

## EURASIAN CONNECTIVITY FEATURES: IN SEARCH OF OPTIMUM

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**Abstract:** *The escalation of the Russia-Ukraine conflict and the subsequent Western sanctions against Russia have had profound and far-reaching impacts on Eurasian connectivity. On the one hand, these circumstances have significantly reduced the role of the Northern and Central Eurasian corridors as transit routes between China and Europe, and maritime transport has also been threatened by geopolitical factors. Concurrently, the Russia-Europe energy trade network and infrastructure connections are undergoing significant adjustments, with oil and gas pipelines frequently politicized and used for purposes such as countering and threatening, thereby undermining the security of Eurasian connectivity. On the other hand, these geopolitical changes have also created a range of opportunities, including deepening cooperation between China and Eurasian Economic Union (EAEU) countries like Russia and Belarus, increased focus on the potential of the Trans-Caspian International Transport Route (TITR, the Middle Corridor), the China-Kyrgyzstan-Uzbekistan (CKU) railway as part of a second Middle Corridor, and the International North-South Transport Corridor (INSTC). Against this backdrop, Russia, China, the United States, and Europe have each developed their connectivity strategies, leading to varying interaction scenarios of “connectivity wars” or collaborative network building, depending on the geopolitical dynamics of different sub-regions within Eurasia. In this context, Central Asia’s pivotal role in Eurasian connectivity is becoming increasingly prominent, positioning it to potentially emerge as a new connectivity hub within Eurasia and lead the construction of a connectivity network spanning the entire continent.*

**Keywords:** *Eurasia; connectivity security; geopolitical challenges; collaborative opportunities*

### Introduction

In its most basic sense, “connectivity” refers to “the characteristic, or order, or degree, of being connected (in various senses),” with the root word “connect” meaning “to join, fasten, or link together: said either of the personal agent or the connecting medium or instrumentality.” Emphasizing the logical interrelation between things, this concept has been widely applied across disciplines such as mathematics, computer science, and biology. In international relations, connectivity is used in economic, financial, energy policy, and infrastructure development to describe the increasing interconnectedness between actors, ranging from individuals to states, in a globalized world and the growing complexity of these interconnected networks. More abstractly, connectivity can be defined as actions intentionally taken to shorten the distance between different countries, peoples, and societies through material or non-material means. Specifically, connectivity encompasses six distinct domains: material infrastructure, economic transactions, institutions, knowledge exchange, socio-cultural exchange, and security.

It is crucial to note that connectivity in international relations is far from a mere conceptual discussion; it is often linked with major global powers' connectivity initiatives and practices. For instance, China’s Belt and Road Initiative (BRI) is one of the most prominent global connectivity initiatives, aiming to enhance policy coordination, infrastructure connectivity, unimpeded trade, financial integration, and

closer people-to-people ties (the Five-Pronged Approach) along the Belt and Road. Given that the “Belt” in the BRI refers to the “Silk Road Economic Belt,” which spans the entire Eurasian continent, Russia, seeking parity with China in Eurasian connectivity, proposed the “Greater Eurasian Partnership” as a counterbalance to the BRI. However, in light of the friendly relations between China and Russia, the cooperation between these initiatives outweighs their competition. On the other hand, the European Union’s “Global Gateway” initiative and the “Blue Dot Network” proposed by the United States and its Asia-Pacific allies are more competitive. For example, the “Blue Dot Network”, by emphasizing quality and sustainability, seeks to differentiate itself from China’s BRI. Although the U.S. and its allies usually avoid direct criticism (or even mention) of China and the BRI, their implicit aim is to portray Western-funded projects as representing higher quality and sustainability standards than China’s initiatives.

Despite the various connectivity initiatives proposed by major global powers, and considering the geopolitical significance of the Eurasian continent as the core area of these initiatives, discussions of “Eurasian connectivity” should transcend the frameworks of individual countries or organizations. Instead, the concept should be understood regarding the broader material and non-material linkages among different countries, peoples, and societies across Eurasia. However, to make the analysis more focused, and considering that material infrastructure plays a fundamental role and has a driving and radiating effect on other domains within the six main areas of connectivity mentioned earlier, this domain will be the primary focus of the discussion, with different regions addressed briefly.

By clearly defining and operationalizing the concept of “connectivity” within the Eurasian context, it becomes evident that recent geopolitical upheavals—such as the escalation of the Russia-Ukraine conflict, the subsequent Western sanctions on Russia, and geopolitical tensions in the Middle East, including the Israel-Palestine conflict and the Red Sea crisis—pose significant threats and challenges to connectivity security across Eurasia. The following sections will outline and analyze these challenges, explore the opportunities for developing Eurasian connectivity within this context, examine major powers' connectivity strategies and interactions in the Eurasian region, and ultimately highlight Central Asia's primary role and development potential in Eurasian connectivity.

