

DYNAMICS OF CONNECTIVITY IN THE CASPIAN SEA REGION: EXPLORING THE ENERGY POTENTIAL OF THE INSTC

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INTRODUCTION

In recent years, the Eurasian region has witnessed growing competition as well as cooperation for connectivity corridors, depending upon one's perspective. In the G20 New Delhi Summit, Prime Minister Modi announced the launch of the India-Middle East-Europe Economic Corridor (IMEEC). Underlining its importance, Jon Finer (the Biden Administration's principal deputy national security adviser) emphasised the following three reasons for the construction of the corridor. First, to boost the economy in the countries involved by increasing the flow of energy and digital communications. Second, to assist in addressing the shortage of infrastructure required for growth in low- and middle-income countries. Third, to help 'cool down' the 'turbulence and insecurity' emanating from the Middle East.¹ Likewise, similar efforts have been observed with regards to the Caspian Sea region. The 6th International Transport and Logistics

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1. "India-Middle East-Europe Mega Economic Corridor: What is the Project and Why is it Being Proposed?" *The Indian Express*, September 10, 2023, <https://indianexpress.com/article/>

In simple terms, connectivity is about networks. These include air, land, and marine transit connections. Connectivity involves international practices, regulations, conventions, and technological standards backed by international bodies and institutions to facilitate network interoperability and international trade.

Business Forum ‘New Silk Way’ was concluded on October 4, 2023, on the theme “New Trends in Multimodal Transportation on the New Silk Road.” It provided a platform to discuss transport system integration and cooperation, development of the middle corridor, and use of new technologies and innovations in multimodal transport to improve cargo efficiency and delivery. These two recent projects are a few of the latest instances that show the growing global significance of connectivity corridor(s).

This paper attempts to understand the basic notion of connectivity without getting entangled in the theoretical debates around the concept. In simple terms, connectivity is about networks. These include air, land, and marine transit connections. Connectivity involves international practices, regulations, conventions, and technological standards backed by international bodies and institutions to facilitate network interoperability and international trade.² The idea of ‘connectivity’ does not have a clear theoretical or conceptual foundation within the realm of social sciences. The use and meaning of the term in research and practice exhibit variability in accordance with certain contexts. For instance, Darl Kolb assigned the following dimensions to connectivity: geo-physical, technical, interpersonal, group, organisational, networks, economic, cultural, political, and philosophical.³

explained/everyday-explainers/india-middle-east-europe-economic-corridor-what-is-the-project-why-is-it-being-proposed-8932332/. Accessed on February 2, 2024.

2. European Commission, “Explaining the European Union’s Approach to Connecting Europe and Asia,” September 19, 2018, https://ec.europa.eu/commission/presscorner/detail/en/MEMO_18_5804. Accessed on February 2, 2024.
3. Darl G. Kolb, “Exploring the Metaphor of Connectivity: Attributes, Dimensions and Duality,” *Organization Studies*, 2008, 29 (1): 127-144.

The term connectivity found significant attention in the Master Plan on ASEAN Connectivity (MPAC 2010); and since then, the Association of Southeast Asian Nations (ASEAN) and individual Asian countries from China to Japan and India have embraced the term in a plethora of plans and strategies.⁴ According to the ASEAN's Master Plan on Connectivity of 2010, the concept of connectivity is defined as having three major components: physical, institutional, and people-to-people. The objective of *institutional connectivity* is to enhance and broaden institutional collaboration via the implementation of framework agreements and other policy measures. This is done with the intention of facilitating the unrestricted movement of commodities, services, investments, and skilled labour. The objective of *people-to-people connectivity* is to enhance the level of engagement among diverse communities, particularly in the domains of tourism, education, and culture. *Physical connectivity* refers to the process of creating transnational infrastructure projects, and involves linking up existing physical infrastructure, among various other techniques. The domains include transportation, information and communications technology, and energy.⁵ On similar lines, as observed at the 2017 Asia-Europe Meeting (ASEM), the notion of connectivity refers to the deliberate act of bringing societies, nations, and individuals closer together. It facilitates the improvement of economic and interpersonal relations.⁶ The concept encompasses not only hard connectivity which pertains to infrastructure

***Physical connectivity* refers to the process of creating transnational infrastructure projects, and involves linking up existing physical infrastructure, among various other techniques. The domains include transportation, information and communications technology, and energy.**

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4. Johannes Plagemann, et al., "The Paradox of Competing Connectivity Strategies in Asia," *Third World Quarterly*, 2021, 42 (10), pp.2265-2281.
 5. Anna Fünfgeld, "ASEAN Energy Connectivity: Energy, Infrastructure and Regional Cooperation in Southeast Asia," *The Indonesian Quarterly*, 2018, vol. 46 (4), pp. 315-343.
 6. Marcin Kacperek, "(Re)defining Connectivity," Warsaw Institute, October 21, 2020, <https://warsawinstitute.org/redefining-connectivity/>. Accessed on February 2, 2024.

projects, but also soft connectivity which concerns people-to-people or digital interactions. It also encompasses all ties, including those in education, customs cooperation, air, sea, cyber space, and land.⁷

Connectivity is one of essential areas for the Caspian littoral states. According to the International Transport Forum, there is a notable disparity in connectivity between the landlocked countries in Central Asia and the South Caucasus region, and countries that possess advanced logistical capabilities.⁸ This disparity is partially influenced by their geographical remoteness from the main economic centres worldwide, and partly by their limited ability to connect through transit routes. It is important to note that though there are countries which are geographically isolated, their capacity to connect with global markets is determined not only by the actual distance, but by the presence of trade corridors and transit infrastructure.⁹

Within the hydrocarbon sector, particularly the oil and gas industry, robust connectivity infrastructure plays a critical role. Midstream operations, encompassing transportation and storage activities, serve the essential function of transferring crude oil and natural gas from production sites to refineries and ultimately to end-users. Given the significance of connectivity, this paper investigates the dynamics of connectivity in the Caspian Sea region. As the energy dimension of connectivity corridors remains understudied, the upcoming sections will examine regional energy connectivity routes. The aim of this paper can be better understood by answering the following critical questions: **First**, what are the perspectives of the five Caspian states and external actors on connectivity? **Second**, what is India's perspective on connectivity? **Finally**, what are the prospects of the International North-South Transport Corridor (INSTC) as an energy corridor for India's energy security?

7. Bart Gaens, et. al., "Connectivity and Order: An Analytical Framework," *East Asia*, 2023, 40: 209-28.

8. International Transport Forum, "Enhancing Connectivity and Freight in Central Asia," 2019, https://www.itf-oecd.org/sites/default/files/docs/connectivity-freight-central-asia_2.pdf. Accessed on February 2, 2024.

9. "Enhancing Connectivity and Freight in Central Asia", International Transport Forum (ITF), Policy Papers, 2019, No. 71 (Paris: OECD Publishing).

CONNECTIVITY IN THE CASPIAN SEA REGION

The Caspian Sea region, once confined to the Soviet Union and Iran, has now transformed into an arena for regional and international actors to enhance their connectivity endeavours. In this section, this study has tried to understand the notion of connectivity of five Caspian states and external powers in the region. For centuries, the Caspian Sea region has been a locus of changing geopolitical dynamics. It has served as a platform for political rivalry, negotiations, commerce, and transportation. This multifaceted role of the region predates the creation of the East-West dichotomy. For instance, highlighting the value of the Caspian Sea region, Anthony Jenkinson (an English merchant) who tried to establish a trade route to the East by means of the Caspian region, provided a detailed account of his expedition to the region, which he characterised as very arduous, perilous, and financially burdensome. Despite his regretful experience, he saw the Caspian routes as being potentially profitable and worthy of pursuit.¹⁰ Today, connectivity initiatives are the latest geopolitical tool for advancing national interests.

