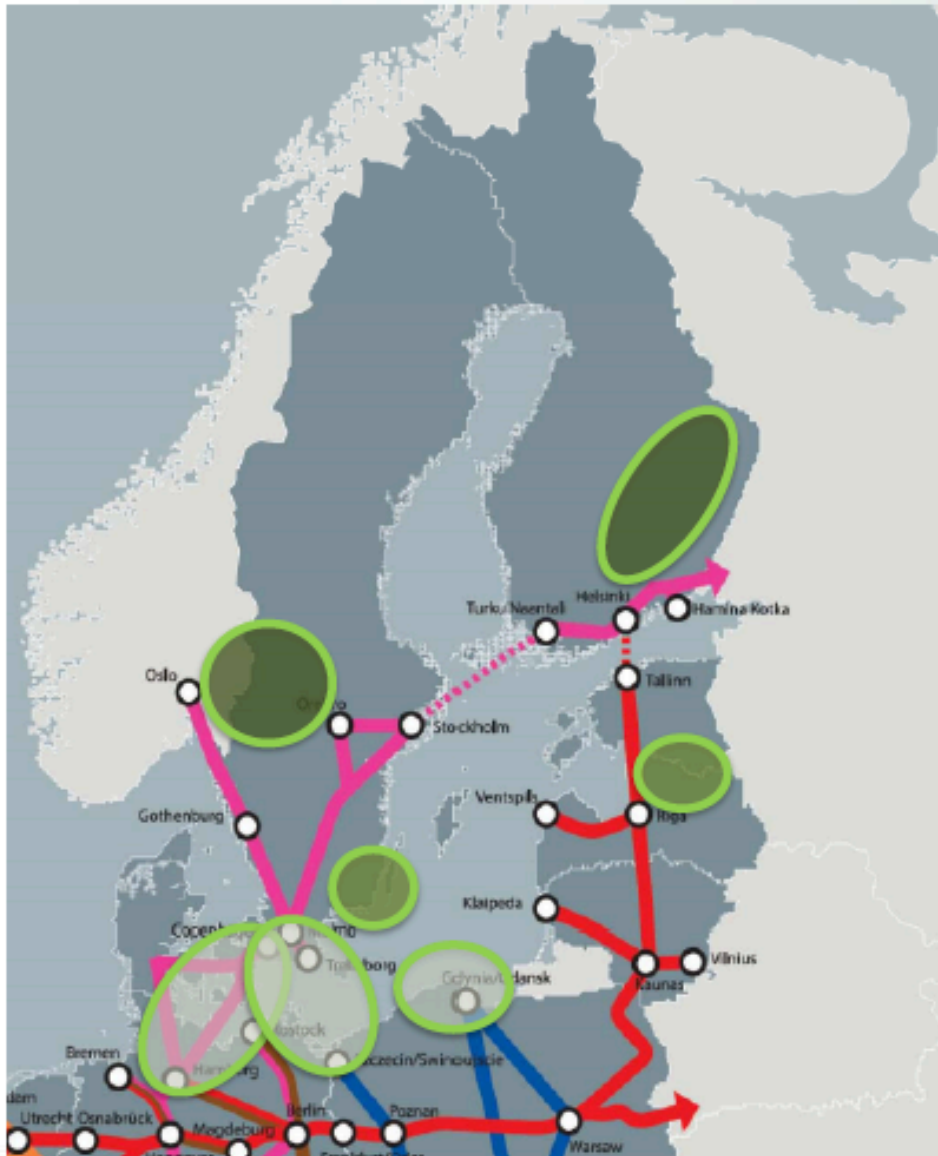


Transport-strukturer i Norden i et globalt perspektiv

Alf S. Johansen

Stockholm 17.01.2017

7 regional showcases



Corridor void regions

- Central Scandinavia borderland (SE/NO)
- Päijät-Häme – North Karelia (FI)



Corridor catchment areas

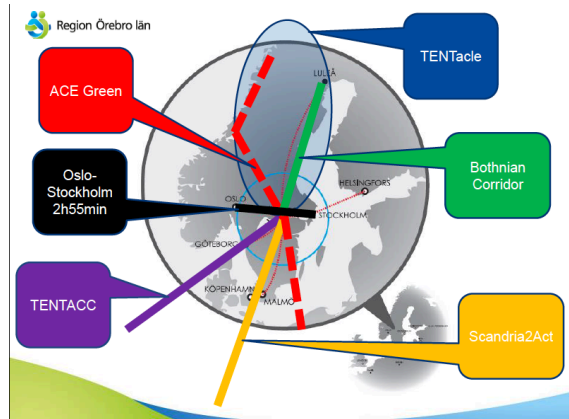
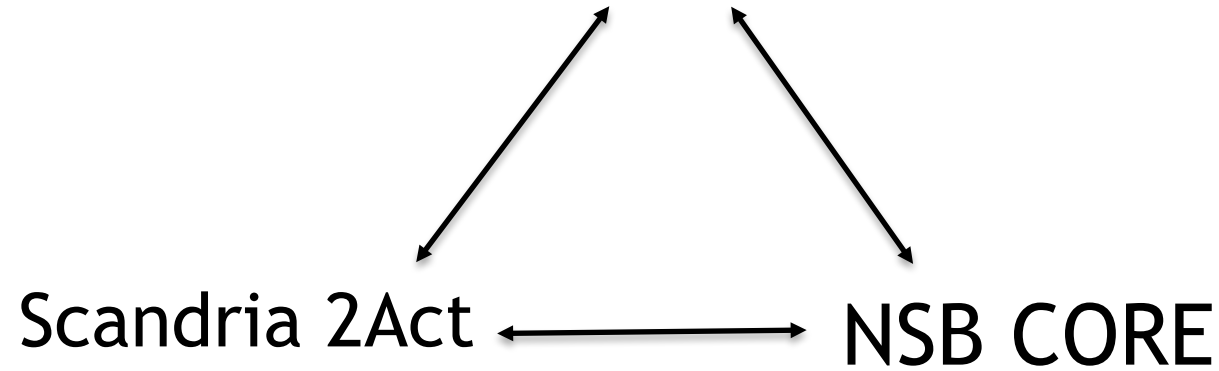
- Blekinge (SE)
- Vidzeme - Valga (LV/EE)



Corridor nodes & transit areas

- Fehmarnbelt Fixed Link (DE/DK)
- Westpomerania - Skåne (PL/SE)
- Gdynia transport/urban node (PL)

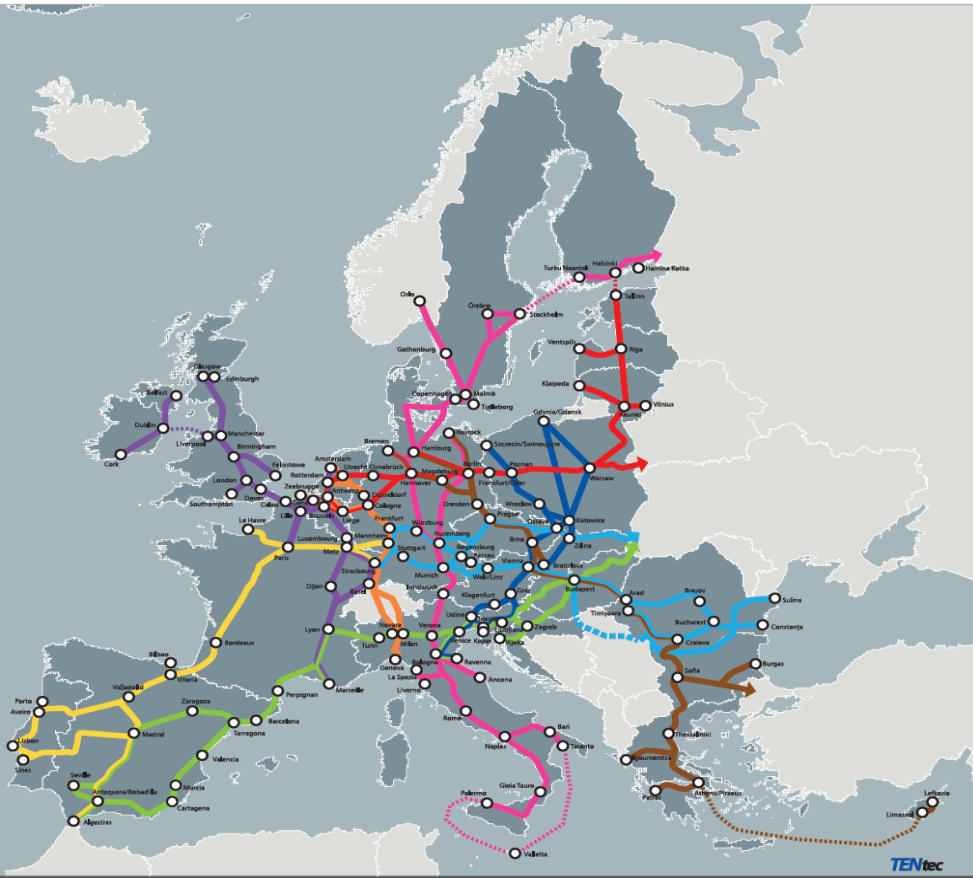
- Address key growth challenge
- Interact between public and market players
- Interlink with peer cases!
- Develop place-based actions for better access
- Deliver replicable solutions



