

Conference on Strategies of Russia 2020
20 October 2008 in St.Petersburg

The ESPON 2013 Programme

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EUROPEAN UNION
Part-financed by the European Regional Development Fund
INVESTING IN YOUR FUTURE

ESPON 2013 Programme

Programme under EU Structural Funds 2007-2013:

- Objective 3 on European Territorial Cooperation
- Provide comparable facts and evidence on dynamics on the European territory its regions and cities
- EU 27 plus Iceland, Liechtenstein, Norway and Switzerland
- Managed by Luxembourg

Structure of intervention:

- What is the ESPON 2013 Programme?
- What evidence does the ESPON deliver to policy development?
- What themes have policy demand defined for the next ESPON projects?

The ESPON 2013 Operational Programme

ESPON 2013 Programme Strategy

Mission statement:

- Support policy development in relation to territorial cohesion and a harmonious territorial development
- Provide comparable information, evidence, analyses and scenarios on territorial structures and dynamics
- Reveal territorial capital and potentials in support of the competitiveness of regions, cities and larger territories

Key principles:

- Policy demand driven applied research themes
- Use of ESPON results by stakeholders
- Scientific platform for European applied territorial research

5 Programme Priorities

- Priority 1: Applied research on territorial development, competitiveness and cohesion
- Priority 2: Targeted analysis based on user demands/ European perspective to different types of territories
- Priority 3: Scientific platform and tools/ Territorial indicators, data, analytical tools and scientific support
- Priority 4: Capitalisation, ownership and participation/ Capacity building, dialogue and networking
- Priority 5: Technical assistance, analytical support and communication plan

ESPON 2013 Programme budget

TOTAL	€45,378 mill. (ERDF 34,033 mill.)
Priority 1: Applied research	€19,241 mill.
Priority 2: Targeted analysis	€6,536 mill.
Priority 3: Scientific platform	€6,148 mill.
Priority 4: Capitalisation	€5,514 mill.
Priority 5: Technical Assistance, Analytical Support and Communication	€7.938 mill.

- Additional contribution from Partner States: €1,800 mill.
(Switzerland, Norway, Iceland and Liechtenstein)

Progress on Applied Research

- Themes of the 6 first projects (P1):
 - Cities and Urban Agglomerations: Functionality and development opportunities for European competitiveness and cohesion
 - Development Opportunities in different types of Rural Areas
 - Demography and Migratory Flows affecting European regions and cities
 - Effects of Rising Energy Prices on Regional Competitiveness
 - Territorial Impact Assessment of Policies (exploratory)
 - Climate Change and Territorial Effects on regions and local economies

Progress on Targeted Analysis

- 8 Targeted Analysis using ESPON results (P2):
 - The Case for Agglomeration Economies in Europe
 - The Development of the Islands – European Islands and Cohesion Policy
 - Cross-Border Polycentric Metropolitan Regions
 - Success for Convergence Regions' Economies
 - Potential of Rural Regions (outside the European core)
 - Spatial Scenarios: New Tools for Local-Regional Territories
 - Transnational Support Method for European Cooperation
 - Territorial Diversity

Progress on Scientific Platform

- Major projects (P3):
 - ESPON 2013 Database
 - Territorial Indicators/Indices (exploratory phase)
 - Territorial Monitoring (coming later)
- Other projects:
 - Map updates for trend analysis
 - Tools development (in support of analysis)

ESPON results in reports and maps

Demographic change

- Population decline (natural population change and migration)
- Highly fragmented pattern with both declining and increasing regions
- Competition between regions for human resources
- Major urban areas and pleasant retirement areas in good position

Population development by components

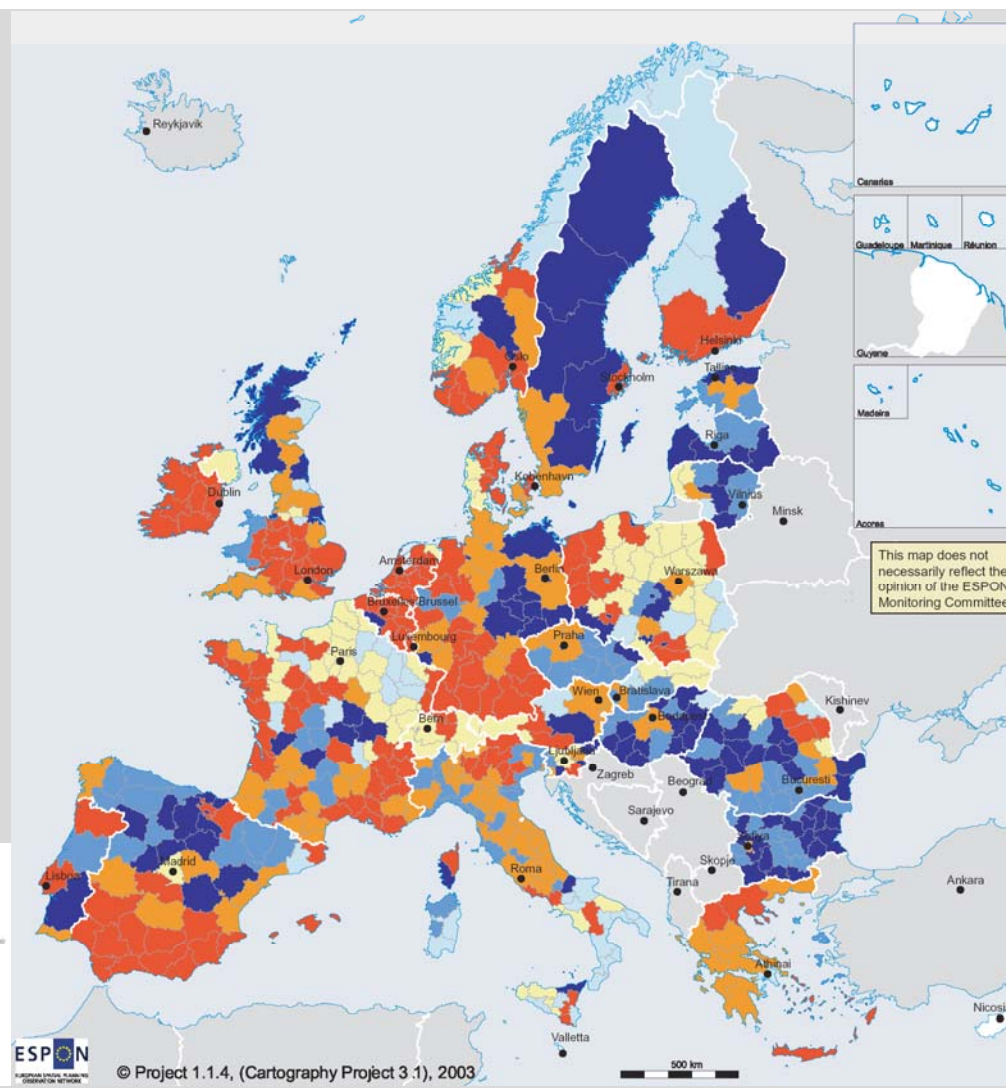
Population increase with	Population decrease with
positive migratory balance and positive natural balance	negative migratory balance and positive natural balance
positive migratory balance and negative natural balance	positive migratory balance and negative natural balance
negative migratory balance and positive natural balance	negative migratory balance and negative natural balance

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Origin of data:
EU15 and CC's: Eurostat, Norway and Switzerland:
National Statistical Offices

Regional level:
NUTS 2 for AT, CH, DE, FI, GR, MT, NL, PT, SE, UK
NUTS 3 for other countries

Source: ESPON Database






Functional Urban Areas in Europe

Classification according to

- Population
- Transport
- Education
- Headquarters
- Administration
- Industry

Functional Urban Areas (FUAs)