### **Challenges to Eurasian Connectivity Security Amidst Geopolitical Turbulence**

From the perspective of transportation infrastructure, the escalation of the Russia-Ukraine conflict since 2022 and the unprecedented Western sanctions on Russia have severely impacted two major international corridors passing through Russia—the Northern and Central Eurasian Corridors. According to the Eurasian Development Bank (EDB), the Eurasian transportation network is primarily composed of five internationally recognized corridors (Figure 1): the Northern Eurasian Corridor, the

Central Eurasian Corridor, the Transport Corridor Europe-Caucasus-Asia (TRACECA), including the Middle Corridor), the International North-South Transport Corridor (INSTC), and the Southern Eurasian Corridor. Among these, the Northern Corridor, including the Trans-Siberian Mainline and the Baikal–Amur Mainline, is the principal artery of Eurasian land transportation, accounting for over 62% of the total international land freight volume of the five corridors, including 72% of the total container transport (2.6 million TEUs). The Central Eurasian Corridor primarily traverses China, Russia, and Kazakhstan, offering the shortest route between China, the EAEU countries, and Western Europe. In 2023, this corridor accounted for 5.7% of the total international freight volume across the five corridors while representing 25.3% of the container deliveries. However, the Russia-Ukraine conflict and Western sanctions against Russia have significantly decreased rail traffic between Europe and China through these two corridors. On the one hand, transit container shipments through the Northern Corridor dropped sharply to just 300,000 TEUs in 2022-2023. Conversely, the transit volume of China-EU-China shipments through the two major border crossings of the Central Corridor—Dostyk and Altynkol—decreased by 49%, dropping from 410,600 TEUs to 211,100 TEUs. The underlying logic is that, amidst geopolitical instability, the increase in insurance costs, the desire to avoid sanctions or secondary sanctions, and the risk of European bans on transiting through Russia have led more clients to choose routes that bypass Russia. Consequently, the roles of the Northern and Central Corridors as transit routes between China and Europe have significantly diminished.

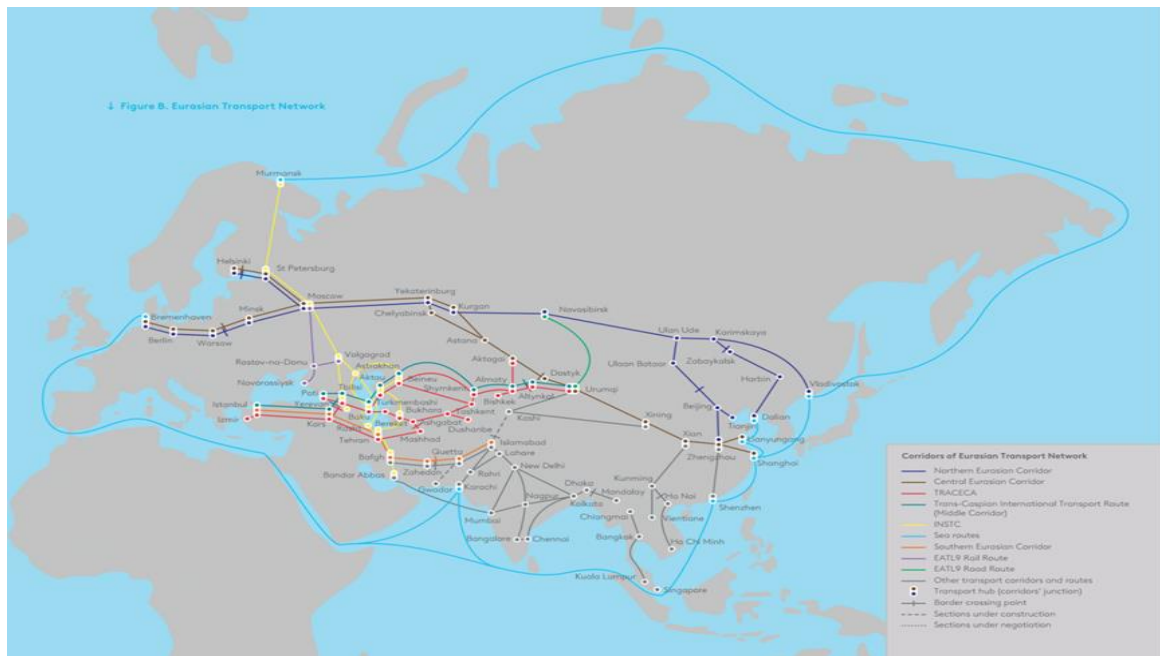


Figure 1: The Eurasian Transport Network. (Source: Eurasian Development Bank. [https://www.researchgate.net/publication/381711684\\_Eurasian\\_Transport\\_Network](https://www.researchgate.net/publication/381711684_Eurasian_Transport_Network))

In maritime transport, geopolitical factors have similarly impacted traditional

shipping routes. For example, the shipping volume through the Red Sea has dropped by 60% due to Houthi attacks on cargo ships, whereas this route previously carried about 40% of Eurasian trade. This loss has been partially offset by rerouting shipments via the Cape of Good Hope and by air or land transport of some goods, but these alternative methods are often more expensive and sometimes more time-consuming. The escalation of conflicts in the Middle East and rising tensions in the South China Sea are potential threats to Eurasian maritime transport. Meanwhile, despite Russia's eagerness to expand investment in the Northern Sea Route (NSR), Western sanctions against Russia have led to a boycott of this northern maritime corridor, causing a significant decrease in shipping volumes. In 2023, westbound shipping volumes through the NSR decreased by 51% compared to the previous year. In the short term, the lack of and inadequacy in port infrastructure, the unpredictability of the Arctic region, path dependency on traditional routes, and fears of Western sanctions will limit the development of the NSR as a viable alternative to the Suez and Panama Canals.

Against this backdrop, the transport network connecting Eurasia is experiencing a certain degree of "congestion." On the one hand, the Red Sea crisis has limited the capacity of traditional routes. At the same time, the Northern Sea Route remains far from being a substitute due to natural factors, infrastructure limitations, and Western sanctions. On the other hand, the shift in pressure from maritime transport to land-based networks, coupled with Russia's prioritization of meeting defense-related transportation needs, has resulted in difficulties such as cargo backlogs and skyrocketing shipping costs. For instance, the China-Europe railway route through the China-Kazakhstan border is currently experiencing significant delays, prolonging transit times and driving up shipping costs. The average rental fee for a 40ft HC container from China to Europe increased by 51% within a month, from \$1,463 in June 2024 to \$2,223 in early July.

