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The Strategic Value of Connectivity in Central Asia and the Caucasus

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Connectivity is a strategic value for the landlocked countries of Central Asia and the South Caucasus. The energy and general cargo transit between the Caspian Basin and Central Asia and the Black Sea and Europe is already significant and plays an important role in the functioning of the regional economy. But the transit potential of the region is still not fully utilized, affected by geopolitical and infrastructure constraints. Strong leadership and continuous intense coordination between state and private actors will be required to address existing bottlenecks in the transportation system, and to increase commercial attractiveness of the transit corridor.

eographic location is an important element of the political and economic security of any country. For the landlocked but resource-rich countries of Central Asia and the South Caucasus, access to markets has a critical importance for their economic and political survival as sovereign states. Thus, connectivity has a strategic value for the region stretched from the Black Sea to Western China. All but one country of the region, Georgia, are landlocked and need to transit neighboring states to reach open seas and markets. Historically, however, the region enjoyed significant economic benefits from its trade and transit function. At the same time, the intensity of trade was always influenced by global and regional political developments.

The strategic landscape of Eurasia is greatly affected by the Russian invasion of Ukraine and the ongoing military operations, increasing the importance of Black Sea-Caspian connectivity for multiple actors ranging from Western China to Central Europe. The war resulted in the cutting of transport corridors across Russia and Belarus from Kazakhstan. In addition, instability in Afghanistan and sanctions on Iran also complicate access to and from Central Asia. In this new reality the South Caucasus is the only way the Central Asian commodities and products can access Europe, as well as for Western products to access markets via the land corridor. At the same time, Europe has a great interest in the diversification of its sources of energy and other resources, and to have alternative access options to trading partners in Asia. This determines the U.S. and EU

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strategic interest to ensure stability and predictability of the political and economic environment in Central Asia. Ultimately, this interest leads to Western support for the sovereignty of the nations of the South Caucasus and Central Asia. Turkey, as a growing power with energy importdependent economy, also has a special interest in the process of promotion of the regional trade and connectivity.

strengthening of the political and economic sovereignty of its neighbors. Instead of benefiting from growing economic success and participating in the improved regional transit and transportation, Russia saw the process as a threat to its own dominance. The first major step towards the destruction of the rules-based security system in Europe, born from the Helsinki process in 1970s,

The experience of energy exploration and transit infrastructure development in the region since the mid-1990s sets a precedent for success. Following the break-up of the Soviet Union, Turkey was a major anchor and channel

of Western political, strategic, and economic interests in the Black Sea-Caspian region at the time. The U.S. supported the so-called Multiple Pipeline Policy, based on the assumption that shared access to resources and markets by many actors is a more efficient way of managing global energy security needs than control over territories and resources. This concept of shared access and collaborative effort of many countries brought about the development of vibrant energy transit connections between the Black Sea-Caspian region and the Mediterranean, delivering huge economic and political benefits to all the producing and transit countries of the region: Kazakhstan, Turkmenistan, Azerbaijan, Georgia and Turkey

But Russia under President Putin was increasingly unhappy with the process of the



Central Asia-Black Sea Maritime Links

was the 2008 invasion of Georgia and subsequent military occupation of two regions of the country, affecting the overall Black Sea area security environment and elevating risks for transit through Georgia and the South Caucasus. This was followed by

the annexation of Crimea in 2014, which allowed Russia to exponentially increase its military presence in the Black Sea region and to establish a platform for power projection aimed at not only the Black Sea, but at the Mediterranean as well. Inadequate responses to Russian actions in 2008 and 2014 by the international community, and the West in particular, were seen by President Putin as an invitation for even greater Russian aggression in Ukraine.

The Russian invasion of Ukraine in February 2022 created new geo-political realities, when the war itself, as well as the resulting sanctions, removed Russia from the transit options for Europe-Asia trade. This led to increased interest to

so called Middle Corridor,1 connecting Western China to Europe via Central Asia, the Caspian Sea, and Azerbaijan and Georgia to the Black Sea, the Mediterranean and Europe. But lack of infrastructure and inefficient management of the entire transportation system through multiple countries and modes of transportation never attracted global traders at a large scale in the past, and still remains a constraint for greater transit today. The Trans-Caspian shipments remain the major bottleneck as natural barriers – the shallow waters of the Caspian Sea with limited depths require a creative approach for transshipment with a special shuttle flotilla of container, bulk and Ro-Ro ships which can move cargos between eastern and western shores of the Caspian faster and cheaper. The other issues include harmonization of tariffs, customs procedures, border crossings, readiness of ports to handle variety of bulk cargos, and availability of the railway rolling stock throughout the corridor.

