



# Research on the Development of Transportation Cooperation between China and the ‘Belt and Road’ Co-construction Countries: A Case Study of the Five Central Asian Countries

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**Abstract.** To promote the ‘Belt and Road’ Initiative is not only China's need to deepen and expand opening-up, but also the practical need to strengthen mutually beneficial cooperation with other countries in Asia, Europe, Africa and other countries worldwide. Central Asia is the first link of the ‘Silk Road Economic Belt’ and is an important partner of the ‘Belt and Road’ Initiative. Deepening China's transport cooperation with the five Central Asian countries is an important measure to promote the construction of the Belt and Road Initiative. Based on the analysis of the current situation and development trends of transportation cooperation between China and the five Central Asian countries, with the goal of ‘sustainable transportation development’, this paper proposes strategies such as enhancing strategic planning alignment, strengthening the ‘hard connectivity’ of infrastructure, promoting the ‘soft connectivity’ of institutional rules, fostering the ‘heart-to-heart connectivity’ of traffic integration, and supporting the formation of a new pattern for the development of China's western regions. The research findings are of great significance for the further promotion of our country's foreign economic and trade development.

**Keywords:** The ‘Belt and Road’ Initiative; Development of transportation cooperation; Five Central Asian countries; Development status and countermeasures.

## 1 Introduction

Situated in the heart of the Eurasian landmass, Central Asia occupies a strategic position as a nexus point that bridges Eastern and Western regions while also serving as a crucial corridor linking the Northern and Southern parts of the continent. It is the first link of the ‘Silk Road Economic Belt’ and is the only place for China to carry out land

economic cooperation with West Asia, Russia and Europe<sup>[1]</sup>. Transportation is the thread of economy and the bond of civilization, promoting economic integration and people-to-people exchanges, and making the world into a closely interconnected 'global village'<sup>[2]</sup>. With the promotion and implementation of the 'Belt and Road' Initiative, China's transportation cooperation with countries co- construction of the 'Belt and Road' has been deepened<sup>[3]</sup>. In October 2023, Chinese President Xi Jinping attended the opening ceremony of the Third 'Belt and Road' Forum for International Cooperation and delivered a keynote speech entitled 'Building an Open, Inclusive, Interconnected and Common Development World', where he put forward eight proposals, including building a multi-dimensional connectivity network along the Belt and Road, supporting the building of an open world economy and so on<sup>[4]</sup>. By analyzing the current status and development trends of transportation cooperation between China and the five Central Asian countries, this paper puts forward countermeasures and suggestions on sustainable transportation development of our country and the five Central Asian countries, with the ultimate goal of further promoting the development of our foreign economic and trade activities.

## **2 The Current Status of Transportation Cooperation Between China and the Five Central Asian Countries**

### **2.1 The Current State of Traffic Networks Between China and the Five Central Asian Countries**

At present, China and the five Central Asian countries are mainly connected by 2 railways and 8 road passages<sup>[5]</sup>, as shown in Table 1. At the same time, Chinese enterprises have participated in the construction of a number of transportation infrastructure projects in Central Asian countries<sup>[6]</sup>, such as China-Kyrgyzstan-Uzbekistan Highway, China-Tajikistan Highway, Bukhara Highway, Shahrstan Tunnel, Kamchik Tunnel, Anglian-Papu Railway tunnel, Wahdat-Yaawan Railway and so on. The above projects have effectively improved the transport infrastructure conditions of Central Asian countries, promoted the hard connectivity between China and Central Asian countries, and enhanced the efficiency of transport.

**Table 1.** The current state of transportation networks between China and the five Central Asian countries

S/N	Traffic type	Passing Points
1	Railway	Urumqi - Alashankou (Dostyk) - Aktogay (Kazakhstan)
2		Urumqi - Khorgos (Altynkol) - Almaty (Kazakhstan)
3	Highway	Urumqi - Jeminay (Maikapchagai) - Semipalatinsk (Kazakhstan)
4		Urumqi - Baketu (Bakhty) - Ayaguz (Kazakhstan)
5		Urumqi - Alashankou (Dostyk) - Aktogay (Kazakhstan)
6		Urumqi - Horgos (Altynkol) - Almaty (Kazakhstan)
7		Urumqi - Dulart (kolzhat) - Almaty (Kazakhstan)
8		Kashgar - Torugart (Torugart) - Bishkek (Kyrgyzstan)
9		Kashgar - Irkeshtan (Irkeshtan) - Osh (Kyrgyzstan) - Tashkent (Uzbekistan)
10		Kashgar - Karasu (Kulma) - Dushanbe (Tajikistan)

