



# Maximizing the Potential of Economic Corridors

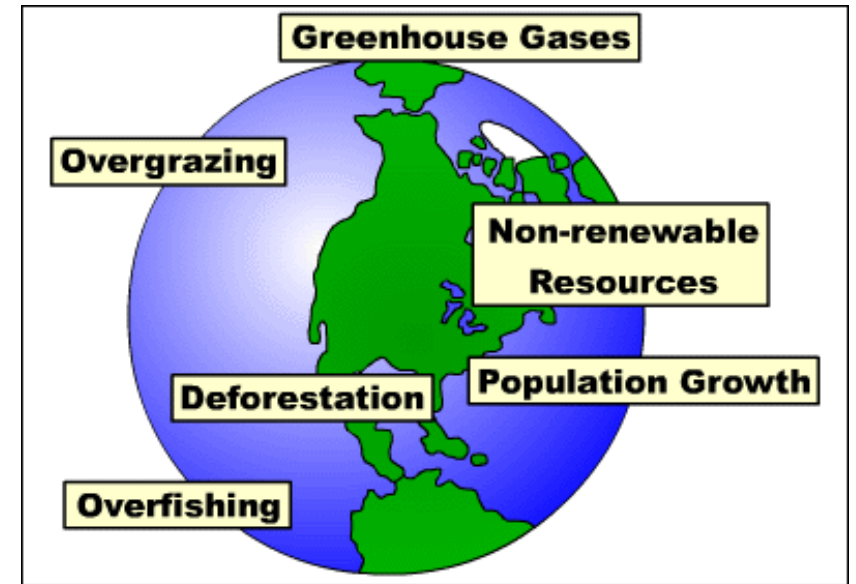
**Dr. Bernard Aritua**

**Senior Infrastructure & Logistics Specialist**

## Economic Corridors

***".....It is our considered professional judgment that this dilemma has no technical solution. If the great powers continue to look for solutions in the area of science and technology only, the result will be to worsen the situation."***