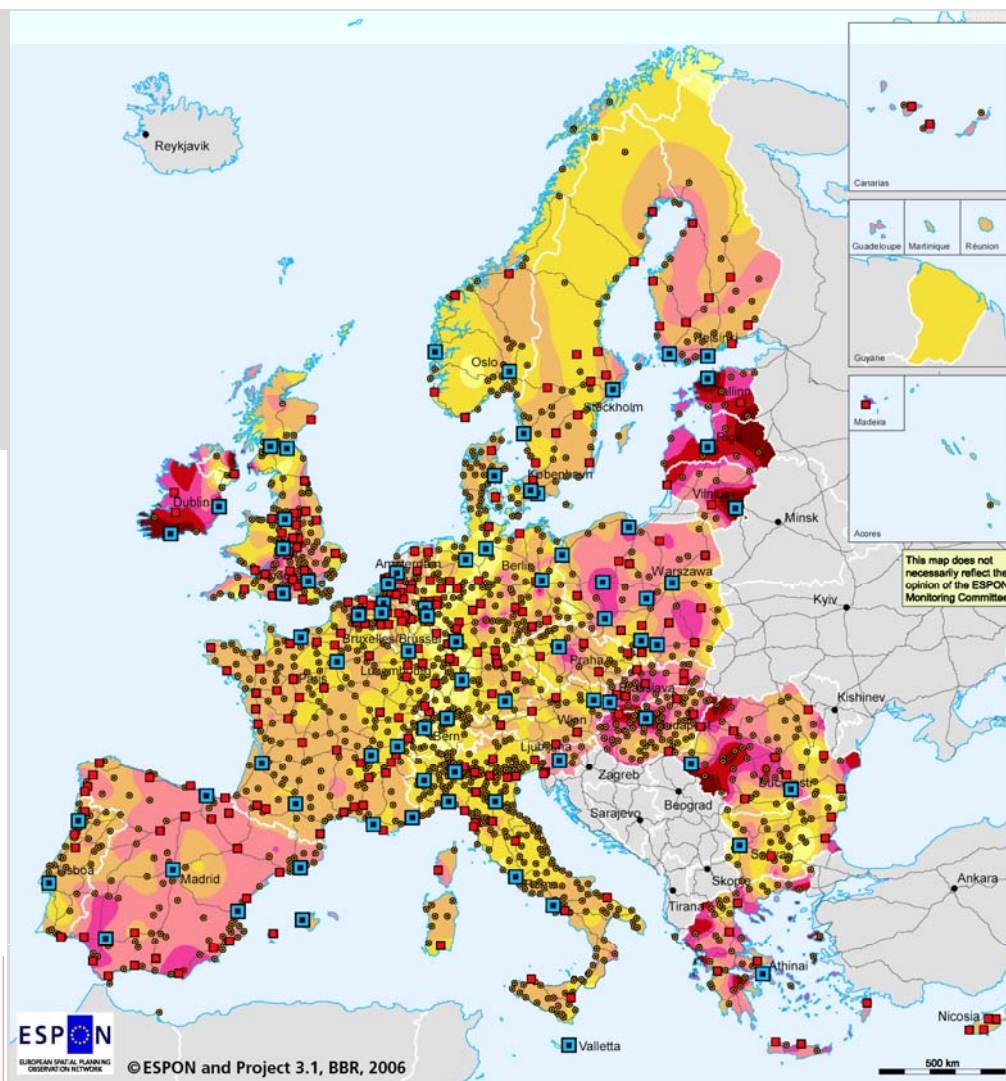
-  Metropolitan European Growth Areas (MEGAs)
-  Transnational / national FUAs
-  Regional / local FUAs
-  Highways of European level

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

Source: ESPON database

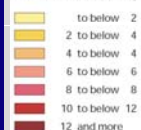
The functional urban areas are an important territorial structure in Europe. An ongoing ESPON Project is doing further work on their classification. New results will be available by the end of 2006.



Main European metropolitan areas

- Metropolitan areas important economic drivers in the European/global context
- Pentagon (14-32-46)
- High GDP growth in areas with relatively lower GDP level (% 1995-2002)
- Increasing importance of Metropolitan regions in proximity of and outside the core

Average yearly development of GDP per capita in Purchasing Power Standards 1995-2002 in percent*



*Switzerland, Norway and Bulgaria 1995 to 2001; Romania 1998 to 2001

Metropolitan Growth Areas



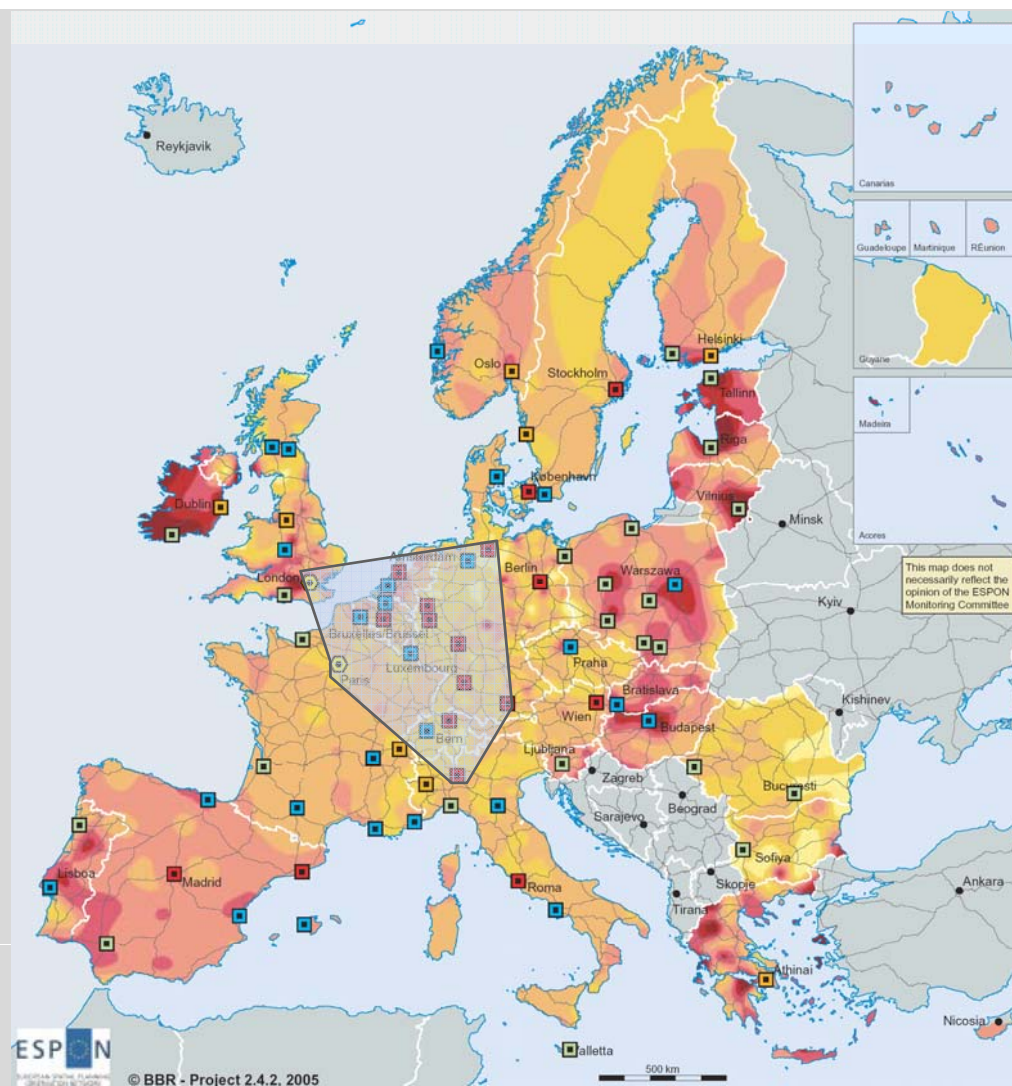
— Highways of European level

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Regional level: NUTS 3

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

Source: ESPON database

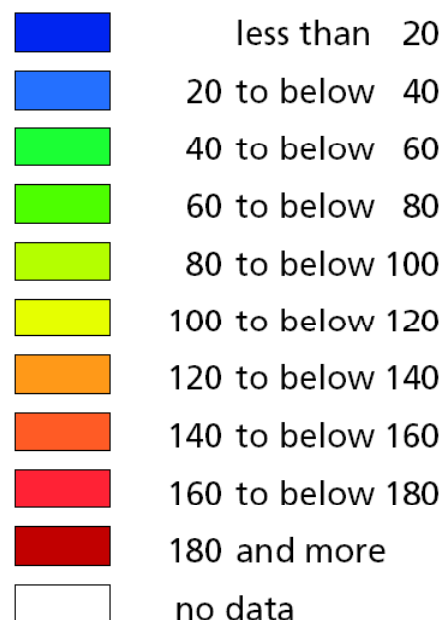


Potential accessibility multimodal, 2001

A centre-periphery pattern at European scale:

- Strong for road and rail
- More polycentric for air

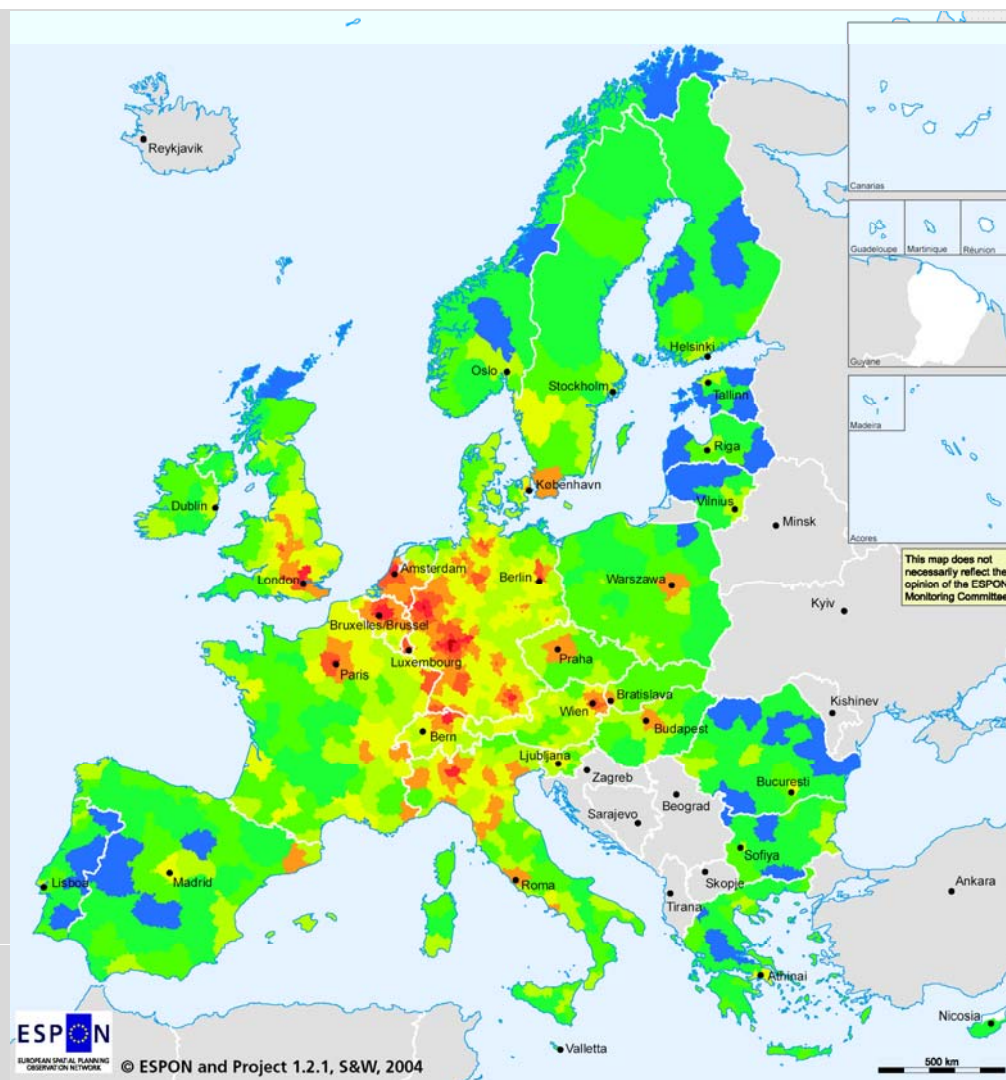
Accessibility index (EU25+2 = 100)



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Regional level: NUTS 3
Origin of data:
Spiekermann & Wegener (S&W)

Source: ESPON database

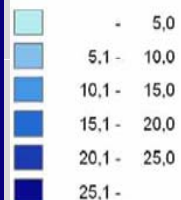


Absolute change of potential accessibility by road between 2001 and 2006

- Areas in the vicinity of the Pentagon are improving in potential accessibility by road
- Eastern fringe of the Pentagon is gaining the most

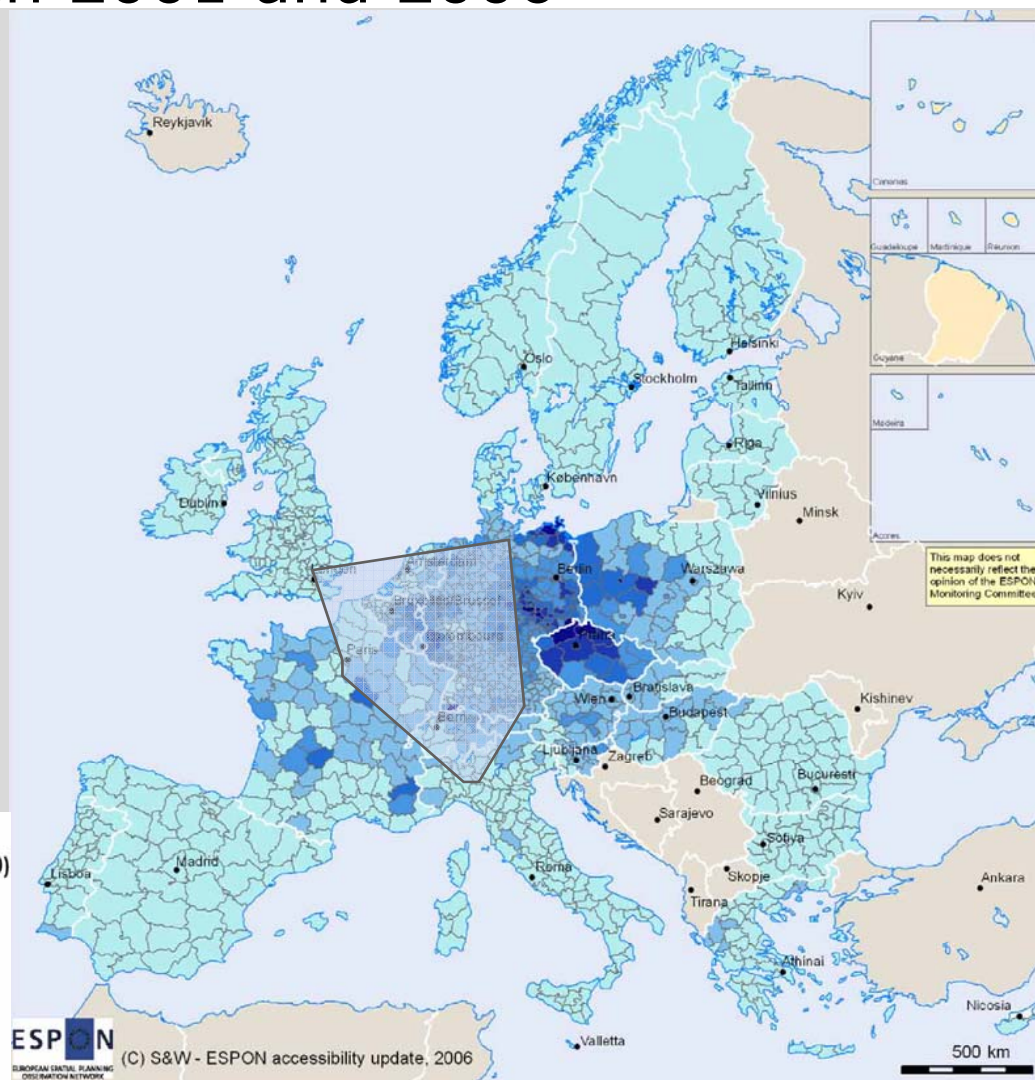
Potential accessibility

Road, absolute change 2001-2006 (EU27 absolute average in 2006 = 100)



