ESPON BSR TeMo

ENECON CONFERENCE

10-11 April 2014

Vilnius, Lithuania

Gunnar Lindberg, Nordregio

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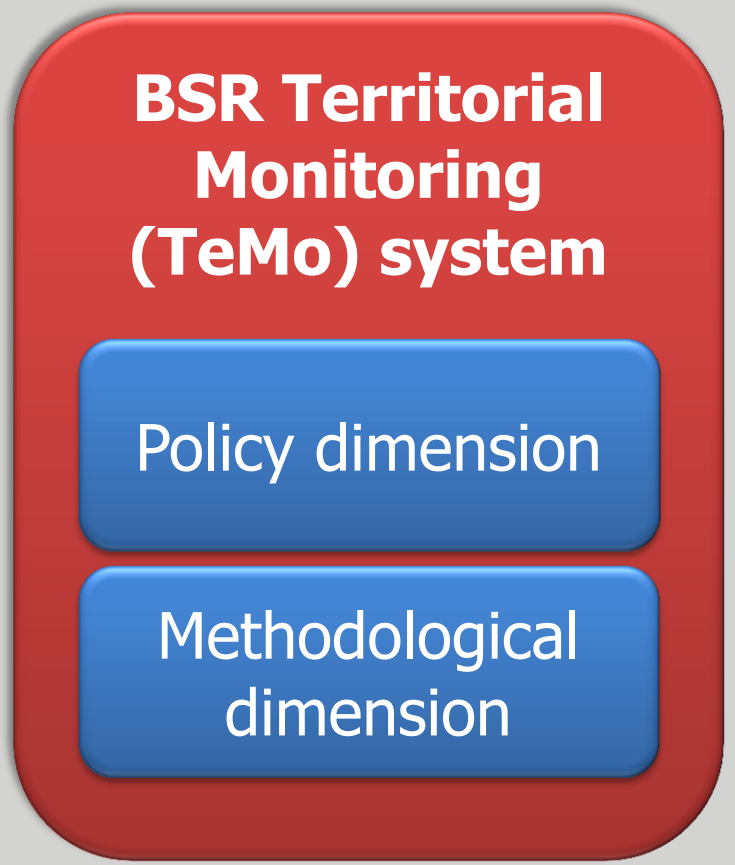
Project Partners

- Nordregio (Lead Partner)
- University of Gdansk
- Aalto University
- RRG Spatial Planning and Geoinformation
- Institute of Geography and Spatial Organization Polish Academy of Sciences
- BGI Consulting Ltd.
- Geomedia LLC

What we have built:



- An operational indicator-based territorial development monitoring system, comprehending a policy and a methodological dimension aimed at understanding territorial cohesion in the Baltic Sea Region.

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Added value of TeMo

- Building on regional policy context
- Addressing the policy questions that are important in the region;
  - the context of the region and stakeholders is really strong.
- Using available data, and at NUTS 3.
- Operational– and we show also how to measure territorial cohesion.
  - With 10 operational analytical indicators

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Target Group

- **Analysts and practitioners** working with policy makers responsible for cohesion, regional and spatial policy;
- **International organizations** (e.g. the VASAB-cooperation and the HELCOM organization), and local cross-border associations (i.e. Euroregions);
- **The ESPON community** (including stakeholders, researchers and planners);
- **Institutions** implementing, managing and evaluating actions taken within the framework of the EU's cohesion policy;
- **Researchers** dealing with territorial cohesion;
- **Other interested actors**, including students.

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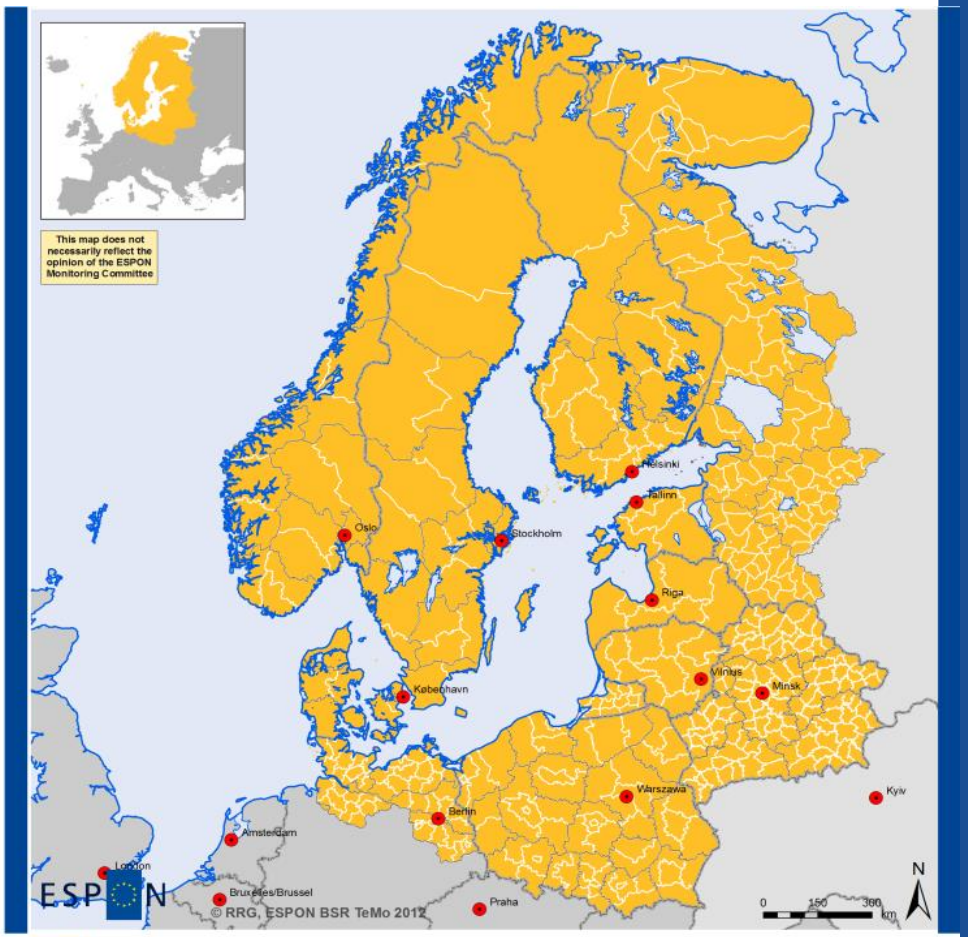
Geographical coverage

NUTS-3 and NUTS-2 levels are identified as the main geographical scales to work at in ESPON TeMo.

The task for BSR TeMo was to generate seamless layers of administrative boundaries (NUTS3, NUTS2 and NUTS0) for the study area including Belarus and Russia.

The project attempts to find additional data at the LAU-2 level.



Thematic content and indicators

Policy and Theory

- Concept of territorial cohesion (TC)
- BSR “filter” on TC
- Monitoring experiences
- Previous indicators

Workshop

- 7 domains
- No sub-domains
- **Focus on linking up with BSR topics**
- No indicators

Final system

- 5 Domains
- 12 sub-domains
- At first ca 90 indicators
- **Now 29 indicators**

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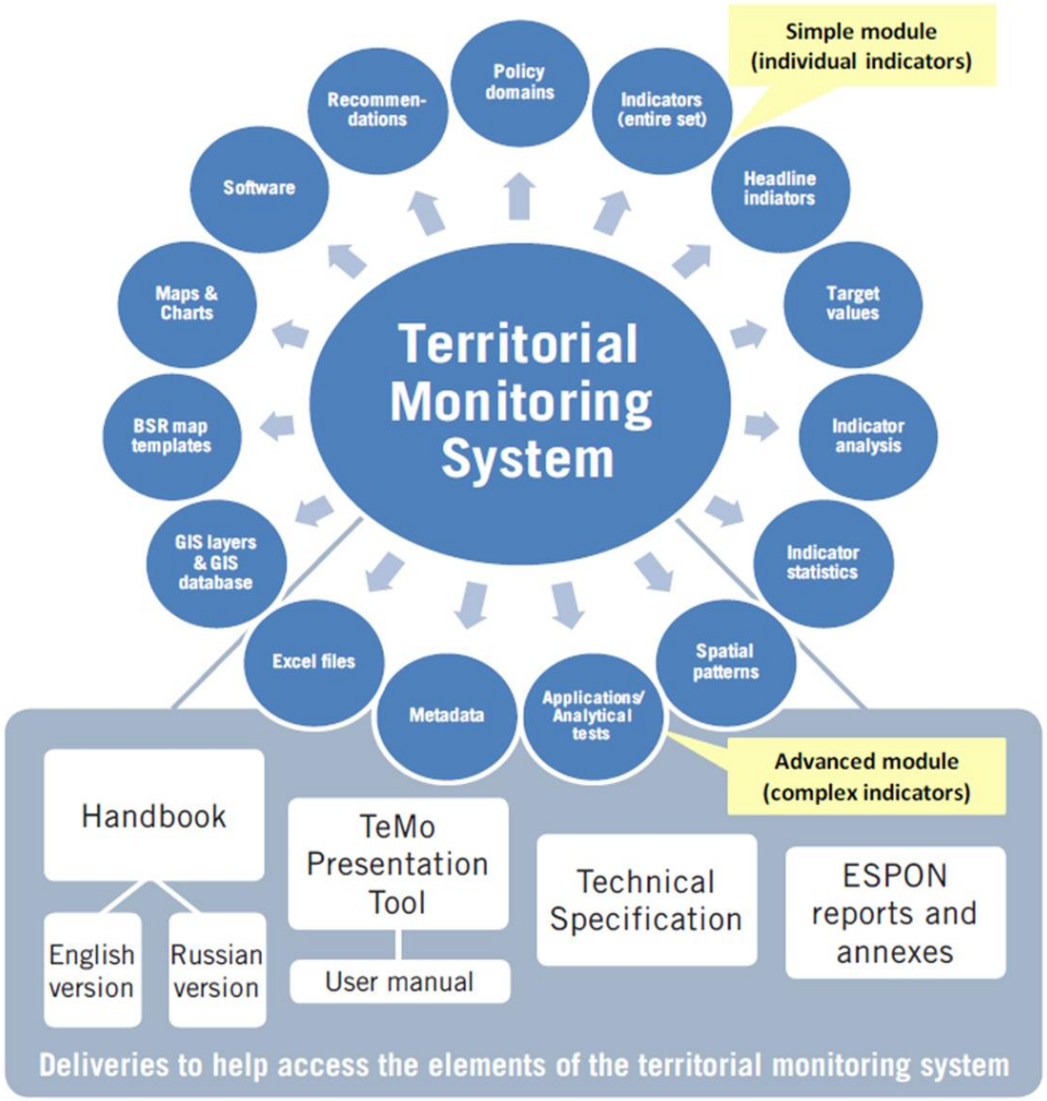
Structure of TeMo



Domains	1. Economic perfomance and competitivness
Subdomains and indicators	**1.1. Macroeconomic development**
	GDP per capita
	GDP per person employed
	1.2. Labour market
	Unemployement rate, total
	Unemployement rate (20 - 64 years)
	1.3. Demography
	Net migration rate
	Total population chamge
	Economic dependency ratio

