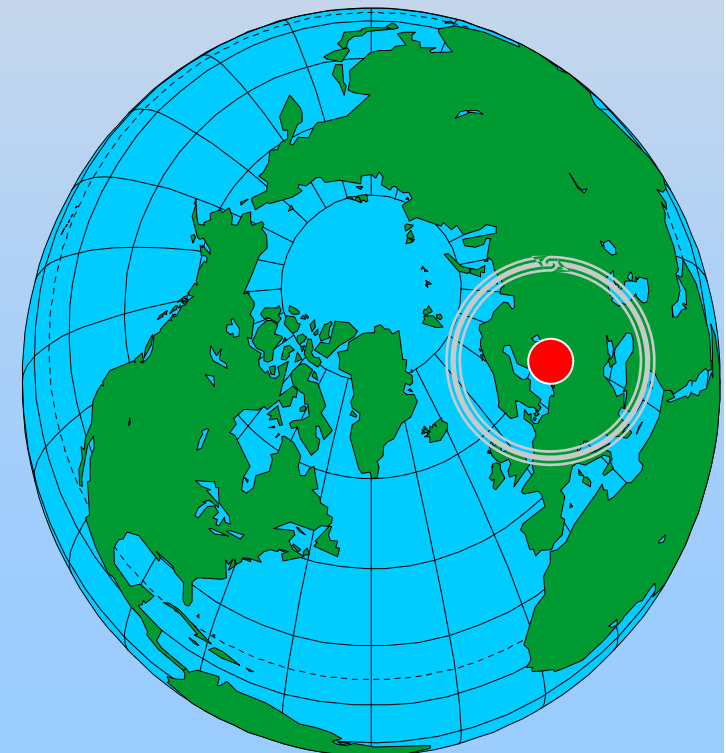


Eurasian Railway Corridors and future North Atlantic Port connections -strategic issues

Global Rail Freight Conference
St Petersburg 6. July 2010

By Stig Nerdal

Senior Adviser International Corridors, UIC
CEO Transportutvikling AS



The content of my presentation

- The Eurasian Land Bridge – introduction and market opportunities
- Permanent vs non-permanent challenges
- A strategic view on future port connections and intermodal transports

The Europe-Asia (Eurasian) Land Bridge

Different names

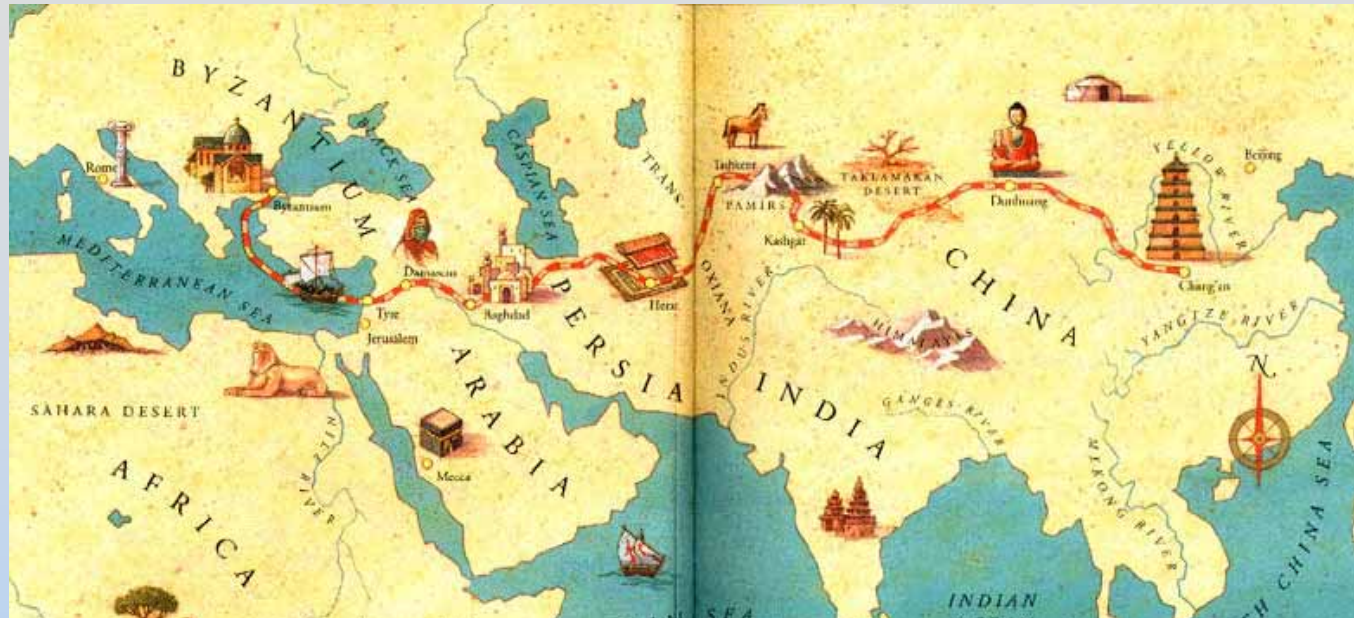
- "The old Silk Road"
- "The EurAsian Land Bridge"
- "The New Silk Road"
- East-West....."

