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VASAB Annual Conference
7-8 February 2011 in Warsaw

Territorial Cohesion in the Baltic Sea Region: Support from ESPON Evidence

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The Baltic Sea Region

Important Characteristics

- European macro region defined around “water”
- Great regional diversity, specially in population density and climatic conditions
- High level of cooperation and networking
- Long tradition in territorial visions and strategies, starting with VASAB 2010
- Long-term Territorial Perspective
- EU Baltic Sea Region Strategy (to be updated)

Structure of Intervention

Focus

- ESPON evidence and facts looking at the Baltic Sea Region from the European perspective
- Derived ideas for promoting territorial cohesion

Content

- Policy Framework and Orientations for Territorial Cohesion
- Observing the BSR - Territorial Structures, Trends and Perspectives
- Options for promoting Territorial Cohesion in the Baltic Sea Region

Policy Framework for Territorial Cohesion

Main European Policy Directions

- Intelligent, Sustainable and Inclusive Growth
- Cohesion Policy as investment policy for economic, social and territorial cohesion
- Solidarity fostering spread of growth and prosperity
- Competitiveness based on strong regional and local economies
- Global Europe in an increasingly connecting World

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Policy Approaches for Territorial Cohesion

Main Policy Approaches

- Harvesting territorial potentials and converging challenges into opportunities (double track policy)
- Regional diversity as a strength (calling for tailor made policy mixes unlocking potentials)
- Place-based, integrated development of regions and cities (promoting a functional area approach)
- Integration of sector policies (ensuring synergies)
- Cooperation (joining forces exploring comparative advantages and increasing joint critical mass)
- Multilevel Governance (condition for optimal delivery)
- More use of Strategies

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Policy Directions for Territorial Cohesion

European Territorial Priorities and Orientations

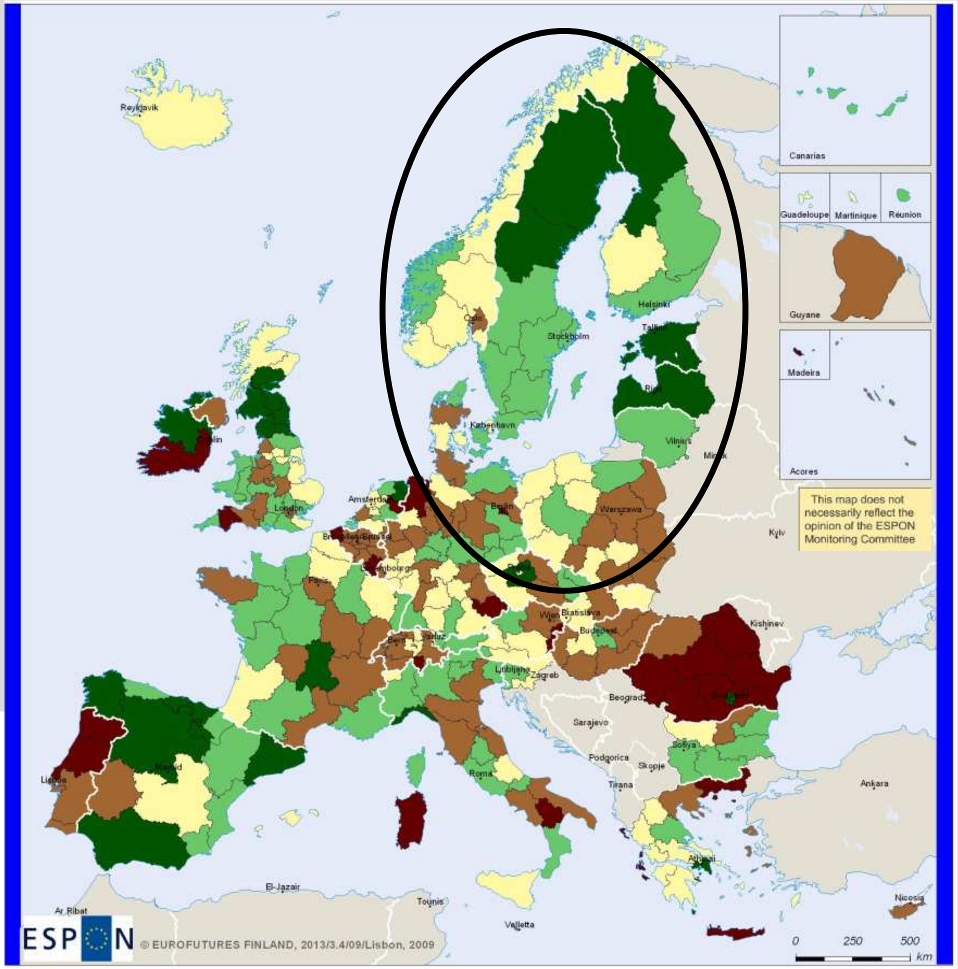
- Harmonious and Balanced territory
- Polycentric Europe (at EU, national and regional level)
- Urban drivers of economic growth
- Connectivity and accessibility improvement (for individuals, communities and enterprises)
- Ecological and cultural assets for development
- Attention to challenges of specific types of regions
- Rural-Urban partnerships
- Networking of cities (neighbours and long distance)
- Cross-border and transnational functional regions (such as Macro Regions)

Socio-Economic Realities

Trends in composite Lisbon Performance 2000-2006

- Many BSR regions improving their relative performance before the crisis
- Only a few regions in the BSR had a relative loss

7 out of 14 Lisbon indicators:
(1) GDP/capita,
(2) GDP/employed person,
(3) Employment rate,
(4) Employment rate of older workers,
(5) Gross domestic expenditure on R&D
(6) Dispersion of regional unemployment rates
(7) Long-term unemployment rate.



Change in composite Lisbon performance ca. 2000-06

< -0.4	(Strongly improving relative performance)
-0.4 – -0.1	(Improving relative performance)
-0.1 – 0.1	(Relative performance largely unchanged)
0.1 – 0.4	(Weakening relative performance)
> 0.4	(Strongly weakening relative performance)

No data available

For each of the seven variables, all regions are ranked from 1 through 287 and then divided into quartiles (1 through 4). Composite performance calculated as the average of these seven quartile rankings.

Change calculated as nr of points change in composite average performance between last and first year. Negative value= relative improving performance; positive value = relative worsening performance.

Composite performance based on following seven regionalised Lisbon short list indicators:

1. Gross Domestic Product in PPS per capita (ca. 2000-06)
2. Gross Domestic Product in PPS per person employed (ca. 2000-05)
3. Employment rate, total (ca. 2000-06)
4. Employment rate, 55-64 years (ca. 2000-06)
5. Total intramural R&D expenditure (GERD) as a percentage of GDP (ca. 2000-06)
6. Dispersion of regional unemployment rates (ca. 2000-06) [1]
7. Long-term unemployment rate (ca. 2000-06) [2]

Precise data years vary substantially per region. For exact information, see final report of ESPON 2013 project 2013/3.4/09/Lisbon, 2009.

[1] Coefficient of variance [$s^2 = \frac{\sum (X-M)^2}{N-1}$] of NUTS 3 unemployment rates within each NUTS 2 region.
[2] Persons unemployed for 12 months or over as a share of the economically active population.

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Regional level: NUTS 3
Source / Origin of data: Eurostat/New Cronos, Statistics Iceland, Landesverwaltung Fürstentum Liechtenstein, Statistics Norway, Statistik Schweiz

Composite Lisbon Performance, 2006

- Regional diversity of potential contribution to growth
- North-West BSR showing highest performance
- South-Eastern regions lesser performing

7 out of 14 Lisbon indicators:
(1) GDP/capita,
(2) GDP/employed person,
(3) Employment rate,
(4) Employment rate of older workers,
(5) Gross domestic expenditure on R&D
(6) Dispersion of regional unemployment rates
(7) Long-term unemployment rate.

Composite Lisbon performance

Average quartile for all seven mapped indicators:

- 1.0 – 1.5 (High performance, most indicators in the best quartile)
- 1.5 – 2.0
- 2.0 – 2.5 (Medium performance)
- 2.5 – 3.0 (Medium performance)
- 3.0 – 3.5
- 3.5 – 4.0 (Low performance, most indicators in the worst quartile)
- No data available

For each of the seven variables, all regions are ranked from 1 through 287 and then divided into quartiles (1 through 4). Composite performance calculated as the average of these seven quartile rankings.

Composite performance based on following seven regionalised Lisbon short list indicators:

1. Gross Domestic Product in PPS per capita (ca. 2006)
2. Gross Domestic Product in PPS per person employed (ca. 2005)
3. Employment rate, total (ca. 2006)
4. Employment rate, 55-64 years (ca. 2006)
5. Total intramural R&D expenditure (GERD) as a percentage of GDP (ca. 2006)
6. Dispersion of regional unemployment rates (ca. 2006) [1]
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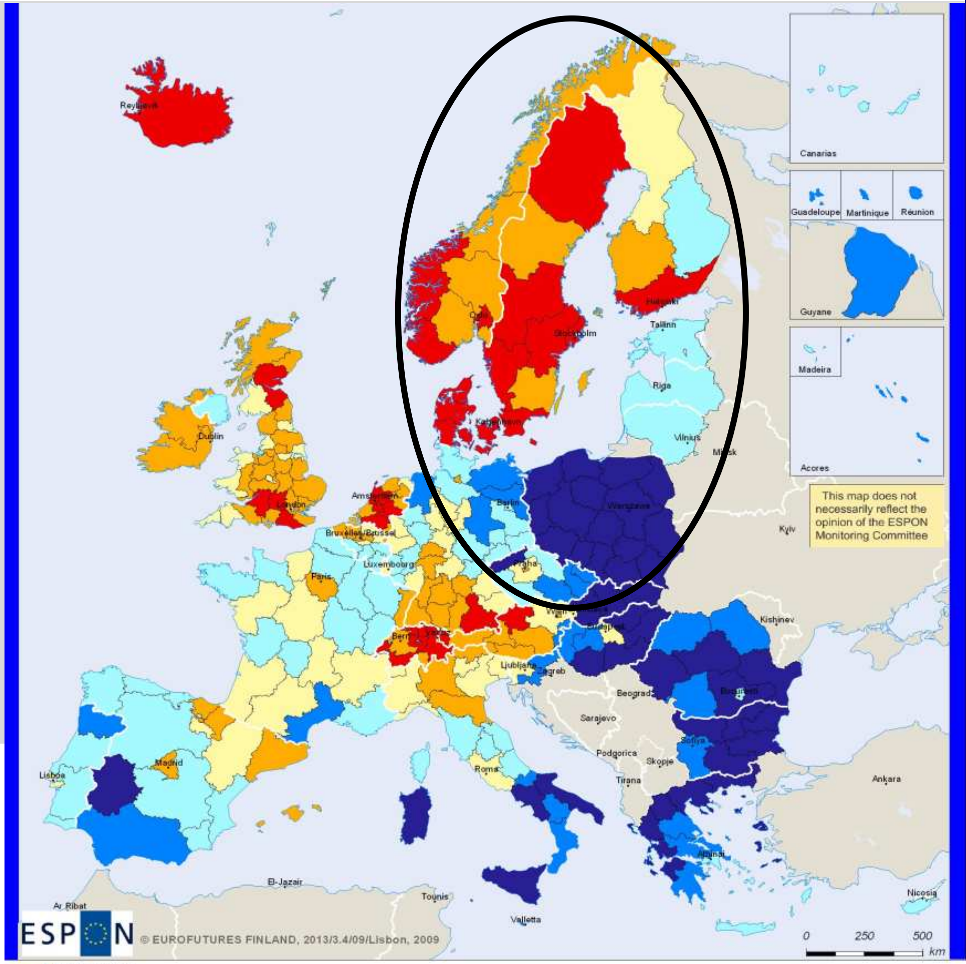

