

European spatial and transport scenarios for the Baltic Region

- **Scenarios developed in the European Spatial Development Observatory Network (ESPON, DG REGIO) and the on-going review of the European White Paper of Transport (DG TREN) as reference for the Baltic region**
- **Objective:** To provide reference spatial development and transport scenarios for the Baltic area, based on already existing scenarios defined at European level recently

European spatial and transport scenarios for the Baltic Region

- **Global Trends**
- **European Territorial Scenarios**
- **European Transport Scenarios**
- **Transport Territorial Impacts**
- **Baltic Scenarios**

Global Trends and spatial development until 2050

➤ Europe as a whole for the coming decades

Growth in passenger mobility and freight mobility

New generation of more specialized vehicles

Road as a dominant transport mode, with online pricing and intelligent management systems

New rail services in dedicated lines linking major ports and logistics areas

Increasing volumes of freight from overseas markets

Increasing air trips in a more dense network of airports

Stable energy consumption, substitution fossil fuels with renewable sources

➤ Trends in the Baltic Sea, specific for navigation

Maritime traffic increasing in the Baltic Sea

Oil transportation will grow significantly especially in the gulf of Finland area

New Risk Control Options are scheduled in the near future

Increased risks for collision and groundings in the Baltic Sea

Winter Navigation may encounter problems in severe winters

Global Trends and spatial development (Wild Cards)

➤ **Refers to unlikely events that may have potentially large impacts**

The development of alternative energy sources, new ICT and transport vehicles, impact of global warming, oil-peak are well known

For the Baltic region, the political evolution of Russia and former USSR republics, and the enlargement processes of Europe are of extreme importance

The Northeast passage will probably be open in 15-20 years. How will this change flow of goods between Europe and Asia/US west coast?

European Territorial Scenarios

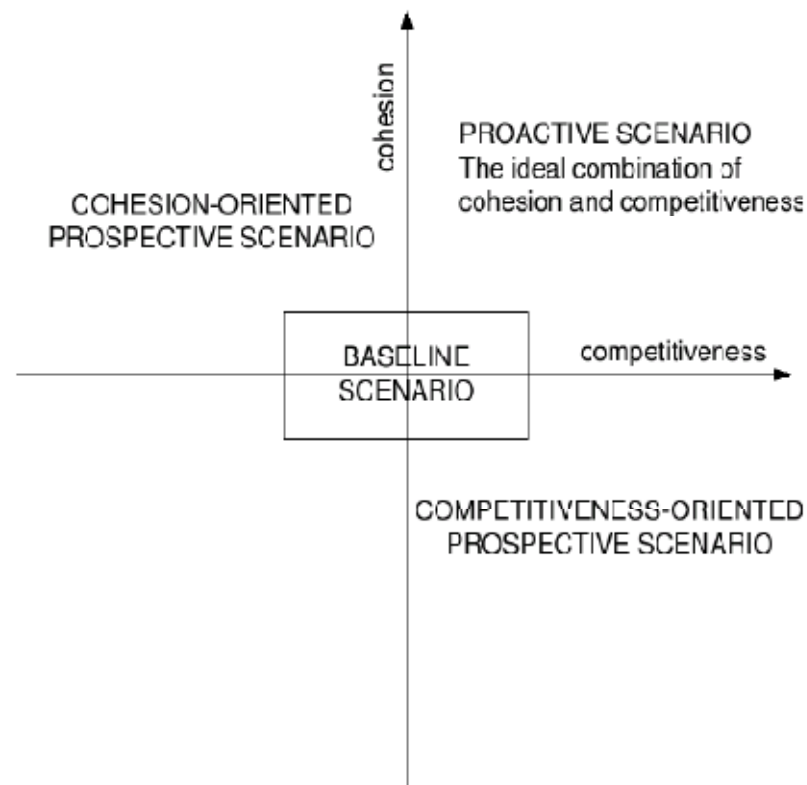
➤ Main policy-scenarios from ESPON based in three paramount political aims