Control over connectivity routes has always been critical for military and economic effectiveness. Generally, land and maritime powers have long held opposing views on connectivity corridors. On the one hand, land powers prefer corridors that cross their own territory because they have more control over the flow of goods and people. On the other hand, maritime powers prefer corridors that cross international waters because they allow them to move their military and trade more freely. These two different points of view have begun to converge in the Caspian Sea region. Landlocked states are gradually understanding the significance of maritime routes, while coastal states see the value of continental routes. This convergence in the Caspian region is due to the growing interests of global actors, on the one hand, and the interests of the landlocked Caspian Sea littoral countries in accessing global markets, on the other.

10. Erika Monahan and Matthew P. Romaniello, "Early Modern Trade in the Caspian Region," *Russian Studies in History*, 2021, 60, pp.1-4.

Connectivity Approach and Initiatives of Caspian Five in Caspian Sea Region

Historically, the South Caucasus and Central Asia regions have been geographically separated by the Caspian Sea, hindered by insufficient infrastructure. Amidst the ongoing military operation in Ukraine, escalating tensions between China and the United States, and the evolving geopolitical reconfigurations in West Asia, the Caspian Sea littoral states are witnessing major shifts in terms of regional connectivity. As the economic and political viability of landlocked resource-rich countries in the Caspian Sea region is heavily dependent on their ability to reach markets, the littoral countries have engaged amongst themselves in various bilateral, trilateral, and multilateral connectivity project initiatives.

Azerbaijan considers connectivity to be a pivotal factor in its economic development, diversification, and integration within the region. The transit approach of Azerbaijan, being a landlocked nation, is focussed on the development of new infrastructure and the expansion of transport connectivity. The objective is to effectively utilise transit opportunities, offer state assistance for transport projects, align the legal and institutional frameworks with international standards, and implement comprehensive transport and logistical systems that streamline transportation operations and the movement of goods. Efforts are now underway to adopt new initiatives aimed at enhancing the transit capacity as Baku has entered into many agreements in this region that facilitate the use of streamlined customs and border crossing protocols for international freight transit. The enhancement of transport infrastructure, which encompasses the establishment of international transport corridors that traverse the nation's territory, plays a crucial role in augmenting its transit capacity.¹¹ The following are the connectivity initiatives undertaken by Baku: East-West Transport Corridor or

11. Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, "National Reports on the implementation of the Vienna Programme of Action for Landlocked Developing Countries for the Decade 2014–2024 (2023) of Azerbaijan," https://www.un.org/ohrrls/sites/www.un.org.ohrrls/files/azerbaijan_national_report_assessment_of_the_implementation_of_the_vpoa.pdf. Accessed on February, 2, 2024.

Trans-Caspian International Transport Route (TITR); North-South Transport Corridor; Baku-Tbilisi-Kars Railway (BTK); Qazvin–Rasht–Astara railway; and the Trans-Caspian International Transport Route (TITR).

Russia's connectivity strategy focusses on three distinct geographic regions: Greater Eurasia, post-Soviet Central Asia, and the eastern region of the Russian Federation.¹² With regards to the Caspian Sea region, inferences can be drawn by observing Moscow's approach to connectivity with the Central Asian states. From 2000 onwards, Moscow has developed a growing inclination to maintain and, whenever feasible, enhance the current degree of connectivity between Russia and the Central Asian states. Since the mid-1990s, Moscow's overarching objective has been to have a role in the development of alternative infrastructure connections, particularly those that would transport natural resources from Central Asia to the European market. Considering Russia's ongoing military operation in Ukraine and the European Union's (EU's) embargo on Russian oil and gas, Moscow is now expanding its focus to the Asian economies. When it comes to connectivity in the region, Russia maintains a cooperative stance with the littoral states. Its renewed emphasis on the International North–South Transport Corridor (INSTC) is one such instance.

In the last three decades, **Kazakhstan** has employed a multi-vector approach to its foreign policy with the objective of maintaining its independent and sovereign character. Kazakhstan strategically interacts with many major powers via the fragmentation of problems into smaller components, aligning corresponding interests with multiple countries, and mitigating risks associated with excessive reliance on a single partner. This multi-vector strategy of the country is reflected in its approach to connectivity. Kazakhstan, due to its strategic geographical position at the crossroads of Europe and Asia, has historically served as a pivotal hub for transportation and commerce. Kazakhstan serves as a crucial transit hub for the transportation of products from China and Central Asia to Europe, with a

12. Kristiina Silvan and Marcin Kaczmarek, "Russia's Approach to Connectivity in Asia: From Cooperation and Coercion," *East Asia*, 2023, 40, pp. 317-334.

Ashgabat believes that it has a strategically advantageous geographic position, enabling the country to serve as a pivotal junction for regional transportation networks.

significant proportion of over 80 percent of these commodities traversing its territory. According to Murat Nurtleu (deputy prime minister and minister of foreign affairs of Kazakhstan), the connectivity strategy of Kazakhstan is driven by its objective to foster the development of a more equitable, environmentally conscious, and interconnected economy on a global scale. He further emphasised that the country's ambition to expand transcontinental trade channels

should not be misconstrued as the start of a new Great Game characterised by geopolitical competition.¹³ Kazakhstan's crucial role is to foster positive and cooperative relationships with neighbours—Russia and China—to fully use the country's transport capabilities. Some of its connectivity initiatives are: Nurlı Zhol Infrastructure Development Programme; Trans-Caspian International Transport Route (TITR); Western Europe-Western China International Transit Corridor; and development of the port of Aktau.

Turkmenistan, a country that has included the principle of 'permanent neutrality' into its constitutional structure, seeks to engage in connectivity initiatives from a position of neutrality. Ashgabat believes that it has a strategically advantageous geographic position, enabling the country to serve as a pivotal junction for regional transportation networks. The country has some notable strengths such as its strategic coastal location, well-developed railway system, and a range of specialised infrastructure; and is actively pursuing the enhancement of its transit capabilities. As the discontinuation of conventional trade routes from the East to the West through Russia, Belarus, and Ukraine has prompted the regional countries to explore alternative trade routes, the situation has also motivated Turkmenistan to actively participate in new initiatives, particularly due to the intensifying initiatives

13 Murat Nurtleu, "Kazakhstan is Building More Connections with the World," *Nikkei Asia*, September 20, 2023, <https://asia.nikkei.com/Opinion/Kazakhstan-is-building-more-connections-with-the-world#:~:text=Our%20new%20economic%20agenda%20places,China%20and%20Europe%20via%20the>. Accessed on February 2, 2024.

for transportation routes.¹⁴ The following are the instances of connectivity initiatives pursued by Ashgabat: INSTC; Ashgabat Agreement; Lapis Lazuli Corridor; and Turkmenbash International Seaport.

For Iran, corridors serve not only as means of transportation, but also as instruments for facilitating trade growth and enhancing economic development at the national, regional, and global levels.¹⁵ Tehran has made a commitment to mitigate the susceptibility of landlocked nations, aiming to facilitate commerce and enhance their access to global markets while decreasing associated costs. It attempts to fulfil the transit requirements of landlocked countries in the region, positioning itself as a developing transit country alongside other transit countries in the region.¹⁶ The significance of corridors in facilitating transportation routes within the Persian Gulf, the Gulf of Oman, the Indian Ocean, and the Caspian Sea has become more prominent. The following are the connectivity initiatives undertaken by Tehran: INSTC; Ashgabat Agreement; Persian Gulf-Black Sea Transport Corridor; Chabahar Port; and development of the port of Bandar Abbas.

The following are the connectivity initiatives undertaken by Tehran: INSTC; Ashgabat Agreement; Persian Gulf-Black Sea Transport Corridor; Chabahar Port; and development of the port of Bandar Abbas.

