Transportation Research Board

International Trade and Transportation (AT020)

Chinese One Belt One Road Initiative

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HELLENIC INSTITUTE OF TRANSPORT

RUTGERS
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Strategic Context

The Red-Med Corridor

Land-Sea Rail Express Line

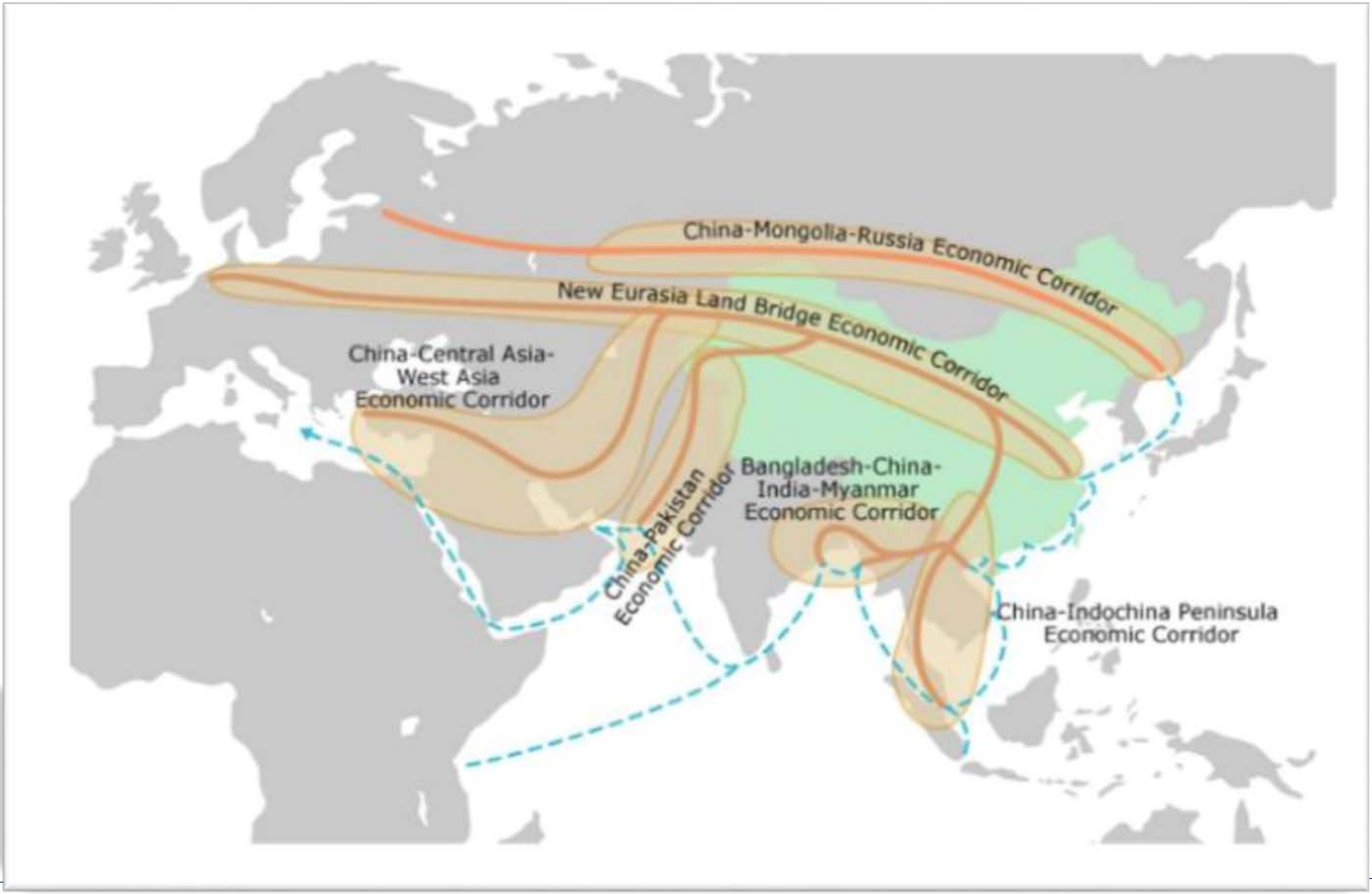
The initiative covers transportation, utilities, energy and telecommunications.