Same idea:

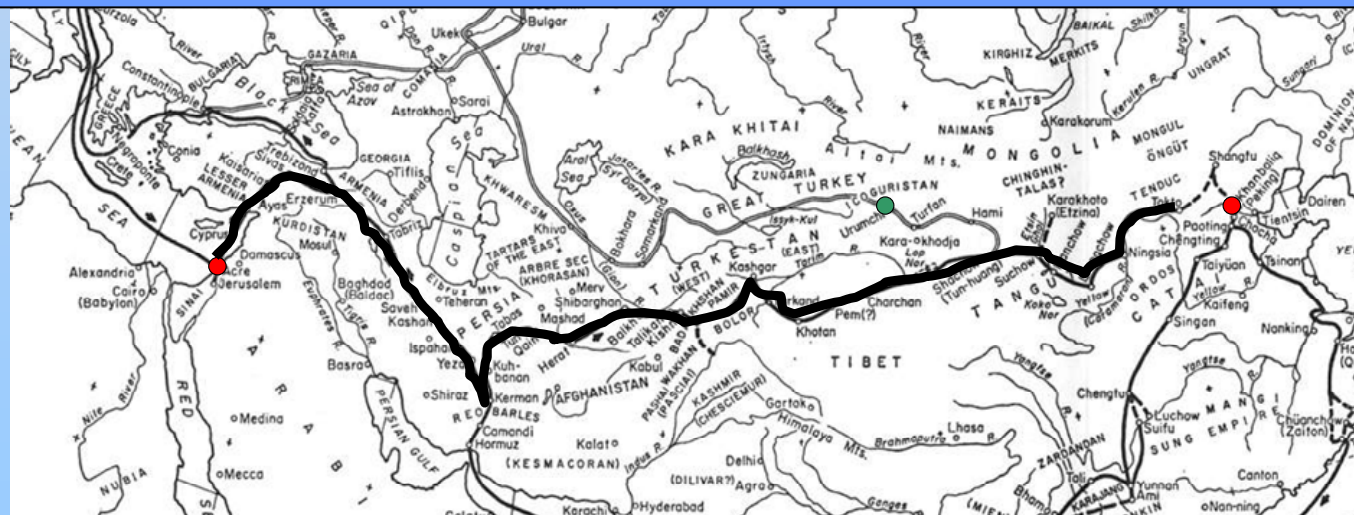


**The over land connection between
Asia and Europe**

Main routes Tang Dynasty (618-906)



Marco Polo (1254-1324)



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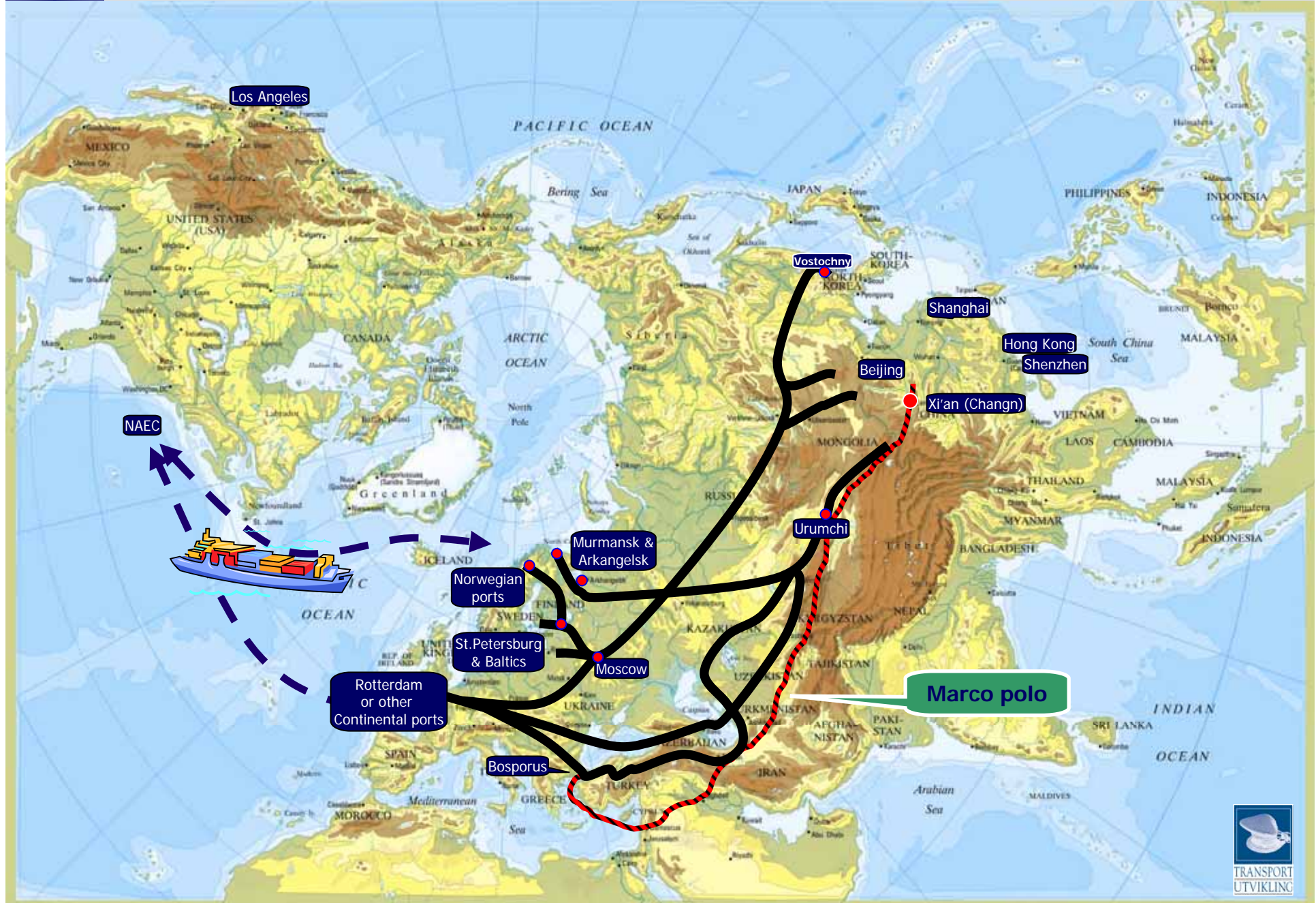
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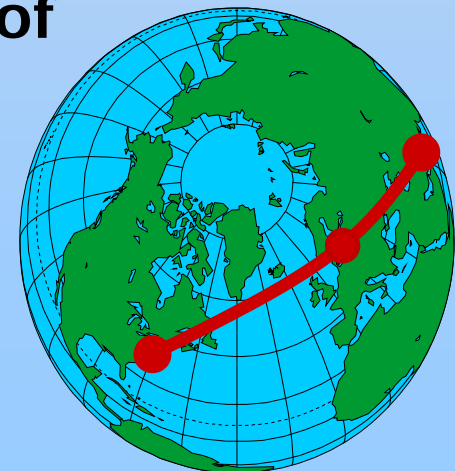
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Main EurAsian Railway Connections



