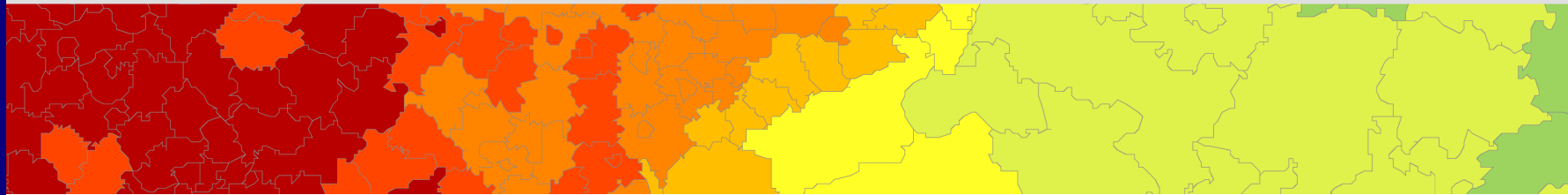




EUROPEAN SPATIAL PLANNING
OBSERVATION NETWORK



ESPON 2006 Programme Project 3.3

Territorial dimension of the Lisbon/Gothenburg Process

Lead Partner: *Centre for International Studies on Economic Growth
Faculty of Economics, University of Rome "Tor Vergata"*

Project Partners: *Centre for Urban Development and Environmental Management, Leeds Metropolitan University (UK); OTB Research Institute for Housing, Urban and Mobility Studies, Technical University of Delft (NL); Centre of Geographical Studies, University of Lisbon (P); Centre of Urban and Regional Studies (CURS), Helsinki University of Technology (HUT) (FI); Slovenia ESPON Contact Point*

Subcontractors: *Mcrit sl., Barcelona (E); IGS, Italian Geographical Society (I)*

Political goals at the base of the research

3.3. contextualised results:

1. Political recommendations and indications to revisit the **Structural Funds 2007-2013**, having full coherence with the dictates on **competitiveness** of Lisbon (2000 and renovated in 2004-05), performing **sustainable** economic and social development (Göteborg, 2001) as a support for a policy of *cohesion* towards *integration* of the EU **regional territories**
2. **New list of indicators** about both competitiveness and sustainability, to measure the *territorial competitiveness in sustainability*
3. Proposal of some **transnational cooperative areas** to act upon by the new Structural Funds, according to precise indications expanding the base of the cohesive participation

3.3 TPG political choices to revisit the Structural Funds 2007-2013 according to Lisbon and Göteborg territorial dimension

Some **composite indicators** (4, to be combined into a synthetic one) to measure the L/G territorial dimension and strategies looking at:

- The ESDP policy
- Policies from the other ESPON projects in relation to the Lisbon-Göteborg strategy
- Policy recommendations derived from the Lisbon strategy through the 4 determinants
- Policy recommendations derived from the Göteborg strategy through the 4 determinants
- Policies from other sectors or opinion groups (e.g. Metrex, EESC, COR, SMF, etc.)

General policy recommendations arising from the territorial dimension of Lisbon/Gothenburg

- to review the open method of coordination (OMC) introduced by the Lisbon Strategy and to adopt in experimental substitution the European Strategic Territorial/Environmental Assessment processes (e.g. SEA) applied to policies and programs at different subsidiarity level of constitutional country organisations;
- to apply Specific Environmental Concerns by appropriate technological support (e.g. IPPC, BAT, etc.) and procedures (TQ, EMAS, CSR) particularly into institutional actions and enterprise delocalisation investments towards the new Eastern countries
- to study integrated strategies about the offer of 'research/education delocalization'
- to apply the subsidiarity principle and the relative rules to create a link between territorial government and governance (bottom-up vision), favoring the intra and inter-regional cohesive instruments
- to revisit the application of Social Quality and Cohesion principles looking at some common indicators on the base of social and welfare system and the capability of sustaining the balanced and satisfactory relationships between stakeholders and shareholders
- to build a common model/procedure for contrasting the risk of social exclusion looking at the children and ageing people;
- to invest in the life and environmental quality with regard to public expenditure for employment;
- to fix some common rules for making the places to invest in and work more attractive and developing and sharing good practices with public and private business partners
- to support innovation and tech transfer jointly with technical assistance and advisory financial services provided to agencies working for creation and development of SMEs, looking at the question of Access to Intellectual Property from research organisations
- to include in the Espo researches the study of new instruments to better meet the Lisbon/Gothenburg objectives (e.g new risk capital instruments for SME start-ups using environmental technologies).

