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RISING IMPORTANCE OF RAILWAYS IN THE EURASIAN GEOPOLITICS: POTENTIAL ADVANTAGES AND RISKS

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Abstract:

Railways are becoming more important in geopolitics as a result of technological developments and the economic rise of Asian countries. Global trade is flowing from east to west as a result of the economic growth of China, which opens up new geopolitical opportunities in the Eurasian region. In 2013, with the announcement of the Belt and Road Initiative (BRI), projects and routes based on the Northern, Middle and Southern Corridors were developed. Railway transport has become an increasingly popular option in recent years as it is cheaper than air transport and shorter than maritime transport. Freight rail transport between China and Europe continued to grow during the Covid19 epidemic, reaching 222 cities in 25 European countries. Thus, with the development of rail transport, history has returned to the historical Silk Road route and has been created new geopolitical opportunities for Eurasia. In 2011, there were 17 train services between China and Europe. In 2020, the number of China-Europe freight train trips exceeded 10,000, with 4,541 trips in the first quarter of this year, up 9 per cent year-on-year. Additionally, China has begun manufacturing high-speed freight trains for the first time in the world, making high-speed freight train transportation more attractive. While railways and the BRI create potential advantages for the Eurasian geography, on the other hand, they also contain potential risks in the Eurasian geography. Especially with the outbreak of conflicts between Russia and Ukraine, problems in the Northern Corridor have come to light. On the other hand, there are various protocol and capacity problems regarding the functionality of the Middle Corridor. Furthermore, Central Asia faces various risks such as radical terrorism, coup attempts and color revolutions. Eurasian geography is predominantly terrestrial and railways are of vital importance as Eurasia acts as a bridge for the trade flowing from east to west. Although railways contribute to Eurasia's global geopolitics, their risks should also be considered. This article's main objective is to assess the rising importance of railways in Eurasian geopolitics and the potential advantages and risks in the Northern Corridor and Middle Corridor.

Keywords: Eurasia, Geopolitics, Railway, Middle Corridor, Security

DOI:

РОСТ ЗНАЧЕНИЯ ЖЕЛЕЗНЫХ ДОРОГ В ЕВРАЗИЙСКОЙ ГЕОПОЛИТИКЕ: ПОТЕНЦИАЛЬНЫЕ ПРЕИМУЩЕСТВА И РИСКИ

Аннотация: В результате технологического развития и экономического подъема азиатских стран, железные дороги становятся все более важными в geopolitics. В результате экономического роста Китая, глобальная торговля течет с востока на запад, что открывает новые geopolitical возможности в евразийском регионе. В 2013 году с объявлением инициативы «Один пояс, один путь» (BRI) были разработаны проекты и маршруты, основанные на Северном, Среднем и Южном коридорах. Железнодорожный транспорт становится все более популярным вариантом в последние годы, поскольку он дешевле воздушного транспорта и быстрее морского транспорта. Грузовые железнодорожные перевозки между Китаем и Европой продолжали расти во время эпидемии Covid-19, достигнув 222 городов в 25 европейских странах. Таким образом, с развитием железнодорожного транспорта история вернулась к историческому маршруту Шелкового пути и были созданы новые geopolitical возможности для Евразии. В 2011 году между Китаем и Европой было 17 железнодорожных сообщений. В 2020 году количество поездок грузовых поездов Китай-Европа превысило 10 000, при этом в первом квартале этого года была совершена 4 541 поездка, что на 9% больше, чем в предыдущем году. Кроме того, Китай впервые в мире начал производство высокоскоростных грузовых поездов, что сделало перевозки высокоскоростными грузовыми поездами более привлекательными. Хотя железные дороги и BRI создают потенциальные преимущества для

евразийской географии, с другой стороны, они также содержат потенциальные риски. Особенно с началом конфликтов между Россией и Украиной, выявились проблемы в Северном коридоре. С другой стороны, существуют различные проблемы протокола и пропускной способности относительно функциональности Среднего коридора. Кроме того, Центральная Азия сталкивается с различными рисками, такими как радикальный терроризм, попытки переворотов и цветные революции. Евразийская география преимущественно наземная, и железные дороги имеют жизненно важное значение, поскольку Евразия выступает в качестве моста для торговли, текущей с востока на запад. Хотя железные дороги вносят вклад в глобальную геополитику Евразии, следует учитывать и их риски также. Основная цель этой статьи — оценить растущую значимость железных дорог в евразийской геополитике и потенциальные преимущества и риски в Северном коридоре и Среднем коридоре.