The Land Bridge potential

- **The Europe Asia Land Bridge represents the shortest distance between**
 - Asia and Europe, and
 - Asia and the North American East Coast
- **Well organized it should be faster and cheaper than competing modes, -and offer the same quality and reliability.**
- **The Europe Asia Land Bridge can connect the largest merchandise trade lanes of the world**
 - Europe-Asia
 - Asia – North America (East Coast)



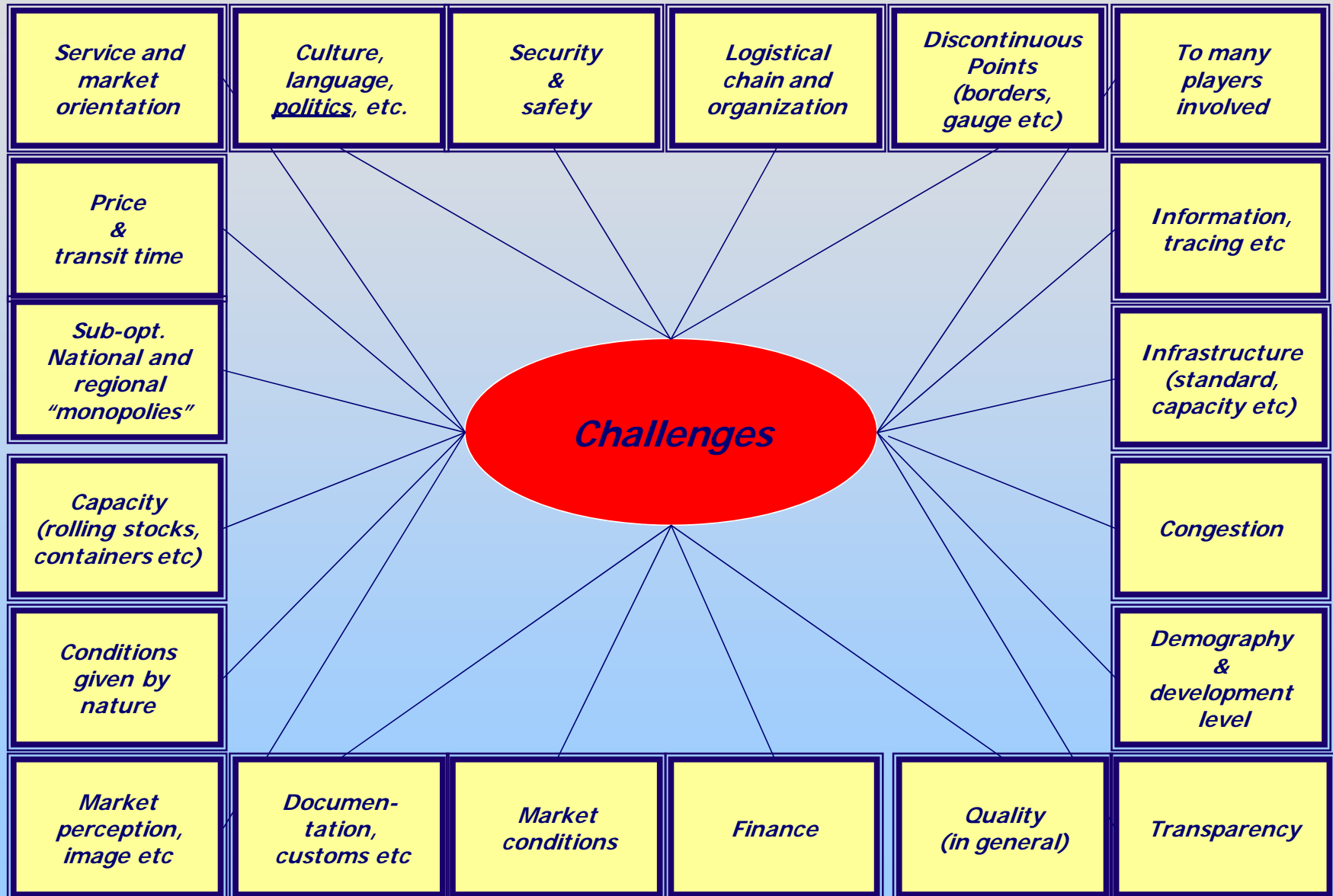
The East-West market potential Along the Eurasian Land Bridge



