



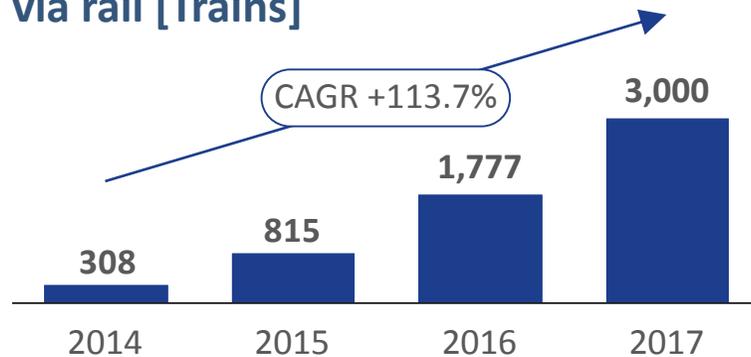
# Rail Freight Corridor Developments and the New Silk Roads

Development of volumes and potential

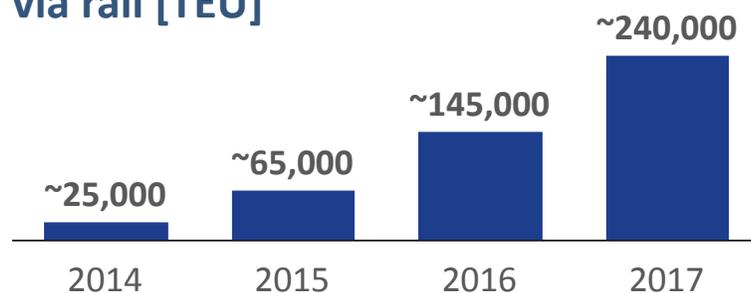
Andreas Schwilling, Roland Berger

# Eurasian rail cargo grew significantly, yet has a low intermodal market share

## Transport between China and Europe via rail [Trains]



## Transport between China and Europe via rail [TEU]



- Improvements driving volume development on Eurasian rail routes
  - Reduction of transit time and increased punctuality
  - Increase of destinations to 15 in Europe and 16+ in China
  - Reduction of freight rates, subsidies from China's OBOR initiative
  - Targeting of suitable customers and regions e.g. Western China
  - Ease of border crossings through common consignment note, Eurasian Customs Union and local improvements
  - Upgrading and extension of infrastructure, e.g. in Kazakhstan
- However, market development and competition from other transport modes prevent rail transport from reaching higher market share
  - Freight rates for container shipping have fallen significantly since 2011. Price level of rail transport is now 3 to 4+ times higher than shipping
  - Economic growth rates in China cooled down. trade between Asia and Europe stagnated
  - Still room for efficiency and quality gains.
  - Constraints of reliability and transport time



# Railway infrastructure is stretched to its limits and endangers future growth

## Europe

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Construction works on main railway lines in Poland for several years

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Growing Eurasian transport flows are concentrating on railway lines from/to Brest with resulting capacity constraints

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In general too many locomotive changes and resulting waiting times for drivers at national borders

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Low and changing prioritization of rail freight when passing through countries



## Border terminals

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Border terminal Brest/Malaszewicze is congested due to growing volumes and insufficient infrastructure

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Conflict in Ukraine makes it impossible to use alternative routes and terminals with sufficient capacity

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Terminal of Zabaykalsk at the Russian/Chinese border with insufficient capacity