Domains	2. Access to services, markets and jobs
Subdomains and indicators	**2.1. Potential accessibility**
	Accessibility potential by road
	Accessibility potential by rail
	Accessibility potential by air
	Multimodal accessibility potential
	2.2. Spatial structure
	Functional areas: access to cities
	Population potential within 50 km
	Border crossings
	2.3. Internet
	Households with internet access at home

Domains	3. Innovative territories
Subdomains and indicators	**3.1. Human capital**
	Population with tertiary education (25 - 64 years)
	Employement in technology & knowledge sectors
	3.2. Financing and institutions
	Gross-domestic expenditures on R&D, business
	Gross-domestic expenditures on R&D, total

Domains	4. Social inclusion and quality of life
Subdomains and indicators	**4.1. Social inclusion**
	A-risk-of-poverty rate
	Severe material deprivation rate
	Youth unemployement rate (15-24 years)
	Gender imbalances
	4.2. Health
	Life expectancy at birth, in years
	Self-assessed general health status

Domains	5. Enviromental qualities
Subdomains and indicators	**5.1. Consumption and production**
	New soil sealing per capita
	Air polution (PM10)
	Eutrophication
	5.2. Natural recourses
	Fragmentation index

10 Analytical / Complex indicators

(1.) The Gini Concentration Ratio	Distribution
(2.) The Atkinson index	
(3.) The 80/20 ratio	
(4.) Sigma-convergence	Convergence
(5.) Beta-convergence	
(6.) The east/west ratio	Targeted/Territorial
(7.) The south/north ratio	
(8.) The urban/rural ratio	
(9.) The non-border/border ratio	
(10.) The coast/inland ratio	

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Data

Data needed for the project has b
rather than indicators.

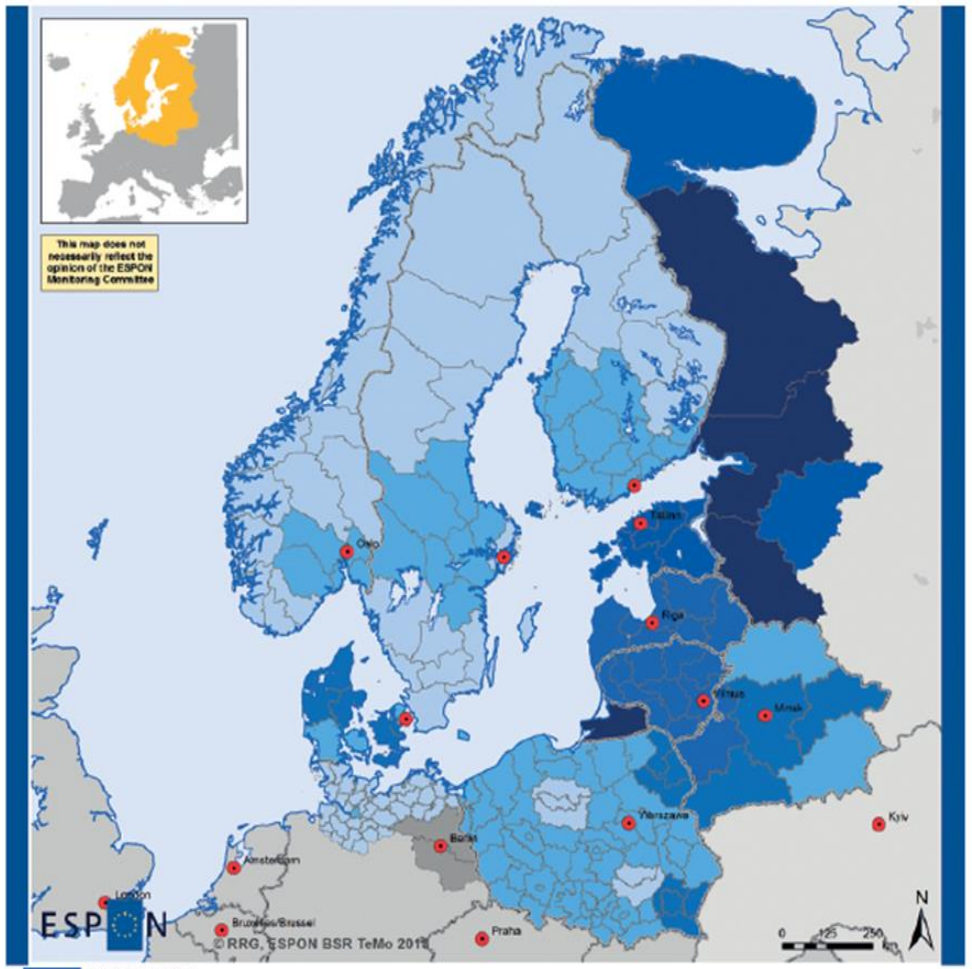
The time frame for data to be colle
latest available data.

Ease of updating the monitoring s

Three main sources, which provid
certain extent – data on a yearly b
and Norway), ROSSTAT (Russia)

Coherence regarding methodolog
BSR countries has been consider

Example of good availability and comparability:
Life expectancy at birth



Indicator	BY	DE	DK	EE	FI	LT	LV	NO	PL	RU	SE
GDP per capita	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GDP per employee	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Unemployment rate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Employment rate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Net migration rate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Total population change	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Economic dependency ratio	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Potential accessibility by road	X	✓	✓	✓	✓	✓	✓	✓	✓	X	✓
Potential accessibility by rail	X	✓	✓	✓	✓	✓	✓	✓	✓	X	✓
Potential accessibility by air	X	✓	✓	✓	✓	✓	✓	✓	✓	X	✓
Multimodal potential accessibility	X	✓	✓	✓	✓	✓	✓	✓	✓	X	✓
Households with internet access	X	X	✓	✓	(✓)	✓	✓	✓	X	✓	✓
Population potential within 50 km	X	✓	✓	✓	✓	✓	✓	✓	✓	X	✓
Functional areas: cities within reach	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Border crossings	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Population with tertiary education	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Employment in technology	X	✓	✓	✓	✓	✓	✓	✓	X	X	X
GDP in R&D, business	X	✓	✓	✓	✓	✓	✓	X	✓	X	✓
GDP in R&D, total	X	✓	✓	✓	✓	✓	✓	X	✓	✓	✓
At-risk-of-poverty rate	X	✓	✓	✓	✓	✓	✓	✓	✓	X	✓
Severe material deprivation	X	X	✓	✓	✓	✓	✓	✓	✓	X	✓
Youth unemployment rate	X	✓	✓	✓	✓	✓	✓	✓	✓	(✓)	✓
Gender imbalances	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Life expectancy at birth	✓	(✓)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Self-assessed health status	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
New soil sealing per capita	X	✓	✓	✓	✓	✓	✓	X	✓	X	✓
Air pollution (PM10)	X	✓	✓	✓	✓	✓	✓	X	✓	X	✓
Eutrophication	*Not applicable*										

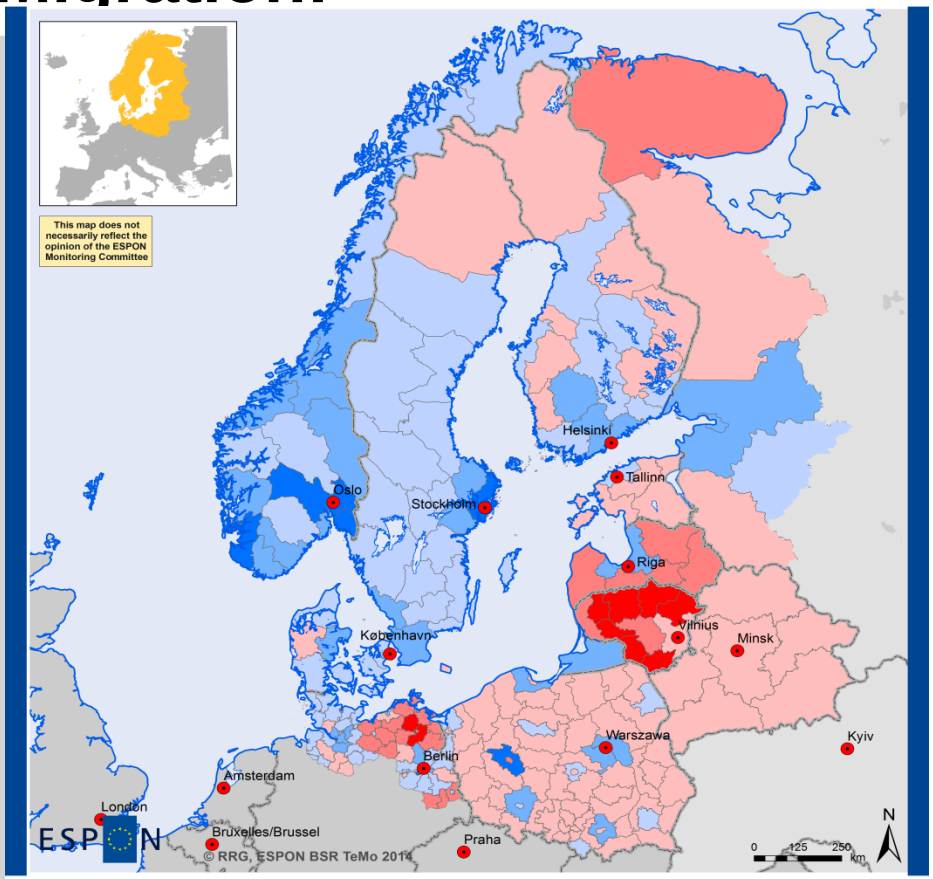
Application of the System

Testing of the monitoring system: allowed to establish the functionality of the system by pushing its analytical capacity in a selection of "real life situations".

Investigative areas (topics):

- ability to handle cross-cutting issues (**territorial cohesion**);
- functionality within a pronounced thematic focus (**migration**);
- functionality to depict a particular geographic scope (**border regions**);
- overall benchmarking ability (**BSR benchmarked against the Alpine Space and the North Sea transnational regions**).