Ключевые слова: Евразия, Геополитика, Железная дорога, Средний коридор, Безопасность

AVRASYA JEOPOLİTİĞİNDE DEMİRYOLLARININ ARTAN ÖNEMİ: POTANSİYEL AVANTAJ VE RİSKLER

Özet:

Teknolojik gelişmeler ve Asya ülkelerinin ekonomik yükselişiyle birlikte demiryollarının jeopolitikteki önemi giderek artmaktadır. Çin'in ekonomik yükselişiyle beraber küresel ticaret doğudan batıya doğru akmakta ve bu durum Avrasya coğrafyası için yeni jeopolitik fırsatlar sunmaktadır. 2013 yılında Kuşak ve Yol Girişimi'nin ilan edilmesiyle birlikte Kuzey, Orta ve Güney Koridor eksenli projeler ve rotalar geliştirilmiştir. Demiryolu taşımacılığının havayolundan ucuz deniz yolundan kısa olması nedeniyle son yıllarda giderek popülerleşen bir opsiyon haline dönüşmektedir. Covid19 salgınının tüm dünyayı etkisi altına aldığı dönemde Çin ile Avrupa arasında yük treni taşımacılığı büyümeye devam ederek 25 Avrupa ülkesinde 222 şehre ulaşmıştır. Böylelikle demiryolu taşımacılığının gelişmesiyle tarih tekrardan tarihi İpek Yolu güzergahına dönmüş ve Avrasya için yeni jeopolitik fırsatlar yaratmıştır. 2011 yılında Çin-Avrupa arasında 17 tren seferi yapılmıştır. Çin-Avrupa Demiryolu Taşımacılığı 2020 yılında sefer sayısı 10.000'i aşmış ve bu yılın ilk çeyreğinde yıllık yüzde 9 artışla 4.541 sefer düzenlenmiştir. Ayrıca Çin'in dünyada ilk kez yük taşımacılığı için hızlı yük trenleri üretmeye başlamasıyla birlikte hızlı yük treni taşımacılığı daha cazip bir alternatif oluşturması mümkün gözükmemektedir. Tren yolları ve Kuşak ve Yol Girişimi'nin Avrasya coğrafyası için potansiyel avantajlar yarattığı gibi diğer taraftan Avrasya coğrafyasında potansiyel riskleri de içinde barındırmaktadır. Özellikle Rusya ile Ukrayna arasındaki çatışmaların başlamasıyla birlikte Kuzey Koridor'da sorunlar gün yüzüne çıkmıştır. Diğer taraftan Orta Koridor'un işlevselliğiyle ilgili çeşitli protokol ve kapasite sorunları yaşanmaktadır. Bunun yanında Orta Asya'da radikal terörizm, darbe ve renkli devrim sorunu gibi çeşitli risklerle de karşı karşıyadır. Avrasya coğrafyası karasal coğrafya ağırlıktadır ve tren yolları doğudan batıya akan ticarete Avrasya'nın köprü görevi görmesi nedeniyle hayati önemdedir. Bu açıdan tren yolları küresel jeopolitik Avrasya için avantajlar yaratmasına rağmen içinde bulundurduğu risklerin de birlikte değerlendirilmesi gerekmektedir. Makalenin temel amacı Avrasya'daki demiryollarının jeopolitikte yükselen önemi, Kuzey Koridor ve Orta Koridor'daki potansiyel avantaj ve riskler değerlendirilmesidir.

Anahtar Kelimeler: Avrasya, Demiryolu, Güvenlik, Jeopolitik, Orta Koridor

Introduction

Geographically, the term Eurasia was first used by Aleksander Von Humboldt in 1829 as the place where Europe and Asia meet. Eurasia, which connects Asia and Europe, has been the point of interaction and exchange of both trade and cultures throughout history. As a bridge between Asia and Europe, Eurasia was an important trade point on the historical Silk Road during the period of land and caravan trade. With the announcement of the Belt and Road Initiative (BRI) in 2013, the development of the railways of the Middle and Northern Corridors has made Eurasia an important geopolitical part of history again.

Railways have become an increasingly popular option in recent years as they are cheaper than air and shorter than sea routes. During the period when the Covid19 epidemic affected the whole world, freight train transport between China and Europe continued to grow and reached 222 cities in 25 European countries. Thus, with the development of railway transport, history returned to the heart of the historic Silk Road. A century ago, geographer Halford Mackinder had underlined the advantage of Russia's Trans-Siberian Railway in connecting Europe and Asia and stated that horses and camels had begun to replace horses and camels on the historic Silk Road (Mackinder, 1904: 434-436). With the BRI and technological developments in railway

freight transport, it will be possible to transport goods faster in the future. With the cargo train, the first high-speed train produced by China, freight transport from China to Europe is expected to accelerate further. The advent of high-speed rail reinforces the argument that roads are more advantageous for trade than maritime routes, echoing Mackinder's warning that rail routes threaten maritime hegemony (Harper, 2019: 106).