(C) EuroGeographics Association
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Data sources:
RRG GIS Database
S&W Accessibility Model



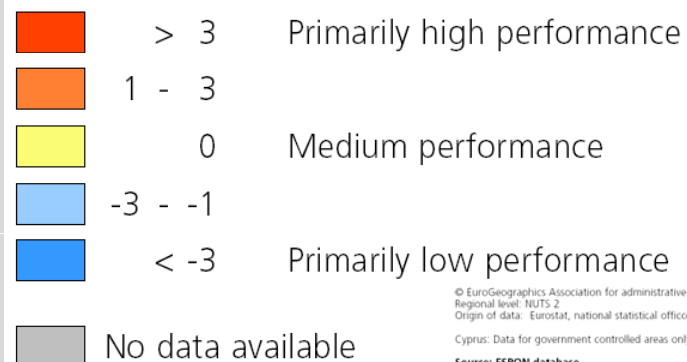
Economic Lisbon indicators

7 out of 14 Lisbon indicators:

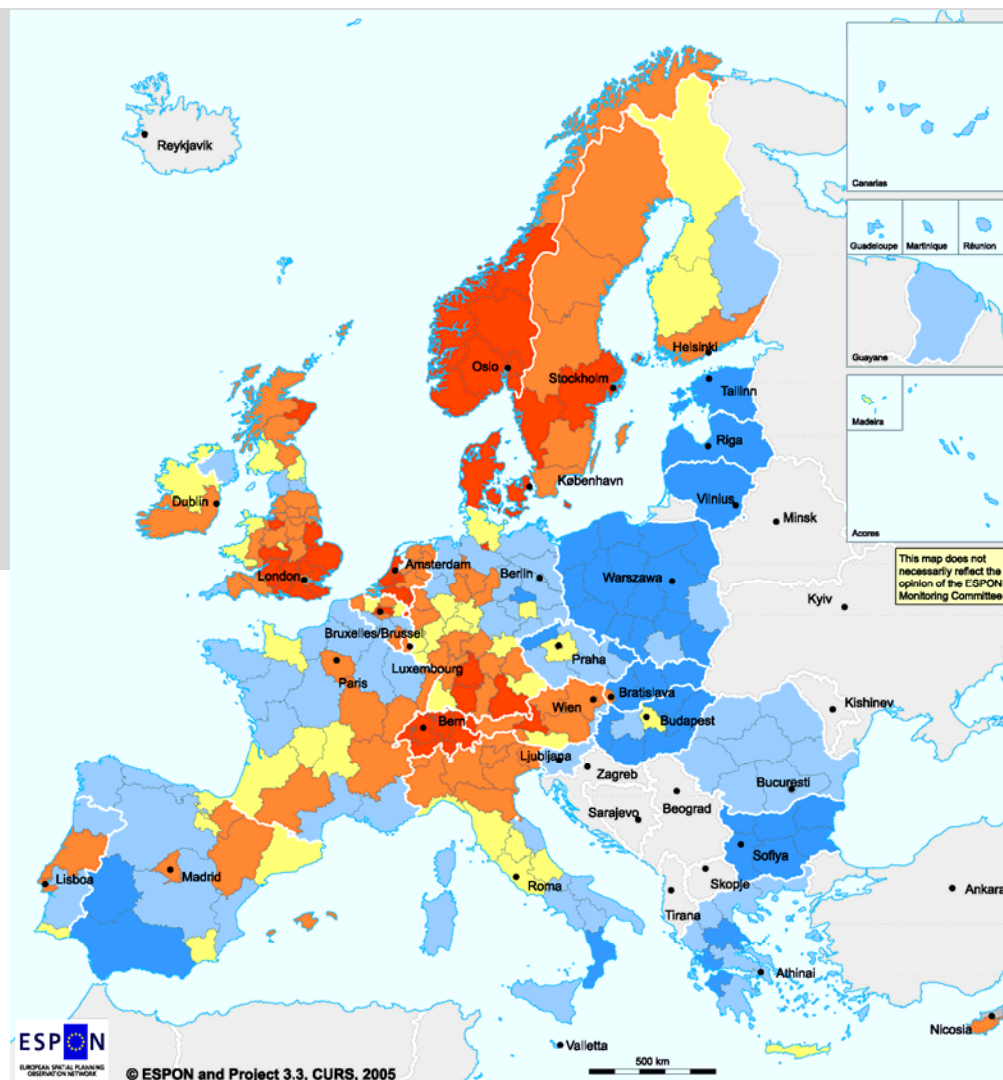
- (1) GDP/capita,
- (2) GDP/employed person,
- (3) Employment rate,
- (4) Employment rate of older workers,
- (5) Gross domestic expenditure on R&D
- (6) Dispersion of regional (un)employment rates
- (7) Long-term unemployment rate.

Performance

Number of indicators in the upper quartile minus number of indicators in the lower quartile



© EuroGeographics Association for administrative boundaries
Regional level: NUTS 2
Origin of data: Eurostat, national statistical offices
Cyprus: Data for government controlled areas only.
Source: ESPON database



Aggregated natural and technological hazards

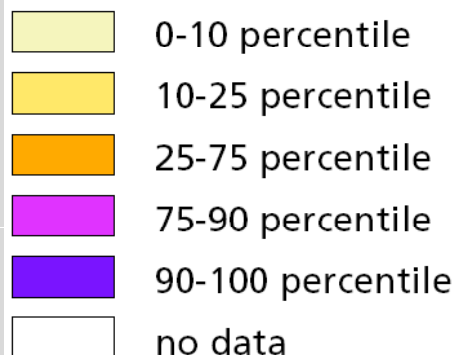
Natural hazards:

- Avalanches
- Drought potential
- Earthquakes
- Extreme temperatures
- Floods
- Forest fires
- Landslides
- Storm surges
- Tsunamis
- Volcanic eruptions
- Winther and tropical storms

Technological hazards:

- Air traffic hazards
- Major accident hazard
- Nuclear power plants
- Oil processing, storage and transportation