Migration:



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Regional level: NUTS-3, RU & BY: oblasts
Data source: Eurostat
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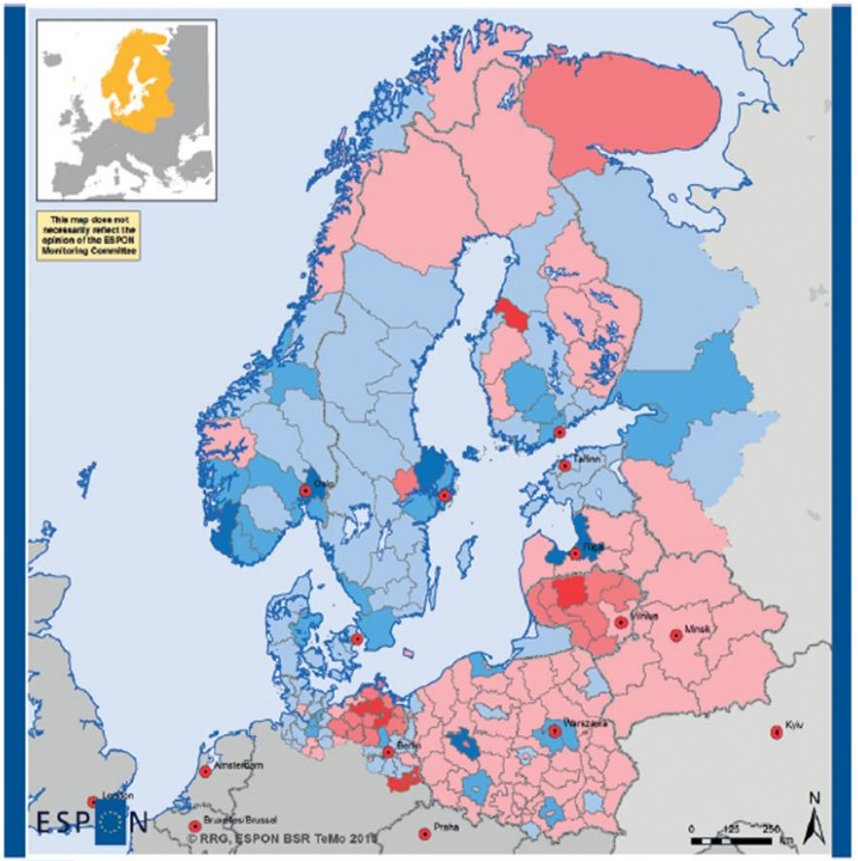
Net migration 2007-2012
Average annual rate (%)

Negative rate	*Positive rate*	
-5.0% - -2.0%	0.0% - 0.5%	Data n.a.
-2.0% - -1.5%	0.5% - 1.0%	
-1.5% - -1.0%	1.0% - 1.5%	
-1.0% - -0.5%	1.5% - 2.0%	
-0.5% - 0.0%	2.0% - 5.0%	

Mecklenburg-Vorpommern: 2007-2010



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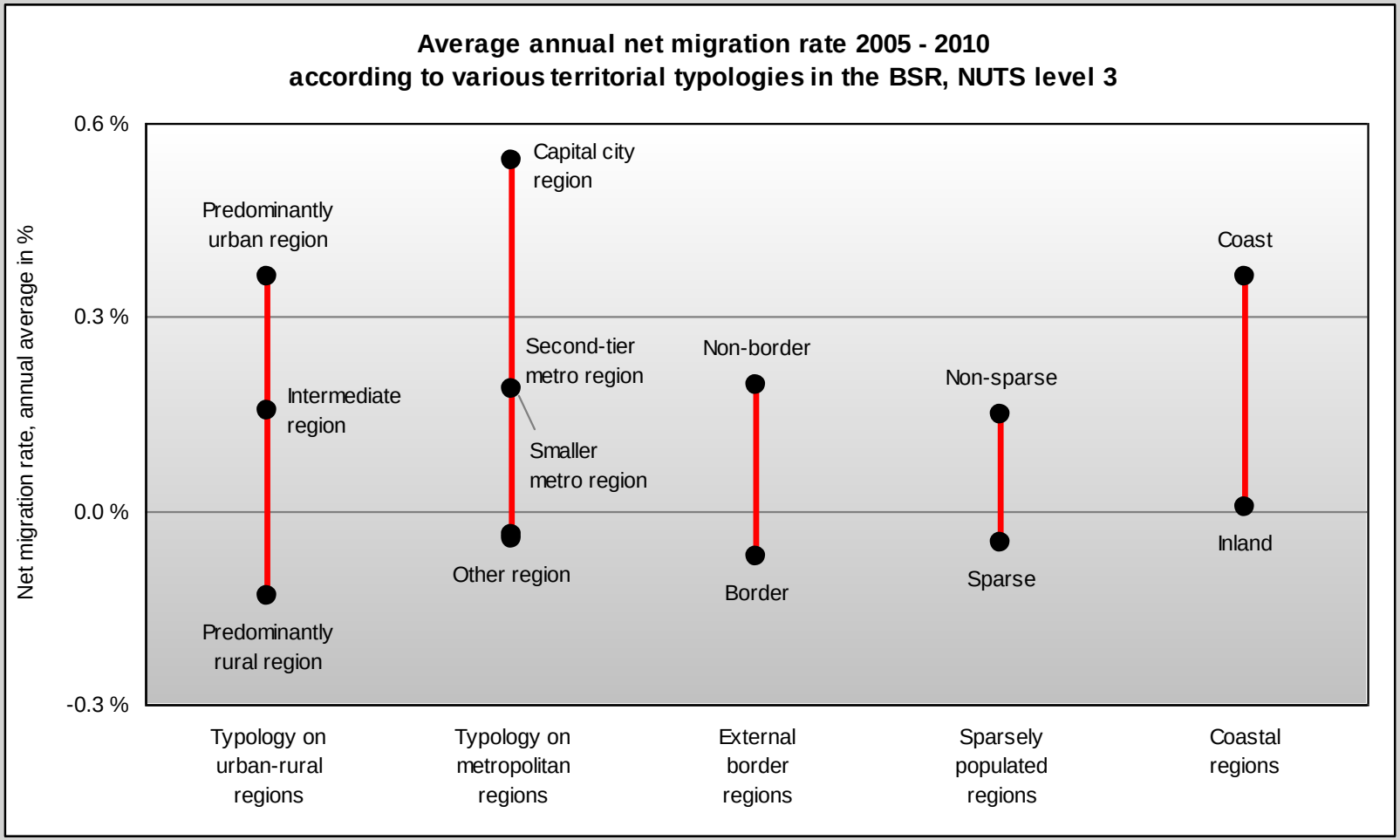
-1.5% - -1.0%	1.0% - 1.5%	
-1.0% - -0.5%	1.5% - 2.0%	
-0.5% - 0.0%	2.0% - 5.0%	

DK & FI (apart from Åland): 2007-2010
Russia: 2005-2009

Migration: trends 2005-2010



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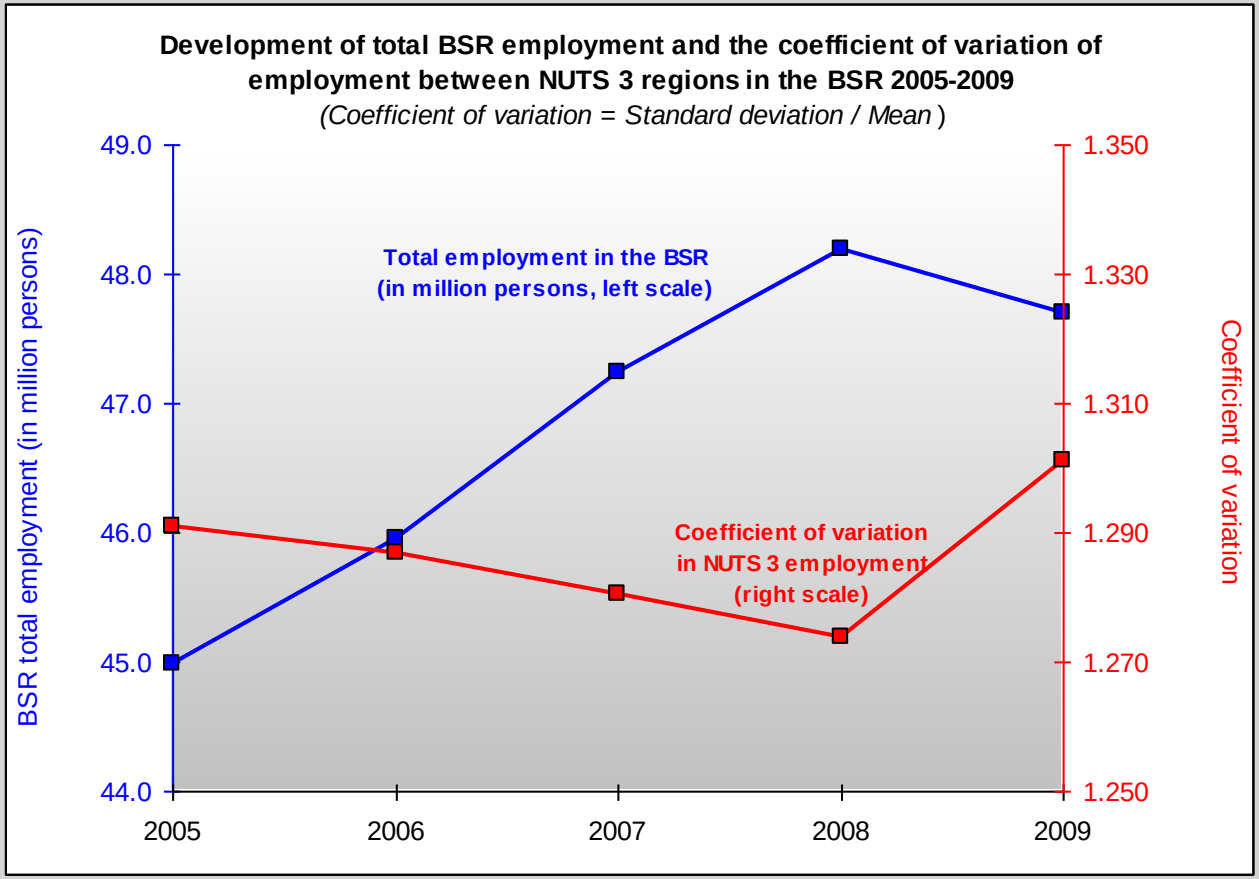
Migration: the story of jobs



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Main development trends of BSR

The main BSR divides:

- **East-West** (between more and less affluent countries);
- **North-South** (between countries with low and high population density);
- **Urban-rural** (between rural and urban areas).