The importance of railways in transport is gradually increasing. However, it is seen that the importance of railway transport in Eurasian geopolitics has not been evaluated. Studies on this subject are quite limited and potential advantages and risks are not assessed. This study assesses the importance of railways in Eurasian geopolitics, what kind of benefits the development of railway transport will provide to Eurasian countries and what kind of risks there are.

The Importance of Railways in Eurasian Geopolitics

Geopolitics analyses the effects of political events and changes in the world on geographical necessities (Hagan, 1942: 484). Eurasian geography is generally a land-dominated geography. For Eurasia, which has a land-dominated geography, railways provide an important geopolitical advantage. Mackinder defined Eurasia as a geographical pivot region and stated that the struggle was a geopolitical struggle between land-based Eurasian powers and Atlantic maritime powers (Mackinder, 1904 & Harper, 2019). Mackinder argued that a power that could dominate the vast territories, resources and peoples of Eurasia could dominate the world. Mackinder used the term Heartland to refer to the Eurasian region from the east of Siberia to the east of Europe (Mackinder, 1943: 597). Mackinder explained that transportation between production centers and consumption centers by railways would be less costly and take less time than maritime transportation (Petersen, 2011: 14). Mackinder defined dominating the Heartland as "He who dominates the Heartland dominates the World Island. He who rules the World Island rules the World" (Mackinder, 1919). The strengthening of railways provides an important geopolitical advantage for the Eurasian geography between China and Europe. The flow of trade between China and Europe is shifting from maritime routes to railways. The most important reason for this is that the increasing risks in sea routes make railways a more reliable option. Former Prime Minister of Kyrgyzstan Djoomart Otorbaev emphasised the increasing importance of railways in China-Europe trade due to the increasing dangers on sea routes (Otorbaev, 2024a). For example, maritime trade from China to Europe has been affected by various problems, such as increasing tensions between Israel and Yemen and disruptions due to traffic problems in the Red Sea. Therefore, maritime trade had to switch to longer routes, which increased costs.

With the economic rise of China, the world's second largest economy, and it's becoming a production center, there is a significant trade flow from China to the rest of the world. Especially European Union (EU) countries are important trade partners of China. The share of sea routes in China's exports to EU countries is around 80-85 per cent. Despite this, the share of railways in trade between China and Europe has been increasing over the years (Ghiretti, 2023). From 2016 to 2023, the annual number of freight train trips between China and Europe increased nearly 10-fold, from 1,702 to over 17,000, with an annual growth rate of 39.5 per cent (*Global Times*, 2024). On 25 May 2024, with the departure of the train from Xian to Poland, the 90,000th train from China to Europe departed. Thus, 8.7 million (TEU) containers were transported in 90 thousand trips between China and Europe, transporting goods worth 380 billion dollars (*Global Times*, 2024). High-speed train traffic is expected to double in 2030 and triple in 2050. Freight train transport is expected to increase by 50 per cent in 2030 and double in 2050 (*Global Times*, 2024). The number of train trips increased from 1,900 in 2016 to 14,000 trips in 2021, and the volume of goods transported increased rapidly from 8 billion dollars in 2016 to 74.9 billion in 2021. The value of rail transport has also increased, especially with the Covid19 pandemic. Rail transport, which was worth \$50 billion in 2020, increased by 50 per cent to \$74.9 billion in 2021 (Brinza, 2022).

The geopolitical rise of railways in Eurasia is also linked to the global situation. As maritime transport becomes risky for China due to the global competition between the United States (US) and China, the geopolitical importance of railways in Eurasia is increasing. This is because the US and its partners in the Asia-Pacific are pursuing a strategy to contain China from the seas through issues such as Taiwan and the South China Sea (Reed, 2013 & Tamer, 2024). The Biden administration is trying to cut China's access to the oceans by making military alliances with Australia, the Philippines, India and Japan in the Asia-Pacific, such as submarine production cooperation such as QUAD and AUKUS, missile systems and increasing its presence in military bases (Heydarian, 2023). In fact, on 24 April 2024, US President Joe Biden signed a \$95 billion military aid and spending package involving Ukraine, Taiwan and partners in the Asia-Pacific (Ismay, 2024 &

Sputnik, 2024). As a result of the US containment of Russia and China, Russia and China are deepening their cooperation in various fields in Eurasia (Serafettin, 2020). China is in political alliance with Eurasian countries such as Russia, Kazakhstan, Kyrgyzstan, Uzbekistan and Russia in various collaborations such as Shanghai Cooperation Organization and BRICS. In this respect, the railways in Eurasia are a safe harbor for the trade flowing from China to Europe.