J. B. Wiesner and H. F. York, Scientific America. 211 (No. 4), 27 (1964).



TRAGEDY OF THE GLOBAL COMMONS



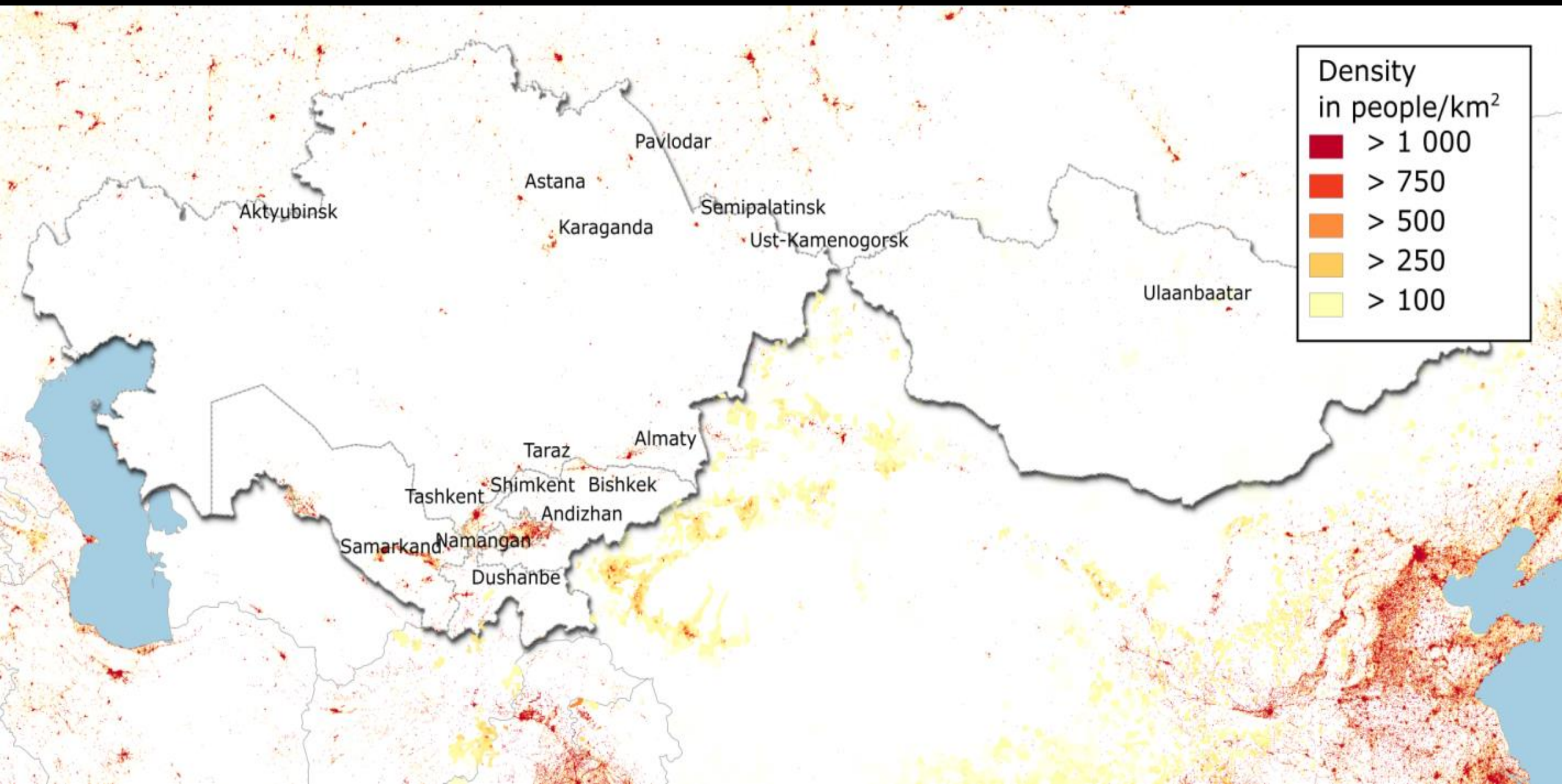


# Economic Geography, Regional Economic Integration, Value Chains





# Population