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14. Evgeniya Makhmutova, "Outlook for Turkmenistan as Eurasia's Transport Hub," Russian International Affairs Council, July 27, 2023, <https://russiancouncil.ru/en/analytics-and-comments/analytics/outlook-for-turkmenistan-as-eurasia-s-transport-hub/>. Accessed on February 2, 2024.
 15. Office of the High Representatives for the Least Developing Countries, Landlocked Developing Countries and Small Island Developing States, "A Transit Country Perspective – Remarks by Dr. Mahdi Safari Deputy Foreign Minister for Economic Diplomacy of the Islamic Republic of Iran," August 16 2022, https://www.un.org/ohrlls/sites/www.un.org.ohrlls/files/h.e._mr._mahdi_safari_deputy_foreign_minister_for_economic_diplomacy_of_iran.pdf. Accessed on February 2, 2024.
 16. Office of the High Representatives for the Least Developing Countries, Landlocked Developing Countries and Small Island Developing States, "Speech by Rostam Ghasemi Honorable Minister of Roads and Urban Development of the Islamic Republic of Iran In the Conference of Developing Landlocked Countries," August 15-16 2022, https://www.un.org/ohrlls/sites/www.un.org.ohrlls/files/ministerial_iran_text_rostam_ghasemi.pdf. Accessed on February 2, 2024.

To sum up, the post-Soviet dissolution period witnessed the proliferation of several initiatives aimed at establishing transit corridors to link the South Caucasus and Central Asian countries. The signing of an agreement on ‘Cooperation in the Field of Transport’ by five Caspian states in 2018 is one such example of regional cooperation. The agreement emphasised that the purpose is to foster collaboration among the Caspian Five to establish, and enhance, the Caspian Sea region as a prominent global hub for transportation and logistics.¹⁷

Connectivity Approach and Initiatives of External Actors in Caspian Sea Region

The beginning of Russia’s special military operation in 2022 changed the global powers’ approach to the Caspian Sea region. The West—the United States in partnership with the European allies—seeks to strategically shift the dynamics of regional relationships by reducing Russian influence. Washington strategically uses contemporary global processes to increase its influence in the domain of Russia’s traditional interests. This is accomplished by increased engagement with post-Soviet countries in a variety of areas, including commerce, economics, politics, humanitarian initiatives, and security.¹⁸ The Caspian region is important to Washington because of its potential to reduce Europe’s dependency on Russian fossil fuels while also improving energy security in Europe. In this regard, the United States is willing to assist the Central Asian and European countries in improving their ability to withstand and counter Russia’s strategic energy tactics. For instance, the US National Security Strategy of 2022 reiterates its aim to “reduce Europe’s dependence on Russian fossil fuels,” and “strengthen

17. Ministry of Foreign Affairs of the Russian Federation, “Agreement Among the Governments of the Caspian Littoral States on Cooperation in the Field of Transport,” August 15, 2018, <https://www.mid.ru/tv/?id=1574918&lang=en>. Accessed on February 2, 2024.

18. Vladislav Kondratyev, “Transformation of US Geostrategy in the Caspian Region,” Caspian Institute for Strategic Studies, November 14, 2023. <https://caspian.institute/product/kondratyev-vladislav/transformation-of-us-geostrategy-in-the-caspian-region-38596.shtml>. Accessed on February 2, 2024.

European energy security.”¹⁹ The US considers the Caspian region strategically important for two interconnected reasons: the Caspian is an important energy source for the US’ allies in Europe; and fierce competition for control in the region. Given the significant involvement of Russia and China in this region, the US seeks to impede these countries from further strengthening their influence here. In view of the current surge in economic and security ties among Russia, China, and some Central Asian countries, the US seeks to hinder or offset these alliances to the greatest extent possible.²⁰

The **European** strategy known as the ‘Global Gateway-2021’ focusses on addressing difficulties within the present geopolitical landscape via the development of infrastructural solutions. The focal points of this framework include five key policy drivers, namely digital, climate and energy, transport, health, and education and research. With regards to connectivity in the Caspian region, the ‘EU Strategy on Central Asia-2019’ seeks to enhance the region’s connectivity by expanding upon the existing Global Gateway strategic framework.²¹ In 2007, the EU implemented its first strategy for Central Asia with the intention of addressing various objectives. However, several commentators expressed disapproval towards the EU for allocating its resources too widely and for treating Central Asia as a unified area rather than recognising the distinct requirements of individual nations. The 2019 plan, named ‘New Opportunities for a Stronger Partnership,’ considered these lessons and included three main areas of focus: resilience, prosperity, and regional collaboration.²²

In recent years, there has been an increasing level of engagement by the EU in the Caspian Sea region. One of the primary motivations is to enhance

19. Haley Nelson, “Biden Carries on the Cold War Paradigm in the Caspian Region,” *Caspian Affairs Magazine*, 2023, 7, pp.34-36.

20. Eugene Chausovsky, “Strategic Connectivity: The U.S./China Competition in the Caspian Region,” November 2023, https://api.caspianpolicy.org/media/ckeditor_media/2023/11/02/the-uschina-competition-in-the-caspian-region.pdf. Accessed on February 10, 2024.

21. European Commission, “Global Gateway in the Middle East, Asia and the Pacific,” https://international-partnerships.ec.europa.eu/policies/global-gateway/initiatives-region/initiatives-middle-east-asia-and-pacific_en?page=0. Accessed on February 10, 2024.

22. Anna Matveeva, “A New Opening for EU–Central Asia Relations?” *Carnegie Europe*, April 23, 2023, <https://carnegieeurope.eu/2023/04/13/new-opening-for-eu-central-asia-relations-pub-89454>. Accessed on February 10, 2024.

collaboration with Central Asia in pursuit of Brussels' geoeconomic aspirations to enhance Euro-Asian connectivity. This entails the development of both physical and non-physical infrastructure that facilitates the unrestricted movement of commodities, people, ideas, and services. It has actively engaged in the domain of connectivity within the region. The establishment of energy and transport linkages between the two areas was identified as a priority in the 2007 Central Asia Strategy by the EU.²³ These two areas were reiterated by the EU foreign policy chief Josep Borrell in November 2022 when he said, "Connectivity is going to be the key word for the future."²⁴ This emphasis aligns with the EU's Global Gateway foreign policy strategy, which aims to enhance digital, energy, and transportation linkages. It is important to know that the EU's pursuit of alternative energy sources is a fundamental aspect of its involvement in the Caspian region. Amidst the ongoing military operation conducted by Russia in Ukraine, the significance of the Caspian region for Europe has increased significantly. The EU and Caspian littoral countries convened the EU-Central Asia Investment Forum in January 2024, focussing on a sustainable transport corridor to link Europe and Central Asia. This event highlights Europe's strong desire for enhanced connectivity.²⁵ The European countries are involved in several connectivity initiatives, including the Southern Gas Corridor and the Transport Corridor Europe-Caucasus-Asia (TRACECA).

In **China**, at the Peripheral Diplomacy Work Conference, President Xi said that China's neighbours had "extremely significant strategic value." He also stated that he aimed to improve China's relations with its neighbours, including strengthening economic ties and deepening security cooperation. He said,

23. Alouddin Komilov, "What Explains Growing European Engagement in Central Asia?," *The Diplomat*, November 22, 2022, <https://thediplomat.com/2022/11/what-explains-growing-european-engagement-in-central-asia/>. Accessed on February 12, 2024.

24. Matveeva, n.22..

25. Directorate-General for International Partnerships, "EU-Central Asia: 19th Ministerial Meeting held in Luxembourg on 23 October 2023," https://international-partnerships.ec.europa.eu/news-and-events/news/eu-central-asia-19th-ministerial-meeting-held-luxembourg-23-october-2023-2023-10-23_en Accessed on February 12, 2024.

... We must encourage, and participate in, the process of regional economic integration, speed up the process of building up infrastructure and connectivity. We must build the Silk Road Economic Belt and 21st Century Maritime Silk Road, creating a new regional economic order.²⁶

Here, Xi clearly emphasised on the need for connectivity, and, therefore, he sees the ‘Silk Road Economic Belt’ and ‘21st Century Maritime Silk Road’, which are today known as China’s Belt and Road Initiative (BRI), as tools to provide new infrastructure, and expansion of commerce and economic development across Asia and other regions. The inclusion of the BRI in the Chinese Constitution underscores the importance of connectivity to national interests.²⁷ China is boosting connectivity in Central Asia through various projects, including railways like the China-Kazakhstan Route and the Kazakhstan-Turkmenistan-Iran Route, pipelines like the China-Central Asia Gas Pipeline, and other transportation corridors like the Trans-International Transport Route (TITR).