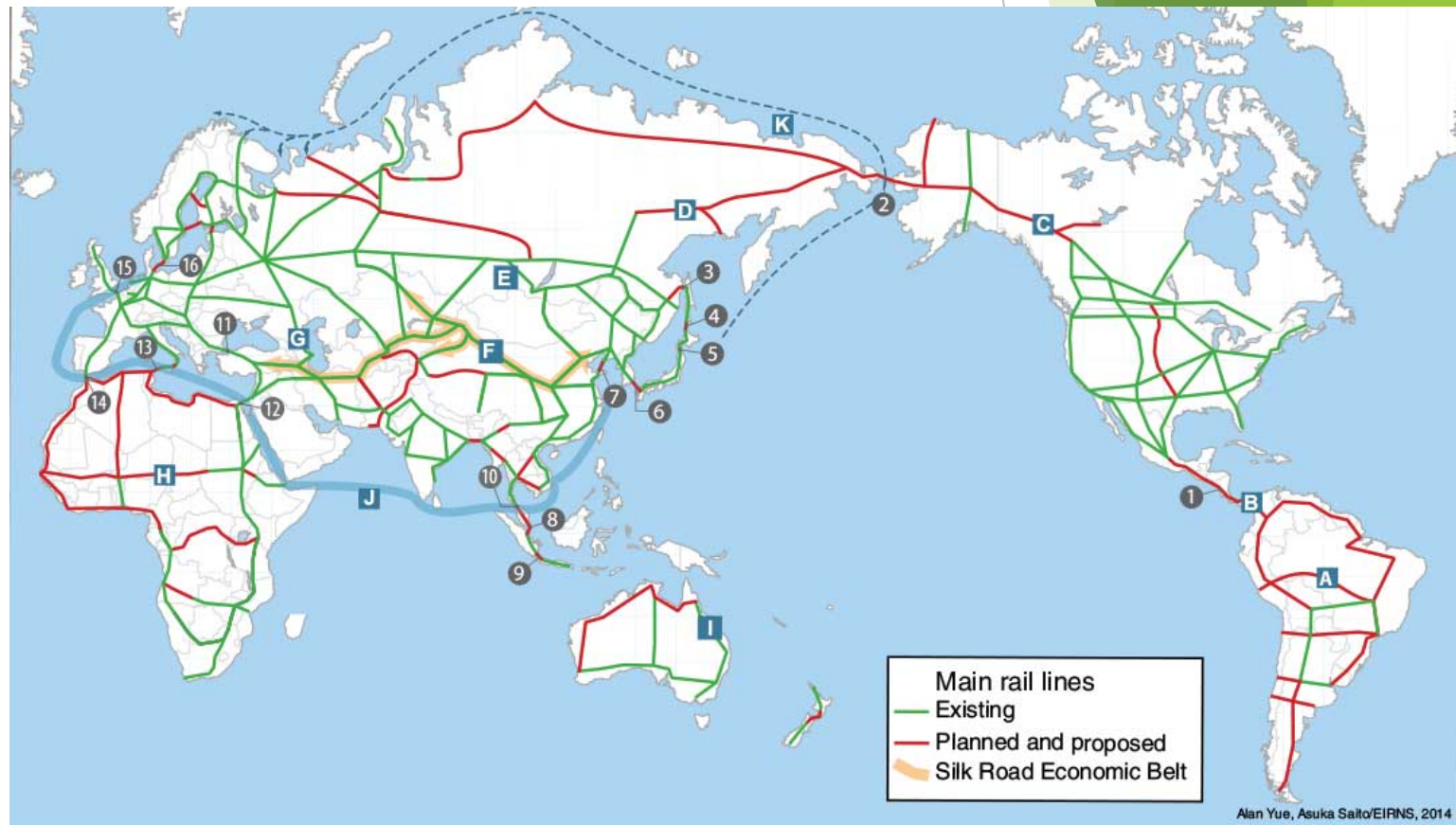
Map: Alignment of the North Sea – Baltic core network corridor