density is extremely low



# Distance to and from production and consumption centers





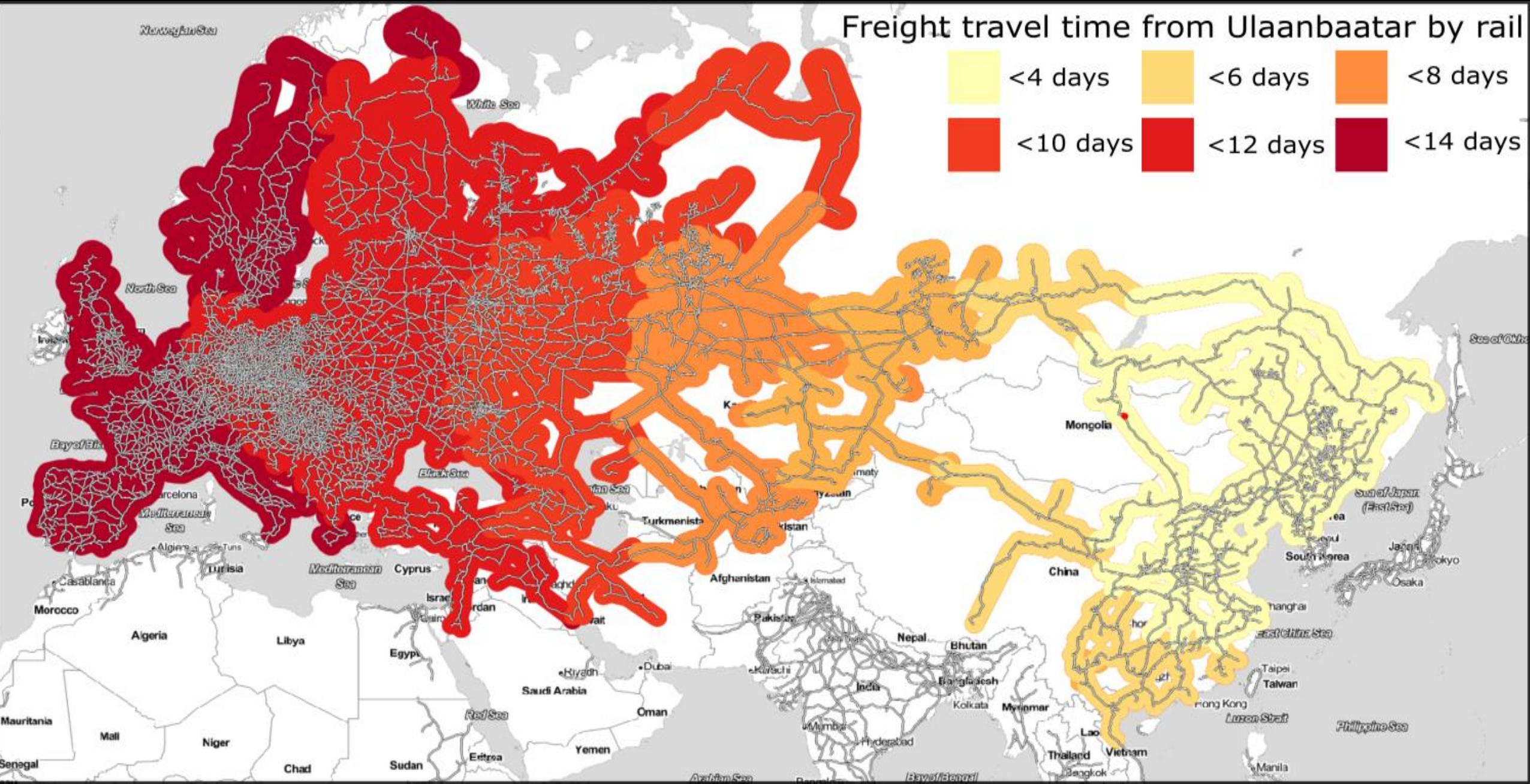
# Huge Infrastructure Gaps

Major rail  
infrastructures



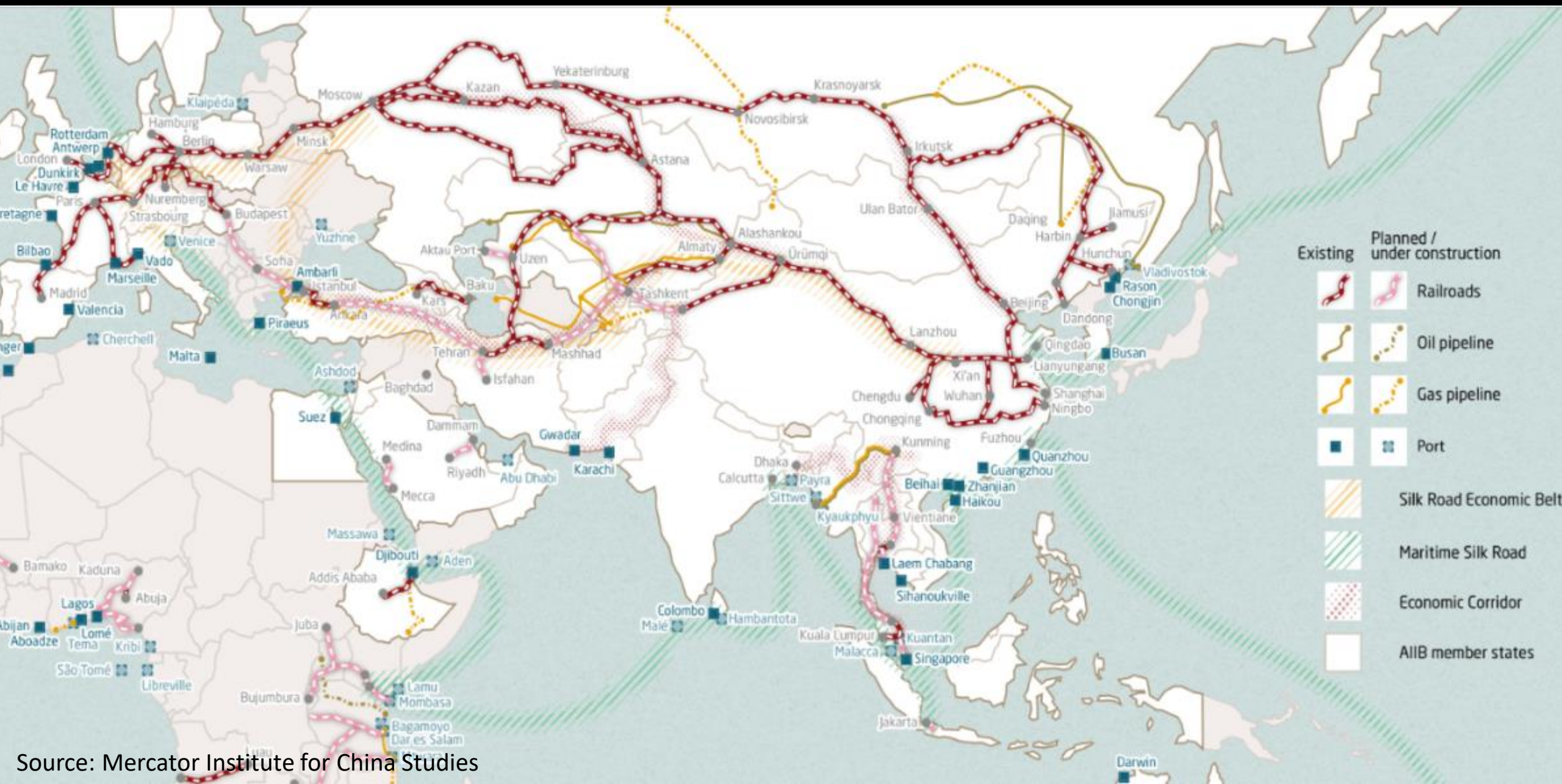