To sum up, as observed earlier, the Caspian Sea littoral countries have been actively involved in initiatives to develop and facilitate intra-regional connectivity in recent years. Their leaders are also reaching out actively to non-regional powers to strengthen engagements. For example, in October 2023, Mohammad Mokhber, the first vice president of Iran, expressed willingness to establish a transit corridor to connect the member states of the Shanghai Cooperation Organisation (SCO).²⁸ In a similar vein, Turkmenistan and Azerbaijan have expressed their readiness to augment the number of goods transported over the CASCA+ (Central Asia, South Caucasus, and

26. Peter Cai, “Understanding China’s Belt and Road Initiative”, Lowy Institute for International Policy, 2017. *JSTOR*, <http://www.jstor.org/stable/resrep10136>. Accessed on February 12, 2024.

27. International Transport Forum, “Enhancing Connectivity and Freight in Central Asia,” 2019, https://www.itf-oecd.org/sites/default/files/docs/connectivity-freight-central-asia_2.pdf. Accessed on February 12, 2024.

28. “Iran says Ready to Create Transit Corridor Linking SCO Members,” *Xinhua News*, October 26, 2023, <https://english.news.cn/20231026/b2b64d80183a4be1bcbbb671c2555543/c.html>. Accessed on February 12, 2024.

The breakdown in economic relations between Russia and the Western countries, along with the strategic positioning of the Caspian states has emphasised the significance of these countries in promoting connectivity initiatives across Eurasia. This is particularly relevant in crucial sectors such as energy and transportation.

Anatolia) multimodal transport route as well as the Trans-Caspian International Transport Corridor.²⁹

Assessing Connectivity Initiatives in Caspian Sea Region: Cooperation or Competition?

A paper authored by Stuart Coles, et al, titled "Seven Ways Russia's War on Ukraine has Altered the World," elucidates seven specific ways in which Russia's military operation has brought about changes on a global scale.³⁰ Energy is highlighted as one of the seven areas

that has been considerably changed. It confirms that the crisis has compelled Europe to seek alternative energy sources, while Russia has begun to focus on the East. However, their evaluation missed recognising the importance of connectivity corridors in the Eurasian region amidst the ongoing conflict in Ukraine. The significance of connectivity corridors can be observed in Russian President Putin's strong lobbying for the INSTC as the major route for connectivity at the 6th Caspian Sea Summit.

With the crisis in Ukraine now in its third year and not a hint of resolution in sight, the prolonged dispute has brought forth difficulties and possibilities for the Caspian Sea littoral states. Among the challenges that the Caspian countries have faced because of the conflict are the escalating inflation and economic pressures. On the other hand, the breakdown in economic relations between Russia and the Western countries, along with the strategic

29. Ngangom Dhruva Tara Singh, "Corridor Cooperation in Caucasus-Central Asian Region: How Should India Proceed?" *CAPS InFocus*, November 23, 2023, <https://capsindia.org/corridor-cooperation-in-caucasus-central-asian-region-how-should-india-proceed/>. Accessed on February 16, 2024.

30. Stuart Coles, et al., "Seven Ways Russia's War on Ukraine has Changed the World," Chatham House, February 20, 2023, <https://www.chathamhouse.org/2023/02/seven-ways-russias-war-ukraine-has-changed-world#russia-the-pariah-state>. Accessed on February 16, 2024.

positioning of the Caspian states has emphasised the significance of these countries in promoting connectivity initiatives across Eurasia. This is particularly relevant in crucial sectors such as energy and transportation.

Following its special military operation in Ukraine, **Russia** actively sought other trade partners due to the loss of access to European markets. In 2022, Russia saw a 50 percent reduction in imports from Europe, while Europe's imports from Russia had an even more significant decline. The global community has placed sanctions on Russia because of the conflict, thereby isolating Moscow from international trade routes for containerised freight. Prominent shipping companies have ceased operations in Russia and are no longer accepting reservations for ports in Russia. Consequently, Russia has experienced a state of isolation from international trade routes, resulting in a near cessation of cargo operations at its ports.³¹ Similarly, the EU, UK, and US have enforced sanctions on the Russian railway that have hindered Moscow's ability to expand. Therefore, for Moscow, the other four countries in the Caspian region serve to alleviate its economic load. President Putin's endorsement of the US\$1.7 billion deal in May 2023 to finance the construction of a railway that would link Iran and Azerbaijan, serving as a crucial component of the North-South Corridor, is one such example.³²

Considering the ongoing geopolitical milieu, **Kazakhstan** is actively seeking new transportation routes while striving to enhance cooperation across borders. The heightened regionalisation processes in Central Asia have led to a surge in commerce among countries. The establishment of the Central Asia International Centre for Cross-Border Cooperation on the

As of now, Kazakhstan accounts for 60 percent of the Gross Domestic Product (GDP) and attracts 70 percent of the Foreign Direct Investment (FDI) in Central Asia.

31. Dennis Koegeboehn, "Impacts of the Russia-Ukraine War on Ports and Transport," TOC Europe Website, <https://www.tocevents-europe.com/en/media/press/impacts-of-the-russia-ukraine-war-on-ports-and-transport.html>. Accessed on February 16, 2024.

32. "Iran & Russia: New Land & Sea Networks," *The Iran Primer*, May 18, 2023, <https://iranprimer.usip.org/blog/2023/may/18/iran-russia-new-network-land-sea-routes>. Accessed on February 16, 2024.

Kazakhstan-Uzbekistan border, along with the Kyrgyz-Kazakh industrial, commerce, and logistics complex at the Ak-Tilek and Karasu crossings, was a crucial step in this direction.³³ As of now, Kazakhstan accounts for 60 percent of the Gross Domestic Product (GDP) and attracts 70 percent of the Foreign Direct Investment (FDI) in Central Asia. The Caspian Sea ports in Kazakhstan have achieved an unprecedented level of trade activity during the first half of 2022. For instance, according to Kazakhstan's Statistics Committee, the transportation of goods via domestic water transport infrastructure increased to US\$907,530 which is more than five times the turnover compared to the same period in 2021. In June 2022, the Kazakhstan-Turkmenistan-Iran-Türkiye Corridor established a new connectivity initiative as the first goods train from Kazakhstan reached Iran, en route to Türkiye and Europe, which shows growing connectivity amidst the conflict.³⁴ Significant progress has been made with regard to the Middle Corridor Route (a.k.a. the Trans-Caspian International Transport Route) since February 22, 2022. For instance, last year, cargo transportation through the Middle Corridor climbed 88 percent, reaching 2 million tonnes by 2023.³⁵

In the 5th Consultative Meeting of Heads of States of Central Asia on September 14, 2023, President Berdimuhamedow of **Turkmenistan** suggested the creation of a unified transport and logistics platform for Central Asia. Following the 5th Consultative Meeting, the foreign ministers of the Central Asian governments signed two new agreements, one of which was the 'Agreement on Strengthening the Connectivity of Land Transport in Central Asia' which underlined the increasing importance of intra-Caspian

33. Nurlan Kulbatyrov and Aida Haidar, "Five Trade Trends in Central Asian Connectivity," *The Astana Times*, June 26, 2023, <https://astanatimes.com/2023/06/five-trade-trends-in-central-asian-connectivity/>. Accessed on February 16, 2024.

34. Muhammad Rafiq, "Economic Gains of Kazakhstan in Wake of Shifting Supply Chains," *The Astana Times*, August 19, 2022, <https://astanatimes.com/2022/08/economic-gains-of-kazakhstan-in-wake-of-shifting-supply-chains/>. Accessed on February 20, 2024.