2 viktige aktører som påvirker transportutviklingen i Norden

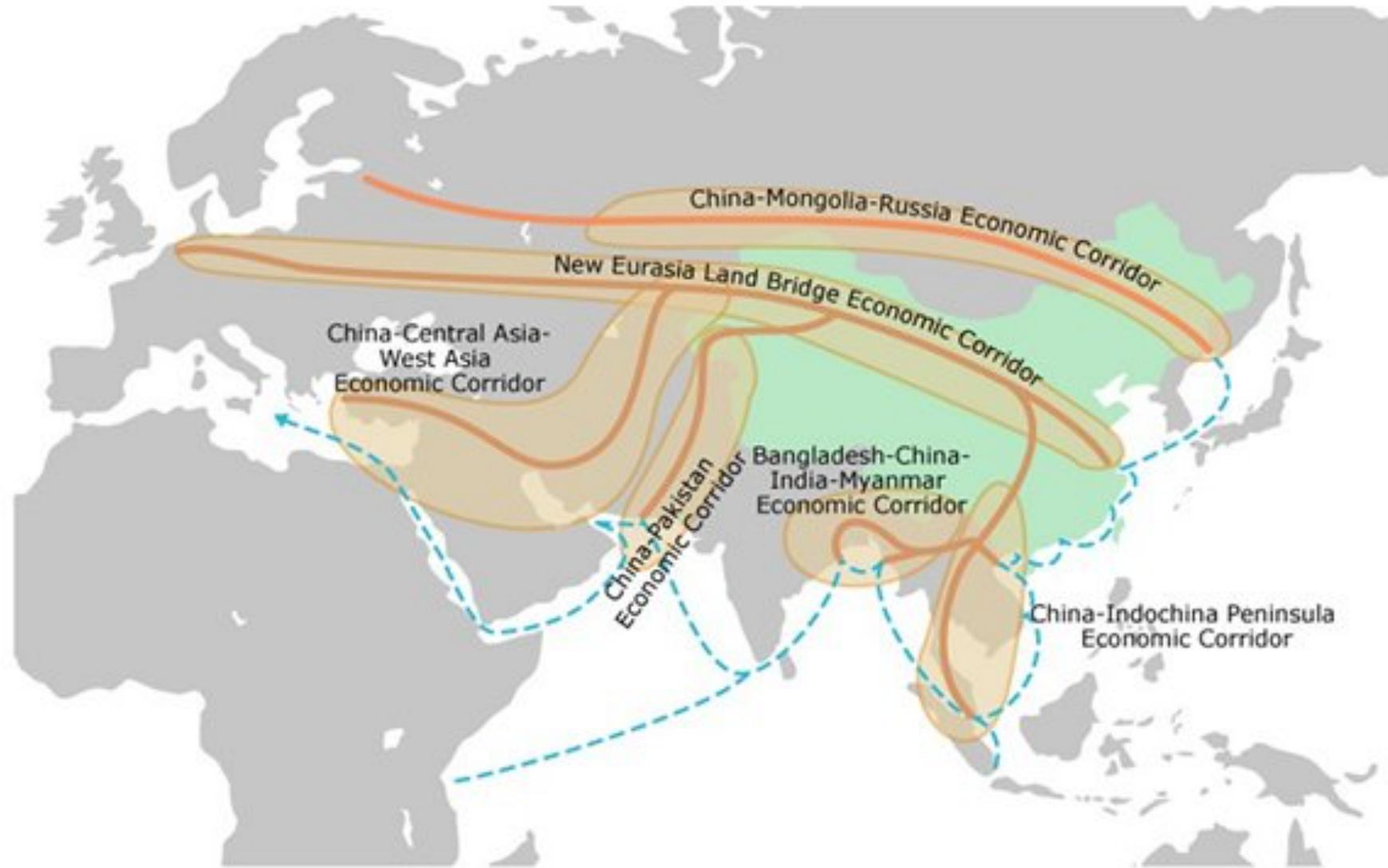
► EU



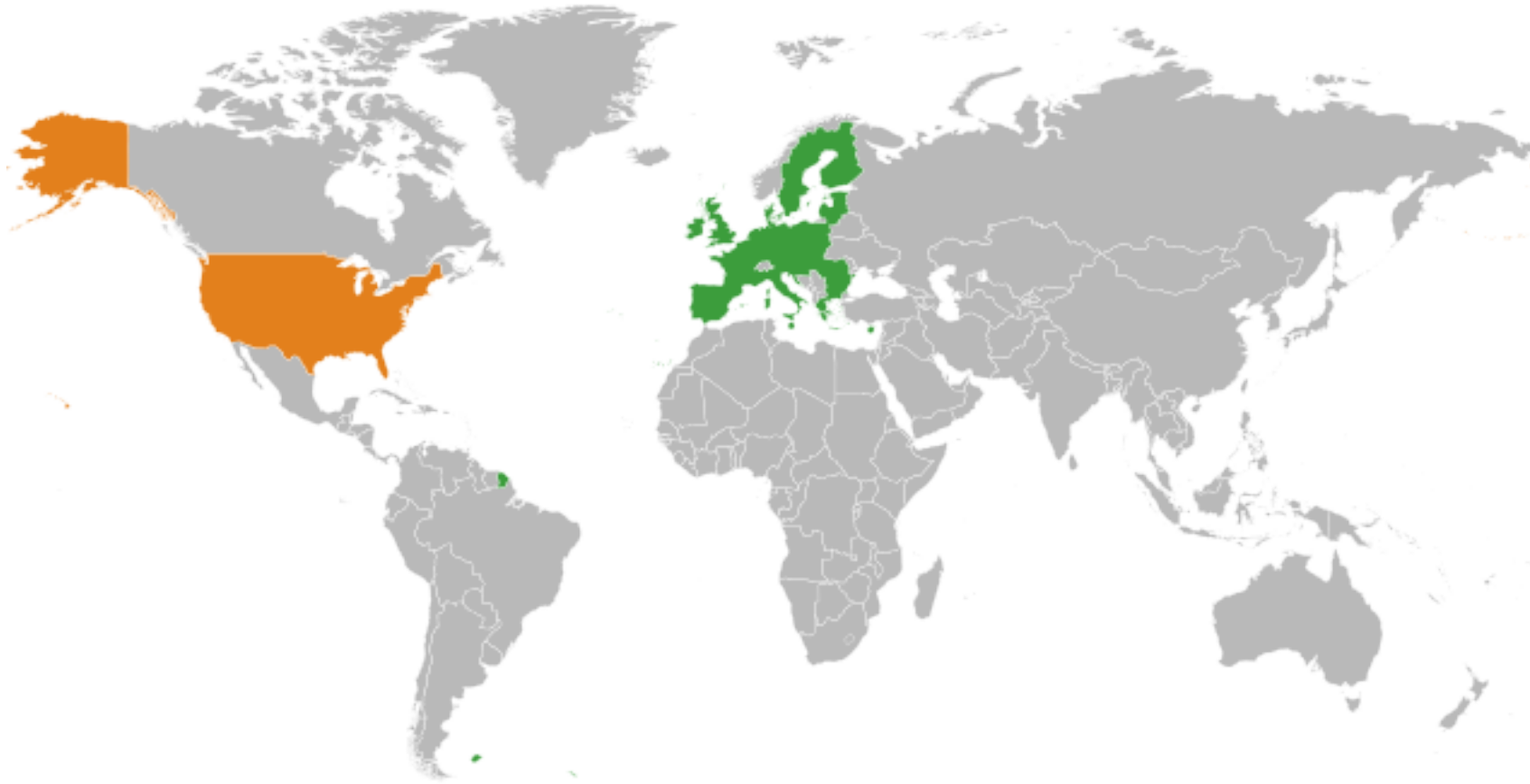
► Kina



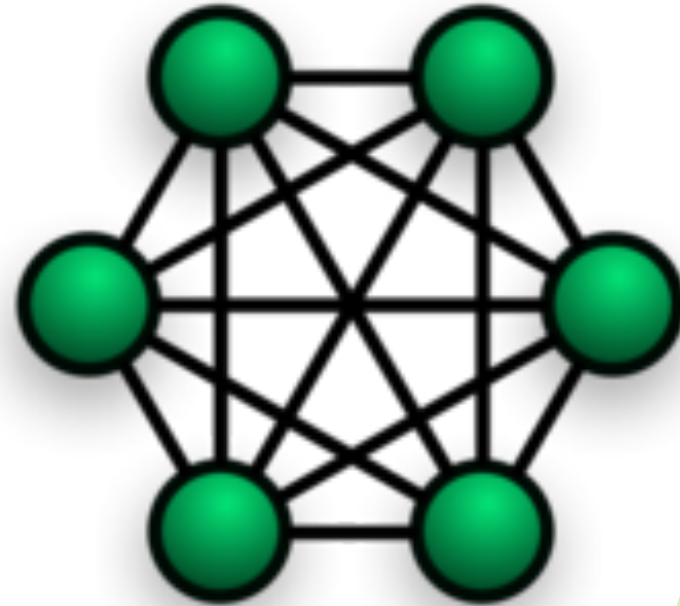
The Belt and Road Initiative: Six Economic Corridors Spanning Asia, Europe and Africa



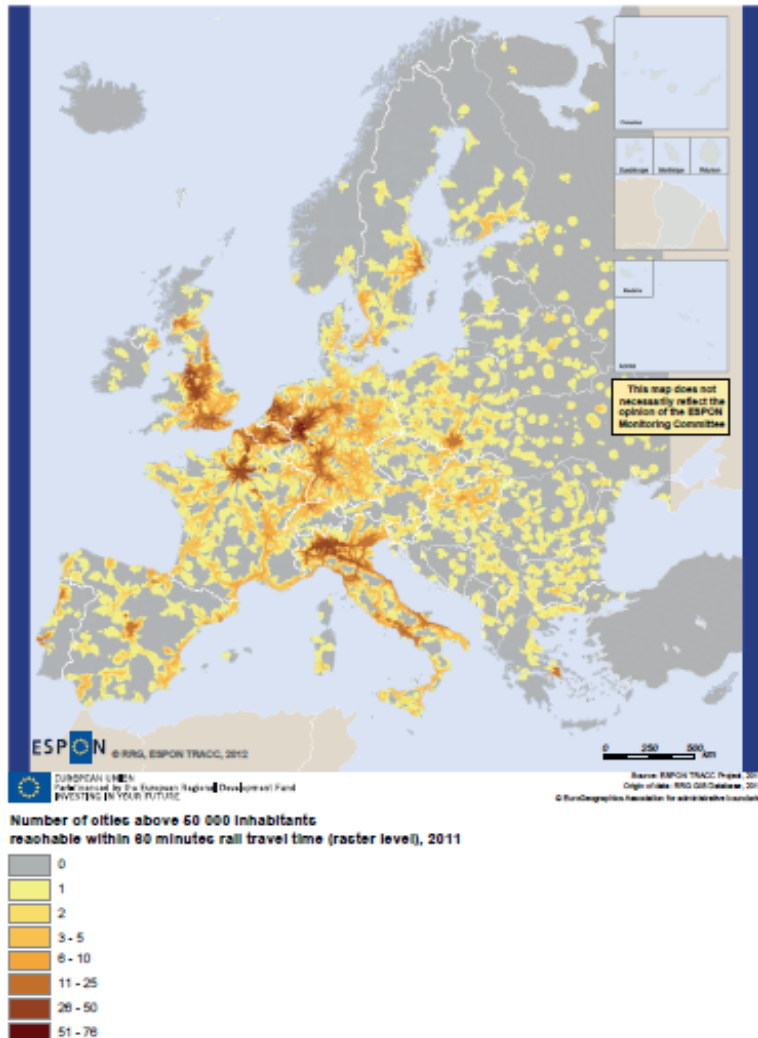
The Transatlantic Trade and Investment Partnership (TTIP)