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Regional level: NUTS 3
Source / Origin of data: Eurostat/New Cronos, Statistics Iceland, Landesverwaltung Fürstentum Liechtenstein, Statistics Norway, Statistik Schweiz
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Unemployment in European regions, March 2010

- The economic downturn hit some BSR countries and regions severely, facing unemployment rates in 2010 above 10%
- Investment options:
  - Innovation, R&D and training
  - Nano-, Bio-, Info-tech and Cognitive Sciences
  - Green growth and low carbon economy

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Regional level: NUTS 2-3 (version 2006)
Source: ESPON 2013 Database Project (Regional values 2007 adjusted NUTS0 in March 2010)
Origin of data: ESPON 2013 Database Project, 2009; Eurostat, 2010;
Secretariat d'Etat a l'economie suisse, 2010; Statistics Iceland, 2010;
Landesverwaltung Liechtenstein, 2010
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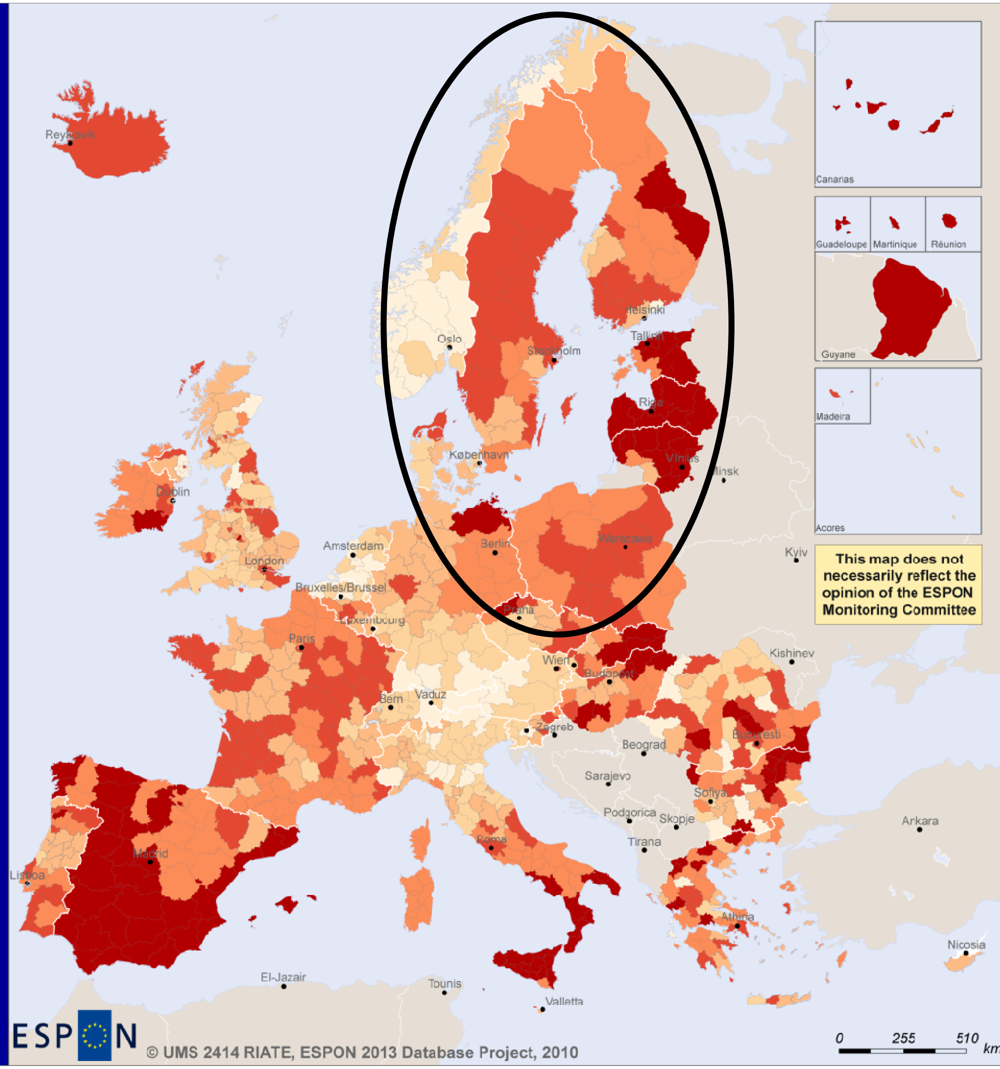
Unemployment rate (%)

0 – 4 – 6 – 8 – 10 – 15 – 49.5



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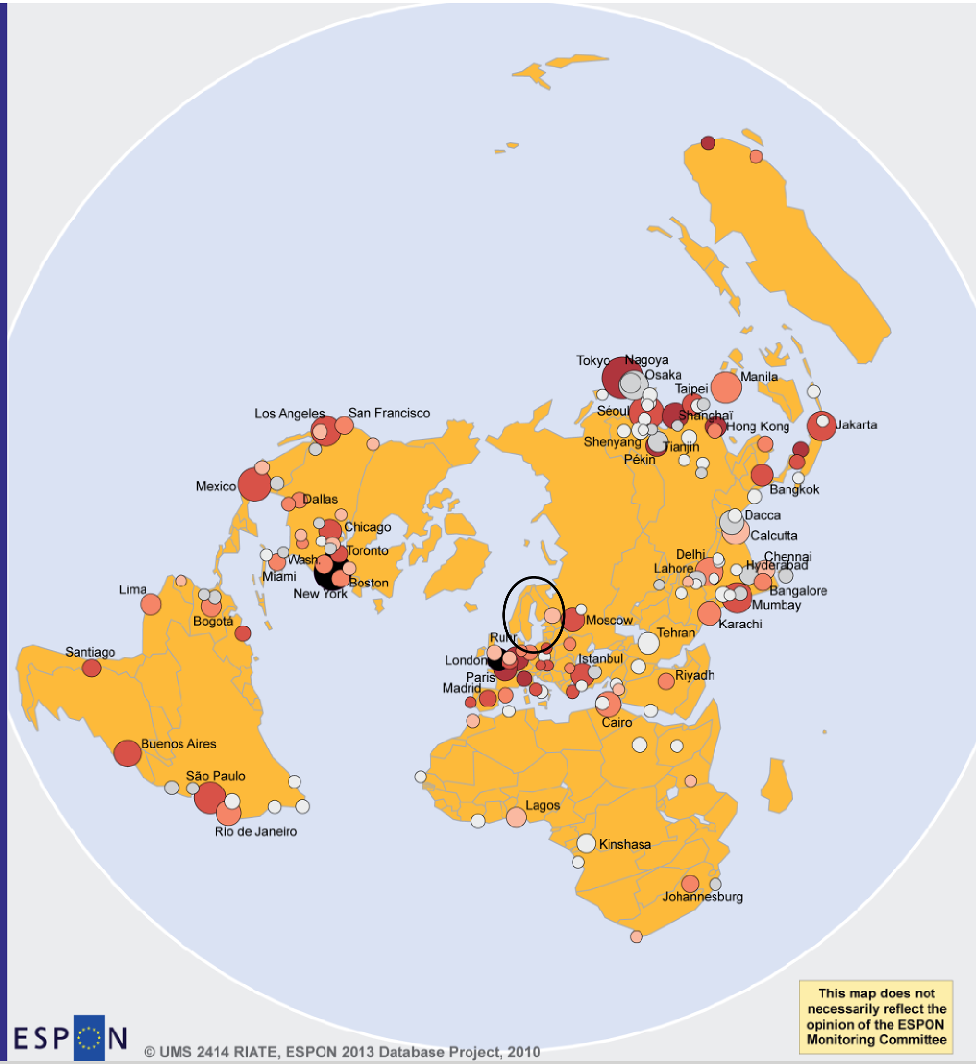
Urban Economic Drivers

World City Network, 2008

- BSR urban system without cities above 2 million inhabitants
- Nearest mega city is Saint Petersburg
- London and Paris main decision making centres in Europe



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Sources: Population: Moriconi-Ebrard F., 2001, De Babylone à Tokyo, Ophrys
World cities classification - Taylor et al., 2010, Measuring the World City Network: New Results and Developments
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City's integration into the world city network in 2008

- London and New York: clearly more integrated than all other cities
- Other highly integrated cities
- Very important world cities that link major economic regions and states into the world economy
- Important world cities that are instrumental in linking their region or state into the world economy
- World cities linking smaller regions or states into the world economy, or important world cities whose major global capacity is not in advanced producer services
- Cities that have sufficient services so as not to be overtly dependent on world cities (smaller capital cities, and traditional centres of manufacturing regions)
- Other cities

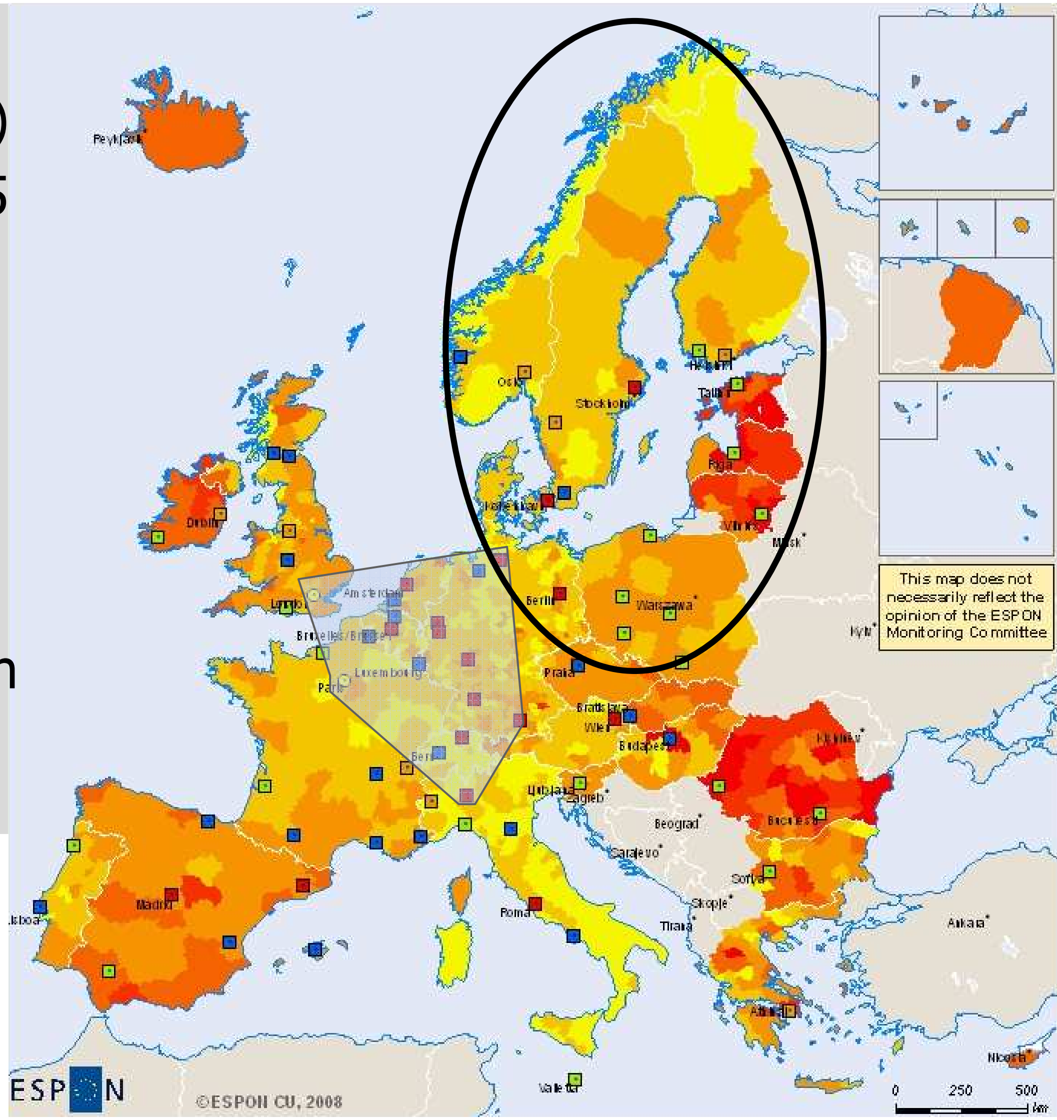
Population of Urban Areas (million of inhabitants in 2000)