35. Assel Satubaldina, "Cargo Transportation Along Middle Corridor Soars 88%, Reaches 2 Million Tons in 2023," *The Astana Times*, December 28, 2023, [https://astanatimes.com/2023/12/cargo-transportation-along-middle-corridor-soars-88-reaches-2-million-tons-in-2023/#:~:text=In%20the%20first%20nine%20months%20of%202022%2C%20the%20figure%20stood,million%20tons%20of%20cargo%20annually](https://astanatimes.com/2023/12/cargo-transportation-along-middle-corridor-soars-88-reaches-2-million-tons-in-2023/#:~:text=In%20the%20first%20nine%20months%20of%202022%2C%20the%20figure%20stood,million%20tons%20of%20cargo%20annually.). Accessed on February 20, 2024.

connectivity for Ashgabat.³⁶ According to Berdimuhamedow, transport plays a crucial role in the ongoing negotiations among the littoral countries, and the current circumstances present an opportune moment to enhance collaboration in this field, considering the advantages for both freight and passenger movement among the Central Asian Republics (CARs). Ashgabat, with its abundant deposits of fossil fuel—natural gas—is actively pursuing more advantageous transportation links between the South Caucasus and Central Asia. Within the framework of the aforesaid agreement, the BTK railway aligns well with the strategic objectives of Turkmenistan to expand its presence in international markets.³⁷

In the case of **Azerbaijan**, its foreign policy adviser to the president, Hikmet Hajiyev stated that Baku's geopolitics involve a multifaceted approach to foreign policy. It has prioritised balance in its endeavour towards connectivity initiatives. Azerbaijan has played a proactive role in developing regional connectivity. The country has allocated resources towards the advancement of transport infrastructure, encompassing the construction of roadways, trains, and ports, with the aim of fostering collaboration, and facilitating novel commercial prospects. The construction of transport and communication infrastructure in Azerbaijan, such as the Baku International Sea Trade Port and the Baku-Tbilisi-Kars Railway, serves as evidence. In March 2022, Baku took another important decision and signed an agreement with Tehran. This agreement aims to create new transport networks that will connect the western region of Azerbaijan's main territory with its Nakhchivan Autonomous Republic via northwest Iran.³⁸

The conflict in Ukraine has prompted **Iran** to engage in unprecedented levels of connectivity cooperation. For example, the INSTC is a major

36. Ministry of Foreign Affairs of the Republic of Tajikistan, "Fifth Consultative Meeting of Heads of State of Central Asia," September 9, 2023, <https://mfa.tj/en/main/view/13362/fifth-consultative-meeting-of-heads-of-state-of-central-asia>. Accessed on February 20, 2024.

37. Nigar Bayramli, "Turkmenistan Proposes Central Asian Transport, Logistics Platform," *Caspian News*, September 19, 2023, <https://caspiannews.com/news-detail/turkmenistan-proposes-central-asian-transport-logistics-platform-2023-9-18-29/>. Accessed on February 20, 2024.

38. Official web-site of the President of the Republic of Azerbaijan, "Ilham Aliyev Received Delegation led by Iran's Minister of Roads and Urban Development," March 11, 2022, <https://president.az/en/articles/view/55603>. Accessed on February 20, 2024.

connectivity project through which Tehran aims to establish itself as a pivotal link among the Economic Cooperation Organisation, Association of Southeast Asian Nations, Eurasian Economic Union, Gulf Cooperation Council (ECO, ASEAN, EAEU, GCC), India, Central Asia, and the West Asia regions. Further, the INSTC, together with the Ashgabat Agreement of 2018 (which involves India, Oman, Iran, Turkmenistan, Uzbekistan, and Kazakhstan), has the potential to streamline the movement of goods between Central Asia and West Asia. Since the beginning of the Russia-Ukraine conflict, the strategic significance of the INSTC has gained relevance for Moscow and Tehran as both countries are now subject to economic restrictions and wish to enhance the efficiency of the corridor. As Tehran joins the SCO and Brazil, Russia, India, China and South Africa (BRICS), Iran's intra-regional connectivity efforts are expected to intensify.

Overall, after being sanctioned by the West, Russia has been compelled to seek new economic partners. As a result, trade with the neighbouring Caspian states has expanded. The conflict has underlined the Caspian republics' relevance in pushing connectivity initiatives across Eurasia. This is especially important in critical industries like energy and transportation. Correspondingly, sanctions on Russia have opened new commercial prospects for the Caspian countries such as Azerbaijan and Kazakhstan, as these countries can now export their goods to Russia at a time when they are in high demand. This conflict has led to increased collaboration among the Caspian republics.

Connectivity initiatives in the Caspian Sea region comprise a complex interplay of cooperation and competition. While there is a shared desire to enhance regional connectivity, there are also significant geopolitical and economic rivalries that shape the development of these initiatives. The connectivity initiatives in the region—North-South and East-West—coincide in terms of their reach and sophistication. Therefore, these developments cannot be construed as one initiative obtaining an edge in a competitive competition; and, hence, are completely a matter of geopolitical speculation.

INDIA'S APPROACH TOWARD CONNECTIVITY

In 2014, Prime Minister Modi made connectivity a policy priority. Speaking on the importance of the Indo-Pacific region at the 2018 Shangri-La Dialogue in Singapore, he said:

Connectivity is vital. It does more than enhance trade and prosperity. It unites a region. India has been at the crossroads for centuries. We understand the benefits of connectivity. There are many connectivity initiatives in the region. If these have to succeed, we must not only build infrastructure, we must also build bridges of trust.³⁹

In 2016, at the first Raisina Dialogue, the then Indian Minister for External Affairs Sushma Swaraj emphasised the significance of connectivity for India in the following way:

Connectivity today is central to the globalisation process. It is, of course, particularly important for Asia's growth and development. Indeed, the past many decades have witnessed the restoration and modernisation of connectivity as an integral element of the continent's revival. Where India itself is concerned, whether it is domestic, external, or regional, connectivity will determine how we meet our promise of growth, employment, and prosperity⁴⁰ ... connectivity is not just key to India's development ambitions but an important and integral aspect of its vision for international cooperation. It will drive our interests and relationships in Asia and beyond. We bring to bear a cooperative rather than unilateral approach and believe that creating an environment of trust and confidence is the prerequisite for a more inter-connected world. This is in our DNA;

39. Ministry of External Affairs, "Prime Minister's Keynote Address at Shangri-La Dialogue," June 1, 2018, <https://www.mea.gov.in/Speeches-Statements.htm?dtl/29943/Prime+Ministers+Keynote+Address+at+Shangri+La+Dialogue+June+01+2018>. Accessed on February 20, 2024.

40. Observer Research Foundation, "Raisina Dialogue: Conference Report-2016," March 1-3, 2016, https://www.orfonline.org/wp-content/uploads/2016/10/Raisina2016_Report.pdf. Accessed on February 22, 2024.

Connectivity pertains to the creation and enhancement of several forms of linkages, including infrastructural, economic, and cultural bonds, both domestically and internationally, with other countries.

after all, we are the inheritors of two powerful connectivity legacies—the message of Buddha and the Spice Route.⁴¹

Further, India’s approach, specifically towards the Caspian Sea region can be observed in her statement:

... our efforts to work with Iran on the Chabahar Port are getting underway. Perhaps less well known are other initiatives under discussion to cooperate with Iran as a transit corridor to Central Asia and Russia.⁴²

Her statement underscores the importance of connectivity in achieving India’s developmental objectives and its wider ambition for global collaboration. In this context, connectivity pertains to the creation and enhancement of several forms of linkages, including infrastructural, economic, and cultural bonds, both domestically and internationally, with other countries. It implies that connectivity serves not just as a method to accomplish India’s economic goals, but also as a vital element of its approach to international relations. The mention of a “cooperative rather than unilateral approach” suggests that India advocates collective efforts, promoting cooperation and reciprocal advantages with other countries. The objective is to provide a setting characterised by trust and assurance, highlighting the significance of constructive and cooperative connections for a more interconnected global community. The reference to “the message of Buddha and the Spice Route” emphasises India’s historical and cultural ties to the concept of connectivity. The essence of Buddha’s message pertains to the doctrines of peace, empathy, and interdependence that are closely linked with

41. Ibid.

42. Ibid.

Buddhism. The Spice Route, in contrast, refers to ancient trade routes that linked India with other regions, enabling the interchange of commodities and ideas. Connectivity is firmly embedded in India's cultural and historical legacy. India seeks to actively contribute to the formation of a globally interconnected and cooperative society by placing emphasis on a collaborative approach and leveraging its historical heritage.

