

The Eurasian Landbrige

Importance for the Danube Region

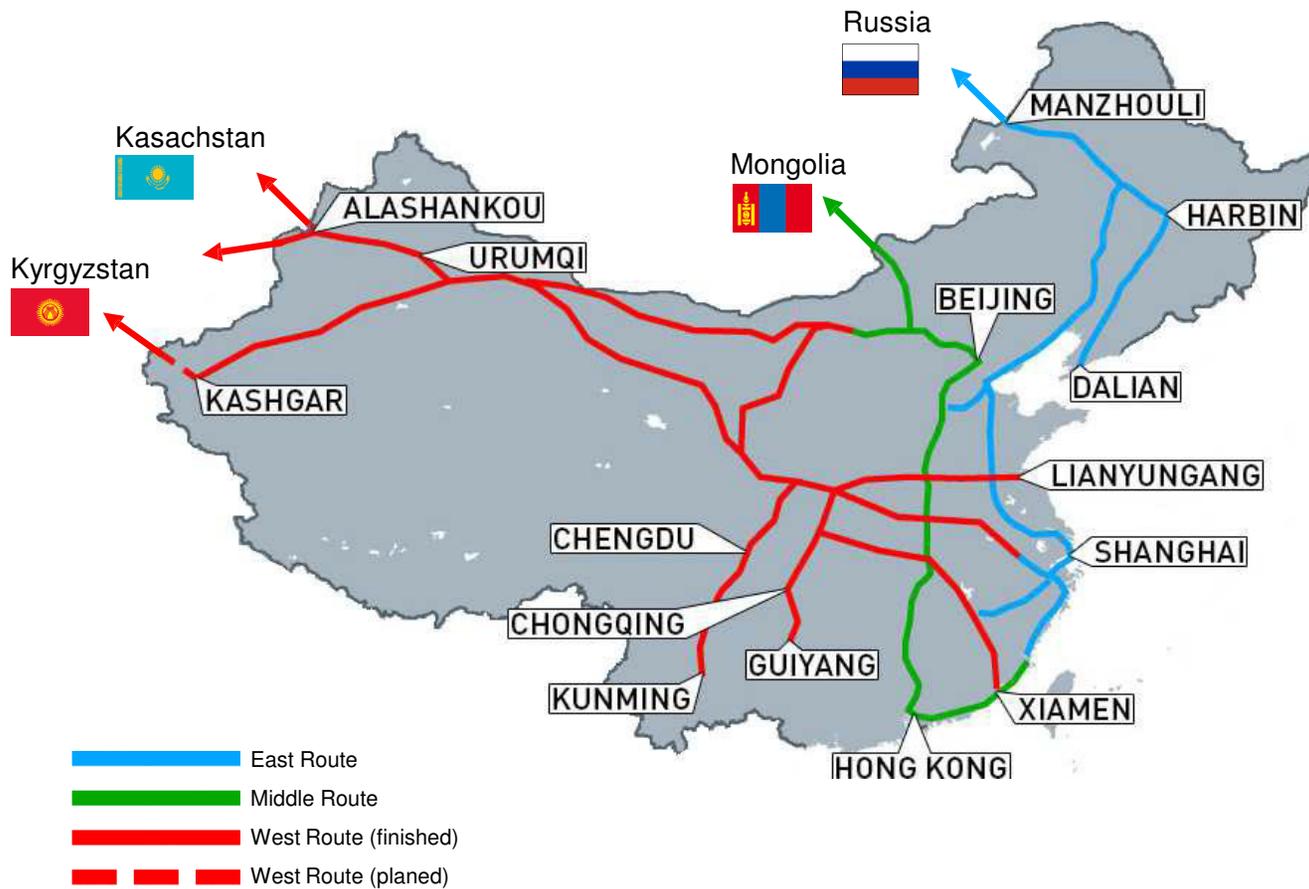
Igor Hribar | The Danube Region Transport Days 2018 | Ljubljana | December 2018



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Current development

The railfreight system in China connects the megacities and all industrial regions



China's Rail System

East Route

- Connects the main East Coast Cities
- Linked to the Transsib and Transit Russia