Competitiveness

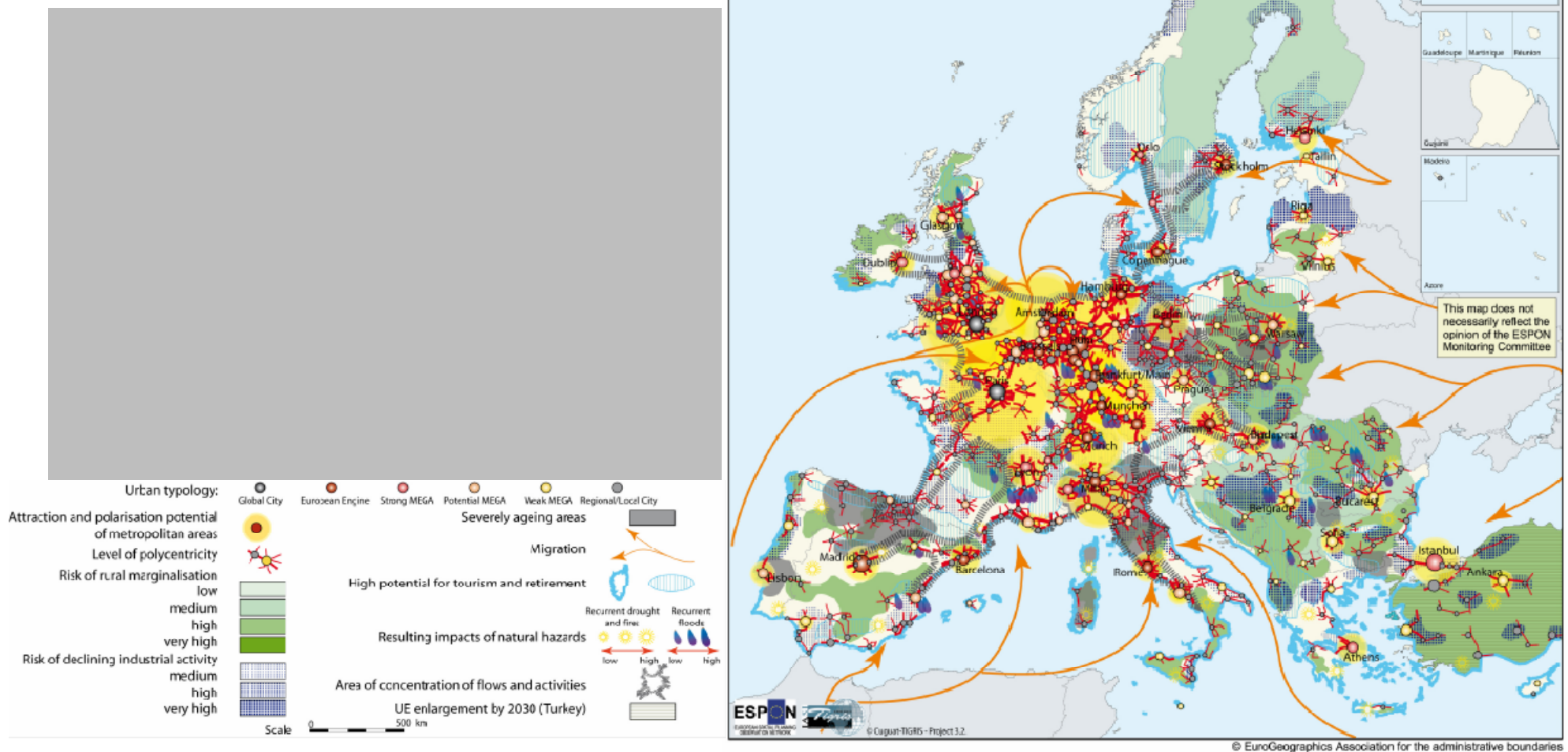
Cohesion

Sustainability

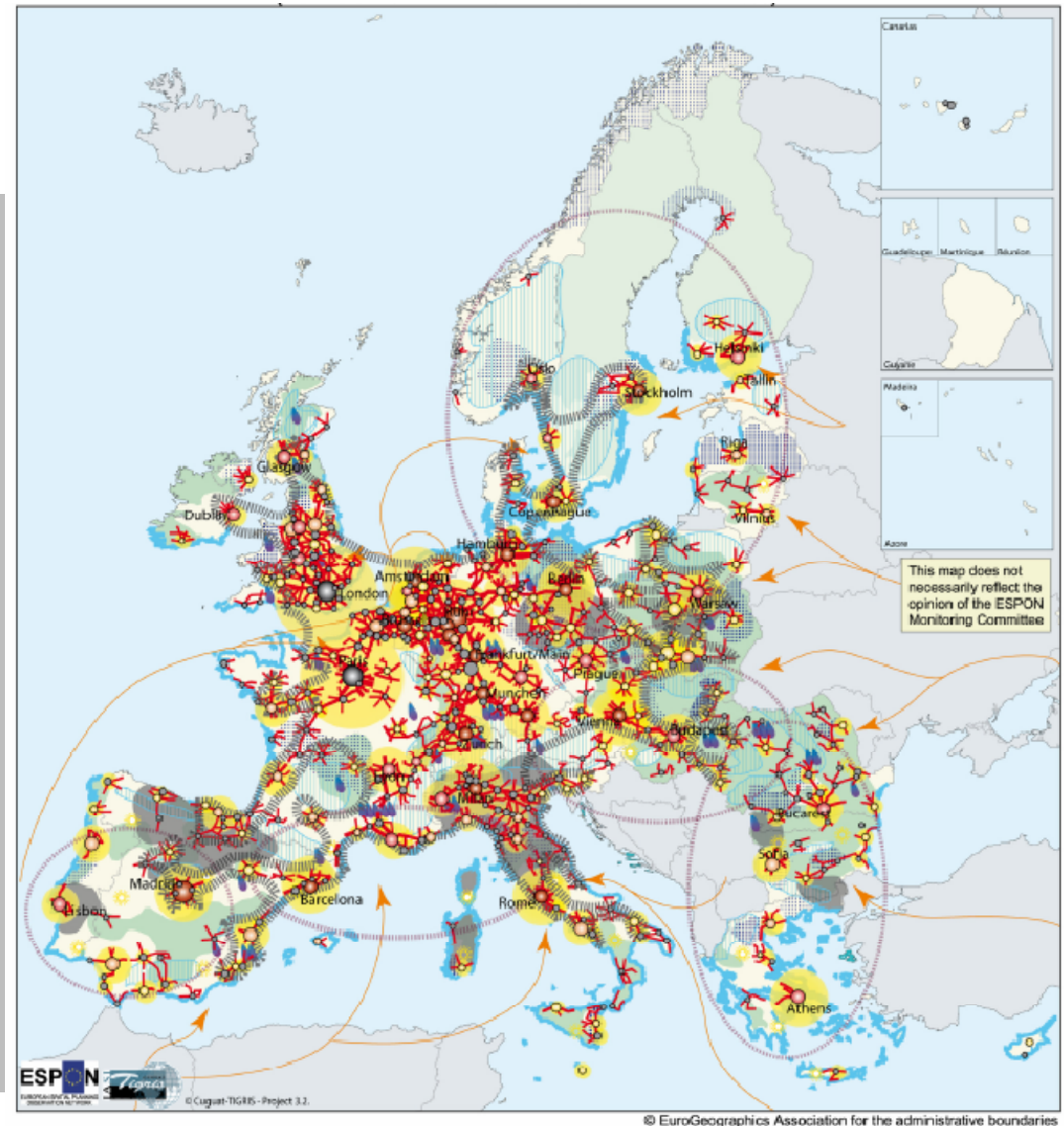
Cohesion-oriented scenario	Competitiveness-oriented scenario
lower global growth rates	higher global growth rates
higher public expenditures	lower public expenditures
weaker technological development	strong technological development
lower emissions and significant advances in the prevention of climate change	high levels of emissions and little prevention of climate change
greater social cohesion and peace	high socio-economic dualisation and segregation, social conflicts
high degree of integration of immigrants	socio-ethnic segregation



