



Policies and infrastructure for better regional connectivity

ENHANCING FREIGHT CONNECTIVITY IN CENTRAL ASIA

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Benefits of improved freight connectivity

- Provides access of peripheral areas to markets
- Reduces costs for domestic economy – improving quality of infrastructure and services
- Access to international markets for trade
- Revenues from expanded transit
- Lays foundation for future economic growth - agglomeration effects



Three parts

1. Benchmarking performance



Infrastructure



**Transport and
logistics**

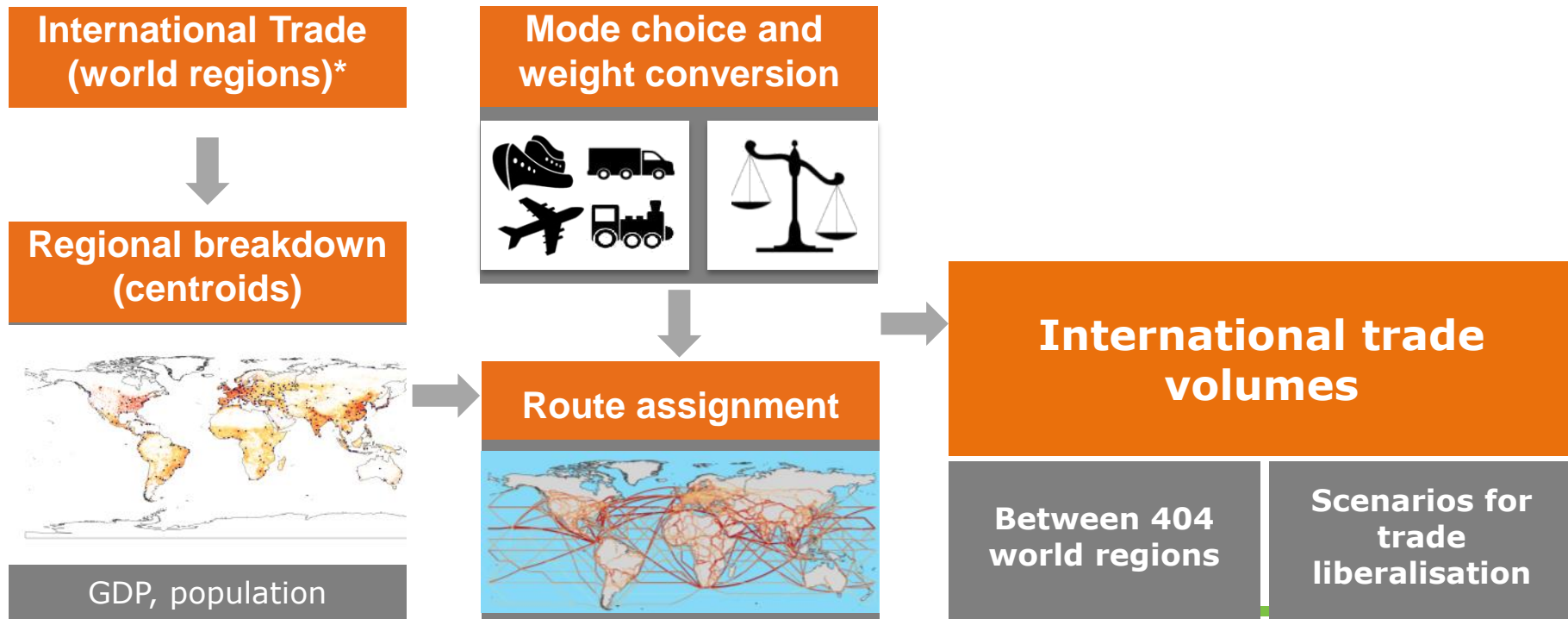


Customs

2. Regional connectivity gap and future investment plans

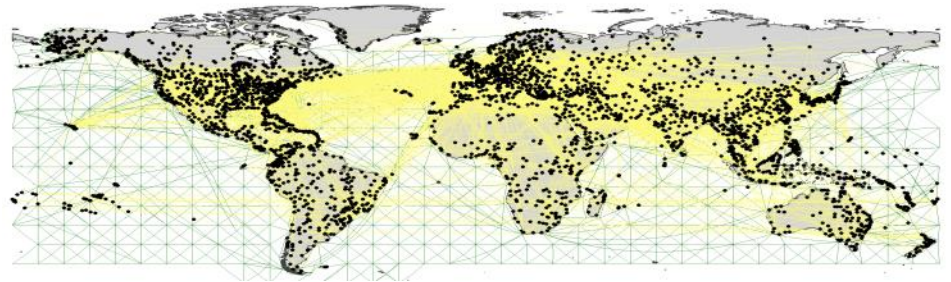
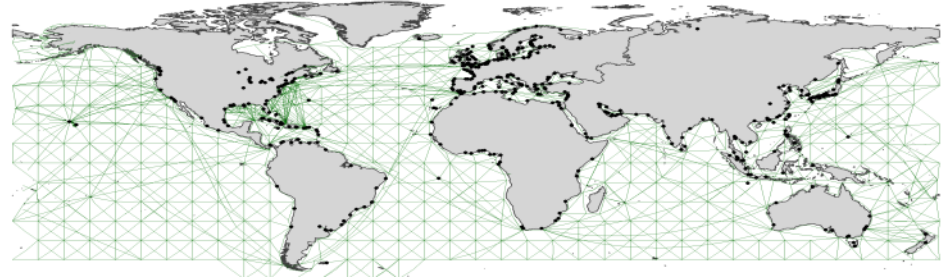
3. Transport planning and governance