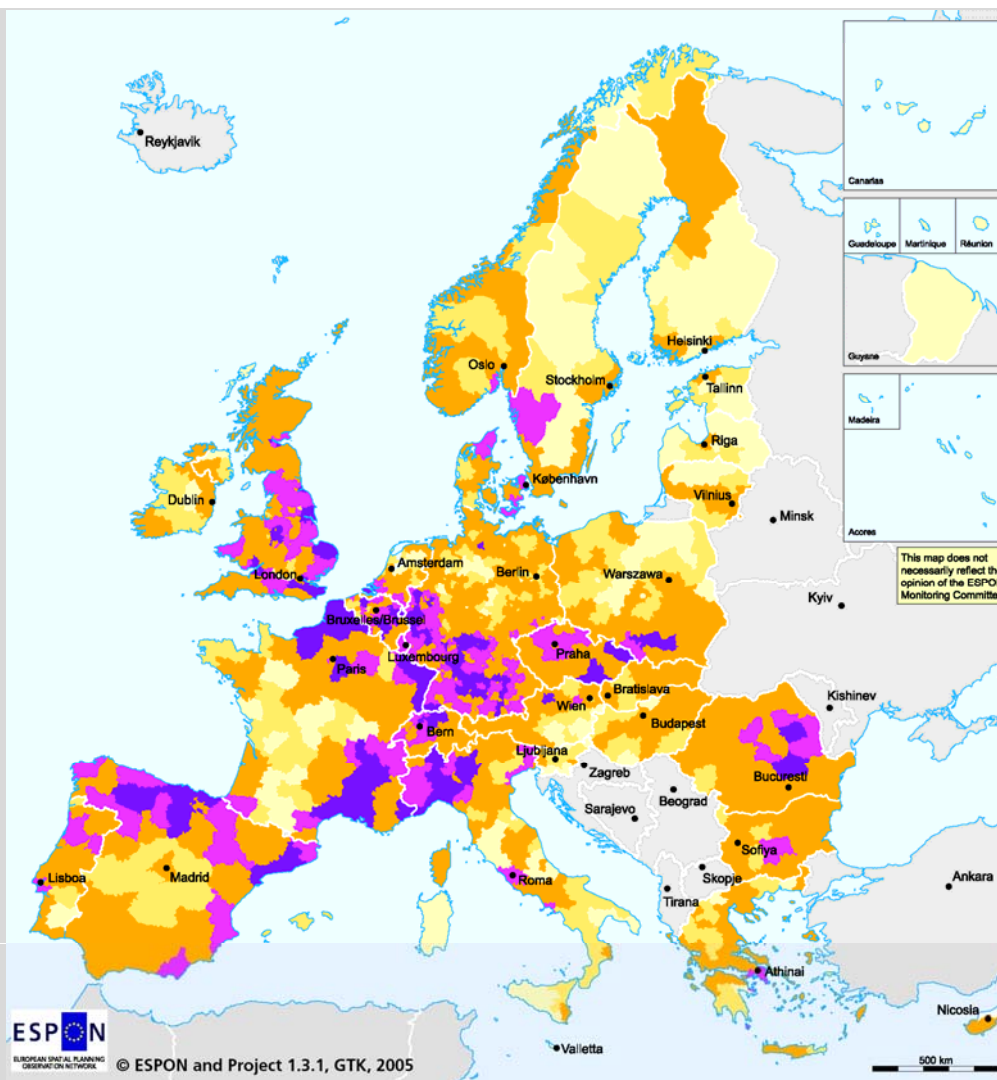
Hazard classification



This map shows the aggregated hazard typology based on 15 hazard indicators. Every indicator gives the value from 1 to 5 depending on the magnitude of the hazard in the NUTS 3 area. For the class "no data" value is 0. These values are then weighted on base of expert opinion (Delphi method questionnaire). At the end the sum of 15 weighted indicators are classified on base of percentile rank. For instance, NUTS 3 areas that belong in 90-100 percentile have their score greater than or equal to 90% of the total of all the summed hazard values.

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Regional level: NUTS 3
Origin of data: ESPON Project 1.3.1, GTK
Source: ESPON database



Natural Hazards

- Southern Europe: Forest fires and drought hazards
- Western and Northern Europe: Winter storms, storm surges and floods
- Climate: Affects frequency, intensity and coverage

The classification of the forest fire hazard is based on a combination of the numbers of observed fires per 1000 sq. km 1987-2003 (ESA) and the biogeographic regions map of Europe (ESA).

The number of observed fire per 1000 sq.km 1987-2003:

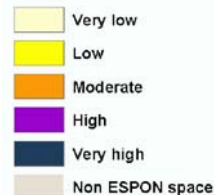
- 1 = No fires
- 2 = <1 observed fire
- 3 = 1-5 fires
- 4 = 5-10 fires
- 5 = >10 fires

Biogeographic regions:

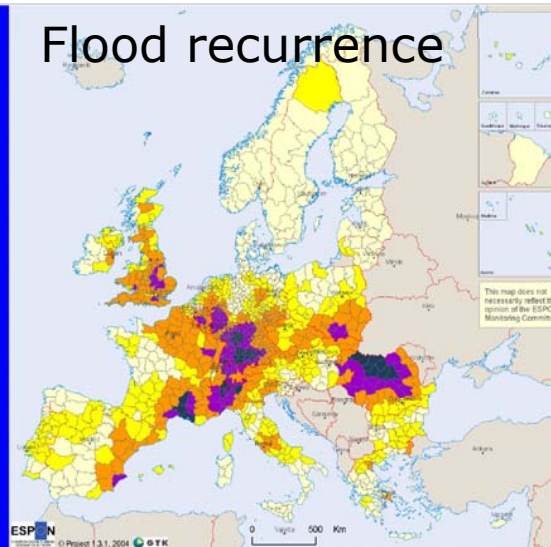
- 1 = Alpine and Arctic
- 2 = Atlantic
- 3 = Boreal
- 4 = Continental, Black sea, Pannontian and Steppic
- 5 = Mediterranean

Origin of the data: © EuroGeographics Association for the administrative boundaries
Forest fires years 1987-2003: ESA
Biogeographic regions: ESA
Source: ESPON Data Base