There are 2 aspects of the policy regarding transport connectivity; the Overland Silk Road (OSR) spanning the Eurasian Continent and the so called 21st Century Maritime Silk Road (MSR).

Chinese Leadership uses the term "One Belt, One Road" to capture the dual connection strategy and initiative.

From OBOR to BRI (Belt and Road Initiative) – shift in cooperation preference from developing to developed countries

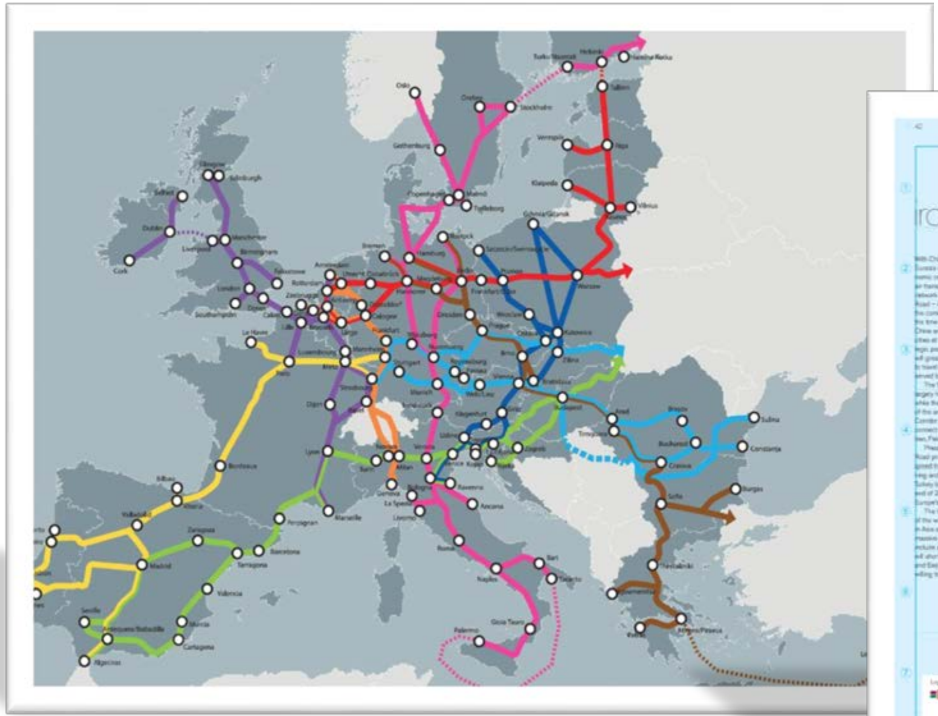
Other Economic Corridors

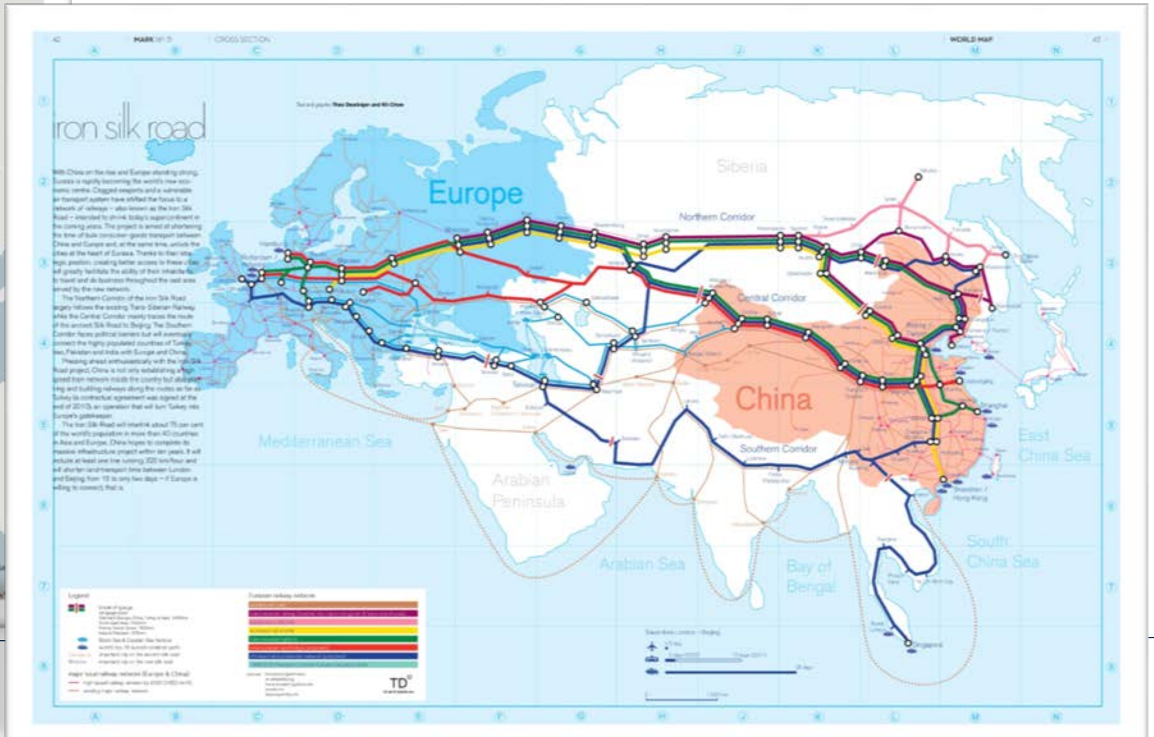


Source: Hong Kong Trade Development Council

EU Cooperation with China

- ***NEAR² (Network of European –Asian Rail Research Capacities)*** aiming to identify existing bottlenecks along the Trans-Eurasian rail Corridors, assess potential solutions and highlight research priorities.
- ***RETRACK*** looked at the operational feasibility, the potential of the Eurasian land bridge corridors and the logistics developments along them.
- Formation of the **"Connectivity Platform"** – strengthen information exchange, promote seamless transport connections and transport facilitation, synergize related policies and projects, create cooperation opportunities for Chinese and EU enterprises, create an open and transparent environment and a level playing field for investment in transport and other fields