Beyond transportation, energy infrastructure connectivity also faces challenges. In Russia-Europe energy trade, for example, energy infrastructure has become a tool and casualty of geopolitical games. Before the special military operation in February 2022, Russia supplied approximately 40% of Europe's natural gas. Following the escalation of the Russia-Ukraine conflict, Russia cut off most supplies through the Baltic Sea and Belarus-Poland pipelines, citing disputes over ruble payment demands as a pretext to pressure Europe. To exacerbate the situation, although the exact cause remains unclear, geopolitical motives likely led to sabotaging the Nord Stream pipelines, further deteriorating the connectivity of the Russia-Europe energy infrastructure. Europe viewed Russia's gas cutoff as energy blackmail and set a plan to stop importing Russian natural gas by 2027 completely. With an energy crisis, Germany was forced to build floating terminals to import liquefied natural gas (LNG) via ships rather than pipelines. At the same time, Norway and the United States

seized the opportunity to fill Europe's gas gap and became the two largest gas suppliers to the region. This chain reaction triggered by the Russia-Ukraine conflict reshapes Europe's energy trade network and infrastructure landscape.

Energy infrastructure's politicization is also evident in Central Asia, with Kazakhstan being a prominent example. About 80% of Kazakhstan's crude oil is exported through the Caspian Pipeline Consortium (CPC), which traverses Russian territory and seaports, making Kazakhstan heavily dependent on Russia for its oil exports. Consequently, Russia frequently leverages Kazakhstan's dependence on its pipelines to achieve political objectives. In 2022, within just six months after Russia launched its special military operation, the CPC pipeline experienced four interruptions attributed to reasons such as equipment damage, the discovery of explosives, and environmental regulation violations. For instance, a Russian court ordered the pipeline to shut down in July due to ecological regulation breaches. Although transportation resumed a few days later, analysts saw this brief shutdown as a warning from the Kremlin, as it occurred in the context of Kazakh President Tokayev offering Kazakhstan's energy resources to Europe to mitigate the impact of the Russia-Ukraine conflict. In response, Kazakhstan is seeking to diversify its oil export routes by exploring the potential of the Baku-Tbilisi-Ceyhan (BTC) pipeline. These examples illustrate how, driven by geopolitical motives, energy infrastructure connectivity in the Eurasian region faces numerous challenges and is undergoing unprecedented adjustments.

It is essential to recognize that the challenges to Eurasian connectivity security extend beyond physical infrastructure. By applying the analytical framework developed by Gaens et al., challenges in other domains can also be identified. First, in the economic domain, the Russia-Ukraine conflict and Western sanctions have severely disrupted Eurasian economic linkages. Beyond the structural shifts in energy trade mentioned above, geopolitical changes have allowed Russia to reintegrate and strengthen economic ties with Central Asia. For instance, Russia-Kazakhstan economic cooperation reached record levels in 2022 and 2023, with trade volumes amounting to \$26 billion and \$27 billion, respectively. Meanwhile, Central Asian countries' desire for diversified economic partnerships aligns with China's intent to strengthen ties with Belt and Road countries. Between 2022 and 2023, trade between China and Central Asian countries increased by 27%. Western sanctions have excluded Russia from the SWIFT payment system in the financial domain, significantly disrupting and reshaping Russia's economic transactions with Eurasian countries. Russia is now promoting its domestic financial messaging system, SPFS, and opening direct correspondent accounts between lending institutions to conduct financial and trade cooperation with other countries.

Second, at the institutional level, existing international mechanisms are encountering new global dynamics. For instance, with Russia's strategic resources deeply entangled

in the Ukraine conflict, the prospects for implementing the “Greater Eurasian Partnership” plan appear increasingly bleak. For the more tightly integrated Eurasian Economic Union (EAEU), the passenger transport infrastructure initially intended to facilitate labor migration to Russia, along with preferential measures in cross-border management such as visa-free agreements, is now being repurposed to accommodate reverse migration from Russia.

Third, in the knowledge domain, geopolitical tensions resulting from the Russia-Ukraine conflict have negatively impacted regional research and cooperation, particularly in military and energy technology. Western countries have imposed strict and secondary sanctions to limit the export of high-tech products and expertise to Russia, which will undoubtedly negatively impact Russia's scientific development and collaborative research efforts and its partners.

Fourth, in the socio-cultural exchange domain, the Western countries’ geopolitical isolation of Russia has also extended to socio-cultural exchanges, leading to a sharp decline in people-to-people and cultural interactions between Russia and Western countries. On the other hand, the influx of predominantly young, highly skilled urban migrants from Russia is expected to impact the economies of Central Asian countries positively. This migration could foster entrepreneurship, drive technological innovation, and enhance overall labor productivity in Central Asia despite representing an inevitable loss of high-quality human capital for Russia.

