



TRANSPORT POLICY RESPONSES

TO THE WAR IN UKRAINE

No. 2, 24 October 2022

Transport Connectivity in Central Asia: Strengthening Alternative Trade Corridors between Europe and Asia

At a Glance

- More and more freight between Europe and Asia is transported by rail. Twice as many routes connect China and Europe today as was the case five years ago.
- The Ukraine war has disrupted transit on the Northern Corridor. The Middle Corridor via Central Asia and the Caucasus is the most feasible alternative.
- A shift of freight flows from the Northern to the Middle Corridor would enhance the dominance of rail transport in Central Asia.
- To offer competitive lead times, reliability and transit costs, the Middle Corridor needs enhanced capacity, better technology and optimised operations.
- Such improvements would make the Middle Corridor 35% faster and 40% cheaper than the Northern Corridor, creating an attractive alternative.
- Regional policy dialogue and co-operation are prerequisites to preserve and further develop a resilient and integrated transport network in Central Asia.

The Issue

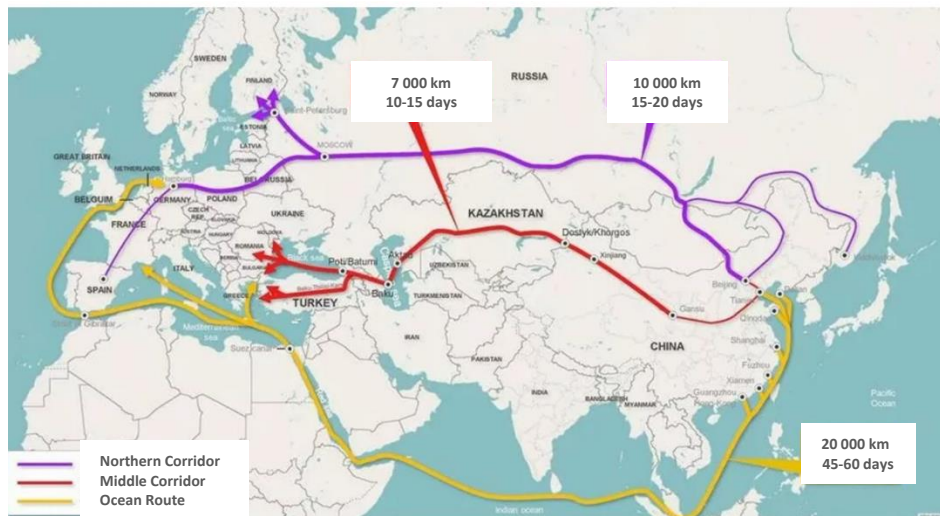
Rail freight has become more important in connecting Asia and Europe

Asian countries account for just over one-third (36%) of the European Union's total trading volume. In 2011-21, the value of Eurasian trade almost doubled from EUR 383 billion to 696 billion.¹ Over that period, the share of rail freight increased from 0.6% to 2%.² Rail freight costs less, and is more reliable and faster: trains take 15 to 20 days, ships 45 to 60. Almost twice as many rail freight routes than five years ago link China and Europe: 78 rail lines from Asia reach 180 cities in 23 European countries.³ China-Europe express trains operated more than 1 000 trains per month in 2020–22.⁴ More Asian countries, most recently Viet Nam, are now connected to Eurasian rail corridors.⁵ The International Union of Railways estimates the potential growth rate of rail cargo on the Eurasian routes to be between 10% and 16%.⁶

The war in Ukraine has disrupted land-based transit in Eurasia

The main freight route between Asia and Europe has been the Northern Corridor, or New Eurasia Land Bridge. Its rail link connects China and Europe via Kazakhstan, Russia and Belarus. It dominated due to the uniform track gauge and harmonised legal regime of the Organization for Co-operation of Railways (OSJD). When the Ukraine war brought sanctions and uncertainty, transit on the corridor plummeted. As these disruptions persist, they further intensify the problems created by fuel price increases, land-transport capacity constraints and port congestion, such as higher transport costs and more delays. Moreover, insurance companies started to refuse coverage for shipments via the Northern Corridor.

Main Eurasian freight corridors



Adapted from RailFreight, "[Keeping cargo on rail between Europe and Asia](#)", 16 March 2022

1 Eurostat, "[Asia-Europe Meeting: EU trade deficit at €244 billion](#)", 24 November 2021

2 Uply, "[Asia-Europe rail freight attracts European investment](#)", 25 February 2022

3 Foreign Policy, "[Putin's War Has Killed China's Eurasian Railway Dreams](#)", 1 March 2022

4 China Daily, "[China-Europe freight trains break new records](#)", 8 August 2022

5 RailFreight, "[Vietnam regains position on BRI with another line to China](#)", 25 August 2022

6 UIC, "[Eurasian Rail Traffic Development: Southern and Middle Corridor](#)", Webinar Presentation, 22 April 2021

Central Asian countries are strongly exposed to risks from supply chain disruption