ITF International Freight Model

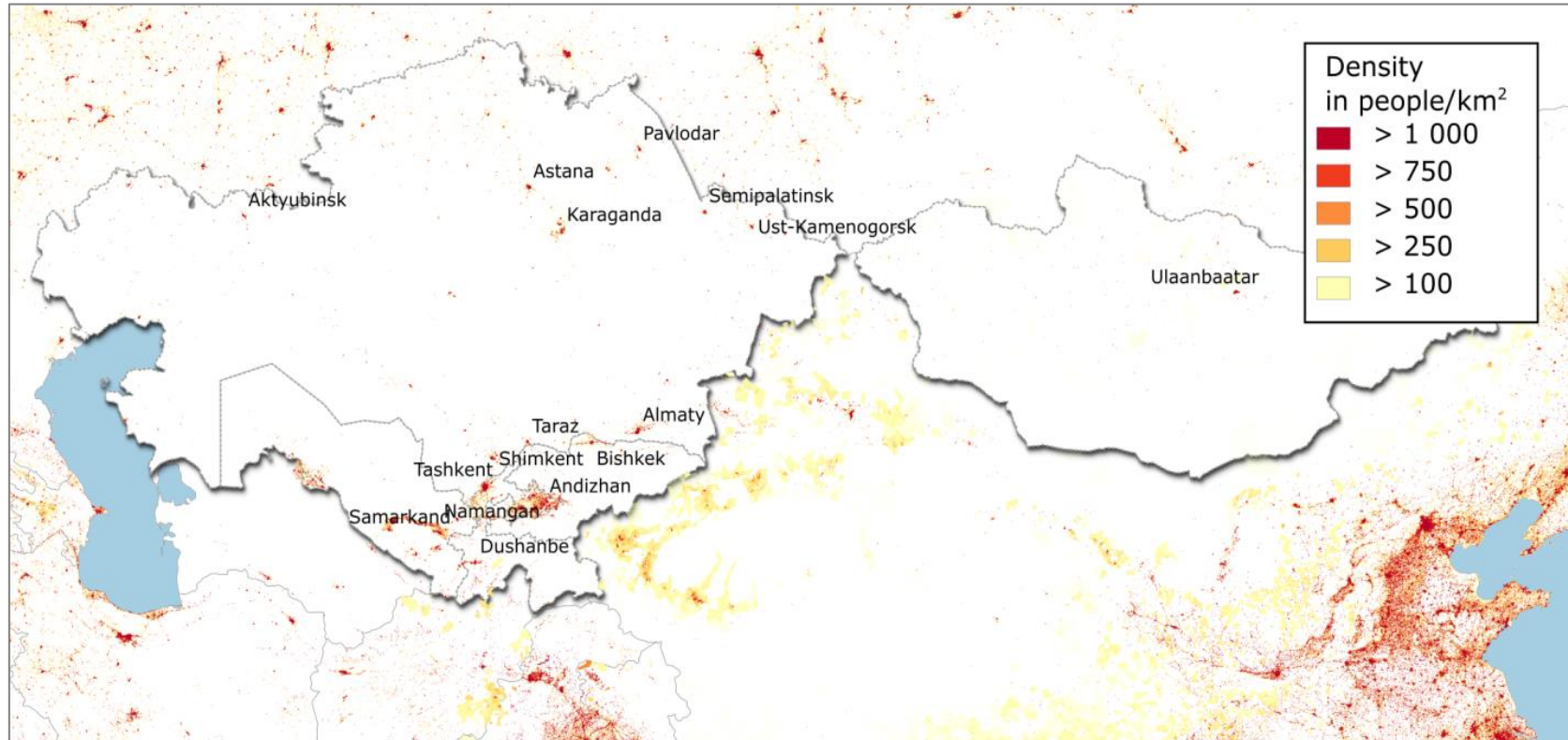


Network model

- ▶ Infrastructure and routes
 - a) Road (highways or main roads)
 - b) Rail (station, network)
 - c) Sea (ports, routes)
 - d) Air (airports, commercial flights)
 - Differential speeds by mode, infrastructure and continent
- ▶ Routable O-D network
- ▶ Links between modes and to centroids
- ▶ Includes dwelling and border crossing times
- ▶ Port capacity



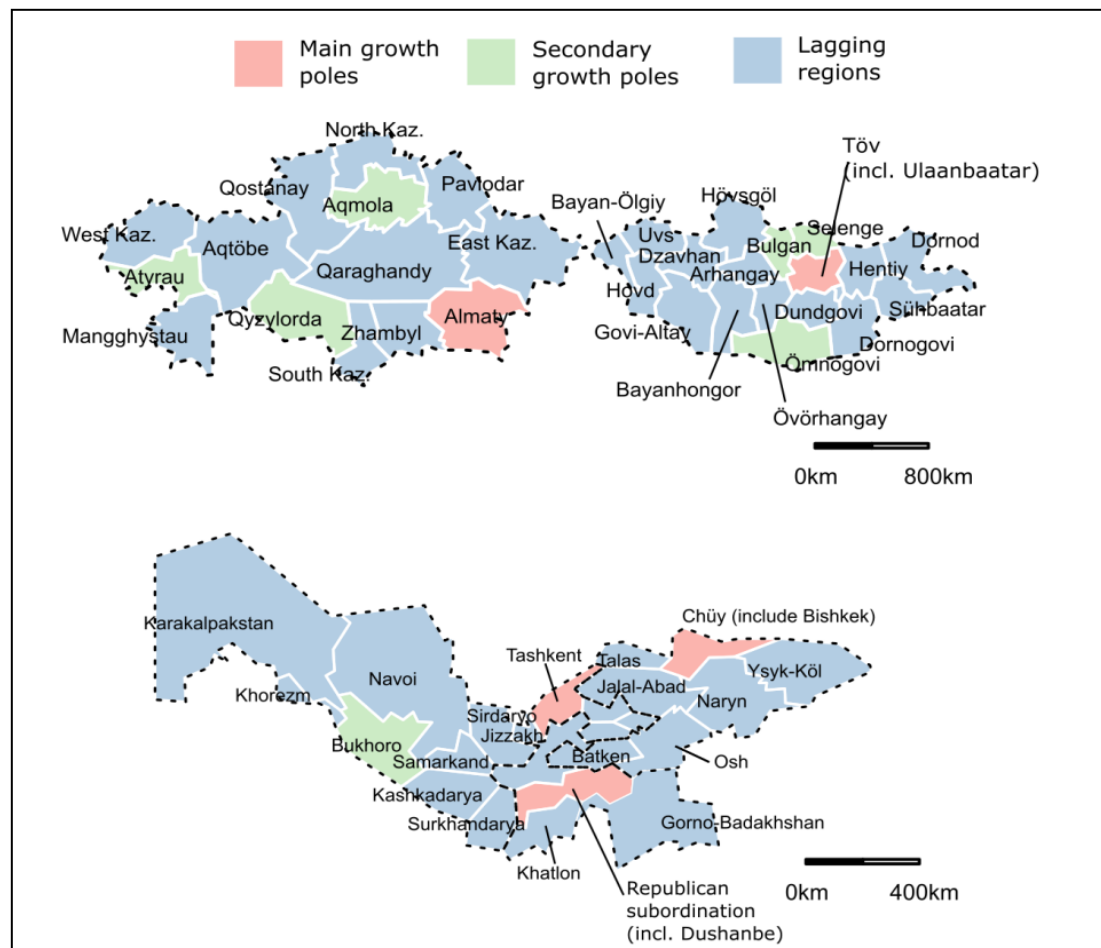
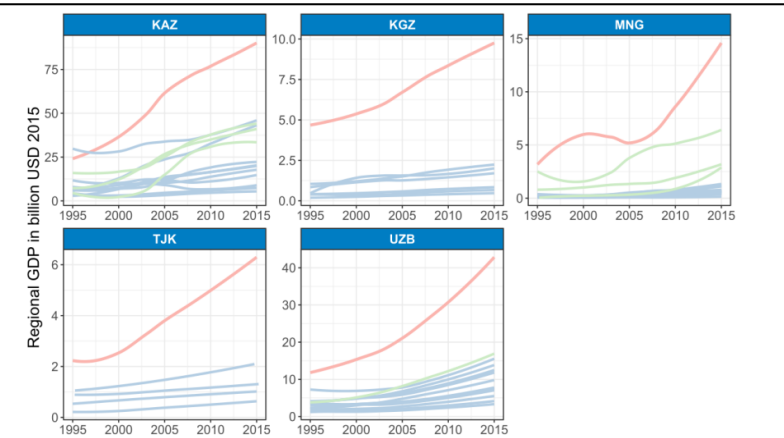
Central Asia: Population density is extremely low