Fifth, in the security realm, mainly due to Russia’s diminishing willingness and capacity to engage in other regions against the escalating Russia-Ukraine conflict, specific traditional security linkages are weakening while new security connections emerge. For example, during the 2020 Nagorno-Karabakh conflict, Russia declined to provide direct support to Armenia. In 2021 and 2022, the Russia-led Collective Security Treaty Organization (CSTO) twice rejected Armenia’s requests for assistance. In this context, Armenia has strategically distanced itself from Russia, opting to freeze its participation in the CSTO. At the same time, in pursuit of more diversified military support, Armenia has actively sought military cooperation with the United States and Europe, taking steps such as conducting joint military exercises with the United States and procuring military equipment from France.

### **Potential Opportunities for the Broader Eurasian Connectivity**

As the previous analysis demonstrates, geopolitical shifts have posed numerous challenges to the key pillars of Eurasian connectivity. They are profoundly influencing and even reshaping the connectivity network across the region. However, amidst these challenges, there are significant opportunities for developing Eurasian connectivity, particularly in material infrastructure, which we will analyze further.

Firstly, the substantial operation and stable growth of the China-Europe Railway Express (CR Express) will help maintain and enhance the connectivity functions of the

Northern and Central Eurasian Corridors. As an international rail freight service running between China and Europe, as well as other Belt and Road countries, the three main routes of the CR Express largely overlap with the Northern and Central Eurasian Corridors and hence pass through Russia. Despite the significant impact of the Russia-Ukraine conflict and Western sanctions against Russia on the volume of freight traffic between China and Europe via these corridors, the surge in trade between China and EAEU countries such as Russia and Belarus and the corresponding increase in demand for rail freight, have partially offset this impact, maintaining and even boosting the volume of CR Express shipments. From January to July 2022, freight volumes between China and the EU via the CR Express significantly declined, with westbound volumes dropping by 24% and eastbound volumes by 35%. However, the 30% surge in China-Russia trade during the same period, coupled with the increased demand for rail transport, resulted in the CR Express carrying 869,000 TEUs.

Although this is modest compared to the previous annual growth rate of over 20%, it still achieved a 4% year-on-year increase. In 2023, the freight volume between China and European countries via the CR Express further decreased, dropping by 48.57% compared to 2022, reaching only one-third of the 2021 level. Nevertheless, fueled by the rapid expansion of trade between China and EAEU countries like Russia and Belarus, along with the opening and use of new ports, the CR Express maintained its growth and saw a rebound in growth rates. In 2023, the CR Express operated 17,000 trips, transporting 1.9 million TEUs, representing 6% and 18% annual increases, respectively. Among these, the freight volume between China and EAEU countries reached 462,900 TEUs, marking a 71% increase compared to 2022. Furthermore, factors such as strengthened coordination of domestic and international transportation, enhanced port transshipment capacity, and the facilitation of customs procedures through the digital transformation and upgrading of border ports have further boosted the freight volume of the CR Express. From January to July 2024, the CR Express operated 11,403 trains, transporting 1.226 million TEUs, with 12% and 11% yearly increases, respectively. Notably, the three main routes—Western (via Alashankou and Khorgos ports), Central (via Erenhot port), and Eastern (via Manzhouli, Suifenhe, and Tongjiang North ports)—all experienced year-on-year growth of 15%, 22%, and 2%, respectively.

Secondly, as the most promising alternative route to the Northern and Central Eurasian Corridors, the potential of the Trans-Caspian International Transport Route (TITR, also known as the Middle Corridor) is gradually gaining recognition and development. The Middle Corridor is a multimodal trade route from the Black Sea and the Caucasus to the Central Asian steppes, and it serves as a crucial artery connecting the markets of China, East Asia, and Europe. The countries and regions along this corridor include China, Central Asia (currently mainly Kazakhstan, with the

future potential of Uzbekistan, Kyrgyzstan, and Turkmenistan to increase), the South Caucasus (currently mainly Azerbaijan and Georgia, with Armenia also expected to play a more active role in the corridor's development), Turkey, and the Black Sea countries in Europe. Compared to the 19-day transit time of the Northern Corridor passing through Russia and the 22-37 days voyage of the Southern maritime route via the Red Sea, the estimated 14-18 days transit time makes the Middle Corridor a desirable option for commercial shipping. Against the backdrop of geopolitical changes, the potential of the Middle Corridor as an alternative to the Northern and Central Corridor is becoming increasingly evident. In 2023, the total rail freight volume along the TITR reached 2.76 million tons, an 86% increase from 2022, with container shipments via the TITR (20,200 TEUs) accounting for over 60% of the total along the entire Europe-Caucasus-Asia corridor. The growth in westbound shipments was particularly remarkable, with the freight volume in that direction reaching 891,100 tons in 2022, an increase of 6.5 times compared to 2021.

However, the complexity of transit procedures, underdeveloped infrastructure (e.g., low port throughput), and existing geopolitical risks (e.g., the Armenia-Azerbaijan conflict) have limited the operational efficiency of the Middle Corridor. Nevertheless, with increased attention and investment from all parties in the Middle Corridor (as detailed below), the corridor's future development holds great promise. According to the World Bank's optimistic forecast, by 2030, freight volume along the TITR is expected to double. The eastward transport to and from Kazakhstan and the westward transport to and from Turkey are anticipated to be the main drivers of this growth. Meanwhile, the development of the TITR is expected to increase rail freight between China and Turkey/Europe by 16% (reaching 2.3 million tons by 2030), which in turn will drive a 30% increase in freight volume along the TITR.

