



Nordic
Co-operation



TENTACLE

Alf S. Johansen

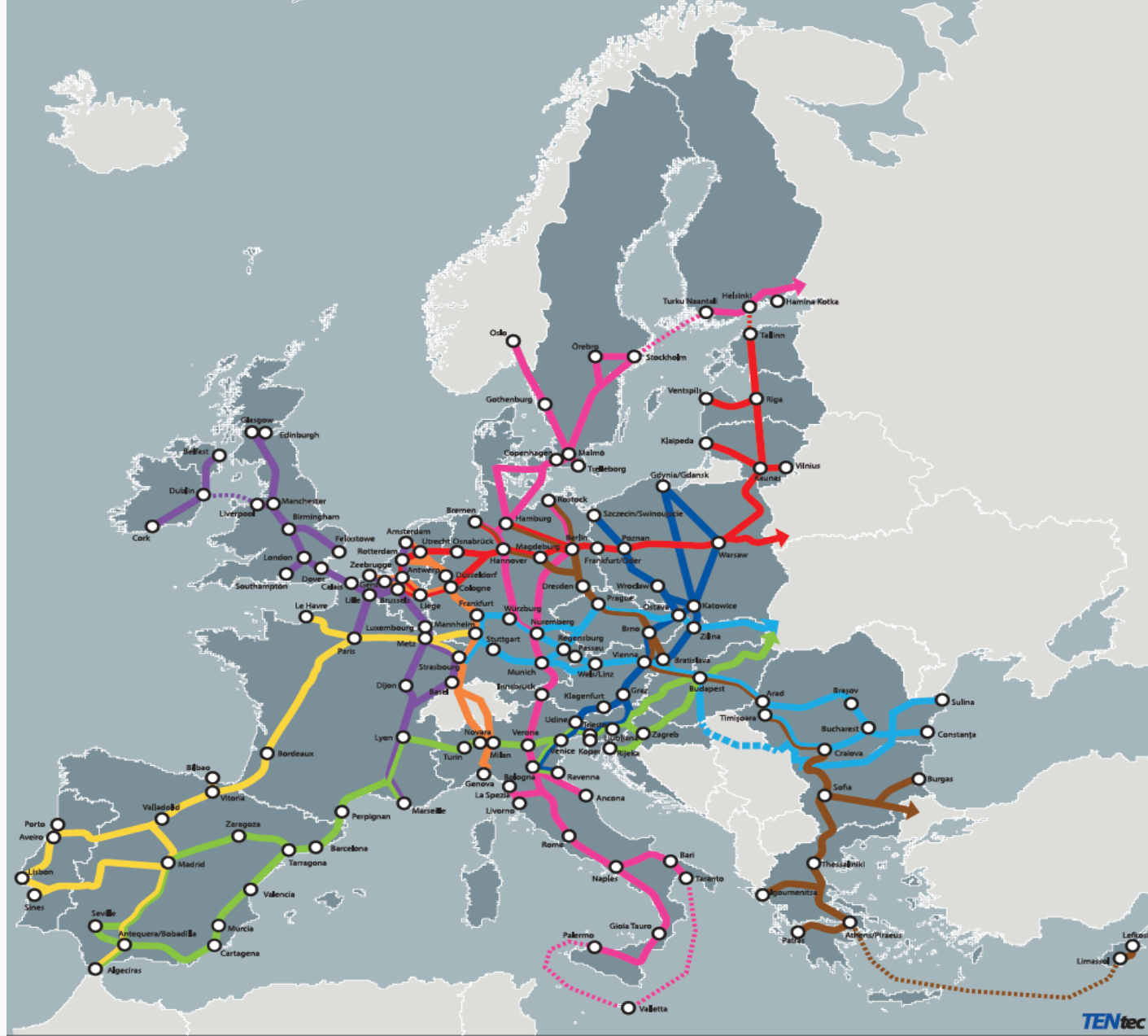
Innovation Circle Network

Suwalki 09.11.2017

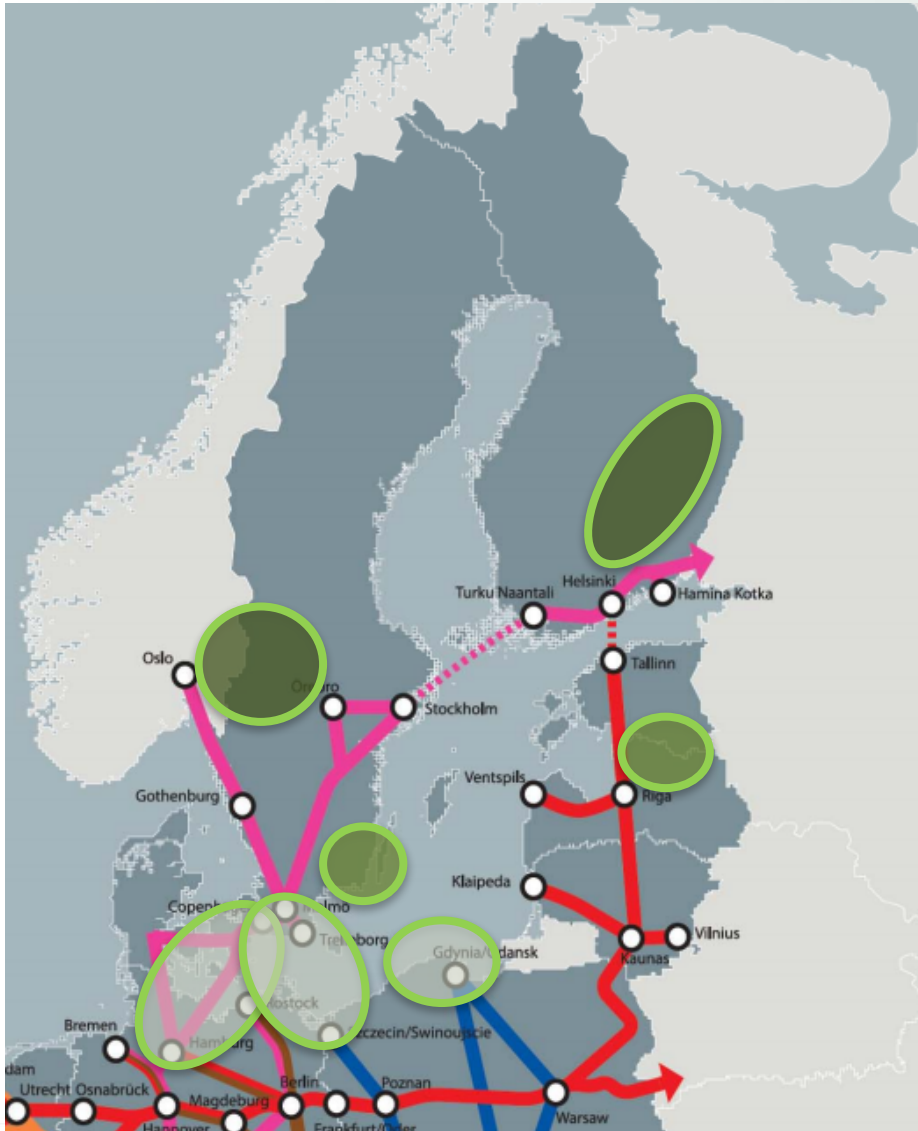


9 TEN-T Core Network Corridors

-  **Atlantic**
-  **Mediterranean**
-  **North Sea
Mediterranean**
-  **Rhine
Alpine**
-  **Scandinavian
Mediterranean**
-  **Baltic
Adriatic**
-  **North Sea
Baltic**
-  **Orient
East Med**
-  **Rhine
Danube**



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)

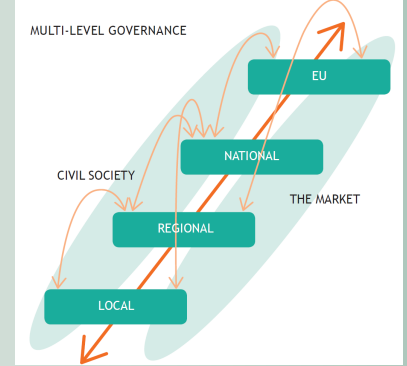


Corridor nodes & transit areas

- 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

Exemple of showcases...