Increasing rail freight rates put pressure on economies. Most Central Asian countries transport 40% or more of their freight by rail.⁷ Being landlocked, they are particularly vulnerable to changes in land-based Eurasian supply chains. Higher transport rates also drive up costs for producers and consumers, hampering economies: forecasts have lowered 2022/23 growth projections for the region by 2 to 10 percentage points.⁸

The Impact

The current supply chain disruption is transforming trade patterns

Countries and regions react differently to the current supply chain disruptions. China subsidises land-shipping expenses by covering “war insurance” costs.⁹ European traders are redirecting land cargo to maritime routes. This exacerbates the pressure on Asian ports and freight rates. It has also intensified the imbalance between low eastbound and strong westbound cargo traffic on the Northern Corridor.¹⁰ In addition, the war-related restrictions on European airlines have given non-sanctioned Asian air-freight carriers a competitive advantage. Air transport is thus now viable on Eurasian routes for certain cargos. The shift to different transport modes and routes is accompanied by changes in the composition of traded goods. Previously dominant energy products and metals have been complemented by a broader range of freight goods. For example, Kazakhstan has increased its wheat and flour exports to Azerbaijan, China, Georgia, Iran, Pakistan and Türkiye, as well as new markets in the EU.¹¹

Landlocked Central Asian countries and China are seeking alternative routes

Asian countries are seeking new links with Europe. The Middle Corridor, or Trans-Caspian International Transport Route, is the best alternative. It is 2 500 kilometres shorter on average than the Northern Corridor and can potentially cut rail journey times by seven to eight days. It could also boost trade among the countries it traverses. Already, the Middle Corridor sees increased freight flows. In the first quarter of 2022, freight volumes saw an on-year increase of 28%.¹² In 2022, cargo transiting Central Asia and the Caucasus could grow sixfold compared to 2021, to 3.2 million tonnes.¹³ If connectivity gaps can be closed and bottlenecks opened (see below), considerable further growth is possible.

The current geopolitical crisis could also provide momentum to create new rail links in the Eurasian network. The Kazakhstan-Turkmenistan-Iran (KTI) route, known as the Southern Corridor, can take freight from Europe to South and Southeast Asia through Türkiye, Iran and Pakistan, as well as to China via Turkmenistan, Uzbekistan and Kyrgyzstan. Part of it is already operating under the Economic Cooperation Organisation on the Islamabad-Tehran-Istanbul rail corridor (ECO ITI). However, the KTI still faces many constraints, among them missing links, political hurdles and sanctioned territories. Substantive progress has recently been made to revive the China-Kyrgyzstan-Uzbekistan (CKU) railway. In September 2022, the three countries signed an agreement to provide joint funding for a feasibility study for the Kyrgyzstan section of the railway, with the aim to launch construction in 2023.

7 ITF, “[Enhancing Connectivity and Freight in Central Asia](#)”, Case-Specific Policy Analysis, 14 May 2019

8 World Bank, “[Europe and Central Asia Economic Update: The War in the Region \(Spring 2022\)](#)”, 10 April 2022

9 AIES, “[The Implications of the Russian Invasion of Ukraine on the Future of Sino-European Overland Connectivity](#)”, June 2022

10 Railpage, “[Middle Corridor unable to absorb northern volumes, opportunities still there](#)”, 20 March 2022

11 The Astana Times, “[Economic Gains of Kazakhstan in Wake of Shifting Supply Chains](#)”, 19 August 2022

12 RailFreight, “[Middle Corridor traffic rises again, new services to come](#)”, 2 May 2022

13 GIS, “[Central Asia’s Middle Corridor gains traction at Russia’s expense](#)”, 29 August 2022

The Outlook

The Middle Corridor is limited as an immediate alternative Eurasian trade route

In its current state, the Middle Corridor cannot accommodate all cargo from the Northern Corridor. The Middle Corridor has the capacity for 3-5% of the goods transported between China and Europe via the Northern Corridor.¹⁴ Shifting all the freight transported via the Northern Corridor would represent an increase in volume of around 2 000% for the Middle Corridor.¹⁵

The main bottlenecks of the Middle Corridor are the maritime links: from Kazakhstan and Turkmenistan across the Caspian Sea to Azerbaijan, and from Georgia and Türkiye across the Black Sea to Bulgaria, Romania and Ukraine. Many ports face interoperability issues and heavy congestion, especially Constanza in Romania. The alternative land-based Baku-Tbilisi-Kars (BTK) line is also congested. In the Caspian Sea, only two ships carry goods for the China-Europe route. Neither vessels nor port equipment can handle containers, since the route was primarily used for transshipments of bulk commodities prior to 2022.

