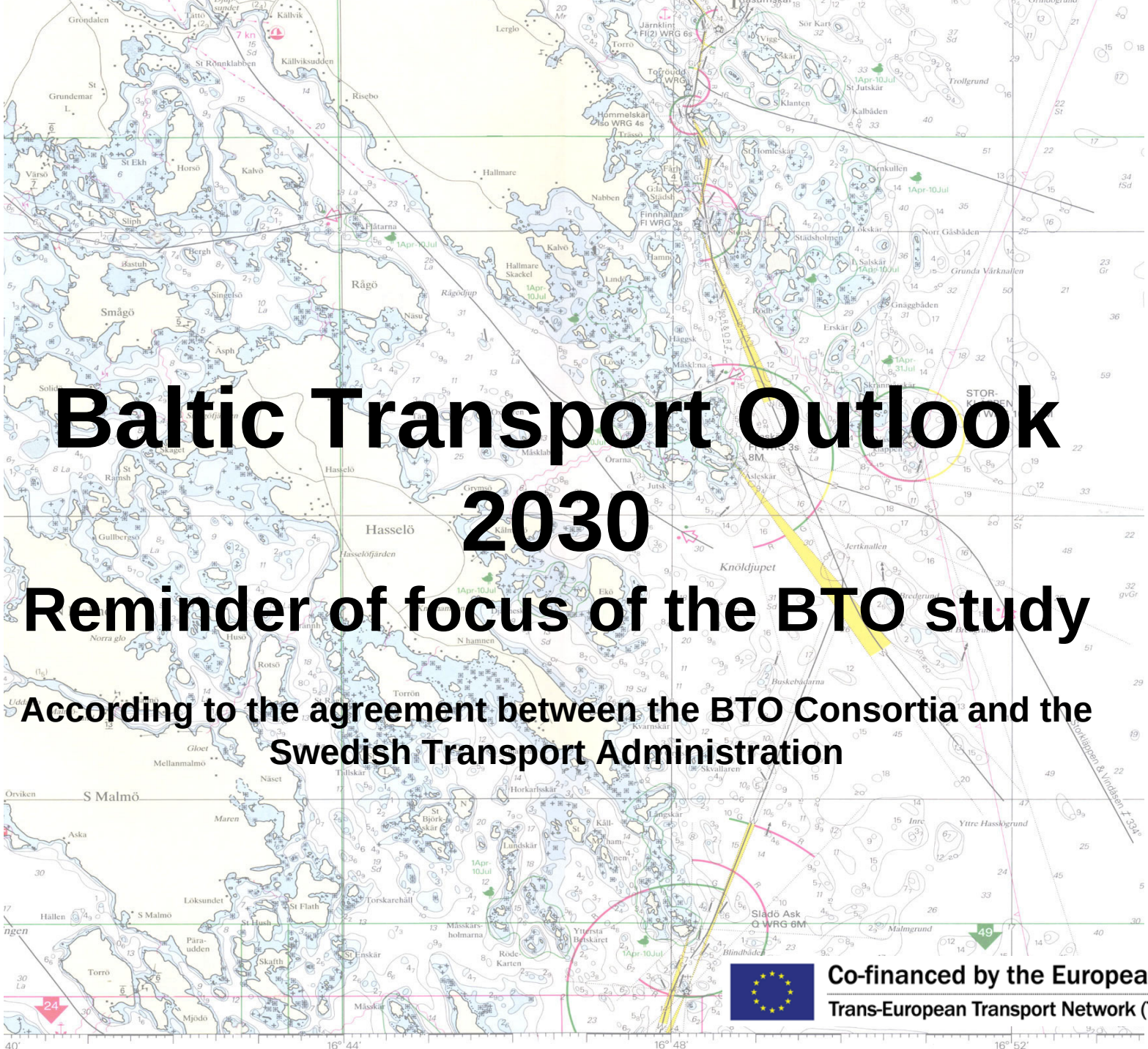

Baltic Transport Outlook 2030

Reminder of focus of the BTO study

According to the agreement between the BTO Consortia and the Swedish Transport Administration

Co-financed by the European Union
Trans-European Transport Network (TEN-T)

General approach

- National aspects will not be in focus in this study
- Close to EU-perspective
- Establishment of a core/strategic network based on existing and future transport flows
- TRANSTOOLS will be applied to evaluate these flows
- Different scenarios will be developed
- A mainly qualitative analysis will be carried out based on the scenarios
- Transport planning methodologies applicable in the BSR will be identified

BALTIC
TRANSPORT
OUTLOOK

General approach

- NOT a modelling work, but a project where transport model results are used to highlight some of the challenges in the transport system
- Multi-criteria analysis will be carried out
- Not taken into account has been any other port criteria data such as efficiency of port, size of port in ha, port capacity or environmental performance.

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TRANSPORT
OUTLOOK

Data collection and sources

- Socio-economic data – EUROSTAT
- Economic development and trade flow – International Monetary Fund, OECD and similar sources and TRANSTOOLS-
- Passenger flows – TRANSTOOLS (and supplemented with actual flows)
- Freight flows – TRANSTOOLS and supplemented with counts
- Network data – some links will require inspection to identify road and railway conditions
- Cost data – TRANSTOOLS
- Transport policy – evaluate these effects and insert in TRANSTOOLS

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TRANSPORT
OUTLOOK

Strategic network methodology

- TRANSTOOLS the methodological basis for description of transport flows in networks.
- No model development work - TRANSTOOLS model will be applied in its present version.
- Specific analysis is required concerning maritime transport by port and route. Build on the results from Baltic Maritime Outlook 2006.
- Pipelines will be looked at separately
- Intercontinental air transport needs elaborated analysis

BALTIC
TRANSPORT
OUTLOOK


BTO 2030
Ports
2
3
Strategic Road Network
Strategic Rail Passenger Network
Strategic Rail Freight Network
Strategic Road Network
Rail Passenger Link
RailFreightLink
RoadLinkWith Preload
BTO Countries
Kemi
Lulea
Oulu
Umea
Husum
Vaasa
Sundsvall
Pori
Rauma
Vyborg
Hamina
Kotka
Primorsk
Skoldvik
St. Petersburg
Turku
Helsinki
Ust-Luga
Gävle
Hanko
Bergen
Tallinn
Stockholm
Karmsund
Tonsberg
Grenland
Stavanger
Nykoping
Oxelösund
Brofjorden
Goteborg
Frederikshavn
Ventspils
Riga
Arhus
Karlskrona
Helsingør
Klaipeda
Kalundborg
Malmo
Ystad
Esbjerg
Fredericia
Trelleborg
Kaliningrad
Gdynia
Gdansk
Rødby
Sassnitz
Kiel
Gedser
Lübeck
Puttgarden
Rostock
Szczecin
0 45 90 180 Kilometers
N

Baltic Transport Outlook 2030 – Task 3 Scenarios

Coordination with the TENCONNECT2 project

One baseline scenario for 2030 with improved infrastructure development, economic growth and demographic projections