How the 3.3 project obtained the A case results

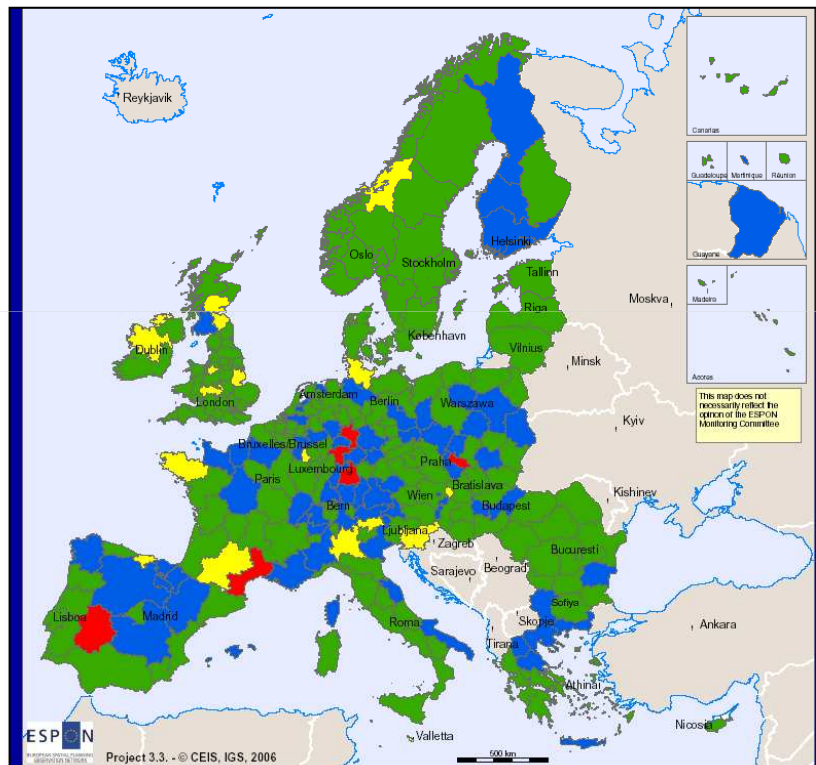
- By concentrating the research on the 4 main addresses of Lisbon/Gothenburg dimension (determinants or synthetic indices):
 - 1. Innovation & Research**
 - 2. Global/Local Interaction**
 - 3. Quality**
 - 4. Resources & Funds**
- In respect of the principles of the EU cohesion
- On the base of a new measure using new instruments
- Looking at the territorial dimension and not only at the spatial one
- Integrating and making interaction between sectoral policies and territorial capabilities (local identities at regional level)
- Amplifying the base of participation by the transnational cooperation

Policies recommendations with regard to **Innovation & Research**

- common measures directly dedicated to the countries showing very low I&R profiles, with respect to the national plans to invest in an appropriate technological base (I&R exchanges and growth about ICS)
- improving the share of population and firms "surfing the web" in Eastern countries and Mediterranean area to sustain internationalisation
- common education as a base of the ICS (from the tertiary education level by life-long learning projects) putting attention towards the medium age population and their possible re-involvement into the productive system with new responsibility positions
- innovation and restructuring of the knowledge structures and R&D infrastructures (new telecommunication systems and dedicated technologies by European patents) to sustain exchanges between research products and their applications
- a better link between I&R and local job market, opening new Structural Funds at the SM firms-regional institutions-educational/research system joint;
- the SF participation in the public-private cooperation about education (Mediterranean and North Sea regions, Baltic ones including Estonia, Latvia, Lithuania, Eastern European regions) balancing the EU offer and mobility of Human Capital towards the Eastern regions;
- the actualisation of the tertiary education level to the international needs (Mediterranean regions) in order to realise more telecommunication, horizontal structural connection and integration, over taking the design of the positive 'Y', using especially new technologies contributions.

The I&R current territorial patterns

MAP IR 17 - Innovation and Research: Syntetic Spatial Composit Index

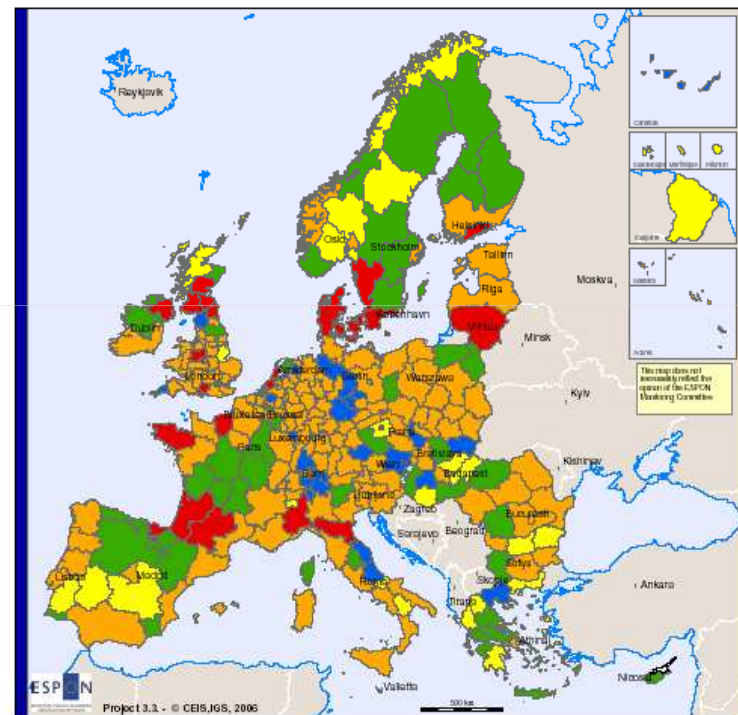


Values obtained combining Innovation and Knowledge Creation Facilities

- High
- Medium high
- Medium low
- Low

© Eurogeographics Association for the geographic boundaries
Regional reference: NUTS2, 2003
Origin of data: CEIS, 2005