The major trade regions of the world are Asia. Europe and North America

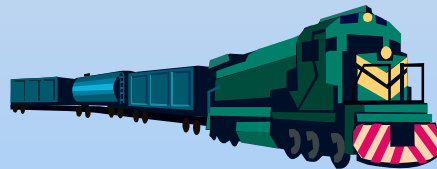
Some land Bridge challenges

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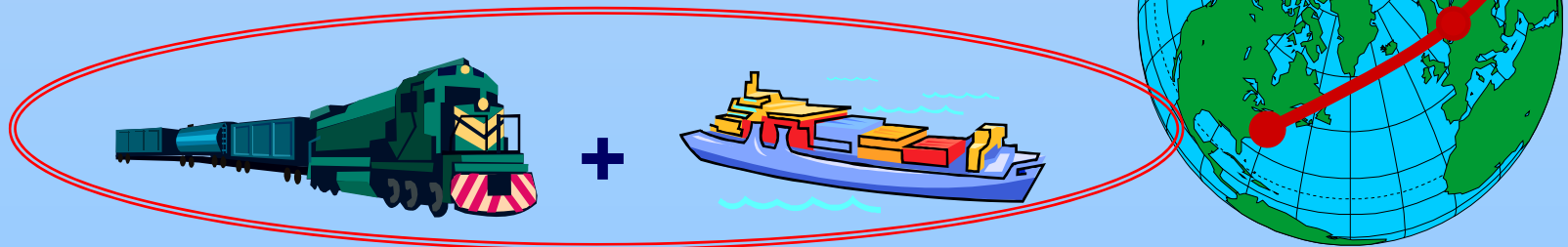


Several EW corridor alternatives

- Railway development is long term, and we should also look for the corridors long term competitive advantages
- Different market areas
 - Europe-Asia is one issue



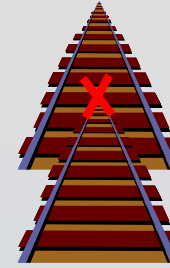
- Intermodal Asia-North America is another issue