In order to further advance Black Sea-Caspian connectivity and maximize transit and other economic opportunities for the South Caucasus and Central Asia, there is a need for greater coordinated efforts between key transit countries of the region to establish higher efficiency and low-cost transportation, which would attract regional and global trading and shipping companies. Responding to this need multiple meetings of Georgian, Azerbaijani, Turkish and Kazakh government representatives resulted with the adoption of the Road Map for the development of the Middle Corridor for 2022-2027.² The objective is to develop the Trans-Caspian International Transit Route, focusing on connectivity between Western China and Central Asia via Kazakhstani ports of Aktau and Kuryk to Azerbaijan and then Georgia and Turkey.

This analysis argues that energy and transportation will remain drivers for greater regional political-economic integration between the South Caucasus and Central Asian countries, as well as with their European, Mediterranean and Black Sea neighbors. But the success of the South Caucasus transportation system cannot be taken for granted: countries need to work together proactively with their international partners and private companies to attract cargos based on efficiency and competitiveness of the transit corridor. This will require capital investments in soft and hard infrastructure, and organizational and governance reforms.

Success Stories of Building Energy Connectivity: Oil and Gas

Thanks to the regional collaboration between Azerbaijan, Georgia, and Turkey, as well as very

¹ The alternative routes are: Northern Corridor, crossing from China to Russia, or from China to Kazakhstan and then to Russia and Belarus to the EU; and the Southern Corridor, from China via Pakistan and Iran to Turkey and the Mediterranean to the EU. Before the war the dominant route was the Northern Corridor. In 2021 a total of 15,183 express container trains and 1.46 million TEUs moved through the northwest region of Kazakhstan into Russia, and then traversed through Belarus and Poland before entering Germany.

The Middle Corridor has a capacity to handle only about 5 percent of this volume.

² "Kazakhstan, Azerbaijan, Georgia and Turkey signed a Roadmap for the development of the Middle Corridor for 2022-2027," New Silk Road Discovery, November 28, 2022.

⁽https://www.newsilkroaddiscovery.com/kazakhstan-azerbaijan-georgia-and-turkey-signed-a-roadmap-for-the-development-of-the-middle-corridor-for-2022-2027)

active U.S. support for energy infrastructure development in the Caspian region, Azerbaijan became a major energy supplier for Turkish and European markets, and by 2007 Georgia achieved a much higher degree of energy security, moving away from almost total dependence on oil and gas imports from Russia. The decision to use Georgian territory as a transit route for major oil and gas pipelines originating from the Azerbaijani section of the Caspian Sea allowed Georgia to access diversified sources of energy. There are still some challenges in terms of the dependency on electricity imports from Russia, which is caused by growing demand of electricity not matched by the same scale of growth in production. But plans for greater investments in hydropower generation and other renewable sources, as well growing regional collaboration on electricity trade, should allow Georgia to avoid energy dependency on unreliable and politically motivated Russian providers.

As a legacy of almost three decades of efforts from policymakers and private companies, a significant volume of oil and natural gas flows from the Caspian region via land pipelines to the Black Sea and Turkey and then onward to Mediterranean/European markets. Three main energy pipelines cross the region today: 1) The earliest built, and relatively smaller, 100,000 barrel per day capacity Baku-Supsa pipeline, connecting Baku with Georgian Black Seaport Supsa; 2) the larger, million-barrel capacity Baku-Tbilisi-Ceyhan (BTC) pipeline, connecting Baku via Georgia to Turkish Mediterranean port Ceyhan,

³ About one percent of daily global energy supplies transit the South Caucasus, the majority being Azerbaijani crude oil. Considering that oil is a global commodity, traded based sending oil to Turkish, Israeli, and other Mediterranean refineries; and 3) the so-called South Caucasus Gas Pipeline, also known as the Baku-Tbilisi-Erzurum natural gas pipeline. It began as a smaller, 8 billion cubic meters (bcm) capacity pipeline aimed at Georgian and Turkish markets, and evolved as part of the system of pipelines called the Southern Gas Corridor, which includes an upgraded South Caucasus Pipeline, the Trans-Anatolian Pipeline (TANAP) in Turkey and Trans-Adriatic Pipeline (TAP). TAP stretches between Greece, Albania, and Italy. This new system has a maximum capacity of 25 bcm in Turkey, and will send 10 bcm of natural gas to Turkey and 10 bcm to Italy in 2023, with the potential to be increased by 2027.

While supply of Caspian oil has some significance for the global energy balance,³ the natural gas supply to European markets has larger geopolitical importance. The volumes of export to Italy at 10 bcm looked modest in comparison to Russian supplies of natural gas to Europe at about 175 bcm in 2021, but in the context of collapsing Russian exports to Europe due to sanctions and European desire to reduce dependency on Russian gas imports, the significance of the Southern Gas Corridor for Europe is increasing.