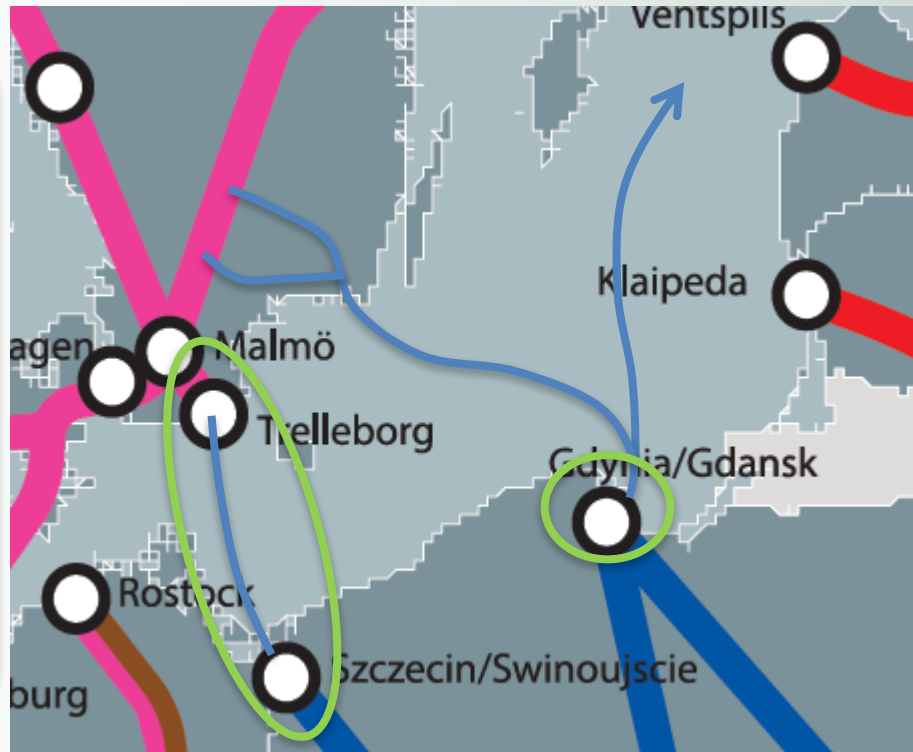


Westpomerania-Skåne (PL/SE)

How to meet the growing cargo volumes through the **networking of logistic centres** on the Baltic-Adriatic Corridor?

How to use the **European Grouping of Territorial Cooperation** to coordinate the greening of transport and to ensure the corridor connectivity across the sea?

How to best incorporate the **maritime leg**?



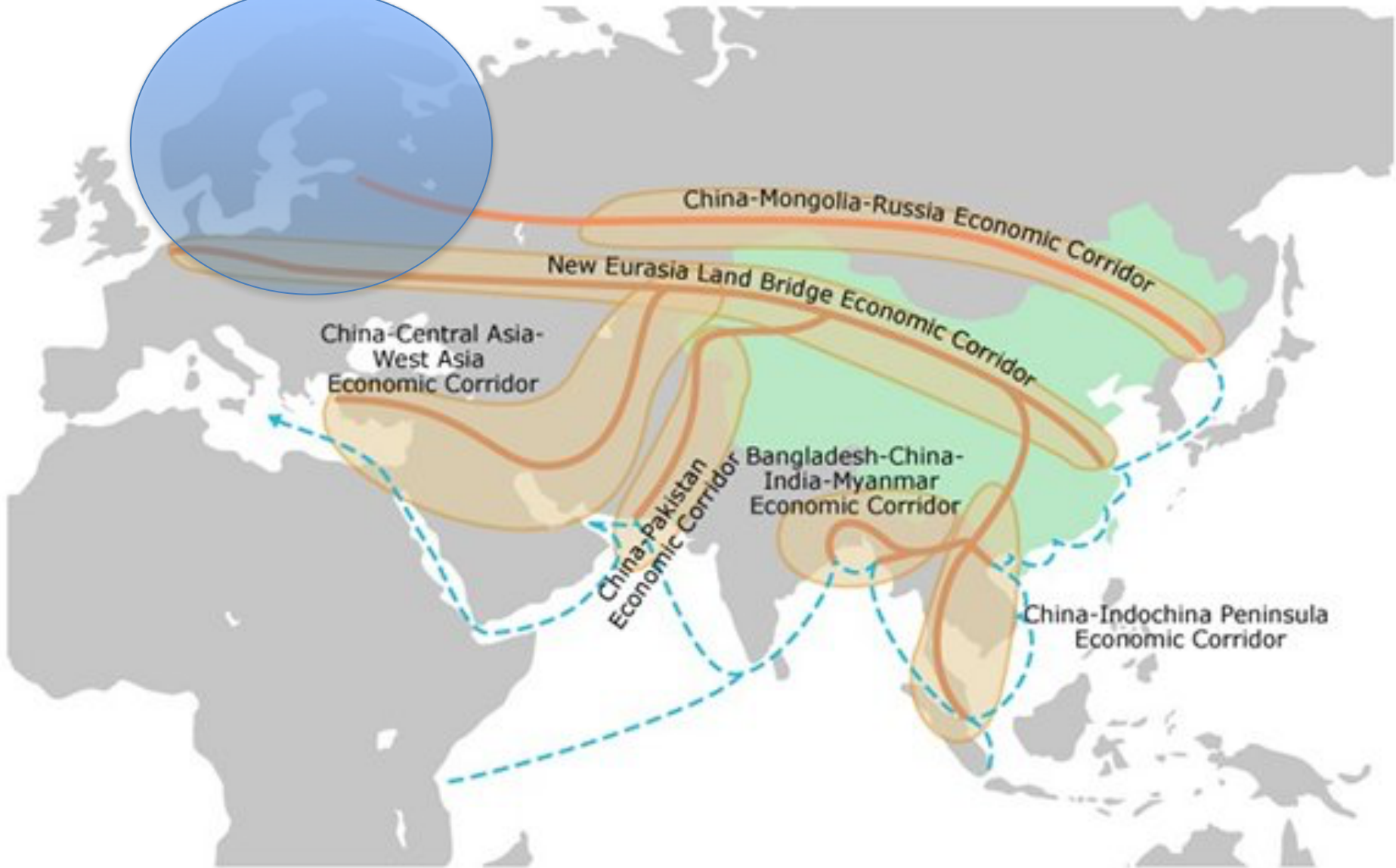
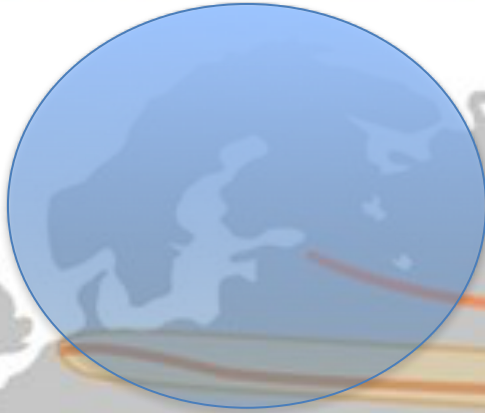
Gdynia transport/urban node (PL)

How to stimulate the growth potential of the corridor **entry/exit node** which has a key transport gateway function?

How to develop a **last mile infrastructure** in and around an urban node on the Baltic-Adriatic Corridor to both serve the metropolitan growth and the seaborne transit ?

How to best incorporate the **maritime leg**?