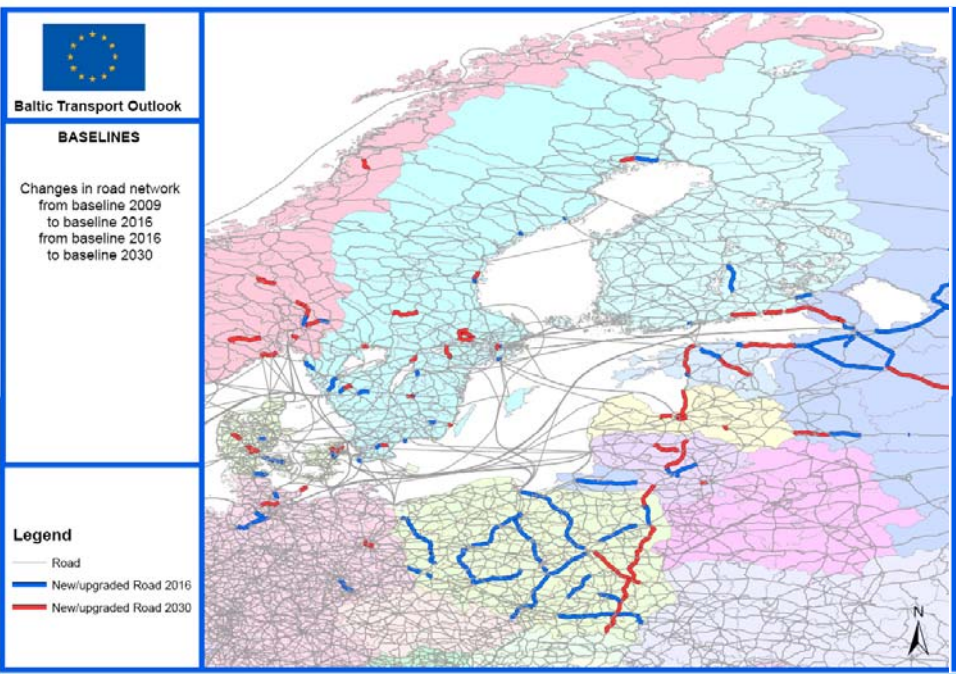
A set of sensitivity tests with different transport cost assumptions

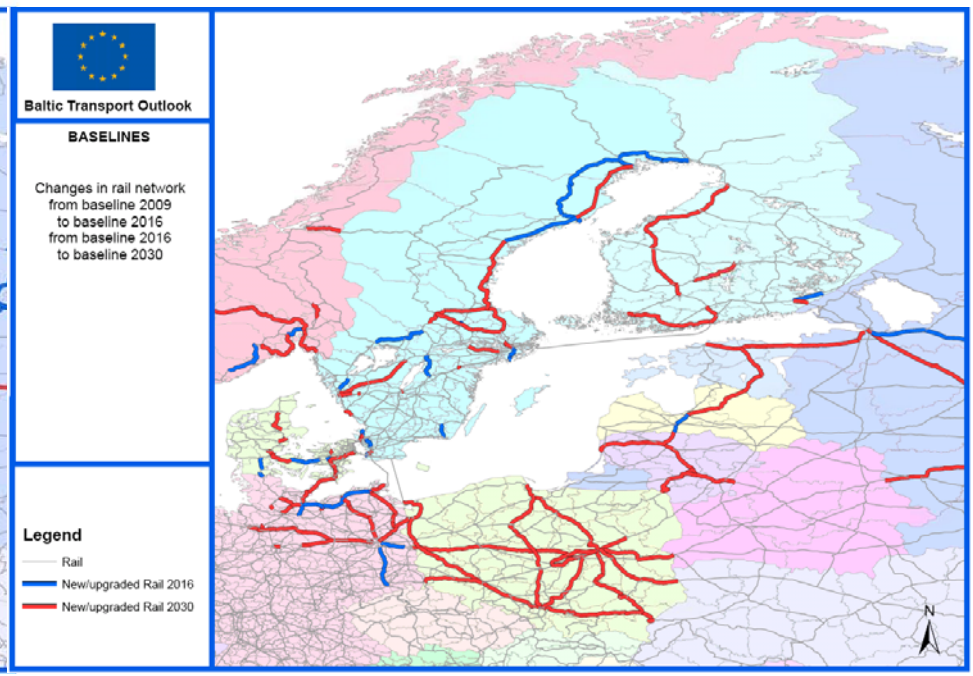
Task 3 Scenarios

Scenario assumptions

Task 3 Scenarios - Infrastructure

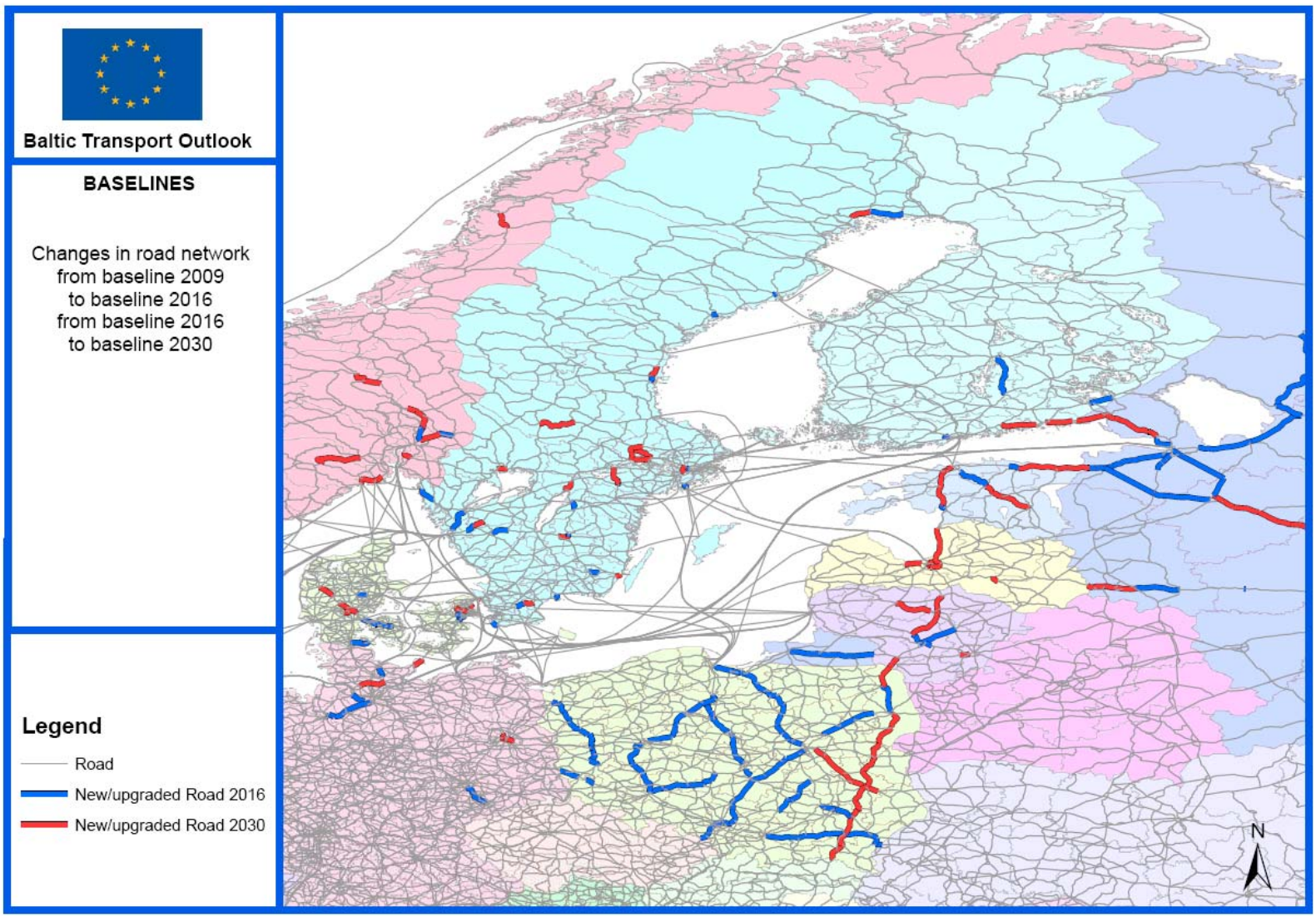
collection of latest* road and rail infrastructure development plans in BSR