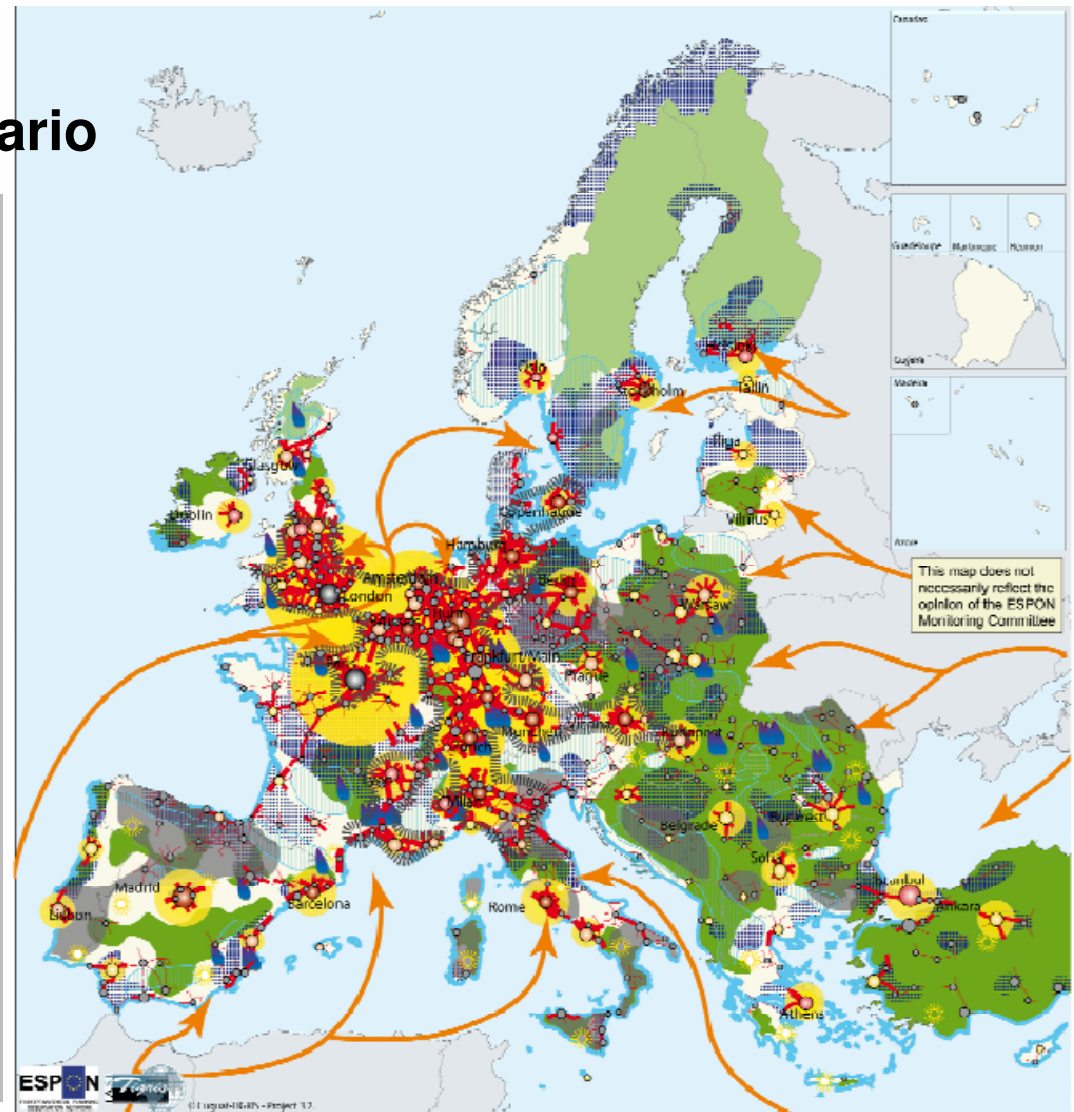
Baseline scenario 2030



Cohesion-oriented scenario



Competitiveness-oriented scenario



Baseline Scenario

- **The Baseline scenario assumes as policy framework the Revision of Transport White Paper 2010-2030.**

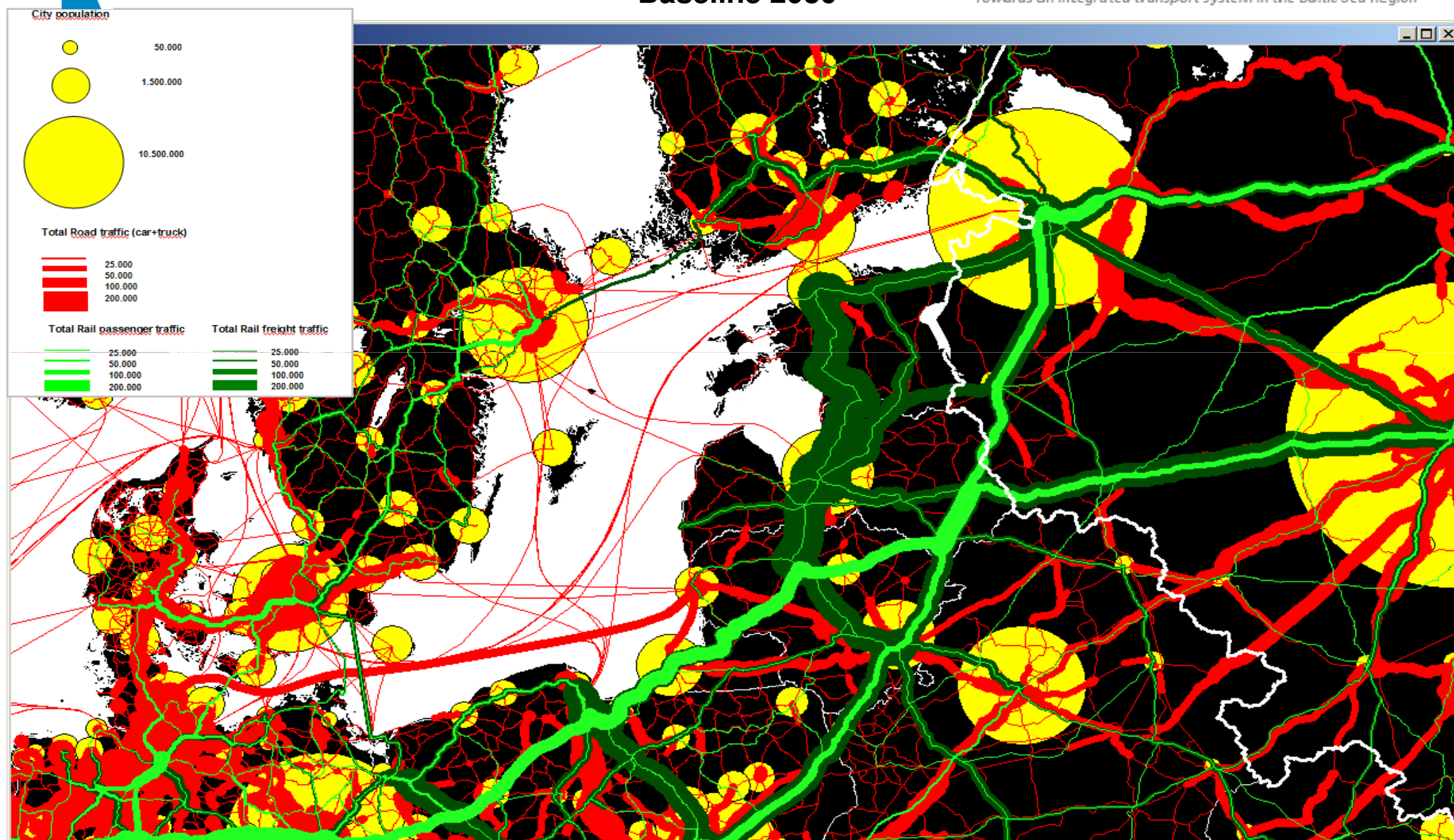
A conservative estimate of what could be accomplished