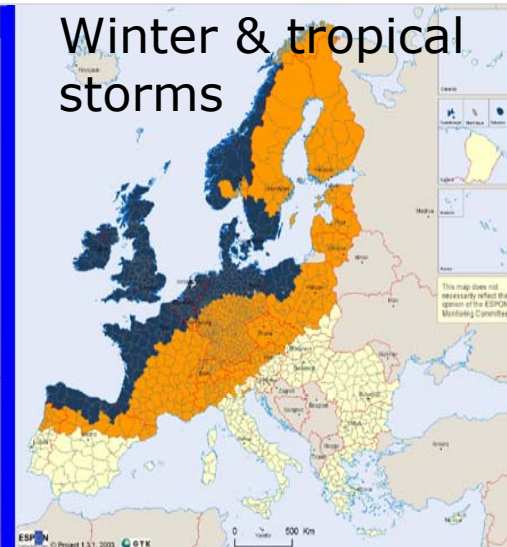
Forest fire hazard



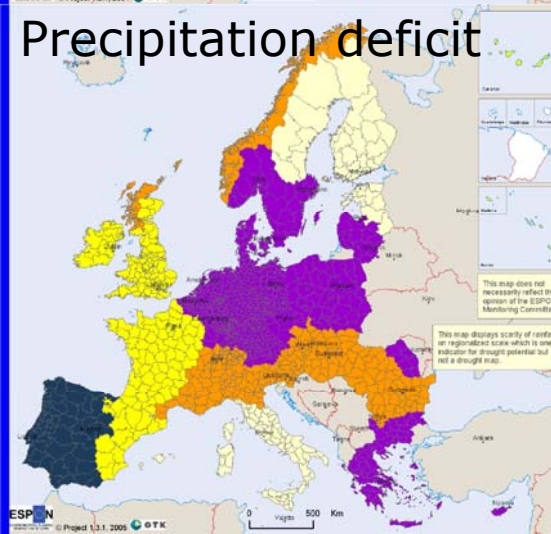
Flood recurrence



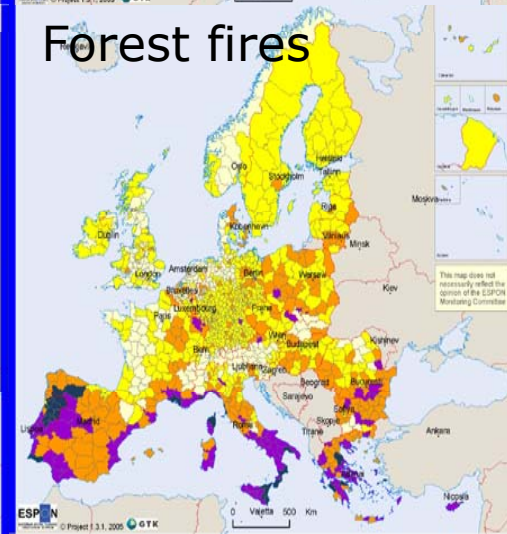
Winter & tropical storms



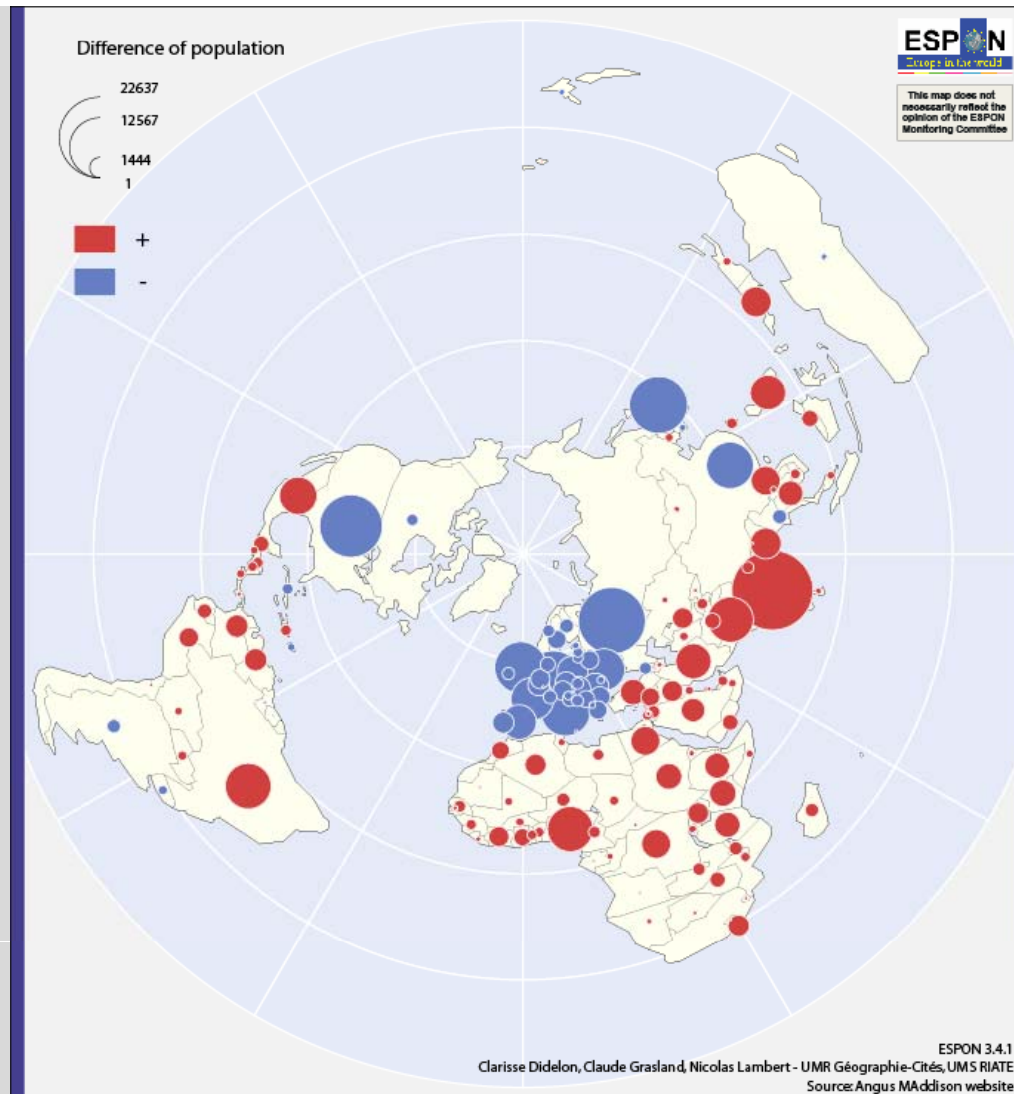
Precipitation deficit



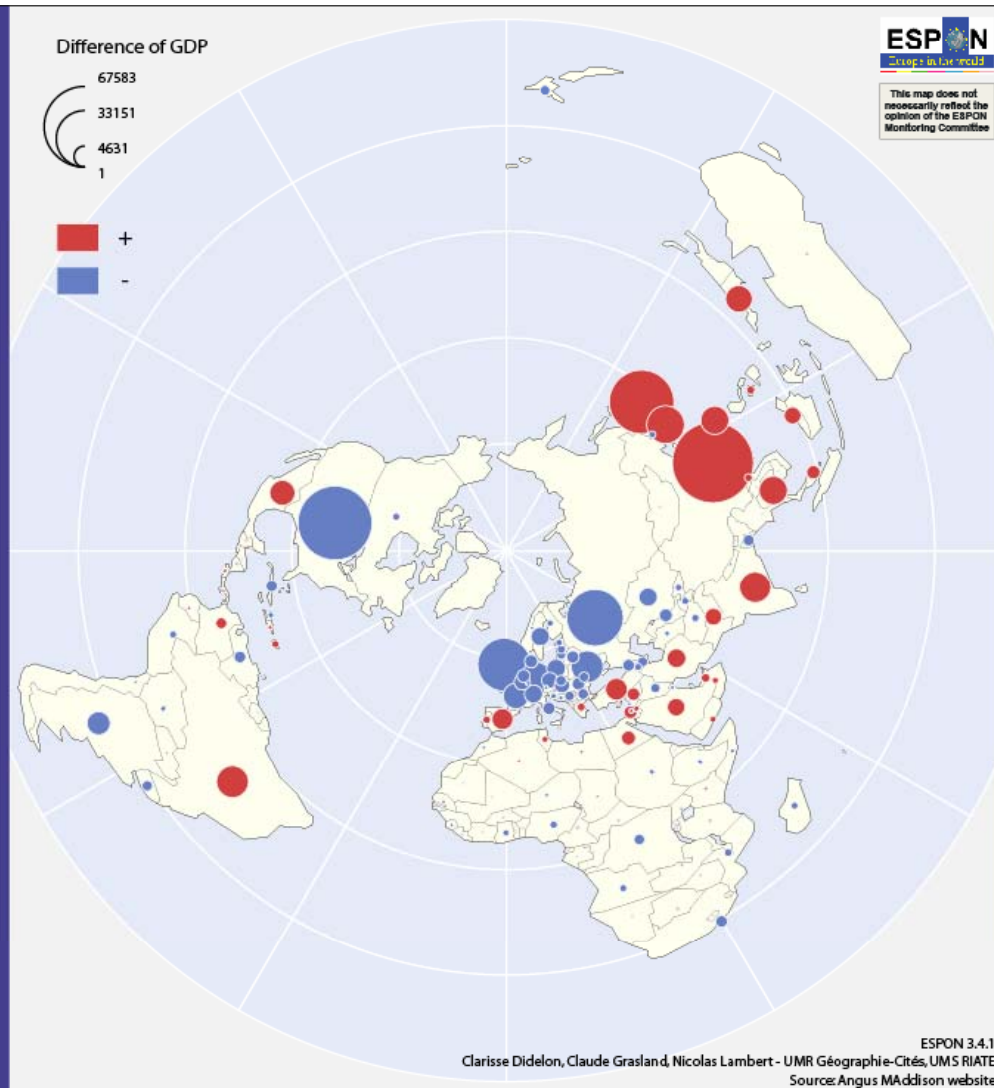
Forest fires



Share of World population by state (1950-2000)

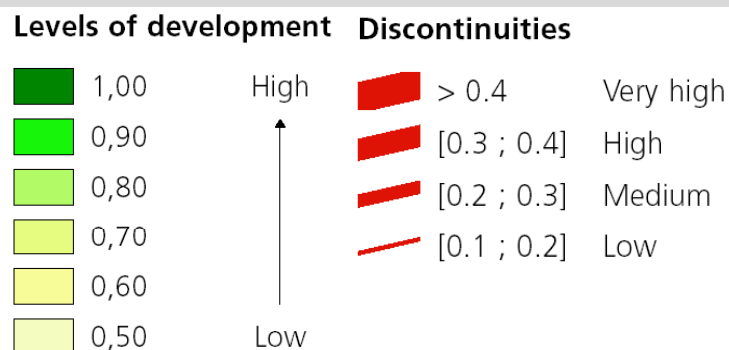


Share of World GDP pps by state (1950-2000)

