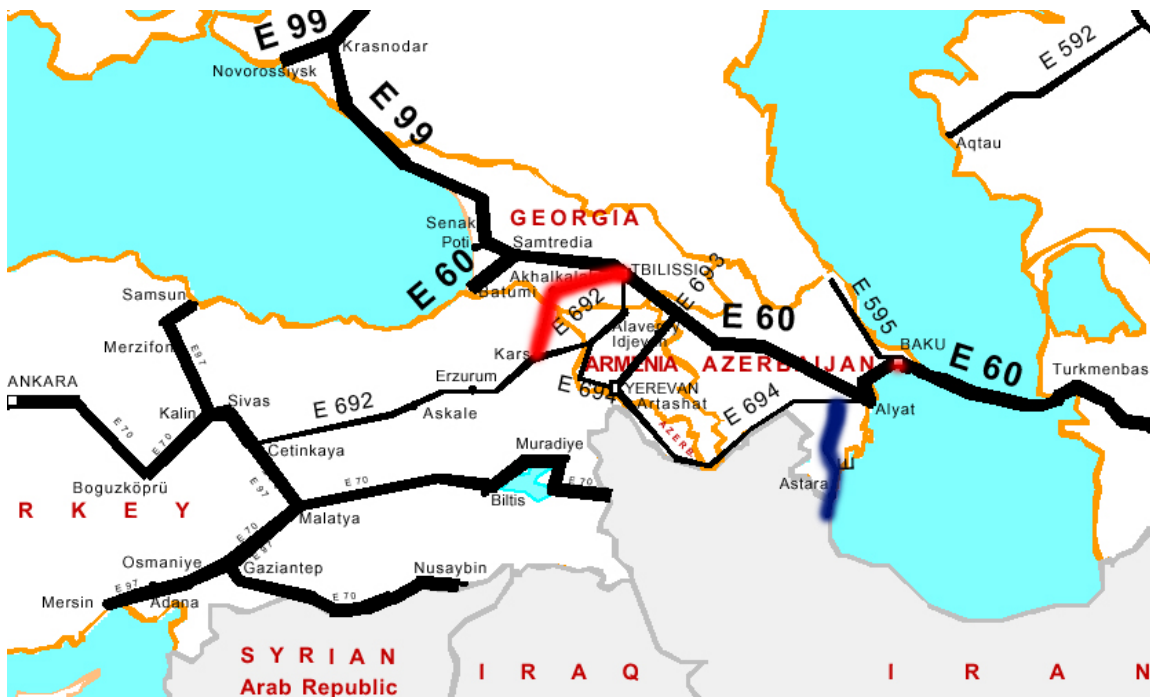
Source: <http://www.eatu.ru>

APPENDIX – 2:

Alternative Transport Routes from Istanbul (Turkey) to Dostik (Kazakhstan), a city near Kazakhstan-China Border

Route Name	Distance/km
<i>Istanbul-Kars-Akhalkalaki-Tbilisi-Baku-Caspian Sea (ferry)-Turkmenbashi-Ashgabat-Tashkent-Almaty-Dostik</i>	6873
<i>Istanbul-Kars-Akhalkalaki-Tbilisi-Baku-Caspian Sea (ferry)-Aktau-Kandagach-Orsk-Akmola-Dostik</i>	7089
<i>Istanbul-Kars-Dogukapi-Masis-Yervan-Barkhunderli-Baku-Caspian Sea (ferry)-Turkmenbashi-Ashgabat-Tashkent-Almaty-Dostik *</i>	6913
<i>Istanbul-Kars-Dogukapi-Masis-Nakhchivan-Julfa-Baku- Caspian Sea (ferry)-Turkmenbashi-Ashgabat-Tashkent-Almaty-Dostik *</i>	6936
<i>Istanbul-Van Lake (ferry)-Kapikoy-Tehran-Mashad-Sarakhs-Tashkent-Almaty-Dostik</i>	7286
<i>Istanbul-Van Lake (by rail)-Kapikoy-Tehran-Mashad-Sarakhs-Tashkent-Almaty-Dostik **</i>	7545
* This route cannot be currently used as they pass through Armenia and Armenian occupied territories of Azerbaijan. Armenia and Azerbaijan do not have communications due to the Karabakh conflict.	
** This route requires the construction of 259 km-long railway to the north of Van Lake.	

APPENDIX – 3 - MAPS



Source: UN

APPENDIX – 4 – Tariffs in Azerbaijan

Source: The following data is from “Azerbaijan Transport Sector, Sector Development, Review and Update” for the year 2003. Available online at <http://www.worldbank.org>

Regular Tariffs

CASPIAN SEA

I. Ferry transit

Baku – Aktau

Per line meter of loaded car \$35.0

Per line meter of empty car \$30.0

Baku – ur m nbashi

Per line meter of car \$30.0

II. Transit of oil in tankers

Aktau – Baku

Per 1 ton of oil \$6.0 – \$6.5

Turkmenbashi – Baku

Per 1 ton of oil \$7.0 – \$7.5

Baku – Ports of Iran

Per 1 ton of oil \$10.0 – \$12.0

BLACK SEA

III. Ferry Transit

Konstance (Romania) – Batumi

Per 1 line meter of car \$36.5 – \$44.0

Konstance – Derinje (Turkey)

Per 1 line meter of car \$18.25 – \$22.0

Special Rates (with 50% discount in accordance with MMA) on Transit through Railways of Azerbaijan and Georgia of Oil, Oil Products and General Cargo For 2004 (in US Dollars per 1 ton)

Through Georgia

	Oil	Oil Products	Gen. Cargo
Ghardhabani – Batumi (342 km)	6.0	8.0	-
Poti – Ghardhabani (360 km)	-	-	8.64

Through Azerbaijan

	Oil	Oil Products	Gen. Cargo
Baku-dock-Georgian border(503 km)	5.5	6.78	9.8

Special Rates on Transit of 20 ton Containers (in US Dollars per 1 Container)

Through Georgia

Poti – Ghardhabani (360 km)
100.0

Through Azerbaijan

Baku-dock – B/Kesik (503km)
213.0

Tariffs for Permits on International Transit through the Territory of Azerbaijan Republic by Foreign Road Transport Carriers

Entry to country or transit	Amount of duty (in US dollars)
By auto carriers from countries having the bilateral Agreement	100.0
By auto carriers from countries lacking the bilateral Agreement	150.0
Return shipment from Azerbaijan	100.0
Transit to/from third countries (one way)	600.0
Entry without car	350.0

Notes:

1. border, permits are obtained by auto-carriers lacking the transit permit (received in accordance with the bilateral agreements).
2. For Iranian auto-carriers the amount of duty for permit is \$160.
3. Duty is not levied for the transit of empty trucks.

Road Tax, levied based on provisions of the Tax Code of Azerbaijan Republic (in US dollars)

Type of Transport Means	For entry to the Republic (for the first day)	from 2 t 7 days 20%	For each day from 8 to 30 days 30%	More than 30 days 40 %
Passengers vehicle	15	-	-	-
<i>Bus up to 12 seats</i>	30	6	9	12
Bus from 13 to 30 seats	40	8	12	16
Bus more than 30 seats	50	10	15	20
Trucks and trailers b/c to 10 tons	40	8	12	16
Trucks and trailers b/c from 10 to 24 tons	70	14	21	28
Trucks and trailers b/c more than 24 tons	100	20	30	40