Networks and Hubs

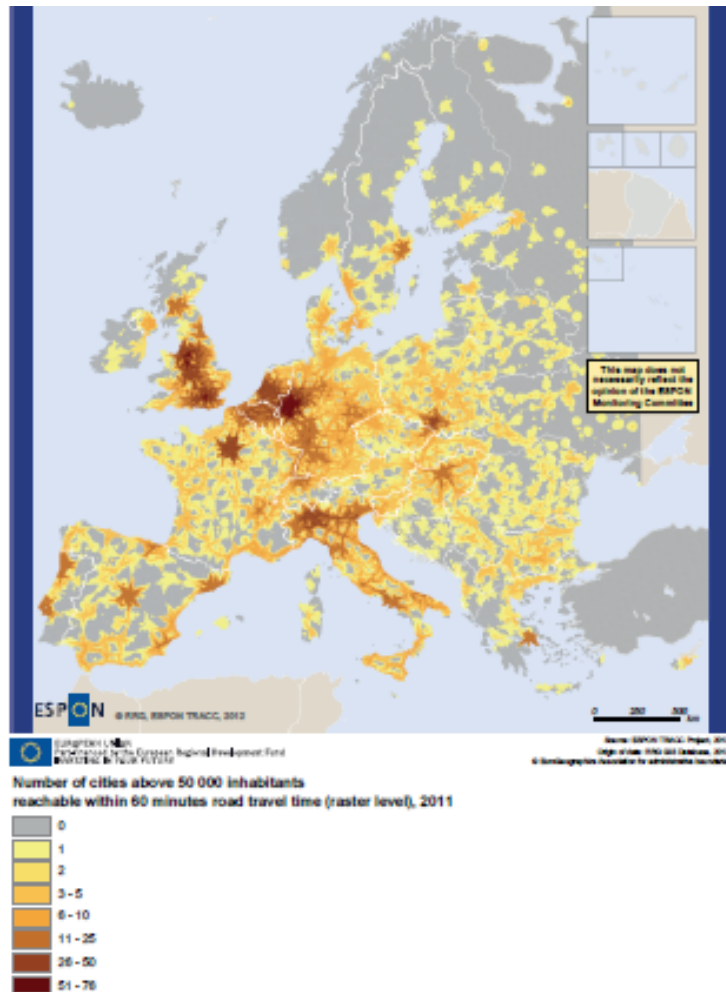


Cities >50,000 reachable in 60 minutes by rail



- ▶ Many regions in the BSR have no cities of >50,000 that can be reached in < 60 minutes by rail.
- ▶ Cities > 50,000 are likely to provide a full range of public and private services and functions.

Cities >50,000 reachable in <60 minutes by car



- ▶ Sparsely populated areas, especially in the Northern Periphery.
- ▶ “Inner peripheries” within the core.

New European transport routes



... to a network
EU 27 Core Network
to be completed in 2030

Directorate-General
for Mobility
and Transport



EU Transport White Paper 2011

An efficient core network for multimodal
intercity travel and transport



The word “rural” does not appear in the White
Paper.

EU – White paper 2011

By 2050, **key goals** will include:

- No more conventionally-fuelled cars in cities.
- 40% use of sustainable low carbon fuels in aviation; at least 40% cut in shipping emissions.
- A 50% shift of medium distance intercity passenger and freight journeys from road to rail and waterborne transport.
- All of which will contribute to a 60% cut in transport emissions by the middle of the century.



Ny teknologi og policy som påvirker transporten nå og framover de neste tiår

- Moderne jernbaner med nye og hurtige tog (Hastigheter >300 km timen blir standard)
- Hyperloop er under ut-testing (Hastigheter 700-1000 km/t)
- Maglev (Hastigheter 500-1000 km/t)
- Elektriske biler, busser, lastebiler, båter og skip
- Autonome kjøretøy, biler, busser, tog
- Flyteknologien vil utvikles
- Nye former for drivstoff
- Forbud mot privatbil i byområder, begrensinger i luftrommet i deler av Europa

SCAN-MED





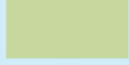

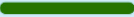

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Åpner i 2029

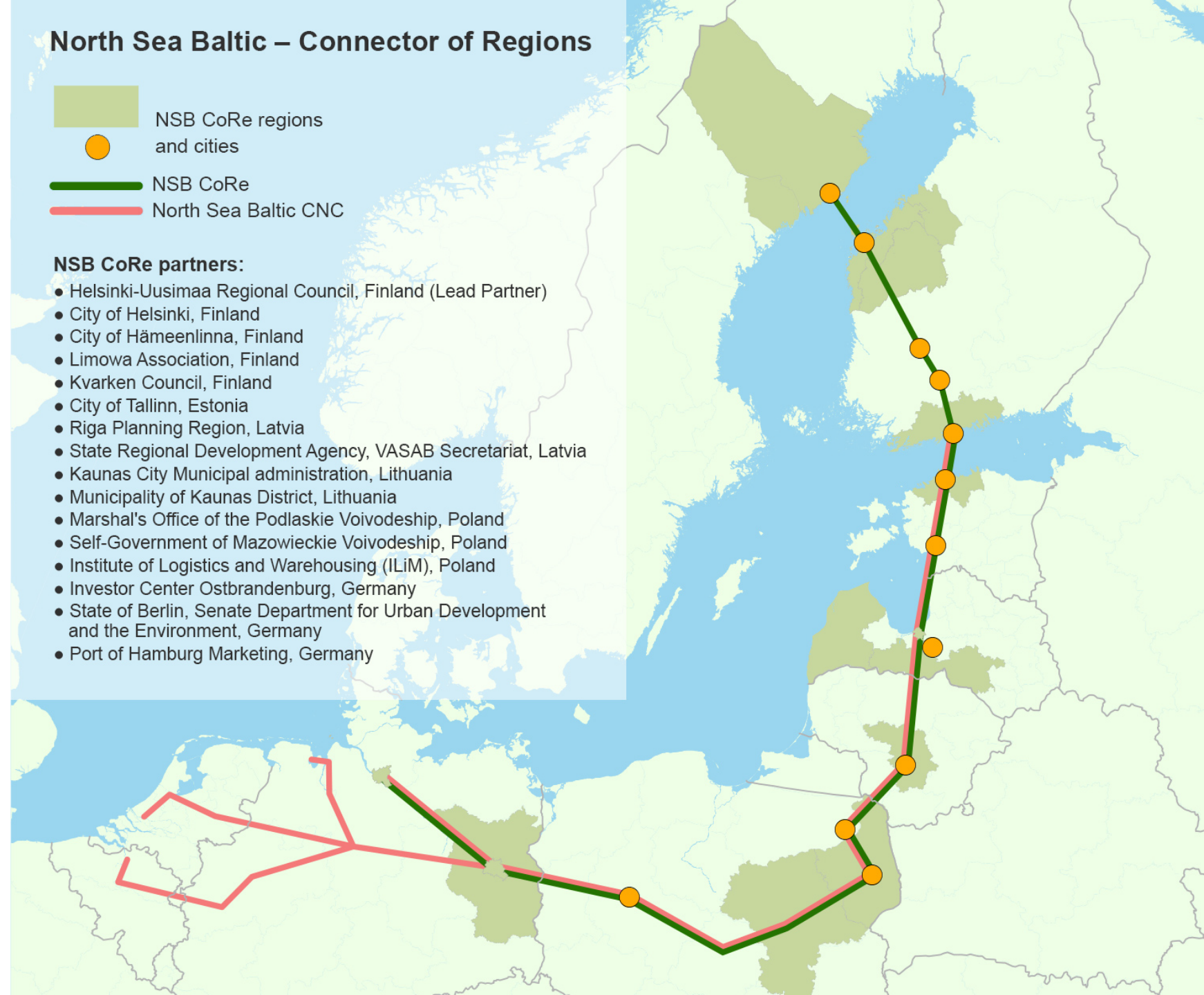


North Sea Baltic – Connector of Regions

-  NSB CoRe regions and cities
-  NSB CoRe
-  NSB CoRe
-  North Sea Baltic CNC

NSB CoRe partners:

- Helsinki-Uusimaa Regional Council, Finland (Lead Partner)
- City of Helsinki, Finland
- City of Hämeenlinna, Finland
- Limowa Association, Finland
- Kvarken Council, Finland
- City of Tallinn, Estonia
- Riga Planning Region, Latvia
- State Regional Development Agency, VASAB Secretariat, Latvia
- Kaunas City Municipal administration, Lithuania
- Municipality of Kaunas District, Lithuania
- Marshal's Office of the Podlaskie Voivodeship, Poland
- Self-Government of Mazowieckie Voivodeship, Poland
- Institute of Logistics and Warehousing (ILiM), Poland
- Investor Center Ostbrandenburg, Germany
- State of Berlin, Senate Department for Urban Development and the Environment, Germany
- Port of Hamburg Marketing, Germany





Ministry of Transport
Republic of Latvia

TEN-T NETWORK – BALTIC SEA REGION

TEN-T Roads



TEN-T Railways





Ministry of Transport
Republic of Latvia

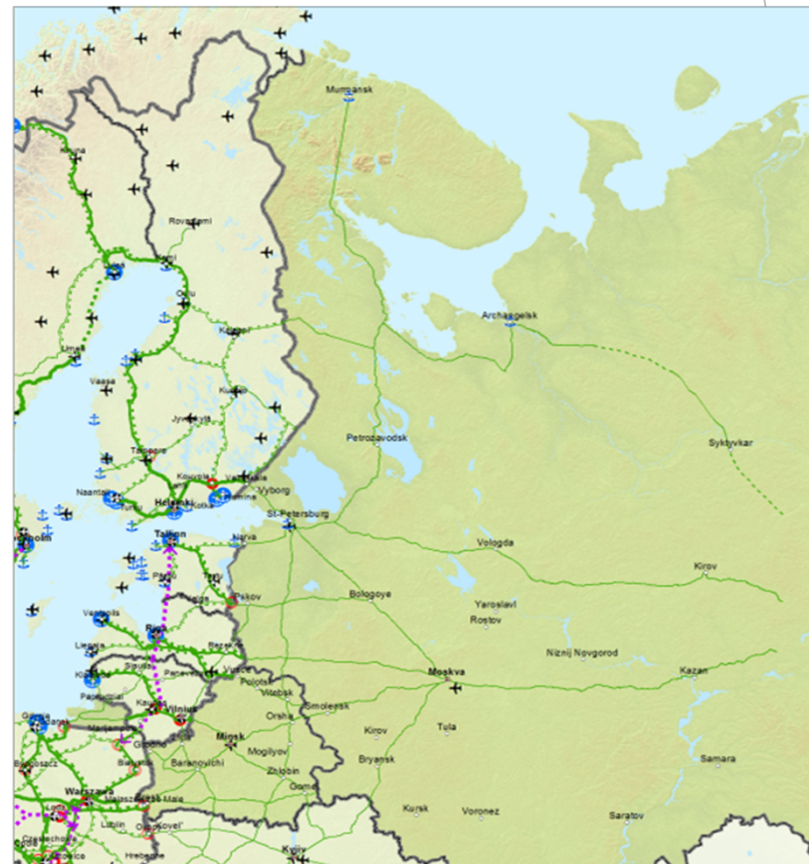
TEN-T EXTENSION TO THE EAST

Northern Dimension Partnership on Transport and Logistics and
Eastern Partnership (Russia, Belarus)

TEN-T Roads extention



TEN-T Railways extention



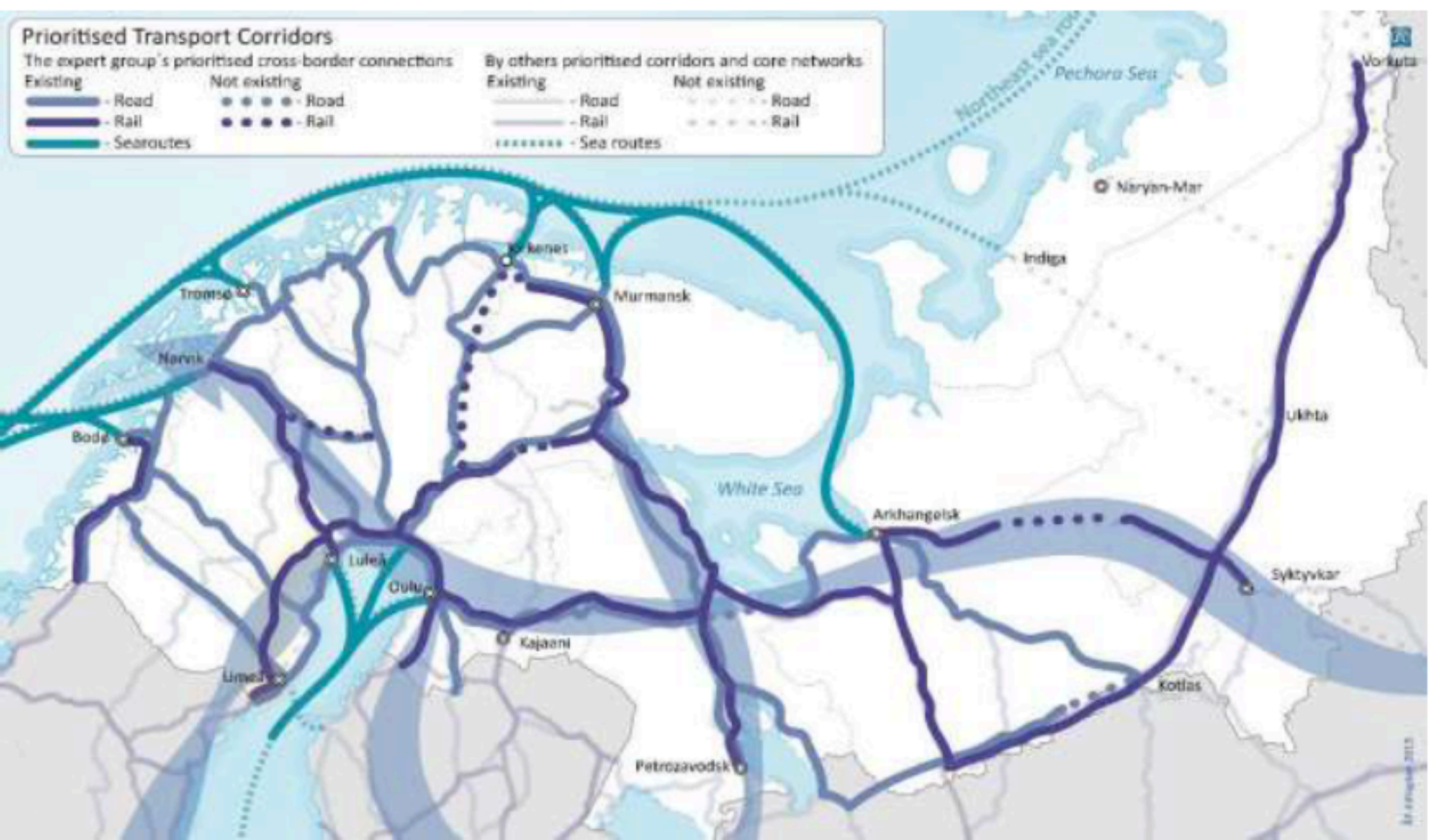
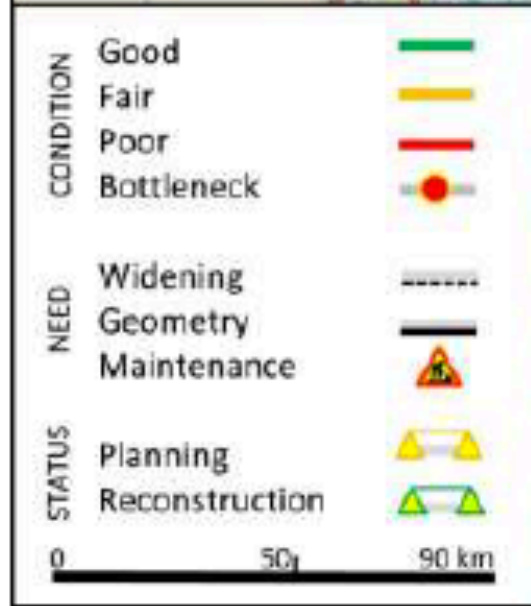
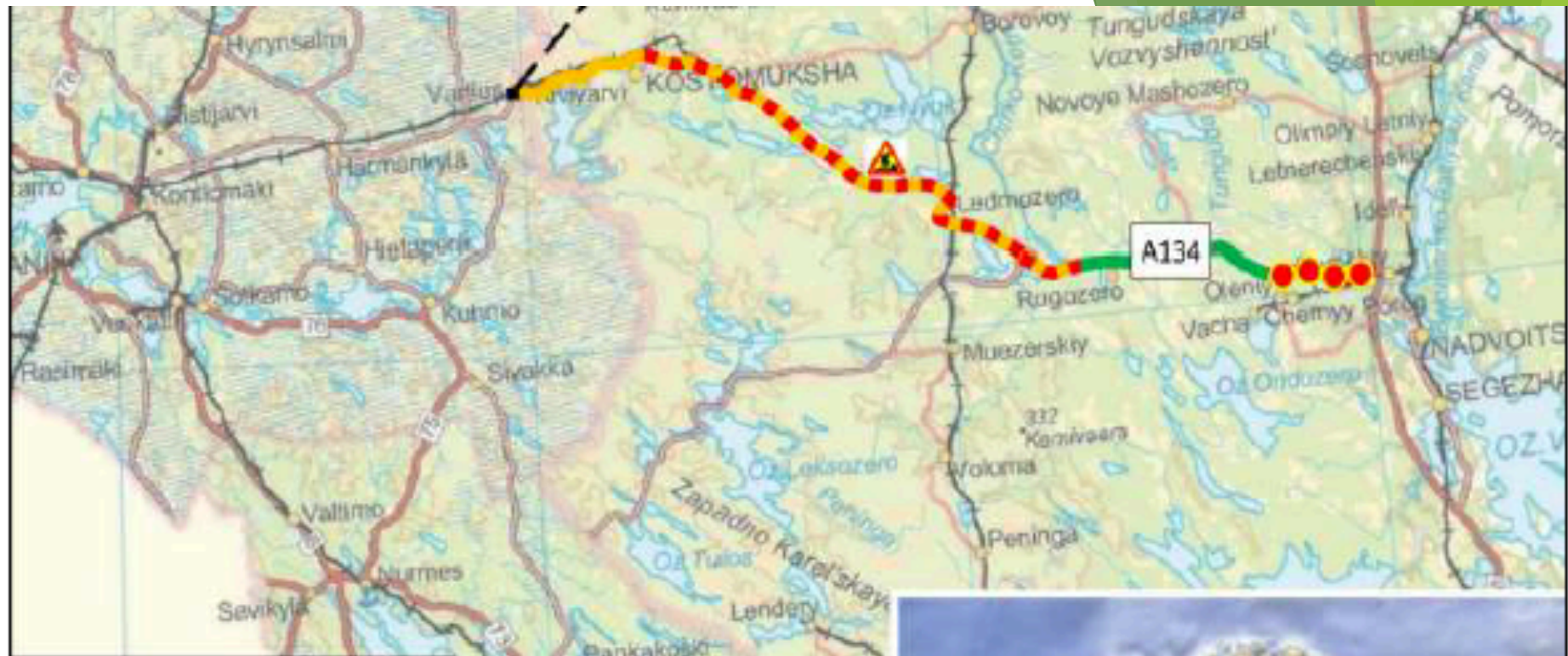