Tetraplan

TransBaltic

Towards an integrated transport system in the Baltic Sea Region

Baseline 2030



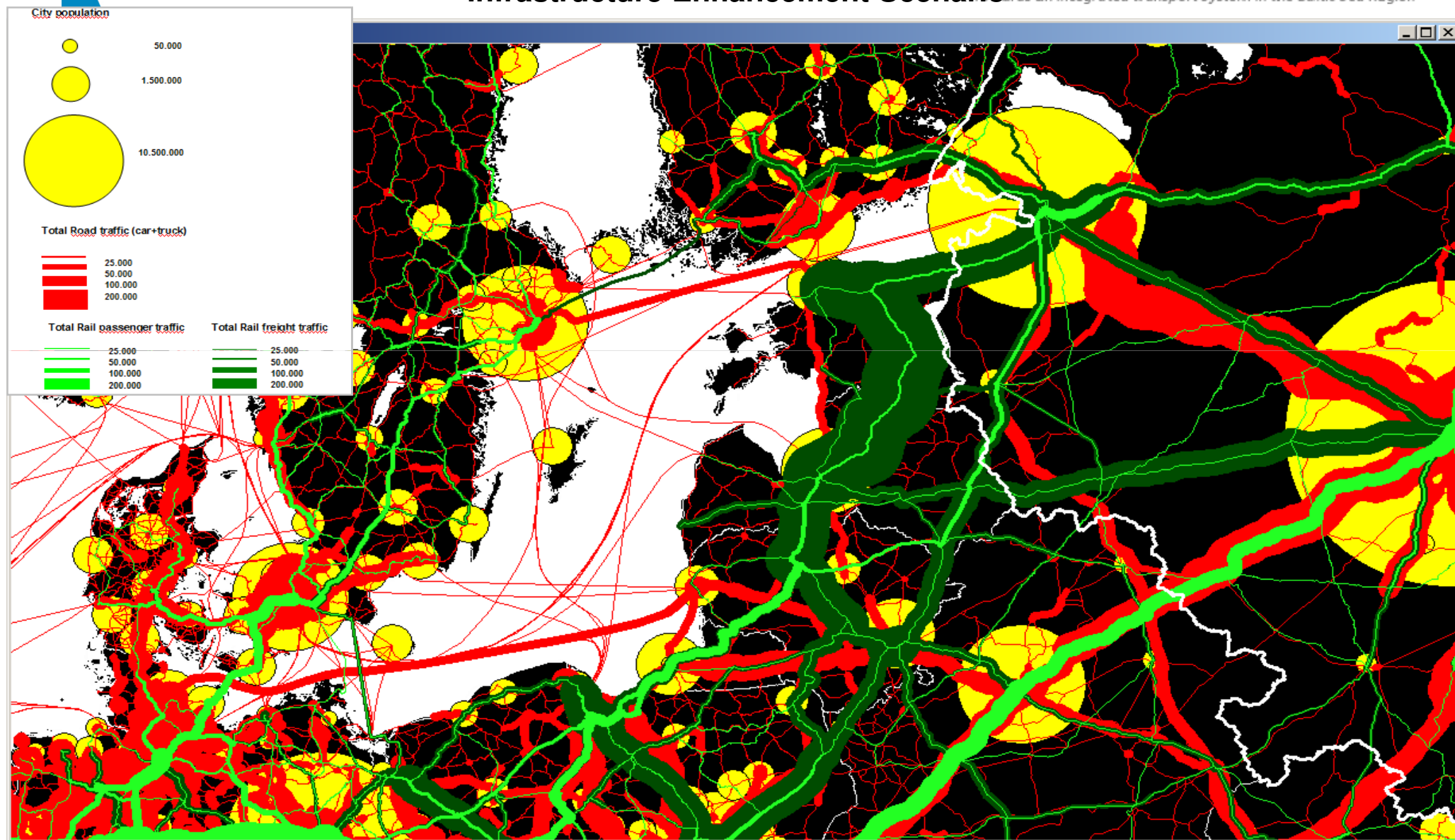
Infrastructure Enhancement Scenario

- **Are oriented towards new infrastructure provision**
Based on high growth 2030 scenario defined in TRANSVision study
- **TEN-T projects completed, as well as a number of other projects of relevance to European cohesion**
- **The main objectives of this policy are improving cohesion, accessibility and reducing congestion by completing all the TEN networks and pan-European corridors that are not included in the priority projects**
- **The policy has the effect of increasing total traffic, it is assumed that a higher renewal of the car fleet will be enforced so that average emission ratios are lower**