## 2.2 The Current State of Transportation Between China and the Five Central Asian Countries

(1) **Railway transport.** At present, there are three railway lines connecting China and the five Central Asian countries: the new Asia-Europe Land Bridge, the China-Europe Railway Express and the Central Asian Railway Express<sup>[7,8]</sup>. The new Asia-Europe Land Bridge has not played its due role due to various factors such as differences in track gauges among countries, inconsistencies in fees and taxation policies, competition and obstruction from Russia and so on. The ‘one-time declaration, one-time inspection, and one-time release’ management mode and the ‘1+N’ transport mode adopted by the China-Europe railway Express has greatly improved the efficiency of freight transportation<sup>[9]</sup>.

(2) **Road transport.** China has signed bilateral and multilateral transport facilitation agreements with many Central Asian countries. These include the ‘Bilateral Motor Transport Agreement and its Implementation Rules’, the ‘Agreement on the International Motor Transport Licensing System’ with Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan and other countries, as well as the ‘Transit Transport Agreement among the Governments of China, Kazakhstan, Kyrgyzstan, and Pakistan’, the ‘Agreement on the Establishment of an International Road Transit Transport Permit System’, the ‘Automobile Transport Agreement among the Governments of China, Kyrgyzstan and Uzbekistan’ and other multilateral transport agreements<sup>[10]</sup>.

(3) **Air transport.** Urumqi Airport is an important passenger transport channel between China and Central Asian countries. The airport has established numerous flight routes to key cities in the region, including Astana (Kazakhstan), Almaty (Kazakhstan),

Bishkek (Kyrgyzstan), Osh (Kyrgyzstan), Tashkent (Uzbekistan), Dushanbe (Tajikistan), Hujieot (Tajikistan) and Ashgabat (Turkey). In addition to passenger transport, the Urumqi-Almaty route, which commenced operations in 1989, has been providing cargo and mail transportation services between the two countries since its inception. It is now one of the most mature international freight routes. The route not only serves local Xinjiang market, but also goods in Shenzhen, Nanjing and other cities all over the country can be transferred to Kazakhstan through Urumqi, the next day can arrive in Almaty<sup>[11]</sup>.

(4) Port. At present, there are 12 ports (Class I) between China and Central Asian countries, out of which 10 are land border ports (2 have not been officially opened for use), and 2 are air ports (the Urumqi air port, the Kashgar air port). Key ports between China and Kazakhstan are the Alashankou Port and the Khorgos Port. The Alashankou Port is the most comprehensive Class I port in Western China. It is an international comprehensive transportation hub integrating highway, railway, air and pipeline modes. The Khorgos Port is China's largest land port integrating road, railway and pipeline transportation, which is the western bridgehead of the new Asia-Europe Continental Bridge. Key ports between China and Kyrgyzstan are the Torugart Port and the Irkeshtan Port. The Torugart Port is an important post station on the ancient Silk Road, and the Irkeshtan Port is the most western port in China. The key port between China and Tajikistan is the Karasu port, which is the only open international road passenger and goods transport port between our country and Tajikistan at present<sup>[12]</sup>.

### **3 Development Trend of Transport Cooperation Between China and the Five Central Asian Countries**

In June 2022, China, together with the five Central Asian countries, put forward seven cooperation initiatives aimed at deepening the connectivity cooperation under the framework of 'China+Central Asia Five Countries'. First, give full play to the advantages of cross-border railway transport; Second, actively promote the facilitation of international road transport; Third, gradually resume normal passenger and cargo flights; Fourth, comprehensively strengthen the capacity building of port clearance; Fifth, actively build a 'fast channel' for people to move freely; Sixth, continuously improve the 'green channel' for things to flow smoothly; Seventh, improve the institutional building of connectivity.

In May 2023, the List of Outcomes of the China-Central Asia Summit was released. Among the 54 cooperation consensus and initiatives, 13 are related to connectivity cooperation between China and Central Asia, 8 of which are related to the construction of transport corridors and 'hard connectivity' of infrastructure. The 8 cooperation agreements and initiatives include: promoting the construction of the China-Central Asia Transport corridor, promoting the trans-Caspian transport route through the port of Aktak, Kurek Port, Turkmen Bashi port and other seaports multimodal transit transport, promoting railway transport between China and Central Asia, improving transport infrastructure (including the construction and upgrading of existing railways and highways between China and Central Asia), completing the feasibility study of the

China-Kyrgyzstan-Uzbekistan railway to accelerate the construction of the railway, ensuring the smooth operation of the China-Kyrgyzstan-Uzbekistan highway, realizing the normal operation of the China-Tajikistan highway and the ‘Western China-Western Europe’ highway, Studying the possibility of developing the best transit transport scheme from the Central Asian countries to South-East Asia and other Asian countries.