Central Asia is far from production and consumption centers



Increasing economic concentration



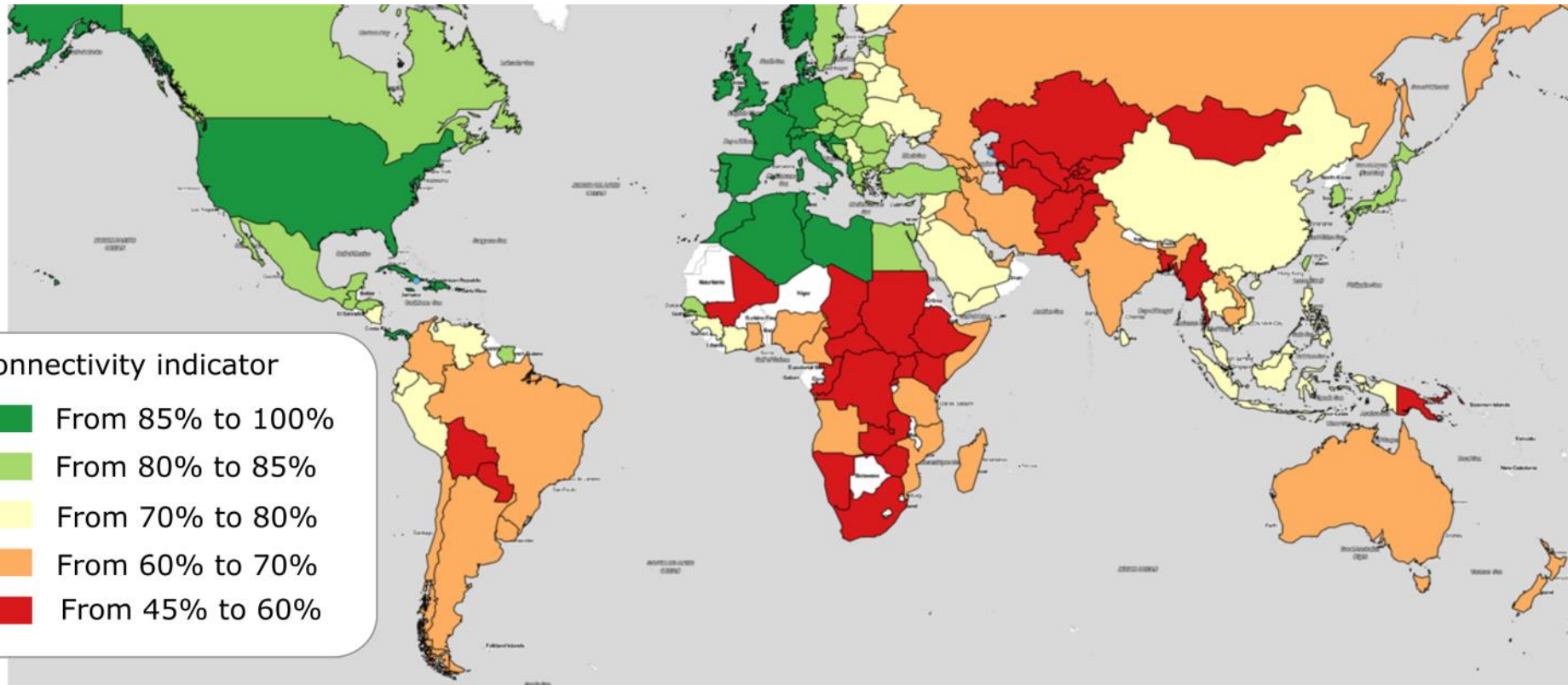
Source: ITF computations based on GIS data from (Kummu, Taka, and Guillaume, 2018)



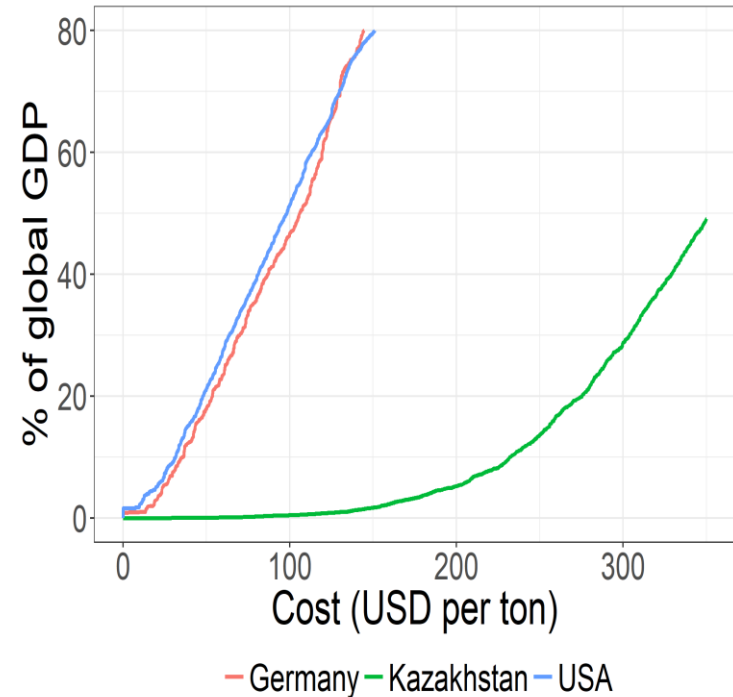
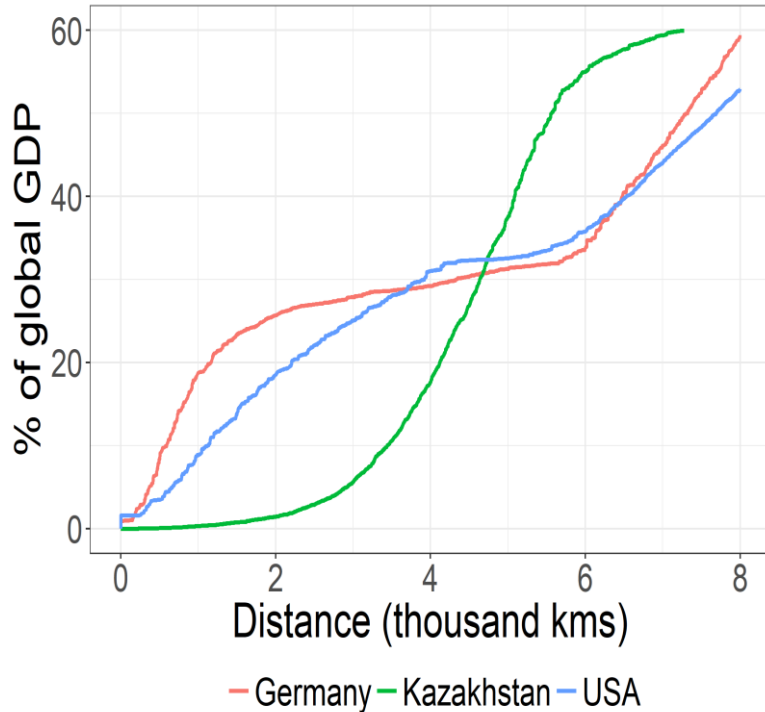
Infrastructure is scarce