MAP IR 18 - Innovation and Research: Territorial Dimension at NUTS 2



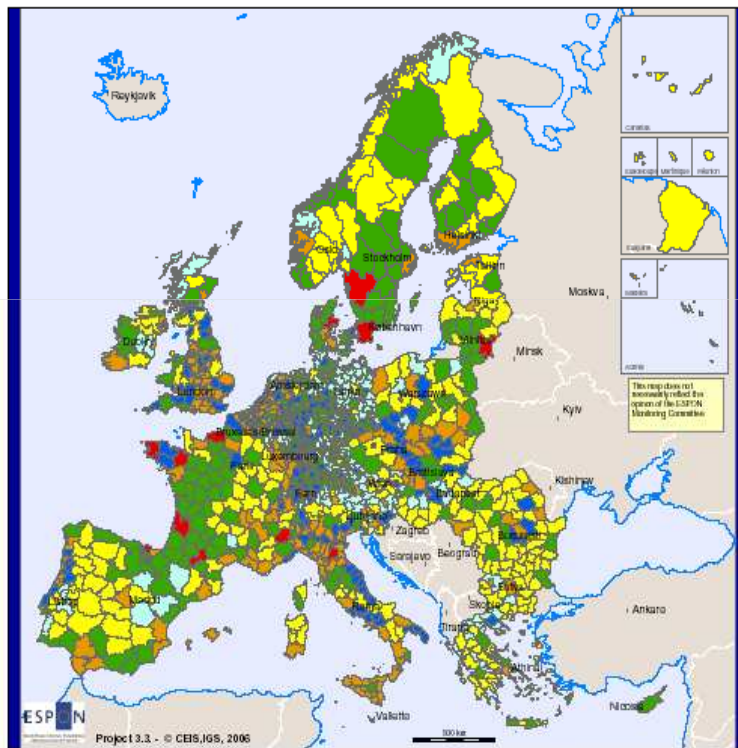
Values obtained combining Innovation and Research: Syntetic Spatial Composit Index and TT2 - Territorial tipologies at NUTS2

- ABSOLUTE
- VERY HIGH
- HIGH
- MEDIUM
- LOW
- VERY LOW

© Eurogeographics Association for the geographic boundaries
Regional reference: NUTS2, 2003
Origin of data: CEIS, 2005

First proposal of some transnational cooperative areas from the Innovation & Research territorialisation

MAP IR 19 - Innovation and Research: Territorial Dimension at NUTS 3

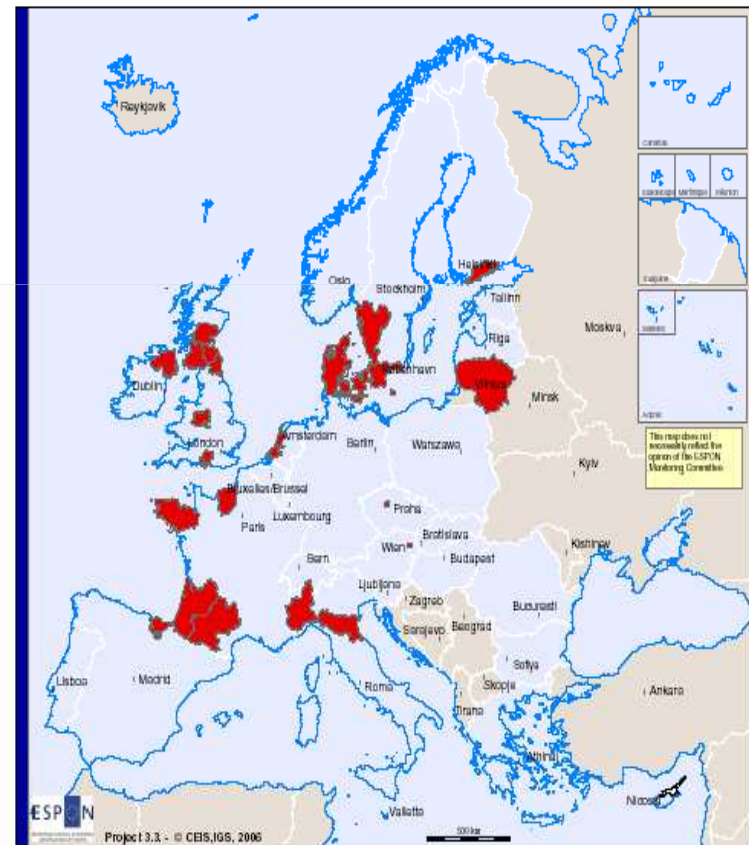


Values obtained combining Innovation and Research: Synthetic Spatial Composit Index and TT3 - Territorial typologies at NUTS3

- ABSOLUTE
- VERY HIGH
- HIGH
- MEDIUM
- LOW
- VERY LOW

© Eurogeographic Association for the geographic boundaries
Regional reference: NUTS, 2003
Origin of data: CEIS, CEIS, 2006 - 2005

MAP IR 18 - Innovation and Research: Territorial Dimension at NUTS 2



Values obtained combining Innovation and Research: Synthetic Spatial Composit Index and TT2 - Territorial typologies at NUTS2