Tetraplan



Infrastructure Enhancement Scenario



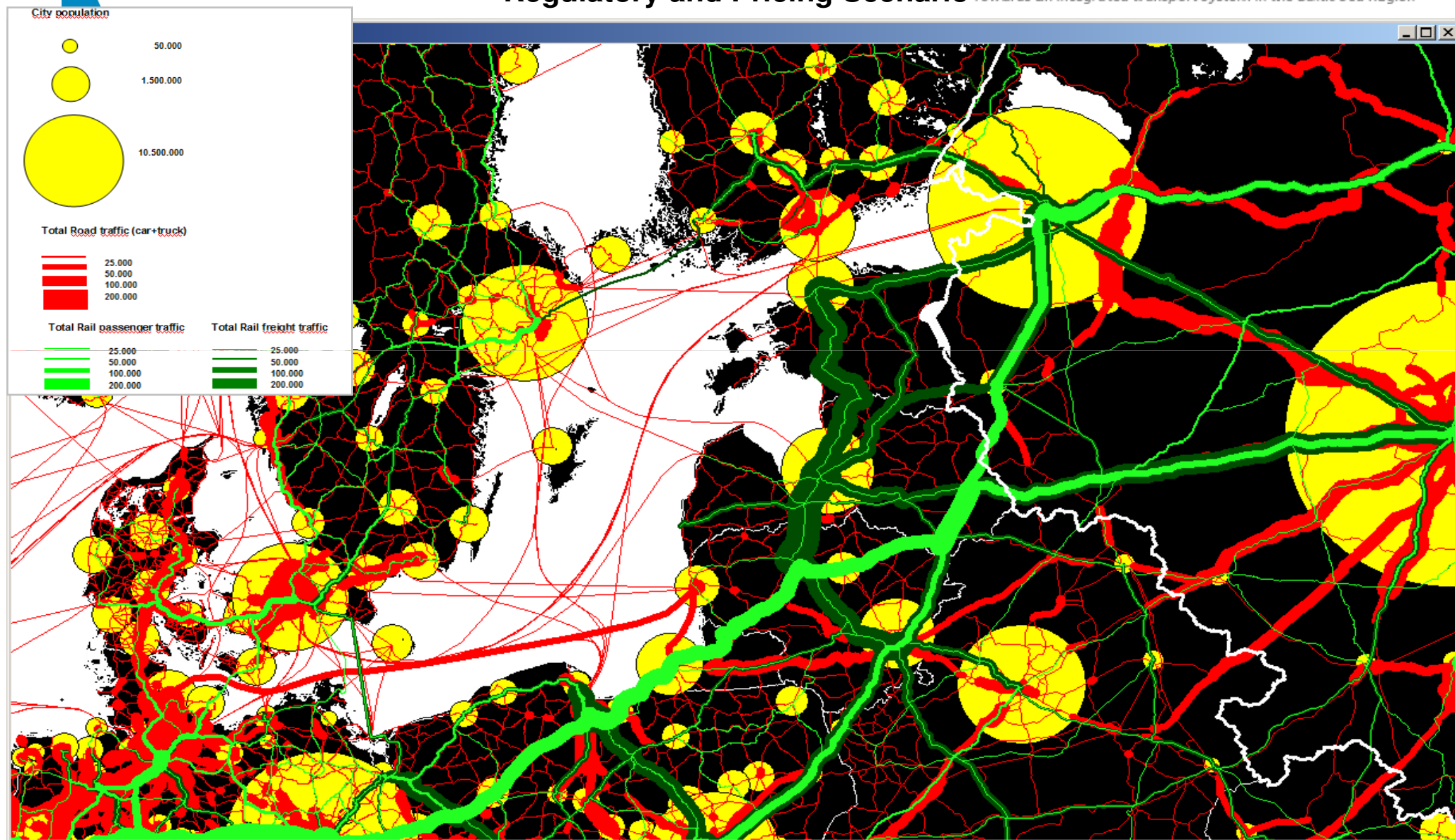
Regulatory and Pricing Scenario

- Based on Low Growth 2030 as defined in TRANSVisions study, characterised by a low economic development further emphasized by a negative population development
- Low growth occurs because of increasing costs of energy, particularly oil. Europe's answer to the increasing energy costs is mobility reduction in terms of higher operating costs which reflects the high energy prices
- Policies in this scenario are oriented towards taxation, internalisation of transport externalities, and putting incentives for a modal shift towards rail.