In addition, China has railway transport development projects taking into account the various geopolitical advantages of railways. In 2020, China produced the world's first high-speed cargo train travelling 350 km/h (People's Daily, 2020). Although China has not yet used the high-speed train in international rail freight transport, it has started to use it as a pilot programme in domestic transport between Zhengzhou and Chongqing as of February 2024 (China Daily, 2024). In addition, it conducts Hyperloop tests for the production of ultra-high-speed trains. In February 2024, China's Hyperloop train in the testing phase broke a record by reaching a speed of 623 km per hour, and the project is working to increase the train speed to 1000 km per hour (SCMP, 2024). These studies can accelerate passenger transport and may lead to new developments in freight transport, such as faster and more freight transport. In addition to the production of high-speed freight trains, China is also working on the operation of freight trains with more freight capacity. In April 2024, a freight train with 324 wagons and a load capacity of 30 thousand tonnes was test transported (Xinhua, 2024). These projects are also developing in freight transport. With China starting to produce high-speed freight trains for the first time, it will be possible to carry out freight transport two or three times faster than the current freight transport. This has the potential to make land routes more advantageous than sea routes in terms of transport.

The geopolitical importance of railways in Eurasia is increasing due to both the efforts to contain China from the seas and the increasing security risks on international maritime routes. Due to the fact that railways are far away from geopolitical risks, they have become increasingly popular in recent years and the number of train services and the amount of cargo transported have increased over the years. In addition, when China's technological efforts to increase freight train transport are evaluated, the geopolitical rise of railways in Eurasia is clearly seen.

Potential advantages of railway development in Eurasia

Since Eurasian geography is a land-dominated geography, the development of railways is of vital importance in Eurasian geography and geopolitics. So, the question of which advantages railways offer for Eurasian countries needs to be answered. First of all, railways offer the opportunity to grow by sharing for the countries on the route. Railways are a strategic choice that aims to increase multiple cooperation and mutual gains as opposed to unilateral cooperation and gains (Xinhua, 2021). Railways are a more sharing and co-operation-promoting alternative. Chinese President Xi Jinping's metaphor of making a big cake and sharing the big cake is a metaphor that can be considered valid for the countries along the Middle Corridor. In this metaphor, Xi Jinping described making a big cake by developing the Chinese economy and sharing it fairly (Jinping, 2015: 42-44). At the same time, the BRI promises to make a bigger cake through economic revitalization and development and fair sharing through win-win. The development of railways is also in line with the discourses of shared development and China's building a community with a shared future for mankind (Demircan, 2023a).

The development of railway transport offers development opportunities for the countries on the route as well as the local regions along the route. Railways not only increase trade and create new job opportunities in the countries on the route, but also enable the welfare level of the local people to be increased through the construction of infrastructure such as bridges and tunnels as well as freight transport by enabling infrastructure investments to be made. The elimination of infrastructure deficiency plays an important role in the transition from poverty to prosperity. The construction of railways indirectly serves to reduce poverty and ensure prosperity (Demircan, 2023). The development of railways also increases welfare by providing an important infrastructure investment. With China's BRI, the construction and development of railways in Eurasia also ensures the interconnection of the Eurasian continent. During activities such as the construction and renovation of railways, roads are shortened or accelerated. For example, after the construction of railways between Laos and China, the people's living standards have increased with the increase in trade as well as fast train transport. In addition, Laos' agricultural exports have increased, creating new job opportunities and playing a positive role in reducing poverty (FAO, 2023, *Global Times*, 2023 & World Bank, 2022).

In addition, increasing the use of railways in freight transport is also important in terms of being environmentally friendly. Railways are the most ecological option in logistics (DHL, 2023). It has been determined that rail and maritime transport emits lower carbon emissions than other land and air transport at the same rate. Railways recorded the most improvement in greenhouse gas emissions (European Environment Agency, 2020). Looking at the overall comparison and specific results between cities, rail travel was found to be the most sensible option. When the emission effects of air transport are assessed on a passenger and kilometer basis, it is seen that greenhouse gas emissions are higher. Travelling by air causes six times more carbon emissions than travelling by High-Speed Train (HSR). HSR was found to be the most environmentally friendly option due to its high occupancy rate (*European Environment Agency, 2020*).

The development of rail transport offers faster delivery and a wider range of goods transport (*CGTN, 2024*). Rail transport can be competitive for time-sensitive goods such as perishable foodstuffs. However, the highest volumes reached in 2020 and 2021 can be partly explained by capacity shortages, barriers and subsequent higher tariffs on sea freight, which can be shifted to rail freight where this more expensive option would not normally be justified (Wensink, 2023). In addition, the states in Central Asia have rich natural resources such as oil and natural gas. The development of railways, especially in the Middle Corridor, is also important for the supply and diversification of energy flows and valuable minerals from east to west (OECD, 2023:18-19).