Figure 4. Joint Barents Transport Plan 2013 corridors

Eksempel på plankart





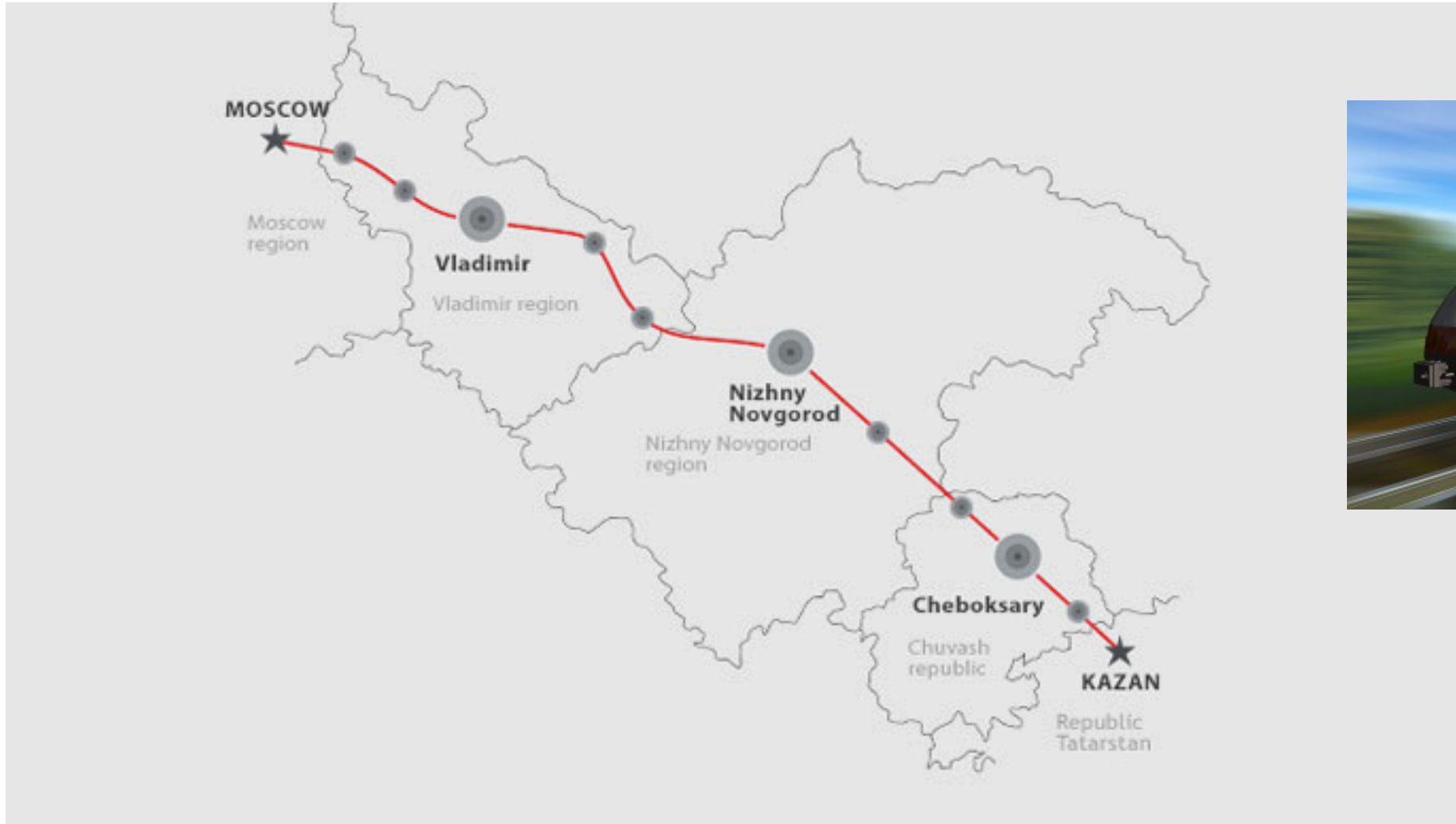
ALLEGRO HELSINKI-ST.PETERSBURG



Allegro kjører nå med høyhastighet mellom Helsinki og St. Petersburg



Russia & China to invest \$15bn in high-speed rail link from Moscow to Kazan



Helsinki-Tallinn på 30 min.



Image: SWECO

Estimated to cost 9-13 billion Euro. 40% EU support (TEN-T)





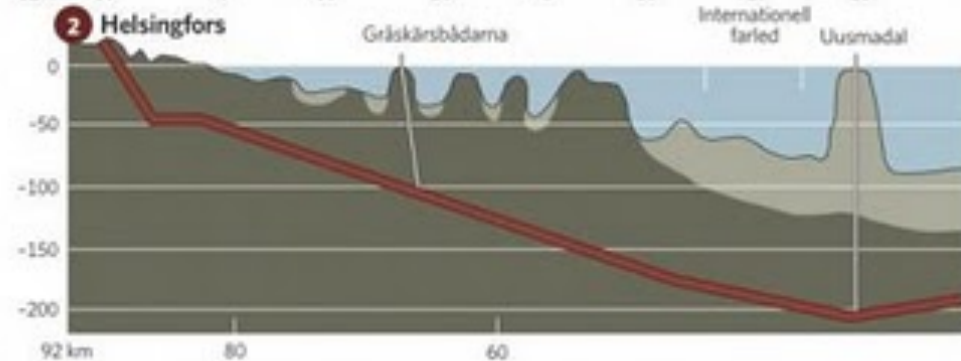
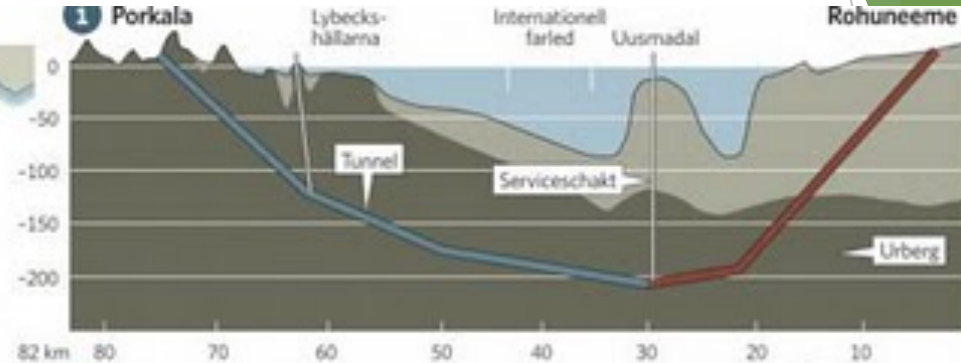
Memorandum of understanding signed
5th January 2016 about a railway tunnel
Between Helsinki and Tallinn