As a potential component of the second Middle Corridor, the China-Kyrgyzstan-Uzbekistan (CKU) Railway is highly anticipated for its role in enhancing Eurasian connectivity. China has consistently emphasized the Middle Corridor as a vital route within the Belt and Road Initiative (BRI). In May and October 2023, Chinese President Xi Jinping expressed support for the construction of the TITR at the inaugural China-Central Asia Summit and the Third Belt and Road International Cooperation Forum, respectively. China has also actively cooperated with countries like Georgia and Kazakhstan to improve infrastructure along the corridor further and expand the transportation potential of the Middle Corridor.

On the other hand, the CKU Railway's ongoing construction is considered a crucial component of the second Middle Corridor. On June 6, 2024, the signing ceremony for the CKU Railway project agreement between the governments of China, Kyrgyzstan, and Uzbekistan took place in Beijing. Chinese President Xi Jinping, Kyrgyz President Sadyr Japarov, and Uzbek President Shavkat Mirziyoyev expressed their appreciation for the project's strategic significance in enhancing connectivity between China and



Central Asia. According to the agreement, the railway will start from Kashgar, cross the border at Torugart, pass through cities like Makmal and Jalal-Abad in Kyrgyzstan, and finally reach Andijan in Uzbekistan. According to information from the Kyrgyz side, the three countries plan to sign an investment agreement in September and commence construction of the CKU Railway in October. Upon completion, the railway is expected to transport approximately 15 million tons of goods annually, shortening the transportation route by 900 kilometers and saving about 7-8 days in transit time. The completion of the CKU Railway is also expected to invigorate cross-border cooperation in the Ferghana Valley, improve employment conditions for the populations along the route, help address Central Asia's integration into the global economy, and further connect East Asia, Central Asia, South Asia, the Middle East and Europe.

Thirdly, the International North-South Transport Corridor (INSTC), a core north-south axis of the Eurasian transport network, is set to play an increasingly significant role with robust support from the countries along its route. The INSTC comprises three primary routes: the western route, which connects Russia, Azerbaijan, and Iran, linking to TRACECA (including the TITR) near Baku; the eastern route, which utilizes a direct rail link through Kazakhstan and Turkmenistan, entering Iran's rail network via the Turkmenistan-Iran border crossing; the Caspian Sea route is a multimodal transport corridor that includes numerous seaports in Russia and Iran, which are further connected with roads, railways, and inland waterways. These routes demonstrate the key values of the INSTC: it can link Russia, the Baltic and Scandinavian countries, Central Asian states, and the Persian Gulf while also connecting with latitudinal international transport corridors, thereby achieving broader connectivity. Additionally, the corridor provides a vital route for Russia's southbound trade, including the export of grain from southern Russia and the Volga region, industrial products from the Chelyabinsk and Sverdlovsk regions, mineral waste from the Perm Krai, and containerized goods from agglomerations of Moscow and St. Petersburg to countries along the route. This is particularly significant in the context of Western sanctions against Russia. In 2023, the total freight volume along the three routes of the INSTC reached 19 million tons, with rail transport accounting for 12.5 million tons, and with further infrastructure development, the corridor is expected to realize even more significant potential.

### **Key Players in Eurasian Connectivity and Central Asia's Pivotal Role**

As we address the challenges and explore the opportunities for Eurasian connectivity, it becomes clear that several key players—Russia, China, the United States, and Europe—and Central Asia's increasingly pivotal role are shaping the region's connectivity landscape. These countries possess distinct strategic interests and connectivity strategies in an era of significant global shifts.

Russia: As the Russia-Ukraine conflict escalates and relations between Russia and the United States and other Western countries deteriorate due to the sanctions, Russia's connectivity strategy has pivoted towards the "East" or, more accurately, towards the

“non-West”. This strategy is reflected in Russia’s strengthened trade cooperation with China, leading to a rapid increase in goods transported between the two countries and sustaining the connectivity functions of the Northern and Central Eurasian Corridors. Simultaneously, Russia is actively developing other connectivity routes, such as the INSTC, to establish broader ties with non-Western major economies and non-European markets in the Eurasian space. Moreover, in light of the evolving international landscape, Russia is increasingly cooperating with its partner, China, in Central Asia. For example, in recent years, Russia has not only ceased opposing the construction of the CKU Railway but has repeatedly emphasized the importance of aligning the EAEU with China’s BRI in various international forums.

**The United States and Europe:** The primary goal of the United States and European countries in the Eurasian region is to sanction and isolate Russia while enhancing their position and influence in Eurasian connectivity. Guided by this objective, the U.S. and Europe actively support the construction of the Middle Corridor, which bypasses Russia. For instance, during the inaugural U.S.-Central Asia “C5+1” Summit in September 2023, the U.S. and Central Asian countries emphasized accelerating the economic development, energy security, and connectivity of the Middle Corridor. They decided to establish a new mechanism—the C5+1 Regional Connectivity Ministerial—to further coordinate concrete actions. In June and July 2024, U.S. Trade Representative Katherine Tai and Acting Special Coordinator for the Partnership for Global Infrastructure and Investment (PGI) Helaina Matza made successive visits to Central Asia. The primary purpose of these visits was to discuss promoting the construction of the Middle Corridor, including strategic investments in infrastructure, thereby enhancing the role of the United States in the Middle Corridor’s development and balancing China and Russia’s influence in Eurasian connectivity. Meanwhile, Europe is also actively participating in its development as a direct beneficiary of the Middle Corridor. Based on the outcomes of the EU-Central Asia Transport Connectivity Investors Forum, in June 2024, the Coordination Platform for the Trans-Caspian Transport Corridor was launched by the European Commission and Kazakhstan in Astana. The platform aims to “turn the corridor into a sustainable, competitive, and efficient route”.