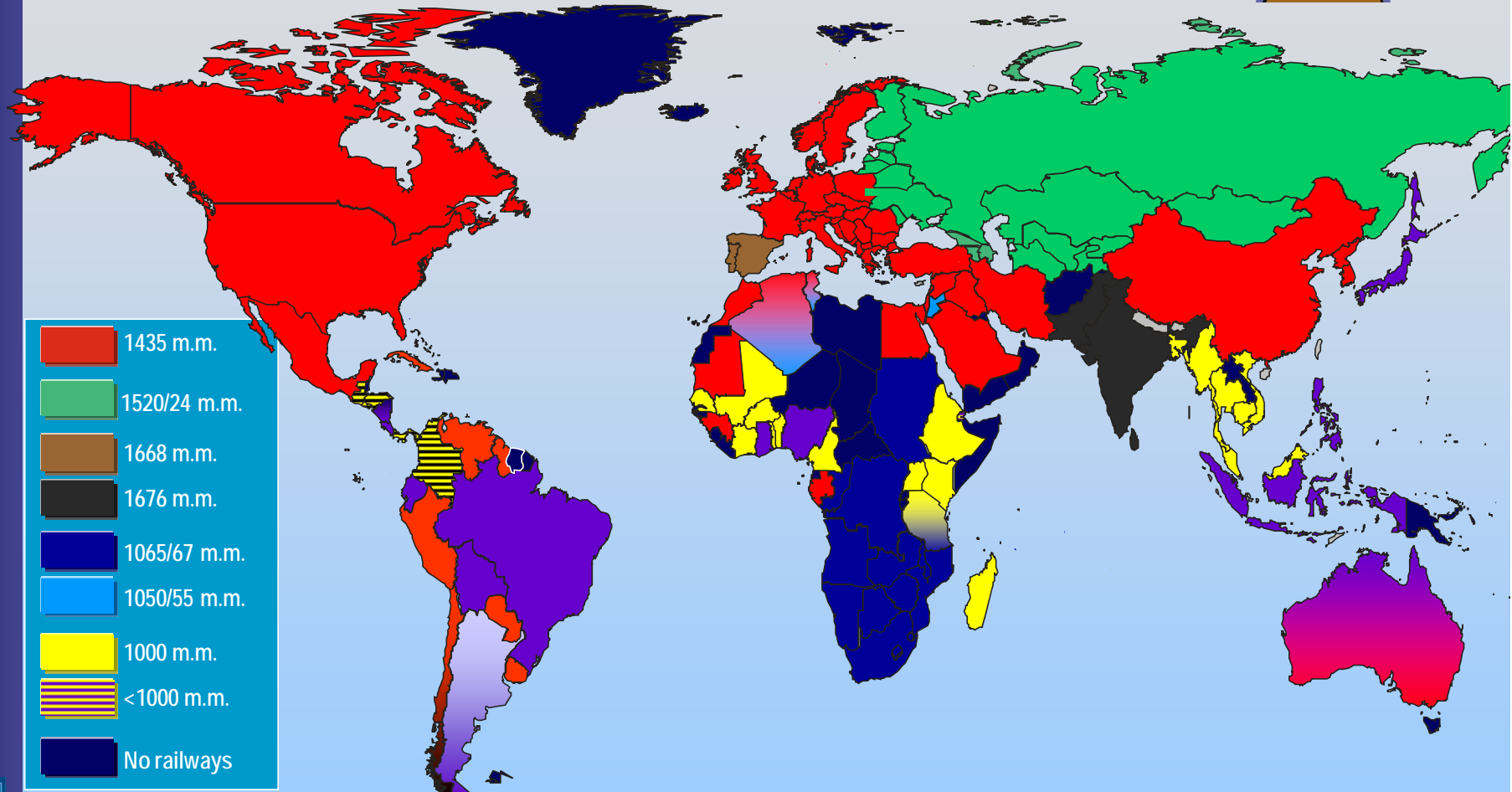
Some challenges are “given by nature” (or more or less permanent)

- Most Eurasian railway corridors faces challenges when European ports are to be connected
- Some can be solved and some are more permanent
- If there are alternative transport routes, it may be wise to avoid permanent barriers like for instance:
 - **Break of gauge**
 - **Port and maritime regions exposed to ice and cold climate**

TU global railway gauge map - 2010



www.transportutvikling.no



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Note: Several countries have more than one gauge. The figure show the main gauges and country borders. For some countries two colors are used, indicating two major gauges.





Brest (Poland/Belarus)



Ussuriisk (Russia/China)



Haparanda (Sweden/Finland)

GAUGE CHANGE COSTS & SOLUTIONS

Source:
© TRANSPORTUTVIKLING AS

COSTS

TIME CONSUMPTION

PHYSICAL PAYMENTS

CAUSED BY INVESTMENTS

INCREASED RISK

= LOSS OF INCOME

SOLUTIONS

Trans loading (Gantry, fork-lift,
reach stacker etc)