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



1. EURASIAN SERVICE LINES

TRANSIT TIME: 14 – 18 DAYS



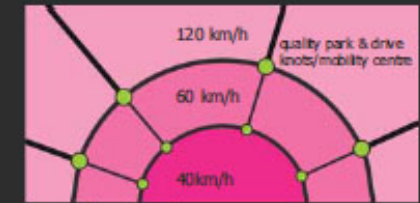
CONCEPTS



MAIN CORRIDORS OF MOVEMENT AND DEVELOPMENT IN SOUTHERN FINLAND

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

METROPOLIS ROAD HIERARCHY



ring road III ring road I

METROPOLIS FORMS OF TRAFFIC



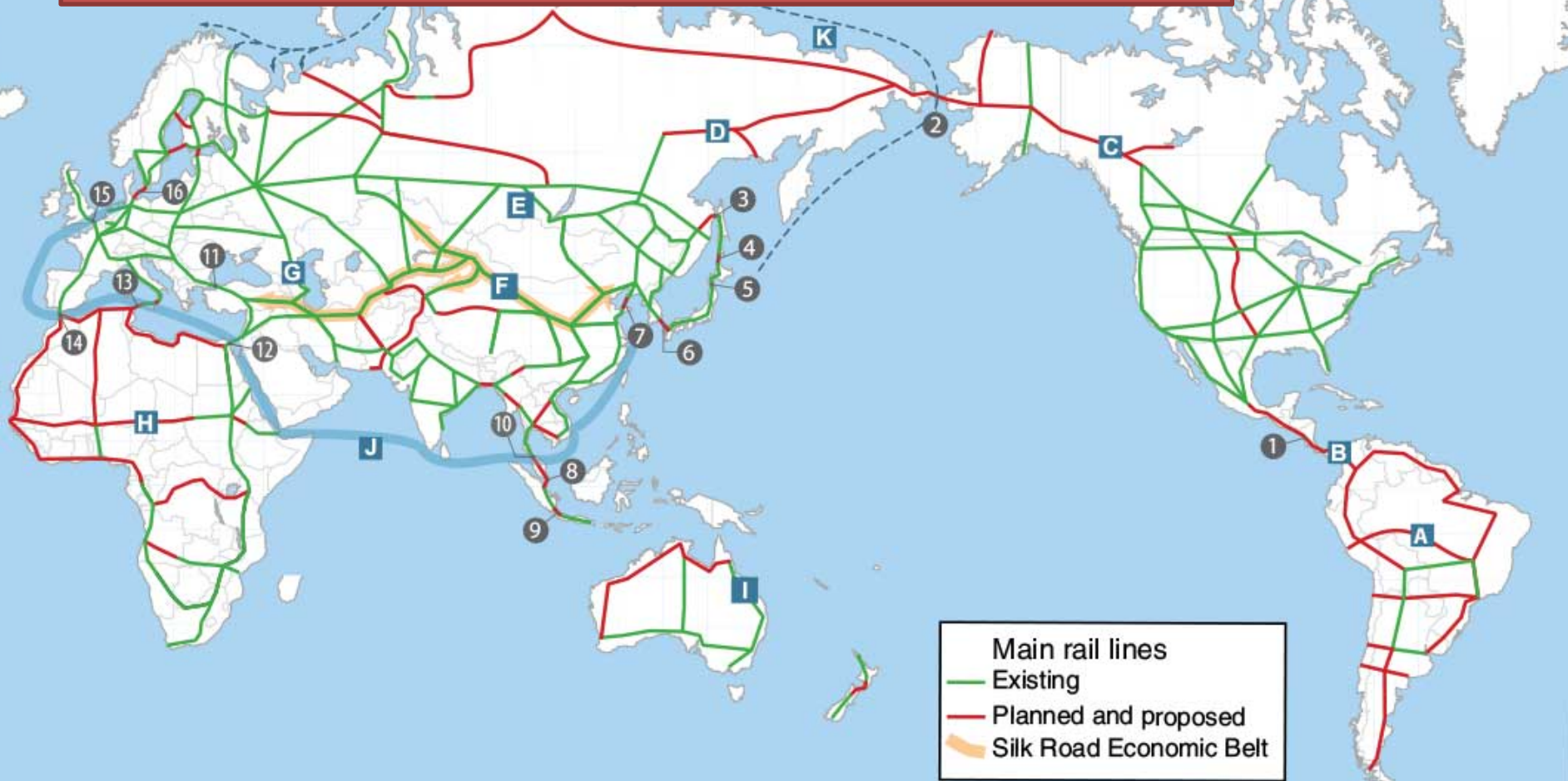
1. Pedestrian, bicycle, rail
2. Ecobus feeding traffic, pedestrian, bicycle, rail
3. Personalized public: feeding transport, private cars, light traffic and rails



Scandinavian express railway



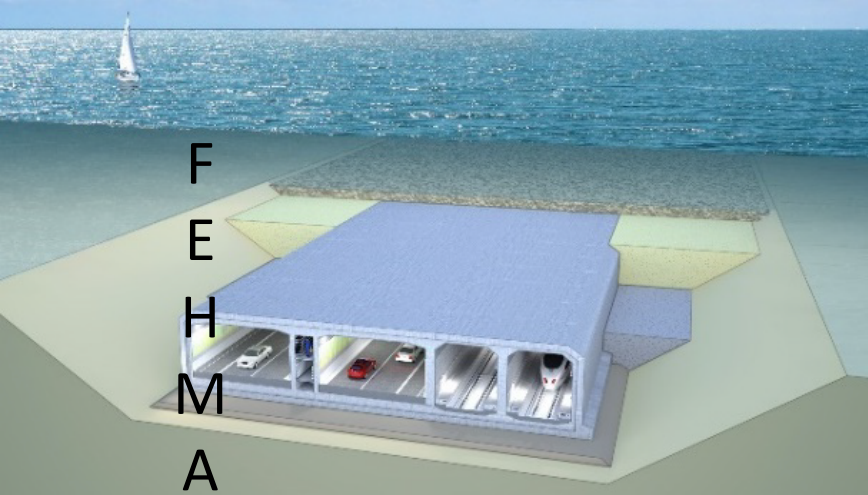
Skandinavia må inkluderes i det globale transportnettverket