In the 2nd Raisina Dialogue (2017), Prime Minister Modi emphasised that India's approach to international engagement is centred on "rebuilding connectivity, restoring bridges and rejoining India with our immediate and extended geographies."⁴³ He observed the need of regional connectivity in achieving peace, advancement, and economic well-being. In addition, he underscored the need of preserving the sovereignty of the countries involved to fully realise the potential of regional connectivity and avoid the creation of tensions and disputes.⁴⁴

In his recent visit to Iran on January 14-15, 2024, concerning the Chabahar port, External Affairs Minister Dr. Jaishankar said, "...we discussed India's involvement in the development and operation of the Chabahar port, a joint project with a joint vision of connectivity...discussed how we can establish a firm, sustainable and long-term roadmap, for India's continued involvement over the coming years."⁴⁵ Further, on INSTC, he said, "Regional connectivity has been a critical pillar of India-Iran relations, and was naturally prominent in the agenda of today's discussions. I reiterated India's interest in benefiting from Iran's unique geographical position to access markets in Central Asia, Afghanistan, and Eurasia. We discussed the prospects of energising the

India's connectivity policy prioritises a rules-based approach that is economically feasible and environmentally sustainable, while also respecting sovereignty.

43. Observer Research Foundation, "Prime Minister's Keynote Address at 2nd Raisina Dialogue," 2017, https://www.orfonline.org/wp-content/uploads/2017/09/Raisina_Report_2017-WEB.pdf. Accessed on February 22, 2024.

44. *Ibid.*

45. Ministry of External Affairs of India, "Joint Press Statement by EAM, Dr. S. Jaishankar with Minister of Foreign Affairs of Iran," January 15, 2024, <https://www.mea.gov.in/Speeches-Statements.htm?dt1/37513/Joint+Press+Statement+by+EAM+Dr+S+Jaishankar+with+Minister+of+Foreign+Affairs+of+Iran>. Accessed on February 22, 2024.

INSTC.”⁴⁶ The joint statement underscores the importance of connectivity in achieving India’s developmental objectives and its wider ambition for global collaboration.

Connectivity, in general, can help improve energy security in the following ways: First, broadening the range of oil and gas supply sources and routes. Countries can access a broader selection of suppliers and lessen their dependence on any one supplier by connecting to multiple oil and gas markets. This can help to reduce the likelihood of supply disruptions and price shocks. Second, new oil and gas resources can be developed. Connectivity can help isolated places develop new oil and gas resources by giving access to infrastructure and markets. This can help to improve oil and gas supply and lessen the likelihood of supply shortages. Third, the efficiency and dependability of oil and gas infrastructure must be improved. Countries may build a more linked and robust oil and gas system that can survive interruptions by connecting diverse pipelines and storage facilities. This can facilitate an increase in supply reliability and reduce the danger of price shocks.

The Indian top leadership’s position on connectivity highlights the need of upholding sovereignty, adhering to the rule of law, promoting openness, transparency, and equality. Ensuring the preservation of regional peace and stability takes precedence over engaging in geopolitical rivalry. New Delhi acknowledges the need of expanding roadways, trains, developing rivers, and enhancing digital connections to foster regional development. Nevertheless, its objective is to help sustainable initiatives that have a positive impact on local communities. India’s connectivity policy prioritises a rules-based approach that is economically feasible and environmentally sustainable, while also respecting sovereignty.⁴⁷

46. Ibid.

47. Manasi Singh, “India, Europe and Connectivity: From Shared Views on BRI to Mutual Cooperation?” in Rajendra K. Jain, eds., *India, Europe and Asia Convergence and Divergence*, (Singapore: Palgrave Macmillan).

OIL AND GAS RESOURCES ALONG THE INSTC ROUTE

To assess the energy dimension of the INSTC, it is first important to examine the distribution of oil and gas reserves alongside the corridor route (Maps 1 and 2). The INSTC consists of three routes:

- The **Trans-Caspian Section** is a maritime transportation route that connects northern Russia to southern Iran, crossing the Caspian Sea. From there, goods may be sent via the Strait of Hormuz to reach the Arabian Sea. It includes the Russian seaports Astrakhan, Olya, Makhachkala, and the Iranian ports Bandar-e-Anzali, Nowshahr, and Amirabad.
- The **Western Section** is a land route that combines rail-and-road transportation. It starts from northern Russia and goes south through Azerbaijan, reaching northern Iran. From there, it continues to a southern port on the Persian Gulf, where the goods are sent by sea. It includes a direct rail link through the Samur (Russia) and Yalama (Azerbaijan) crossing points, extending into Iran through the transborder section between Astara (Azerbaijan) and Astara (Iran).
- The most recent rail-and-road route, known as the **Eastern Section**, extends from northern Russia in a southeastern direction through Kazakhstan and Turkmenistan, ultimately reaching Iran. It includes a direct rail link through Kazakhstan, and Turkmenistan reaching Iran's rail network at the border-crossing points Serakhs (Turkmenistan)-Sarakhs (Iran), and Ak-Yayla (Turkmenistan)-Incheboron (Iran).

The distribution of oil and gas reserves along the **Western Section** includes:

- **Astrakhan, Russia:** The Astrakhan Oblast has oil and gas reserves located in areas such as the Astrakhan Gas Condensate Field and the Kasatskoye Field. As of 2022, 11 hydrocarbon deposits were listed on the state balance sheet at the beginning of 2022, with another 11 deposits on the Russian side of the Caspian Sea's seabed.

- **Sardar-e Jangal Gas and Oil Field, Iran:** Iran is a major global oil producer, with extensive reserves distributed throughout its territory. The field is located on the southern coast of the Caspian Sea and serves as the location for several oil and gas fields. The field potentially holds 2 billion barrels of oil, 25 percent of which is estimated to be recoverable, and an approximate volume of 12 trillion cubic metres of gas.
- The distribution of oil and gas reserves along the **Eastern Section** includes:
- **Aktau, Kazakhstan:** Kazakhstan is a significant producer of oil and gas, with its deposits mostly located in the western region of the country; and the region is home to five prominent oil and gas reserve companies, namely Safar Oilfield Services KZ branch, OMV Petrom S.A. branch in Kazakhstan, KazTransOil, and Weatherford International.
- **Turkmenbashi, Turkmenistan:** Turkmenistan is a significant hydrocarbon producer, with deposits located in the southern region of the country. The company named Turkmenbashi Oil Refinery OCGT Power Plant Turkmenistan, which specialises in oil and gas reserves, is in proximity of Turkmenbashi.
- The **Trans-Caspian Section** of the INSTC is a crucial connection that crosses the Caspian water body, linking five Caspian states.
- **Caspian Sea Section of Kazakhstan:** Kazakhstan has substantial offshore reserves in the northern part of the Caspian Sea, which include parts of the Kashagan field and other deposits such as Karachaganak, and Tengiz.
- **Absheron Peninsula, Azerbaijan:** The Azeri-Chirag-Guneshli (ACG) oil field, which is one of the biggest in the Caspian Sea, is located on this peninsula.
- **Gunashli and Shah Deniz Fields, Azerbaijan:** The presence of these supplementary significant offshore deposits makes a substantial contribution to Azerbaijan's oil and gas production.