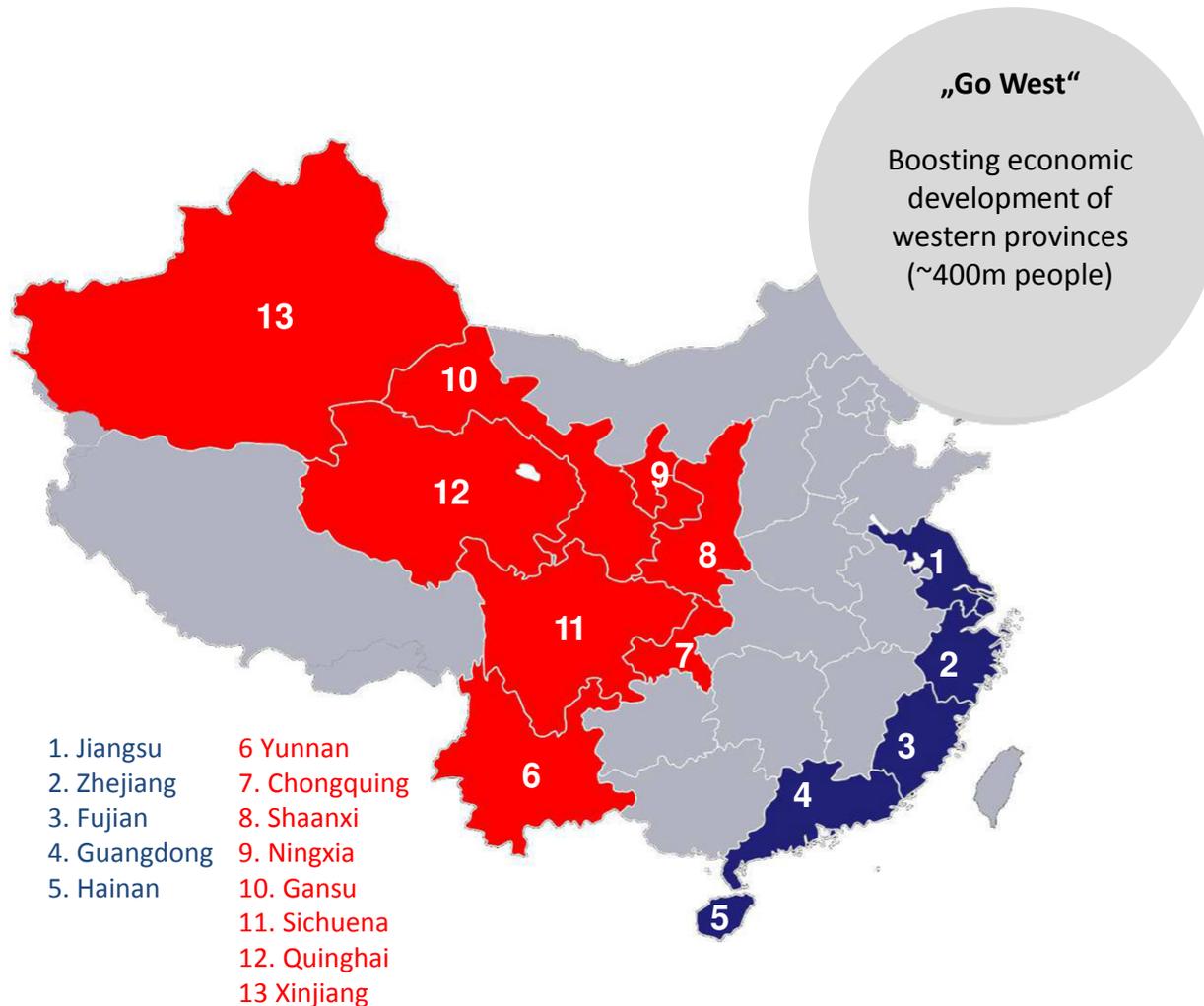
Middle Route

- Connects Beijing with Hongkong
- Linked to the Transsib and Transit Russia

West Route

- Connects the western Regions of China
- Linked with the New Silk Road and Trans-Kasachstan Rail
- CKU Railway Project in negotiation (China-Kyrgyzstan-Uzbekistan)

The western regions are in the focus of the „Belt-and-Road“ initiative



‘One Belt, One Road’

- Started in 2013
- Project to create new trans-continental trade routes that will benefit different areas to general globalized trade
- 13 provinces are expected to benefit, primarily western areas
- Investments will lead to creation of new markets
- Key areas:
 - Healthcare
 - High-tech manufacturing and transport
 - E-commerce
 - Finance
 - Agriculture
 - Infrastructure

10 years of the succes story „China by Rail“



<p>The first container was shipped on the Trans-Siberian Railway back in 1973</p>	<p>It takes an average of 14 to 16 days for a train to make the journey between China and Germany</p>	<p>Trains travel 10,000 km or some 12,000 kilometers between Germany and China depending on the route</p>	<p>The longest freight rail link ever traveled covers 13,000 km between Madrid and Yiwu, China</p>	<p>Each train must undergo at least two changes of track gauge</p>
<p>At least five languages are spoken during the journey: German, Polish, Russian, Belarusian and Chinese</p>	<p>Trains cross eight time zones and four climate zones</p>	<p>Trains are upwards of 1,000 meters long on sections of the route in Russia and 600 meters long in Europe</p>	<p>A train loaded with 41 containers, including the cars, can weigh up to 1,600 metric tons. That's roughly as much as 320 African elephants</p>	<p>Deutsche Bahn hopes to transport 100,000 standard containers a year between China and Germany by 2020</p>

5000 trains will be operated in 2020



Until 2011

1st train started in **2008** from Beijing to Hamburg
2010: tests on Northern and Southern route

2011: Company trains Chongqing – Duisburg and Leipzig – Shenyang

2012 + 2013

Regular trains east- and westbound (CN-EU v.v.)

Regular container shipments from China to CIS countries

First regular **multi-customer train** Zhengzhou–Hamburg

2014 + 2015

Growing number of east- and westbound train services

DB Schenker enlarged service portfolio:

- **Rail/Air**
- **LCL**
- **Reefer shipments**

2016 + 2017

2200 trains WB and 1100 trains EB were operated in 2017 by the end of November

ChinaRailways announced to increase number of trains per year up to

- **5000 trains in 2020**

2018 - 2030

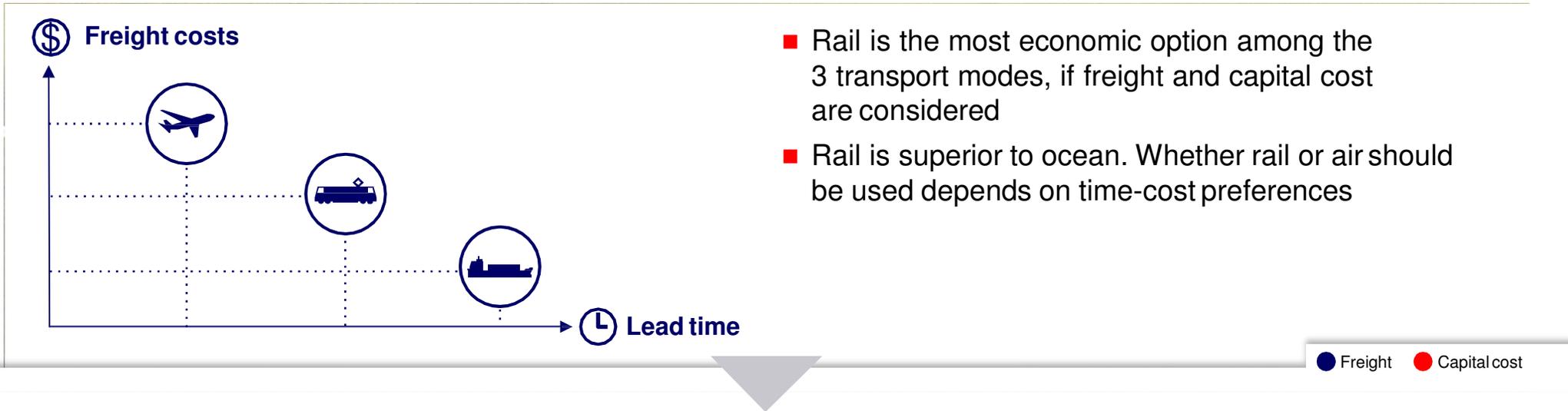
Rail potential according UIC*-study:

- **7756 trains in 2027 (21 train daily)**
- **9880 trains in 2030 (27 trains daily)**