Alan Yue, Asuka Saito/EIRNS, 2014



Opens i 2029



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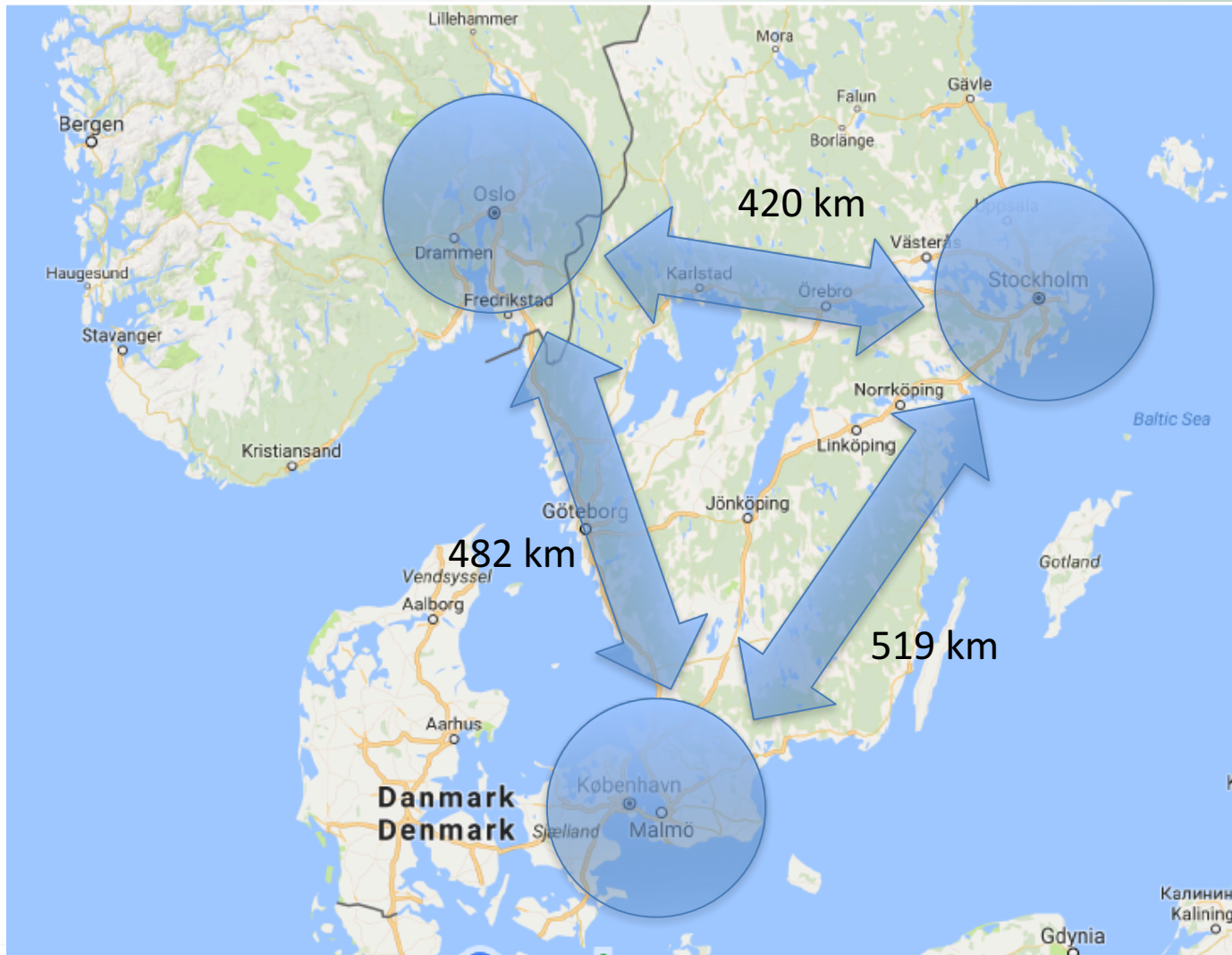
Helsinki-Tallinn in 30 min.



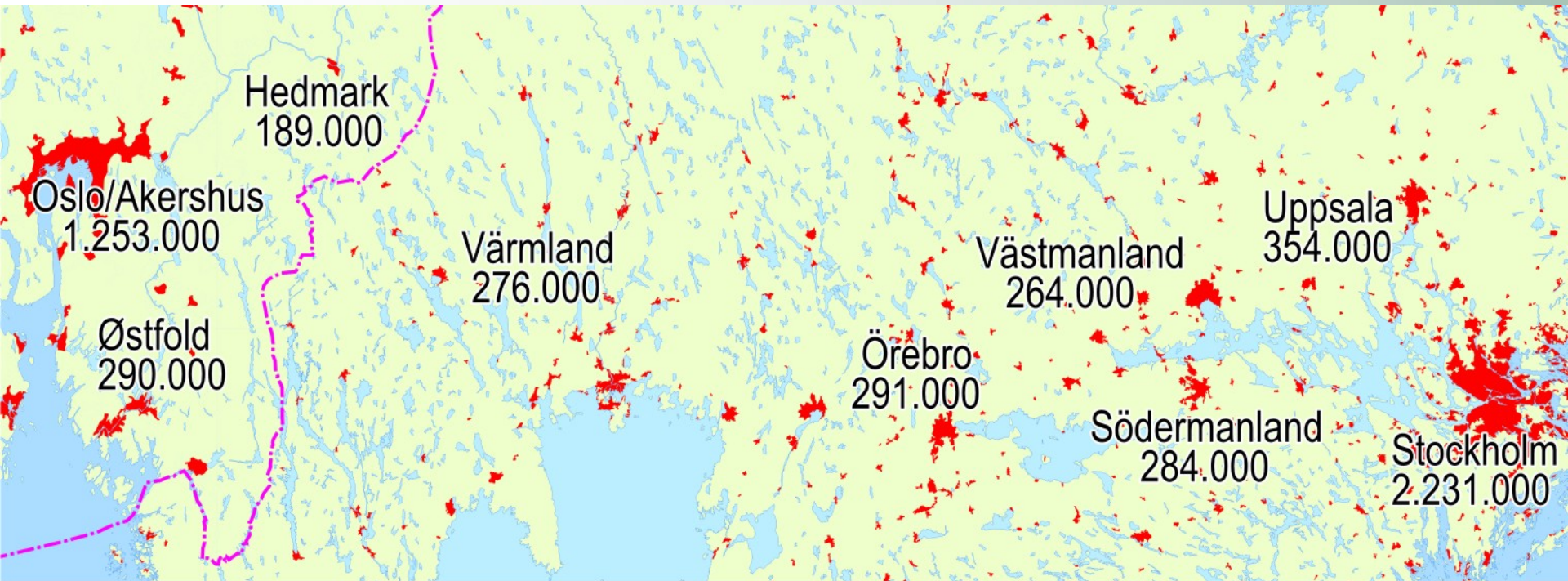
Estimated to costs 9-13 billion Euro. 40% EU support(TEN-T)



Scandinavian Triangle



Much more than end to end!

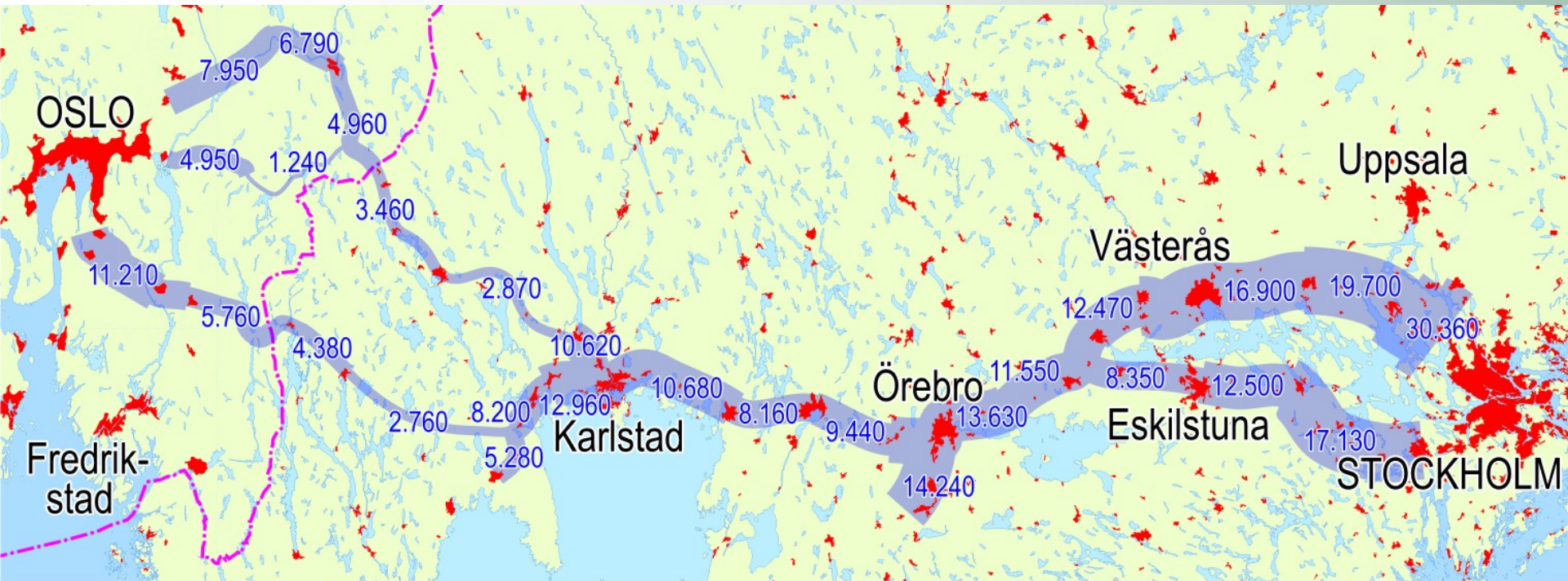


5 mill inhabitants today
7 mill inhabitants 2050

Inhabitants in Norwegian and Swedish counties near a future Oslo – Stockholm line, 01.01.2016.