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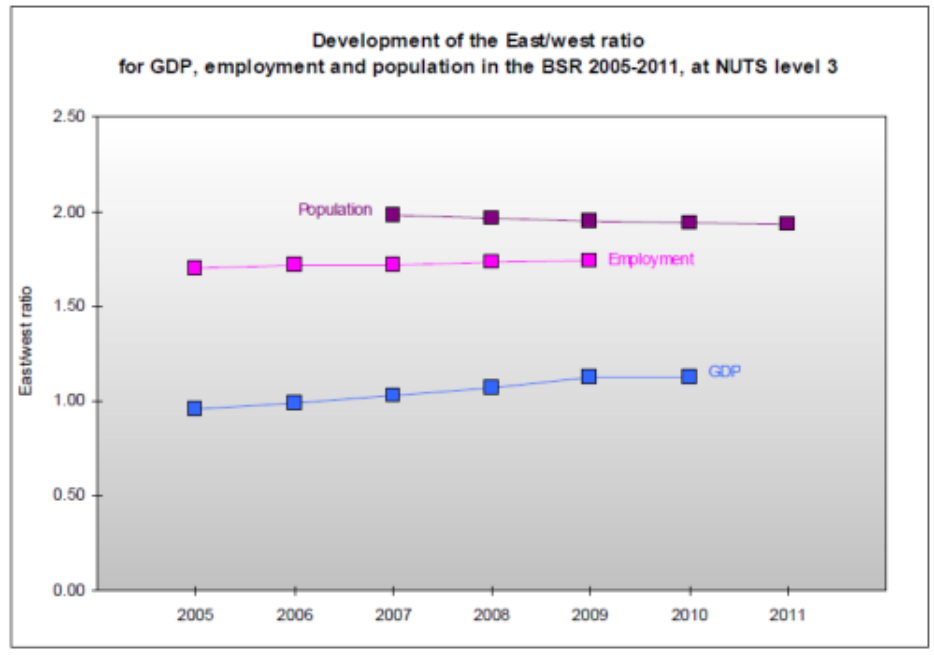
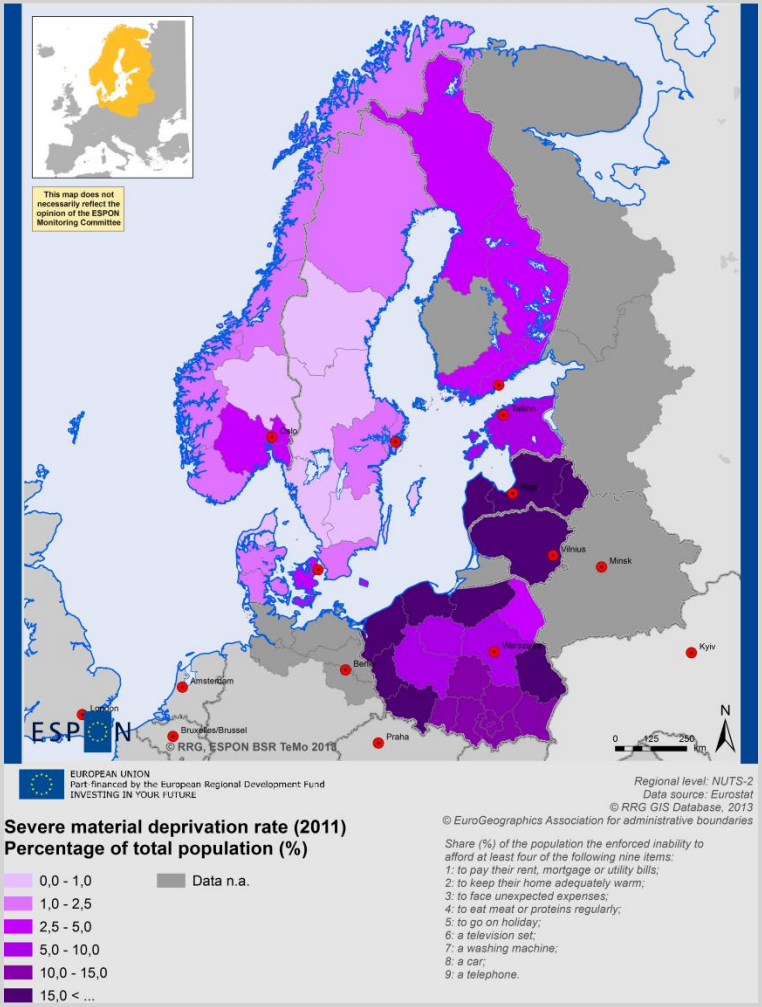
The Principal Divides (1): East-West

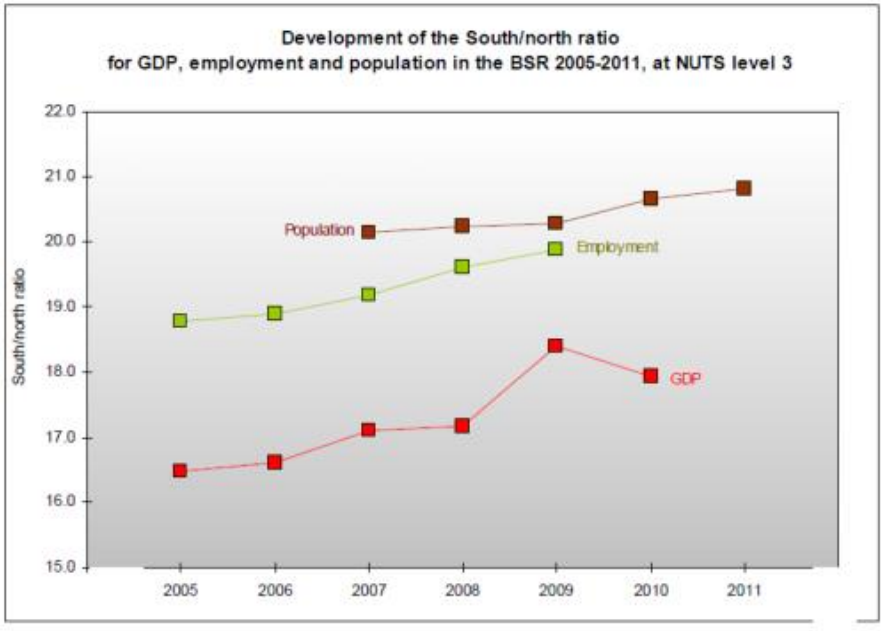
Between more and less affluent countries: the sharpest divide today can be found within the social spheres of development. In terms of for instance poverty or health, the BSR displays a substantial variation.

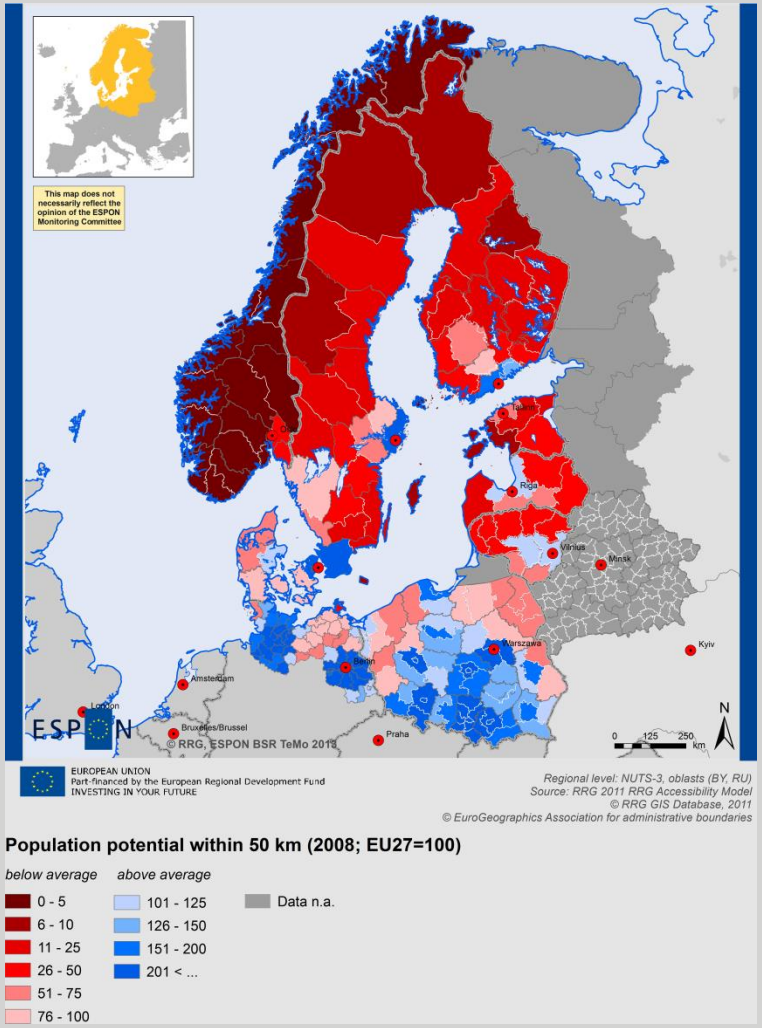




The Principal Divides (2): North-South

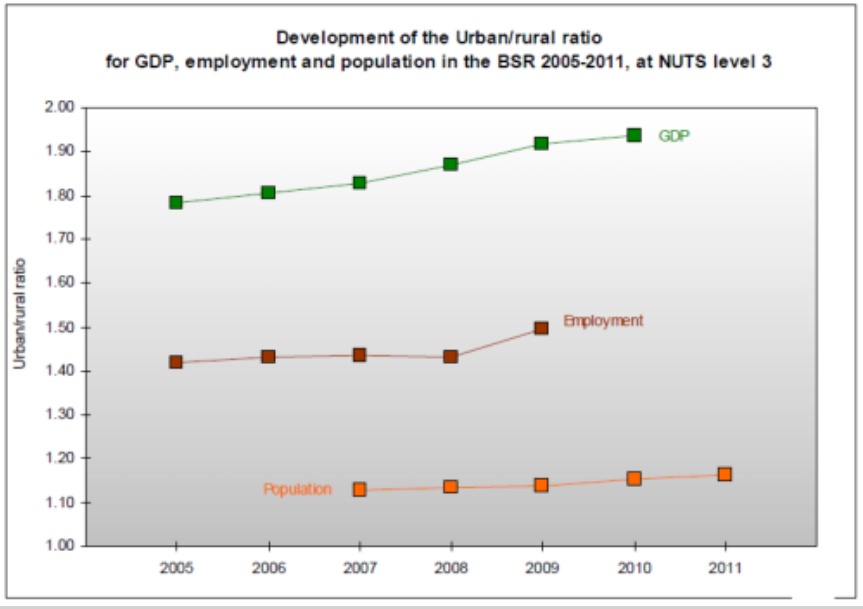
Between countries with low and high population density: sparse regions are in general the most disadvantaged types of territories and are largely lagging behind in most aspects of socioeconomic development, particularly when examined in a national context.

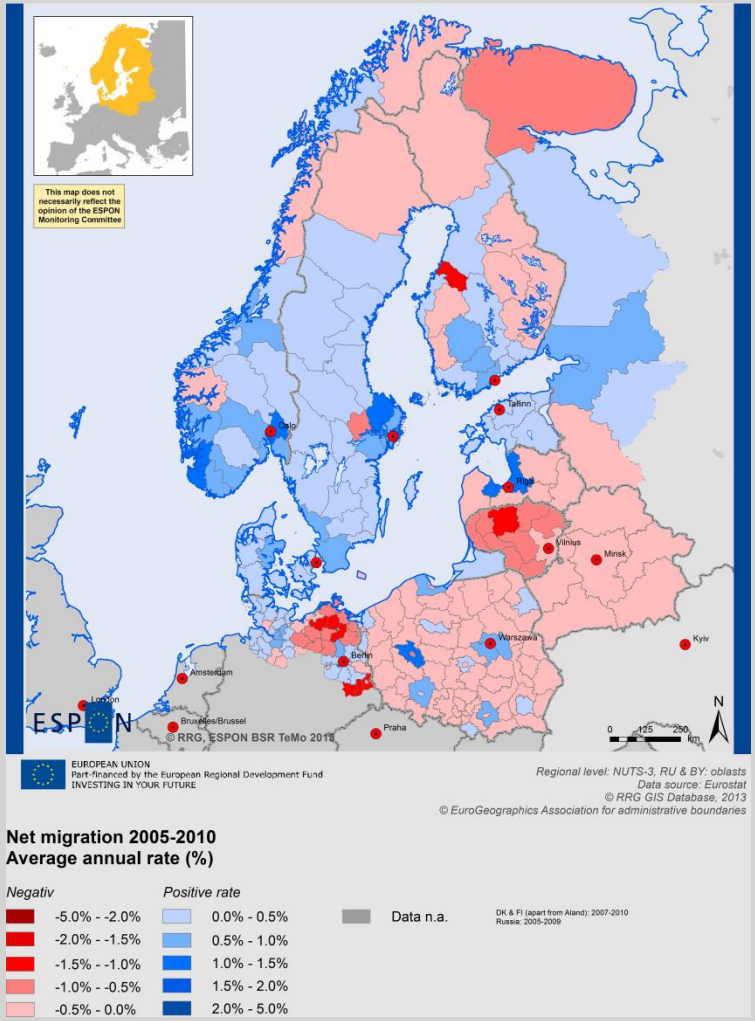




The Principal Divides (3): Urban–Rural

Between rural and urban areas: with very few exceptions the rural areas generally occupy the bottom positions regarding most aspects of socio-economic development. The financial crisis also appears to have affected rural migration harder than any other type of regions.