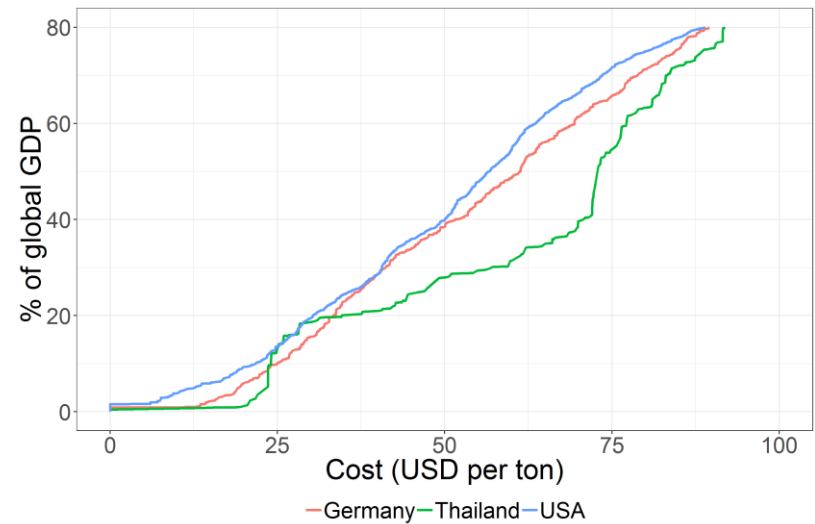
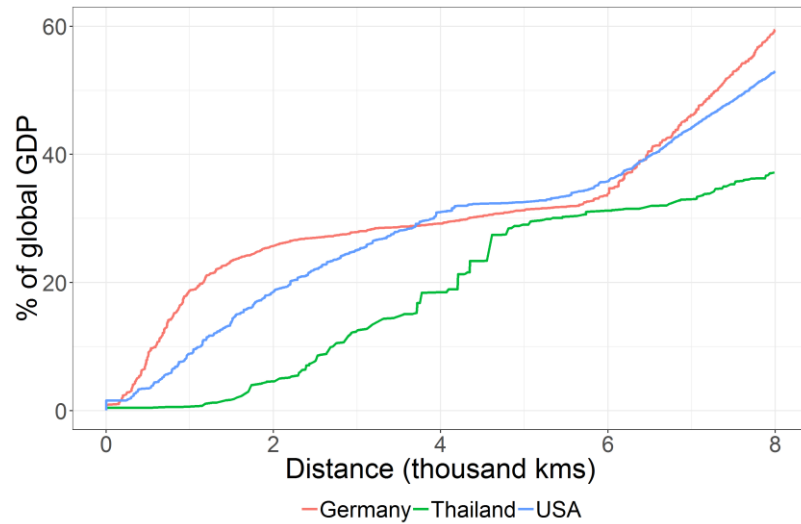
High cost of being landlocked



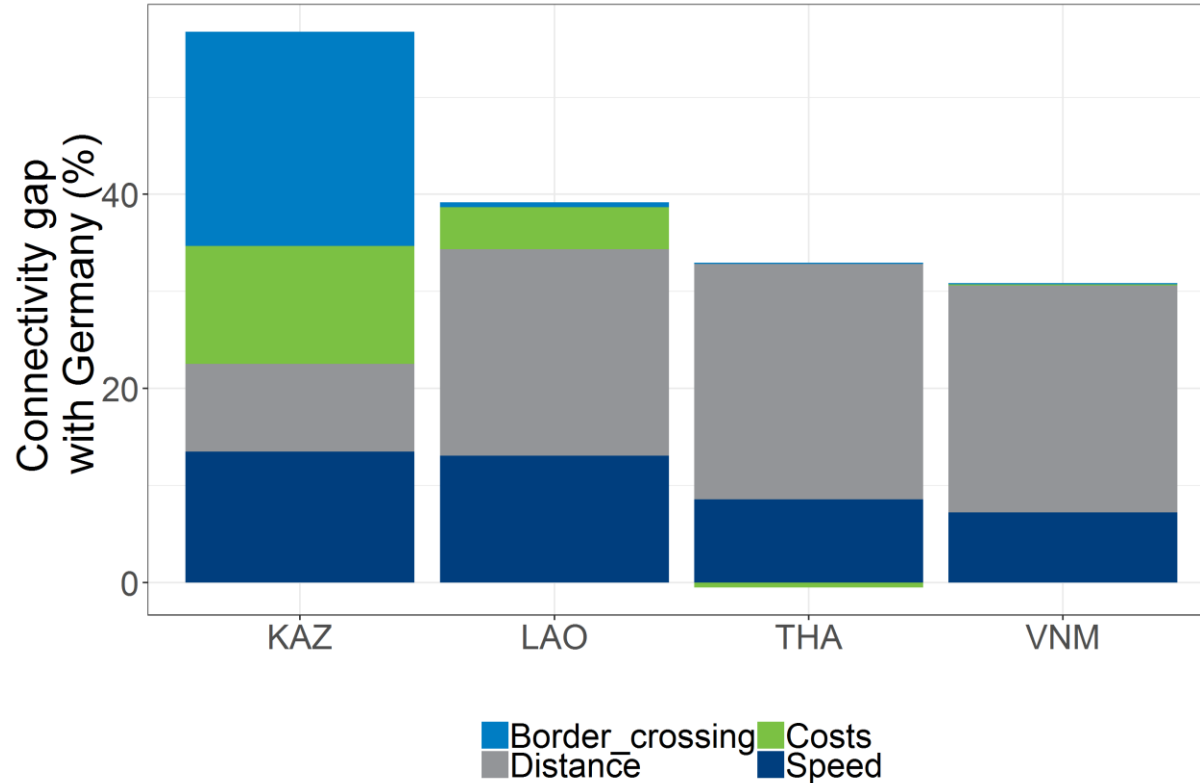
Need to compensate impact of distance with appropriate policy measures