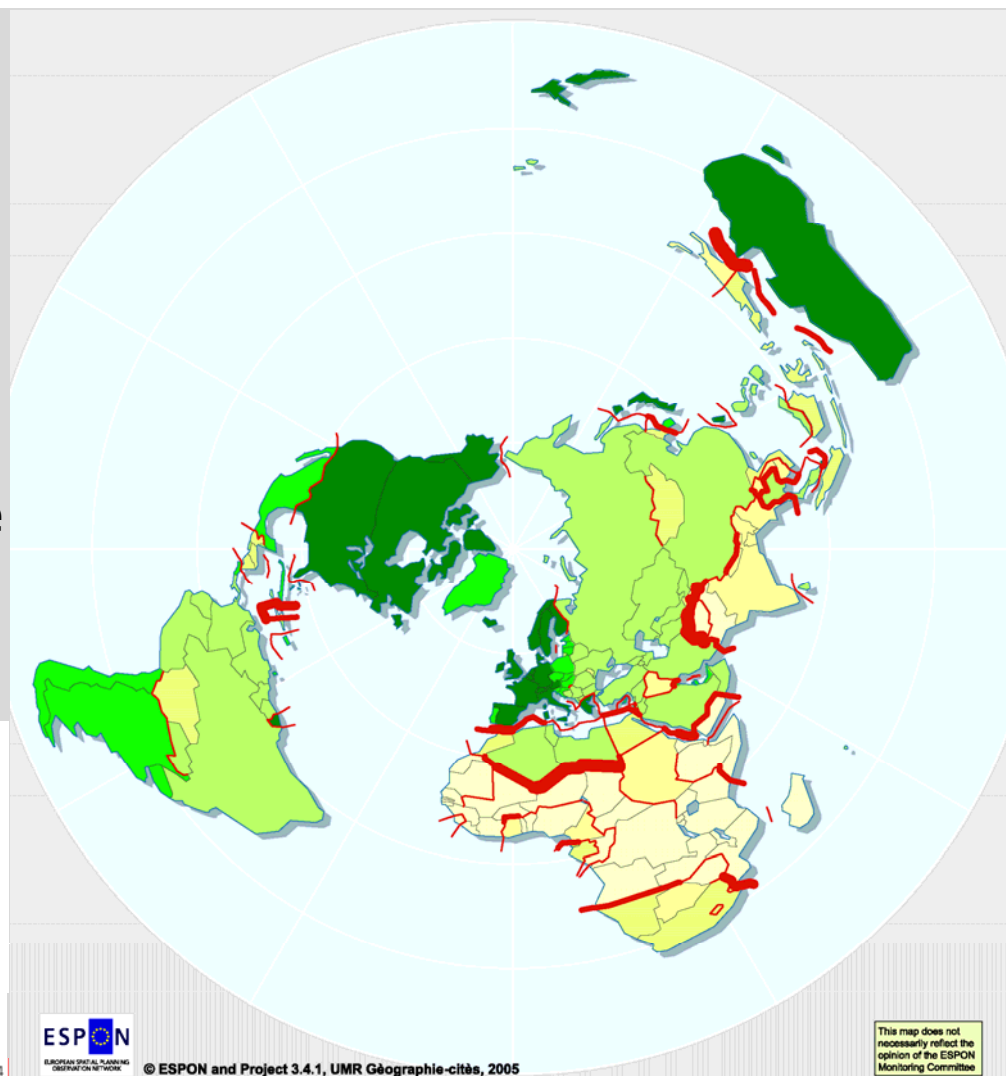


Human development index 2002 – Global component

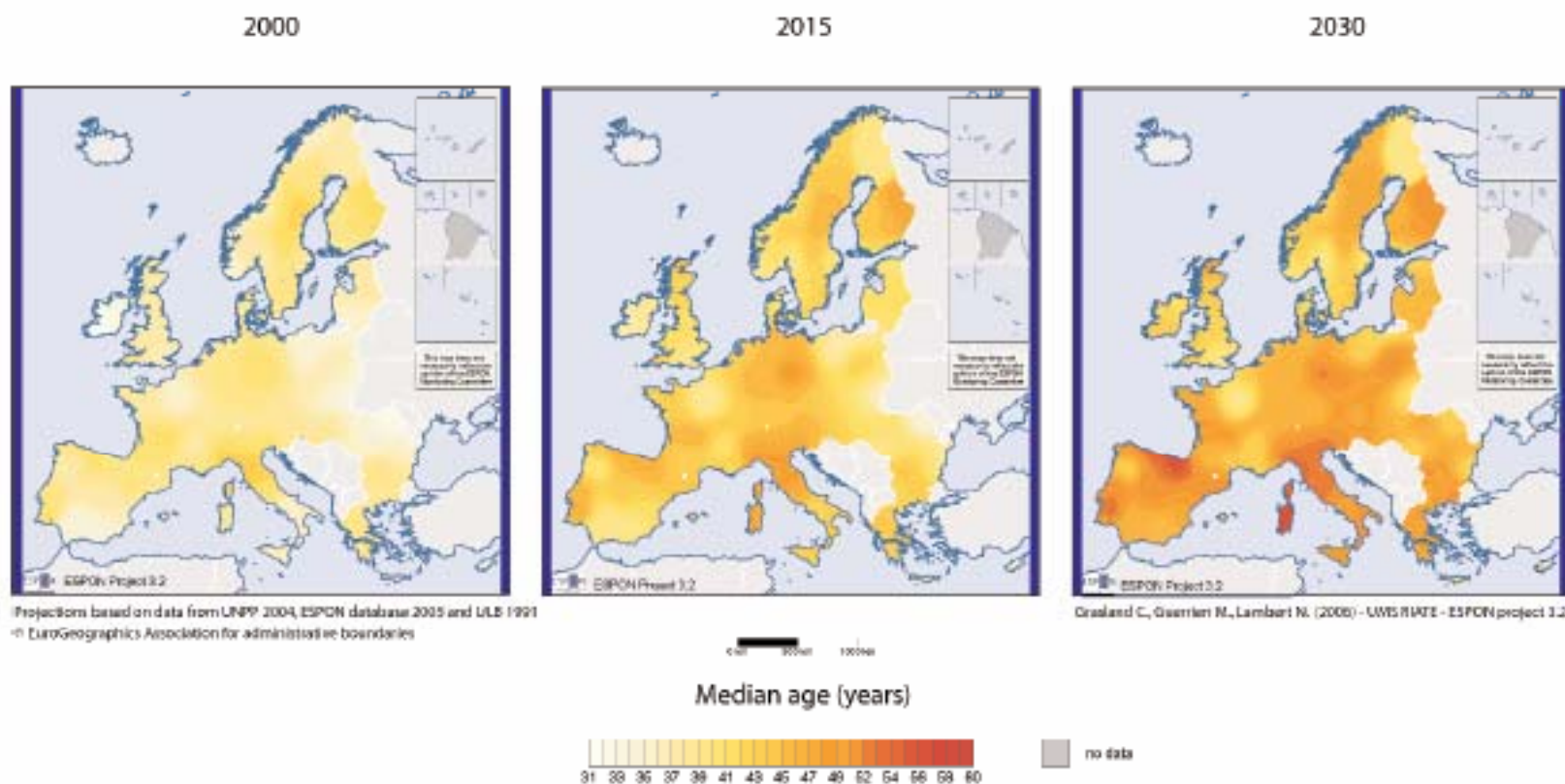
- The majority of European countries have a high level of human development.
- Main discontinuity between the EU and its neighbours in the South.
- Another major discontinuity is located in the Sahara between Northern Africa and the Sub-Sahara countries.