**China:** Under the guidance of the BRI, China has adopted a comprehensive strategy of inclusive development in Eurasian connectivity. On the one hand, China’s trade cooperation with Russia is deepening, revitalizing the growth of the China-Europe Railway Express through the Northern and Central Eurasian Corridors. On the other, China also highly values its collaboration with Europe. Although geopolitical tensions have led to a decline in trains between China and Europe, the CR Express has maintained a particular scale of operation.

Moreover, the continuous export of China’s “new trio” of high-value-added products—new energy vehicles, lithium-ion batteries, and photovoltaic products—

alongside the steady influx of European agricultural products, high-tech goods, and artificial intelligence products into the Chinese market has fueled the growth of rail transport between China and Europe. Furthermore, China actively supports the development of the existing TITR and the second Middle Corridor, including the China-Kyrgyzstan-Uzbekistan railway. In summary, with a cooperative and win-win approach, China supports the construction of Eurasian connectivity corridors across the board and deepens cooperation with Eurasian countries along these corridors.

As these significant powers actively construct Eurasian connectivity, analyzing the potential conflicts and opportunities will help us understand Eurasian connectivity's current state and prospects. Experts and scholars hold varying views on the interactions among different connectivity strategies. Some pessimists, such as Mark Leonard, Director of the European Council on Foreign Relations, have proposed the concept of “connectivity wars,” arguing that conflicts in the modern era are no longer traditional armed conflicts but rather competitions through connectivity measures. In this scenario, power is exercised through “control over flows of ideas, people, goods, money and data, and via the connections they establish,” meaning states can strike opponents by controlling information flows, financial systems, or supply chains. Optimists, like experts from the Eurasian Development Bank, believe that different connectivity projects—such as the east-west and north-south corridors in Eurasia—can bring synergies to transportation and logistics, enhancing connectivity and economic ties. A more neutral view suggests that the U.S., Russia, and China are pursuing a “dual balance” logic in Eurasian connectivity, aiming to reconcile each country’s dual demands of development and security to maintain a “manageable competition and cooperation” framework in the region, thereby avoiding any single party establishing a hegemonic order.

This paper argues that both “connectivity wars” and the objective synergies among different connectivity strategies coexist in Eurasia. As a result, the tendencies of containment, competition, and cooperation among major powers in the realm of connectivity also coexist. Specifically, since connectivity projects are primarily in the low-political tier, they are, on the one hand, strongly influenced by geopolitical competition, as seen in the significant impact of the escalation of the Russia-Ukraine conflict and Western sanctions on the roles of the Northern and Central Eurasian Corridors as transit routes between China and Europe. On the other hand, in regions where high-political military and diplomatic competition is less intense, competition among different projects is relatively subdued and more driven by economic logic, considering transportation costs and supply chain needs. This means that the development of Eurasian connectivity will be shaped by different factors depending on the level of geopolitical tension in other sub-regions.

In other words, for the Northern and Central Corridors involving Russia and the West, their development prospects resemble a “connectivity war,” with Western countries

attempting to isolate Russia by controlling the flow of goods and finances. At the same time, Russia actively seeks to break out of this isolation by turning towards the East and deepening cooperation with China and other partners. For corridors in regions with less intense geopolitical competition, such as the Middle Corridor and the INSTC, geopolitical motives may influence the investment preferences of different countries, and particular competition may arise when selecting specific routes and projects due to differing national interests. However, due to the less intense geopolitical competition in these regions, the geopolitical significance of connectivity projects is less pronounced. Moreover, as projects of different countries could help form an interconnected network, generating synergy and positive spillover effects, economic logic and the theme of cooperation are more likely to dominate the construction of connectivity corridors in these areas. Namely, the involvement of Russia, China, the Western powers, and other countries along these routes will objectively foster a collaborative environment for actively building the Eurasian connectivity network, potentially leading to the flourishing and interconnection of these corridors until a more integrated and advanced Eurasian connectivity network is established.

Central Asia: Due to its advantageous and strategically significant geographic location, it plays an undeniably crucial role in this context. On the one hand, for the Eurasian connectivity network, three of the five Eurasian corridors—the Central Eurasian Corridor, the TRACECA, and the INSTC—pass through Central Asia. Central Asia is a crucial transportation hub connecting Russia, China, Europe, the Middle East, and South Asia. On the other hand, for the Central Asian countries themselves, further developing existing connectivity networks and constructing new connectivity projects will help break Central Asia's landlocked isolation and integrate it more closely with the broader Eurasian and global economies. Moreover, to gain influence in Eurasian connectivity, external powers are actively deepening their cooperation with Central Asian countries, adopting measures including but not limited to high-level visits, leveraging international organizations or summits to strengthen commitments, signing a series of cooperation agreements, and investing in various connectivity projects. In this regard, Central Asia, the Silk Road jewel, again highlights its central role in Eurasian connectivity. Moreover, the outlook for connectivity development in Central Asia is promising. By 2030, freight volumes along the three main corridors traversing Central Asia are expected to increase by 1.5 times, reaching 95 million tons. Container transport is expected to grow faster, rising by nearly two-thirds to 1.7 million TEUs.