The fact that the railway is a safe option and away from global uncertainties, such as the problem in the Red Sea, has provided a guarantee for traders (*Global Times, 2024*). Especially during the turmoil caused by the Israeli-Palestinian conflict, there was an increase in demand for rail transport in Eurasia as a safe trade route (*CGTN, 2024 & The State Council of Information Office the People's Republic of China, 2024*). On 15 October 2024, after the Houthis in Yemen targeted Israeli ships with missile attacks over the Gaza War that started on 15 October 2024, logistics companies transiting through the Red Sea experienced uneasiness and tended to change their routes to go around the African continent. This situation led to both a prolonged supply period and an increase in prices (Nag, 2024). For example, after the Houthis attacked the US aircraft carrier Eisenhower with a missile on 31 May, transport in the Red Sea was affected, and the price of shipping a 40 TEU container from China to Northern Europe increased 3.5 times compared to the price on 1 May and reached \$4,615. The price of a 40 TEU container from China to the East Coast of the US increased from \$2,772 on 1 May to \$6,061 (Baertlein, 2024).

Maritime transport faces various challenges such as conflicts in different regions. Unlike maritime transport, which is prone to piracy, adverse weather conditions and geopolitical tensions, the Eurasia-centred China-Europe freight train transport offers a faster, safer and more stable alternative (*CGTN, 2024*). Rail transport is emerging as an alternative to maritime transport and this transition can help increase trade sustainability, secure supply chains and reduce carbon emissions (Otorbaev, 2024).

Potential Risks in Eurasian Railways

We can summarize the potential risks in railway transportation in Eurasia under four headings: political risks, economic risks, technical barriers and security. Political, economic risks and technical barriers may be caused by internal factors of the countries, as well as security risks due to external factors. Political risks and foreign policy changes along with elections in countries may put rail transportation at risk. Westerners are concerned that the construction of railway infrastructure and the increase in economic volume of Central Asian countries will lead to the development of deep political relations with China. Some western analysts have concerns that the deepening of economic relations of the states in Central Asia with China will further strengthen political ties (Rodríguez, Corta and, Bruzzone, 2020 & Rizzi, 2024). There are public attitudes in Central Asian countries that see China as an economic threat and think that it drags the countries into a "debt trap" (Abdoubatova, 2020). For example, possible changes in power that share these views could disrupt the functionality of the railways from China to Europe. Technical barriers pose a major problem for railway transportation due to countries' infrastructure inadequacies and economic reasons.

We can give the China-Kyrgyzstan-Uzbekistan (CKU) railway as an example of economic risks. The completion of the construction of the CKU railway stands out as a new route that shortens the road between the east and west of Uzbekistan and Kyrgyzstan, which are in the center of Eurasia, by 900 km (*Xinhua, 2024a*). The 454-kilometer-long CKU railway includes 50 tunnels and 90 bridges passing through mountains where transportation is difficult. The 280-kilometer part of the project in Kyrgyzstan is estimated to cost 4.7 billion

dollars. Problems may also be encountered, such as the lack of sufficient state treasuries or the inability to provide sufficient loans to complete the necessary projects (Dzamukashvili, 2022). There are also claims that the projects are debt traps. As in many countries in the world, one of the biggest problems of Central Asian countries is their relationship with corruption and bribery at the level of state and local administrators. This situation causes projects to be delayed and not completed on time (Putz, 2024). However, the Minister of Transport and Communications of Kyrgyzstan rejected the claims that the project was delayed due to financing (*Radio Free Europe Radio Liberty*, 2023).

The biggest risk for Eurasian railways is security. Because political risks can be resolved through diplomacy, and technical deficiencies can be eliminated by making various investments. But ensuring railway safety may not be easy. Because these risks are not only the internal problems of the country, but also problems related to external factors. We will assess security risks under the subheadings such as military coup and color revolution attempts, war and terrorism. For example, the ongoing conflicts between Russia and Ukraine threaten rail transportation in Eurasia (Daly, 2022). There are claims that sanctions against Russia will affect rail freight transportation between China and Europe (Brinza, 2022). With increased geopolitical instability surrounding Russia, a 34 percent decrease in shipping volume in the Northern Corridor has been seen (Zhang, 2023). This decline in 2022 was caused by some companies considering using the northern corridor due to Western sanctions against Russia, turning to other alternatives due to uneasiness. However, there was no problem that would reduce the functionality of the Northern Corridor. Wuxi Western Railway Logistics Park Deputy Manager Zhu Ping has given confirmatory information from the field that flights from Wuxi are currently sent to Russia and Central Asia and that the Northern Corridor is not seriously affected by war and sanctions (Demircan, 2024). Although European Union countries have imposed various sanctions on Russia due to the ongoing conflicts between Russia and Ukraine, the Northern Corridor appears to be unaffected by these sanctions. First of all, the first reason for this stemmed from the concern that disruptions in the Northern Corridor would harm Europe's trade with China. Secondly, Russia is a transit country in the trade flowing from Europe to China. For this reason, there is an opinion that any sanctions imposed on Russian railways will not affect Russia and will harm the commercial interests of European countries (Wensink, 2023).