That explains the warming up of EU relations with Azerbaijan. The President of the EU Commission, Ursula von der Leyen, visited Baku on July 18, 2022, and signed an energy memorandum between the EU and Azerbaijan on increased natural gas supplies to Europe via the Southern Gas Corridor. This energy corridor has

on supply and demand equilibrium, this volume still plays a role in the global energy security.

the potential for substantial expansion based on increased volumes from other fields in Azerbaijan, currently under exploration by BP and other companies, as well as from Turkmenistan. Turkmenistan has the world's fourth largest deposits of natural gas and an opportunity to become an important player in the European energy market. However, political and commercial considerations prevented the development of Trans-Caspian energy connectivity between Turkmenistan and Azerbaijan in the past.

Skeptics regarding the future of the hydrocarbon economy would say that Turkmenistan has missed its chance to become a significant supplier to European markets due to EU policies oriented toward green energy. But the opening of the new, larger-scale pipeline connecting Azerbaijan to Europe will create an additional incentive for Turkmenistan to send some of its gas from relatively smaller Western fields to Europe via Azerbaijan. The Convention on the Legal Status of the Caspian Sea, signed in August 2018 by leaders of the Caspian littoral states, provides a framework for Azerbaijan and Turkmenistan to arrange for joint exploration and drilling, as well as longstalled pipeline projects. On Jan. 21, 2021, Azerbaijan and Turkmenistan reached a preliminary agreement on the joint exploration of a once-disputed section of an undersea oilfield, signaling progress in this direction. In a symbolic gesture of the spirit of partnership, both parties signed a memorandum on the mutual intention to jointly explore and develop the Dostluq (Friendship) undersea field, which was previously called Kapaz by Baku and Serdar by Ashgabat(RFE/RL). This is seen as a major step forward in building the Trans-Caspian energy partnership, allowing larger volumes of energy to flow toward the Black Sea and Mediterranean. Connecting Central Asian energy resources to Europe via the Black Sea and Turkey should remain a geopolitical priority for the regional countries and their partners in the EU and the US.

It is important to mention that some volumes of Caspian oil were moving toward Eastern Europe via Georgian Black Sea ports and the rail system of Azerbaijan and Georgia as well. Kazakhstan, through state-owned KazTransOil, owns the Batumi oil terminal, and plans to increase transshipments of oil via barges and Azerbaijani and Georgian rail systems to 1.5 million tons in 2023, which is about 2 percent of the Kazakh annual export, the majority of which reaches world markets via the CPC pipeline, crossing from Kazakhstan to Russia to the Black Sea port of Novorossiysk. Before the Russian invasion of Ukraine, oil shipments from Azerbaijan to Ukraine grew in 2020 and 2021, sending oil to the Ukrainian ports of Odessa and Pyvdenny (Yuzhnyi). Azerbaijan became one of the key suppliers of crude oil and oil products to Ukraine before the war, but exports via the Black Sea have fallen drastically since the Russian invasion of Ukraine in February 2022.

Next Big Project: Electricity Transit

The EU's policy to move away from a hydrocarbon economy toward green and sustainable energy will impact the decision-making of the individual members of the Union regarding their own energy mixes. Down the road, this will have a significant impact on the prioritization of regional energy projects. However, the energy security of Eastern European and Black Sea countries will depend, for the foreseeable future, on reliable sources of hydrocarbons and improved exchange of natural gas and electricity power via interconnectors, allowing greater efficiency in utilization of regional resources. In this context, a new initiative to build a submarine power line between Georgia and Romania opens a new opportunity.

On December 17, 2022, the leaders of Azerbaijan, Georgia, Romania, and Hungary signed an agreement on the construction of an undersea power line between Georgia and Romania to transmit green energy from the South Caucasus to Europe. The President of the European Commission, Ursula von der Leyen, attended the signing ceremony in Bucharest. The agreement initiates the construction of the world's longest and deepest undersea power and digital cable line connecting the South Caucasus countries with Romania as part of the wider European Union energy diversification plan.