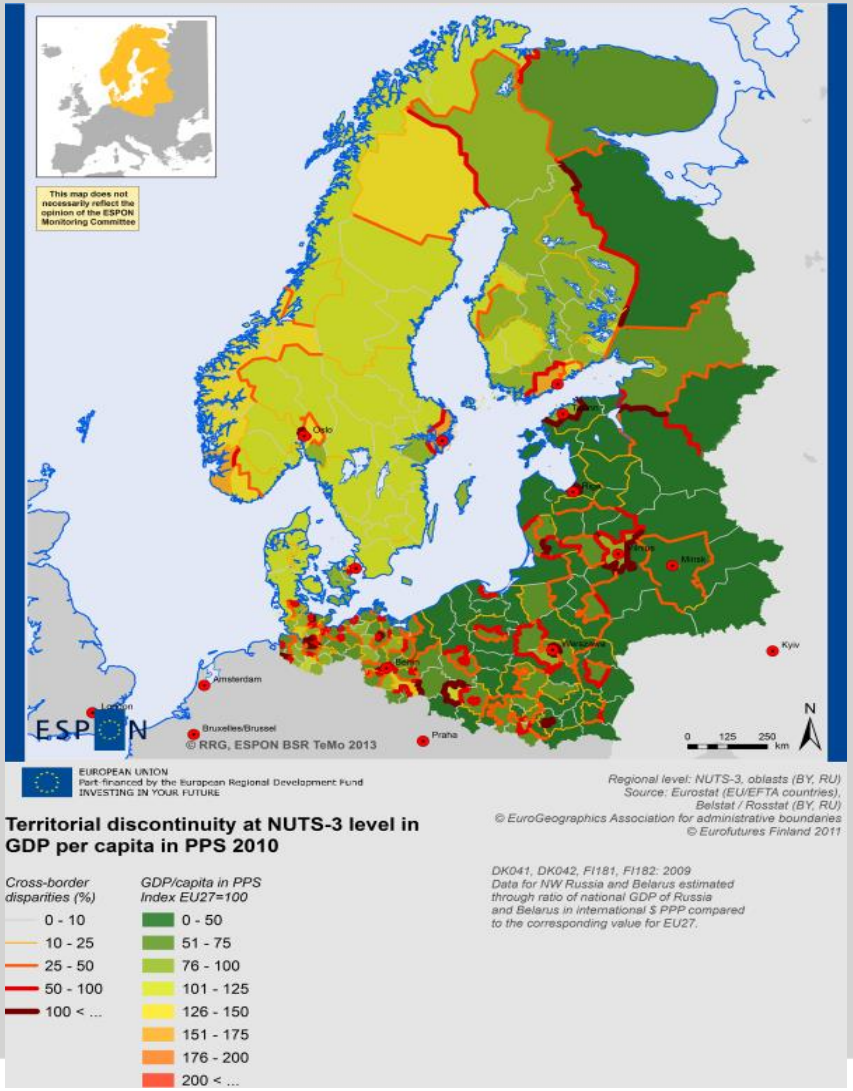


The Principal Divides (3): Urban–Rural

Between rural and urban areas:

Although there is still a divide between East and West,

- Some of the most pronounced disparities in GDP/capita can be found between urban/rural areas – rather than between countries.



Benchmarking

- The BSR has far outperformed its peer regions in economic growth primarily due to the rapid catch- up of eastern BSR.
  - Despite rapid catch-up, the material welfare gap of the BSR is still in a league of its own compared to the peer regions.
- The BSR is inaccessible in comparison to peer regions, but gradually gaining in on them.
- The BSR on the whole is not as attractive to migrants as its peer regions.
- The BSR lags behind its peer regions in the general health status of its population.
  - Interregional differences in the BSR are pronounced in comparison.
- The air quality of the BSR appears not markedly different from that of its peer regions. However, no comparable data on the non-EU parts of the BSR are available.

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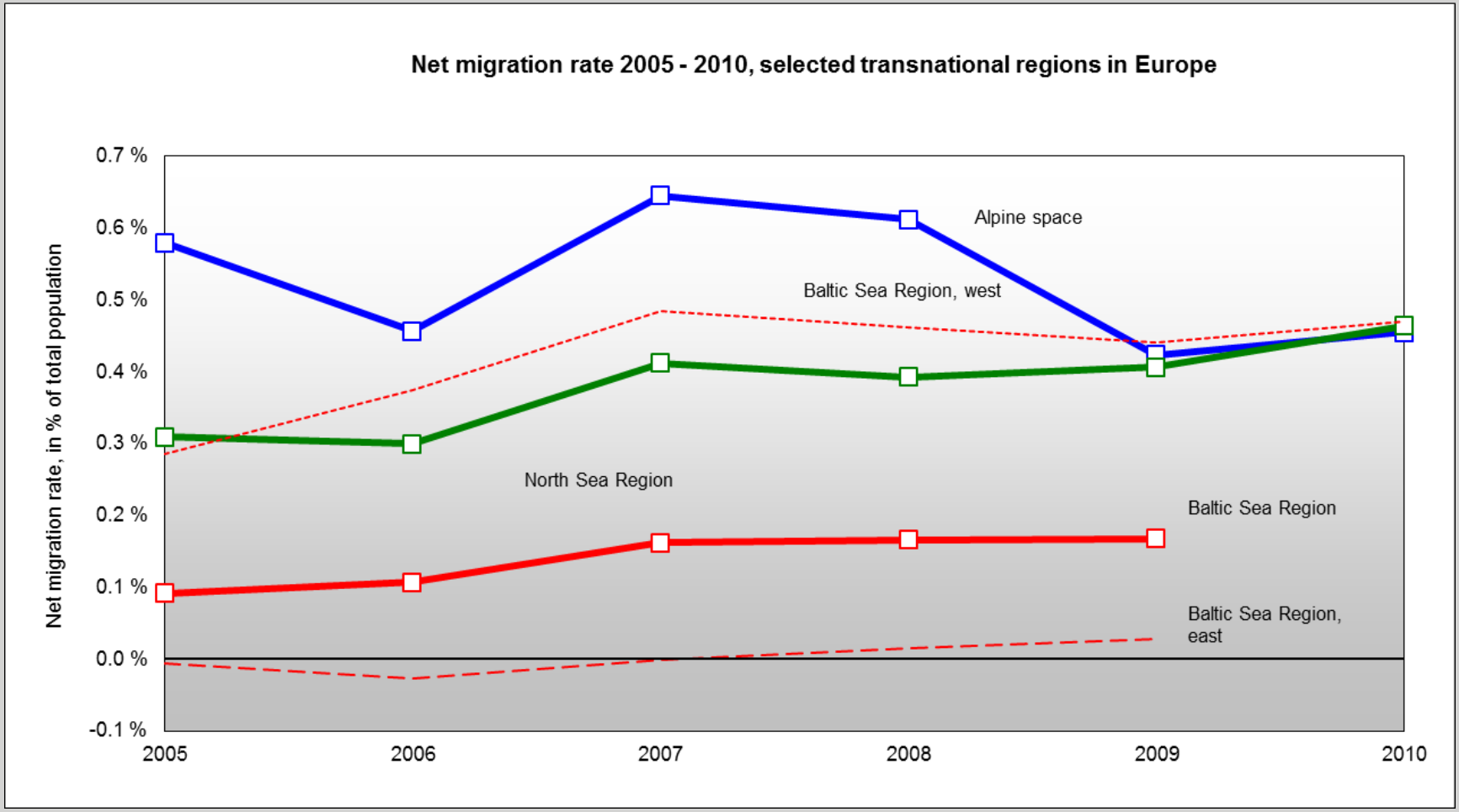
Benchmarking



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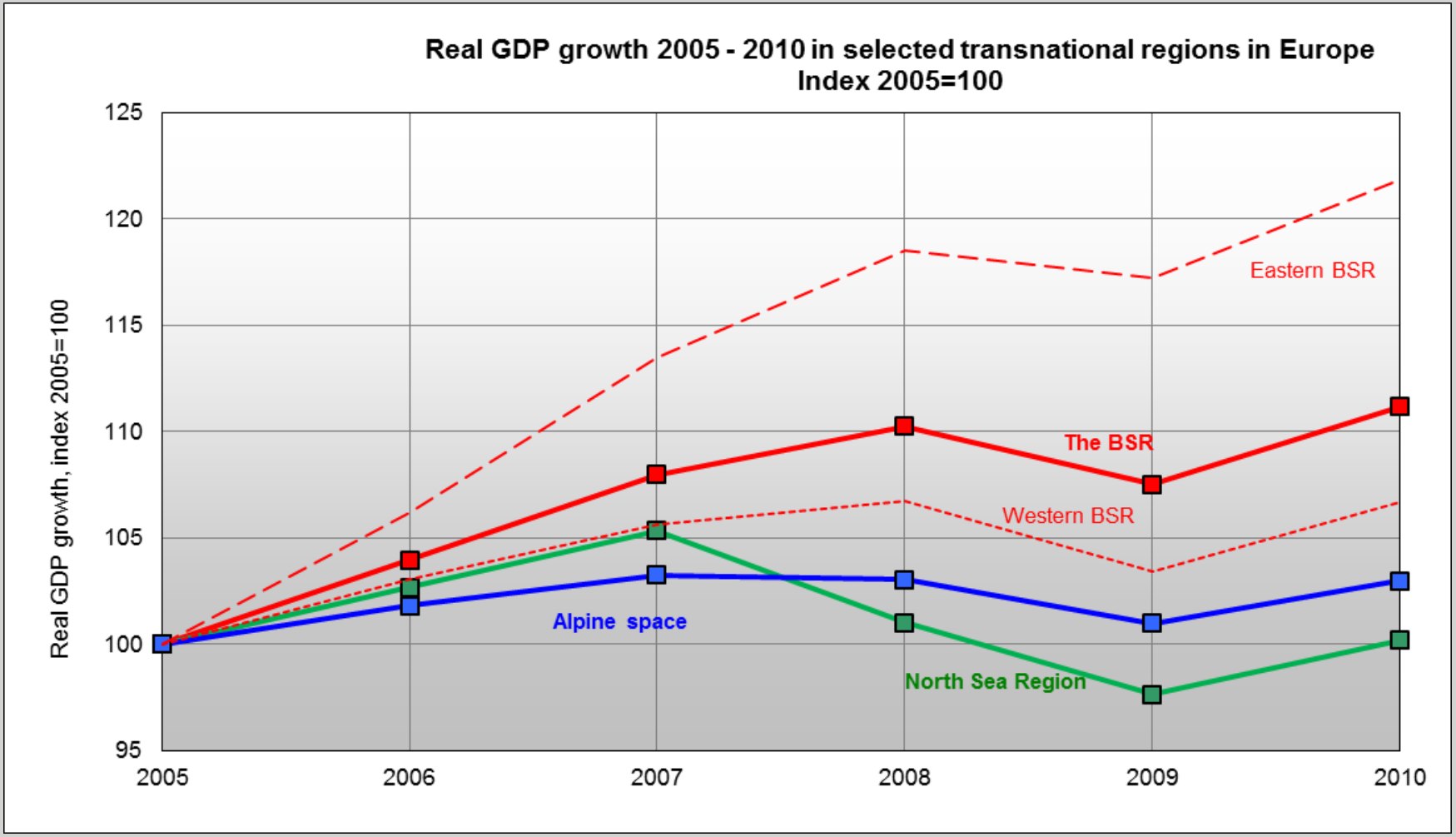
Benchmarking