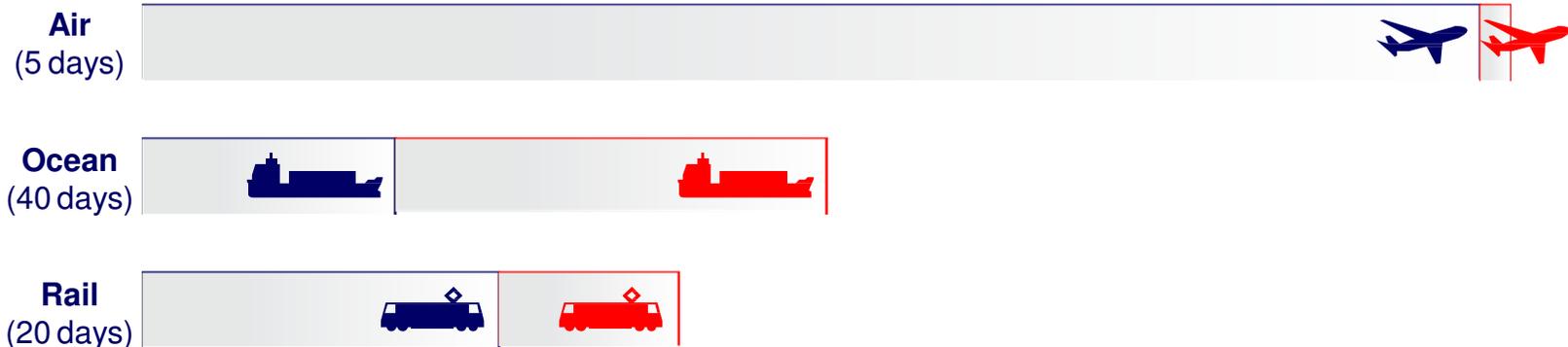
*presented August 2017 with Roland Berger in Paris

Considering capital and freight costs

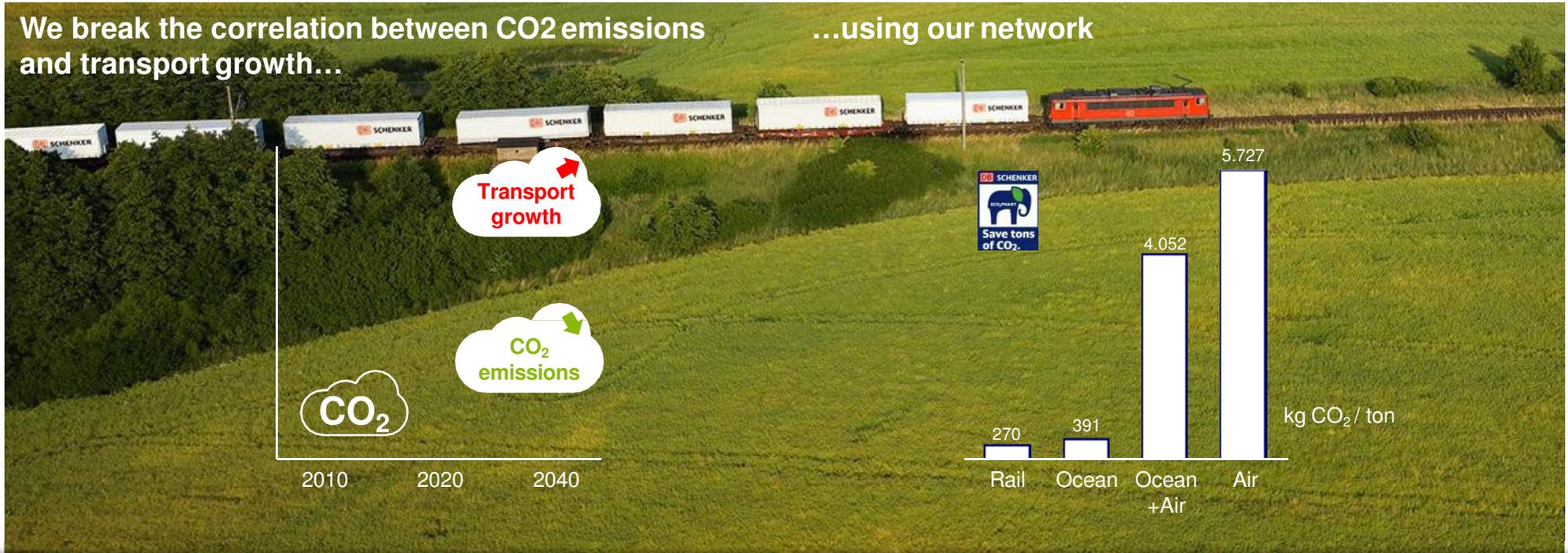
Rail is the most economic option



Example: freight & capital cost for High Value Goods



Green Logistics: apart from economic advantages Rail offers the most environmentally friendly transport mode