The EU's decision to support the submarine power line between Georgia and Romania will allow electricity produced in the South Caucasus to be delivered directly to the European power market. This power line will also help countries producing clean energy to attract more foreign direct investments in hydropower, wind, and solar power generation. According to the Ministry of Energy of the Republic of Azerbaijan, the technical potential of the country's onshore renewable energy sources is 135 GW and offshore is 157 GW. The economic potential of renewable energy

⁴ "The Use of Renewable Energy Resources in Azerbaijan," Ministry of Energy of Azerbaijan, June 14, 2023. (https://minenergy.gov.az/en/alternativ-ve-berpa-olunanenerji/azerbaycanda-berpa-olunan-enerji-menbelerindenistifade) sources is estimated at 27 GW, with wind resources of Caspian Sea being dominant potential. Azerbaijan plans to drastically increase production of electricity from renewable sources and has already attracted significant investments to implement those plans.⁴

While electricity from Caspian Sea wind farms in Azerbaijan may be the leading source of electricity for the power line, preliminary economic analysis has demonstrated that the participation of all the South Caucasus countries in the project will be important its ultimate commercial success. Georgia plans to double its installed electricity production capacity by 2033, by building additional hydropower generation facilities, as well as other facilities based on both renewable and non-renewable sources of energy.

The idea of a submarine power line between Georgia and Romania was born during the Georgia-EU partnership discussions in 2018. The initial idea was based on Georgia's interest in boosting economic integration with the EU and in the potential opportunity to export hydro energy to Europe. The availability of the Black Sea power line could also attract greater investment in Georgia's hydropower generation. This potentially led Georgia to request the World Bank to fund a prefeasibility study, which was completed in 2020 and is now publicly available as the Economic Analysis of Georgia-Romania Interconnector.⁵ The latter project received a new boost with Azerbaijan's interest in developing its vast

⁵ World Bank, "Economic Analysis of Georgia-Romania Interconnection," June 2020. (https://documents1.worldbank.org/cu-

rated/en/442791598001931856/pdf/Methodology-Note.pdf)

wind power generation potential in the Caspian Sea. With the greater regional interest, Georgia moved forward with funding from the World Bank for the feasibility study of the project, which should confirm its commercial viability, optimal transmission capacity, exact routing, etc. This study, which is currently underway, will also look at some of the technical challenges, including the difficult geography of the Black Sea, as well as the need to cross two undersea natural gas pipelines connecting Russia and Turkey. In addition, the feasibility study will also assess the need for additional power infrastructure on Georgian and Romanian sides to ensure stable operation of their power grids.

The initial cost estimate of the project is around 2.5 billion euros, and one of the potential sources of funding is the EU's funding from the European Economic and Investment Plan, allocated for Eastern Partnership countries in the form of grants, blending, and guarantees. Other potential funders may involve the EBRD, DFC and others. Due to the involvement of Romania and Hungary, two countries from the Three Seas Initiative (3SI), it will be natural to have the 3SI Investment Fund also involved.

The idea of an energy bridge between the Eastern and Western shores of the Black Sea is not new. Two of the most prominent proposed projects are the White Stream natural gas pipeline project, initiated more than a decade ago to ship Turkmen gas to Europe via Azerbaijan and Georgia, and the Azerbaijan-Georgia-Romania LNG interconnector project, based on the idea of liquefaction of Azerbaijani and other Caspian natural gas for deliveries to Europe. Neither of these projects have materialized yet, due to a spectrum of political, economic, and technical problems. With the current momentum, the undersea power cable project has a very realistic chance for implementation, potentially opening a pathway for other projects leading to greater Black Sea connectivity.

The growth in electricity consumption in Georgia during the last decade coupled with limited increases in generation sources, has led to an increase of imported electricity, and the installation of more gas-fired thermal power plants ("TPPs"), which work on imported gas. The relatively good news is that Georgia has well developed infrastructure allowing electricity exports and imports with all four immediate neighbors with high voltage transmission lines.

Georgia already serves as an electricity transit country between Azerbaijan and Turkey. The newest Akhaltsikhe-Borchka transmission line, also known as Meskheti power line (which links Georgia's electricity grid to Turkey) started operating at full capacity in May 2022 and as a result, Turkey received 4.2 terawatt-hour (TWh) of electricity from Georgia in 2022, with 0.9TWh being exported from Georgian producers, and 3.2TWh being transited through Georgia from neighboring countries, primarily from Azerbaijan. For context, Georgian consumption reached 14.2TWh in 2022, according to Galt & Taggart.⁶ It is important to emphasize that even without the submarine power line to Europe, high voltage

(https://api.galtandtaggart.com/sites/default/files/2023-03/report/electricity-market-watch-fy22_eng_.pdf)

⁶ Galt & Taggart Research, "Georgia's Energy Sector: Electricity Market Watch," May 1, 2023.

transmission lines between Georgia and Turkey allow both export of electricity from Georgia, as well as transit of electricity to Turkey.