Changing axles

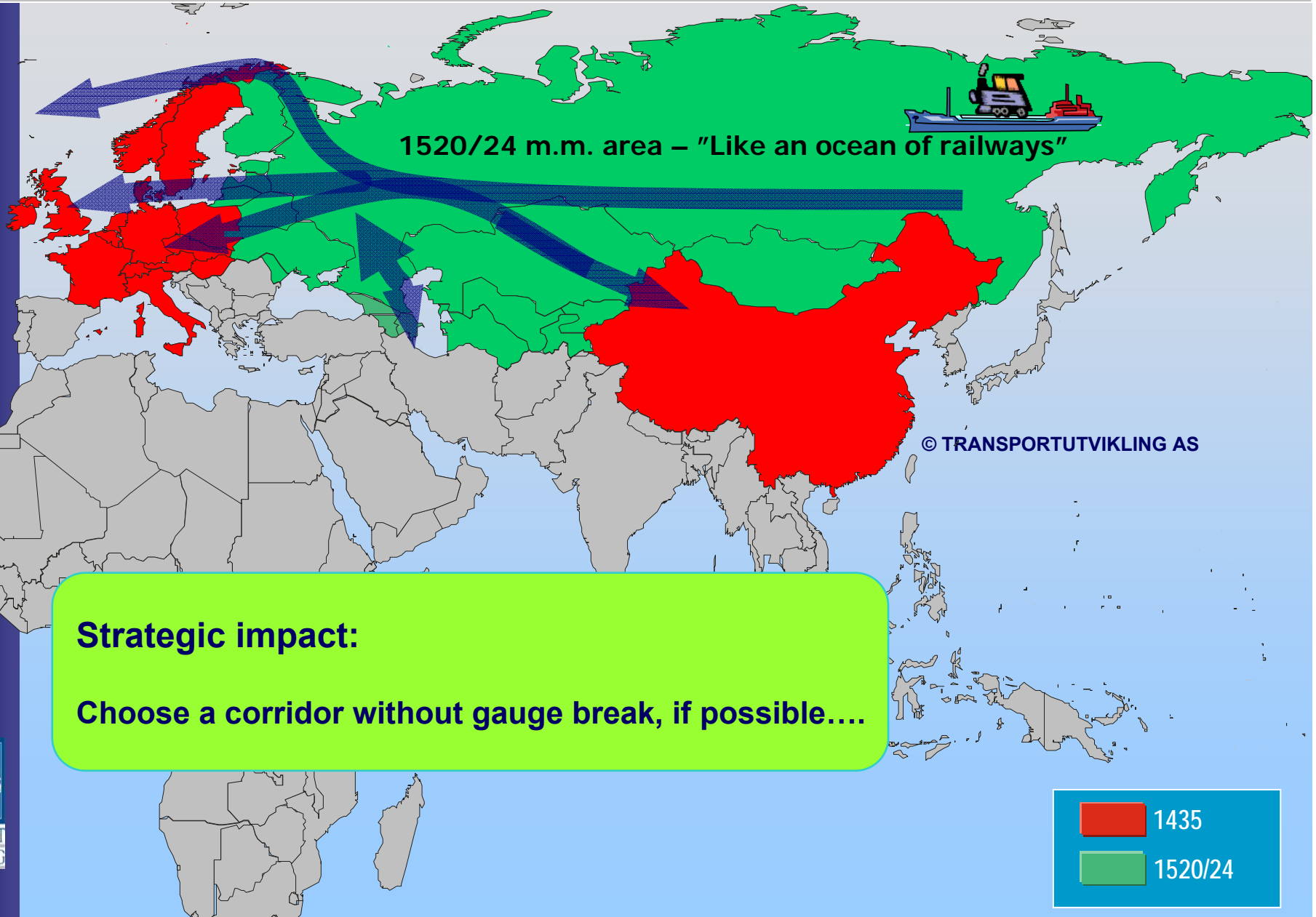
Gauge change device

Building new railways

1520 mm area: the link between the main future markets

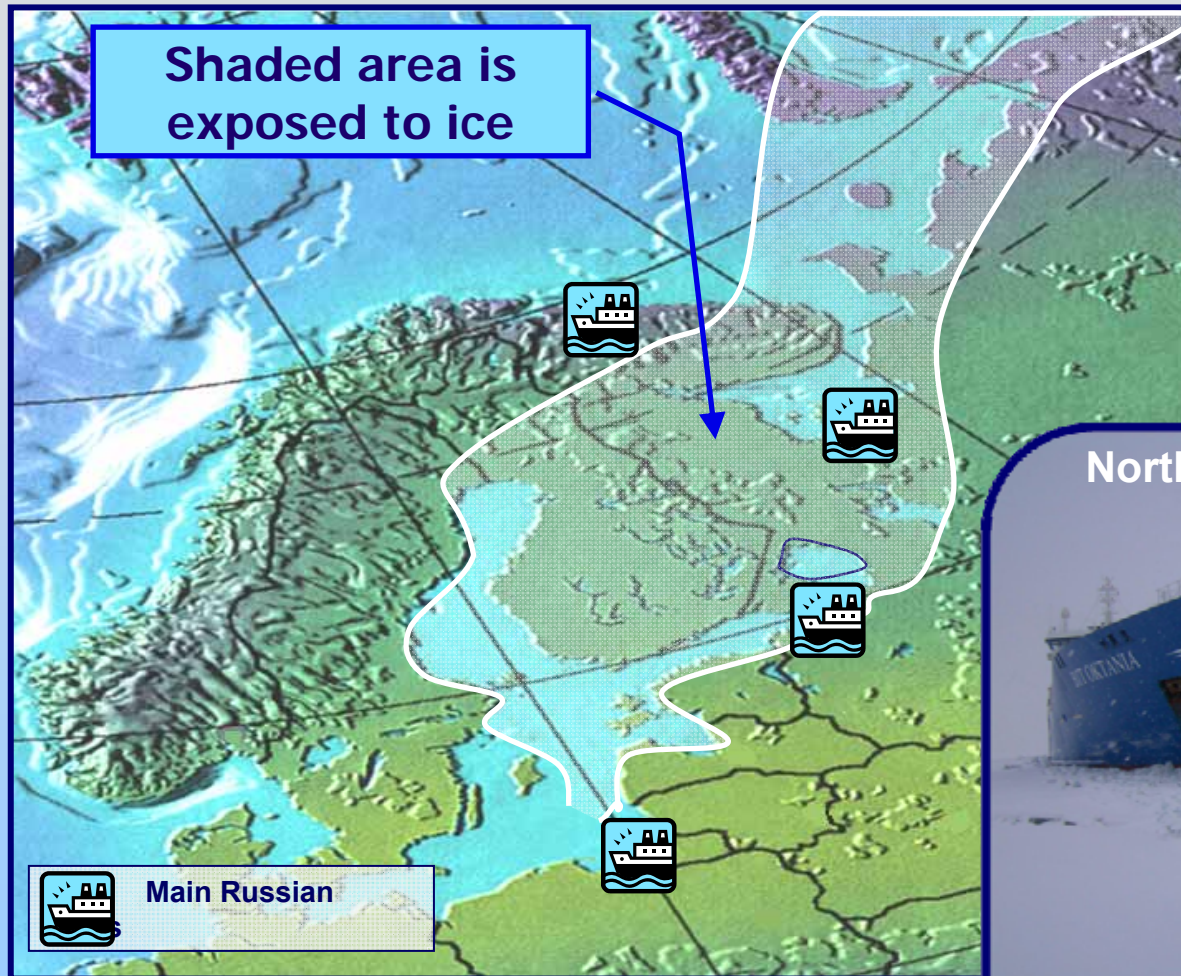
1520 мм: участок между двумя крупнейшими рынками