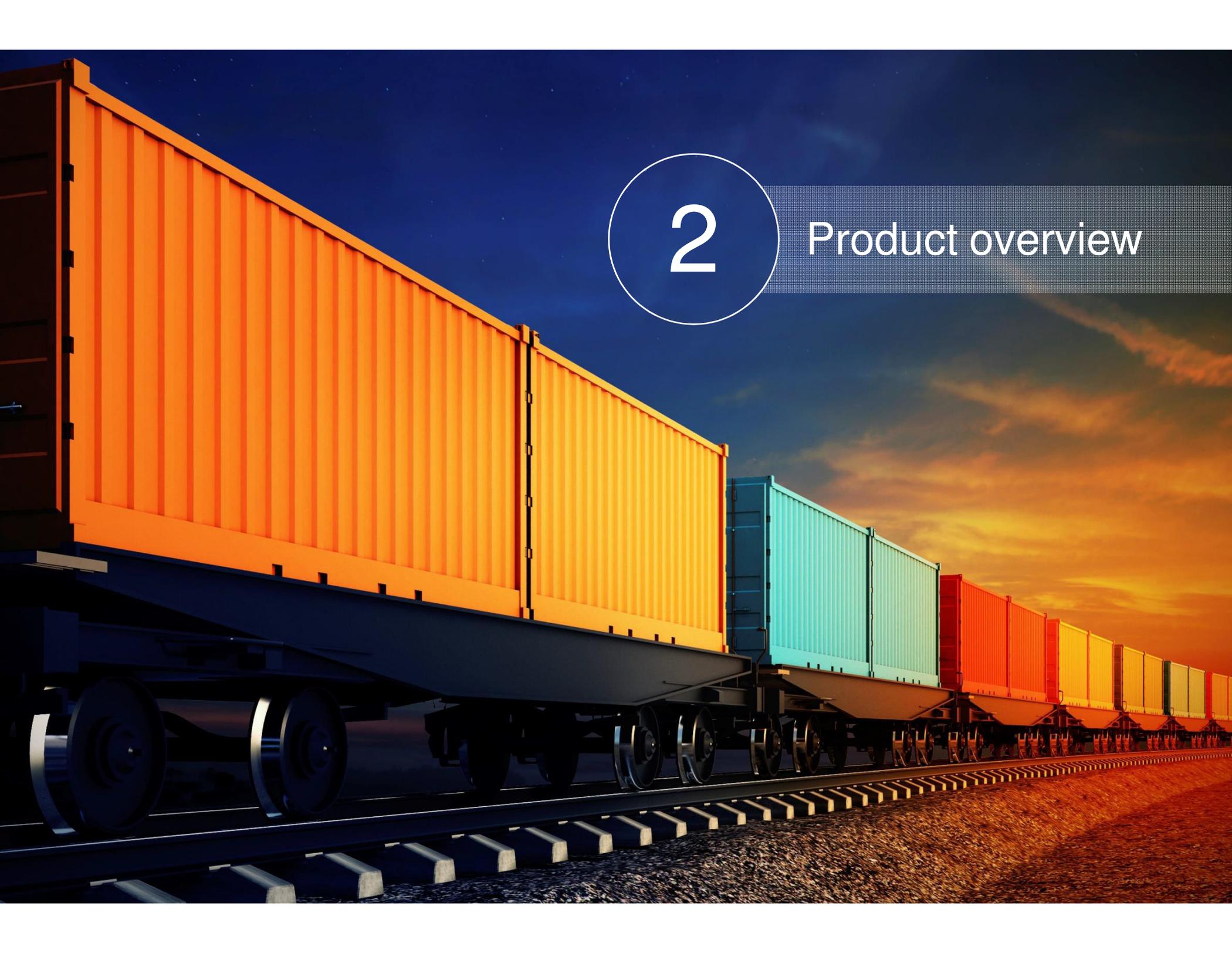


■ From an **environmental perspective** Rail transport is the **preferred choice** for shipments between China and Europe

■ Rail is not only the **most ecological mode** of transport in terms of CO₂ emission but **also regarding other pollutants¹⁾**

Rail service between China and Europe makes sense from an environmental as well as a business perspective

¹⁾ e.g. PM (particulate matter), NMHC (non-methane hydro carbons), SO₂ (sulphur dioxide), NO_x (nitrogen oxide)

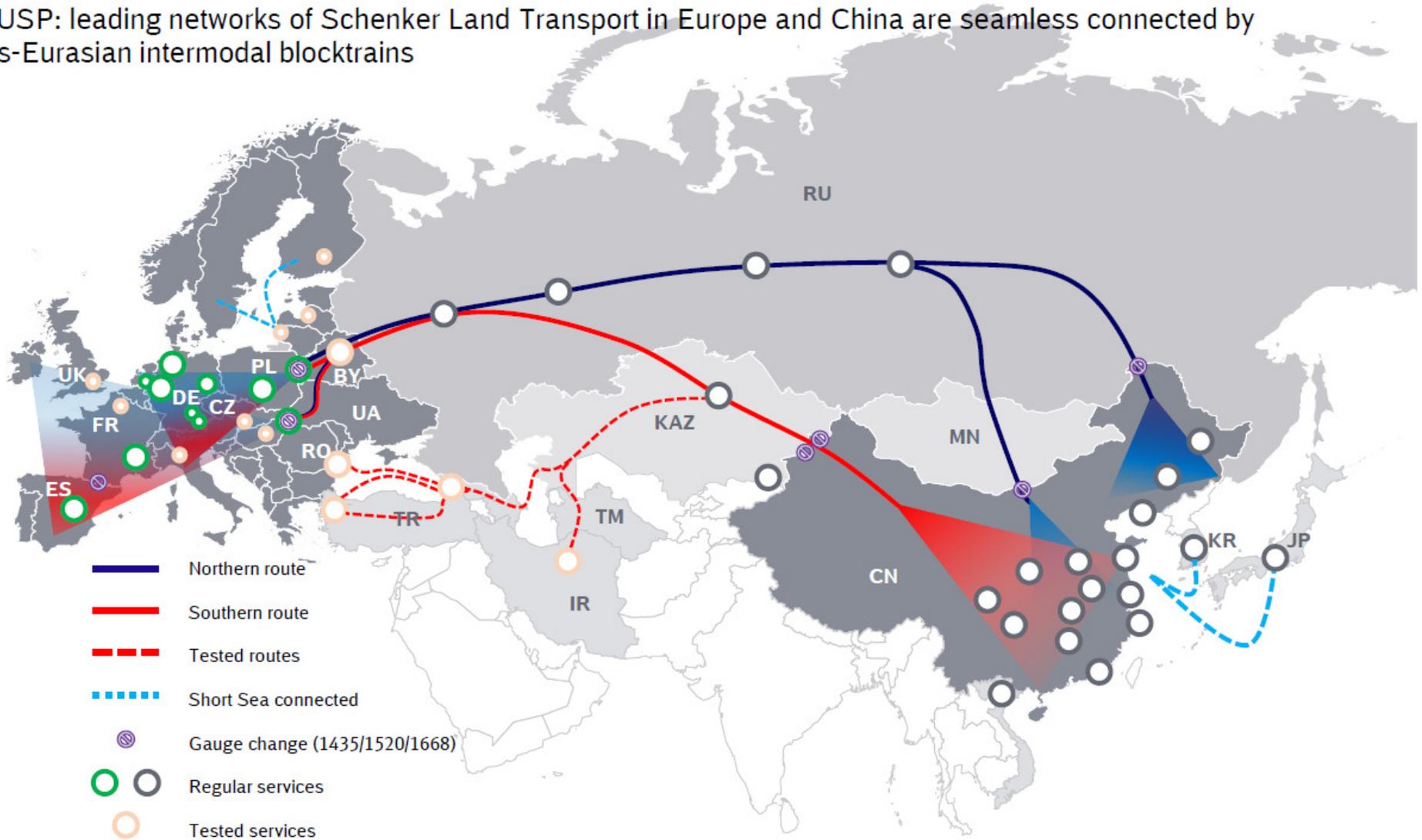
A train of shipping containers on tracks at sunset. The containers are in various colors: orange, yellow, green, and red. The train is moving from left to right. The sky is a mix of blue and orange, indicating a sunset or sunrise. The train is on a set of tracks with gravel ballast.