The Untapped Potential of Black Sea-Caspian Transit

The South Caucasus is a significant historic element in bio-geographical, cultural, geo-political and trade system, linking Asia and Mediterranean and Europe. So, the transit potential of Georgia and Azerbaijan is not limited to the transit of energy resources only. Ports, railways, highways, and air space present a great opportunity to connect Asia with Europe and to bring key actors of the Eurasian region closer. The South Caucasus Corridor is a key link in the transportation corridor between the landlocked Central Asia, and the Black and Mediterranean Seas, and already provides transit for millions of tons of liquid, bulk, and container cargos by rail and highways. But this is far from utilizing the full transit potential of the region.

In 2022, the Georgian transportation system increased its transit of containers and bulk cargos by about 20 percent, in comparison to 2021 and 2020, but still fell behind volumes it transited in 2019, when the ports of Poti and Batumi processed a record number of mostly inbound containers: 531,735 TEUs processed in Poti and 116,081 in Batumi.⁷ There was a 20 percent increase of transshipments via Baku's Sea Port at Alat in 2022, reaching an annual turnover of 6 million tons, still far below its projected capacity of 15 million tons.

It is very important to mention that the combined traffic volume from Turkey and the Georgian seaports for transit goods moving to Central Asia is larger than the cargo flow in the opposite direction, according to USAID.8 The functioning of the Middle Corridor at this stage serves mostly needs of the Central Asian and the South Caucasus countries for imports of cars, industrial products, consumer goods, food products; and for export of commodities such as fertilizers, coal, sulfur etc. and inbound cargo volume exceeds outbound cargo volume. The corridor has a very limited use for transit of Chinese cargos, destined to Europe or Mediterranean. An interesting detail is that Chinese imports of goods to the South Caucasus comes via sea, or Georgian export of commodities and wines to China goes via sea routes as well, bypassing the Middle Corridor. The big idea of the Middle Corridor is to make sure that portion of cargos from China destined to Europe -to travel Kazakh railway, to cross Caspian, and continue to Black Sea or Mediterranean ports to Europe.

For context, China-EU trade in goods is almost 900 billion annually and great majority of goods travel via sea routes, which is cheapest, but lengthiest option. In addition, before the Russian war in Ukraine, a total of 15,183 trains and 1.46 million TEUs moved through the northwest region of Kazakhstan into Russia, and then

⁷ This is mainly explained by expected regulatory changes in the Russian led Eurasian Customs Union at that time, and decision of the regional importers/traders of used cars from Armenia, Kazakhstan and others to stock inventory in advance of changing customs tariffs.

⁸ USAID Central Asia Mission, "Rapid Re-Assessment of the Central Asian Caspian Sea Transit Corridor", June 22, 2022.

traversed Belarus and Poland before entering Germany. The estimate is that just a 4 percent diversion of this volume to the Trans-Caspian could fully utilize the existing transit capacity. While this may seem small volume in the context of China's exports, it is still significant for the Middle Corridor to attract that volume at an initial stage, and to increase it going forward with improvements in infrastructure and management.

There are multiple organizational, infrastructurerelated, governance, and commercial reasons explaining the limits of the Middle Corridor. The key regional bottleneck is Trans-Caspian transportation. The lack of vessels and subsequent slow speed of movement between Eastern and Western shores of the Caspian limit the ability of the transit corridor to operate at full capacity. The previously mentioned USAID report outlines the various constraints, which include addressing short-term capacity maritime limits (e.g., of vessel fleets and seaports), strategic decisions on longer-term capacity (e.g., ship building and improved water draft), and access to capital to realize the above factors. There are country-specific issues, as well as regional issues, which include a complicated fare structure, disconnected information systems, insufficient road permits for transit, shortage of truck parking and disorganized queue management, and inefficient rail operations. All of these affect shipments along the entire Trans-Caspian route. But the functioning of the transportation corridor also depends on various modes of transport and how well these are integrated with the maritime sector both in Caspian Sea and in the Black Sea.

Going forward, there are expectations of growing economic activities in Central Asia, and these landlocked countries also need efficient longterm export transportation solutions. The Russian war in Ukraine and the cutting of transport corridors across Russia and Belarus from Kazakhstan, as well as instability in Afghanistan limits trade options for Central Asian producers of commodities. For example, the most significant increase in transit in 2022 was in fertilizers the Georgian and Azerbaijani railways and ports transshipped cargos exported by Turkmenistan, Uzbekistan and Azerbaijan. The war-related restrictions of transit via the Volga-Don canal from the Caspian to Azov Seas and beyond to the Black Sea made this export route no longer viable for Turkmen and other Central Asian producers, opening more possibilities to transit more cargoes via Azerbaijan and Georgia.

The growth of transshipments via the Middle Corridor in 2023 and beyond will depend on several factors: global prices of commodities and raw materials produced in Central Asa, decisions by Kazakhstan and Turkmenistan to ship part of their crude oil and oil products via Georgian sea terminals, as well as the decisions of producers of some consumer goods in Western China, and traders of those goods, to ship more products in containers via the South-Caucasus Transit Corridor.

