

Summary

- In our [previous report](#), we came to the conclusion that **rapid growth of EU-China container traffic using EAEU railways will continue in the short term**. The current through-freight rate (including Chinese subsidies) of \$5,500 per FEU may encourage further growth of container traffic to 500,000 FEU in 2020 (a three-fold increase over three years). However, to attract additional freight traffic, it is necessary to further expand transport infrastructure and remove a number of barriers. The EAEU and China's domestic railway networks and their transport capacities are quite sufficient to meet the existing transport needs along the China-EAEU-EU axis. Container trains currently boast schedule compliance rates of up to 99%, with routes and schedules having been negotiated and approved by all transcontinental freight traffic stakeholders.
- **That said, long-term growth of container traffic is inhibited by certain external and internal factors, and by the risk that Chinese provinces will discontinue export container traffic subsidies.** Further growth will be contingent upon investments to remove physical bottlenecks in the EAEU railway infrastructure, lower freight rates, and guarantee the preservation of PRC transport subsidies.
- **A critical infrastructural restriction is imposed on the future growth of trans-Eurasian transit by the inferior transport and processing capacity of Polish railways, including crossing points at the Belarus-Poland border.** The most intensive container train traffic is at the crossing point Brest (Belarus) — Małaszewicze (Poland). It is included in almost all routes linking China and the EU. Given the current state of Poland's railway infrastructure, locomotive fleet, and rolling stock, any significant increase of container traffic through the Brest-Małaszewicze crossing point is bound to be extremely problematic. Even today, the Polish side processes only 9–10 trains per day instead of the negotiated 14 trains.

The aggregate capacity of existing and prospective Polish processing infrastructure is considerably lower than the volume of container traffic planned by many trans-Eurasian transit participants. The PRC seeks to have 5,000 Europe-bound trains by 2020, with Kazakhstan projecting a container transit increase to two million TEU. According to our estimates, the anticipated expansion of the Belarusian Railway container train processing infrastructure at the Bruzgi-Kuźnica Białostocka and Swislocz-Siemianówka crossing points will not resolve the problems related to the exhaustion of technical capabilities required to boost the Brest Hub's processing capacity. **This calls for additional investments and a substantial effort to upgrade Polish border crossing points**, as well as an overall improvement of Polish railway infrastructure in the East-West direction. However, Poland is refraining, at least for the time being, from investing in

China-EU routes, and is instead channelling all available resources into railway routes linking Baltic ports to South Europe (North-South). This is contrary to the interests of trans-Eurasian transit.

Differences in container train lengths impose another restriction on the development of transcontinental transit along the PRC-EAEU-EU axis. While in Russia an average train has 71 conventional railway cars (994 m), and in Belarus 57–65 conventional railway cars (up to 910 m), in Poland the technical regulations limit train length to 600 m. Accordingly, trains leaving Małaszewicze can have a maximum of 43 cars carrying 86 TEU. As a result, if a 65-car container train arrives at the border with Poland, the cars have to split up: a 43-car train is composed as the containers are transhipped in Brest, while the remaining 22 cars have to wait at the marshalling station for the next train to be made up. This results in loss of time, accumulation of containers at crossing points, and higher costs.

The low speed of freight trains in EU countries has a negative impact on delivery time, which should be the key competitive advantage of land container transport. Container trains hurtling through the EAEU at an average section speed of 41 km/h slow down dramatically as they enter the EU. Cargo trains travel through international segments of European railways at an average speed of 18.2 km/h, with Poland posting the lowest cargo train speeds in Europe. However, European countries still charge much higher railway freight rates than countries such as Russia. Over the last several years, freight train traffic in many EU countries has been neglected, with shortage of investment capital and lack of modernisation efforts giving rise to a noticeable delay in the development of railway infrastructure.

- **Insufficient standardisation of shipping documents and technical regulations is the main administrative and legal obstacle to the increase of freight traffic among the PRC, EAEU member states, and the EU.** In most European countries, railway freight traffic is regulated by the Convention concerning International Carriage by Rail (COTIF). CIS countries, the Baltic states, Albania, Iran, the PRC, the DPRK, Vietnam, Mongolia, Hungary, and Slovakia use the Agreement on International Goods Transport by Rail (SMGS). The use of the CIM/SMGS common consignment note gives a strong competitive edge to railway shipments through Eurasian space. However, more work needs to be done to standardise normative documents and technical regulations used in Eurasian countries (rules for shipping various types of cargoes, rolling stock operating parameters, environmental standards, etc.).
- **It is often claimed that differences in track gauge and border/customs inspections act as major barriers to increasing freight traffic along the PRC-EAEU-EU axis. We, however, believe that these two barriers are not critical in their impact on the cost and speed of delivery.** Differences in track gauge necessitate container transshipment or bogie exchange at border crossing stations. This takes from two to six hours, on average. Completion of border/customs formalities in EAEU member states usually requires a maximum of four hours.

EAEU member states pursue a coherent policy designed to standardise border/customs rules and documents, and to streamline related regulations to minimise the time required to complete border/customs formalities.