2

Product overview

DB Schenker's network of Land Transport is well connected by New Silkroad rail system

- Key USP: leading networks of Schenker Land Transport in Europe and China are seamlessly connected by Trans-Eurasian intermodal blocktrains



China: DB Schenker connects New Silkroad rail network with own local presence and expertise



ILLUSTRATIVE

DB Schenker China at a glance

- More than 50 years in China
- Full regional coverage with offices in 60 cities
- 5,700 logistics specialists
- 87 warehouses*
- 940,000 m² warehouse area*
- Class A licensed international freight forwarding company
- **Operational expertise**
+ creation of blocktrain products for Chongqing and Zhengzhou
+ documentation, customs, routing options, local presence etc.
- **Close ties to China Railway**
CRCT, CRIMT, Local Railway stations, Terminal JV CR Intermodal

*Includes air freight, ocean freight and contract logistics warehouses



Full scope of rail products is operated on the Trans Eurasian corridor

LCL Shipments

- 5 LCL services from Wuhan to Europe and from Germany to Wuhan
- Regular departures with own controlled services on an end-to-end basis
- Transit time door-door : around 23-29 days



Single containers Group of containers

- Full door-to-door FCL service incl. pre- and on-carriage as well as additional services
- Several departures per week on various routes possible
- Short booking deadlines



Blocktrains

- Available as multi-customer public train for different customers: min. 1 FEU (FCL)
- Top speed due to blocktrain prioritization
- Available as company train for one customer volume requirement: 41-51 FEU per train