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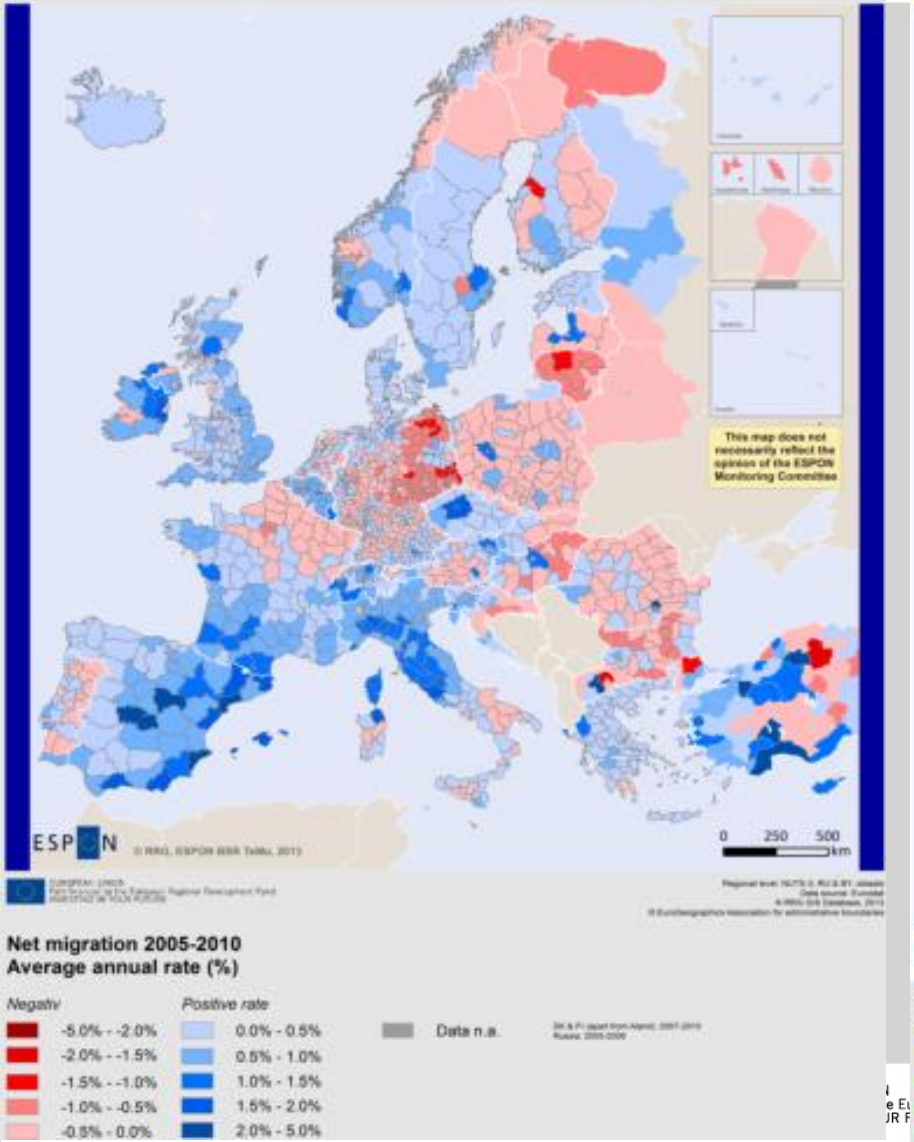
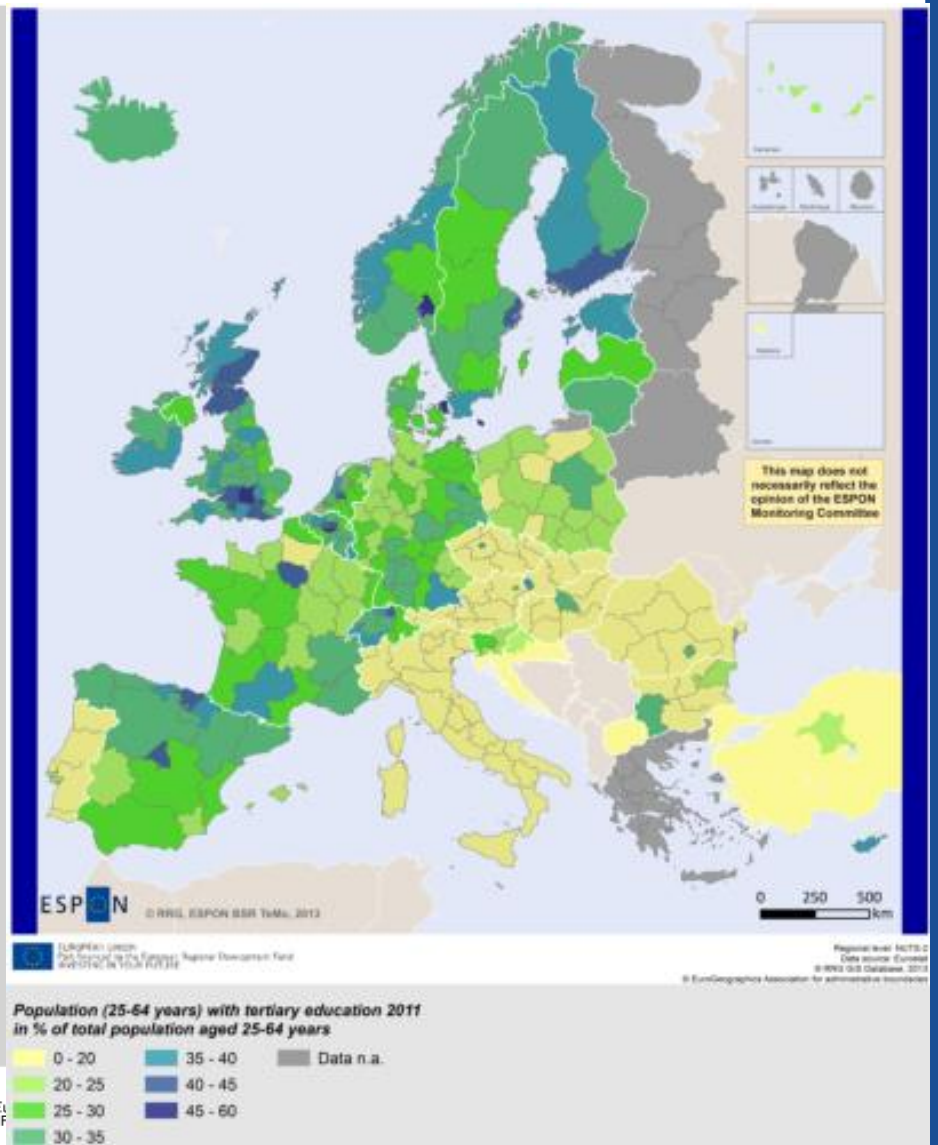
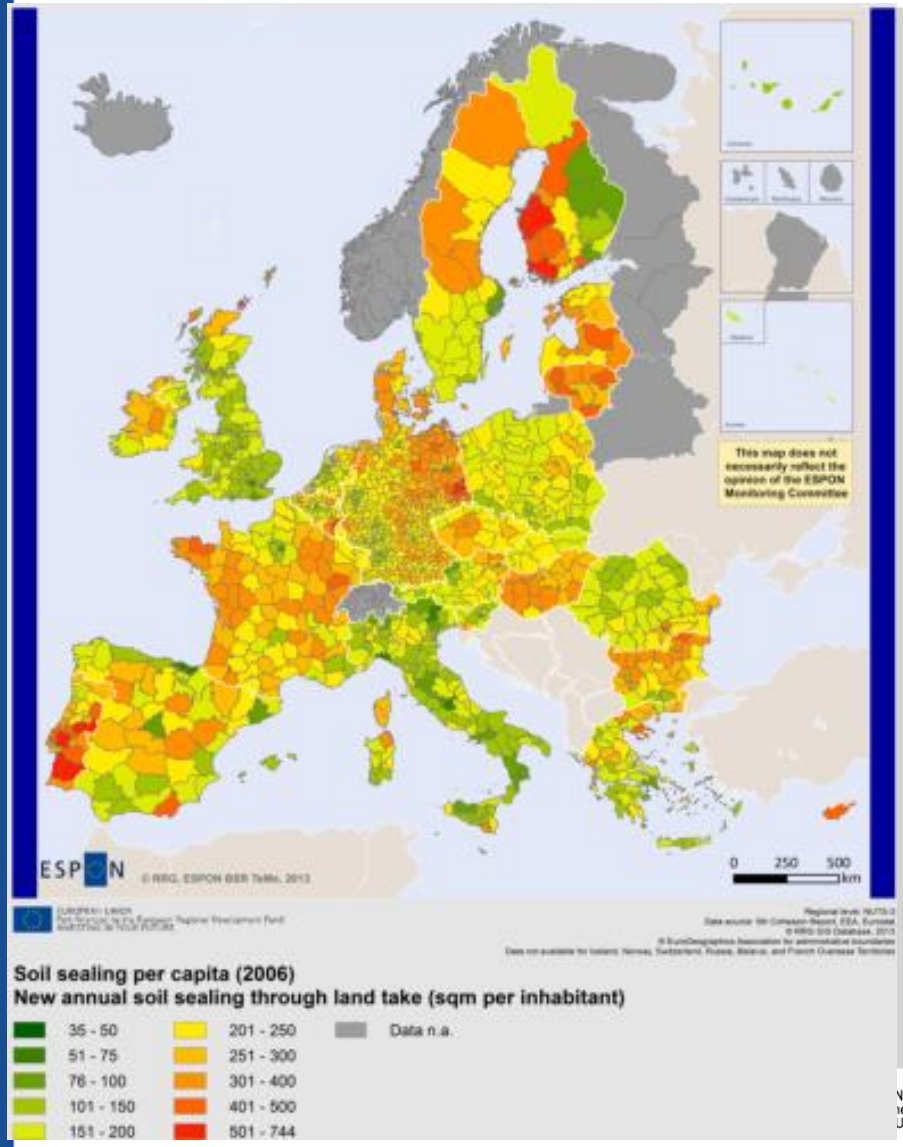
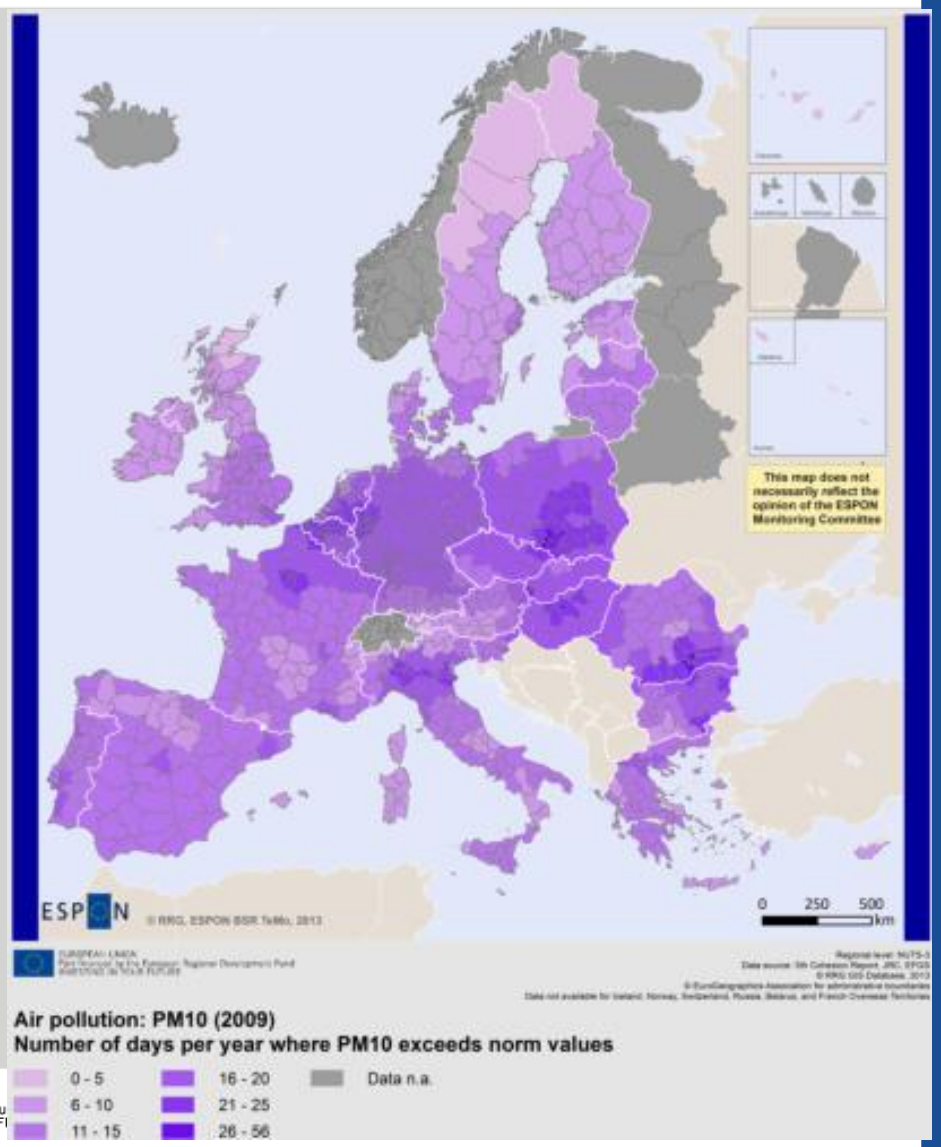
Comparison with EU territory