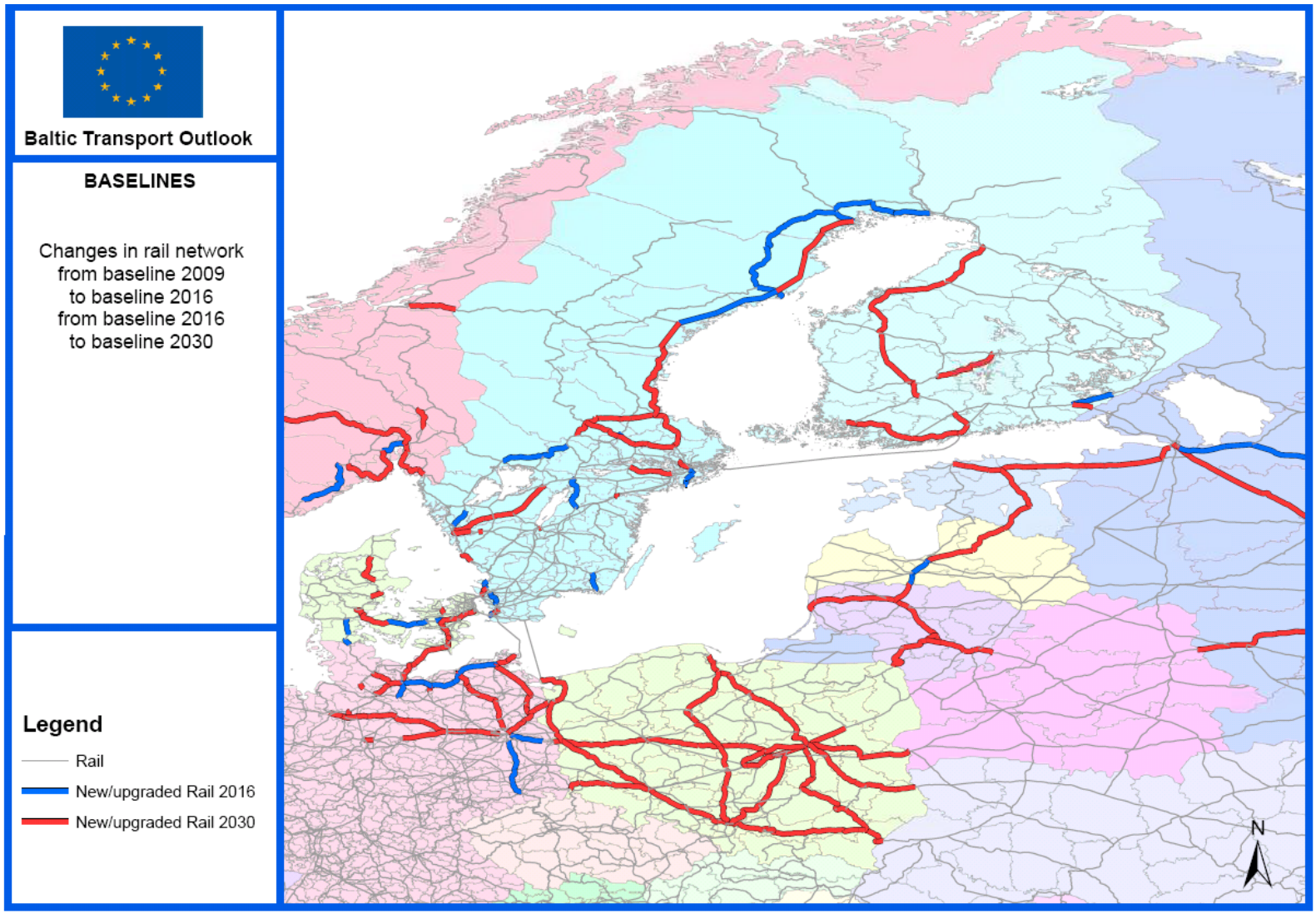


* New plans in Finland were obtained in May 2011 and unfortunately too late for the final 2030 Baseline run