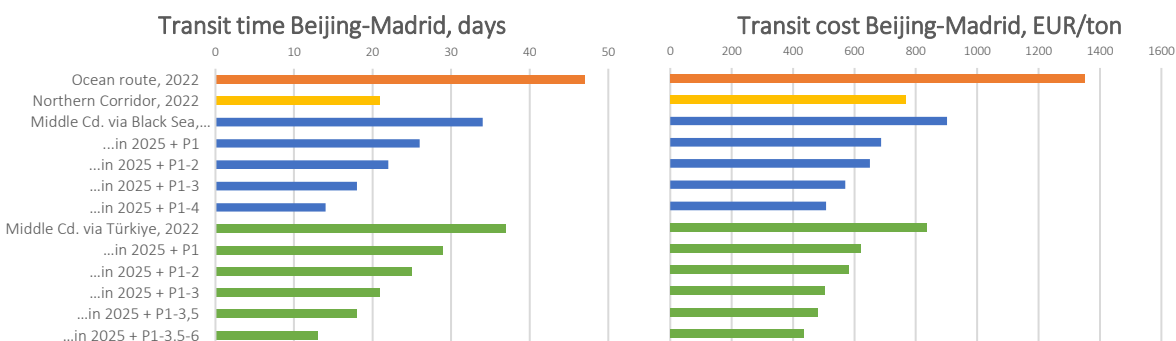
Several other factors hamper freight flows via the Middle Corridor. Among them are inefficient border crossings and customs procedures, low frequency and lack of flexibility of train services, and a lack of a well-established logistics market.¹⁶ Potentially, the Middle Corridor could be the fastest Eurasian route, with journey times of between 10 and 15 days possible in theory, compared to more than 30 days today.

Targeted measures could activate the great potential of the Middle Corridor

Targeted measures can activate the great potential of the Middle Corridor. Implemented by 2025, they could make Eurasian freight flows 30-40% faster and 35-45% cheaper than the Northern Corridor. Six packages targeting different corridor parts were tested for their impact, using the ITF Freight Model:

- P 1: Improve the China-Kazakhstan rail link (Beijing-Aktau)
- P 2: Optimise border crossings in the Caspian Sea and for China-Kazakhstan
- P 3: Develop ports and increase the number of vessels in the Caspian Sea
- P 4: Enhance the capacity of ports and rail connections in the Black Sea
- P 5: Improve the Türkiye rail link (Kars-Istanbul)
- P 6: Modernise border crossings and interoperability for Türkiye-Bulgaria and Türkiye-Georgia

The graphs below show how much each package of measures would reduce transit time and cost for the route Beijing-Madrid via the Middle Corridor compared with the Northern Corridor and Ocean route.



¹⁴ Railpage, "Middle Corridor unable to absorb northern volumes, opportunities still there", 20 March 2022

¹⁵ AIES, "The Implications of the Russian Invasion of Ukraine on the Future of Sino-European Overland Connectivity", June 2022

¹⁶ UIC, "Eurasian rail corridors: What opportunities for freight stakeholders?", October 2017

Policy Considerations

Prioritise efficient infrastructure, seamless borders and functioning multimodality

Establishing robust alternatives to the Northern Corridor requires continuous investment in transport infrastructure and the operational environment. Tackling bottlenecks is essential for success. These include port facilities and multimodal terminals, notably in the ports of Aktau, Batumi, Constanza and Poti. They also include rail tracks (especially the BTK line), rolling stock and vessels (mostly in the Caspian Sea). Building up digital infrastructure is vital to expedite seamless and flexible border crossings. Generally, digitisation and harmonisation should target inefficient planning, redundant procedures, inconsistent regulations (e.g. on train length) and the lack of standardised documents (e.g. the CIM/SMGS consignment note). Initiatives to end bottlenecks and improve network performance should employ measures that will bring down the carbon intensity of Eurasian trade and make it more sustainable.¹⁷

Diversify trade links to make Eurasian supply chains resilient

The countries connected by the Middle Corridor and their neighbours have major economic potential. Developing the Middle Corridor should open new markets and strengthen links between existing trade partners. Adding new and activating under-used transport routes would diversify international trade and support economic development. Transport policy should also advance trade regionalisation and enhance regional connectivity. Limiting the dependency on transit operations and opting for lean and reliable supply chains rather than complex ones provides the basis for more sustainable trade. Eventually, it would improve the region's resilience and reduce the local impacts of foreign crises, which is especially relevant for the Central Asia context.

Implementation Priorities

- Ensure high-level political support
- Intensify co-operation between countries and national operators
- Establish a co-ordination platform for international project management
- Develop multinational action plans for enhancing freight transport connectivity
- Ensure harmonised and coherent transport planning and operations
- Establish a favourable legal framework
- Secure continuous investment
- Encourage the private sector to engage in sustainable freight initiatives

Focus on regional policy dialogue to strengthen transport connectivity

Developing the Middle Corridor will require national initiatives and regional co-operation in equal measure. The countries linked by the corridor should conceive of their national transport infrastructure as part of an integrated, transnational network underpinned by regional and international agreements. These agreements should be enforced at the national level and by reporting to an intergovernmental oversight body. To foster commercial orientation and financial sustainability, a modern logistics sector should be established. Additional effort is required to ramp up frequencies, improve tariff structures and service schedule transparency, and create marketable products.

The International Transport Forum gratefully acknowledges substantial input for this brief from the United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP).

This work is published under the responsibility of the Secretary-General of the International Transport Forum. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Member countries of the ITF. This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

¹⁷ ITF, [“North and Central Asia Transport Outlook”](#), Case-Specific Policy Analysis, 29 June 2022