- ABSOLUTE

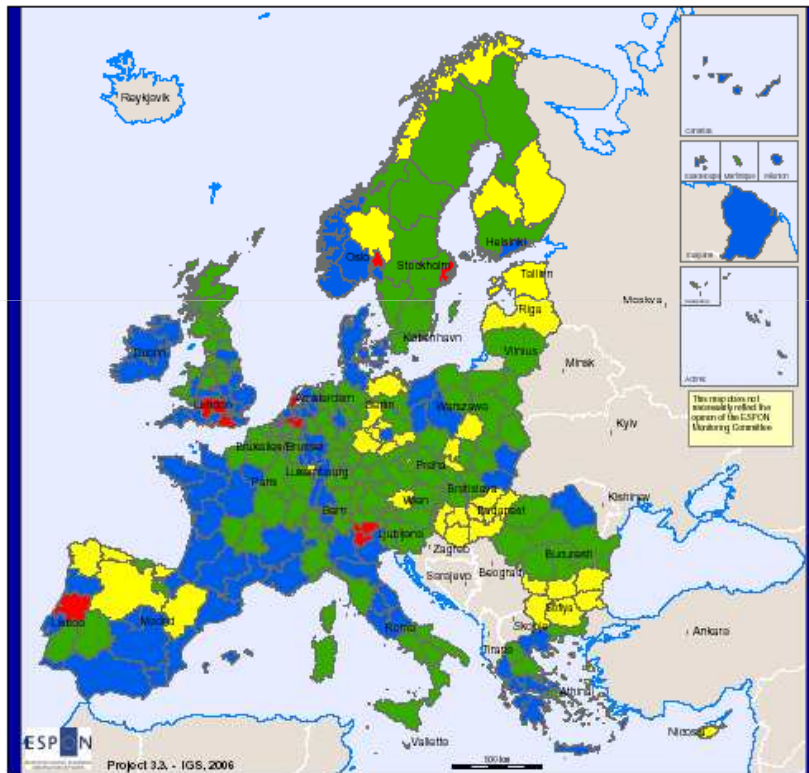
© Eurogeographic Association for the geographic boundaries
Regional reference: NUTS, 2003
Origin of data: CEIS, CEIS, 2006

Policies recommendations with regard to **Global Local Interaction**

- to create a common language in the global 'arena' of competitiveness and sustainability
- to guarantee an appropriate level of security of population migration
- to valorise tourism into a general territorial appeal, linking tourism to the education mobility, sustaining the family income offering a new educational and knowledge system by globalization inputs and ICS;
- to launch specific environmental projects for excluded active population (new job market in the coastal or boundary countries)
- to sustain a global vision into the student and researcher outbound regional mobility
- to launch specific manufacturing enterprise policies
- to improve polycentric models as alternatives to the capital regions
- to implement G/L infrastructures involving credit institutions level and insurance companies to sustain a better general management attitude
- to stress the delocalization particularly in borderline regions
- to confirm the cohesion regional funds to reinforce the local social interaction, involving the manufacturing enterprises and local trade activities, by specific fiscal and financial instruments
- to consolidate the internal goods and services trade using the same rules of the free EU market circuits, favoring the internationalization position of regional systems
- to re-organise a balanced distribution of management attitude

Maps of Global/Local Interaction

MAP GL 42 - Global Local Interaction:
Synthetic Spatial Composit Index

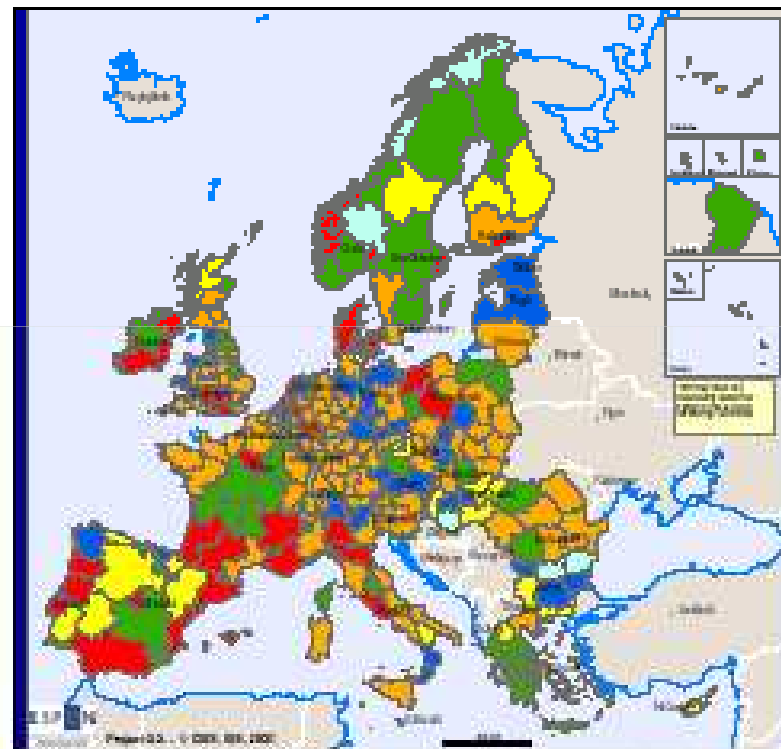


values obtained combining social cohesion reElaborations + risk of social exclusion and social wellness attitude