30
10
2

Classification of cities based upon their level of advanced producer services.
Global service centres are identified and graded for accountancy, advertising, banking/finance and law

European Metropolitan Urban Regions

- Core “Pentagon” (14 terrritory-32 people-46 GDP)
- High GDP growth 2000-2005 in eastern BSR coming from relatively lower GDP level
- Increasing importance of Metropolitan regions in proximity of and outside the core (Pentagon)
- Potential for better European territorial balance



Average yearly development of GDP per capita in PPS 2000-2005 (percent)

GDP growth (relative)	Metropolitan Growth Area
-2,516284 - 2,000000	Global City
2,000001 - 4,000000	European City
4,000001 - 6,000000	Strong MEGA
6,000001 - 8,000000	Potential MEGA
8,000001 - 10,000000	Weak MEGA
10,000001 - 12,964394	

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Regional level: NUTS 3

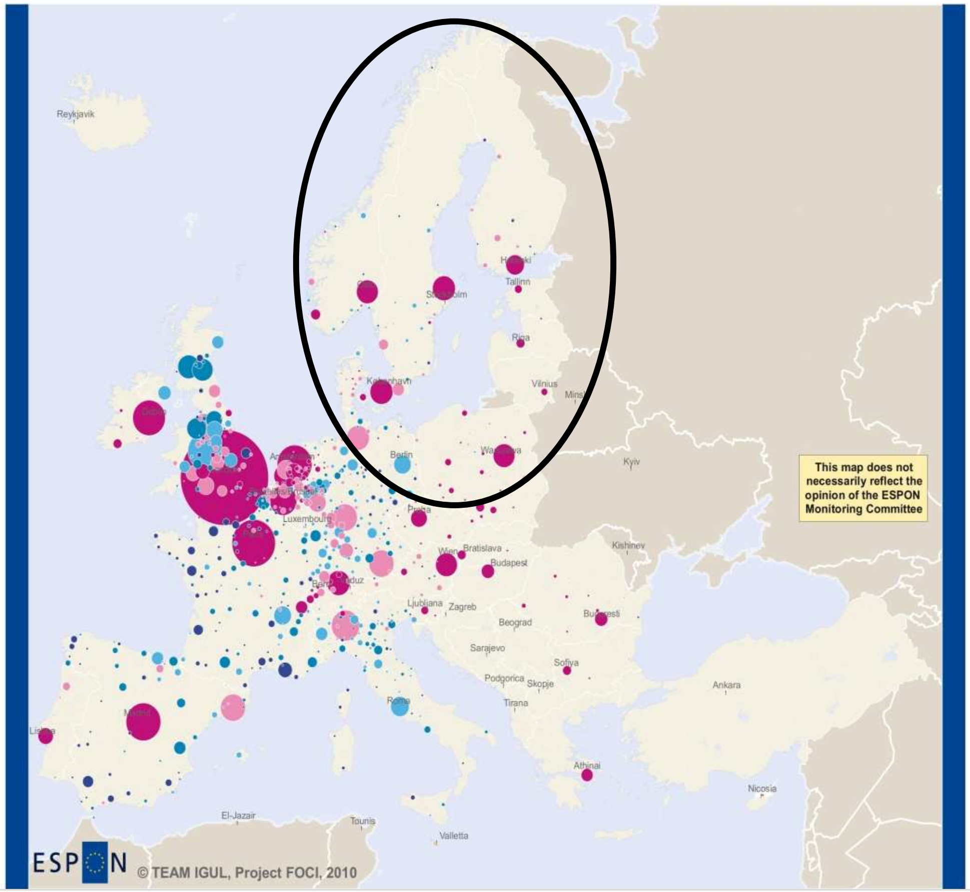
Origin of data: GDP:Eurostat, MEGA: ESPON 1.1.1 Nordregio

Source: ESPON database

Networks of Multinational Firms

- Large cities (especially capitals) group together most of the foreign-owned firms.
- Largest cities drivers in processes of innovation
- In Eastern Europe, multinational companies have decided to go directly to individual cities, avoiding the capitals.

MULTINATIONAL FIRMS NETWORKS
Location of foreign subsidiaries by FUA



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Level: FUA
Source: IGUL-LAUSANNE, Rozenblat, 2010
Origin of data: ORBIS, BVD, 2007
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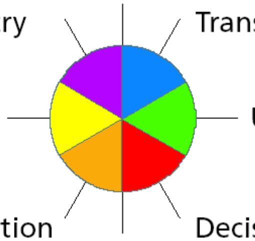
Location of foreign subsidiaries*
(in % of the total number of located subsidiaries, excepted the local controls)
- + 75
- 50-75
- 35-50
- 20-35
- 4-20

Total number of located subsidiaries
(excepted the local controls) by FUA
- 26.000
- 6.500
- 1

* in the sample of the 600.000 direct or indirect subsidiaries in the world of the first 3.000 first worldwide multinational firms

Functional specialisation of metropolitan regions

Metropolitan European Growth Areas (MEGA) by functional importance of global, European, national and trans-national significance



Size according to average value of related significance of functions

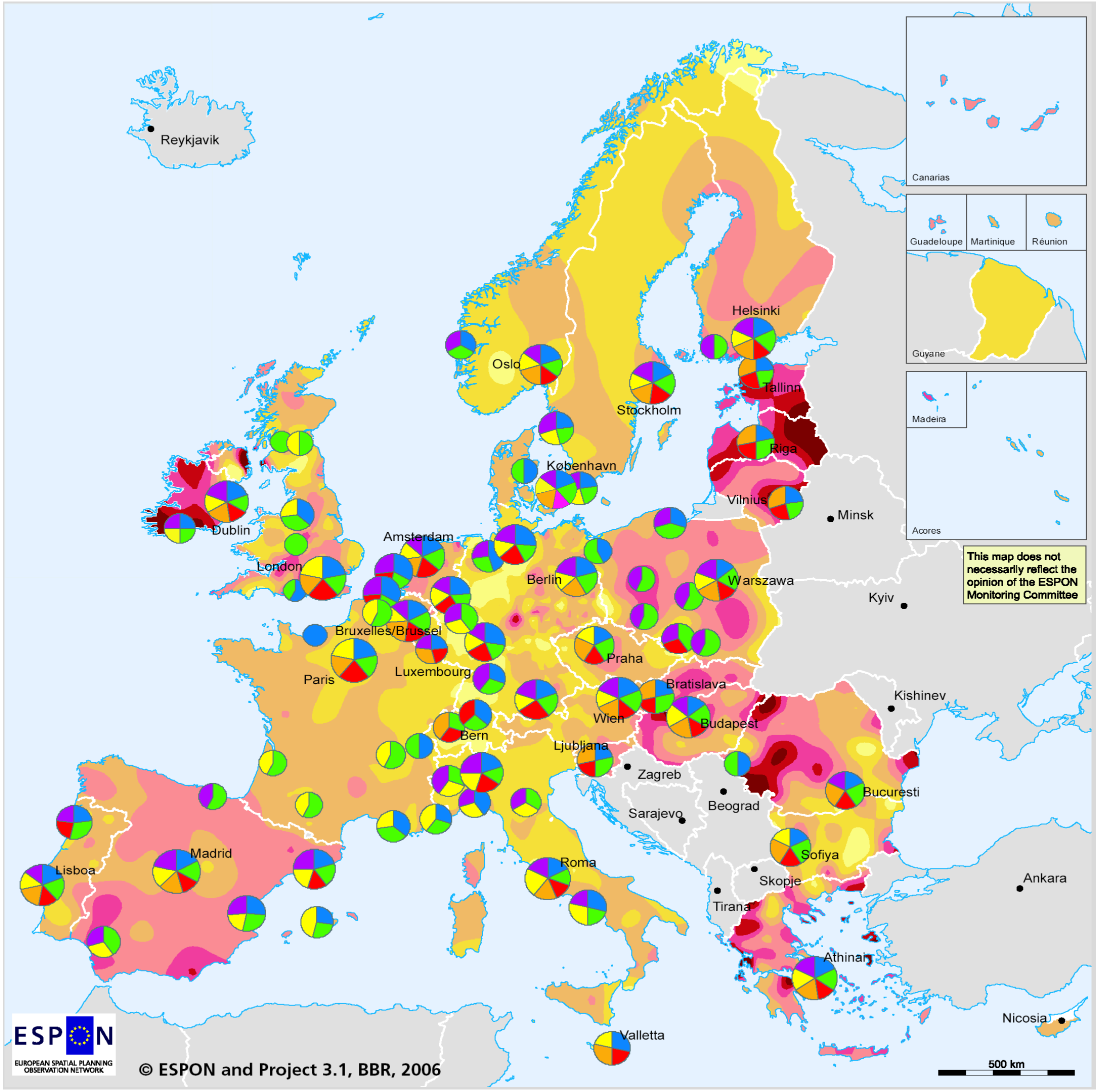
Average yearly development of GDP per capita in Purchasing Power Standards in percent 1995 to 2003 *

- to below 2
- 2 to below 4
- 4 to below 6
- 6 to below 8
- 8 to below 10
- 10 to below 12
- 12 and more
- no data