# ... Poor Connectivity to main markets





## Several plans to improve Connectivity



Source: Mercator Institute for China Studies



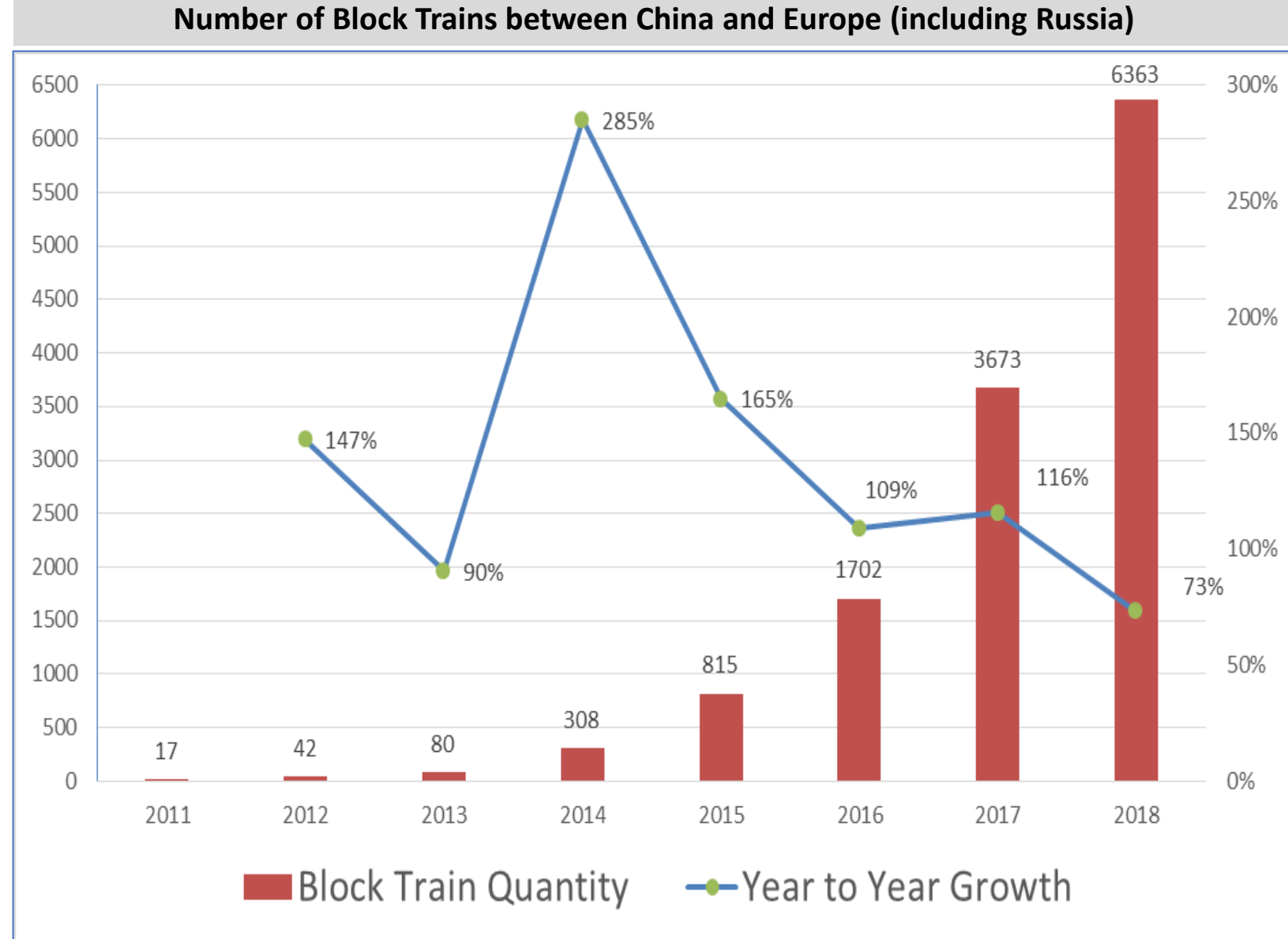


**Multiple (overlapping and often competing) visions of regional connectivity and trade**

# A 'New Driver': China-Europe Block Trains

## ➤ China-Europe Block Trains:

- Increased from **80** to **6,363** per year
- 17,000** trips have been completed (2013 - June 2019)