- High
- Medium high
- Medium low
- Low

© European Association of the geographic, boundaries Regional reference: NUTS 2000. Origin: data: IGS, 2004

MAP GL 43 - TERRITORIAL Global Local Interaction



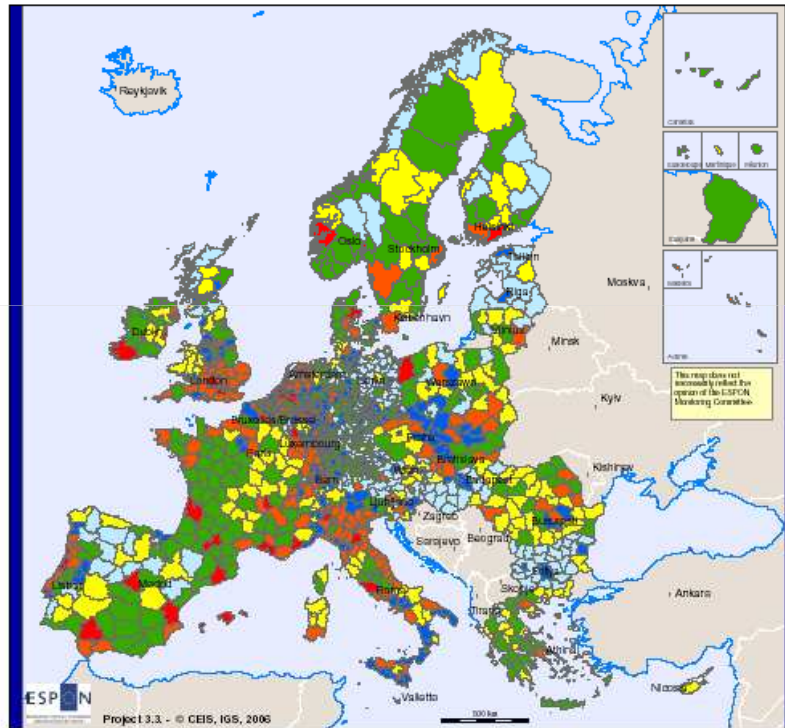
Values obtained combining Global, local Synthetic Spatial Composit Index and TIZ - Territorial Typology on a NUTS2

- ABSOLUTE
- VERY HIGH
- HIGH
- MEDIUM
- LOW
- VERY LOW

© European Association of the geographic, boundaries Regional reference: NUTS 2000. Origin: data: IGS, 2004

First proposal of some transnational cooperative areas from the Global/Local Interaction territorialisation

MAP GL 44 - TERRITORIAL Global Local Interaction



Values obtained combining Global Local: Syntetic Spatial Composit Index and TT3 - Territorial typologies at NUTS3

- ABSOLUTE
- VERY HIGH
- HIGH
- MEDIUM
- LOW
- VERY LOW

© European Association for the Geographic Information Regional Information, NUTS 2003
Original data: CEIS, IGS, 2006

MAP GL 43 - TERRITORIAL Global Local Interaction



Values obtained combining Global Local: Syntetic Spatial Composit Index and TT2 - Territorial typologies at NUTS2

- ABSOLUTE

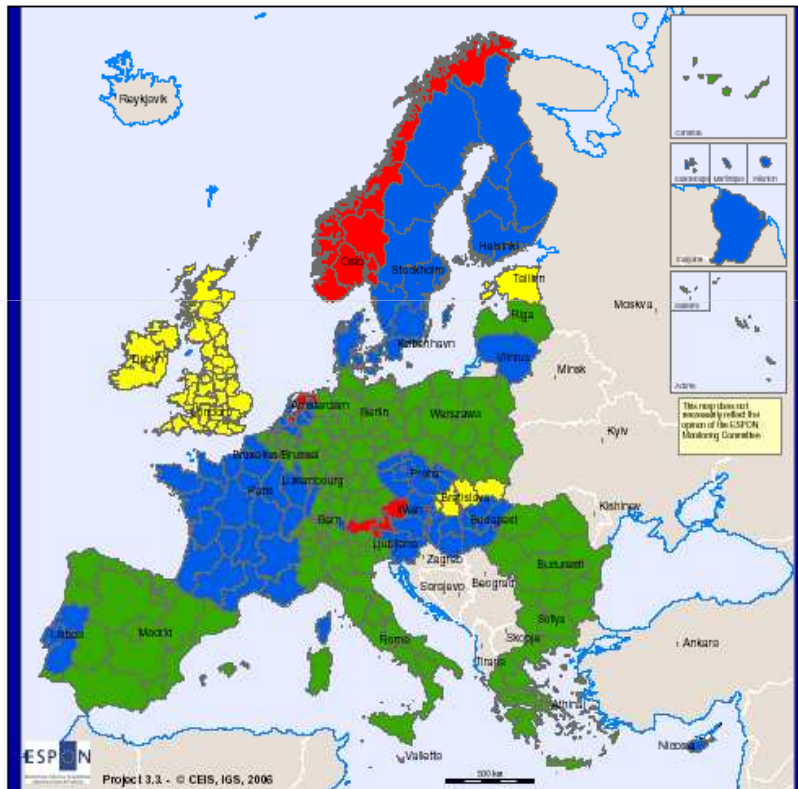
© European Association for the Geographic Information Regional Information, NUTS 2003
Original data: CEIS, IGS, 2006