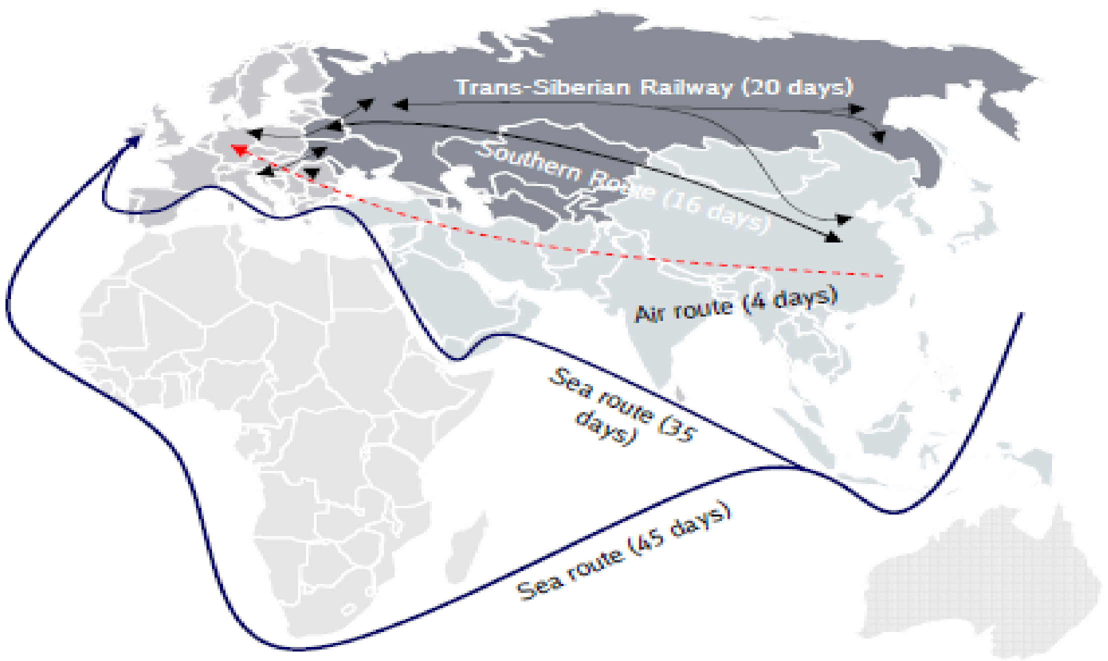
Issues to be Addressed

- For the railway corridors to develop as a notable alternative, complementary, or in combination to maritime routes, a number of issues need to be resolved.
- These issues are not unique to the specific corridors
  - The great length of the Euro-Asian rail corridors;
  - the large number of countries involved and
  - other unique elements of these rail networks make the identification of solutions to these problems more demanding

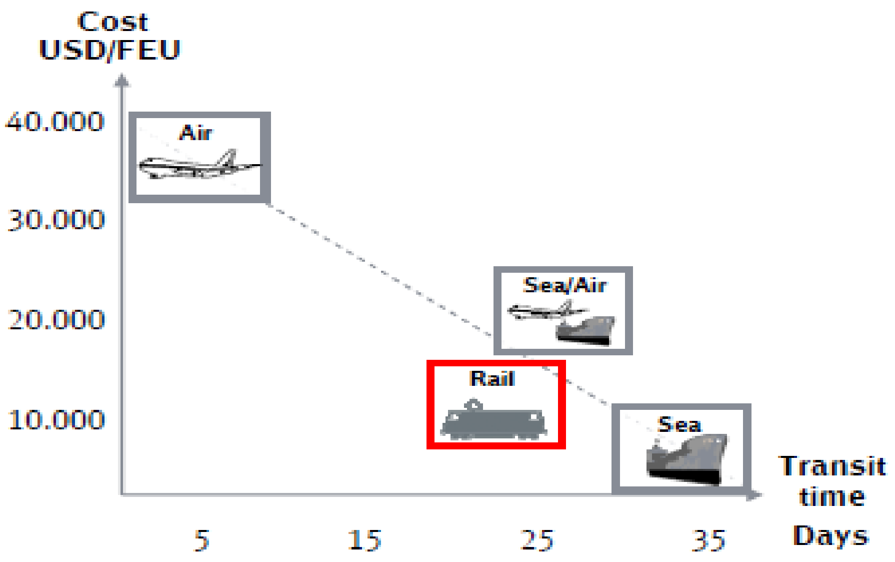
    - Lack of interoperability in both infrastructure and rolling stock
    - Missing links;
    - Significant delays at border crossings;
    - Lack of harmonization in safety requirements;
    - Safety issues occurring due to length of railway routes and lack of adequate monitoring;
    - Misbalance in trade loads from Europe to Asia and vise versa resulting to empty runs;
    - Different policies and legislation in the various countries leading to lack of harmonization in procedures.

Importance - Mode Comparison

Available trade lanes Asia-Europe (lead times[1])



Comparison of transport modes CN-EU



- ✓ Air transport is by far the quickest mode (4 days), with the two railway options, the Southern railway route and the Trans-Siberian route, placing second and third with a lead time of 16 and 20 days respectively.
- ✓ The two routes by the sea are the most time consuming with a travel time of 35 and 45 days.

Importance - Rail Networks

Traffic volume between China and EU

Year	2011	2012	2013	2014	2015	2016	2017
from China to Europe							
Number of trains	17	42	80	280	550	1,130	2,448
TEUs [1]	1,530	3,780	7,200	25,200	49,500	101,700	220,320
from Europe to China							
Number of trains	-	-	-	28	265	572	1,225
TEUs [1]	-	-	-	2,520	23,850	51,480	110,250
Total traffic							
Number of trains	17	42	80	308	815	1,702	3,673
TEUs [1]	1,530	3,780	7,200	27,720	73,350	153,180	330,570
Growth rate (%)	-	147%	90%	285%	165%	109%	116%

Projections for 2027: total traffic ~636000 TEU (from ~150000 in 2016) which is equivalent to ~ 21 trains per day (82 TEU per train).