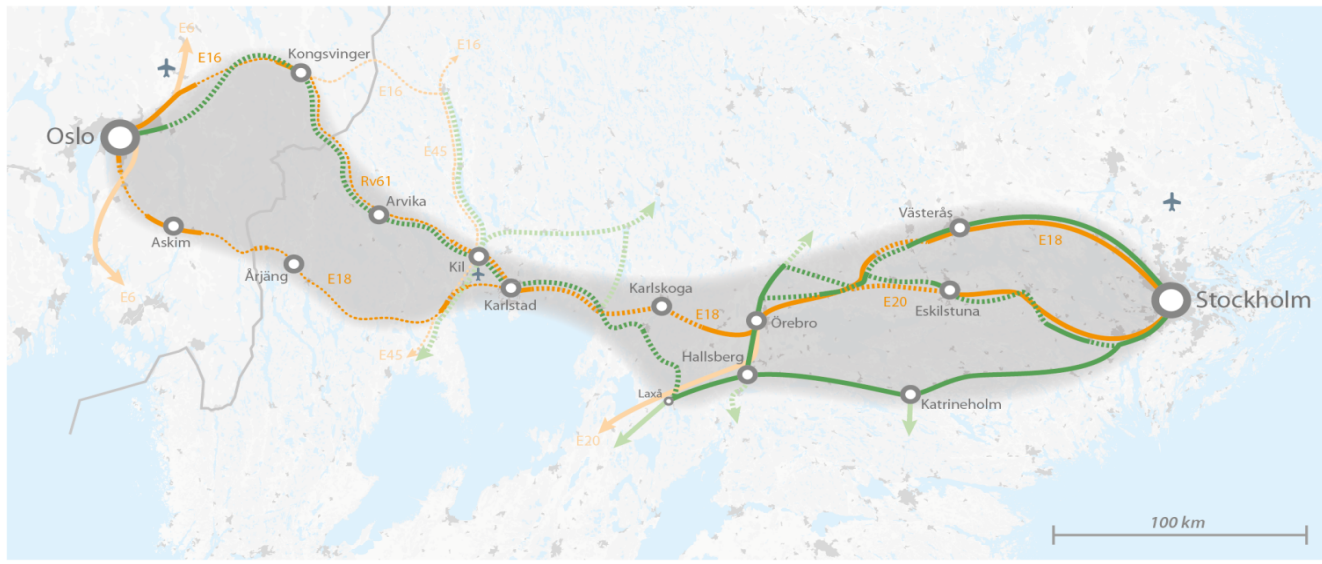
Large passenger car traffic

Number of passenger cars per day in 2015, minimum figures between major nodes in road network.



Strategic choice of measures study within the transport corridor Stockholm–Oslo

- Project coordinator: Jan Lindgren, the Swedish Transport Administration.
- Participants: Norwegian and Swedish transport administrations, regions, municipalities, public transport and freight operators, and others.
- Project period: Spring 2016 to Autumn 2017.
- Area:



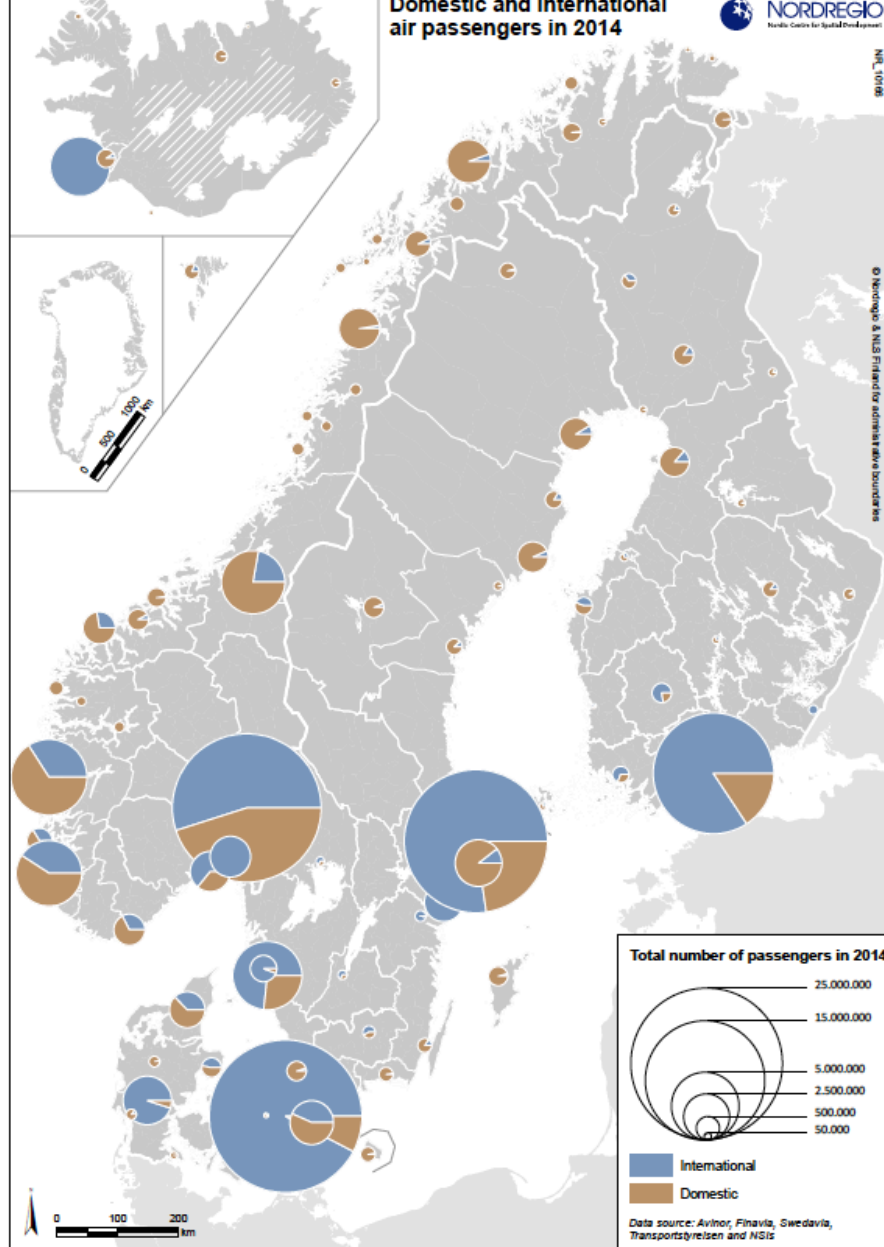
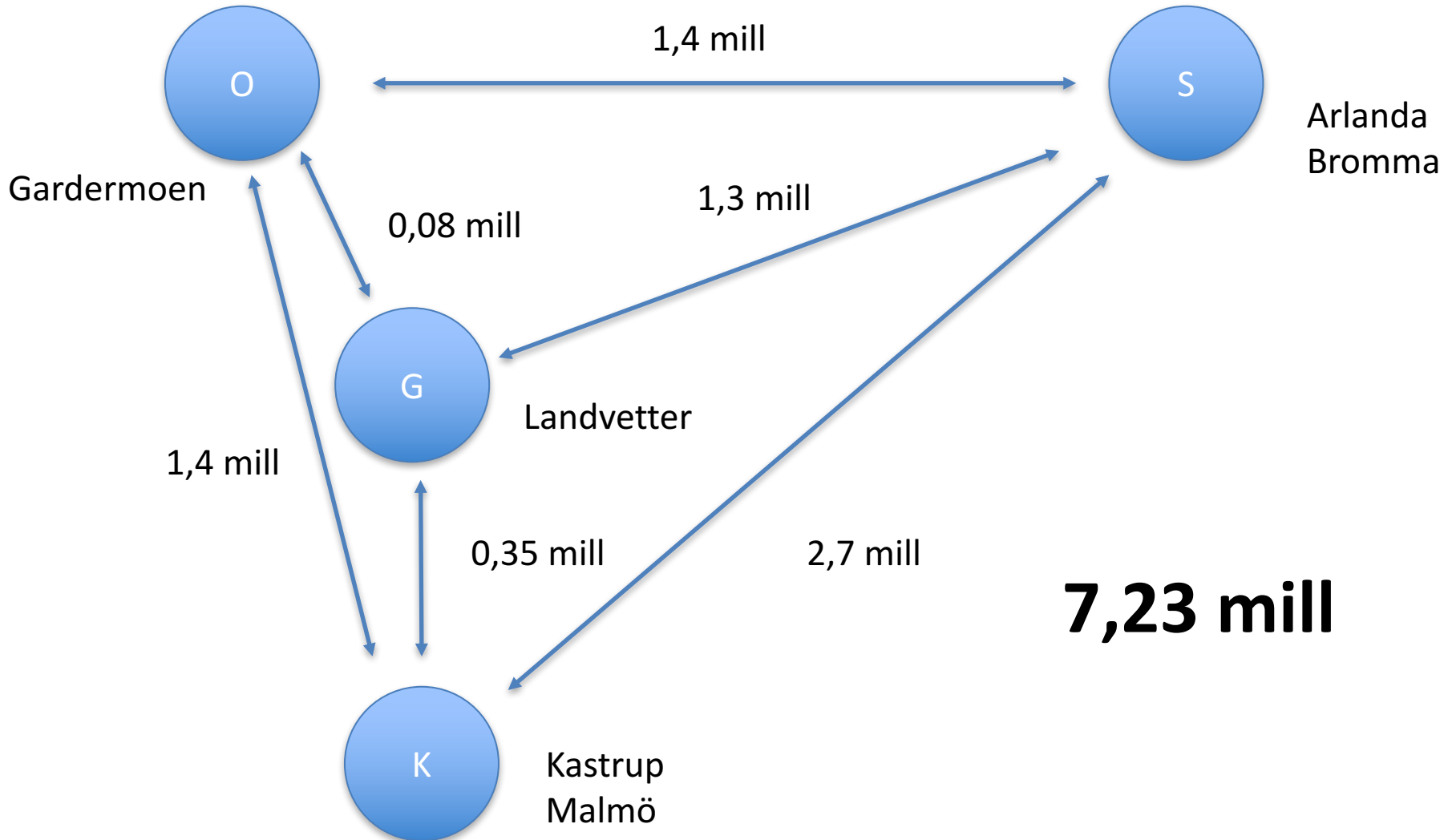