## **4 Strategies for Sustainable Transportation Development in China and Five Central Asian Countries**

### **4.1 Enhancing Strategic Planning Alignment**

We should implement the ‘Belt and Road’ Initiative on the basis of existing cooperation mechanisms, the Agreement on the Asian Highway Network, the Trans-Asian Railway Network and the inter-governmental Agreement on Road ports. In line with Kazakhstan's Bright Road economic policy, Tajikistan's national development Strategy up to 2030, Kyrgyzstan's Development Strategy up to 2040, Uzbekistan's New Uzbekistan Development Road 2022-2026 and Turkmenistan's strategy of Reviving the Silk Road, We should strengthen the synergize with Central Asian countries in the development strategies, development plans and construction plans of transport connectivity, and maintain the coordination and sustainability of regional transport development. We should gradually improve the existing transport cooperation mechanisms, and establish, on the basis of the existing mechanisms, supporting implementation mechanisms, dispute settlement mechanisms, overall planning and balance mechanisms, risk early warning mechanisms, and emergency coordination mechanisms.

### **4.2 Strengthening the ‘Hard Connectivity’ of Infrastructure**

Taking into account the political, diplomatic, economic and social factors of Central Asian countries, we should mobilize the forces of governments, enterprises and other parties to jointly promote the construction of transport infrastructure in conjunction with Central Asian countries. We should take the initiative to better align our transport development policies, construction plans and technical standards with those of Central Asian countries, open up missing road links and bottlenecks, build a new Asia-Europe land bridge and a China-Central Asia-West Asia corridor with multi-directional connectivity, and give full play to the leading role of the demonstration projects undertaken by China in Central Asia. We should strengthen cooperation in hard infrastructure connectivity among Central Asian countries, advance the construction of railway ports and road ports, and build an all-dimensional, multi-tiered and complex China-Central Asia transport network. We should encourage domestic enterprises to strengthen the construction of railway and road logistics bases, distribution and distribution centers, overseas warehouses and airports in Central Asian hub cities, important economic node cities and cities with close production capacity cooperation through acquisitions, joint ventures and cooperation, so as to enhance international logistics radiation and service capabilities.

### **4.3 Promoting the ‘Soft Connectivity’ of Institutional Rules**

In light of the actual conditions of Central Asian countries, we should strengthen the docking and joint construction of technical standards in the field of transport with Central Asian countries, promote the convergence and unification of relevant rules and regulations in the field of transport, and promote transport facilitation. We should promote the upgrading of the ‘stuck neck’ section of the Central Asian Express train, and actively open up new routes overseas and further smooth international road transport. We should strengthen information technology cooperation, actively carry out electronic data exchange and sharing with Central Asian countries on information technology standards, dynamic data exchange, emergency response and fast cross-border e-commerce in cross-border railway, road and civil aviation transport, promote the popularization and application of mobile Internet, big data, cloud computing and the Internet of Things in international transport, and promote the Beidou navigation system to ‘go global’. We should promote the establishment of a transport university alliance with Central Asian countries to study cooperation in running schools. We should improve the emergency rescue support system, coordinate the formulation and management of emergency plans, and enhance the ability to respond to emergencies.

### **4.4 Fostering the ‘Heart-to-heart Connectivity’ of Traffic Integration**

We should give full play to the role of transport think tanks in providing basic and intellectual support for transport affairs between China and Central Asia, and create favorable conditions for think tank personnel to participate in exchanges between Chinese and foreign experts, and to hold or participate in international conferences. We should attract students from Central Asia to further their studies in China, and jointly train professionals in transportation, traffic engineering and other related fields through colleges and universities. We should invite senior and mid-level government officials from Central Asian countries in the field of transport, railway, road, civil aviation, ports and other front-line personnel to China for training, so as to help Central Asian countries have a more comprehensive and accurate understanding of the ‘Belt and Road’ connectivity.

### **4.5 Supporting the Formation of a New Pattern for the Development of China's Western Regions**

Efforts should be made to build the hub of Xinjiang's Silk Road Economic Belt, speed up the construction of a modern, high-quality comprehensive multi-dimensional transportation network, cultivate port transportation hubs, and improve port transportation infrastructure. We should encourage Urumqi, Chongqing, Chengdu, Xi 'an and other cities to accelerate the development of international comprehensive transport hub cities, support Chongqing, Sichuan and Shaanxi in leveraging their comprehensive advantages, jointly build inland open highlands and develop open hubs, and actively implement the China-Singapore strategic connectivity demonstration project (Chongqing).