Overview on main blocktrain services and routes

Chongqing - Duisburg

Chengdu-Lodz/
Tilburg/Nuremberg

Wuhan-Duisburg/
Hamburg/Lyon

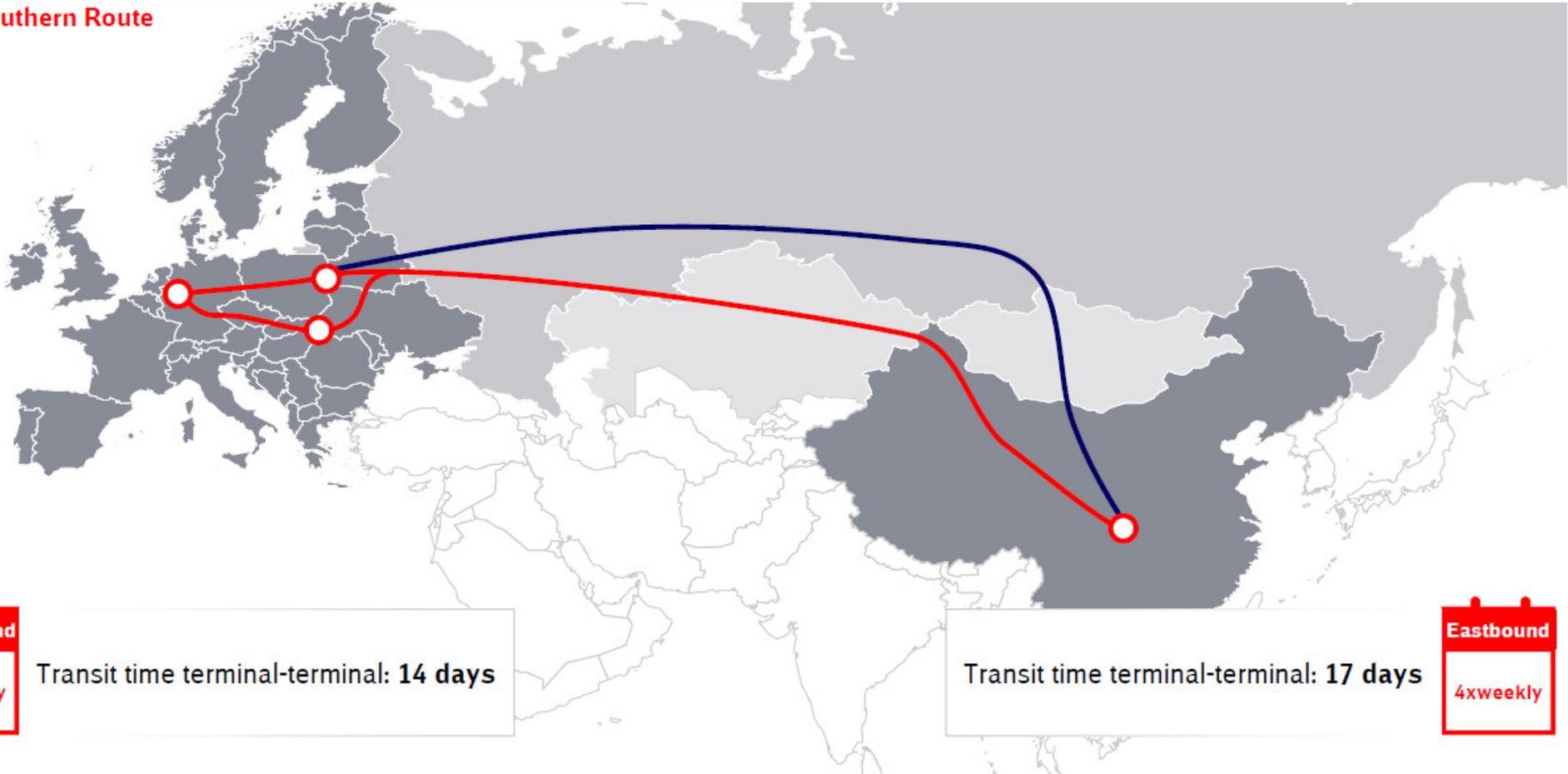
Zhengzhou -
Hamburg

Changsha -
Duisburg

Suzhou -
Warsaw

Shenyang -
Leipzig

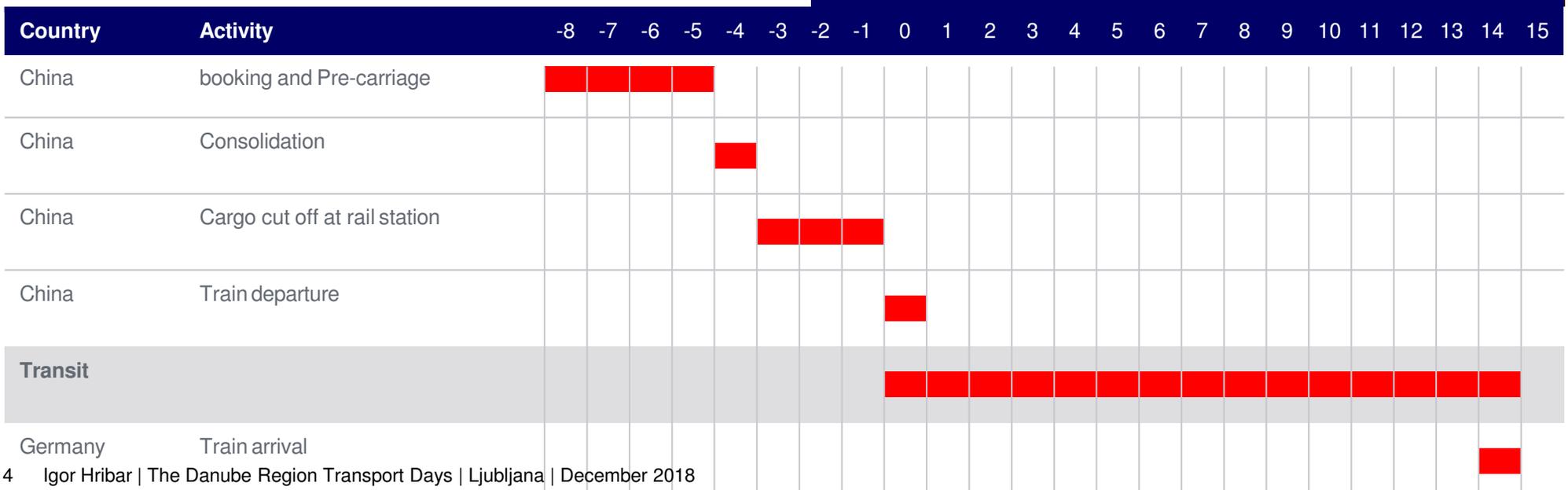
Southern Route



Basic Process and Transit Time Westbound



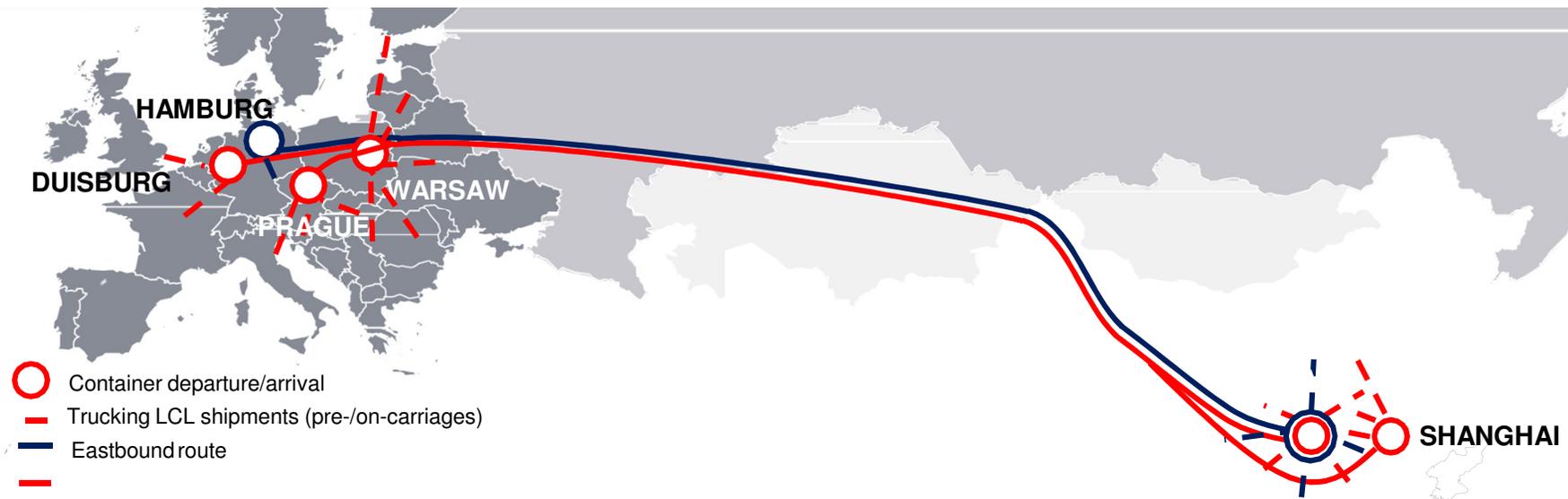
Door - door time of 19 days



Rail LCL service overview

4 westbound services

1 eastbound service



LCL service:

- Depending on the destination area various routes are viable
- Western European as well as Eastern/South Eastern European market connect
- Transit time door-door: 24-28 days including terminal cut off, consolidation, transit and de-consolidation
- Groupage and part loads

Your benefits:

- Frequent and reliable connections to all destinations in Europe via DB Schenker's broad Land Transport network
- Complete DB Schenker end-to-end responsibility
- Flexible and fast solutions for your time critical and high-value groupage and part loads