- **Long-range investment activities in EAEU member states:**
 - No mega-projects are required to expand the transport capacity of land corridors along the PRC-EAEU-EU axis and boost their competitiveness vis-à-vis sea routes. What we need is not a “second Trans-Siberian Railway” but **selective elimination of transport infrastructure bottlenecks**, which can be managed with limited financial outlay: construction of additional railways, electrification of new railway sections, upgrade and modernation of locomotives, acquisition of special rolling stock, improvement of border crossing infrastructure, etc.
 - **Creation of backbone transport hubs/terminal and logistics centres (TLCs) in Russia, Kazakhstan, and Belarus.** The lack of backbone TLCs in the EAEU pushes up mileage and, accordingly, shipping costs incurred by consignors, and increases cargo accumulation and distribution times. Objectives for the creation of transport hubs/TLCs in the EAEU include the following: (1) processing (in border-adjacent areas) of container cargoes entering the EAEU (from the PRC and from the EU) and their subsequent distribution by railway/road transport; (2) accumulation of container cargoes in hubs/TLCs and their subsequent export to the PRC and EU countries by railway/road transport (short-haul operations); (3) possible future accumulation of container cargoes in hubs/TLCs for additional loading of transit container trains travelling along the PRC-EAEU-EU axis.
 - Expansion of international freight traffic by using special containers/cargo boxes (for chemical and mineral cargoes) and refrigerator containers (for food products).
 - Investing in alternative East-West container train routes, as EAEU member states cannot speed up construction of railway infrastructure in Poland. Possible key investment targets include: (1) expanded use of the Saint Petersburg transport hub; (2) international transit use of the transport and logistical infrastructure of Kaliningrad Region (transshipment stations in Chernyakhovsk and Kaliningrad). To assure full-scale use of the route, it may be necessary to invest in boosting the processing capacity of transshipment stations and improving the border crossing infrastructure (Poland-Kaliningrad Region, Lithuania-Kaliningrad Region).
- **Involvement of Chinese direct investors will make BRI projects more attractive for European investors.** In the opinion of potential European investors, direct investments by companies from the PRC (rather than credits extended by Chinese banks) may increase the investment appeal of BRI projects, signalling the emergence of a favourable and stable investment environment in the target area.
- **European consignors do not have enough information on the advantages/terms of using trans-Eurasian land transport corridors** (delivery times,

number of active transport modalities, door-to-door delivery capability, delivery costs) or on the development status of transport corridors and available routes (primarily railway routes). A survey conducted among European consignors has shown that companies that have no trans-Eurasian shipping track record estimate the time of delivery of a 40-foot container at 20–30 days and the cost of delivery at \$10,000–15,000 (see Figure A). In both cases, the actual figures are much lower. **It is necessary to promote the use of trans-Eurasian railway transport along the PRC-EAEU-EU axis. This may generate additional freight traffic from the EU to the PRC and, accordingly, reduce the share of empty return containers.**

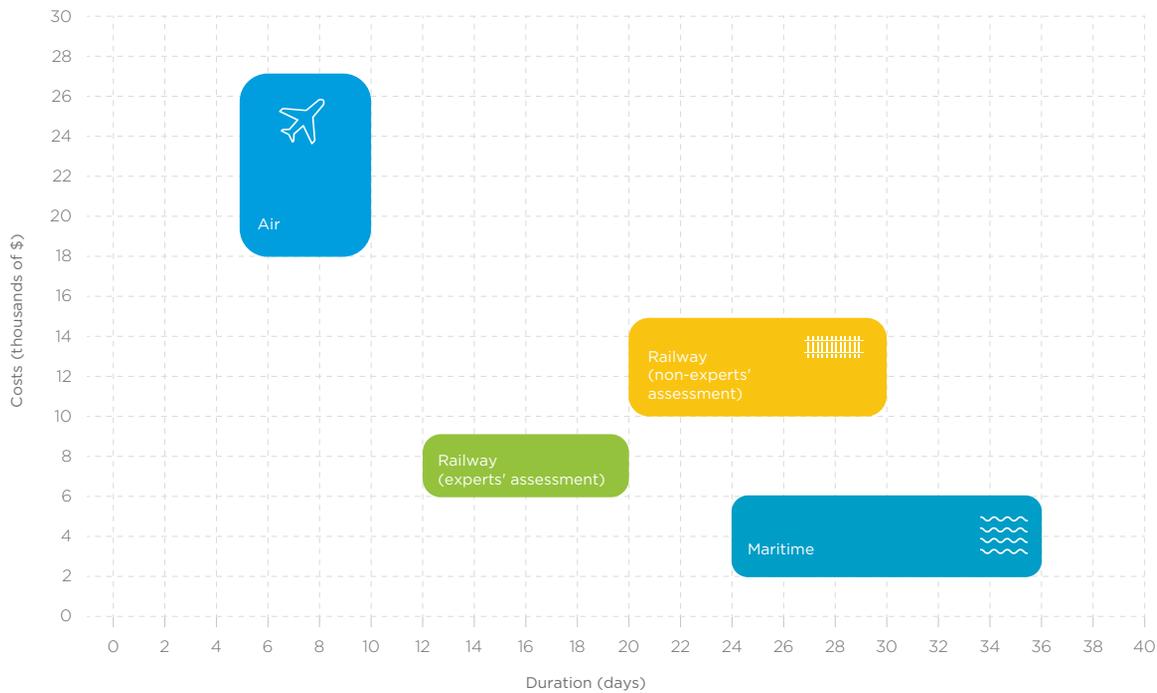


Figure A
Estimated Cost and Duration of Freight Transport by Standard 20-Foot Containers from China to Western Europe

Source: IIASA (2018)