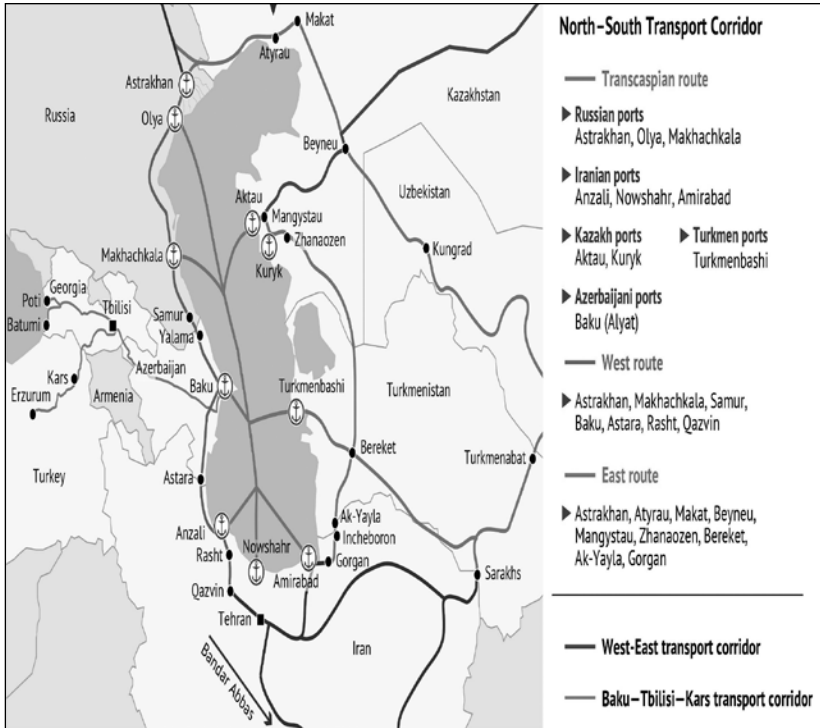
The Trans-Caspian section of the INSTC, while not having the highest number of reserves, is crucial in linking Caspian Sea producers to global markets. To fully maximise its potential in the future, it is essential to address logistical obstacles and prioritise environmental sustainability.

Map 1: Oil and Gas Fields in the Caspian Sea Region



Source: Heley Nelson & Richard E. Hoagland, *The Wealth of the Caspian Region: A Modern History of Oil and Natural Gas Export Routes*, 2023 (Caspian Policy Centre).

Map 2: INSTC Transport Routes and Seaports



Source: Valdai Club.

EXPLORING THE ENERGY POTENTIAL OF THE INTERNATIONAL NORTH-SOUTH TRANSPORT CORRIDOR (INSTC)

The Caspian littoral countries have recently placed increased importance on the INSTC, and the project has acquired significant momentum. However, the INSTC route had difficulties in garnering support, for instance, the challenges included the lack of a minor rail segment on the train connection, little knowledge among prominent commercial organisations, irregular shipping services between India and Iran, and insufficient insurance coverage.⁴⁸ Therefore, amidst these challenges, India must develop a new

48. Athar Zafar, "India and Russia in Central Asia: Growing Convergence of Interests?" *MGIMO Review of International Relations*, 2023, 16 (2), pp. 251-262.

strategy for moving oil and gas from the region. As a non-pipeline option, the INSTC's potential for oil and gas transportation needs to be explored.

Engagement in Hydrocarbon Initiatives through Regional Cooperation Frameworks

In recent times, the Iranian oil and gas sector has experienced new developments. In the upstream segment, Iran now permits International Oil Companies (IOCs) to participate in all phases of upstream projects under Iran petroleum contracts. The IOCs can engage in the production phases in addition to the exploration and development phases, with the option of extension to the enhanced oil recovery phases. In the downstream segment, the Law on the Protection of the Downstream Oil and Natural Gas Sector with Private Investment (2019) was ratified in the sector to implement privatisation in Iran's energy industry. These recent developments provide an avenue for India to engage with Iran's oil and gas companies under the BRICS and SCO frameworks. The prospects for Indian energy companies include updating Iran's oil and gas technologies, Enhanced Oil Recovery (EOR) projects, and the construction of Liquefied Natural Gas (LNG) export facilities.

The significance of the SCO and BRICS stems from the fact that they bring together three Eurasian powers: India, Russia, and China. With the boarding of new members, which include oil and gas-rich countries, the importance of these groupings is projected to grow. In terms of energy cooperation, India and Iran must take a firm stance and present a united front. One of these instances was when India refused to join the 'price cap coalition' against Russia. Iran's importance to India stems from its dual nature as an energy-producing and energy-transit country. In sum, cooperation within the regional cooperative mechanisms of the SCO and the BRICS group holds significant potential for enhancing India's energy partnerships with Iran and catalysing a favourable impact on the geopolitical dynamics of the Caspian region.

While both Russia and Iran maintain tankers on the Caspian, their fleets are relatively insignificant, as they move the bulk of their energy exports via pipelines to the Black Sea and Persian Gulf, respectively, for onward tanker transport.

Collaboration in Trans-Caspian Maritime Infrastructural Connectivity Initiatives

The maritime domain is one of the areas which has drawn the interest of many global players to the Caspian Sea region. It has played a pivotal role in the development of the oil and gas sector, particularly in terms of providing access to offshore oil and gas fields, and allowing the exportation of oil and gas resources. In the last few years, new ports—Amirbad port in Iran (2017), Turkmenbashi port in Turkmenistan (2018), and Kuryk port in Kazakhstan (2018)—have emerged because of the littoral states’ desire to become the region’s key transportation hub, and to promote a competitive climate in the region. While Iran and Russia have access to international waters, Kazakhstan, Turkmenistan, and Azerbaijan are landlocked. Kazakhstan and Azerbaijan currently rely on two major pipelines—the Caspian Pipeline Consortium (CPC), and the Baku-Tbilisi-Ceyhan (BTC) pipeline—to export their oil. In the last 24 years, however, an additional export option has been developed: tankers. Currently, all five Caspian states have mini fleets of tankers plying the world’s largest enclosed inland water body as regional trade continues to increase. While both Russia and Iran maintain tankers on the Caspian, their fleets are relatively insignificant, as they move the bulk of their energy exports via pipelines to the Black Sea and Persian Gulf, respectively, for onward tanker transport. The most significant development is the steady increase in shipping in the rich petro-states of Azerbaijan and Kazakhstan, as well as Turkmenistan’s decision to charter and build vessels for Caspian hydrocarbons transport.

In **Azerbaijan**, the Azerbaijan Caspian Shipping Company (ACSC) is the largest and oldest shipping company, having its precedents in the Caspian Shipping Company, founded on May 21, 1858. The ACSC fleet consists of 97 vessels, including 33 tankers and 13 ferries. Azerbaijan has constructed a

new Caspian Sea port at Alat, southwest of Baku. Alat is situated at a rail and road hub, allowing for multimodal north-south and east-west transit, and can accommodate rail ferries.⁴⁹ **Kazakhstan** also began to transport some of its oil exports by tankers. Beginning in October 2008, the Cross Caspian Oil and Gas Logistics LLC started transportation of crude oil produced from Kazakhstan's onshore Tengiz field across the Caspian to Azerbaijan. In 1998, the Kazakh government created the Kazmortransflot joint stock company to develop a national merchant marine fleet and expand into the international shipping of domestic freight. Kuryk Port is located on the coast of the Caspian Sea, south of Aktau and has direct access to the railway. It can be easily employed for the trans-shipment of oil and gas. **Turkmenistan**, which had previously chartered ACSC ships, has begun to deliver its oil by sea. In 2001, Burren Energy Shipping and Transportation (which operates the Nebit Dag Production Sharing Agreement in Turkmenistan) signed building contracts for 10 tankers for its Samara subsidiary, some of which will be utilised in Turkmenistan. Turkmenistan has been actively establishing its own tanker fleet since 2006, purchasing vessels from Russia and the Baltic states to transport goods along the Caspian coast and crude oil from Turkmen terminals Aladzha and Ekerem to Kenar. In January 2013, Turkmenistan announced plans to build a shipyard on the Caspian coast.