* Romania 1998 to 2003

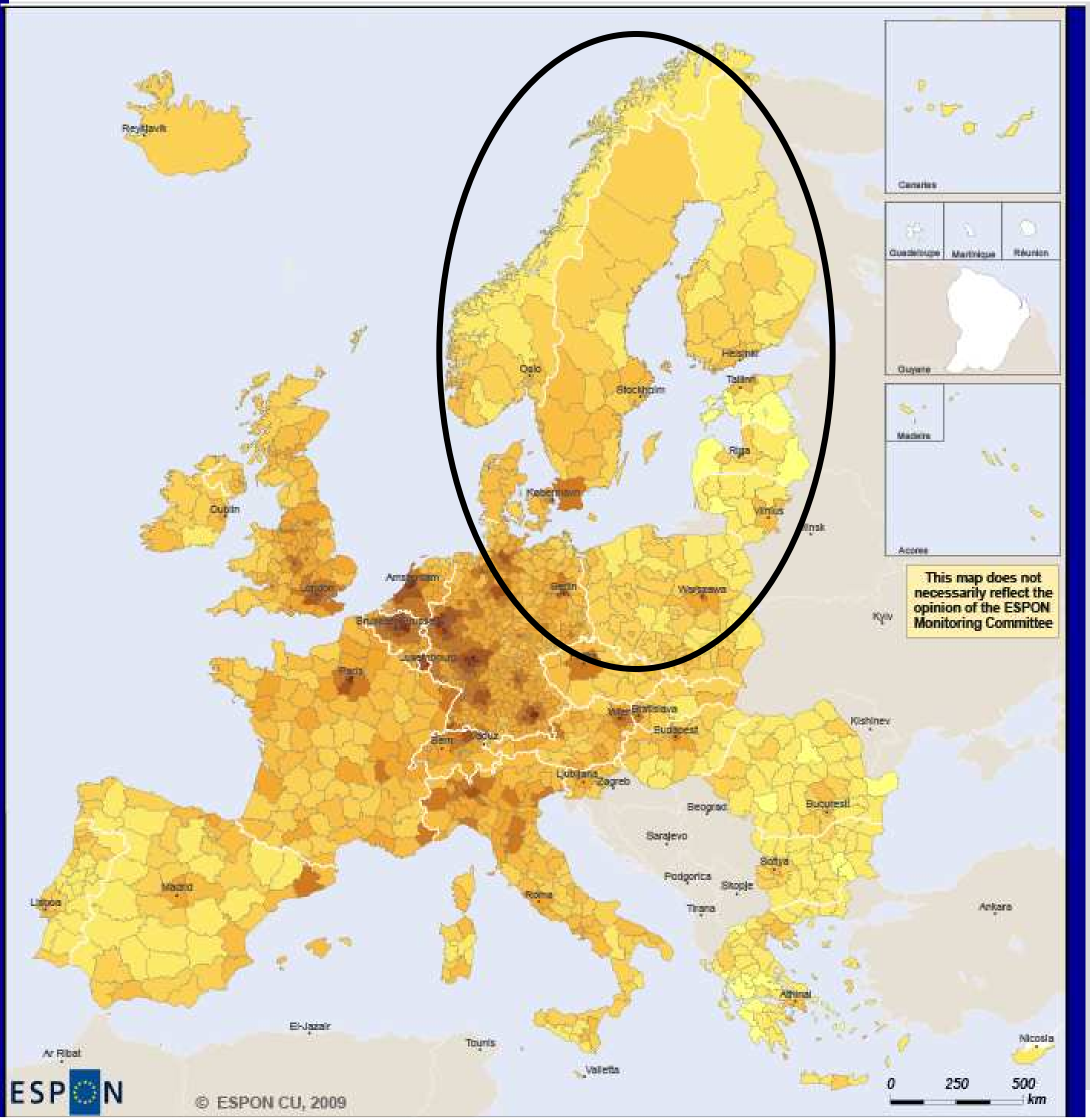
Regional level: NUTS 3
Origin of data: GDP: Eurostat, MEGA: ESPON 1.1.1 Nordregio

Source: ESPON database



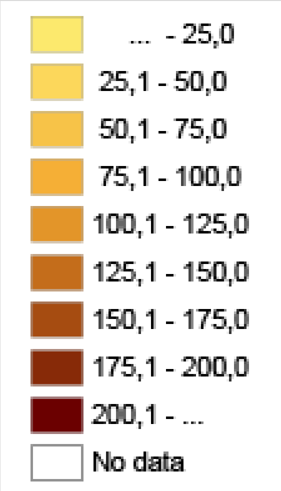
Connectivity and Accessibility

Potential Multimodal Accessibility 2006

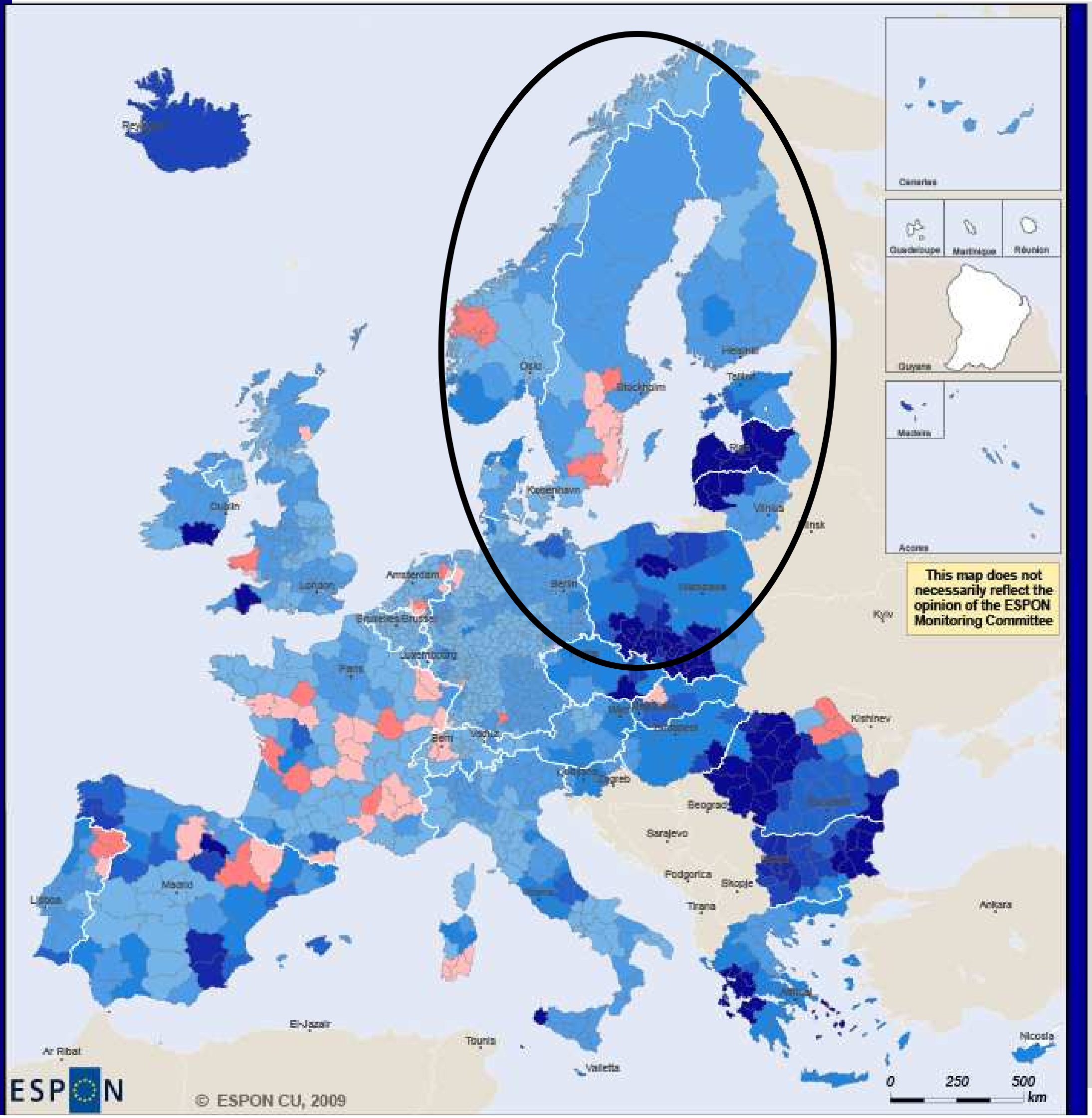


- Potential access lower than in the European core
- Some regions in north and east score particularly low
- Airports play a significant role in the BSR

Index
(EU27=100)



Potential Air Accessibility 2001-2006



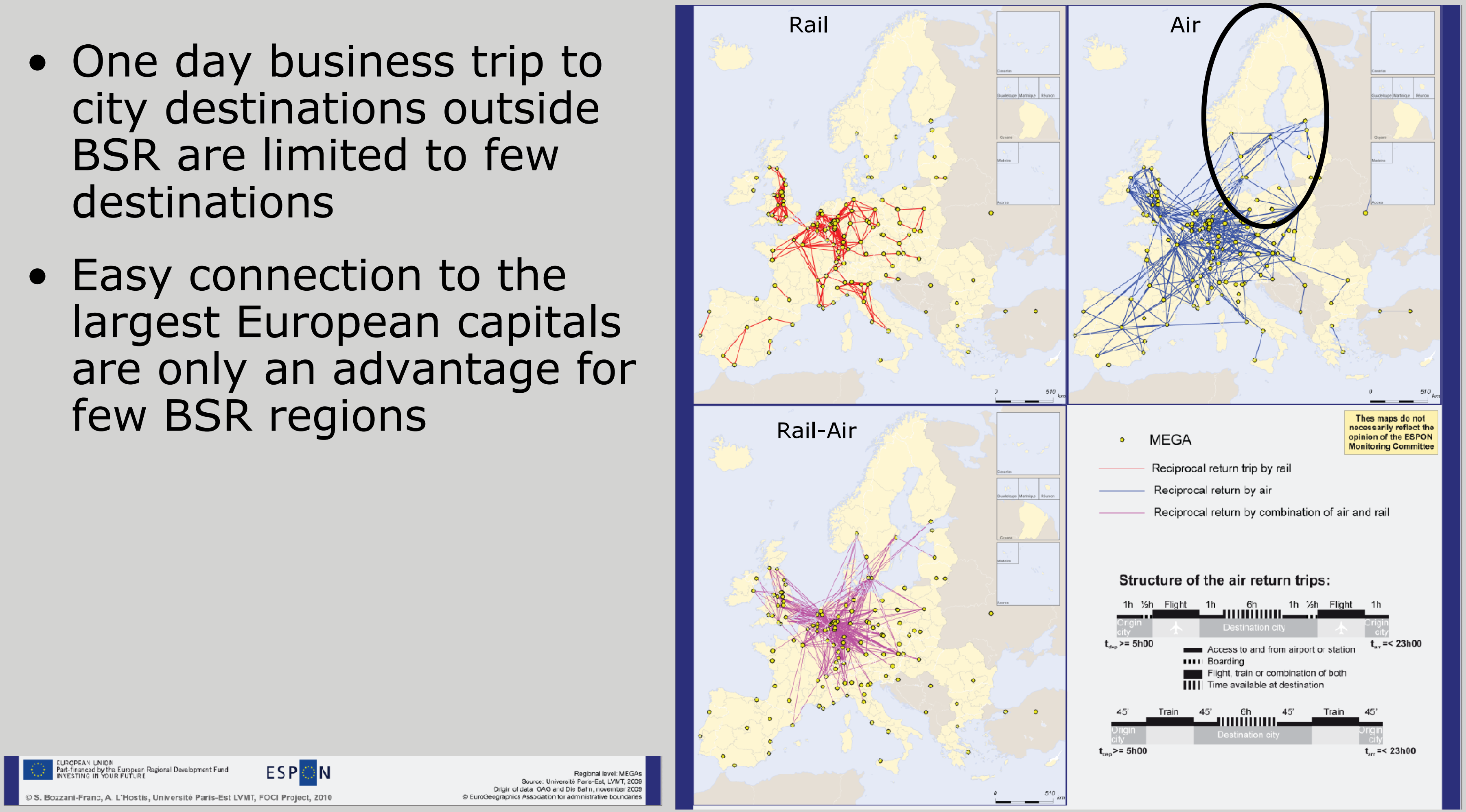
- Eastern BSR regions have experienced improved air accessibility becoming better connected