## 5 Conclusion

This paper takes the five Central Asian countries as examples to study the current situation, development trend and sustainable development countermeasures of transportation cooperation between China and the ‘Belt and Road’ co-construction countries. In the context of deepening the ‘Belt and Road’ Initiative, through various measures and means such as enhancing strategic planning alignment, strengthening the ‘hard connectivity’ of infrastructure, promoting the ‘soft connectivity’ of institutional rules, fostering the ‘heart-to-heart connectivity’ of traffic integration, and supporting the formation of a new pattern for the development of China's western regions, the transportation efficiency between Central Asian countries and China will be improved, and economic and trade exchanges among the ‘Belt and Road’ co-construction countries will be further promoted.

## References

1. Kulyanda K. Nurashva a, Ismailbek I. Shalabayev b, Gulzhanar I. Abdikerimova c, et al. Capital Inflow and Investment Attractiveness of Central Asian Countries (on the example of Kazakhstan)[J]. *Regional Science Policy & Practice*, 2024, <https://doi.org/10.1016/j.rspp.2024.100039>.
2. Mukhit Assanbayev. Developing Regional Connectivity between Central and South Asian Countries[J]. *Journal of Central Asian Studies*, 2024, 92(4):29-38. <https://doi.org/10.52536/2788-5909.2023-4.03>.
3. LIU Wenge, HUANG Wenjie. Prospects for Safety Development Cooperation in the Energy and Mining Sector between China and Central Asia[J]. *China Coal*, 2024, 50(02):132-141. <http://doi.org/10.19880/j.cnki.ccm.2024.02.017>.
4. China Media Group CCTV News, 2023. Keynote Speech by President Xi Jinping at the Opening Ceremony of the Third Belt and Road Forum for International Cooperation. <https://news.cctv.com/2023/10/18/ARTI0xE8WparLTyvoNNbpkjs231018.shtml>.
5. ZHAO Chuqi, QU Yongyan. Research on the Development Path of Logistics Channel between China and Central Asia under the Background of the ‘Belt and Road’[J]. *China Storage & Transport*, 2022(04):127-129. <http://doi.org/10.16301/j.cnki.cn12-1204/f.2022.04.055>.
6. LIU Yue, MIN Lulu. Construction of Traffic Infrastructure under the Initiative of ‘One Belt and One Road’ to Promote the Development of Trade between Xinjiang and Central Asia[J]. *Journal of Qinghai Normal University(Social Sciences)*, 2018,40(03):1-8. <http://doi.org/10.16229/j.cnki.issn1000-5102.2018.03.001>.
7. HOU Shengdong, WU Fan, MA Qingbin. Problems, Ideas and Countermeasures of Building a New Eurasian Land Bridge Economic Corridor under the New Development Pattern[J]. *Globalization*, 2023(04):69-77, 135. <http://doi.org/10.16845/j.cnki.ccieeqh.2023.04.010>.
8. WU Jia. Research on the High-quality Development Strategy of the ‘Yixin-Europe’ China-Europe Express during the ‘14th Five-Year Plan’ period[J]. *Business & Economy*, 2024(04):93-95, 189. <http://doi.org/10.19905/j.cnki.syjj1982.2024.04.037>.
9. YUAN Tao. Research on China's Railway Diplomacy from the Perspective of ‘Belt and Road’[D]. Beijing: China Foreign Affairs University, 2023. <http://doi.org/10.27373/d.cnki.gwjxc.2023.000005>.

10. LI Fusheng. Study on the Impact of Trade Facilitation on Bilateral Trade between China and Countries along the 'Belt and Road'[D]. Nanchang: Jiangxi Science and Technology Normal University, 2023. <http://doi.org/10.27751/d.cnki.gjxkj.2023.000150>.
11. CAI Yanqi. The Connectivity Pattern of Logistics Corridor among Participating Countries of the Belt and Road Initiative and Its Effect Analysis[J]. Review of Economic Research, 2024(01):16-31. <http://doi.org/10.16110/j.cnki.issn2095-3151.2024.01.004>.
12. CHEN Wenjun, ZHANG Shuai. An Empirical Study of Influence of Border Port on Urban Development of Border Port Cities-A Case Study of Xinjiang and Central Asia Border Port[J]. Finance & Economics of Xinjiang, 2018(02):72-80. <http://doi.Org/10.16716/j.cnki.65-1030/f.2018.02.009>.

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