Tunnel till Tallinn



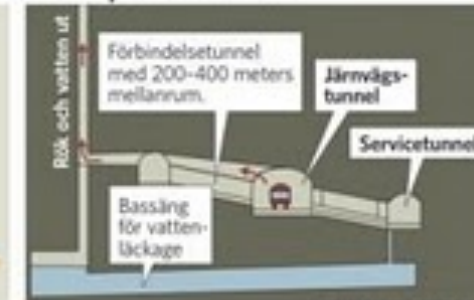
Källa: Banförvaltningscentralen, Helsinki-Tallinn rautatunneliyhtiön ry, Liisa Antikainen



Berggrunden på havsbotten



Princip för tunnelmodell



Grafik: Mikael Bobacka HBL





Seminar on Hyperloop links in Sweden and Finland

7 April 2016

Open seminar on a Hyperloop connection between Sweden, Åland and Finland and how this is related to plans about a rapid transit train between Stockholm, Malmö and Gothenburg. The purpose is to present ongoing studies and invite to an open discussion with KTH- and VTI-researchers and others interested in the potential of Hyperloop as a solution for these links.

CONCEPTS



MAIN CORRIDORS OF MOVEMENT AND DEVELOPMENT IN SOUTHERN FINLAND

- South Finland Corridor (Stockholm - Turku - Lahti - St. Petersburg)
- Lake Finland Corridor (Helsinki - Lahti - Mikkeli)
- Coast Corridor, fast passenger trains (Stockholm - Turku - Helsinki - Kotka - St. Petersburg)
- Inner Finland Corridor (Helsinki - Hämeenlinna - Tampere)
- Europe Corridor (Helsinki - Tallinn/Baltic)
- Logistic Corridor (Hanko - Lohja - Hyvinkää - Mäntsälä)

METROPOLIS ROAD HIERARCHY



METROPOLIS FORMS OF TRAFFIC



1. Pedestrian, bicycle, rail
2. Ecobus feeding traffic, pedestrian, bicycle, rail
3. Personalized public feeding transport, private cars, light traffic and rails