In terms of infrastructure development, there are significant improvements in last decade: there are port facilities on both the eastern and western shores of the Caspian Sea, funded and built by the governments of Kazakhstan, Turkmenistan, and Azerbaijan. The ports of Aktau and Kuryk in Kazakhstan and Turkmenbashi in Turkmenistan are linked with the newly developing terminals at the Baku Port. The USAID study demonstrated that the Trans-Caspian route should be able to handle a total throughput of about 15 million tons and 100,000 TEUs⁹ per year, significant increase from the current 6 million tons and 70,000 TEUs. Based on the official capacity of seaports and the actual cargo and container throughput in 2021, the seaports on the Caspian Sea have adequate capacity. There is also sufficient capacity in railways and at the Georgian seaports at the Black Sea to process this cargo flow. In fact, Georgian ports currently have spare capacity for all types of cargoes, and it will require a significant increase of cargo shipments in some categories to reach limits of capacity for both container and bulk cargos. In terms of liquid cargos, like oil and oil products, Georgia has a significant spare transshipment capacity in ports.¹⁰ (See Appendix 1, 2, 3)

The regional governments are making a special efforts in order to address issues related existing bottlenecks in infrastructure and management of the transit corridor. Multiple meetings of Georgian, Azerbaijani, Turkish and Kazakh government representatives resulted with the adoption of the Road Map for the development of the Middle Corridor for 2022-2027, signed by Ministers of Foreign Affairs and Transport of these states in Aktau on November 25, 2022.¹¹ The priority is to develop the Trans-Caspian International Transit Route, focusing on connectivity between Central Asia and Western China via Kazakhstani ports of

⁹ Twenty Foot Equivalent Unit, which is same as 20-foot container. This is standard used in shipping. Aktau and Kuryk to Azerbaijan and then Georgia and Turkey.

Upgrades are also being made on highways and rail systems linking Baku to Georgian ports. And while Georgian ports are capable of handling current and expected volumes of cargos allowed by the constraints in the Caspian described above, Georgia is still considering the construction of a deep-water port facility in Anaklia in order to address future needs. APM Terminals, the Danish owner of the main Poti Sea Port, is planning its own new deep-water terminal to the north of the current port. Meanwhile, a major new development took place in Poti at the former shipyard harbor, where the U.S. Development Finance Corporation funded the privately owned Poti New Sea Port with two new terminals. One of the terminals was commissioned in 2022, allowing port service for 50,000 ton ships – so far the largest size vessels Georgian ports can handle. Once fully completed, Poti New Sea Port will be able to handle more than 4 million tons, thus significantly increasing annual transshipment capacity for bulk cargos and containers in Poti.

Russia's aggression toward Ukraine and the impact of the war on Black Sea maritime operations slowed down positive trends of growing cargo flow between Georgian and other Black Sea ports in Ukraine, Romania and Bulgaria. However, it is obvious that once military operations are over, and with Ukrainian reconstruction needs, this

¹⁰ USAID Central Asia Mission, "Rapid Re-Assessment of the Central Asian Caspian Sea Transit Corridor," June 22, 2022.

¹¹ Kazakhstan, Azerbaijan, Georgia and Turkey signed a Roadmap for the development of the Middle Corridor for 2022-2027. https://www.newsilkroaddiscovery.com/kazakhstan-azerbaijan-georgia-and-turkey-signeda-roadmap-for-the-development-of-the-middle-corridorfor-2022-2027/

intra-Black Sea trade will receive an additional boost. To replace the suspended ferry line between Poti and the Ukrainian port city of Chernomorsk, a new line between Poti and the Romanian port of Constanta started operations in June 2023, ¹² thus facilitating direct trade between Georgia and its landlocked neighbors, and the EU.

An important recent addition to the transportation infrastructure of the South Caucasus is the Baku-Tbilisi-Kars (BTK) railway line which connects Azerbaijani and Georgian railways to the Turkish railway system. It creates a functioning rail link between Central Asia (and China) and Europe. In 2022, BTK transited almost half a million tons of cargos, which is significant, but still far below the original design capacity of five million tons. Achieving the designed capacity will require some additional \$100 million in investments in engineering solutions, which is underway, bringing the railway to full capacity by 2024.

It is interesting that despite the much-publicized Chinese Belt and Road Initiative, and related infrastructure investments, there are limited investments from China in transit infrastructure in the Trans-Caspian/South Caucasus Corridor. Most of the transit infrastructure development in the region is funded by national governments directly, or through loans from International Financial Institutions. In the case of the Baku-Tbilisi-Kars railway, it was funded by a loan from the Azerbaijani government. Developments in Poti are driven by private investments, attracting Foreign Direct Investment for Georgia.