Since the Middle Corridor is 2500 km shorter than the Northern Corridor, it is 35 percent faster and 40 percent cheaper. The Middle Corridor is not only a shorter and faster route, but also a safer route, making it an increasingly attractive option for companies navigating the volatile environment of global trade (World Bank, 2023, Marsh, 2023: 22, Geopolitical Monitor, 2023, Lee, 2024 & Nag, 2024). Although the Middle Corridor is currently the safest route, it also contains security risks. Political and economic risks in the Middle Corridor are related to domestic reasons. For example, economic problems such as high inflation and unemployment in Azerbaijan, Georgia, Kazakhstan and Turkey are caused by internal reasons (OECD, 2023: 133-139). The biggest risk on the Middle Corridor is coup and color revolution attempts. The Rose revolution in Georgia in 2004, the Tulip revolution in Kyrgyzstan in 2005, the July 15 military coup attempt in Turkey in 2016, the color revolution attempt in Kazakhstan in 2022 and the coup attempt in Kyrgyzstan in the past months have shown that the color revolution wave is a dangerous security risk. The recent protests that started in Georgia against the "influence agent" law show that the color revolution wave supported by the US in the Caucasus and Central Asia is still alive, and these initiatives may undermine the Middle Corridor initiative passing through Georgia (Avdaliani, 2023 & Klarenberg, 2024). The US and CIA-based Fetullah terrorist organization (FETO) played an active role in the Color revolution initiatives in Central Asia (Dugin, 2022, China Foreign Ministry, 2023, Perinçek, 2022 & Polis Akademisi Başkanlığı, 2018). FETO, which especially uses moderate Islam and Turkist discourses, is organized in Central Asia. FETO also played an active role in the July 15 Military coup attempt in Turkey, the Kazakhstan uprising in 2022, and the coup attempt in Kyrgyzstan in June (*Oda Tv*, 2023, Şener, 2022 & *Takvim* 2016). Russian President Vladimir Putin's statement that he will not allow the color revolution wave in the Collective Security Organization demonstrates this security risk (Voice of America, 2022). At the China-Central Asia Summit in May, Xi Jinping said, "We will strongly oppose foreign powers interfering in the internal affairs of regional countries and staging color revolutions." The discourse also shows the security risk (TASS, 2022). In Kyrgyzstan, internal problems such as class economic inequalities, high youth unemployment and corruption cause the color revolution. In addition, mafia formation in Kyrgyzstan caused by drug traffic starting from Afghanistan, increasing crime rates, and extreme radical terrorist groups (Taliban/Khakkany) pose internal security risks (Daneykin, Andreevsky, Rogozhin, & Sernetsky, 2015: 86-91).

Although the Middle Corridor is shorter, it faces the problem of low capacity. Despite the increase in cargo volumes transported in the Middle Corridor, the Middle Corridor still accounts for less than 10 percent of the total cargo transported via the Northern Route (Lee, 2024). For the Middle Corridor to realize its full potential, various obstacles such as inconsistent regulations, changing infrastructure quality and conflicting national interests need to be addressed (*Geopolitical Monitor*, 2023). The variability in Middle Corridor container pricing also creates instability. While the transportation price of an FEU via the Middle Corridor between China and Europe varies between 2,500 and 3,250 dollars, it offers a fixed price of 2,599 dollars to the east and 3,121 dollars to the west on the Northern Corridor (World Bank, 2023: 39). In addition to high costs, it has been observed that the shipping time of goods via the Middle Corridor takes twice as long for transit shipments compared to the alternative route via Russia, and there are delays in border crossings in all operations (World Bank, 2023: 39-40). High prices, unpredictability of transportation time, lack of tracking systems, transfer, low quality of railway vehicles and low quality of logistics centers stand out as the main problems. Excessive paperwork and fragmented or inadequate digitalization at ports and rail border crossings remain ongoing bottlenecks. The container capacity of Baku port is also limited by the existing shipping capacity via the Caspian Sea (World Bank, 2023: 39-40). Another challenge is the climate around the Caspian Sea for the Middle Corridor's trade. The rough waters of the Caspian Sea during the summer months can delay ferry services for weeks. That's one of the reasons it estimates cargo transit time in the Middle Corridor to be 36 to 40 days. This can often increase congestion in Baku port. While Azerbaijan seeks to expand Baku's port capacity with new terminals and ferries, much can be done regarding climate and weather conditions (Chang, 2023). However, the tracks in Kazakhstan, Azerbaijan and Georgia in the Middle Corridor have a gauge width of 1520 millimeters due to the former Soviet railway system. This situation shares operational and cultural characteristics that enable railway vehicles to operate jointly between different railway companies. Although time is lost due to the transfer of cargo in Caspian Sea ports, it provides a faster movement (World Bank, 2023: 47).