Data: Chinese Railways, Belt and Road Portal

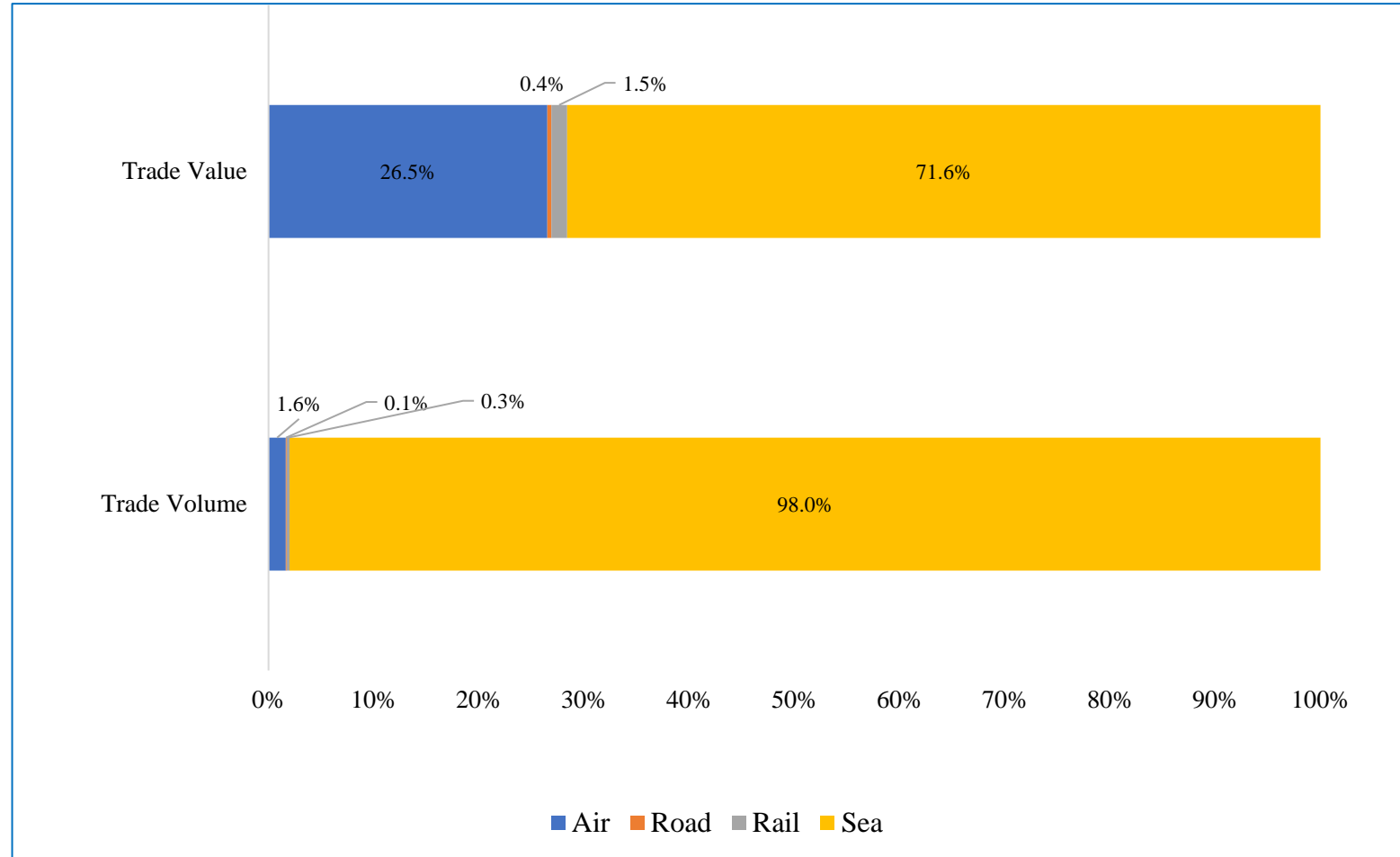


# A New Driver: China-Europe Block Trains

## ➤ Mode Share and Niche Market:

- Sea: **98%** of total trade volume, **low value** goods
- Air: **1.6%** of total trade volume, **high value** goods

Composition of China-Europe Freight Value and Volume by Transport Mode (2016)



Source: World Bank Internal Analysis

# Obstacles and Emerging Challenges

The lack of railway interoperability on legal, operational and technical terms is a major historical obstacle. There are also emerging challenges in capacity, economic and financing constraints

- Lack of systematic design and regional coordination
- Different railway technical systems
- Administrative & legal obstacles
- Limited capacity of intermediate nodes
- Economic & financing challenges



## Obstacles - Lack of systematic design and regional coordination

- There are over 60 cities in China operating westbound block trains to Europe
- All these routes are managed by local governments
- The lack of systematic top-level design and regional coordination has led to inefficiency in terms of railway capacity utilization and resource allocation