Basic Process and Transit Time Westbound Wuhan-Duisburg

Wuhan - Duisburg

Wuhan - Warsaw

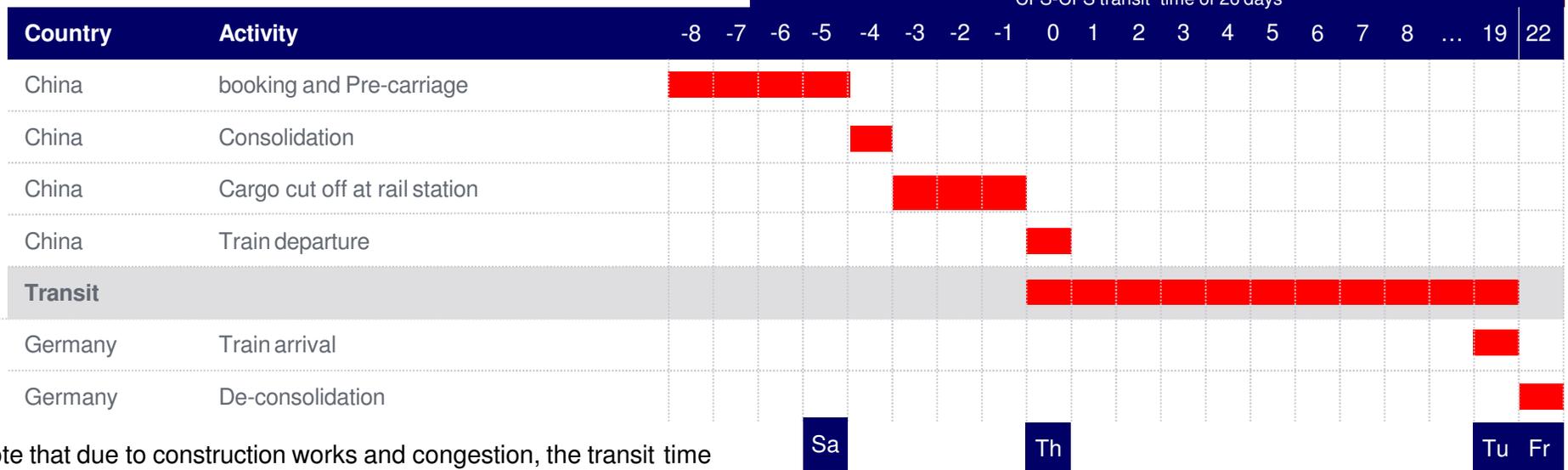
Shanghai - Warsaw

Shanghai - Prague

Hamburg - Wuhan



Terminal-terminal: 19 days
CFS-CFS transit time of 26 days



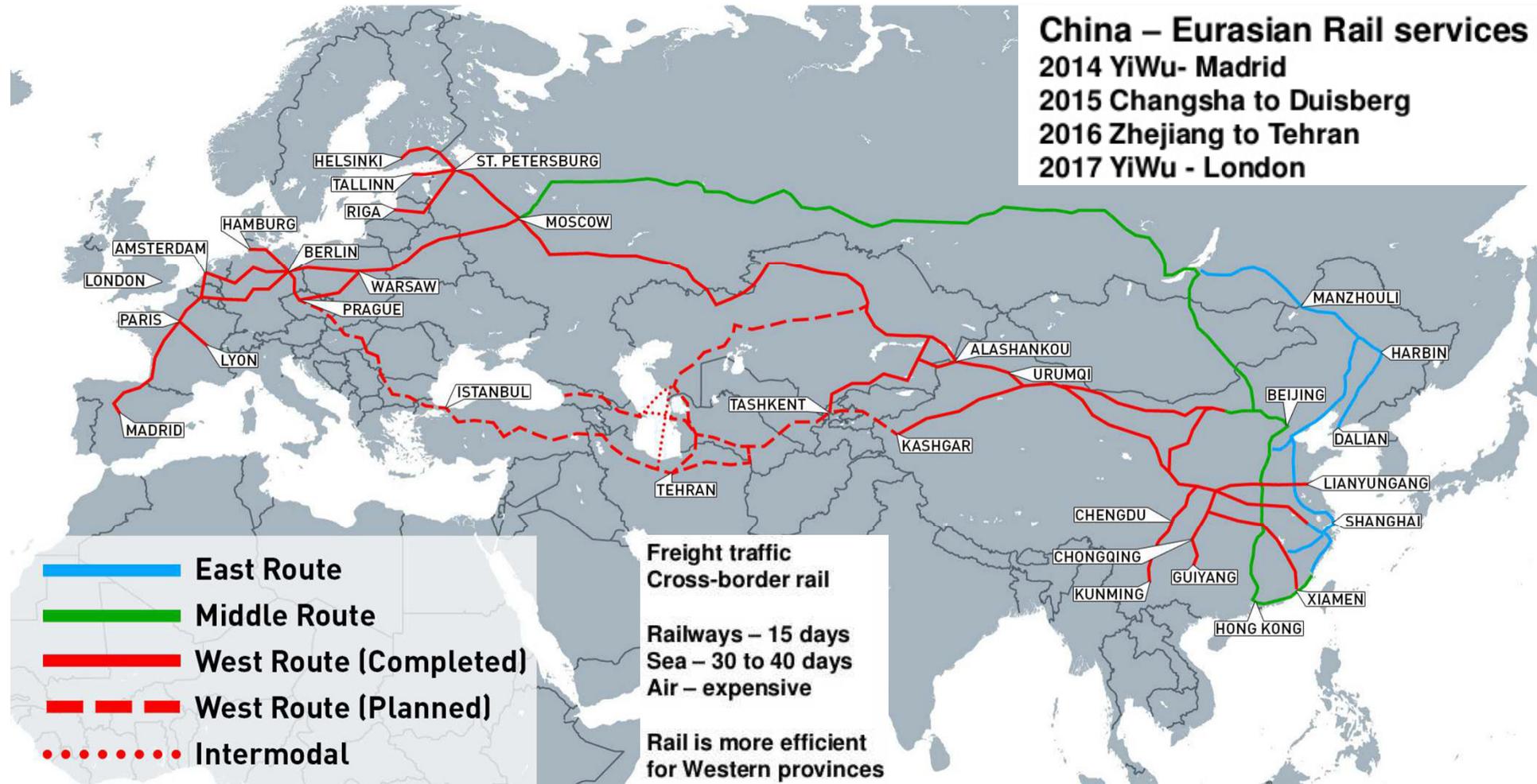
Please note that due to construction works and congestion, the transit time terminal-terminal takes currently 2 to 3 days longer than usual (included in the timeline above).



3

Trends and Challenges

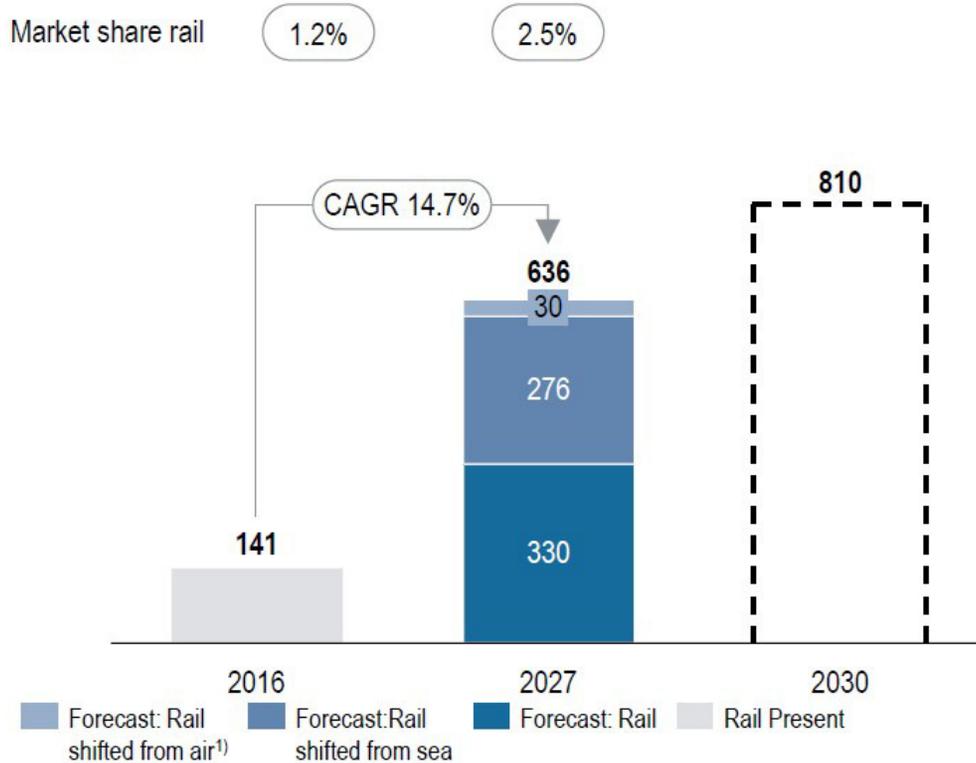
China plans the creation of new corridors through the Middle East to Europe