Policies recommendations with regard to **Quality**

- to use more indicators than one to assess the country positions and to harmonise consumer prices index and the consumption aggregates towards a common medium level in all UE;
- to connect the level of employment (employment index) and its organisation in the traditional industrial regions to the de-industrialisation process;
- to change the parameters of calculation of buying power looking at EU goods of large consumption;
- to stress the *infrastructural variables of cohesion* as significant measure of welfare efficiency,
- to complete the network of physical accessibility and multimodal organisation
- to consider *life quality* as a complex synthetic index, representative of the regional identity into EU context;
- to consider *government quality* as a fundamental point of European integration and a measure of the common European political feeling (using the government quality as a synthetic index);
- to apply the *subsidiarity* principle and its rules to create intra and interregional cohesive instrument;
- to fix different governance rules with respect to the geographical/territorial scale
- to improve citizenship confidence in some countries
- to propose a common reflection about *Social Quality and Cohesion*
- to sustain the social wellness aptitude to reinforce the cooperative regional projects

Maps of Quality

MAP Q 44 - Quality: Syntetic Spatial Composly Index



Values obtained combining social quality and cohesion and status quo (quality)

- High
- Medium high
- Medium low
- Low

© European Association for the geographic boundaries Regional Indicators (RTIS), 2002
Origin of data: CEIS, 2006

MAP Qty 45 - Territorial QUALITY



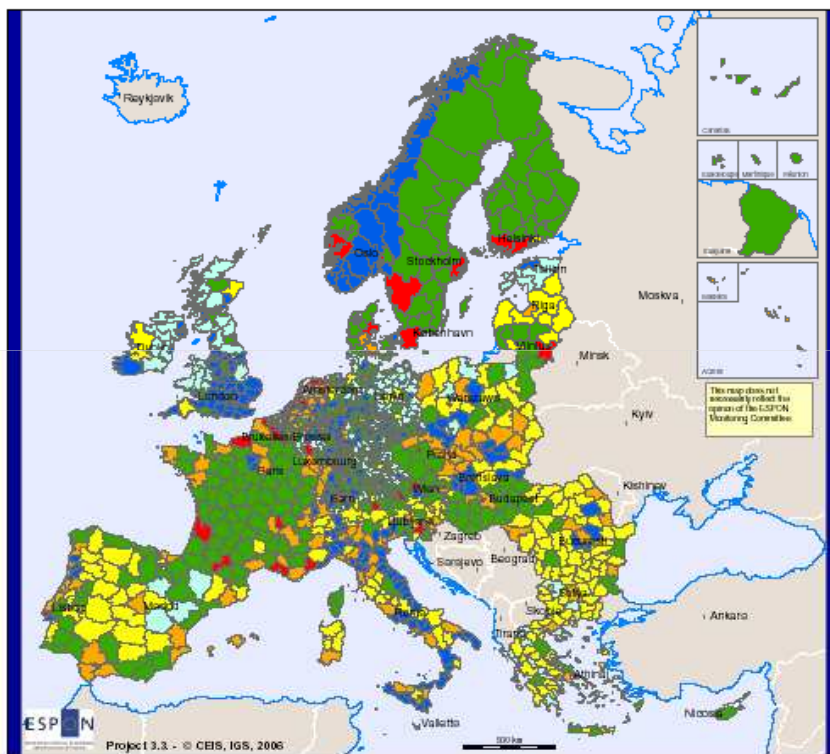
Values obtained combining Quality: Syntetic Spatial Composit Index and TT2 - Territorial typologies at NUTS2

- ABSOLUTE
- VERY HIGH
- HIGH
- MEDIUM
- LOW
- VERY LOW

© European Association for the geographic boundaries Regional Indicators (RTIS), 2002
Origin of data: CEIS, 2006

First proposal of some transnational cooperative areas from the Quality territorialisation