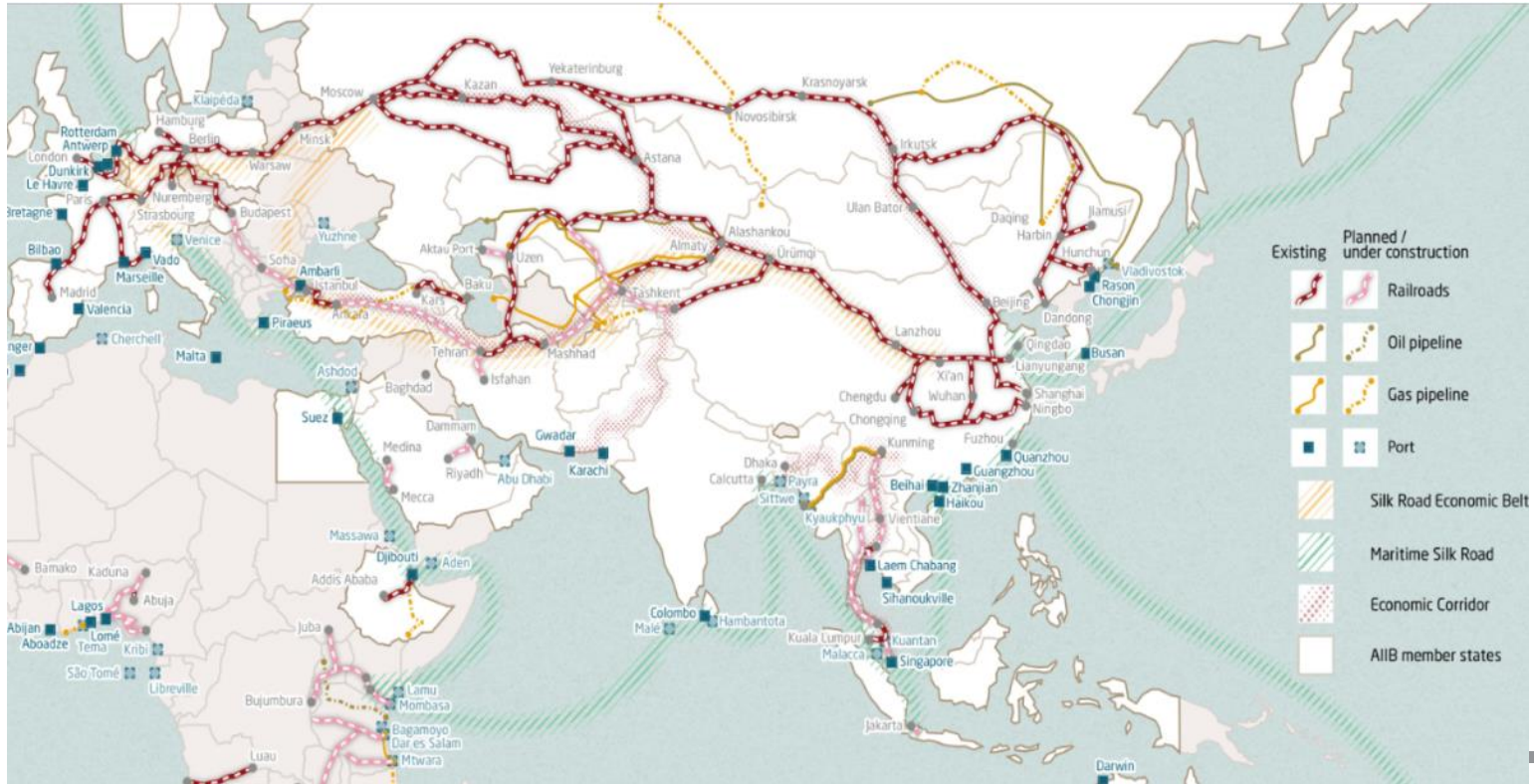
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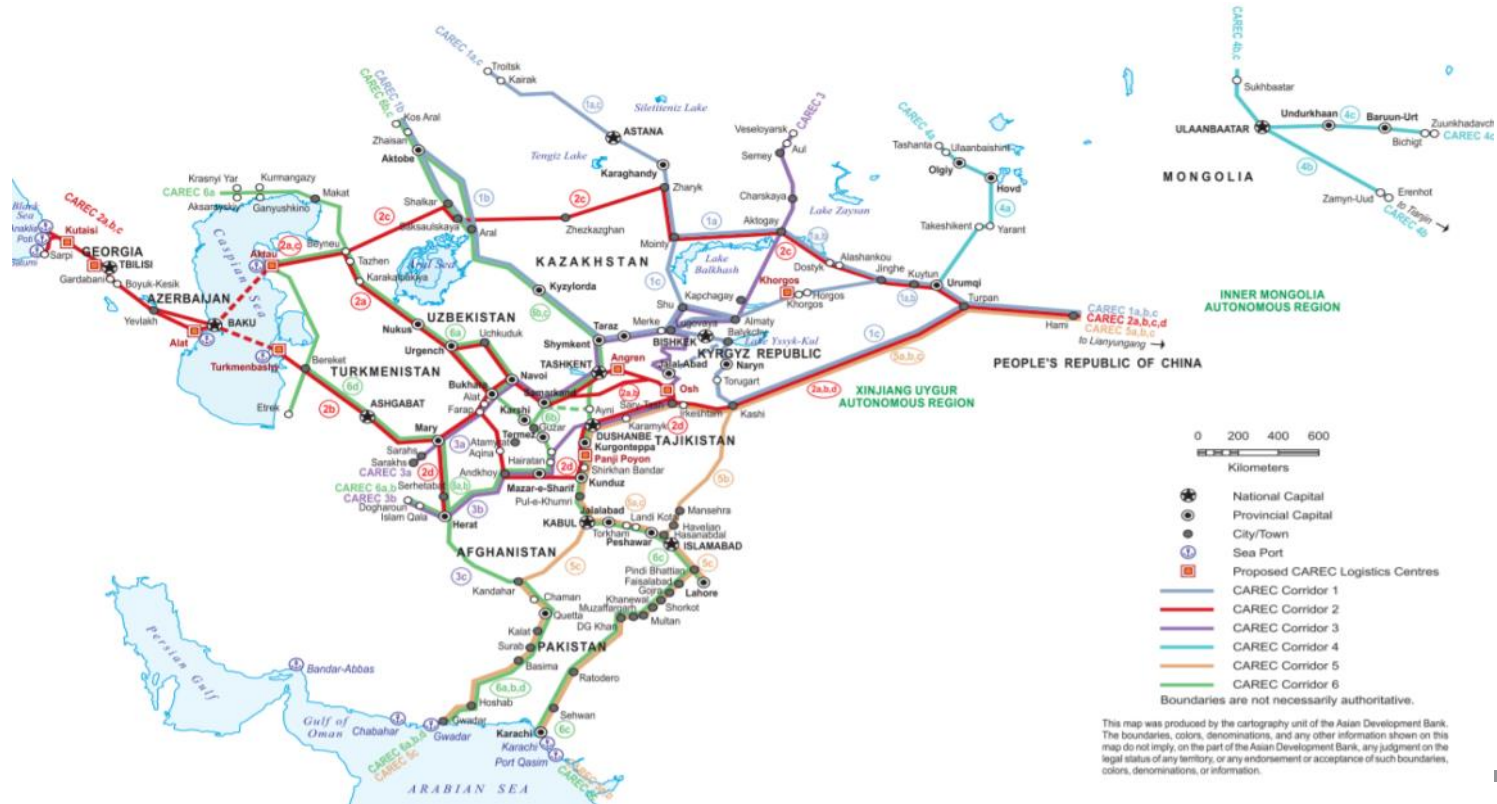
Decomposing the connectivity gap