Tetraplan



Regulatory and Pricing Scenario *Towards an integrated transport system in the Baltic Sea Region*



Baltic Scenarios

- **Baltic scenarios based on the territorial cohesion concept**
- **Characteristics of the Baltic territory:**
 - Low population density
 - Long distances between metropolitan areas
 - Numerous hardly accessible and peripheral regions
 - Well developed knowledge based economy
 - The most developed and the fastest developing countries together
 - Hardly functional region in economic terms
 - Strong density of trans-national public and NGO co-operation network

Baltic Scenarios II

➤ **Specific macro-regional trends**

Baltic Region continues to outperform the rest of the EU but likely to lose global economic weight

Convergence of Baltic countries, Poland, and (with some more uncertainty) Russia to the Nordic levels of prosperity likely to continue

Relative growth of the economic importance of Russia, Poland, and Baltic countries; Nordic share dropping of GDP dropping moderately

Over the next 15 years, demographics benefit the GDP per capita level on the eastern shores of the BSR but then the trend moves into the opposite direction

➤ **Moderately positive outlook for the economic prospects of the region**

Regional collaboration can become the 'turbo' of regional growth, if developments in the EU and/or Russia create the right conditions

The future of the European integration process is the most critical driver of how important Baltic Sea cooperation will be

The most benefits will occur, if the region moves towards a new model of collaboration, more in-line with the changing external conditions

Baltic Scenarios III

➤ **Baseline scenario:**

Projecting the situation when all major transport infrastructure projects included in the medium- and long-term national investment plans of the BSR countries (and optionally – China, India, Ukraine and Central Asia) are completed

➤ **Arctic passage scenario:**

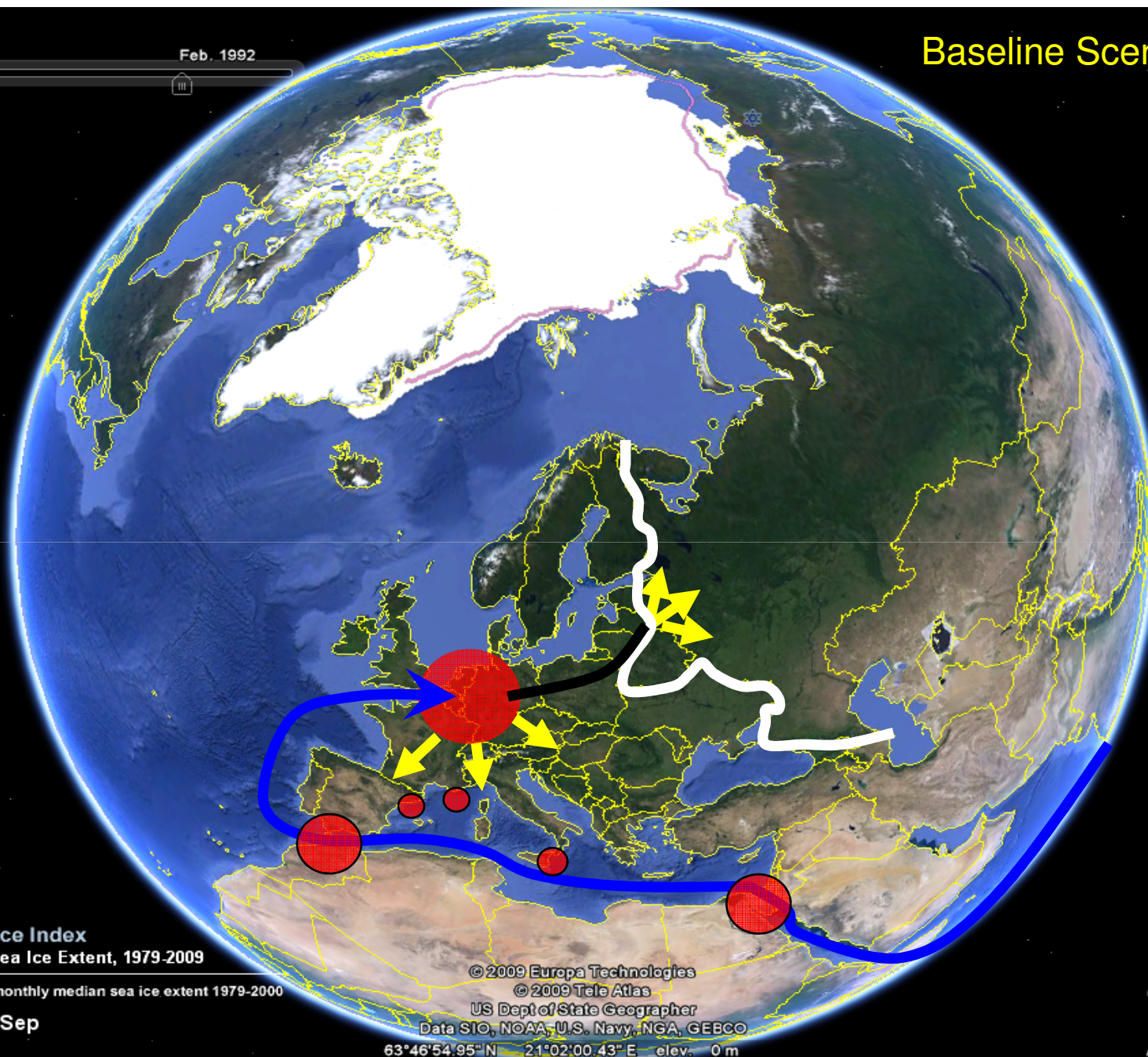
Projecting the situation when the ice-free waters of the Arctic Sea enable summer season navigation to release saturated south Baltic Sea Region road/rail network from intercontinental traffic

➤ **Green transport scenario:**

Projecting the situation when the EU regulations and rules of the EU neighbouring countries lay ground for developing a network of green multimodal transport corridors as a priority network in the BSR (correspondent to present TEN-T network).