Iran is expected to commence operations on 27 midstream oil and gas projects from 2021 to 2025. Regarding the investment in the midstream industry, the report pointed out, "...The investments focus on building greater transport and storage to meet the growing demand for oil and gas,

49. U.S. Department of Commerce, International Trade Administration, "Azerbaijan – Country Commercial Guide," November 21, 2023, <https://www.trade.gov/country-commercial-guides/azerbaijan-transportation-and-logistics>. Accessed on February 22, 2024.

as well as for exports.”⁵⁰ However, the present condition of the Iranian oil industry remains unstable. There is a pressing need for more investment and improved access to equipment and technology. Sanctions have discouraged foreign countries from participating in the Iranian oil and gas sector. The increasing maturity of Iran’s gas fields poses a risk to the security of domestic gas supply in the sector. There is need for liquefaction and compressor technology. Although Iran has the capability to produce some compressor components domestically, it lacks the necessary infrastructure and expertise to undertake large-scale design and construction. This scenario synchronises with Iran’s endorsement of expediting the advancement of the Chabahar port initiative and its request for India to resume the purchase of crude oil from Iran, while attempting to connect the INSTC with Chabahar port. Iran’s unwavering trust and belief in India’s efforts in the region highlight the need for India to harness the seaports for the purpose of facilitating oil and gas imports. The port of Bandar-e-Anzali, through which Iran established links with other Caspian Sea ports to facilitate its economic integration in the region, is now being used for the trans-shipment of containers from the shores of Kazakhstan and Turkmenistan, and provides an impetus for the INSTC’s prospect for oil and gas transportation.

India should intensify its efforts in **maritime** infrastructure development. It is critical for India to take advantage of current and proposed maritime projects initiated by the Caspian countries. For example, it is important for New Delhi to give serious consideration to Astana’s proposal for the construction of ports in the Caspian Sea to foster energy cooperation. Despite the gradual increase in its investments and the development of ports in the region, India should strive to undertake more measures. The recent manifestation of bilateral agreements between India and Russia pertaining to shipbuilding activity in Astrakhan demonstrates the possibility for such initiatives with other Caspian littoral governments. Moscow intends to invest at least US\$250 million (potentially up to US\$1 billion) in the region by 2026,

50. “Iran Leads Midstream Project Starts in the Middle East by 2025,” *Global Data*, January 6, 2022, <https://www.naturalgasworld.com/iran-leads-midstream-project-starts-in-the-middle-east-by-2025-95269>. Accessed on February 22, 2024.

with the goal of increasing the port's capacity from 10 million tonnes to 25 million tonnes per annum. The project includes the construction of new piers, berths, terminals, and cargo handling equipment. The prioritisation of sea ports as facilitators of energy security is essential for the Indian energy requirements as they have the potential to enhance maritime energy transit. The use of ports facilitates the accessibility of offshore oil and gas reserves, hence, allowing the streamlined transfer of people, equipment, and supplies to-and-from offshore platforms. Ports have the potential to facilitate the development of new offshore fields and enhance production capacity. Considering the geographical distance of India, it would be prudent for India to give priority to the development and progress of midstream projects. As ports would help improve marine energy transportation, the Indian shipping industry must prioritise ports as an enabler of energy security.

Collaboration in Rail Infrastructural Connectivity Initiatives

Railways have historically played a crucial role in transporting energy from the Caspian shores. Azerbaijan, as a littoral state, has a documented history of operating oil and gas through railways. In the last three decades, with the introduction of pipelines such as the Baku-Novorossiysk Pipeline in late 1997, the Baku-Batumi Pipeline in early 1999, and the Baku-Tbilisi-Ceyhan Pipeline in mid-2005, there was a decline in the transportation of oil, gas, and oil products by railways in the country. Nevertheless, rail transport has maintained its profitability.

Since the beginning of Russia's special military operation in 2022, the Caspian littoral governments have engaged in many bilateral and trilateral agreements for railway connections. For example, Iran and Turkmenistan inked a transit agreement on November 17, 2023, pertaining to the building of roads infrastructure. The agreement also emphasised on Turkmenistan's connecting Chabahar Port (Iran) through a railway, giving it direct access to international waters. Second, Turkmenistan and Kazakhstan have signed a contract regarding a transportation connection. On November 3, 2023, the companies Russian Railways Logistics (RZD Logistics), Kazakhstan

With regards to the INSTC, India has a unique opportunity to shape its prospects for oil and gas transportation.

Railways (KTZ Express), and the Transport and Logistics Centre of Turkmenistan (TULM) signed a memorandum of cooperation for international and transit freight transportation. The parties have reached an agreement to establish a collaborative railway service along the international 'North-South' route. These initiatives demonstrate that attempts are ongoing to strengthen railway connectivity infrastructure on the eastern side of the Caspian Sea.

On the other hand, railway networks in Russia and Azerbaijan in the south Caucasus region do not have a direct physical link with Iran on the western side of the Caspian Sea.⁵¹ As Russia and Iran have agreed to finish the Rasht-Astara railway, which is part of the INSTC, the route has the potential to boost the number of products transited via Iran. The Rasht-Caspian railroad, spanning 35 km, is one of two railroads that complement the Rasht-Astara train line in Iran's Gilan province. It connects the province to the Caspian port, which is situated in the Anzali Trade-Industrial Free Zone. Due to its sea access, the prospects of this line to facilitate the transportation of oil and gas require serious thought by the INSTC member states.

Further, railway infrastructure complements maritime (seaport) connectivity when it comes to transportation. Therefore, along with the development of the intra-regional railway network, the member countries need to work on the development of port transportation nodes in the region: a port complex, including a seaport with its facilities and infrastructure; a port rail hub, which includes stations, yards, freight areas, intra-node lines and other facilities for wagon and locomotive maintenance; and industrial, automobile, pipeline, and urban transport. It allows movement of goods from the sea to land transport and back. In the middle of the ongoing geopolitical unrest, the Caspian Sea countries are revising their overseas trade strategies and building new logistical routes. With regards to the INSTC, India has a

51. Vali Kaleji, "Will Russia Complete Iran's Rasht-Astara Railway?" The Jamestown Foundation, May 16, 2022, <https://jamestown.org/program/will-russia-complete-irans-rasht-astara-railway/>. Accessed on February 22, 2024.

unique opportunity to shape its prospects for oil and gas transportation. To realise this, New Delhi must carefully coordinate its approach with the Caspian states to serve common interests.

CONCLUSION

The littoral countries of the Caspian Sea have traditionally desired enhanced regional and international connectivity. As both North-South and East-West connectivity initiatives are becoming increasingly complex and sophisticated in terms of their reach and infrastructure, they cannot be readily differentiated or pitted against one another. The complex interplay of factors suggests that initiatives in the Caspian region are not solely about one country or a few projects gaining a competitive edge over others. Instead, they represent a broader shift in the geopolitical and economic landscape of the region, with each development contributing to a larger, interconnected network. Due to the multifaceted nature of connectivity initiatives, attempting to interpret them purely as a competition for dominance might lead to excessively simplified conclusions.

Pipelines are the primary means of oil and gas transportation in the Caspian Sea region, with nations such as Azerbaijan, Russia, and Kazakhstan relying significantly on them. This supremacy stems from their efficiency, cost-effectiveness, and capacity to move enormous quantities over great distances. Maritime tankers play a critical role in transferring oil and gas to markets not served by pipelines, particularly in Azerbaijan, Kazakhstan, and Turkmenistan. Railways and roadways have a smaller role in oil and gas transportation than pipelines and ships. Their principal usage is for internal distribution within countries or to target certain markets that are unavailable by other channels.

Pipelines are the primary means of oil and gas transportation in the Caspian Sea region, with nations such as Azerbaijan, Russia, and Kazakhstan relying significantly on them. This supremacy stems from their efficiency, cost-effectiveness, and capacity to move enormous quantities over great distances.

To capitalise on the INSTC's potential for oil and gas delivery to India, major infrastructure expansion and upgradation are required, particularly for ships, railroads, and/or roads. As the INSTC routes run through areas with substantial hydrocarbon deposits, it would be inconsiderate to overlook or constrain the INSTC's potential for moving commodities alone. It is necessary to look beyond the transportation of goods. Hydrocarbon infrastructure development in the region necessitates significant investment. As a result, India should cooperate proactively to meet its energy needs. Creating a robust multimodal transportation infrastructure is critical for maximising the region's export potential, especially harnessing the INSTC corridor for India.