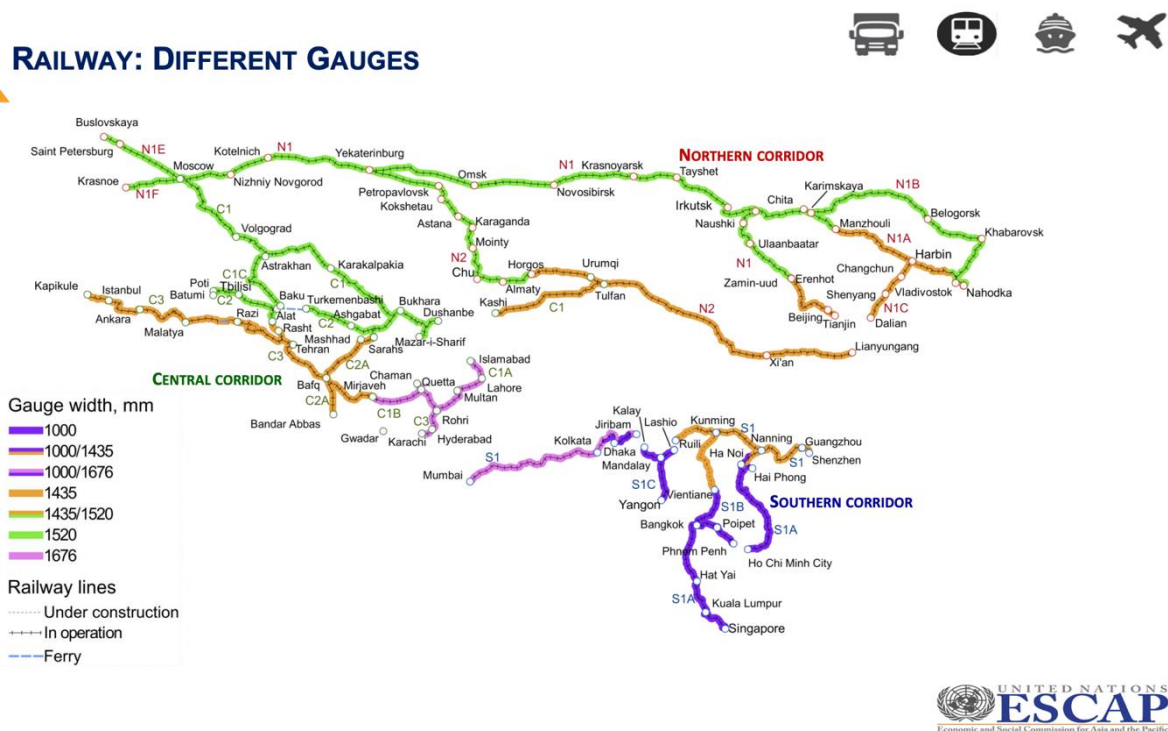


Figure 1: Railway Gauges in Eurasia

The security of a trade route comes to the fore with its ability to transport goods cheaply as well as systematically. Unfortunately, the Middle Corridor has not been able to facilitate fully efficient facilitation and intermodal transfer services. In contrast, Russia's Trans-Siberian railway benefits from a service network developed over decades. Additionally, the Northern Corridor passes through major Russian and Belarusian industrial and population centers, increasing cargo volume and thus reducing costs. While the Middle Corridor also hopes to further promote interregional trade, the industrial and population centers in Central Asia and the