Figure 13.3: Domestic and International air passengers per airports in the Nordic Region in 2014

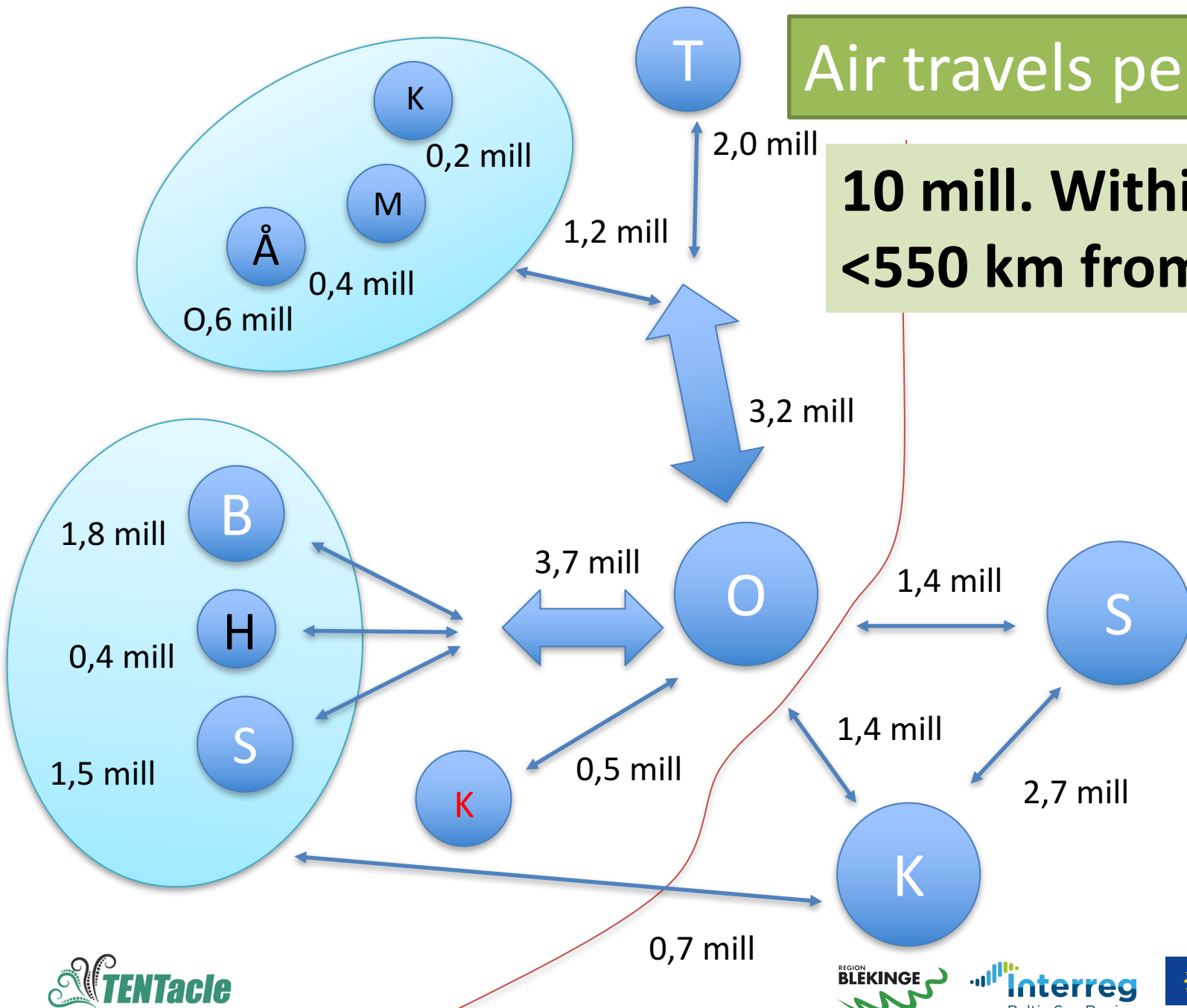
Estimated air travels 2017

(Based on statistics 2014-2016)