Relative change (in %)
EU27 = 7.8%

	... - -10,0
	-9,9 - 0,0
	0,1 - 5,0
	5,1 - 10,0
	10,1 - 15,0
	15,1 - 20,0
	20,1 - 25,0
	25,1 - 30,0
	30,1 - ...
	No data

City network for one-day business trips, 2009

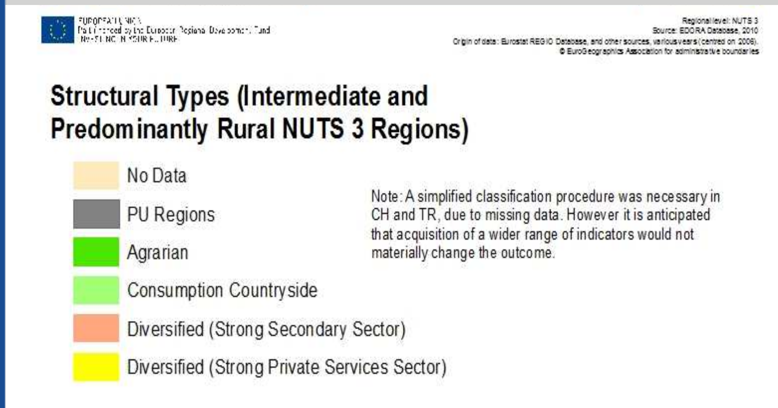
- One day business trip to city destinations outside BSR are limited to few destinations
- Easy connection to the largest European capitals are only an advantage for few BSR regions

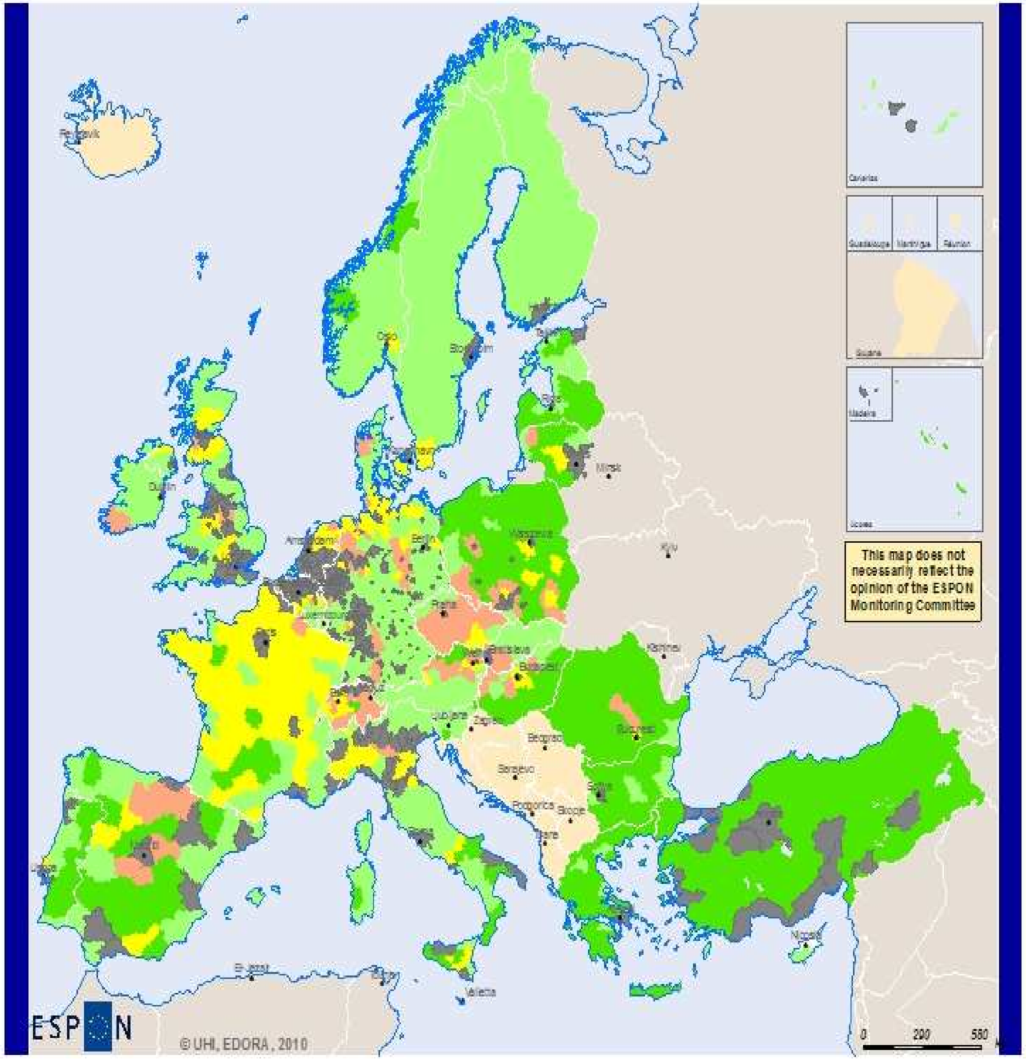


Rural – Urban Relations

Structural Types of Rural Regions

- Regions in South- East BSR with primary sector playing a major role in the local economy.
- The rest of rural BSR regions are mostly regions with a mixed economic base, including recreational functions





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Large cities - surrounding regions (GDP) 1995-2004

- Most of BSR the capital cities has gained GNP in comparison to surrounding regions
- Regional balance may become a future challenge in some eastern BSR countries

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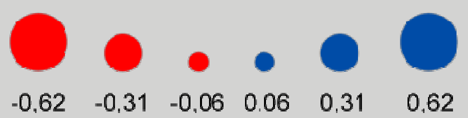
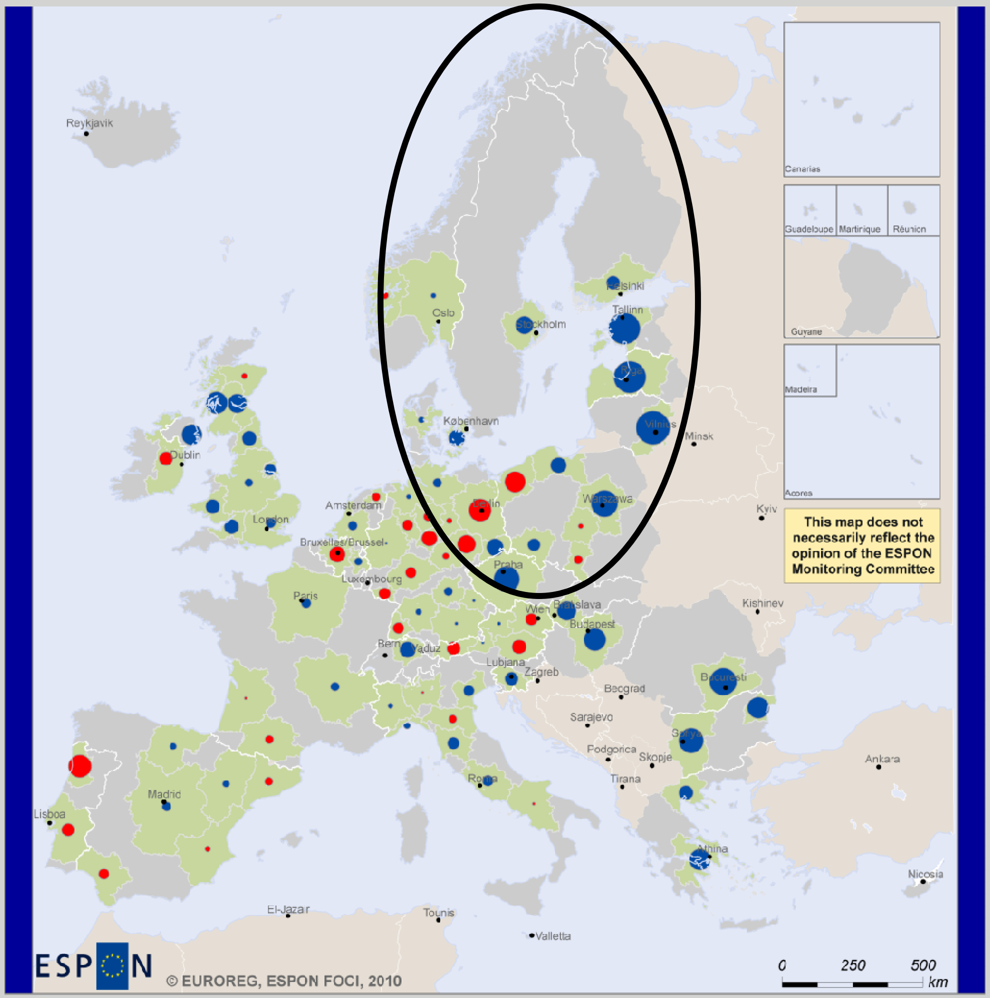
Change in GDP per capita ratio 1995-2004