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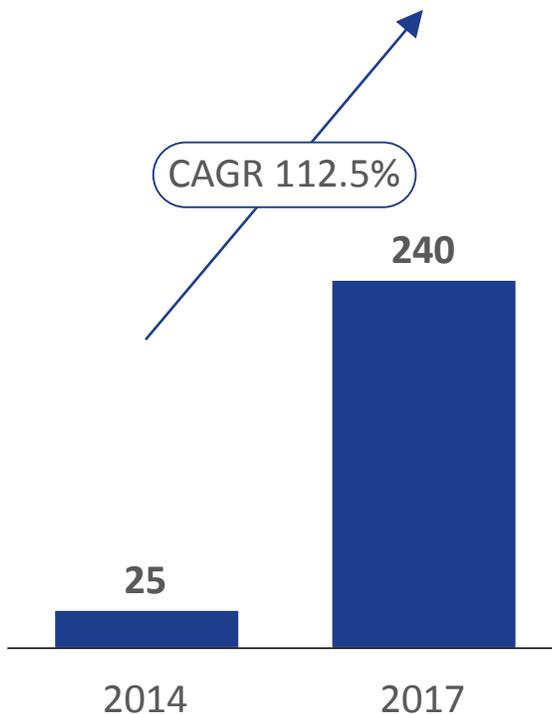
Development of border terminals towards intermodal hubs is lagging behind the needs of operators

26-28 June 2018, Genoa, Italy



# High growth in past and future— Southern route so far not important

**Past development**  
[k TEU]



**Forecast 2027**  
[k TEU]

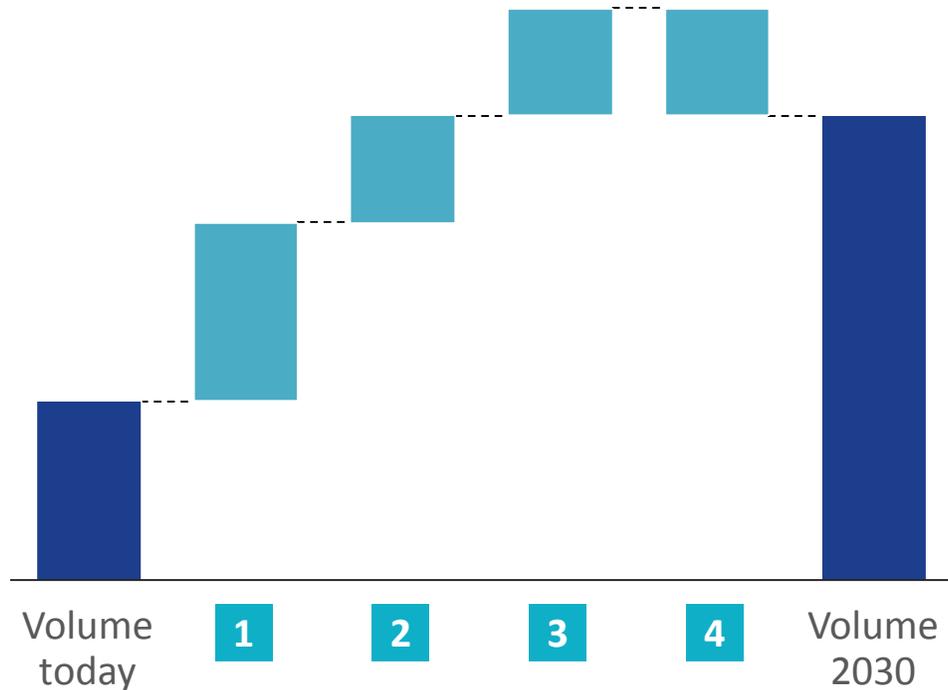


- Total rail potential includes
  - Existing rail volumes increasing over time
  - Shift from sea to rail, including growth of sea transport
- Improvements driving volume development on Eurasian rail routes required
- Southern route insignificant in status quo, growth potential depending a lot on infrastructure improvements and trade between EU and Asia to Iran and Turkey

1) 19,000 TEU for China-Europe only / 390,000 TEU for all transports on Southern routes, incl. China-Iran, China-Turkey, Europe-Iran etc.



# Four key factors determine the future volume – some with high uncertainty



## Main factors driving growth

- 1** Growth of trade and demand for freight transportation in relevant goods
- 2** Efficiency gains along the whole transportation chain
- 3** Improvements of infrastructure and elimination of existing bottlenecks
- 4** Development of Chinese subsidies

## Degree of uncertainty