Comparison with EU territory





Visualisation

- Have taken into consideration the wishes of stakeholders w.r.t.

  - Methods of analysis
  - Concepts for visualization (types of maps etc.)

- One idea was to develop a simple tool which could simplify the access to the indicators and the analysis.

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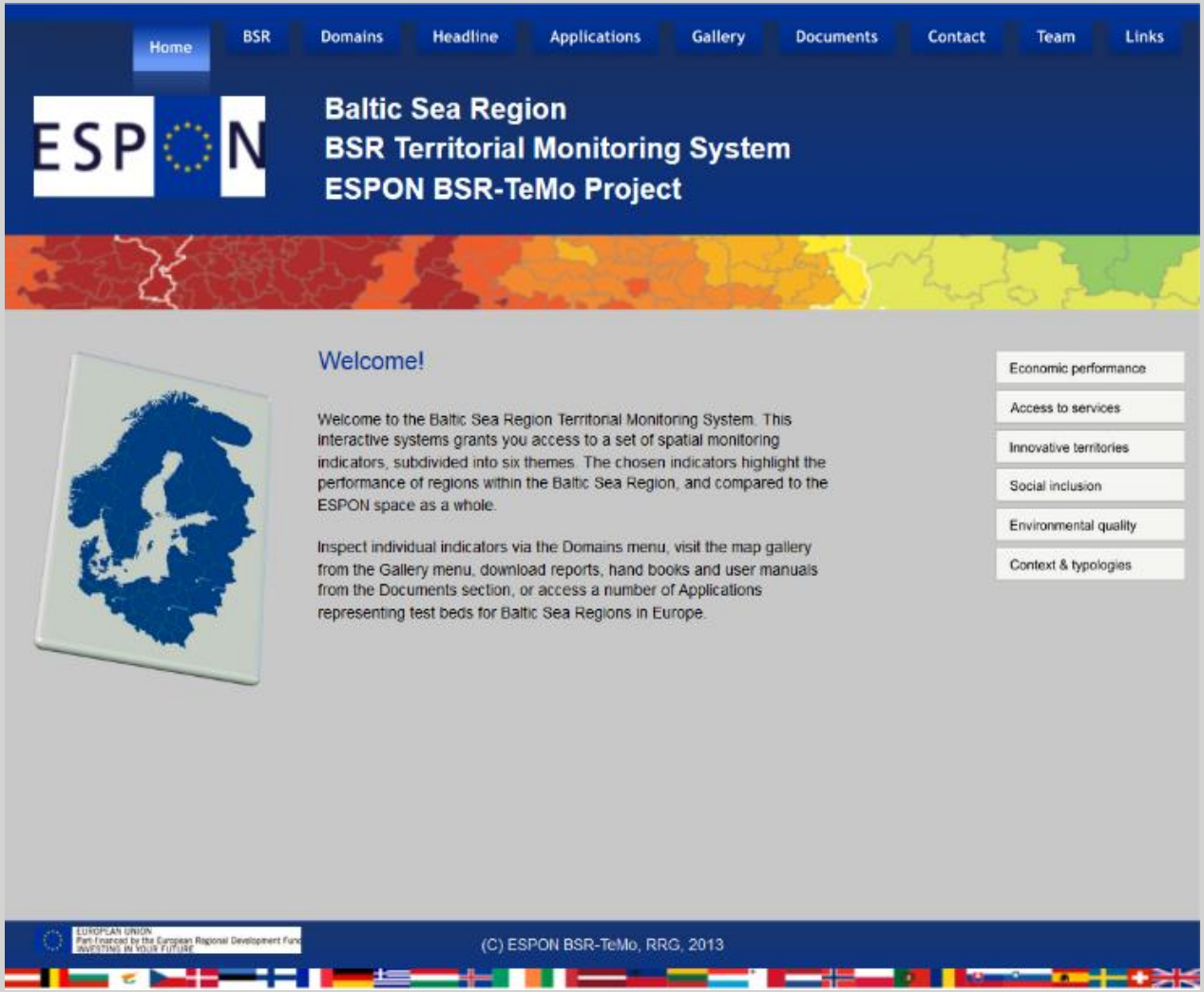
Presentation Tool: http://bsr.espon.eu



What we have learnt:

- ✓ Urban/rural divides is perhaps the most important territorial aspect to focus on in the BSR.
- ✓ The east-west gap is partially closing, but…it has now changed into a far more multifaceted divide, where social differences are the most pronounced ones.
  - ✓ Focus on social, poverty and health aspects across the BSR in order to boost long run development in the region.

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What we have learnt:

- ✓ Challenge of BSR: Increasing spatial polarisation, further aggravating already existing unbalanced regional structures
    - ✓ Territorial disparities between adjacent regions have in the past 15 years “exploded”
- ✓ 10 urban regions swallow 47 % of all migration surplus in the BSR
- ✓ Border regions are often remote and sparse: hence the challenges are more about these factors than something to do with the border.

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What we have learnt:

- ✓ Monitoring as it is conducted right now is focusing mainly on “mega-trends” or “end-game” results of (current) policy. It is not as efficient per se at monitoring/understanding results in the context of the new CSF and its 11 objectives. It is more “backwards compatible” with the priorities of the ESDP and TA2020.
    - ✓ How to make the analysis of 11 thematic objectives “territorial”?
- ✓ Evidence and themes for monitoring has to be updated all the time, and it has to be based on up-to-date data!
- ✓ We only measure what is in the policy today – are we missing trends which are not in our current “view”?

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Baltic Sea Region
BSR Territorial Monitoring System
ESPON BSR-TeMo Project

Economic performance and competitiveness

Macroeconomic development

- GDP per capita
- GDP per person employed

This subdomain looks into the performance and structure of the economy as a whole, in terms of GDP and labour productivity.

Labour market

- Unemployment rate, total
- Employment rate (20-64 years)

This subdomain looks into two major components of labour markets, which are unemployment and employment rates.

Demography

- Net migration rate
- Total population change
- Economic dependency ratio

What are the demographic driving forces for the economy? This subdomain looks into migration as indicator for the attractiveness of a region, the overall population development as well as the economic dependency ratio.

Baltic Sea Region
BSR Territorial Monitoring System
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Unemployment rate, total

Indicator
Map gallery
Statistics
Tables & Maps
Implementation
Metadata

Indicator definition

The unemployment rate represents the ratio between unemployed workers in relation to the total labour force. This indicator gives the overall unemployment rate

Indicator importance

This indicator measures the quality and performance of regional labour markets. it constitues a contextual indicator important to assess regional flexibility as well as sustainability of local economic activities.