Estimated Rail Potential – 636.000 TEU in 2027

Roland Berger

Forecast Rail Transport [000 TEU]



1) Rough estimate based on shift factors of 5% from overall Asia-Europe air traffic 2) Length of an European train

Source: Eurostat, Roland Berger



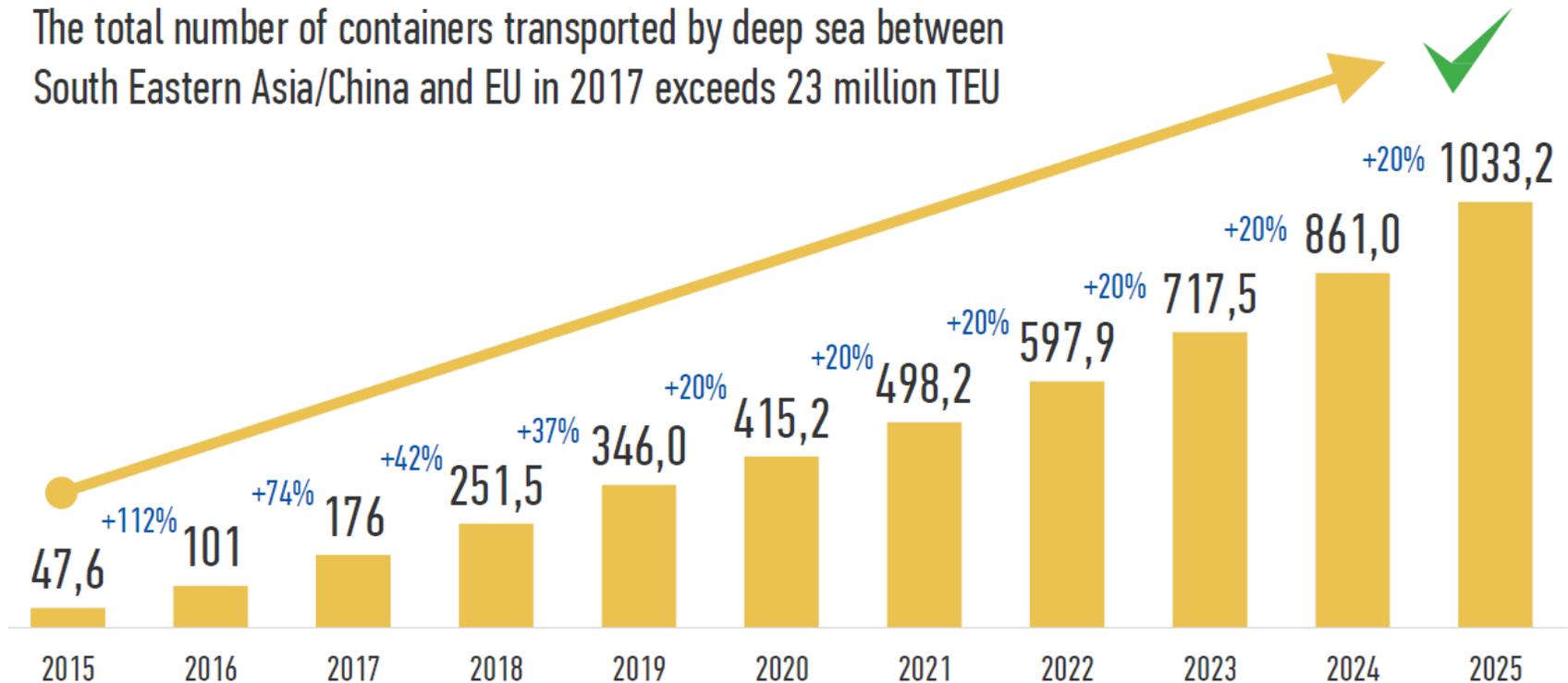
Economist.com

Estimated Rail Potential > 1 mio TEU in 2025

UTLC – Eurasian Rail Alliance*

UTLC ERA one million club

The total number of containers transported by deep sea between South Eastern Asia/China and EU in 2017 exceeds 23 million TEU



Source: UTLC, September 2018

* UTLC ERA Shareholders: JSC Russian Railways, National Union Belarusian Railway, JSC National Company Kazakhstan Temir Zholy

Capacity, Capacity, Capacity

UTLC – Eurasian Rail Alliance*



Main dry border terminals in UTLC ERA services *

		Container trains, day	Capacity, thousand TEU/year
Chinese border	Dostyk	12	360
	Altynkol	30	900
EU border	Brest	20	450
	Bruzhi	4	60
	Svislach	4	60
	Kaliningrad	16	450

* Capacity expected for 2019

Source: UTLC, September 2018

* UTLC ERA Shareholders: JSC Russian Railways, National Union Belarusian Railway, JSC National Company Kazakhstan Temir Zholy

The dynamics of the market development is increasing – but...

Months spent to reach WB market development milestones, 2011-2017



The Potential for the Danube Region ?



RAILFREIGHT

BELT AND ROAD

BUSINESS

TECHNOLOGY

CORRIDORS

POLICY

ADVERT



Hungary gears up to become EU gateway New Silk Road

Published on 06-11-2018 at 11:53

The Hungarian government is to deploy eight new intermodal yards; seven in the countryside and one near Budapest to accommodate rail freight traffic from the Far East to Europe. It is eyeing a strategic position as an eastern European gateway on the New Silk Road.

- **Intermodal terminals:** currently limited logistic infrastructure to be expanded
- **International railway lines:** to be modernized and capacities increased
 - Beograd – Budapest
 - Budapest – Malaszewicze
- **Local railway lines:** upgrading of the lines and signalling systems, modernization of the rail stations
- **Customs:** improvement of the customs processes and counterfeit practices



Thank you for your attention!

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