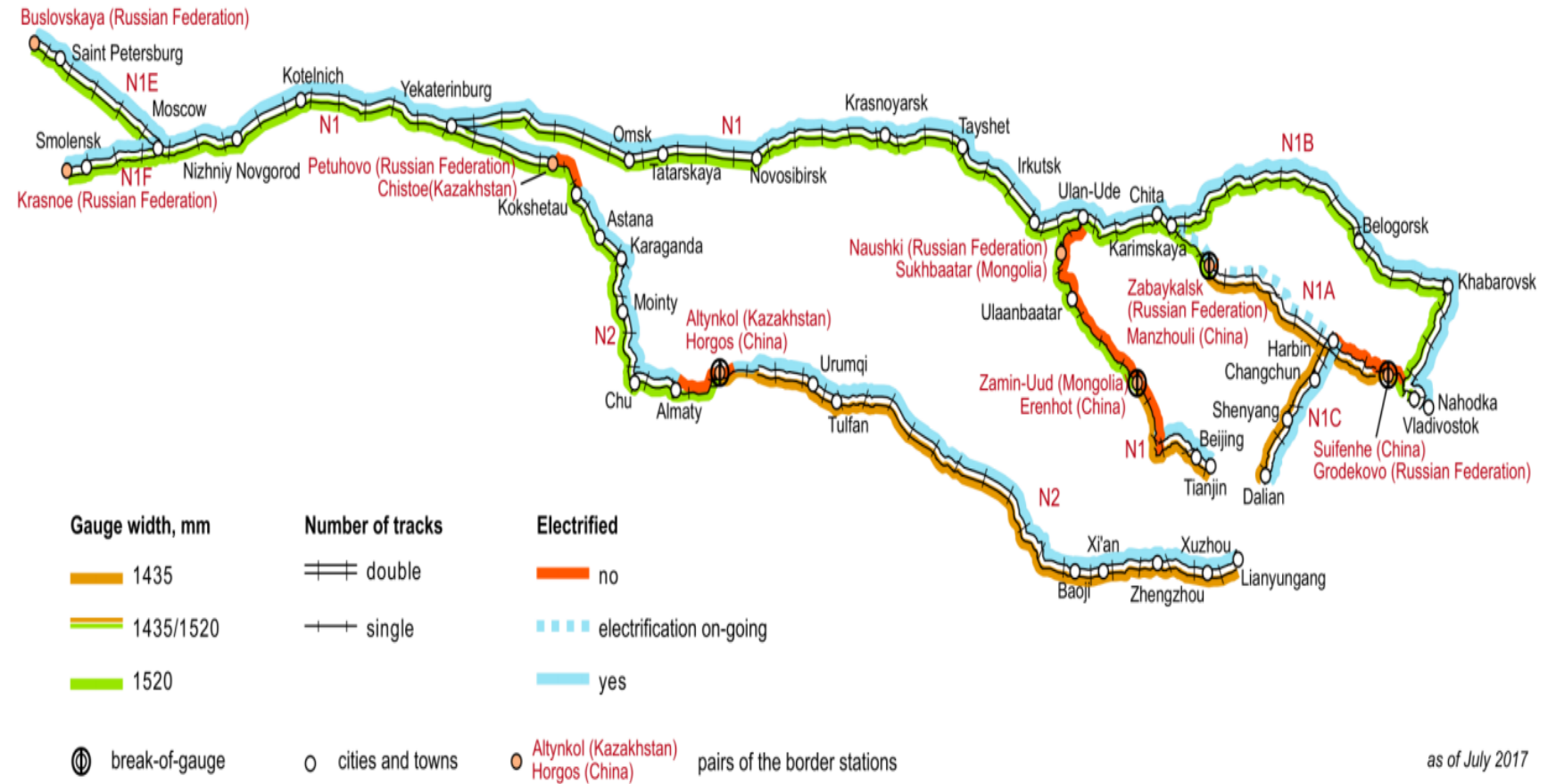
### Distribution of cities in China operating China-Europe Block Trains



# Obstacles - Different railway technical systems

- Power system: electrified, non-electrified
- Rail tracks: double, single
- Track Gauge (mm): 1435, 1520

## Illustration of Existing Rail Routes Connecting Western China to Europe



Source: Varvara Krechetova.

Source: UNESCAP



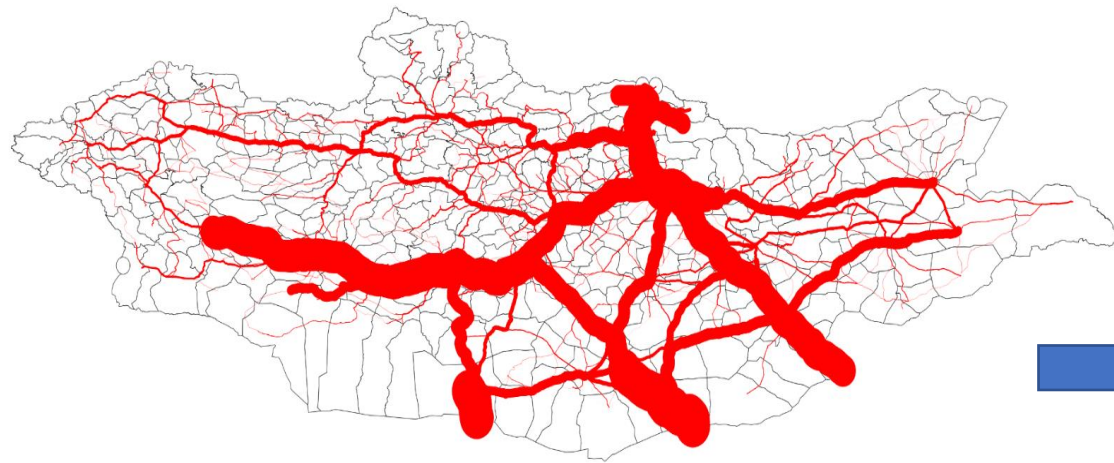
# Obstacles -Limited capacity of intermediate nodes