Feb. 1992

Baseline Scenario



Sea Ice Index
Sea Ice Extent, 1979-2009

monthly median sea ice extent 1979-2000

1992 Sep

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US Dept of State Geographer

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

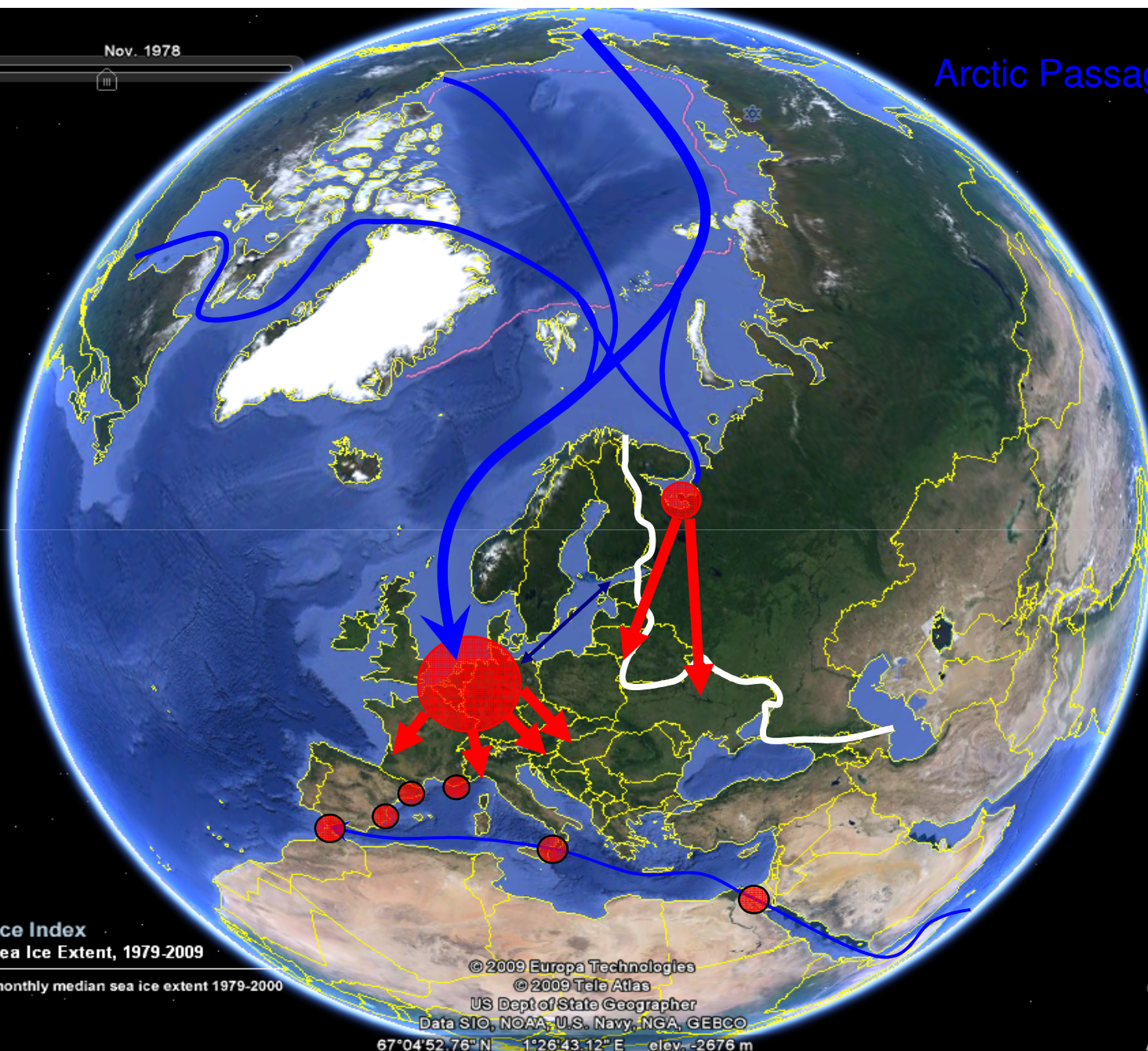
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Alçada d'ull 10607.99 km

Nov. 1978

Arctic Passage Scenario



Sea Ice Index
Sea Ice Extent, 1979-2009

monthly median sea ice extent 1979-2000

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Feb. 1992

Green Transport Scenario



Sea Ice Index
Sea Ice Extent, 1979-2009

monthly median sea ice extent 1979-2000

1992 Sep

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