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MARITIME REGIONS IN NORTHERN EUROPE USUALLY EXPOSED TO ICE CHALLENGES

www.transportutvikling.no



North Finland March 4 - 2010



OF COURSE, THERE ARE ICE-BREAKERS, -BUT THY ARE NOT FREE OF CHARGE



Strategic impact:

Choose a corridor where ice is not a challenge....

“Ice breakers on Friday were working non-stop to clear northern Germany's frozen harbours following a return to frigid temperatures in recent days.

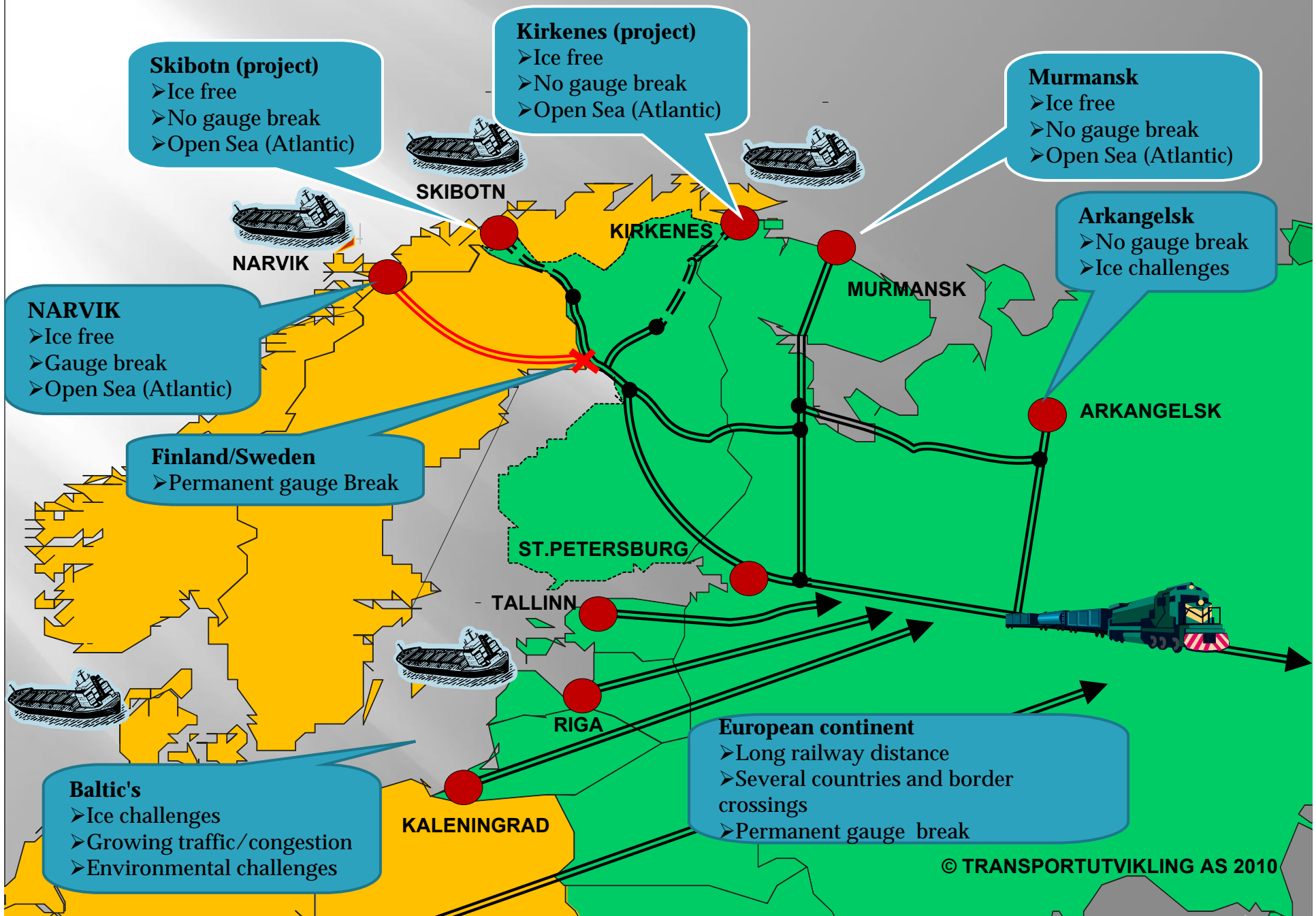
Ships arriving from the Baltic Sea along the coast of the state of Mecklenburg Western-Pomerania can only reach harbours with the help of the breakers after the formation of new ice overnight, spokesperson for the BSH federal shipping office Natalija Schmelzer said.