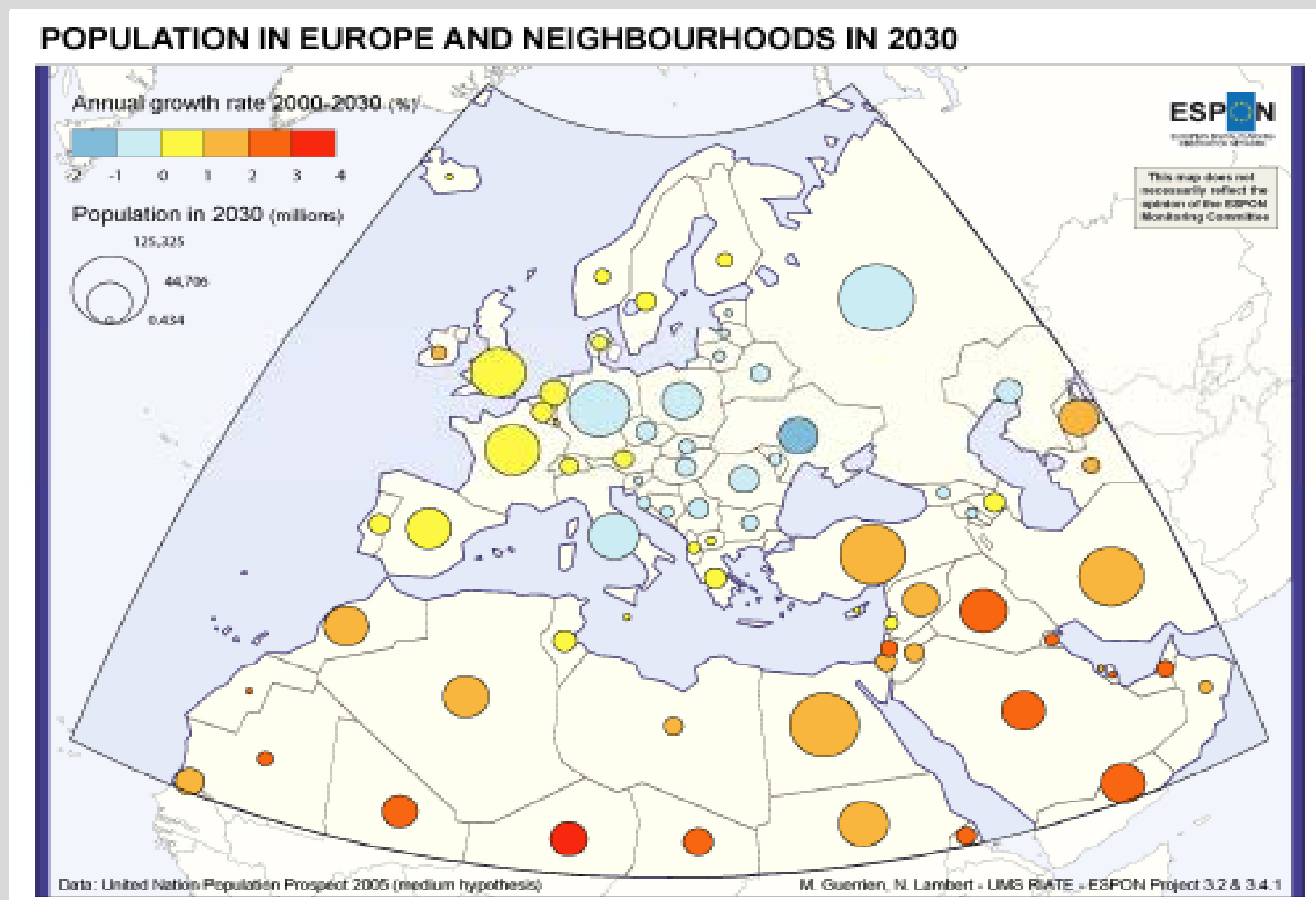
Origin of data: United Nations, Human Development Report 2004



Population ageing towards 2030

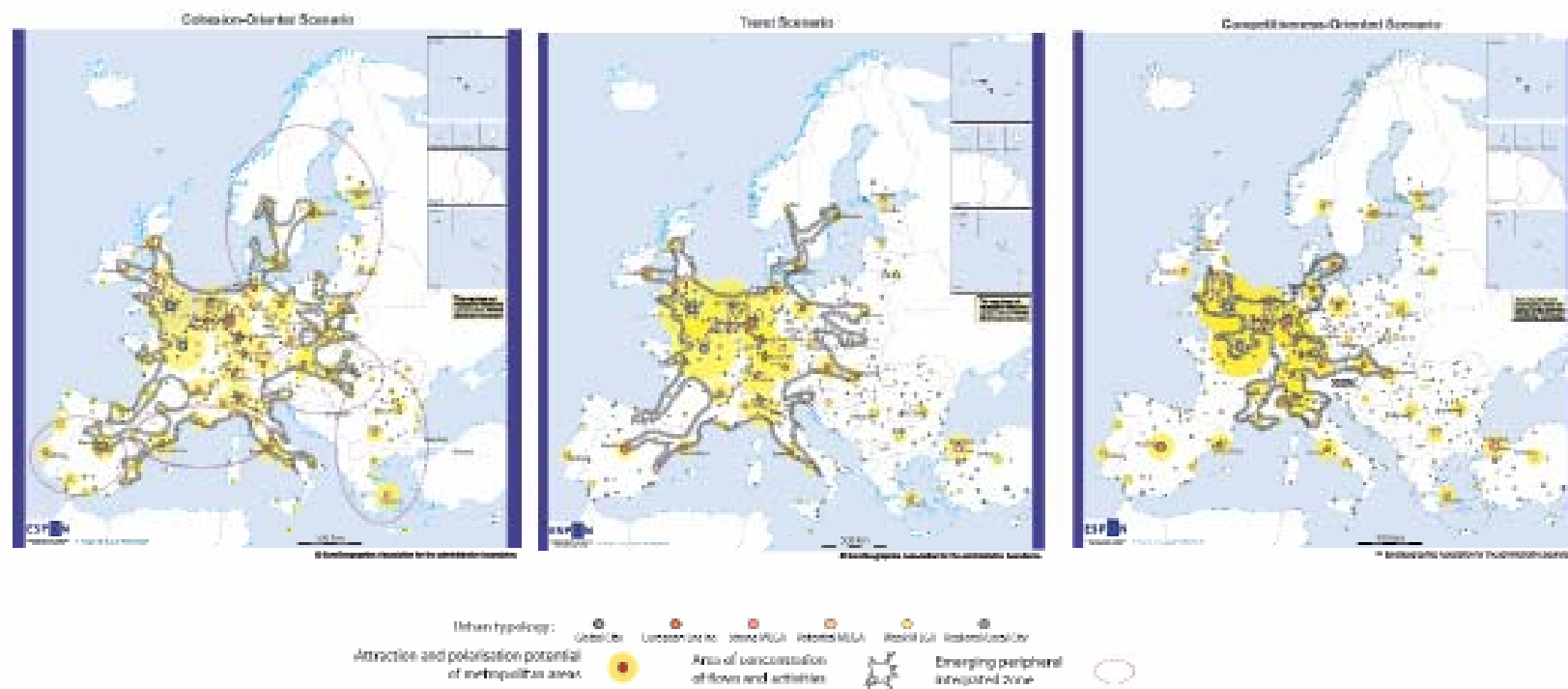


Europe and its neighbourhood towards 2030



Comparing territorial effects of scenarios 2030

Comparing scenarios: Spatial structure and urban hierarchy in 2030



The next ESPON projects

Next projects (1)

- Themes of the 8 next Applied Research projects (P1):
 - Attractiveness of European regions and cities for residents and visitors
 - European patterns of Land Use
 - Territorial cooperation in transnational areas and across internal/external borders
 - Accessibility at regional/local scale and patterns in Europe
 - Secondary Growth Poles in territorial development
 - European perspectives on specific types of territories
 - Territorial dimension of innovation and knowledge economy
 - Continental territorial structures and flows (globalisation)

More information

Thank you for your attention!

More information on
the ESPON 2013 Programme
can be found on

www.espon.eu/ESPON2013