MAP Qty 45 - Territorial QUALITY

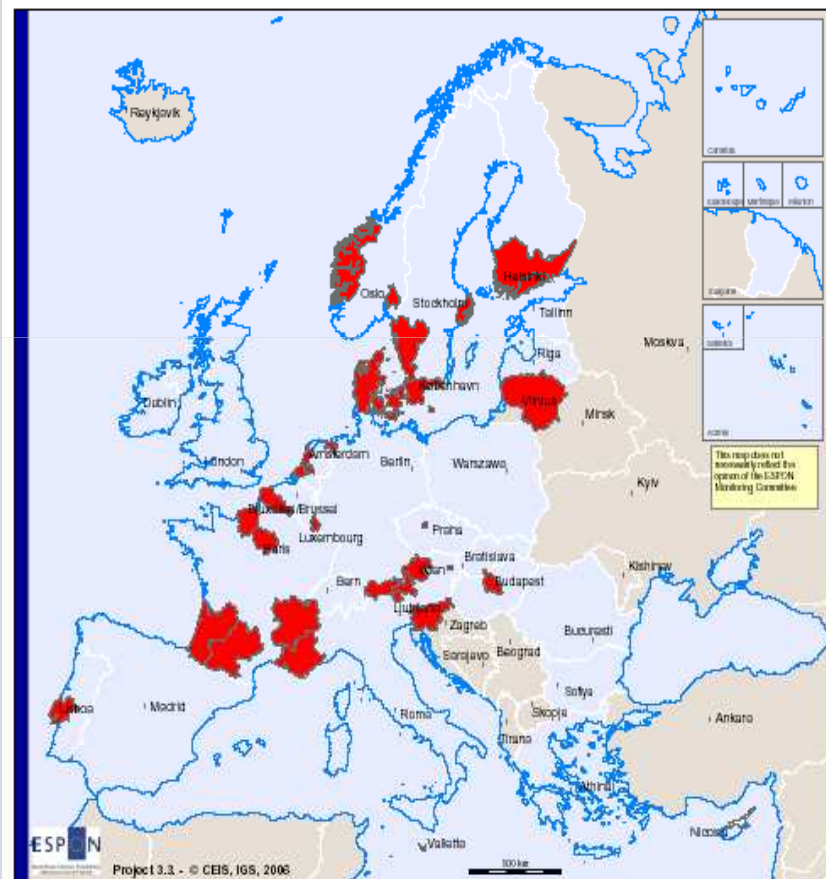


Values obtained combining Quality:
Synthetic Spatial Composit Index and TT2 -
Territorial typologies at NUTS2

- ABSOLUTE
- VERY HIGH
- HIGH
- MEDIUM
- LOW
- VERY LOW

© Eurogeographic Association for the geographic boundaries
Regional reference: NUTS2, 2003
Date of data: CEIS, CEIS, 2006

MAP Qty 45 - Territorial QUALITY



Values obtained combining Quality:
Synthetic Spatial Composit Index and TT2 -
Territorial typologies at NUTS2

- ABSOLUTE

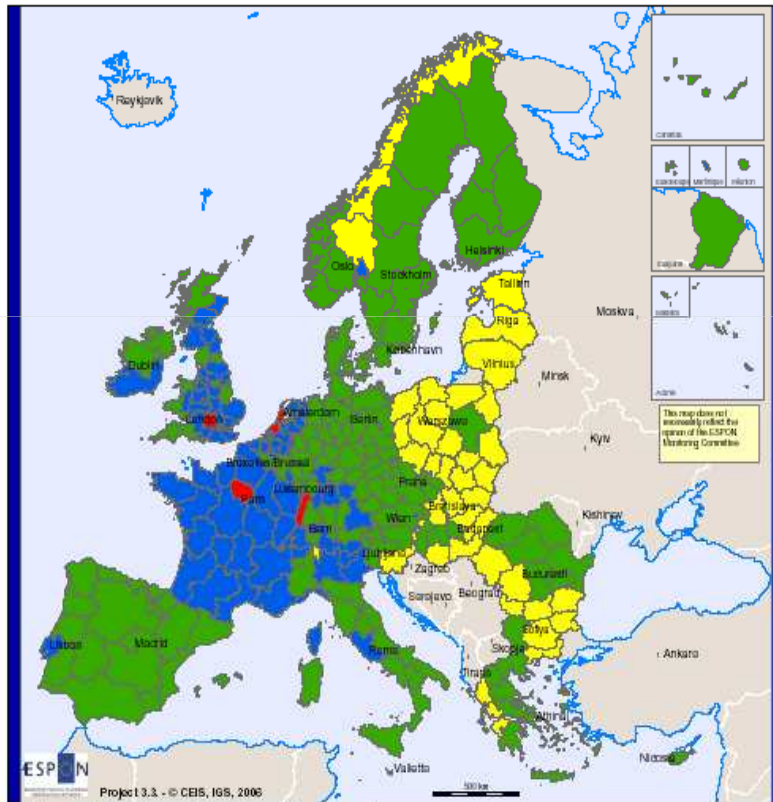
© Eurogeographic Association for the geographic boundaries
Regional reference: NUTS2, 2003
Date of data: CEIS, CEIS, 2006

Policies recommendations with regard to **Resources and Funds,**

- to balance the regional differences on the base of regional capability
- to relate the *Lisbon Strategy (Structure)* to regionally led innovation poles
- to link *Human Capital Expenditure* to *Public Expenditure for Employment* as well as sustaining more specific *Human Capital Policies* (for example, in Austria and Belgium)
- to sustain *Firms Aids*, reflecting on polarisation as economic support (in Central and Eastern Europe, Ireland and Portugal)
- Addressing *Public Expenditure for Employment* to contrast the high public expenditure along the diagonal concentration (from Ireland through to Italy, with the South-West, North-East and Central-East regions), building up the service sector in IT
- To stress international exchange in I&R and cross-border activities in pollution, risk prevention and tackling environmental problems (particularly in the Eastern regions)
- to improve the link between *Structural Funds and Accessibility by Population* by the development of corridors between urban areas
- to address the *policies for the Gothenburg Strategy (Structure)* to contrast the lowest expenditures
- about *Public Expenditure for Poverty and Ageing*, it's needed to have more expenditure for labor markets including older workers
- to overcome the North/South divide by a new ESDP