A potentially significant development impacting regional transit may be the re-opening of the direct railway line between Azerbaijan, Armenia, and Turkey as a part of the post-conflict settlement over Karabakh. Obviously, it will take time, investment, and significant political will to implement this element of the agreement. But if and when fully implemented, this route may attract some volumes from Central Asia. While very important for Azerbaijan, and potentially for the normalization of the Armenia-Azerbaijani-Turkish relationships going forward, the real transit potential of the Nakhichevan corridor will be limited for the foreseeable future due to political, geographic, infrastructural and financial reasons. Linking Nakhichevan directly to Turkey with the new railway seems unrealistic due to the geography of the narrow border area and the link to Kars. Difficult terrain means the need for greater investments and limited capacity of railway transshipments. The more viable alternative is a restoration of the old Soviet railway from Azerbaijan, via Armenia, to Nakhichevan, then again back to Armenia to Gyumri, and onward to Kars in Turkey. This railway is completely destroyed and requires reconstruction. The question is if cargo volumes coming to Azerbaijan can justify large-scale investments in the full reconstruction of this railway. In theory, if this railway is rebuilt, it may compete with Baku-Tbilisi-Kars. But the potential scale of Black Sea trade and the growing

^{12 &}quot;New Black Sea Ferry Service Links Romania With Geor-

gia," Palirapan, June 16, 2023. (https://palipa-

ran.com/2023/06/16/romania-georgia-ferry/)

Central Asia/Central and Eastern Europe trade will keep existing Azerbaijan-Georgia link, and Georgian railway, highways and ports busy, as long as they are managed efficiently.

Strategically, more competition for the South Caucasus Corridor, i.e. the Middle Corridor for the wider Asia-Europe trade, is expected from the so-called Southern Corridor, connecting Turkey to Iran and beyond to Asia. This land corridor for rail and highway connectivity has a potential to link to the Indian subcontinent, in addition to China. It has its political and infrastructure constraints as well, but this is an ancient natural trade route, and it will most probably gain some attraction going forward.

In addition to East-West trade and transit, both the Azerbaijani and Georgian transportation systems are also actively enabling trade between Iran and Russia, Turkey and Russia, and Armenia and Russia. Lines of trucks with cargoes (not included in the list of sanctioned goods) stretch for tens of kilometers on Georgian territory, waiting in line to move to Russia. This truck-based transportation was significant in the past, but has increased drastically since the start of the war. The need for greater transportation between Armenia, and potentially Iran, with Russia, may lead to increased pressure on Georgia to look at the option of the re-opening of rail transportation via Abkhazia. But developments on this issue, like many others, will depend on wider strategic issues, including the outcome of the war in Ukraine and the degree of Russian failure in the war.

Going forward, Georgia and Azerbaijan will also play a significant role in data connectivity, providing an alternative route to cables which currently cross Russian territory, linking Europe with Asia. Georgia itself needs its own secure internet access that bypasses Russian territory. Russia is one of the important digital links between Asia and Europe and is integral to connectivity in some parts of Asia and the Caucasus, which is a source for concern under the current Russian regime. Georgia and its partners in the Caucasus and Central Asia need reliable and secure digital connectivity with European partners. Responding to this need, the EU plans to fund a submarine project in the Black Sea which will serve that purpose. ¹³

Overall, the role of the Middle Corridor and the South Caucasus transit system is increasing. But greater coordination is needed between all the states of Central Asia and the South Caucasus to turn the South Caucasus transit corridor into a reliable, efficient and commercially attractive transportation link. Only in that case will stability and security of the South Caucasus Transportation Corridor become a concern of the global powers with different interests, turning it into the *Land Suez*¹⁴. The transit function for Georgia, Azerbaijan, Kazakhstan and others is not only a trigger

¹³ Alexandra Hill and Sandra Gross, "EU plans Black Sea internet cable to reduce reliance on Russia," *Financial Times*, May 12, 2023, https://www.ft.com/content/d07dbd19-5e8b-4543-85f6-bbf1a6a0858d

¹⁴ Land Suez is a term introduced by Dr. Fred Starr, Chairman of the Central Asia-Caucasus Institute. The idea is to

create an efficient, competitive and transparent transportation corridor in the South Caucasus, serving interests of global trade, similar to the Suez. The growing economic interest in the functioning transportation corridor by multiple state and non-state actors should ensure growing stability and security of the corridor. Georgia is already benefiting

for economic development and source of income, but also a significant national security tool, serving as deterrent for potential external threats as well.