Caucasus are much smaller than those of Russia (Chang, 2023). In order for the Middle Corridor to be a competitive alternative to the Northern Corridor, it needs organized optimized operations with high capacity and technology (International Transport Forum, 2022). There are four railway border crossing points (Alashankou or Khorgos-Kazakhstan-Azerbaijan-Georgia-Turkey) along the Middle Corridor. All of these vary greatly in terms of their operational performance, technology and issues affecting the speed and predictability of transport on the Middle Corridor. Improving transport infrastructure is one of the key interventions needed to increase the capacity and operational efficiency of the Middle Corridor. Increasing the number of locomotives and freight wagons will increase the capacity and efficiency of the Corridor. The Sivas-Kars-Georgia border railway track needs to be modernized as soon as possible. Providing a high-capacity railway connection on the Third Bridge in Istanbul will increase Turkey's competitiveness in the Middle Corridor (World Bank 2024). In order to increase transportation volume, limited transportation capacities must be expanded. This includes increasing the availability and capacity of ships, especially in the Caspian Sea. However, this can only be achieved in the long term, as shipyards must first be built to build ships. In addition to the expansion and electrification of the railway infrastructure, it is also necessary to increase the number of railway vehicles. Expansion of railway infrastructure will also be necessary to increase transfer capacity in Kazakhstan. Additionally, to reduce waiting times at borders, it is recommended to implement digitalization projects such as the introduction of electronic queues at checkpoints and ports, the introduction of electronic transit documents (eTIR) and the establishment of a regional transit network (Walter, 2022). The development of structures that will develop regional trade and remove obstacles to trade, such as the Organization of Turkic States, opens up advantages for geopolitics in Eurasia. It is expected that the implementation of the Action Plan for the Implementation of the OTS Transport Connectivity Program for 2023-2027 adopted at the Astana summit will significantly increase the transit potential of the Middle Corridor and make Caspian crossings smoother (Demircan, 2023b & Turkic States, 2023).

The financing problem comes to the fore in the construction of railways in Central Asia. Kazakhstan Minister of Transport Marat Karabayev stated that a capital requirement of between 19 and 21 billion dollars is required to overcome the logistics and infrastructure deficiencies of the Middle Corridor, which includes the development of high-capacity freight terminals, modernization of railway systems, and the implementation of advanced monitoring and tracking technologies. Karabayev emphasized that the EU plans to invest another 18.5 billion Euros to ensure that railways and Kazakhstan's Aktau and Kuryk ports can provide smart, safe and fast transportation services from China to Europe (Karabayev, 2024).

Conclusion

Maritime transport faces various challenges such as conflicts in different regions. Railways are of vital importance for the Eurasian geography, which has a predominantly land-based geography in the trade flowing from China to Europe. Tensions in the Red Sea have demonstrated the geopolitical importance of railways in Eurasia for trade flowing from China to Europe. In order to prevent the trade chain from being interrupted, international transportation companies have turned to railways in Eurasia (China Daily, 2024a). The return of maritime transport to the Cape of Good Hope in Africa due to the tension in the Red Sea accelerates the transition to railway freight transportation in Eurasia (Otorbaev, 2024). The Middle Corridor alternative is increasingly coming to the fore as the Russia-Kazakhstan railways in Eurasia will have difficulty meeting this increasing potential due to the problems in sea lanes (Otorbaev, 2024). However, both the Northern Corridor and the Middle Corridor also contain political, economic risks, technical deficiencies and security problems. On the other hand, China seems to have a strategic approach to railway transportation with technology projects such as creating alternative routes with railway projects, producing ultra-high-speed trains, high-speed freight trains and locomotives with higher load carrying potential. The number of trips and the amount of cargo carried on railways in Eurasia are increasing year by year.

	Maritime Transportation	Railway Transportation
Time	35-45 days (45-60 days)	12-21 days
Price	6000 USD (40-foot container)	7000-9000 USD (40-foot container)
Cost	Port and logistic costs	Bridge, tunnel and road construction costs
Risks	South China Sea Disputes, Taiwan Strait, Red Sea, Yemen Crises etc.	Western's sanctions on Russia, color revolutions etc. but more safety.
Employment	International water and destination country port	It can open new employment areas by passing through third countries. New logistics and transfer points etc.
Cooperation	bilateral agreements	Multiple Cooperation
Prosperity		The bridges, tunnels and railways built not only shorten freight transportation but also increase prosperity.
Environment	Lowest polluter after train	Low carbon emissions and most environmentally friendly

Table 1: Seaway and Railway Comparison

In the table above, a comparison is made between sea lines and railways. Railways are seen to be shorter, more environmentally friendly, farther from global risks and promoting prosperity. In addition, railways have the disadvantage that they are still not very economical compared to the sea and investment is required due to infrastructure deficiencies. However, it is predicted that by eliminating infrastructure deficiencies, railways will speed up trade compared to the sea, as well as increase welfare and create new job opportunities. In this respect, it seems that railway incentives will be more profitable in the long run. On the other hand, the rise of railway transportation in Eurasia may pose security risks as it will turn into a center of competition. The most important part of this security risk may be color revolution initiatives.

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