- The transit freight at the Belarus-Małaszewicze crossing increased from 5 trains per day in 2016 to over 10 trains in 2017 and continuously increasing...
- Due to railway infrastructure, locomotive fleet, and rolling stock have not been upgraded in long time, this crossing is a key impediment
- Insufficient standardization of shipping documents and technical regulations remains a main obstacle to the increase of freight along the whole route

Illustration of Existing Rail Routes Connecting Western China to Europe

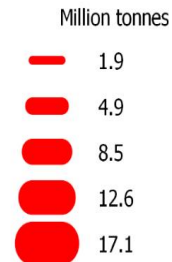


# Unlocking local potential - Evidence is critical

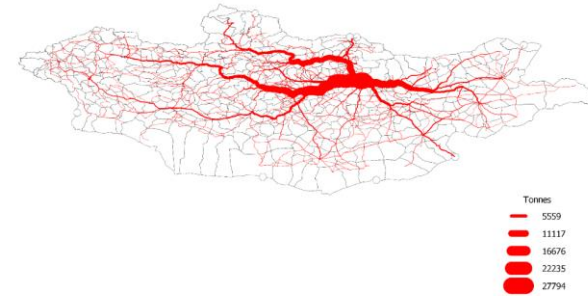


## Within Mongolia:

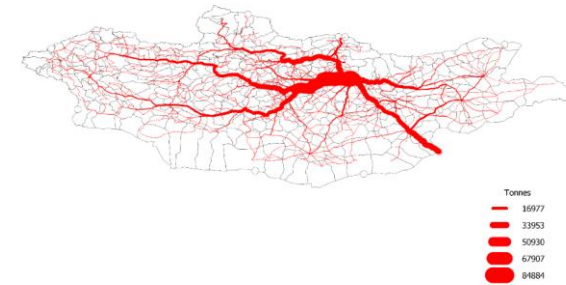
Tonnes: 67.4 Million  
Tonne-km: 40.6 Billion  
Average distance: 602 Kilometres



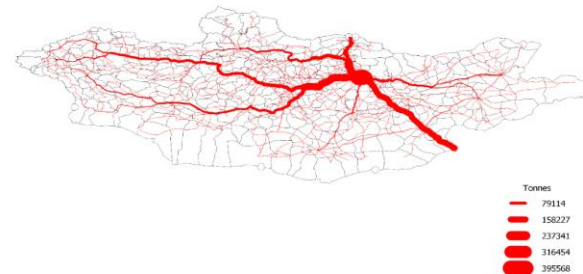
Milk



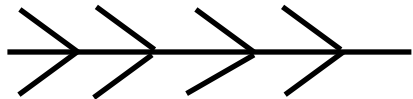
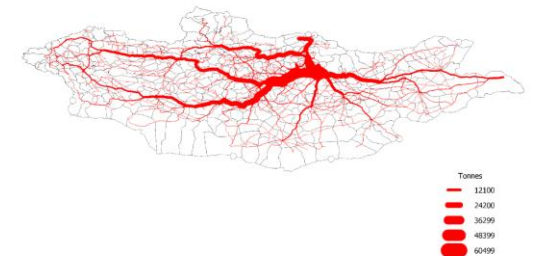
Meat



Animal feeds



Processed food





# 4 big opportunities



**Physical network and  
multilateral  
institutions that are  
fit for the future**

*Integrated and resilient  
network*



**Digital networks  
configured for a new  
normal**

*Digitalization a key driver for  
smart transport systems*



**Green energy networks  
as backbone for  
transport systems**

*Smart energy corridors and  
hubs, Multi-fuel (transition)  
network*



**Sustainable financing as  
driver for low-carbon  
transport in post-pandemic  
world**

*Financial instruments and leaders  
embed sustainability in decisions*



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