Air travels per year

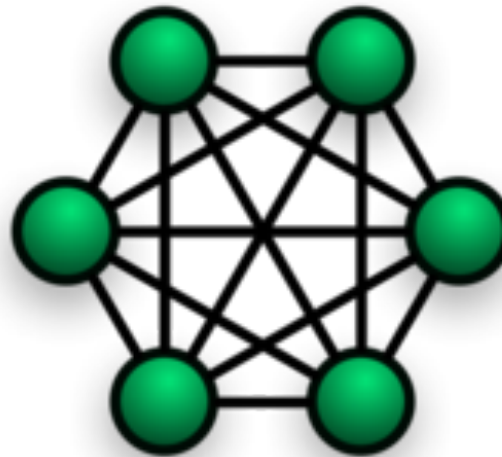
10 mill. Within <550 km from Oslo



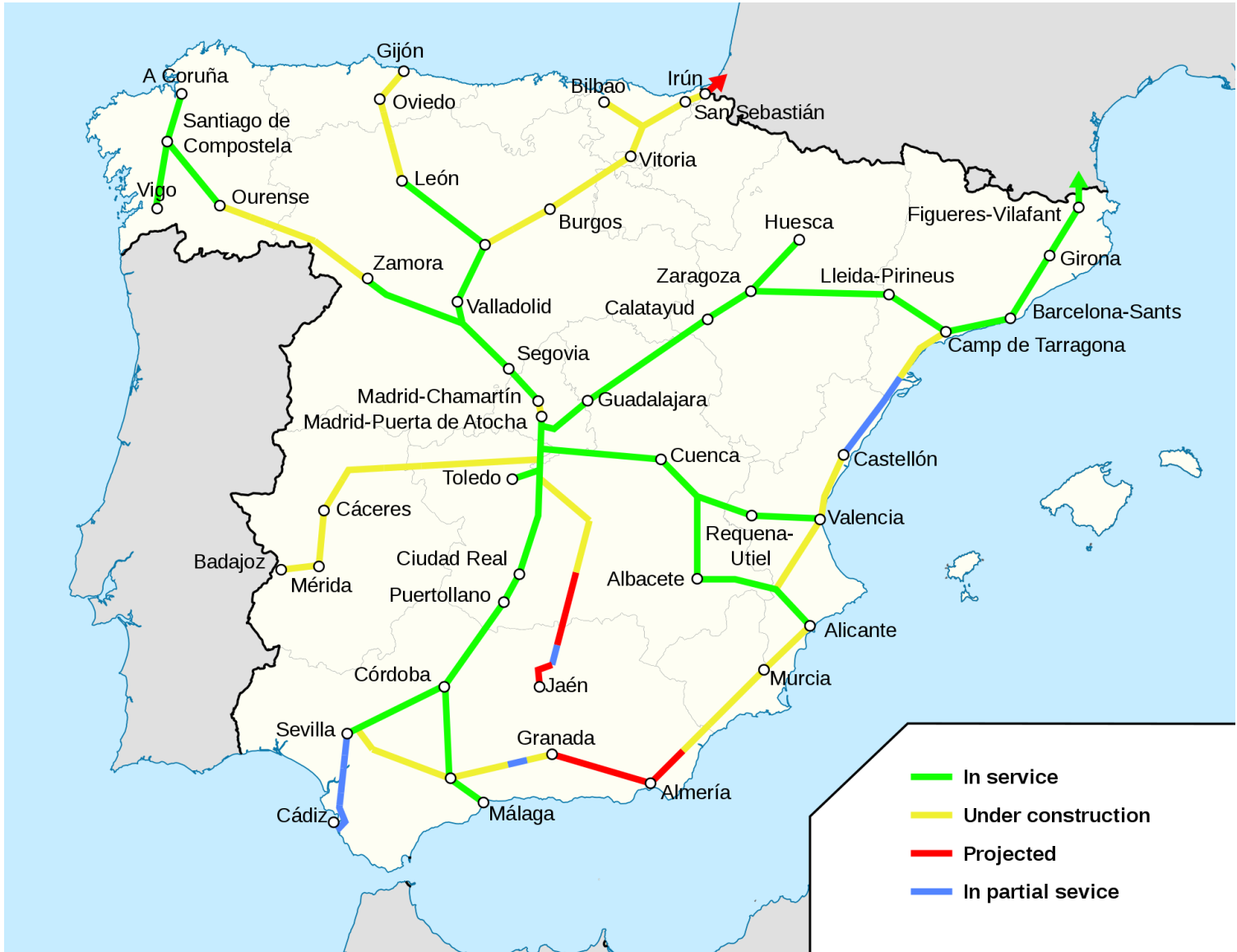
Networks and Hubs

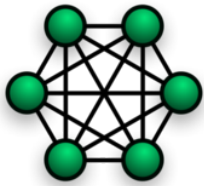
2 ways of development

- Bottleneck structure (hubs, tunnels, bridges, central stations etc.)
- Network structure



High speed railway net in Spaine





Railway map of China

Colored lines showing CRH and other high speed rail services
Last update: 2016-09-10