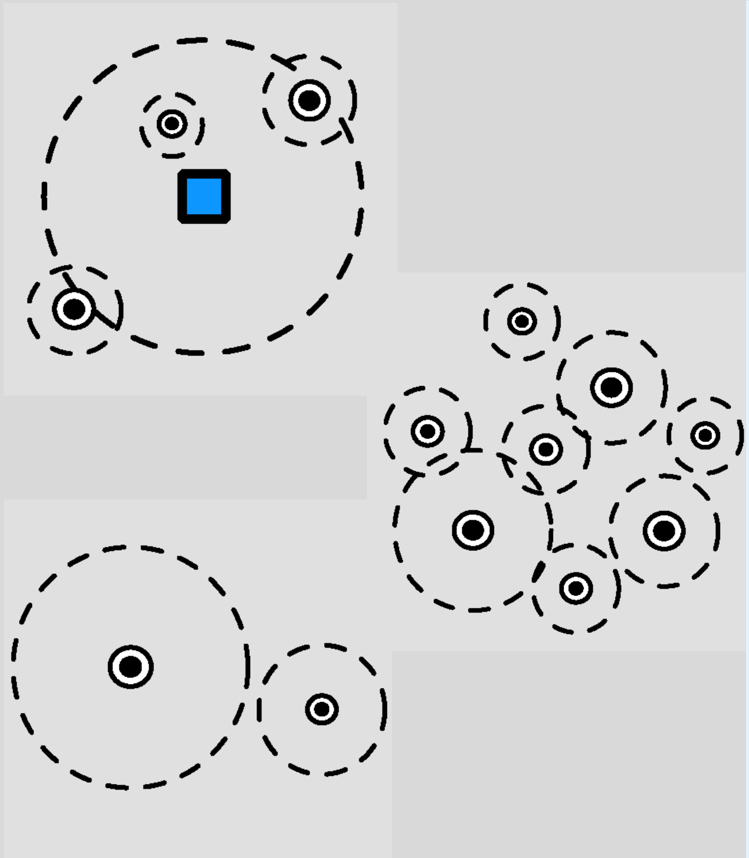


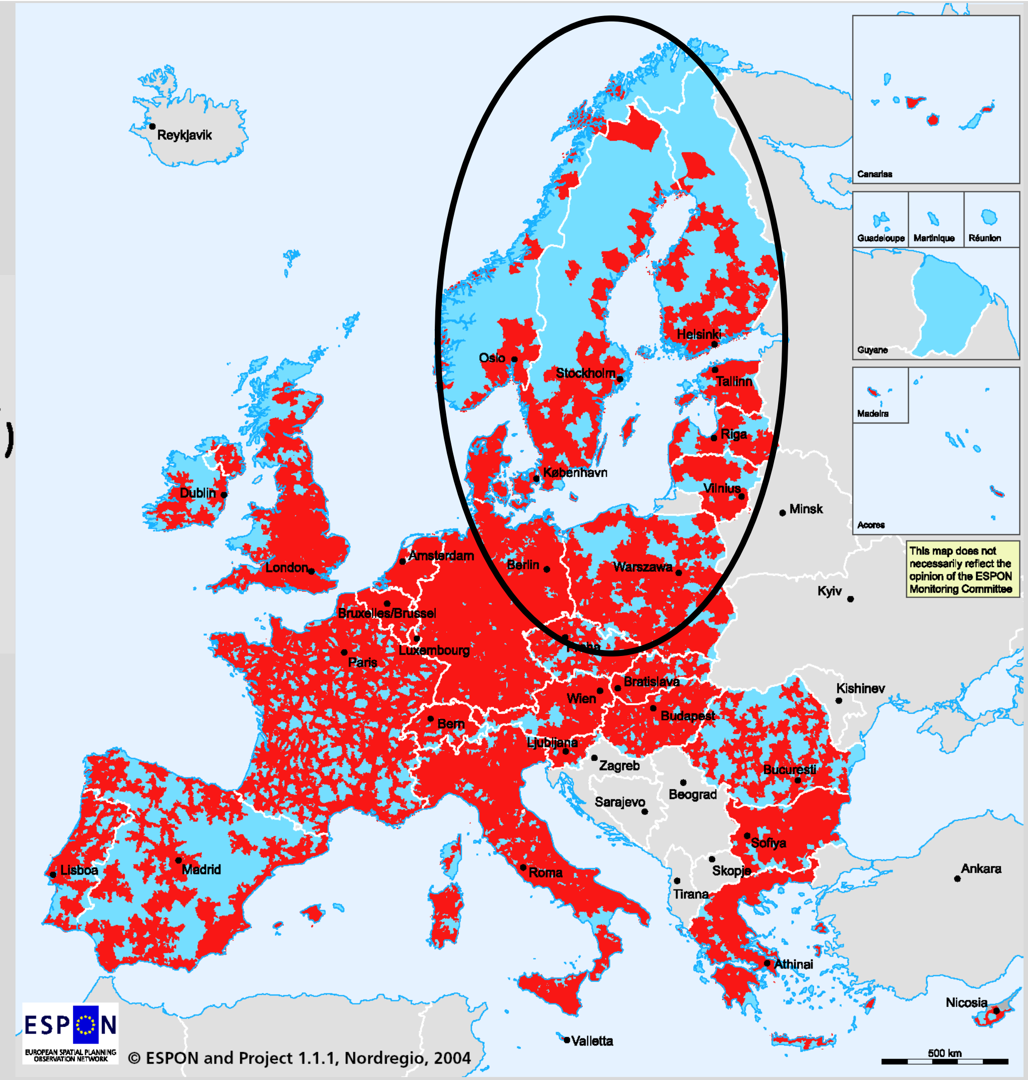
Regional level: NUTS 3
Source: ESPON 2013 Database
Origin of data: ESPON Project FOC



Potentials for territorial cooperation?

Areas in 45 minutes reach of larger urban centres





Area in 45 minutes reach from an urban centre (FUA): Potential Urban Strategic Horizons (PUSH)

Areas more than 45 minutes from the nearest urban centre (FUA)

Origin of data: ESPON Project 1.1.1, Nordregio

Demography and Migration

Demographic Reality, 2005

- Western parts of BSR largely at European average
- Eastern BSR more at risk of decline and loss of labour force

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Regional level: NUTS 2 except UK, NUTS1
Source: ESPON 2013 Database 2010
Origin of data: Eurostat NS, 2008-2009
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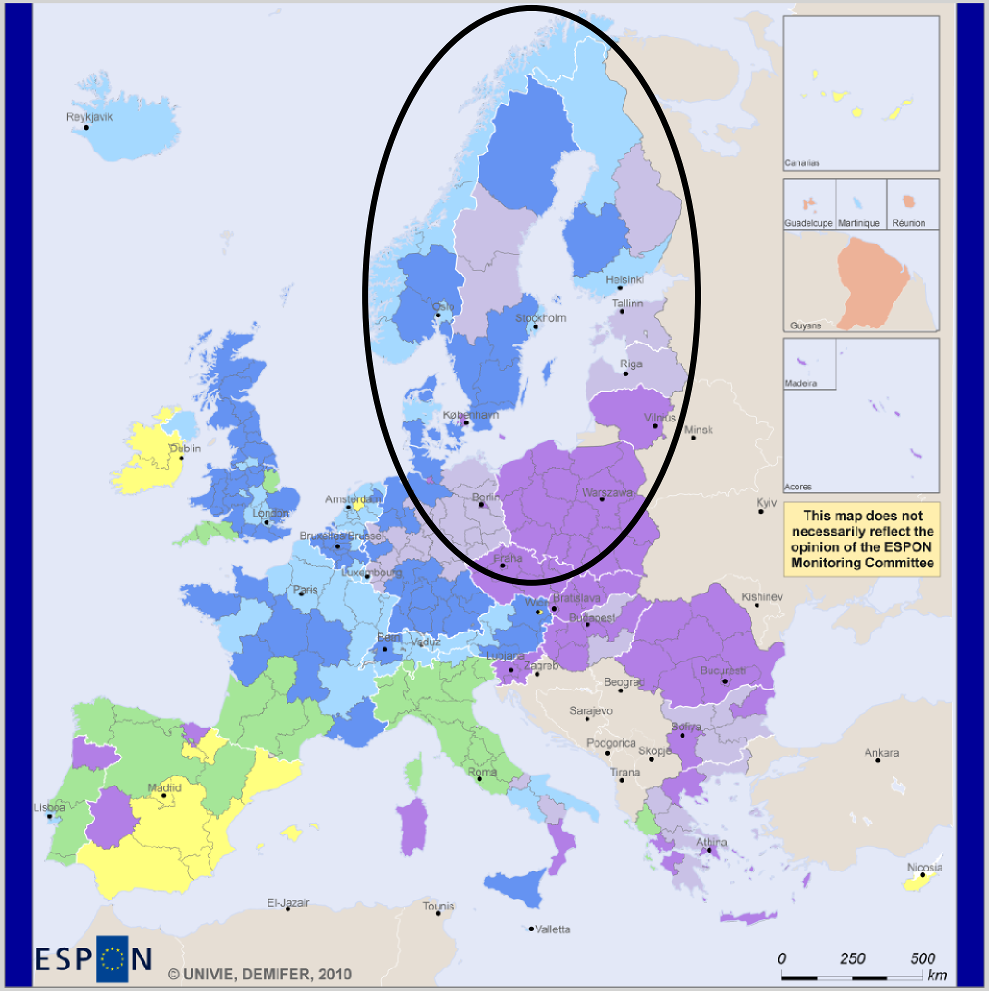
Type	Classification	Cases	Population		Age group 20-39 (%)			Age group 65+ (%)			Natural population increase (per 1000)			Net migration (per 1000)		
			Thousands	%	avg	min	max	avg	min	max	avg	min	max	avg	min	max
1	Euro Standard	79	127 915	25,41	25,68	22,57	28,72	17,46	15,33	20,30	0,01	-2,67	2,47	3,43	-2,11	9,36
2	Chalenge of Labour Force	61	116 768	23,20	30,43	28,33	33,84	14,51	10,60	18,96	-0,78	-4,76	2,89	0,08	-7,35	9,19
3	Family Potental	55	104 657	20,77	28,15	24,80	36,32	14,57	11,13	16,96	3,72	1,06	9,00	2,12	-3,51	9,59
4	Chalenge of ageing	33	33 838	12,68	26,87	21,52	31,19	20,83	18,51	26,51	-1,74	-6,19	1,43	9,42	4,14	16,99
5	Chalenge of decline	38	50 157	9,97	26,32	21,47	30,04	19,49	15,89	22,55	-3,39	-10,35	-0,59	-1,20	-11,25	3,70
6	Young potential	15	38 543	7,66	32,26	28,36	35,86	14,45	3,70	19,03	3,61	-0,15	9,78	17,10	9,96	26,30
7	Overseas	5	1 555	0,31	30,40	27,02	32,55	9,04	3,71	11,81	13,56	8,40	25,28	-1,78	-8,18	9,07
EU27+4	ESPON Space	286	503 342	100	27,82	21,47	36,32	16,63	3,71	26,51	0,33	-10,35	25,28	3,16	-11,25	26,30

In 2005

Average 2001-2005



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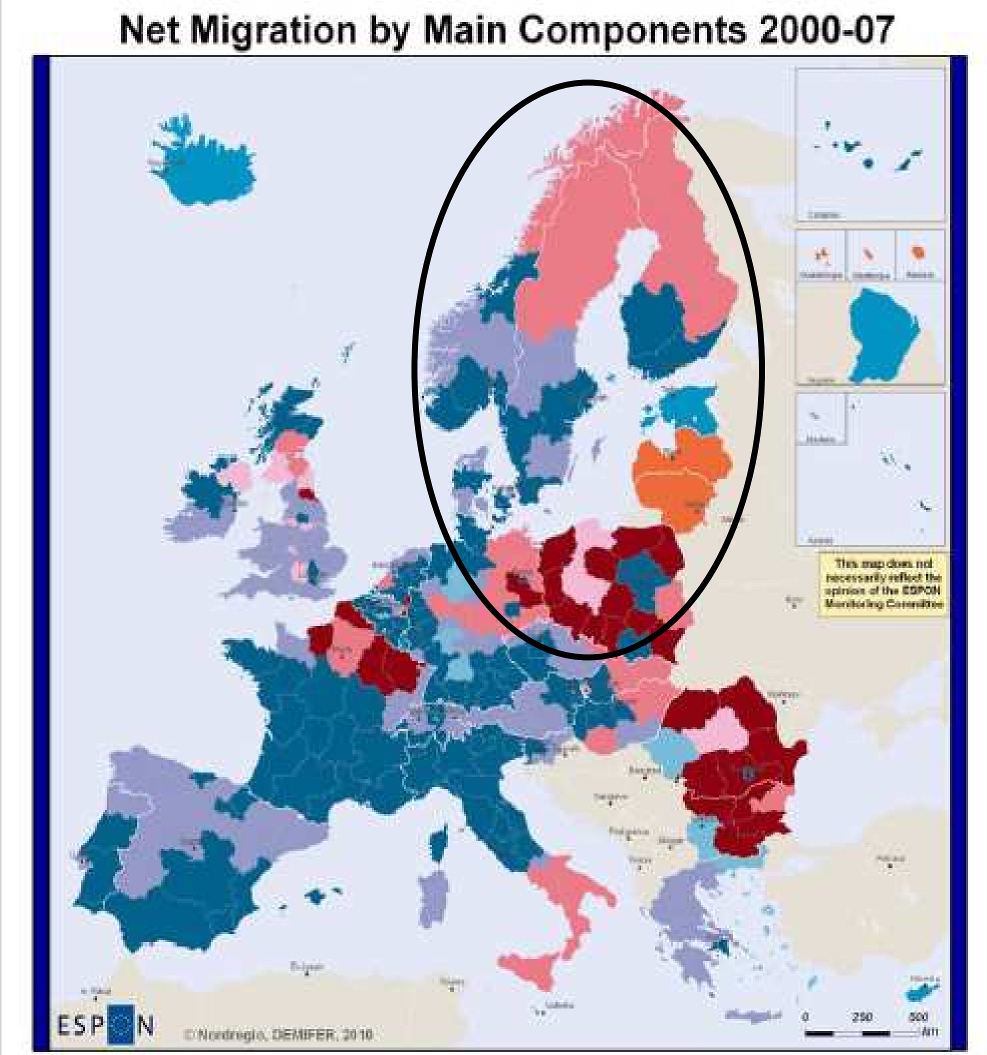
Net Migration Patterns 2000-2007