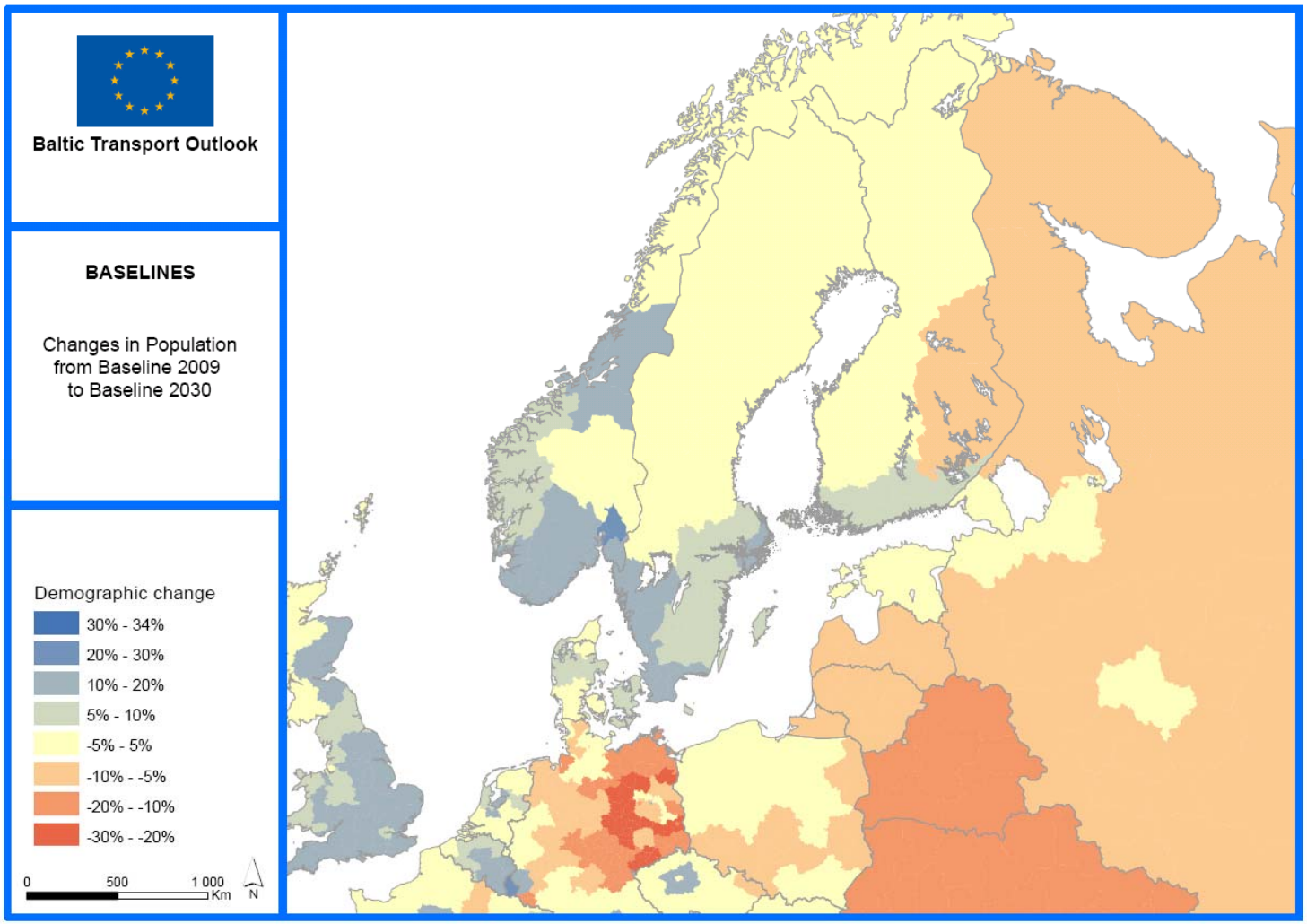
Road improvements



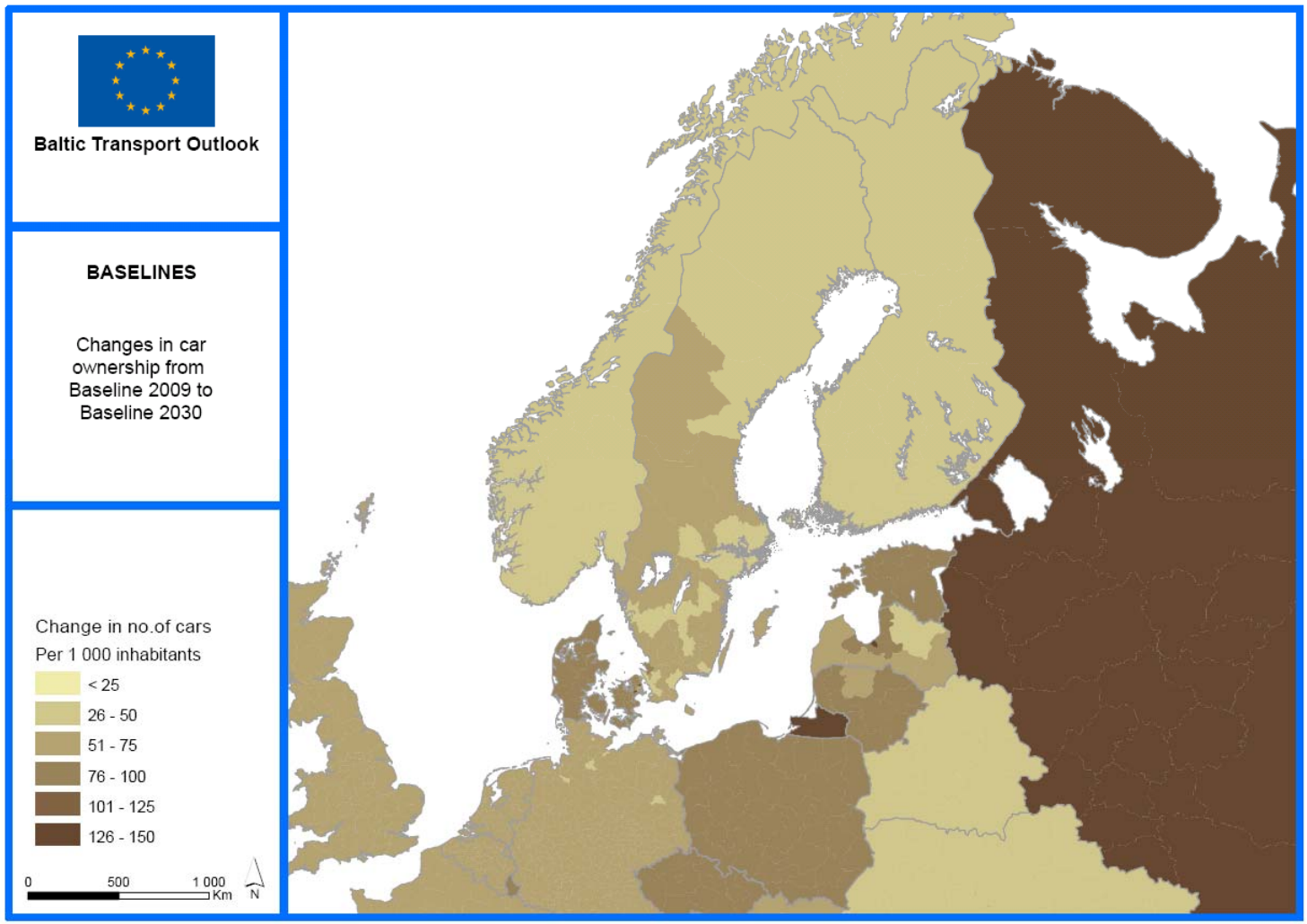
Rail improvements



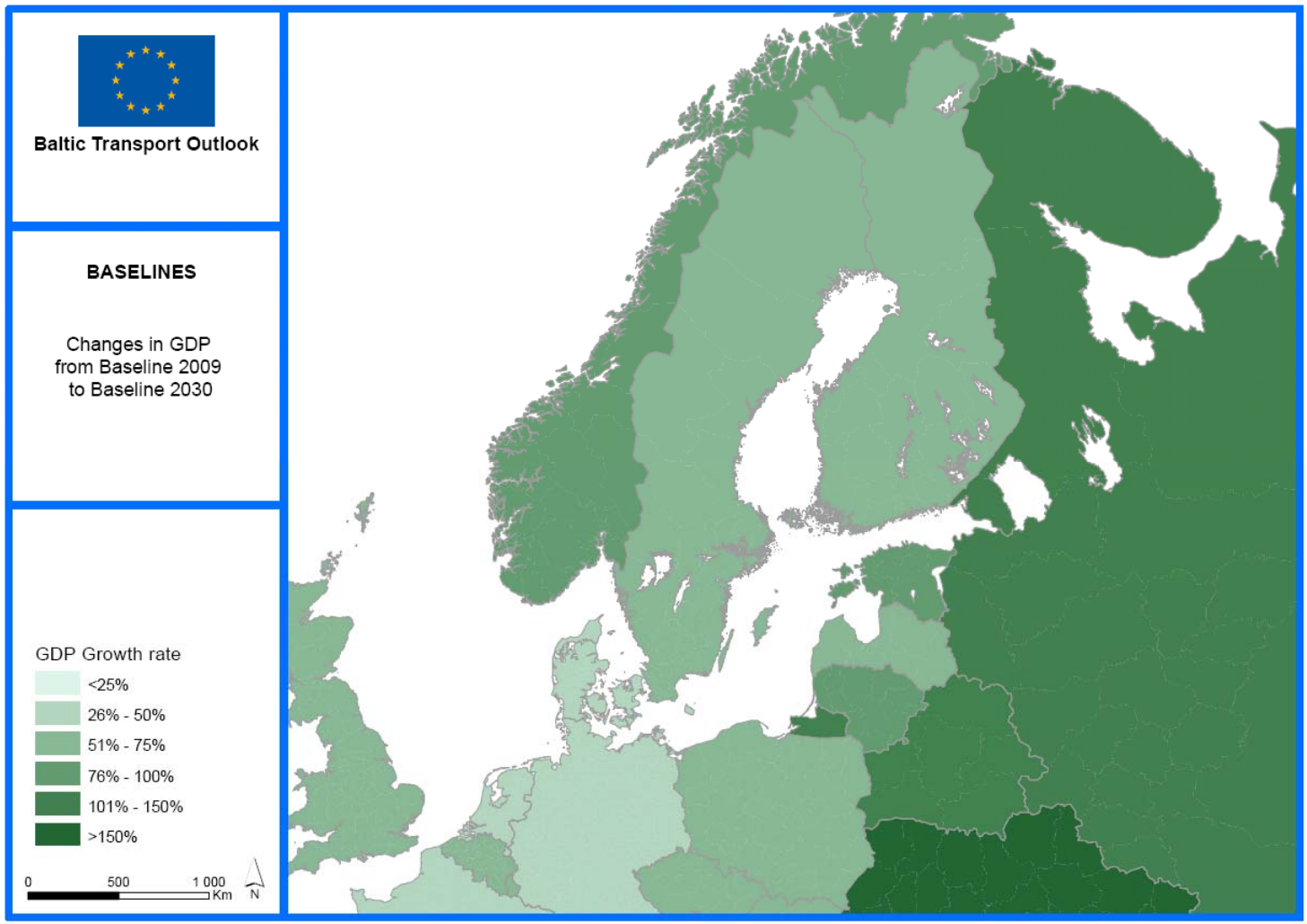
Task 3 Scenarios – Changes in population