Importance - BRI Participating Countries

- **East Asia**: China, Mongolia
- **Southeast Asia**: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Vietnam
- **South Asia**: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka
- **Central Asia**: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan
- **Middle East and North Africa**: Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Palestine, Syria, United Arab Emirates, Yemen
- **Europe**: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Former Yugoslav Republic of Macedonia (FYROM), Georgia, Hungary, Latvia, Lithuania, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Turkey, Ukraine

65 countries, 70% of the world’s population, 55% of its GNP, 75% or its energy reserves

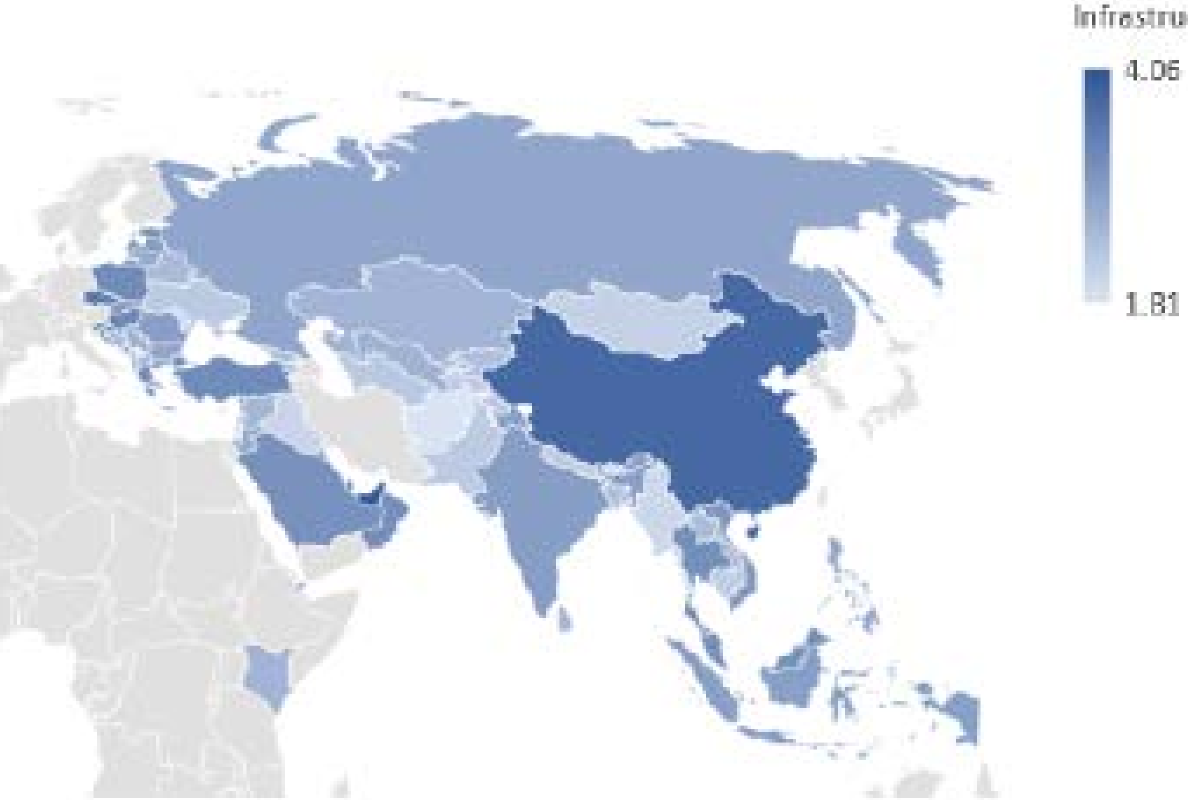
Source: Xuzhou-Zhongjia International

→ If BRI projects are successful they will benefit a large number of poor people.

Increase in transport and logistics infrastructure → increase in trade → enhance international and domestic market integration → become part of international procurement networks → play a role in global value chains. Investment priority should be given to the weakest links.

→ BRI will raise the risk of a sovereign debt default among relatively small and poor countries.

Difficulty servicing debt. China’s case by case approach in dealing with debt relief.



The Quality of trade- and transport-related infrastructure of BRI economies