The weekend weather forecast holds more freezing temperatures and heavy winds which will likely lead to thicker ice along the coasts, she added.

The ice breakers “Arkona” and “Görmitz” have been on duty without rest since the New Year to help freighters reach Stralsund, Greifswald, Vierow and Wolgast and beyond – but experts predict that it will still be several weeks before ice up to 40 centimetres thick disappears completely.”

Source: The local Germany's new in English (March 5-2010)

Alternative East-West railway routes to/from the Atlantic Ocean



FINAL COMMENTS

– PORTS IN NORTHERN EUROPE

- Based on these long term criterias we are left with only one intermodal port in the Northern Region of Europe
 - Murmansk in NW Russia**
- And two projects/ideas included in Finlands new Arctic strategy, -both connecting North Norwegian ports using Finnish/Russian gauge:
 - Skibotn and Kirkenes**

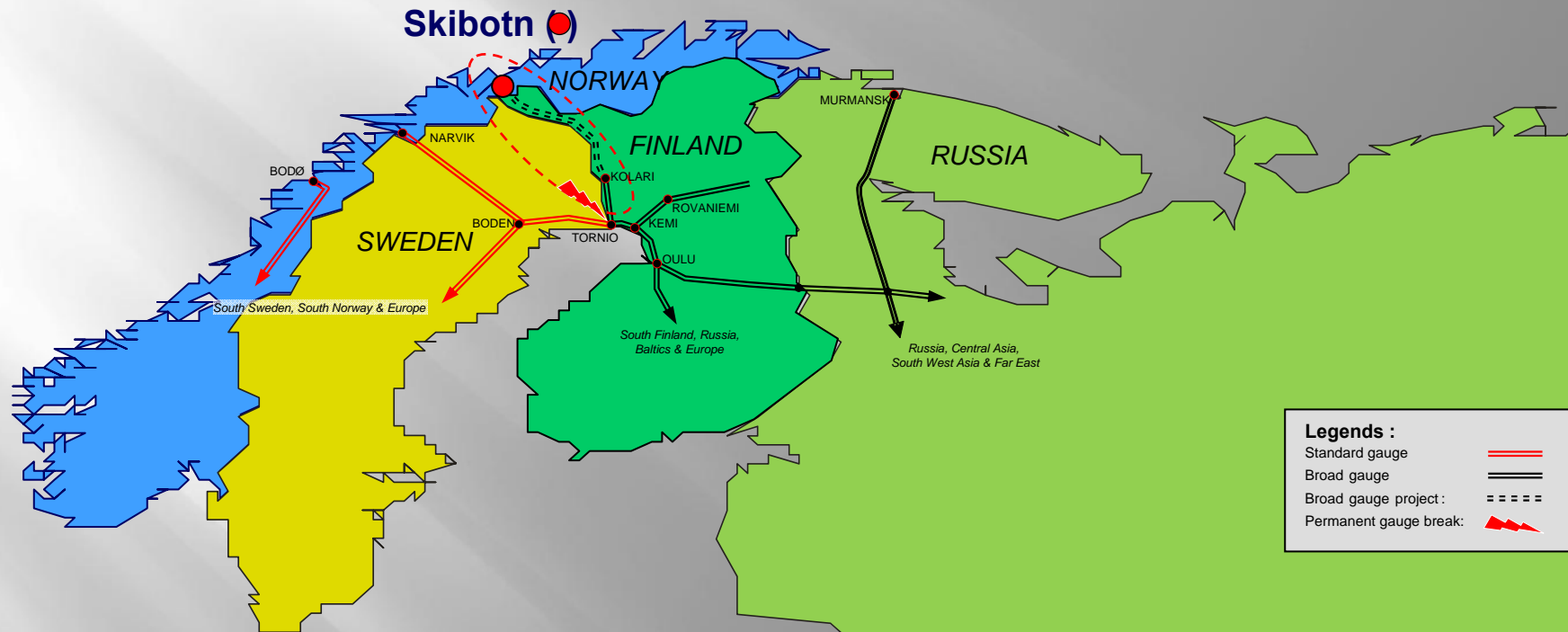


THAN YOU FOR YOUR ATTENTION

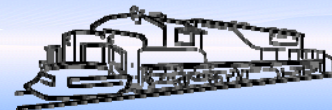
**(I BELIEVE THIS SHOULD BE A GOOD START
FOR DISCUSSIONS DURING TO NIGHTS DINNER)**

Barents railways & Ishavsbanen

-a new connection to the Atlantic



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Ishavsbanen