Task 3 Scenarios – Changes in car ownership



Task 3 Scenarios – Changes in economic growth



Task 3 Scenarios

Transport costs for cars/passengers 2010 to 2030

- **Road traffic: Fuel cost increase as well as improved fuel utilisation: +20%**
- **Km-charges on comprehensive network: 0.02 Euro per km unless other charges already applied**
- **Km-charges on the rest of the network: same as 2010.**
- **Value of Time increases according to GDP**
- **Increase in rail ticket price: same as 2010 rail ticket prices**
- **Increase in air ticket price: +10%**

Task 3 Scenarios

Transport costs for freight 2010 to 2030

- Rail costs unchanged, higher efficiency offset by lower subsidies.
- Road costs increased taking into account internalisation of external costs
- Sea costs increased taking into account controls on sulphur emissions

Transport performance in BTO region 2010 to 2030

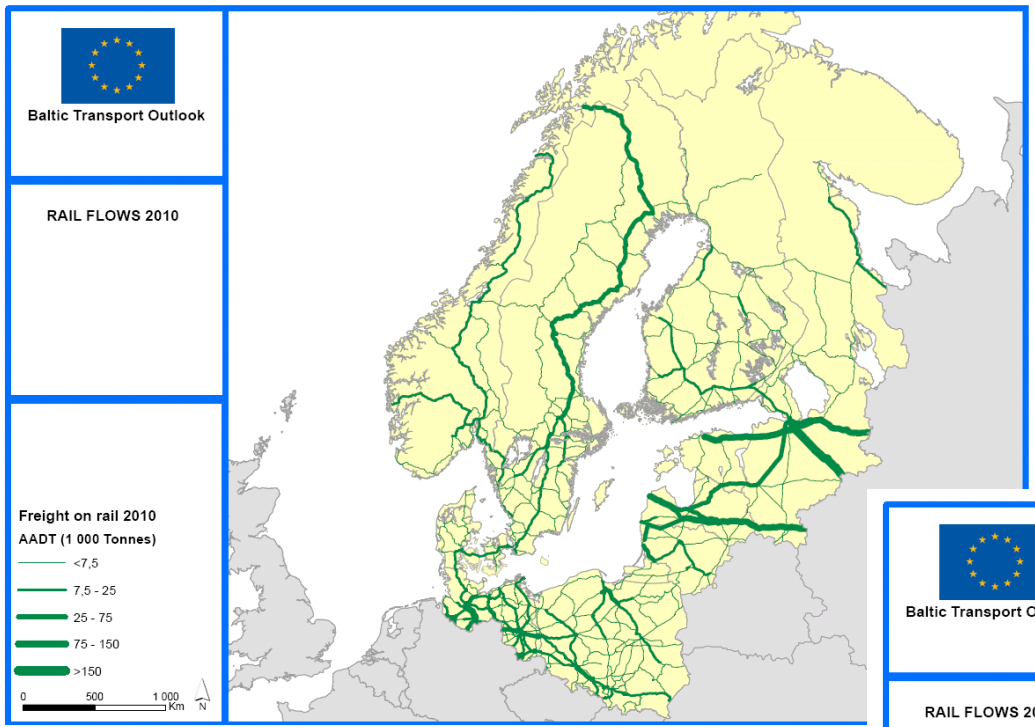
International cars (vehkm)	**+20%**
International passenger trains (passkm)	**+(20 ?)%**
Air passenger (numbers of passengers)	**+62%**

Task 3 Scenario results – Transport performance for BTO region only 2010 to 2030

International trucks (vehkm)	**+65%**
International freight trains (tonnekm)	**+43%**
Inland waterways (tonnekm)	**+27%**