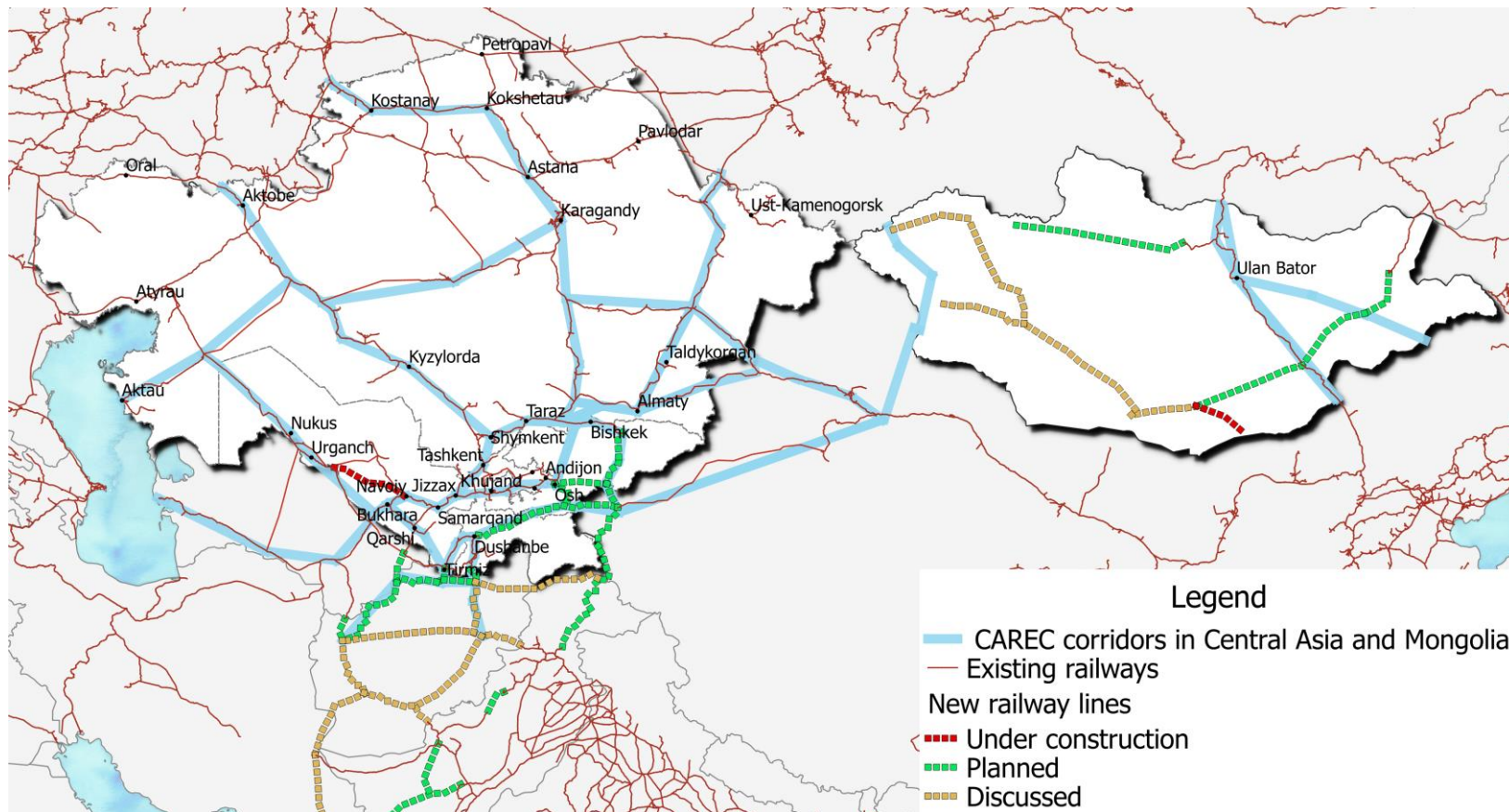


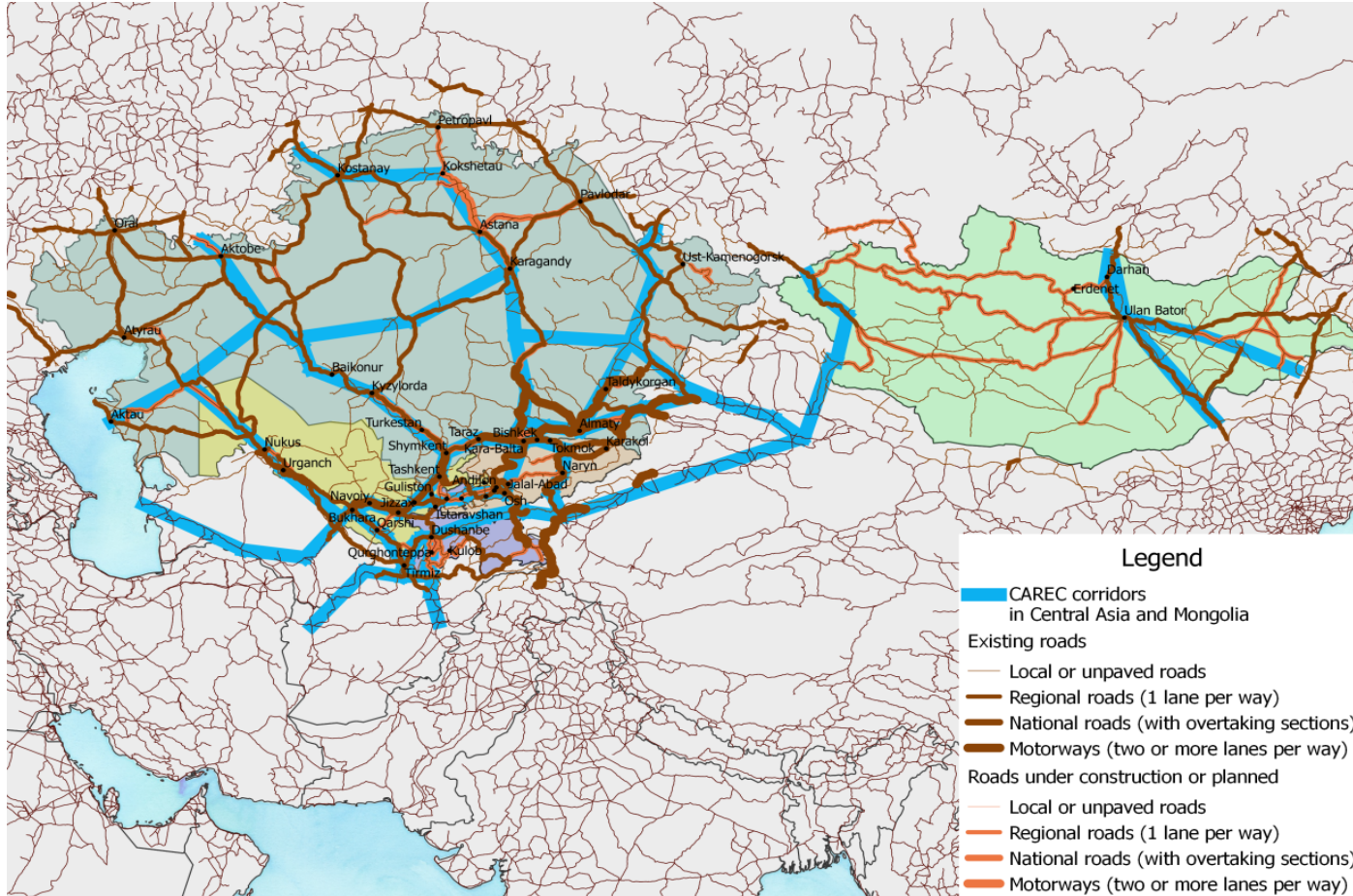
Several investment plans are made to improve connectivity