## **Conclusion**

In summary, the escalation of the Russia-Ukraine conflict and Western sanctions against Russia have profoundly and multidimensionally impacted Eurasian connectivity, presenting challenges and opportunities. In the realm of material infrastructure, geopolitical upheavals have significantly reduced the roles of the

Northern and Central Eurasian Corridors as transit routes between China and Europe and have also disrupted and hindered maritime transport. At the same time, adjustments in energy policies in Europe and Russia have led to significant changes in the Eurasian energy trade network and connectivity infrastructure. Moreover, Russia's control of oil and gas pipelines is frequently used for political purposes to counter Europe and threaten Central Asian countries. Beyond these issues, other domains of Eurasian connectivity—such as the economy, institutions, knowledge, socio-cultural exchange, and security—are also facing challenges and shocks brought about by geopolitical changes.

Conversely, opportunities for the development of Eurasian connectivity also exist. For example, the decline in rail freight between China and Europe has been partially offset by deepening cooperation between China and EAEU countries like Russia and Belarus, which has ensured the substantial operation and stable growth of the CR Express, maintaining and promoting the significance of the Northern and Central Corridors in Eurasian connectivity. As the most promising alternative to these two corridors, the Middle Corridor is progressively gaining recognition and development, including increased support and investment in existing transport routes and advancements on emerging routes such as the CKU Railway. Additionally, the INSTC, which is crucial for helping Russia break through Western economic blockades, is also developing rapidly. As a north-south axis, this corridor also contributes to connecting latitudinal corridors, thereby promoting the construction of a comprehensive connectivity network and realizing the positive spillover effects of this network.

Russia, China, the United States, and Europe have developed connectivity strategies in a rapidly changing international environment. Russia is actively pursuing a “pivot to the East” in its connectivity strategy, strengthening cooperation with China and welcoming greater alignment with China's connectivity initiatives. Simultaneously, Russia is actively promoting the construction of the INSTC to enhance its ties with other non-Western countries. In contrast, the connectivity strategies of the United States and European countries in Eurasia focus on sanctioning and isolating Russia while bolstering their positions and influence. In contrast, China adopts an open stance, welcoming cooperation with Russia and Europe while actively promoting the development of the Middle Corridor and other initiatives in partnership with Central Asian countries. Given that connectivity projects primarily fall within the low-political tier, the interactions between these major powers in Eurasian connectivity strategies vary depending on the geopolitical intensity of different sub-regions. The Northern and Central Corridors appear to be facing a “connectivity war,” with Western countries attempting to isolate Russia by controlling the flow of goods and finances. At the same time, Russia actively seeks to shift towards the non-West to break out of this isolation. However, the Middle Corridor and other alternative routes offer more opportunities for cooperation, with all parties objectively contributing to the joint

development of a Eurasian connectivity network in these regions. Central Asia's pivotal role in Eurasian connectivity is becoming increasingly prominent, positioning it as a critical focus for external powers seeking engagement. Suppose Central Asian countries can seize this opportunity and actively cooperate with relevant parties. In that case, they have the potential to build a connectivity network spanning the Eurasian continent and rise as a new connectivity hub within Eurasia.

### **Bibliography:**

- Oxford English Dictionary. (n.d.). Connectivity. In Oxford English Dictionary. Retrieved August 27, 2024, from <https://www.oed.com/search/dictionary/?scope=Entries&q=connectivity>
- Oxford English Dictionary. (n.d.). Connect. In Oxford English Dictionary. Retrieved August 27, 2024, from <https://www.oed.com/search/dictionary/?scope=Entries&q=connect>
- Buzna, V., Goreczky, P., Salát, G., & Trembeczki, Z. (2024, February 22). Connectivity: Exploring the Concepts Behind Today's Geoeconomic Buzzword. Magyar Külügyi Intézet. [https://hiia.hu/wp-content/uploads/2024/02/0222\\_Connectivity.pdf](https://hiia.hu/wp-content/uploads/2024/02/0222_Connectivity.pdf)
- Kacperek, M. (2020, October 21). (Re)defining Connectivity. Warsaw Institute. <https://warsawinstitute.org/redefining-connectivity/>
- Gaens, B., Sinkkonen, V., & Vogt, H. (2023). Connectivity and Order: An Analytical Framework. *East Asia*, 40(3), 209-228.
- Silvan, K., & Kaczmarek, M. (2023). Russia's Approach to Connectivity in Asia: From Cooperation to Coercion. *East Asia*, 40(3), 317-334.
- Buzna, V., Goreczky, P., Salát, G., & Trembeczki, Z. Connectivity: Exploring the Concepts Behind Today's Geoeconomic Buzzword.
- Vinokurov, E. (Ed.), Amangeldy, S., Ahunbaev, A., Zaboev, A., Kuznetsov, A., & Malakhov, A. (2024). The Eurasian Transport Network. Reports 24/6. Almaty: Eurasian Development Bank. [https://www.researchgate.net/publication/381711684\\_Eurasian\\_Transport\\_Network](https://www.researchgate.net/publication/381711684_Eurasian_Transport_Network)
- Silvan, K., & Kaczmarek, M. Russia's Approach to Connectivity in Asia: From Cooperation to Coercion.
- Capolongo, A., & Kühl, M. (2024, June 27). Butterfly Effect of Geopolitical Conflicts. European Stability Mechanism (ESM). <https://www.esm.europa.eu/blog/butterfly-effect-of-geopolitical-conflicts>
- Kepe, M. (2024, March 12). The Middle Corridor: A Renaissance in Global Commerce. RAND Corporation. <https://www.rand.org/pubs/commentary/2024/03/the-middle-corridor-a-renaissance-in-global-commerce.html>
- Lewis, R. (2024, July 9). Threat of Sanctions is Holding Back the Northern Sea Route. Lloyd's List. <https://www.lloydslist.com/LL1149837/Threat-of-sanctions-is-holding-back-the-northern-sea-route>
- Singh, V., & Munroe, A. (2023, November 22). China-Europe Railway Express. Container xChange. [https://www.container-xchange.com/blog/china-europe-railway-express/#china\\_europe\\_railway\\_express\\_map](https://www.container-xchange.com/blog/china-europe-railway-express/#china_europe_railway_express_map)
- Euronews. (2024, August 15). Why Is Europe Still Getting Gas from Russia? <https://www.euronews.com/2024/08/15/why-is-europe-still-getting-gas-from-russia>
- Kumenov, A. (2022, August 23). Kazakh Oil Exports Across Russia Interrupted for Fourth Time This Year. Eurasianet. <https://eurasianet.org/kazakh-oil-exports-across-russia-interrupted-for-fourth-time-this-year>
- Griffin, R. (2023, May 24). Kazakhstan Diversifying Oil Export Routes to Mitigate Impact of Ukraine Conflict. S&P Global Commodity Insights. <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/oil/052423-interview-kazakhstan-diversifying-oil-export-routes-to-mitigate-impact-of-ukraine-conflict>
- Mallinson, K. (2024, February 29). Russia's Influence in Kazakhstan Increasing Despite the War in Ukraine. Chatham House. <https://www.chathamhouse.org/2024/02/russias-influence-kazakhstan-increasing-despite-war-ukraine>