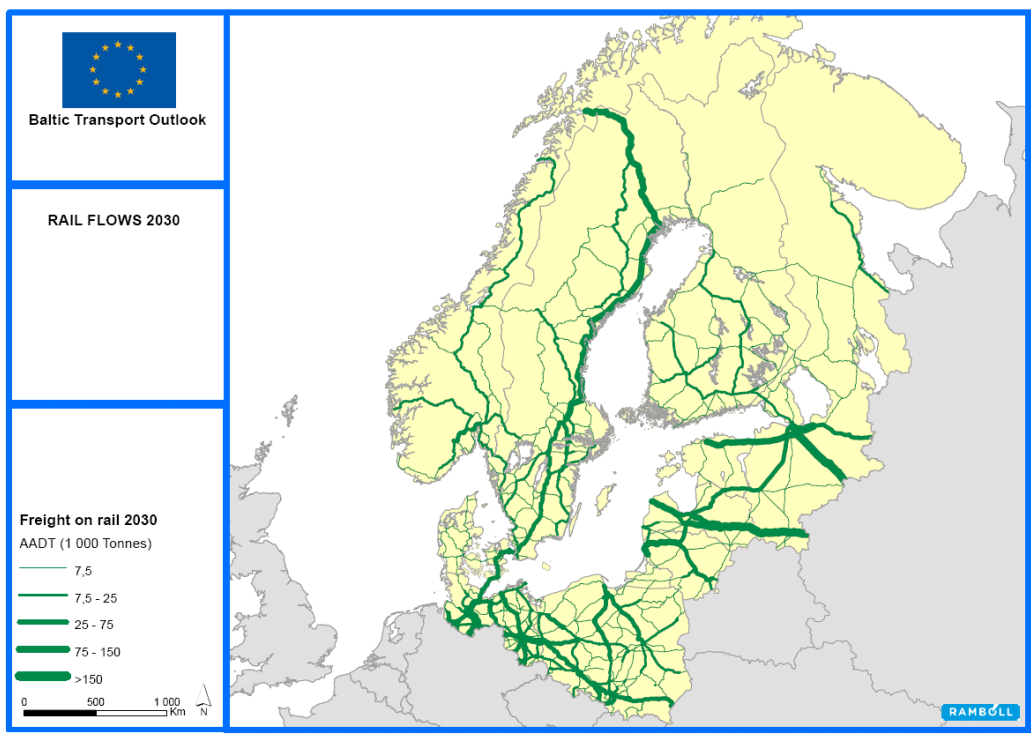
BTO 2030

Task 3 Scenario results – Transport flows



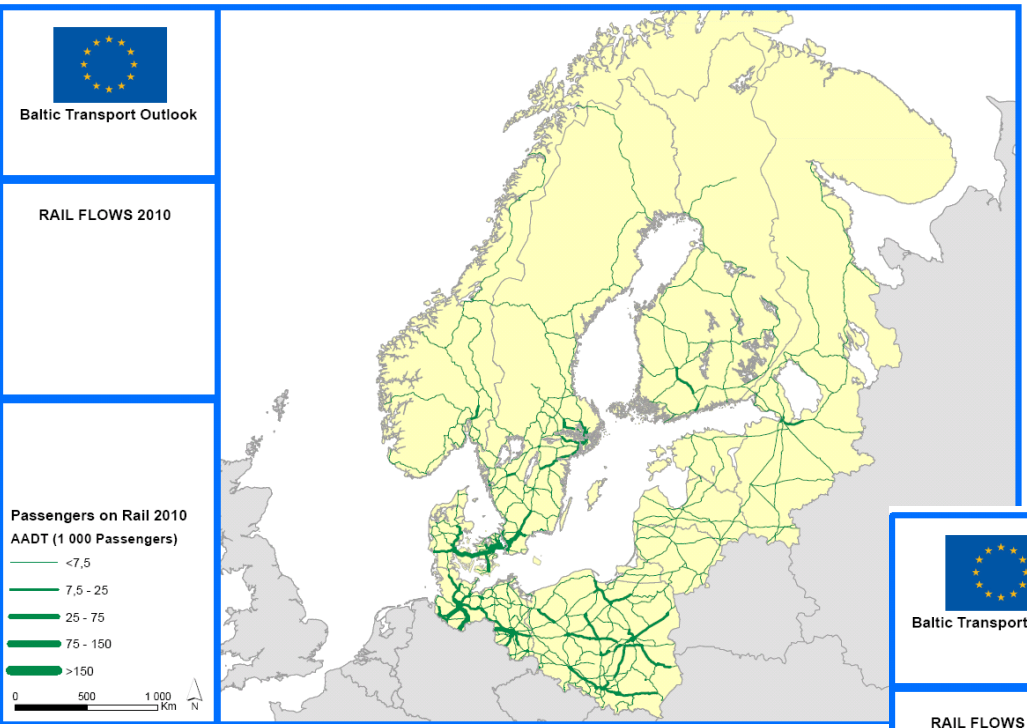
Rail freight flows 2010

Rail freight flows 2030



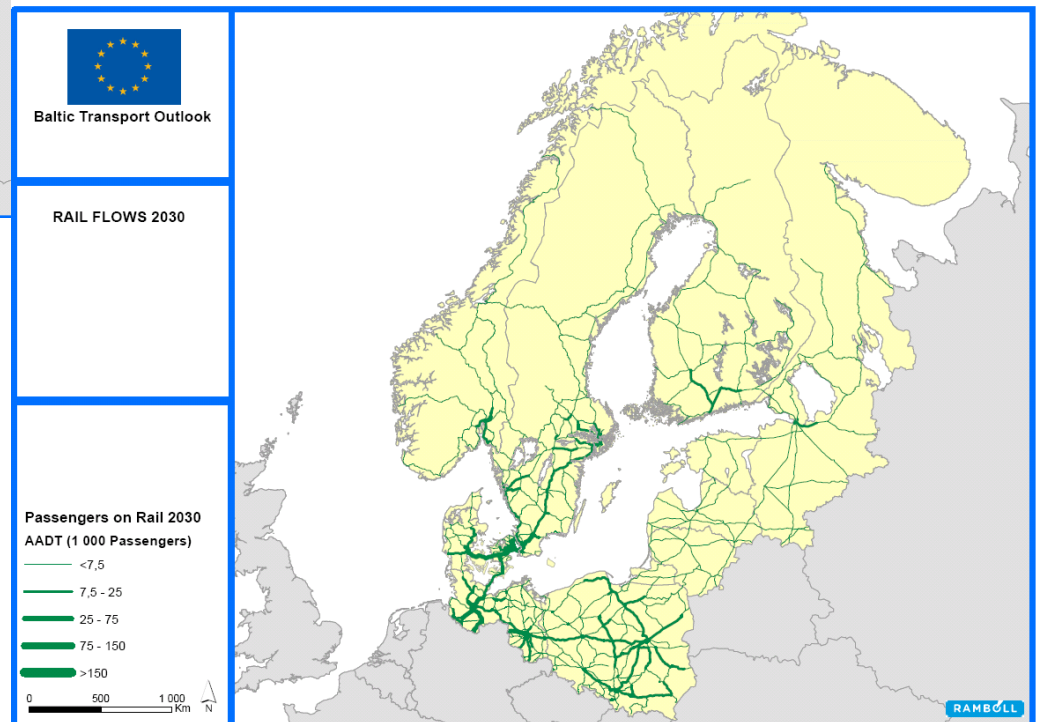
BTO 2030

Task 3 Scenario results – Transport flows



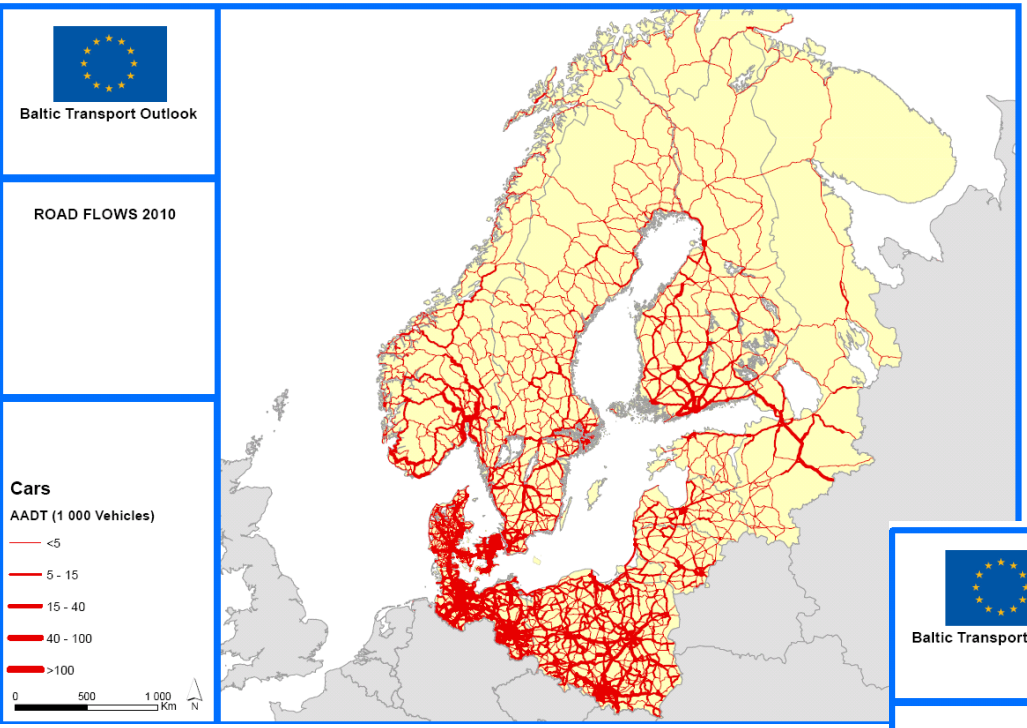
Rail passenger flows 2010

Rail passenger flows 2030



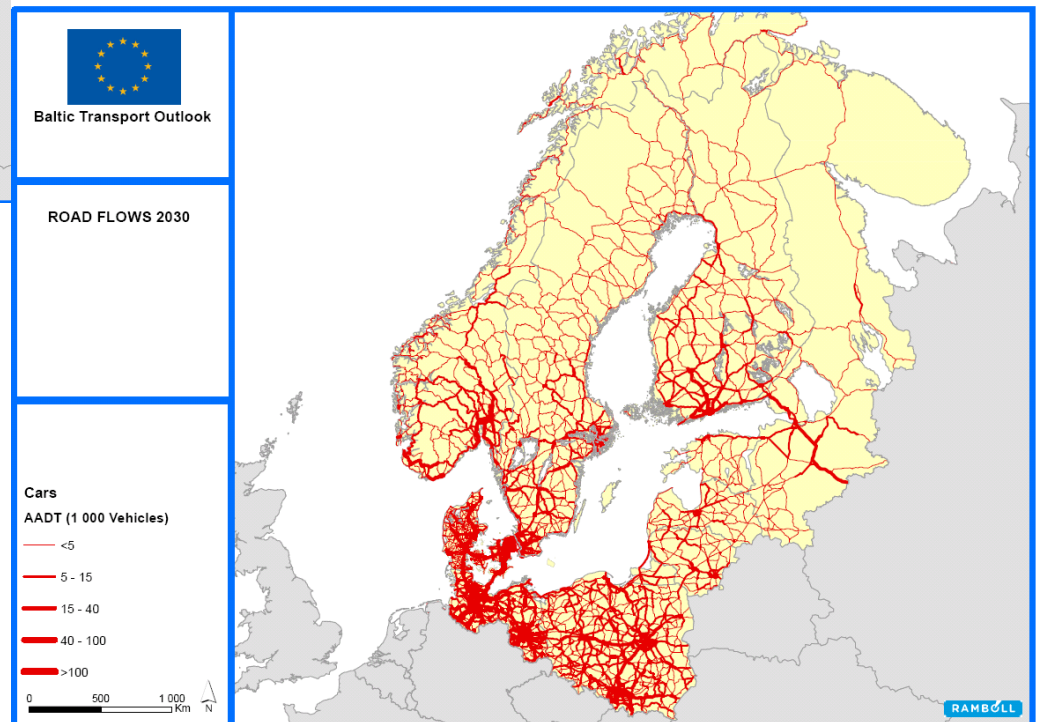