Intercity triangle around Oslo is under construction



”High speed” network in Sweden



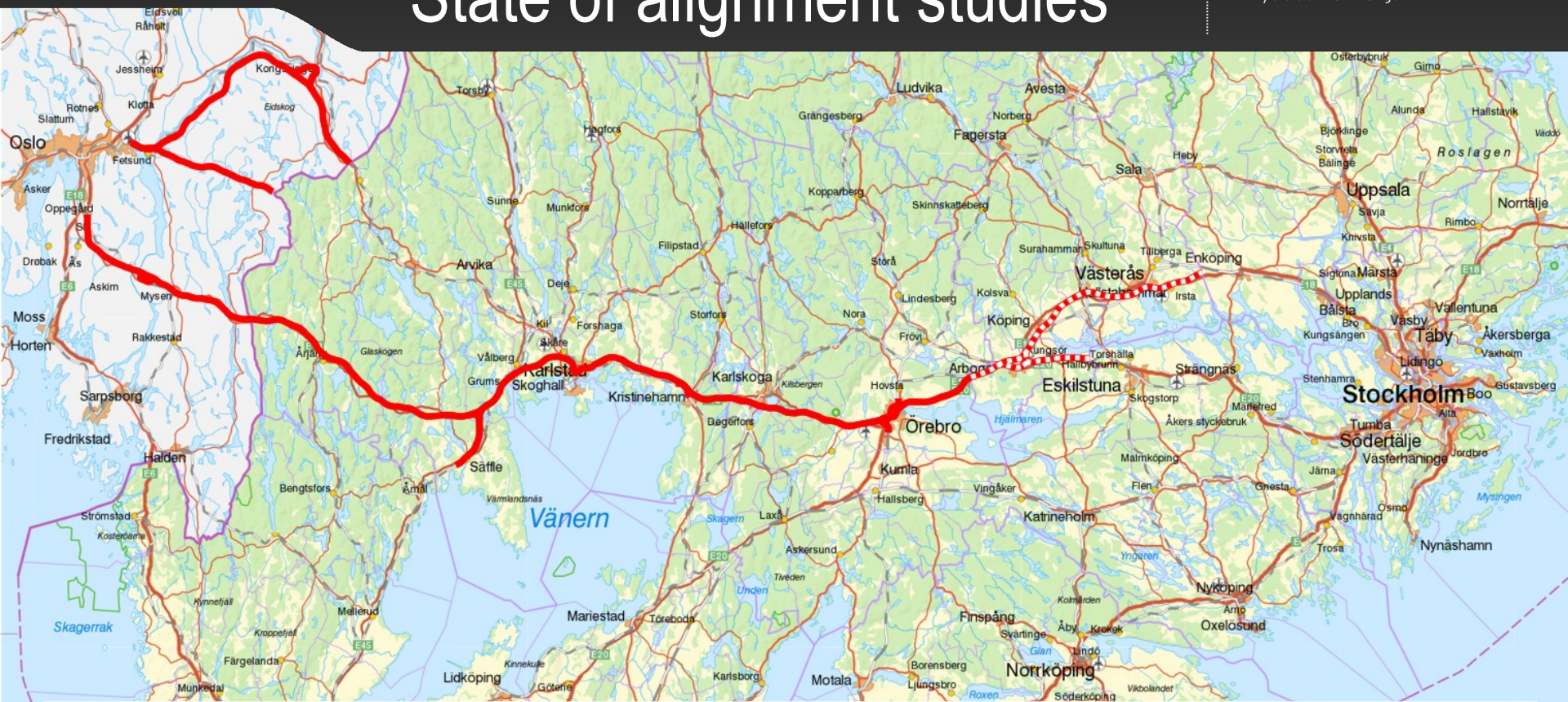
Kilde: Trafikverket



Oslo – Stockholm State of alignment studies

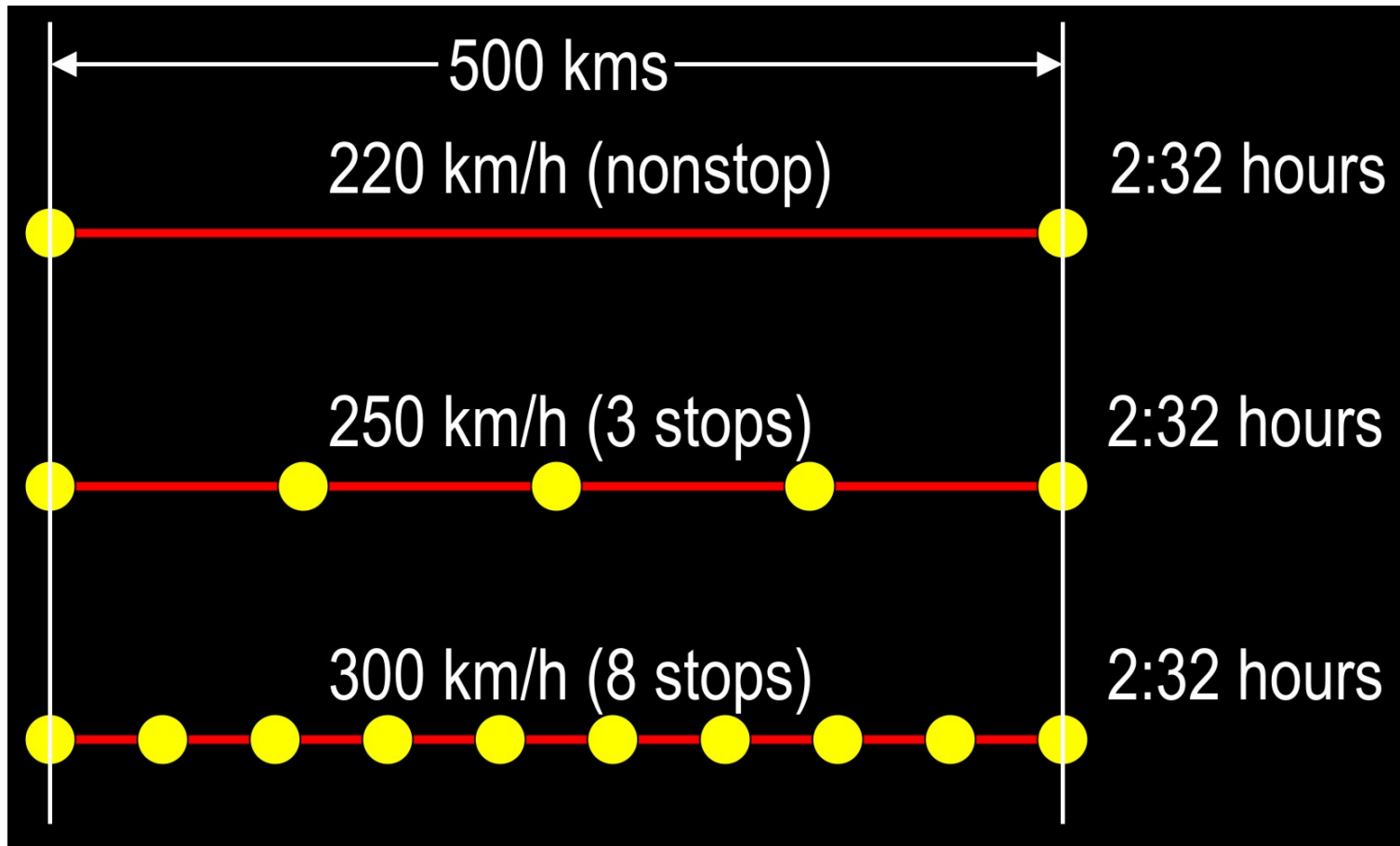
norsk bane®

- Nye tider for Norge



Expected distance Oslo – Stockholm: 500 kms. Current distance: 605 kms.
Travel time nonstop 2:00 h. Travel time included 7 – 8 stops: about 2:35 h.
3 - 5 trains per hour and direction, serving 16 – 20 stations. Alternating stops.
Freight trains on new line at night, on some sections at day time as well.

Oslo – Stockholm (Speed matters)

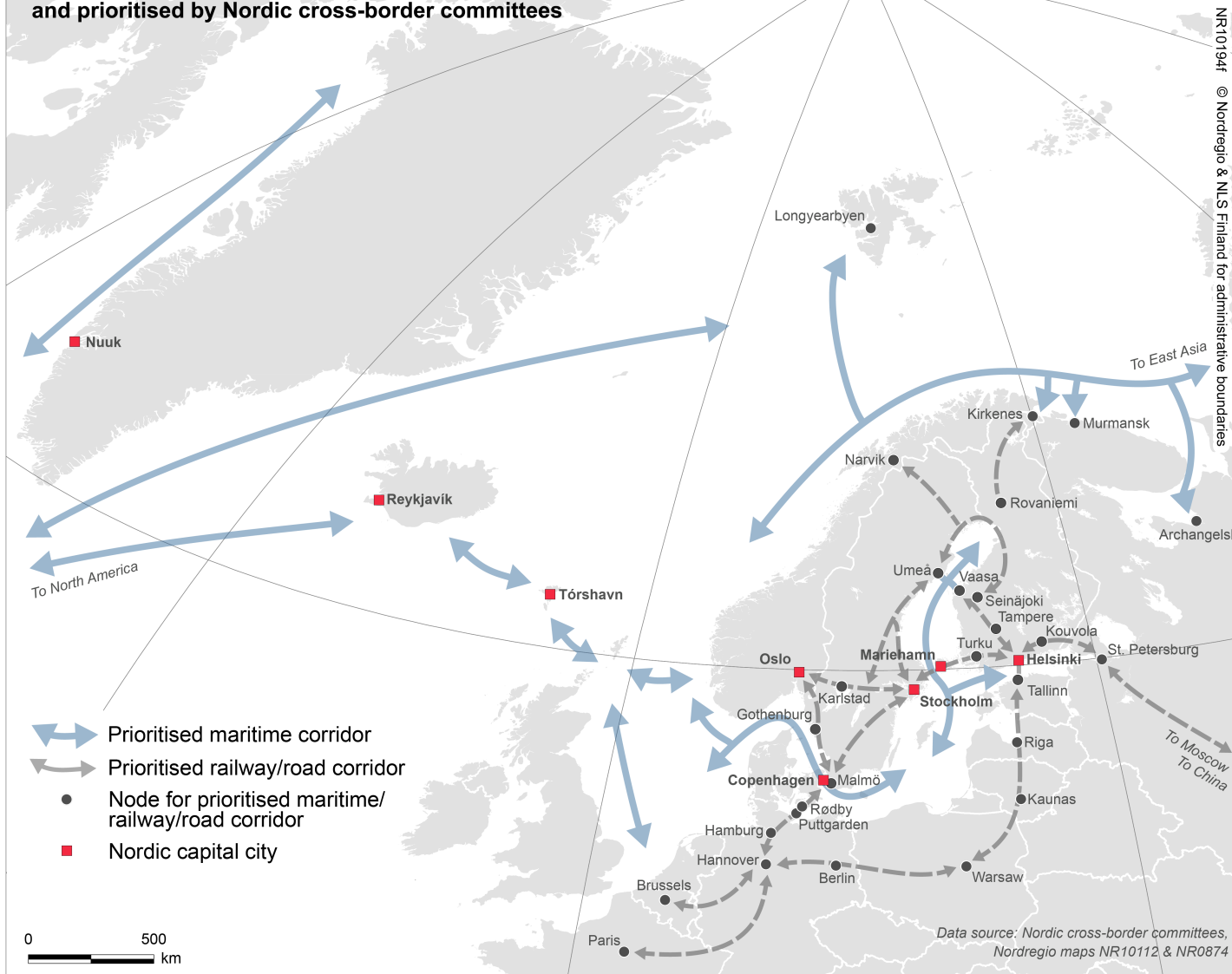


The Railway line will operate with top speed >300km/h and transport 10 mill. passenge



External gateways to the Nordic Region

Including planned infrastructure corridors identified and prioritised by Nordic cross-border committees



NR10194f © Nordregio & NLS Finland for administrative boundaries

Thank you for your attention!

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