- Northern sparsely populated BSR regions as well as many regions in the Western part experienced negative net migration
- Regions including larger cities generally had a positive net migration



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Internal and international migration balance in the NUTS2 Regions in 2000-2007*

Positive Net Migration
- Positive Internal and International Migration (112)
- Positive Internal and Negative International Migration (10)
- Negative Internal and Positive International Migration (82)
- No Differentation (7)

Negative Net Migration
- Positive Internal and Negative International Migration (12)
- Negative Internal and Positive International Migration (31)
- Negative Internal and International Migration (28)
- No Differentation (5)

Regional level: NUTS 2
Source: ESPON 2013 Database 2010
Origin of data: Eurostat 2009, NSIs 2009, University of Leeds 2009
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Total migration: FR 2000-2006; Domestic- & international migration: CH 01-04, DE 02-07, DK 06-07, FR 06, GR & PT 01, IE 02-06, IT 00-05

No differenciation between internal- and international migration (Countries with only one NUTS2 region & French overseas regions)

(x) - number of regions per category

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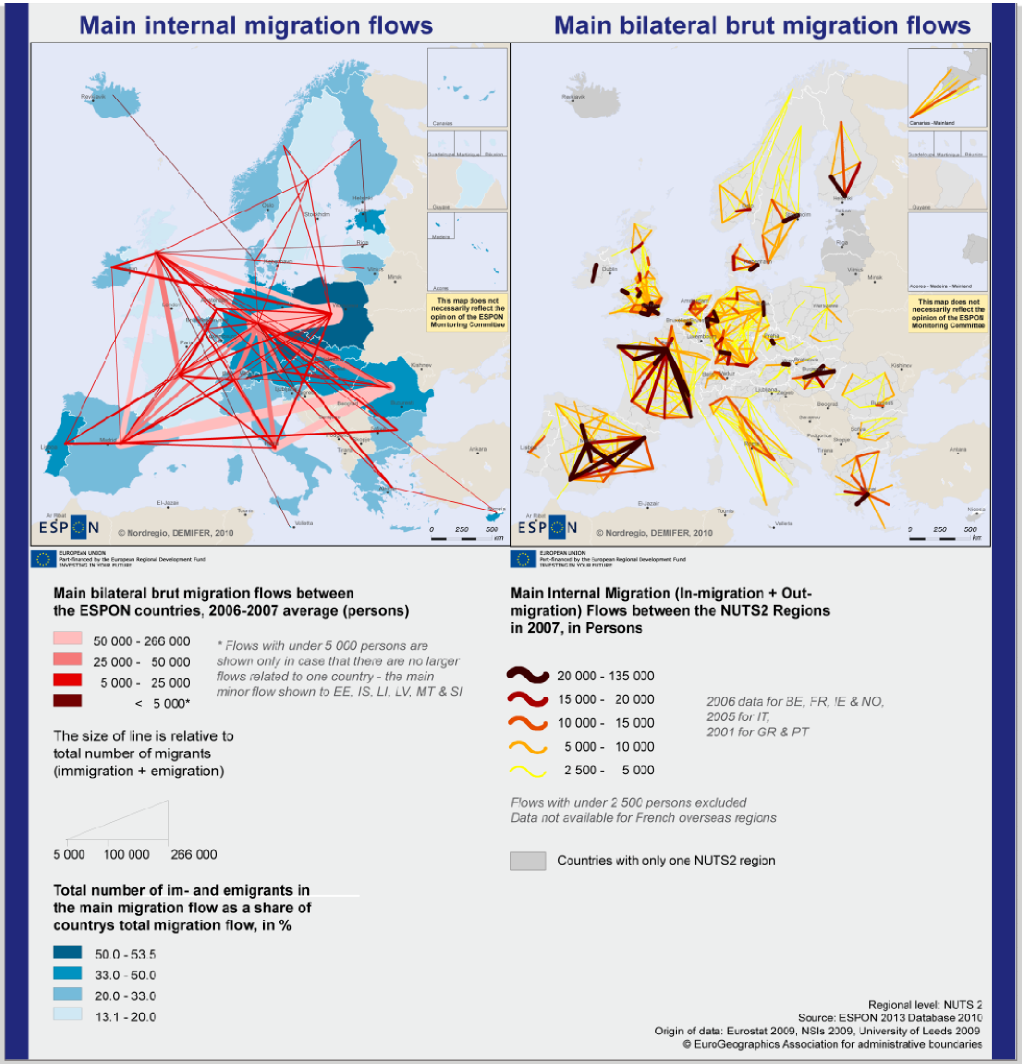
Migration flows, 2006-2007

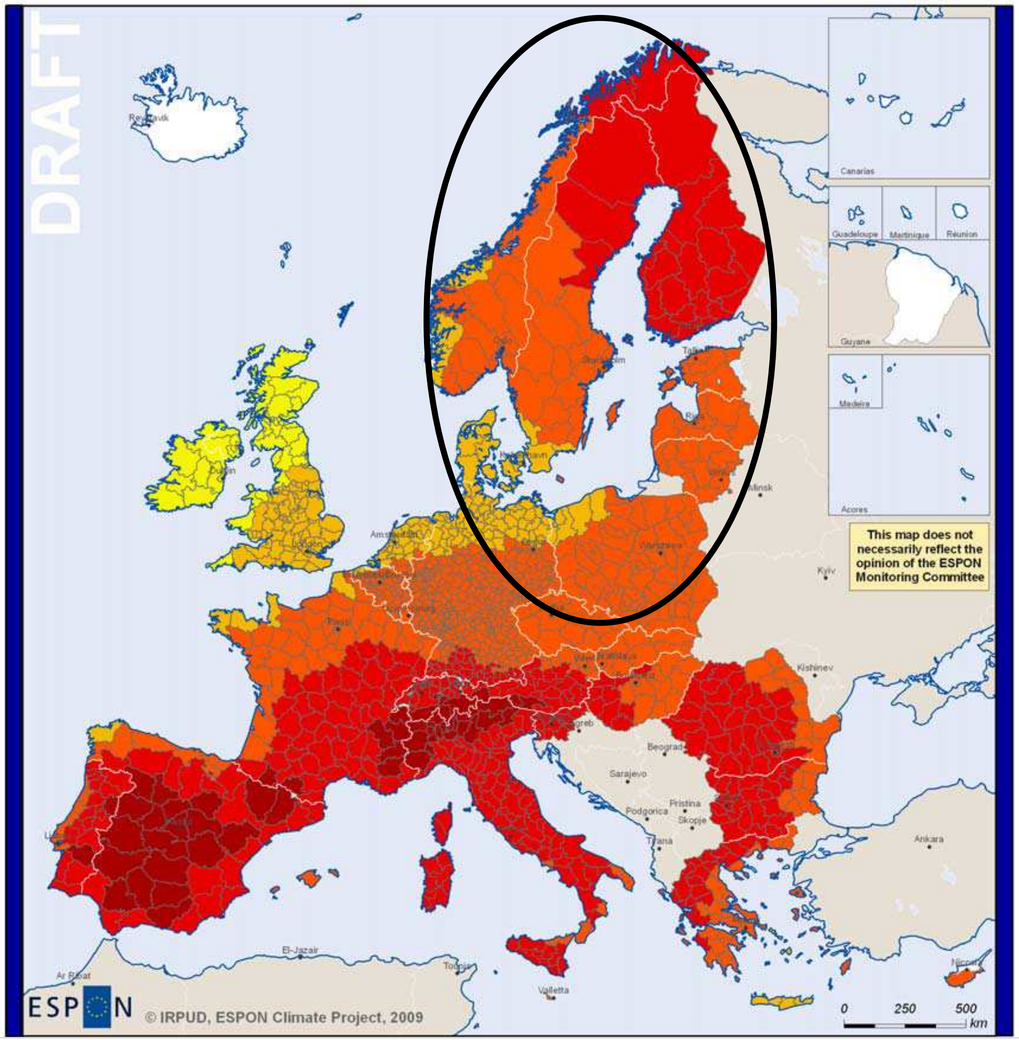
- Major internal European migration flows just before the crisis affected Polish regions of the BSR the most.



Climate Change and Energy Matters

Climate Impact on Temperature

- Increasing annual temperatures expected between 2 and over 4.5 degrees.
- The south-west BSR exhibit the lowest temperature changes.
- The north-east BSR may experience temperature changes of nearly 4 degrees.