BTO 2030

Task 3 Scenario results – Transport flows



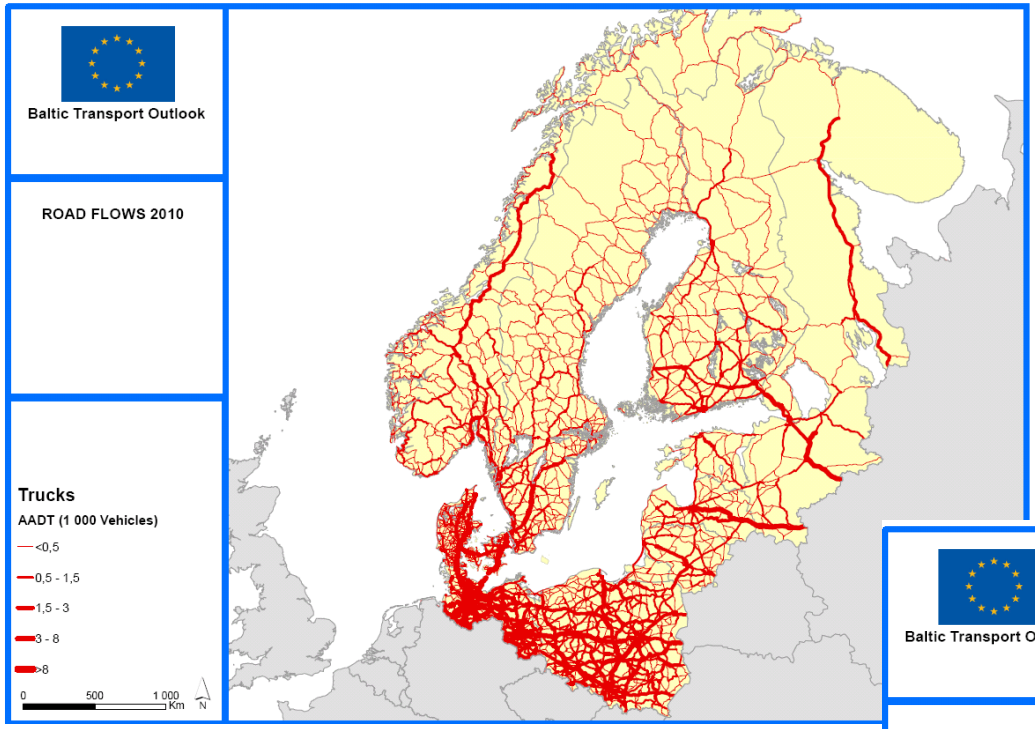
Car vehicle flows 2010

Car vehicle flows 2030



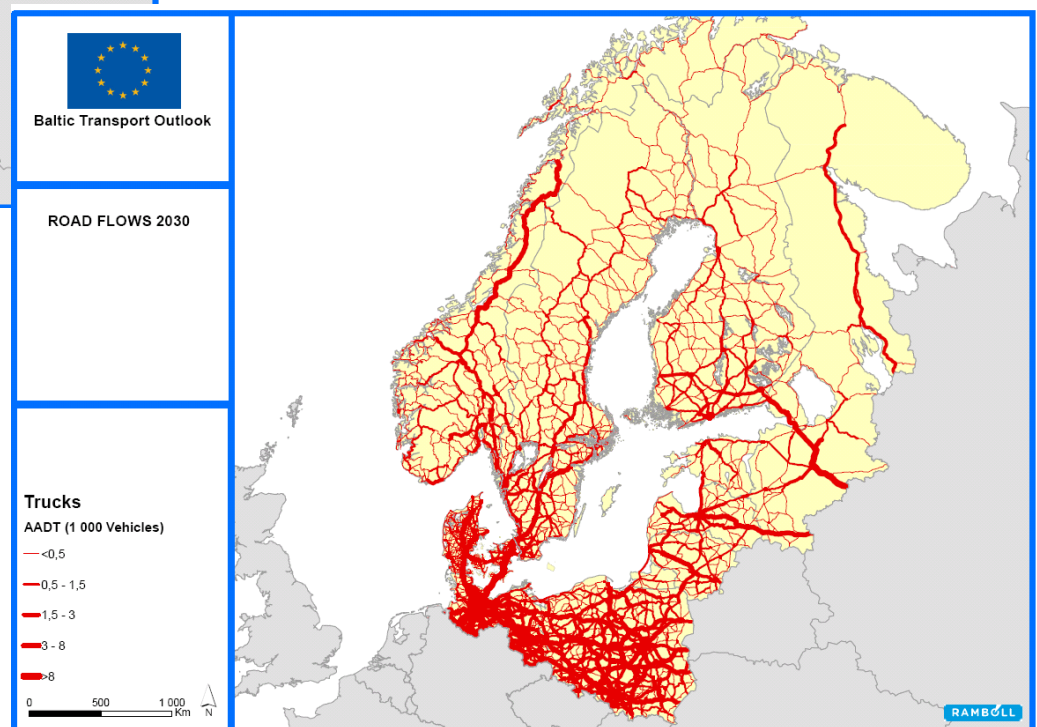
BTO 2030

Task 3 Scenario results – Transport flows



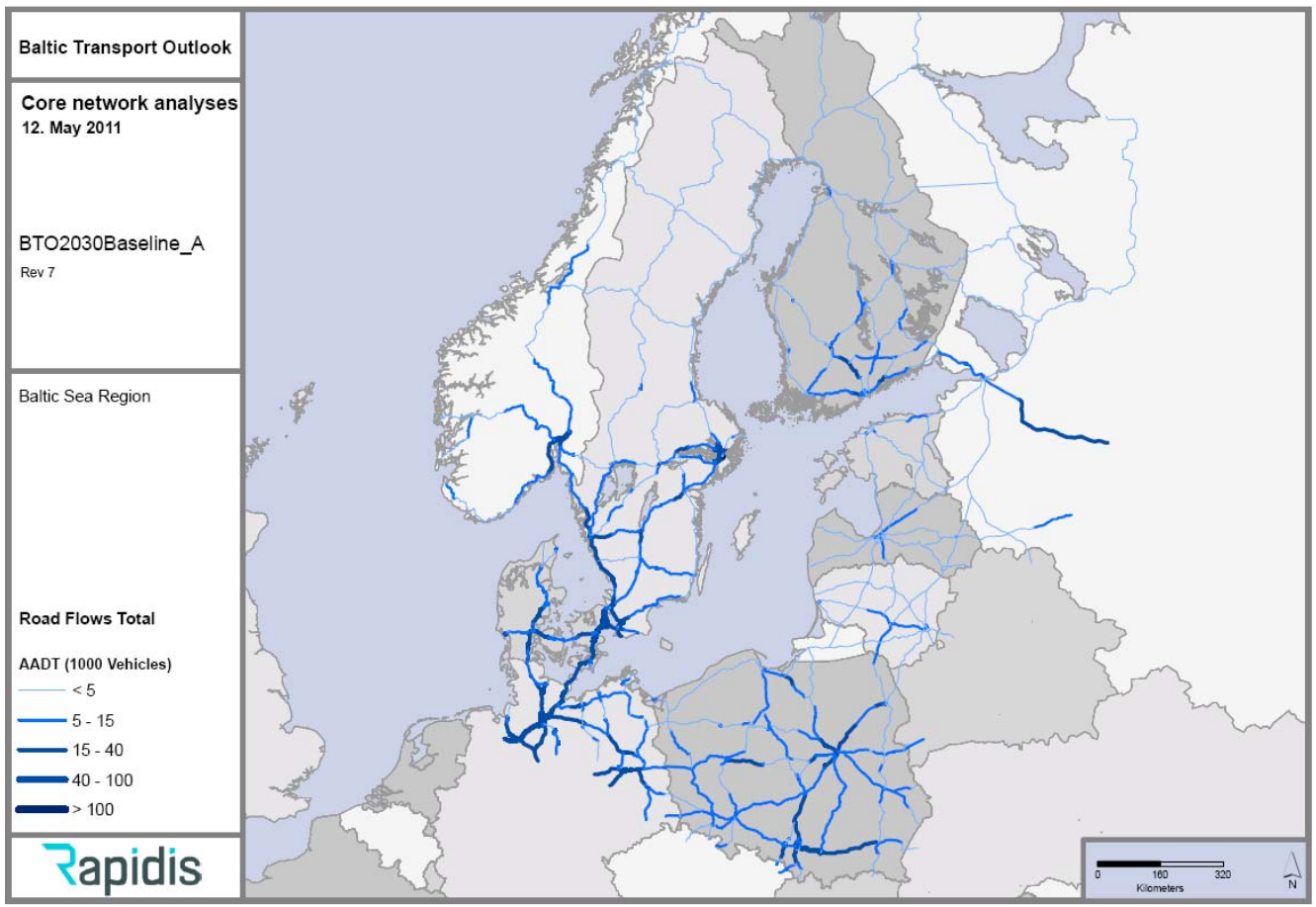
Truck vehicle flows 2010

Truck vehicle flows 2030



Task 3 Scenario results – Other outputs