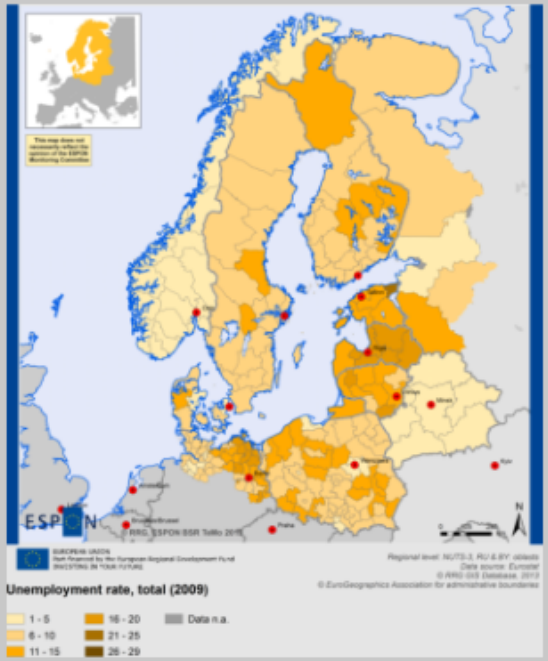
Findings

In 2005, serious unemployment could be found first of all in Poland, Slovakia and East-Germany. Over 10% unemployment was also in Southern Spain, southern Italy, Finnish periphery, Bulgaria and Greece. 2006-2007 the employment situation improved all over the ESPON area, except East Germany and Spain. Especially the situation in Poland improved. High unemployment started to spread to the north in Spain from 2008. In 2009, Spain, Ireland, the Baltic States were hit severely, the situation worsened in Turkey, too.

In BSR, the biggest change in unemployment pattern has been improving in Poland and worsening in the Baltic States. Finnish periphery and East Germany have remained areas of remarkable unemployment through all the period.

Discontinuities:

A difference of 100% and more existed along the Norwegian and Belarus external borders, but also in a few sections around prosperous metropolitan regions of Warszawa and Copenhagen. Elsewhere the differences have been less. However, unemployment was spread more evenly in the Nordic countries, but the situation was more mosaic in the Baltic States, Poland and Germany



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Unemployment rate, total

Indicator
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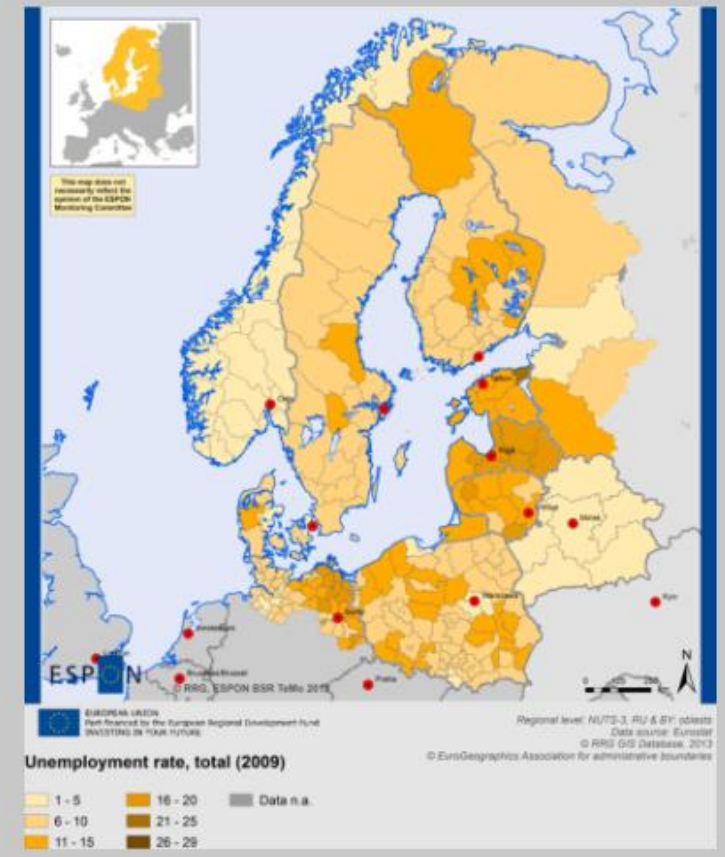
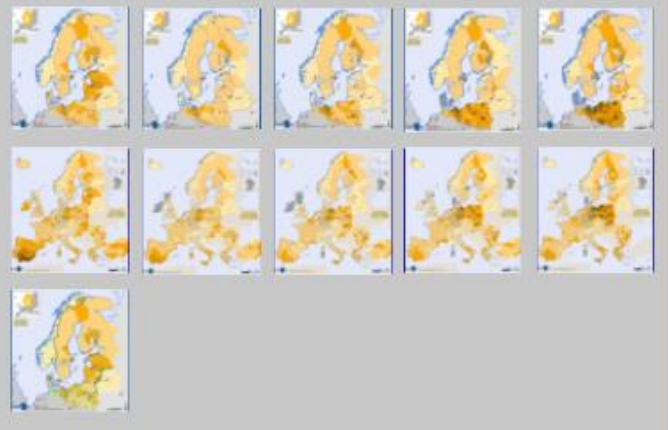
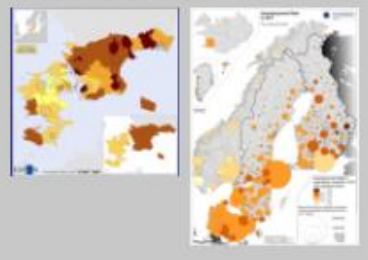
Indicator maps



Monitoring maps (BSR, ESPON space, Change)



Alternative maps (LAU-2)

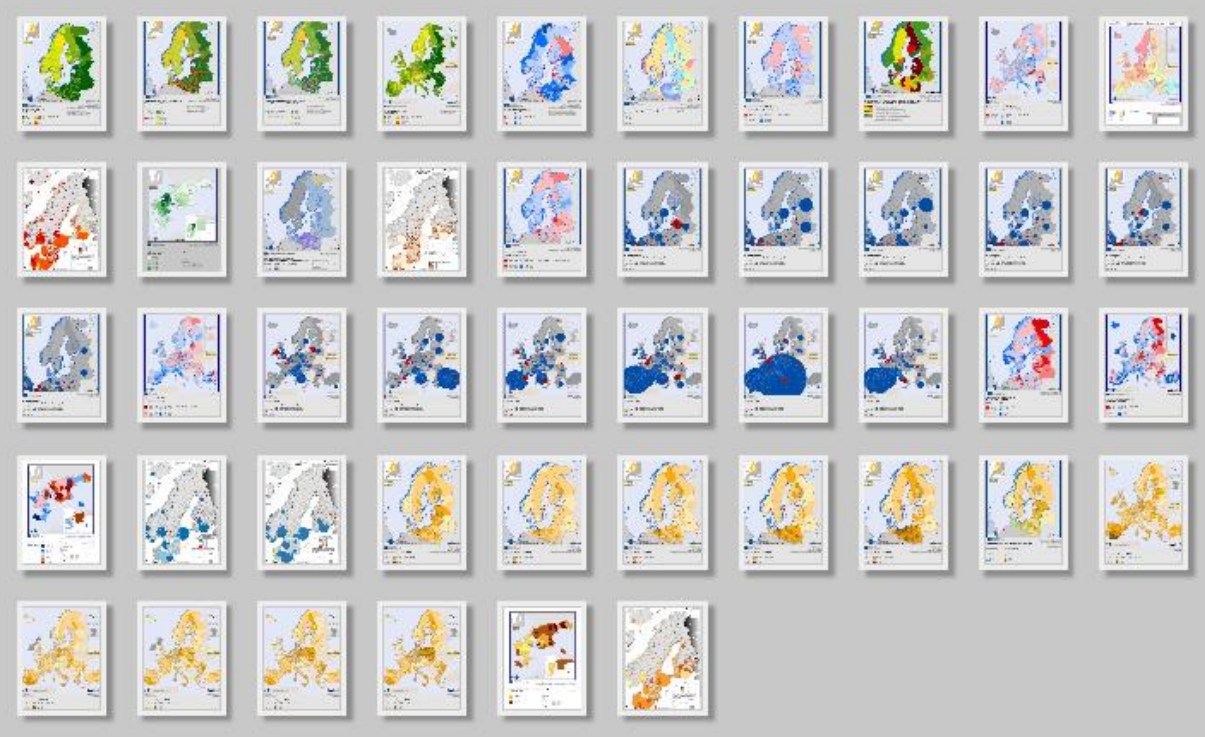


Click to enlarge maps

ESPON

Baltic Sea Region
BSR Territorial Monitoring System
ESPON BSR-TeMo Project

Map gallery: Economic performance and competitiveness



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Baltic Sea Region
BSR Territorial Monitoring System
ESPON BSR-TeMo Project

Unemployment rate, total

Indicator
Map gallery
Statistics
Tables & Maps
Implementation
Metadata

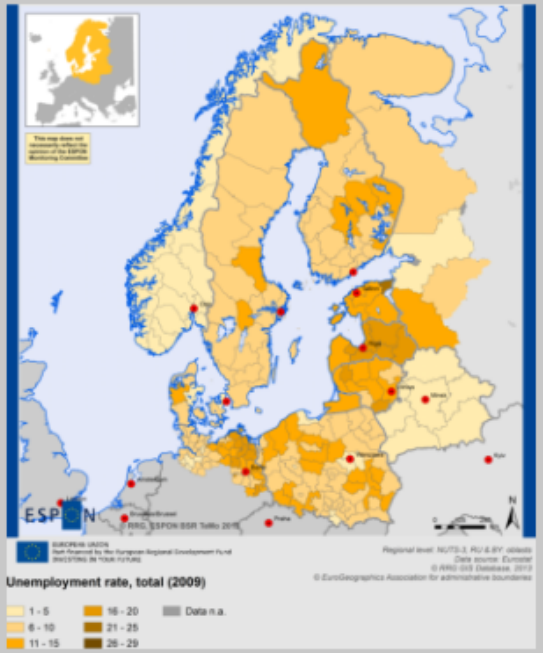
Data table

Click here to open the Excel file with the indicator numbers in ESPON standard Excel file format.

Maps download

Click on map format names to download maps in PNG, AI or SVG file format.
Unemployment rate, total, 2009, BSR (png) (ai) (svg)
Unemployment rate, total, 2008, BSR (png) (ai) (svg)
Unemployment rate, total, 2007, BSR (png) (ai) (svg)
Unemployment rate, total, 2006, BSR (png) (ai) (svg)
Unemployment rate, total, 2005, BSR (png) (ai) (svg)
Unemployment rate, total, 2009, ESPON (png) (ai) (svg)
Unemployment rate, total, 2008, ESPON (png) (ai) (svg)
Unemployment rate, total, 2007, ESPON (png) (ai) (svg)
Unemployment rate, total, 2006, ESPON (png) (ai) (svg)
Unemployment rate, total, 2005, ESPON (png) (ai) (svg)
Territorial discontinuity in unemployment rate, BSR (png) (ai) (svg)

Further related maps can be download from here as well:
Unemplyoment rate in Copenhagen/Skane region, ESPON INTERCO (png)
Unemployment rate, LAU-2, Nordic countries, Nordregio (png)



Final Report

Click here to open the TeMo Final Report as PDF file with indicator results.

Thank you!

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