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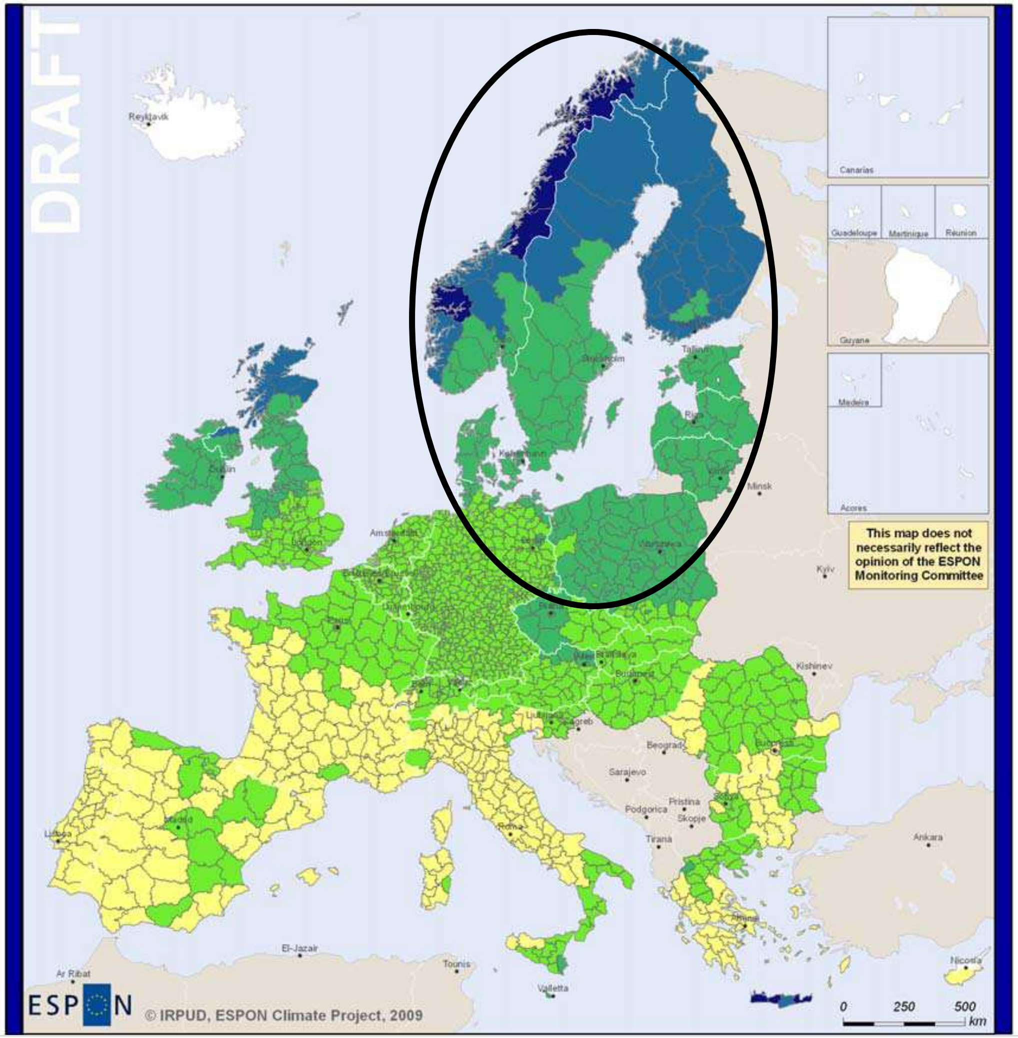
Origin of data: own calculations based on Lautenschlager et al. 2009

Increase in annual mean temperature (in °C)

- 2.0 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- ≥ 4.1
- no data

Climate Impact on Precipitation (summer)

- In the BSR, northern parts and Finnish regions may experience increases in summer precipitation of up to 40%.
- France, Portugal Spain Italy, Greece are projected to experience the strongest relative decreases in annual summer precipitation.



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Origin of data: own calculations based on Lautenschlager et al. 2009

Change in annual mean precipitation in summer months (in %)

- ≤ -40.0
- -39.9 - -20.0
- -19.9 - 0.0
- 0.1 - 20.0
- ≥ 21.0
- no data

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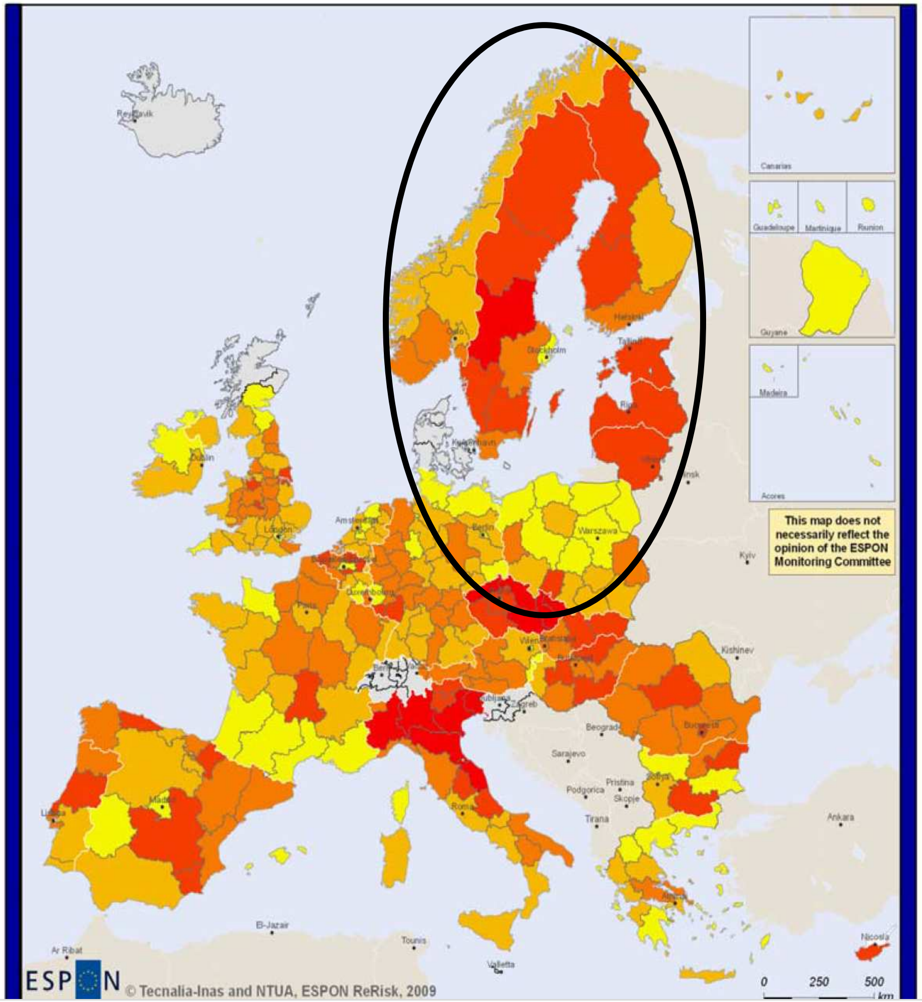
Energy Intensive Industries

- Industries with high energy purchases are rather dominant in the BSR compared to other parts of Europe.
- Rising energy prices may create particular challenges for these industries and the regional economies, and include a risk of relocation.

Proportion of employment in industries with high energy spending



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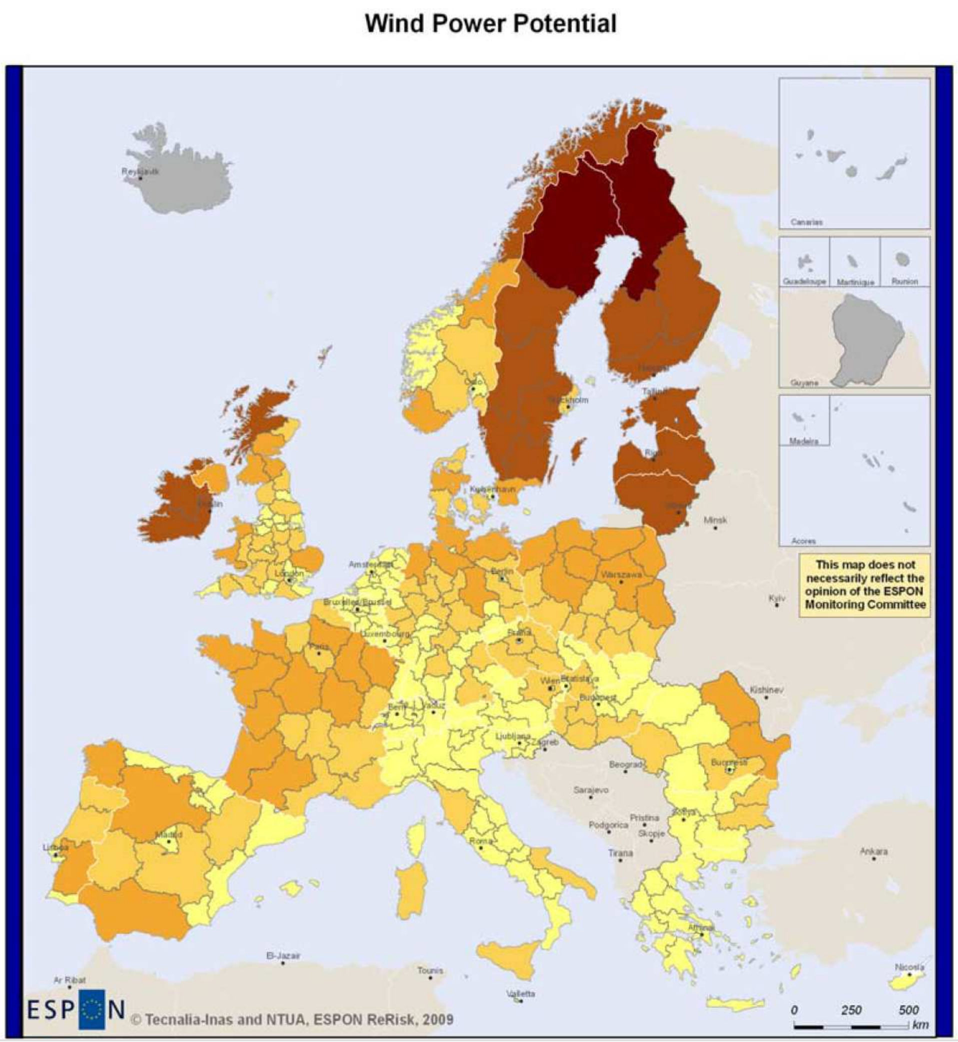
% of employees
- 0,41 - 2,30
- 2,31 - 4,06
- 4,07 - 6,21
- 6,22 - 9,71
- 9,72 - 14,23
- No Data Available

Wind Power Potential

- The production potential of wind power stations, taking into account environmental and other restraints, is high in the BSR, particular in the north.
- Regions in Norway, Finland, Sweden, Estonia, Latvia and Lithuania have a significant advantage in this field.



(Some) Options for the Baltic Sea Region in supporting Territorial Cohesion

Options for BSR supporting Territorial Cohesion (1)

Promote territorial balance by spreading growth and jobs

- Support growth and job creation by investment in innovation building on high level skills and economic sectors related to green economy
- Support inclusion by investments in regions hit by the crisis experiencing high unemployment, demographic challenges and/or high levels of out migration
- Invest in restructuring of agrarian regions in east BSR
- Invest in new potentials and assets in islands and sparsely populated areas in need

Consider the BSR in the World

- Invest in world connections for trade and people
- Promote a Polycentric Metropolitan zone
- Support specialisation and integration of urban drivers in the new world economy

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Options for BSR supporting Territorial Cohesion (2)

Promote polycentric structures

- Encourage deepening the networking of BSR Cities
- Promote rural-urban partnerships in all areas of the BSR, calibrated to the territorial context
- Concentrate on selected cities in sparsely populated areas, mainly in northern part
- Balance capital cities and other regions/hinterland, particular in the eastern part
- Stimulate integration via cross-border cooperation along internal and external borders

Invest in BSR connectivity and access

- Investment in improvements in north and east BSR as well as in rural specific types of territories (in need)
- Invest in European high-speed rail connection of BSR
- Improve rail and road connections towards the east
- Invest in air connections, linking remoter territories

Options for BSR on Territorial Cohesion (3)

Unlock and use new potentials for territories

- Continue the drive towards an ECO BSR with a low-carbon economy
- Invest in new economic opportunities created by climate change, new crops etc.
- Promote well managed ecological and cultural assets increasingly important for future economic development
- Promote a multitude of greener economic activities, including the wind-power potential in the northern BSR

Address environmental sustainability challenges in time

- Adapt to higher levels of precipitation to the north
- Consider possible impacts of sea-level rise
- Invest in countering biodiversity loss

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More Information

Final Advice

Include territorial structures and the international context in the update of the EU BSR Strategy

Thank you for your attention

More ESPON support is available

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