- Possibility to extract flows on strategic network in different scenarios (Task 4)

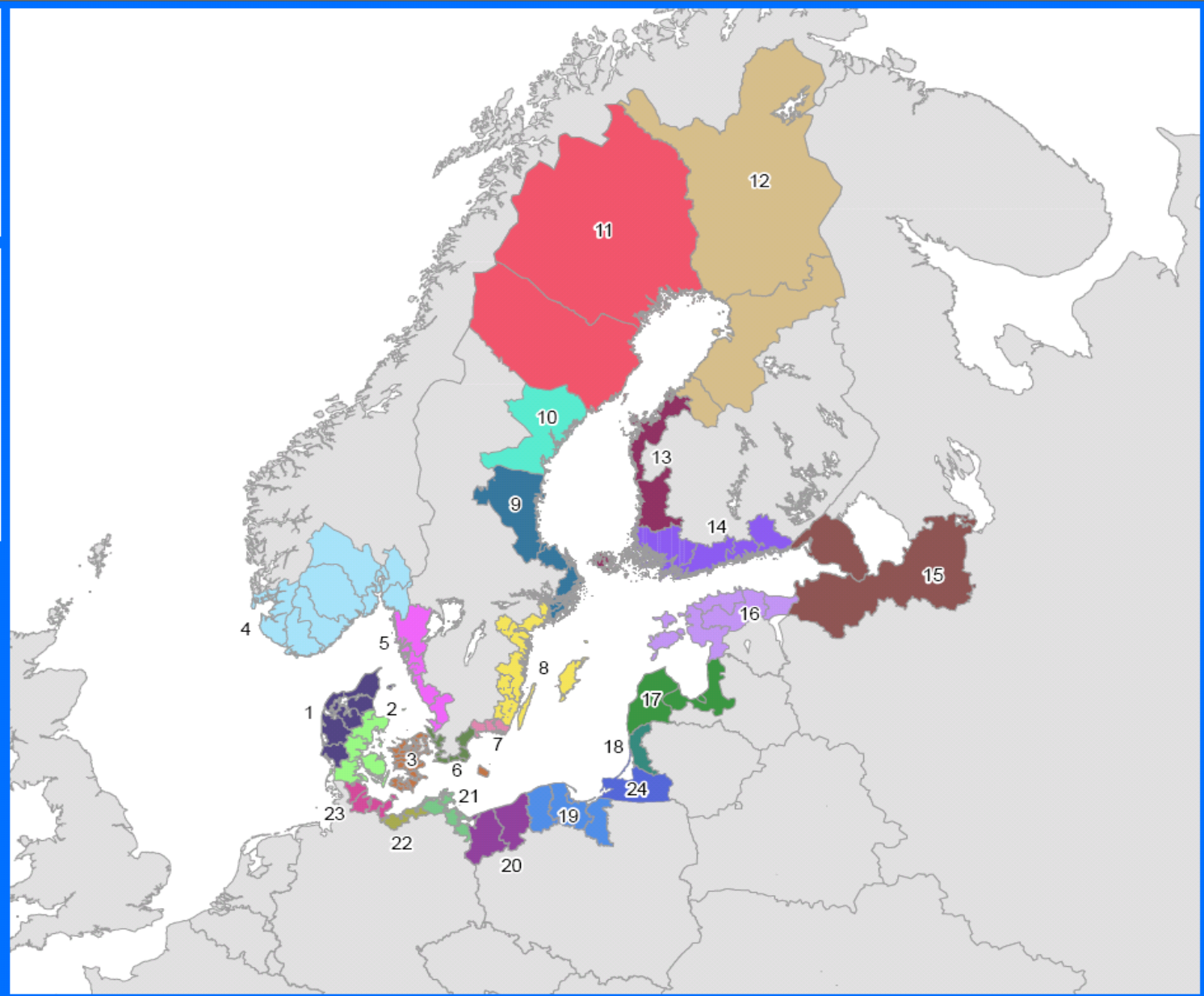


BTO 2030

Sea - Coastal growth rates

Baltic Transport Outlook

COASTAL REGIONS



Sensitivity tests

(compared with BTO Baseline 2030)

Freight transport:

1. Rail costs increased
2. Unchanged 2010 transport costs – only demand changes

Passenger transport:

1. Rail costs increase (ticket prices)
2. Air costs increase (ticket prices)