Intercity triangelet JBV

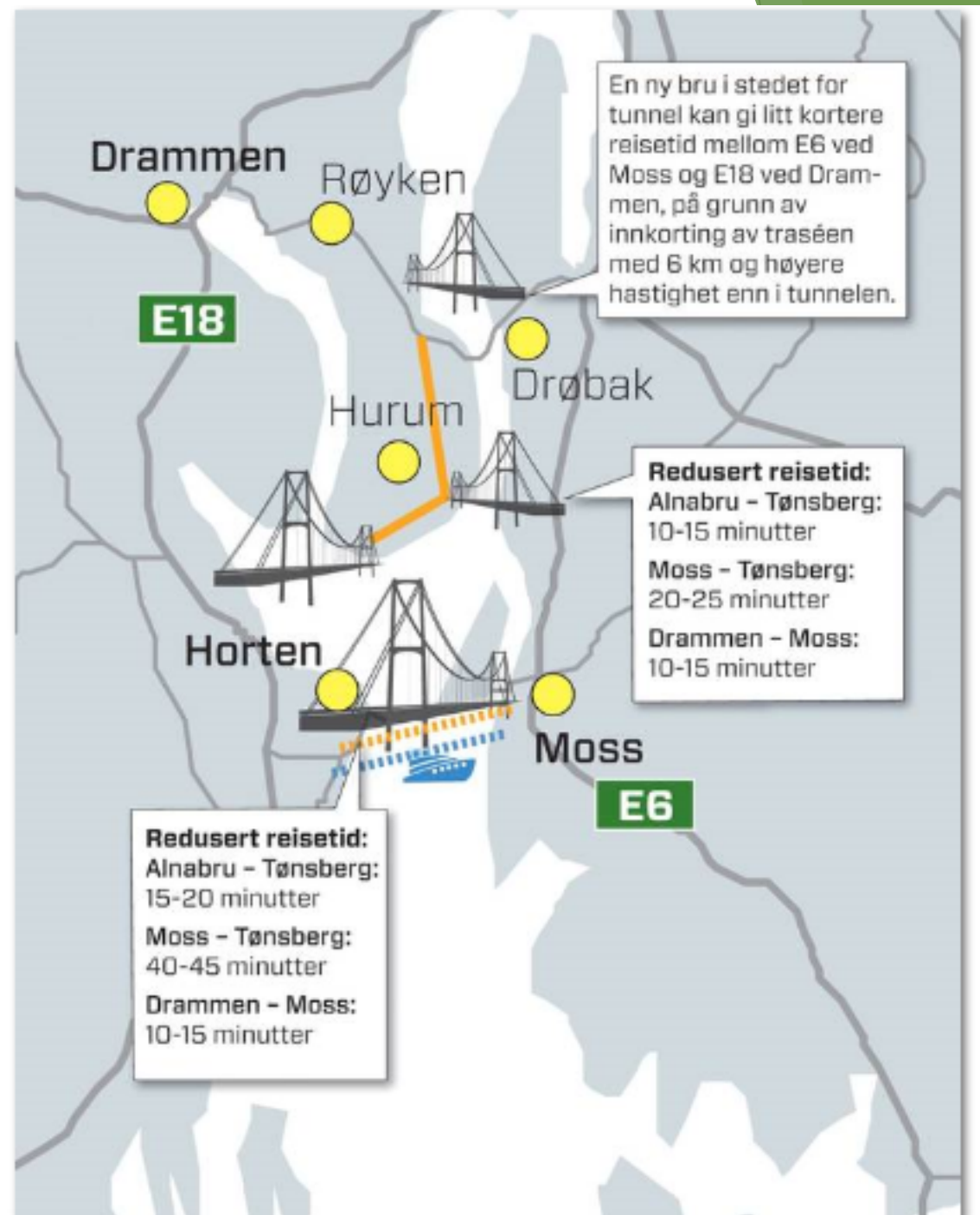


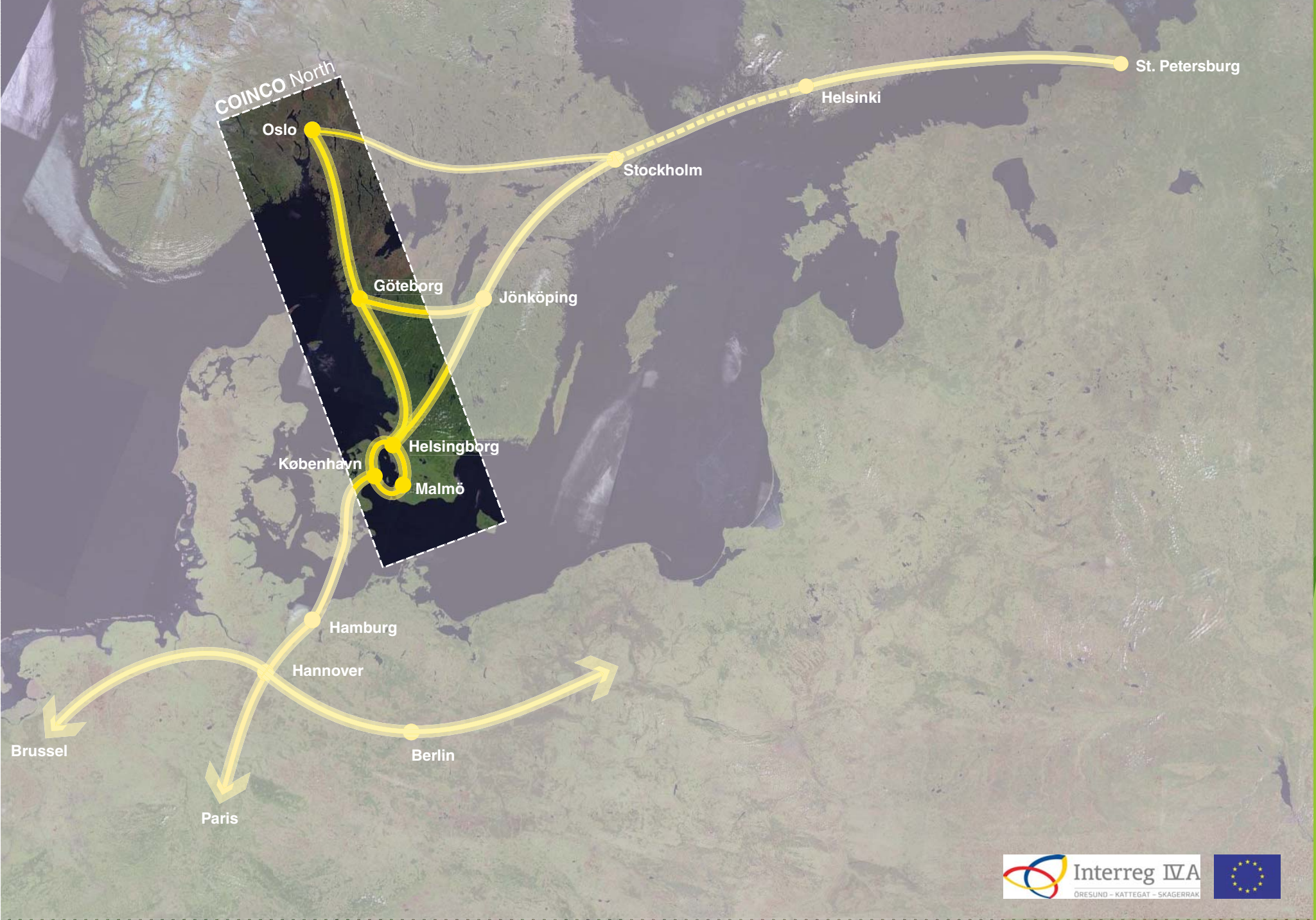
Oslo-Ski: 11 min.

Oslo Halden : 1t 08 min

Oslofjord-
forbindelsen må
ses i et
internasjonalt
perspektiv

Den bør inneholde
både vei og bane





Prinsippskisse for høyhastighet Stockholm-Malmö/Göteborg(Trafikverket)



Norsk Bane AS: Optional routes for high speed railway between Oslo and Stockholm

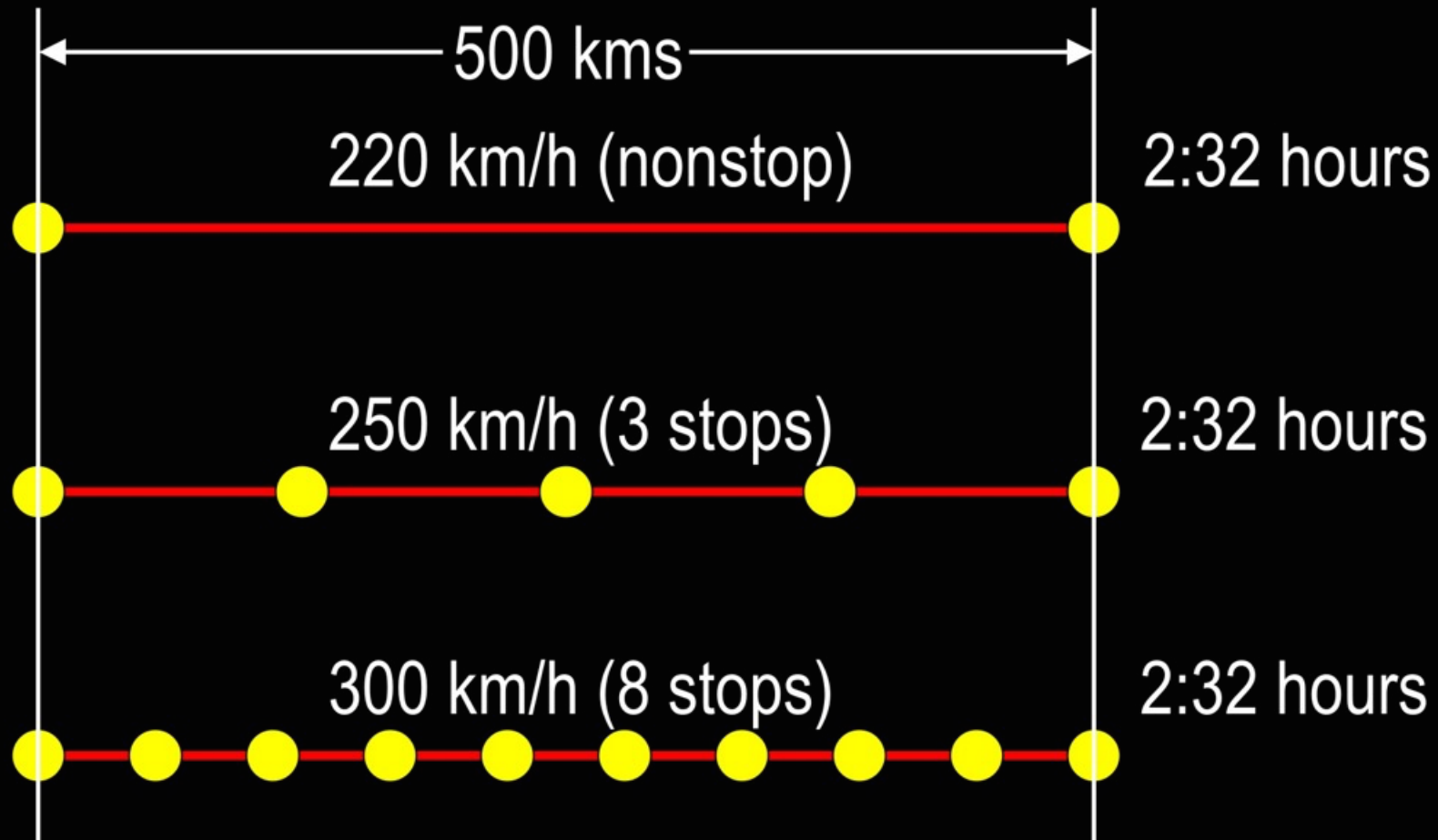


Speed and stops

norsk bane®

- Nye tider for Norge

Oslo – Stockholm



China's New Shipping Frontier

How the new Northern Sea route compares to the traditional Suez Canal route

NORTHERN SEA ROUTE

Travel time
35 days
Dangers
Icebergs
Travel window
July to November
Container-carrying vessels
One this year

SUEZ CANAL ROUTE

Travel time
48 days
Dangers
Access to Suez Canal under question with upheaval in Egypt
Travel window
Year-round
Container-carrying vessels
17,000 last year



Sources: Northern Sea Route Information Office; National Snow and Ice Data Center; Cosco; Lloyd's List The Wall Street Journal

Norden må med i de globale transportrutene!



Hva kan Grensekomiteene gjøre i samarbeid med Nordisk Råd ?

Etablere en arbeidsgruppe

Arrangere seminarer og samle/utveksle ideer

Drive lobbyarbeid for grenskryssende transport-
infrastruktur, enkeltprosjekter

Utvikle en helhetlig nordisk transportstrategi
(prosjekt-finansiering) som innspill til myndighetene

Eksempel på mulige mål for transportutvikling i Norden

- Maks en time til jobben med kollektiv/bil
- Maks 2 timer til en mellomstor by (50.000) med kollektiv/bil
- Maks 3 timer til hovedstaden med kollektiv/bil
- Raske tog(> 3 timer) mellom alle de nordiske hovedsteder og nærmeste storbyer (100.000) i en radius på 600 km
- Mer gods på bane enn på lastebil på alle strekninger >200 km
- Ekspress sykkelveier innenfor en radius på 20 km fra alle byer/sentrum, næringsområder, jernb.st./flyplasser/knutepunkt