Several investment plans are made to improve connectivity







Legend

CAREC corridors in Central Asia and Mongolia

Existing roads

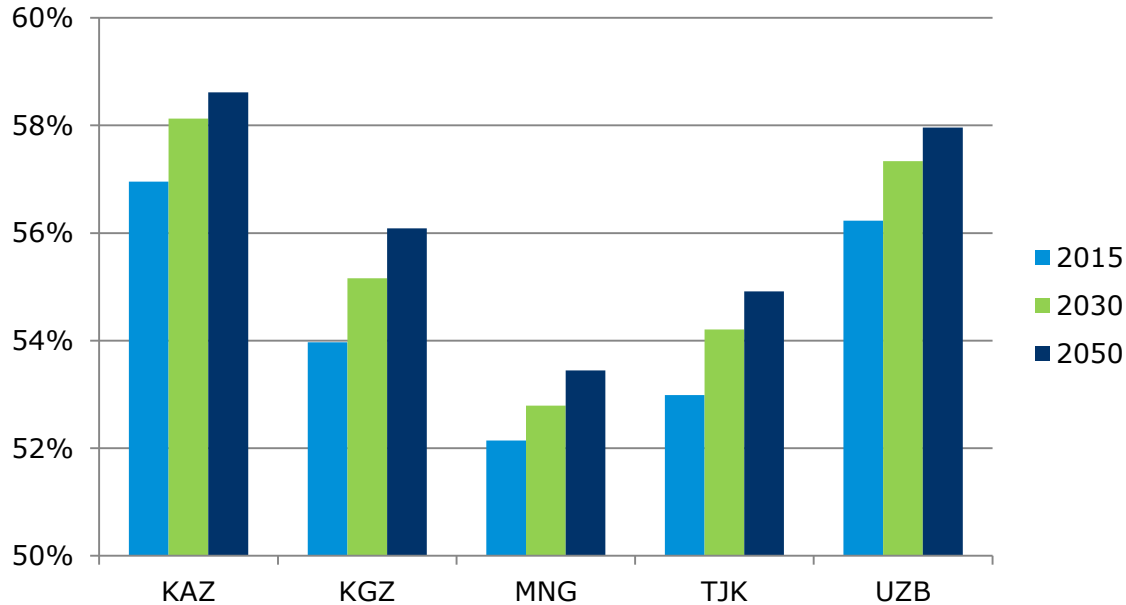
- Local or unpaved roads
- Regional roads (1 lane per way)
- National roads (with overtaking sections)
- Motorways (two or more lanes per way)

Roads under construction or planned

- Local or unpaved roads
- Regional roads (1 lane per way)
- National roads (with overtaking sections)
- Motorways (two or more lanes per way)



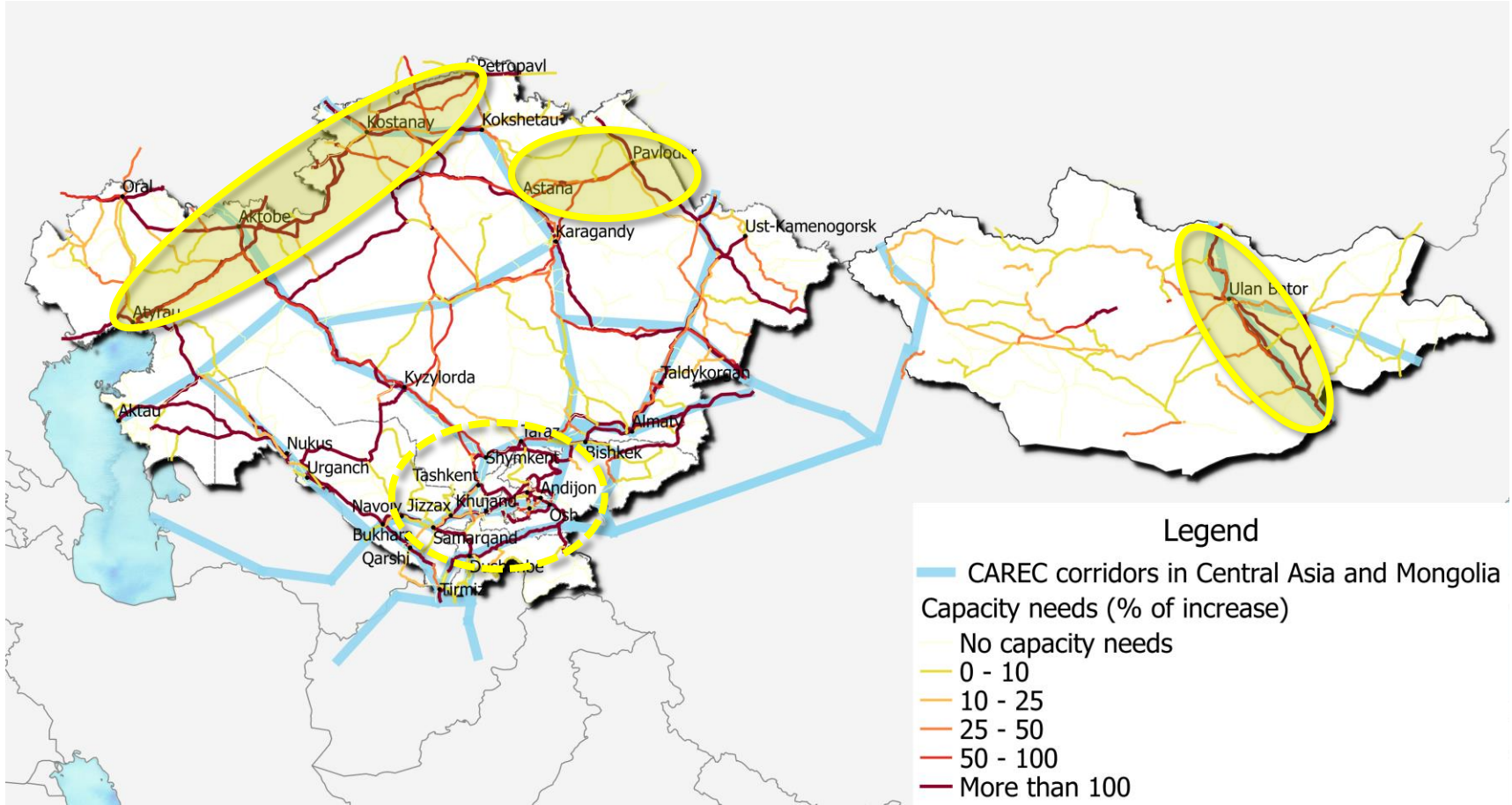
Existing investment plans will reduce connectivity gap...