Conclusions and Recommendations

Connectivity is a strategic value for the landlocked countries of Central Asia and the South Caucasus.

The energy and cargo transit between the Caspian Basin and Central Asia and the Black Sea and Europe is already significant and plays an important role in the functioning of the regional economy. But the transit potential of the region is still not fully utilized, affected by geopolitical and infrastructure constraints. The continuous intense coordinated effort with all the trade and transit partners will be required to address existing bottlenecks in the transportation system, and to increase commercial attractiveness of the transit corridor. In the past, the most successful infrastructure projects in the energy sector became possible with leadership and strong diplomatic facilitation from the U.S., backed by Turkey and other regional leaders. The countries of the region need to make extra efforts to reengage with all the major political and commercial actors who have an interest in the successful functioning of the transit corridor. Particular attention should be paid to the EU, which may be a major beneficiary of the additional access routes to resources and trading partners.

The EU needs to make political support to the South Caucasus transportation corridor and the

Black Sea-Caspian connectivity a policy priority. The EU also needs to enhance coordination of projects and initiatives that improve connectivity of the Black Sea-Caspian region with Europe, including with the Three Seas Initiative of EU. The EU needs to provide financial and organizational support to the energy and transportation projects affecting EU interests, including development of the Black Sea submarine power and data transmission cables. And finally, the EU cannot ignore maritime security of the Black Sea and needs to engage with planning and implementation of the strategy for maritime security, in coordination with NATO, U.S. and Turkey, as well as allied littoral states like Bulgaria, Romania, Ukraine and Georgia.

The non-static, unsettled nature of the geopolitics of Eurasia with many unpredictable actors will also require developing the ability to adapt to a changing environment. The countries of the region need to have more vigorous intra-regional process of coordination of the national security and economic policies, helping the political leadership of regional countries to conceptualize potential development scenarios and have solutions for different trajectories of the geopolitical developments. In this context it is a major priority to plan on post-war development scenarios, including for the post-war reconstruction of Ukraine. The Black Sea-Caspian countries, with their natural and human resources, may be actively involved in the process and must develop appropriate strategies in the priority areas where they may present competitive advantages vis-a-vis other interested actors.

from the transit function of the country not only economically, but also from political-security perspective.

Transportation sector	2017	2018	2019	2020	2021	2022	
Civil aviation (thousand tons)	32.0	25.5	24.9	19.6	18.0	17.5	-2.8%
Automotive	30.7	31.1	31.4	31.8	32.1	32.5	1.3%
Railway	10.7	10.0	10.9	11.1	12.1	14.8	21.8%
Total	41.5	41.1	42.3	42.9	44.3	47.3	6.9%
Volume of c	argo processeo	l in seaports	and terminals	of Georgia	(million tons	;)	
Seaport/Terminal	2017	2018	2019	2020	2021	2022	%
Poti seaport	6.7	6.3	8.6	7.4	7.1	7.7	9.0%
Batumi seaport	4.2	3.7	3.3	3.5	3.9	4.7	19.7%
Total	10.9	10.0	11.9	10.9	11.0	12.4	12.8%
The n	umber of cont	ainers (TEU)	processed in	seaports of (Georgia		
Seaport	2017	2018	2019	2020	2021	2022	%
Poti seaport	318,762	363,936	531,735	387,368	302,213	357,623	18.3%
Batumi seaport	76,025	90,002	116,081	103,002	99,173	119,471	20.5%
Total	394,787	453,938	647,816	490,370	401,386	477,094	18.9%

Appendix 1: Volume of Cargoes Shipped by all Means of Transportation (million tons), 2017-2022

Source: Ministry of Economy and Sustainable Development

Appendix 2: Annual Capacity and Throughput Along the Trans-Caspian International Route (2021, Units in Million Tons)

Seaports And Railways	Annual Capacity	Annual Throughput/Utilization		
9.635				
Aktau	17.7	4 (22.6%)		
Kuryk	6	1 (16.9%)		
Alat (Baku)	15	5.6 (37.1%)		
Poti	15	7.1 (47.3%)		
Batumi	18	3.9 (21.6%)		
Azerbaijani Railways	17	14.6 (85.8)		
Georgian Railways 27		12.1 (44.4%)		

Source: USAID Study

Appendix 3: Container Traffic Along the Trans-Caspian International Route (2021, Units in TEU)

Seaports	Annual Capacity	Annual Throughput/Utilization		
Aktau	100,000	30,000 (306%)		
Kuryk	30,000	7,378(24.5%)		
Alat (Baku)	100,000	45,000 (45%)		
Poti	550,000	302,000 (55%)		
Batumi 200,000		99,195 (49.5%)		

Source: USAID Study