- Hackenesch, C., Huterer, M., Pepe, J. M., & Schmitz, A. (2024). The Geopolitics of Connectivity: Implications for Europe. SWP Comment 35/2024. <https://www.swp-berlin.org/10.18449/2024C35/>
- Silvan, K., & Kaczmarek, M. Russia's Approach to Connectivity in Asia: From Cooperation to Coercion. Oshchepkov, A., Tilekeyev, K., & Gerry, C. (2024, February 15). How War in Ukraine Has Shaped Migration Flows in Central Asia. University of Central Asia. <https://ucentralasia.org/publications/2024/february/how-war-in-ukraine-has-shaped-migration-flows-in-central-asia>
- Lemoine, J. (2022, September 27). Rail Freight: The Reconfiguration of the China-Europe Market. Upplify. [https://market-insights.upply.com/en/rail-freight-the-reconfiguration-of-the-china-europe-market#\\_ftn1](https://market-insights.upply.com/en/rail-freight-the-reconfiguration-of-the-china-europe-market#_ftn1)
- Bachmann, J. (2024, January 24). Overview of China-Europe Rail Freight Data 2023. New Silk Road Discovery. <https://www.newsilkroaddiscovery.com/overview-of-china-europe-rail-freight-data-2023/>
- Pakulniewicz, M. (2024, March 8). Challenges in China-to-Europe Rail Freight. Trans.INFO. <https://trans.info/en/challenges-china-to-europe-381009>
- The State Council of the People's Republic of China. (2024, August 8). 前7月中欧班列开行超1.1万列 [Over 11,000 China-Europe freight trains operated in the first seven months]. [http://www.gov.cn/yaowen/liebiao/202408/content\\_6967592.htm](http://www.gov.cn/yaowen/liebiao/202408/content_6967592.htm)
- Kepe, M. (2024, March 12). The Middle Corridor: A Renaissance in Global Commerce. RAND Corporation. <https://www.rand.org/pubs/commentary/2024/03/the-middle-corridor-a-renaissance-in-global-commerce.html>
- Vinokurov, E. (Ed.), Amangeldy, S., Ahunbaev, A., Zaboev, A., Kuznetsov, A., & Malakhov, A. The Eurasian Transport Network.
- World Bank. (2023). Middle Trade and Transport Corridor: Policies and Investments to Triple Freight Volumes and Halve Travel Time by 2030. <https://www.worldbank.org/en/region/eca/publication/middle-trade-and-transport-corridor>
- Wan, Q. (2024, August 11). 开发中间走廊·中亚会陷入“互联互通战争”吗？ [Developing the Middle Corridor: Will Central Asia Be Caught in a “Connectivity War”?]. <https://baijiahao.baidu.com/s?id=1807052361273153891&wfr=spider&for=pc>
- Vinokurov, E. (Ed.), Amangeldy, S., Ahunbaev, A., Zaboev, A., Kuznetsov, A., & Malakhov, A. (2024). The Eurasian Transport Network.
- Sánchez, W. A. (2024, June 20). The West Is Laser-Focused on Central Asia's Middle Corridor. So Is China. The Diplomat. <https://thediplomat.com/2024/06/the-west-is-laser-focused-on-central-asias-middle-corridor-so-is-china/>
- Intercontinental freight train services boom in 2024, an epitome of closer cooperation, not competition, between China and Europe: experts. (2024, May 7). Global Times. <https://www.globaltimes.cn/page/202405/1311837.shtml>
- Leonard, M. (2021). The Age of Unpeace: How Connectivity Causes Conflict. London: Bantam Press, p. 144.
- Vinokurov, E. (Ed.), Amangeldy, S., Ahunbaev, A., Zaboev, A., Kuznetsov, A., & Malakhov, A. The Eurasian Transport Network.
- Wan, Q. (2024, August 11). 开发中间走廊·中亚会陷入“互联互通战争”吗？ [Developing the Middle Corridor: Will Central Asia Be Caught in a “Connectivity War”?].
- Vinokurov, E. (Ed.), Amangeldy, S., Ahunbaev, A., Zaboev, A., Kuznetsov, A., & Malakhov, A. The Eurasian Transport Network.