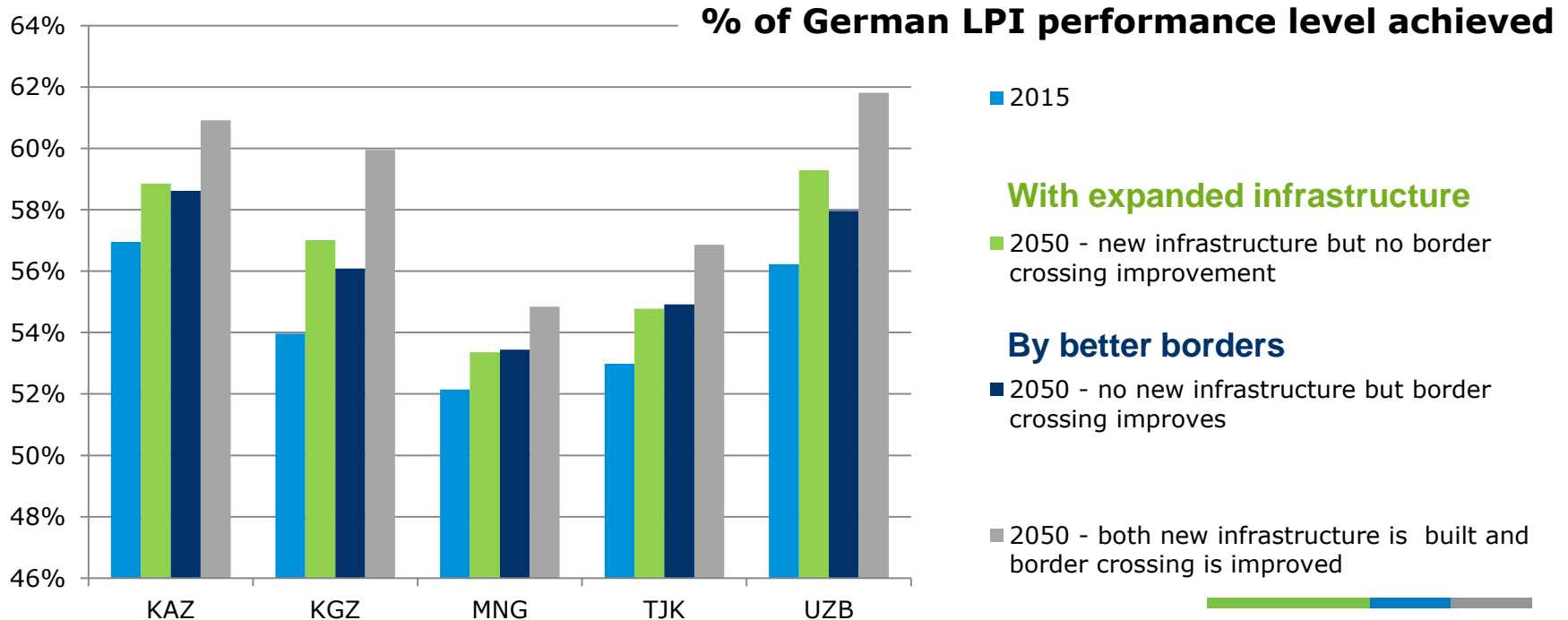
... but are not sufficient alone to maintain existing performance



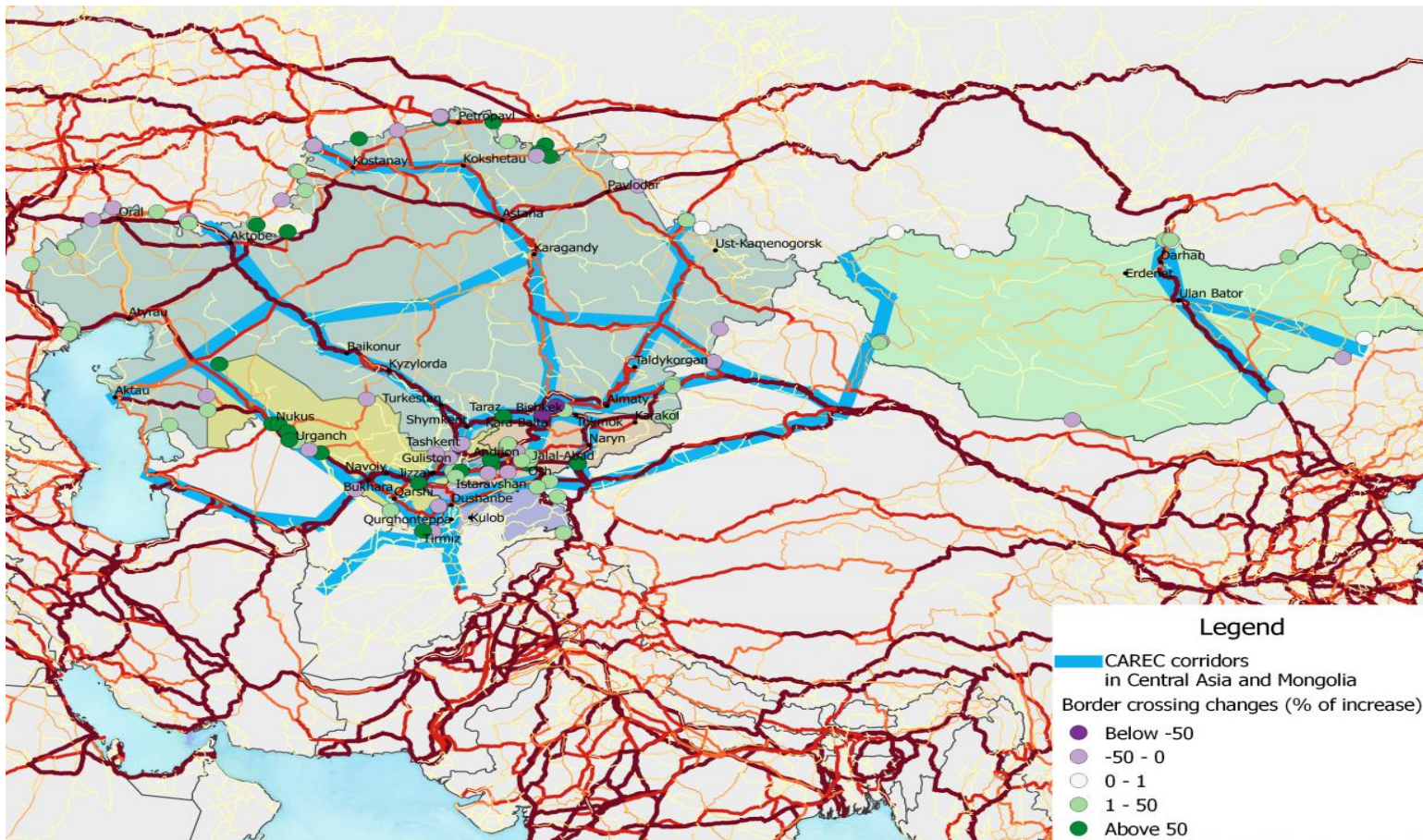
Freight flows 2030 and potential bottlenecks



Improving border crossing can bring comparable connectivity benefits with infrastructure improvement



Change in traffic at border crossings



Towards improved regional connectivity

- Distance and being landlocked can never be fully eliminated: Compensate through appropriate policy measures
 - Rail corridors as the backbone
 - Road for intra-regional connectivity
 - Focus also on local connectivity (firms' access to corridors)
 - Transit not only benefits – manage negative outcomes
 - Border crossing is as important as transport infrastructure
 - Modelling suggests bottlenecks in relation to investment plans
 - Institutional capacity important to plan under uncertainty
 - Continue strengthening regional cooperation to remove bottlenecks (infrastructure and non-infrastructure)
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Thank you

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