Maps of Resources and Funds

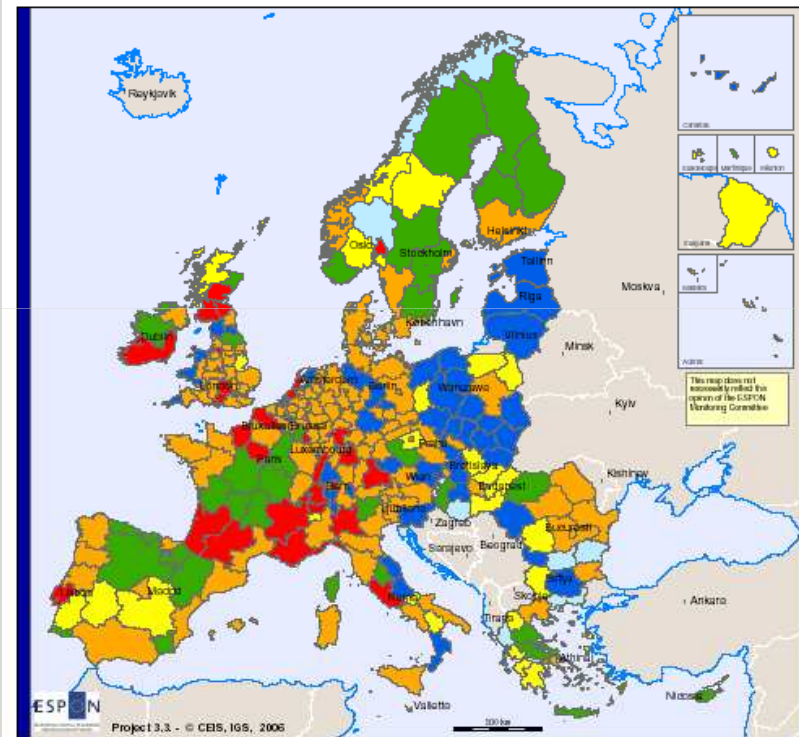
MAP RF 18 - Resources and Funds: Syntetic Spatial Composit Index



Values obtained combining Use of Funds and
Lisbon/Gothenburg Interventions

- High
- Medium high
- Medium low
- Low

MAP RF 19 - Resources and Funds Interaction
Territorial Dimension at NUTS 2

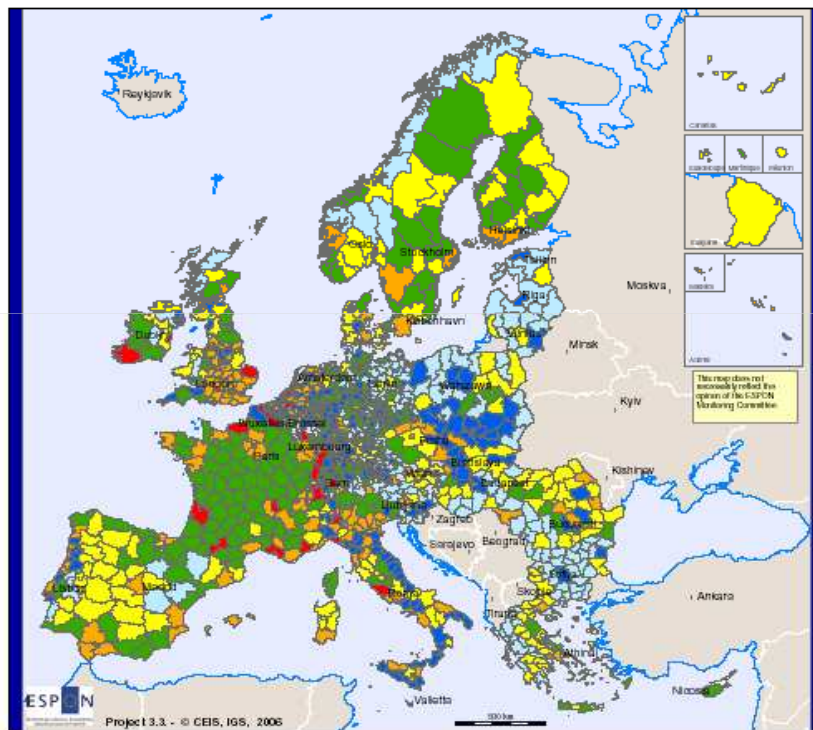


Values obtained combining Resources and Funds:
Syntetic Spatial Composit Index and TT2 - Territorial
typologies at NUTS2

- ABSOLUTE
- VERY HIGH
- HIGH
- MEDIUM
- LOW
- VERY LOW

First proposal of some transnational cooperative areas from the Funds & Resources territorialisation

MAP RF 20 - Resources and Funds Interaction Territorial Dimension at NUTS 3



Values obtained combining Resources and Funds: Synthetic Spatial Composit Index and TT3 - Territorial typologies at NUTS3

- ABSOLUTE
- VERY HIGH
- HIGH
- MEDIUM
- LOW
- VERY LOW

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Regional reference: NUTS3 2003
Origin of data: CEIS, IGS, 2006

MAP RF 19 - Resources and Funds Interaction Territorial Dimension at NUTS 2



Values obtained combining Resources and Funds: Synthetic Spatial Composit Index and TT2 - Territorial typologies at NUTS2

- ABSOLUTE

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Regional reference: NUTS2 2003
Origin of data: CEIS, IGS, 2006

Political results on the base of research goals

New list of indicators

Indicators	Categories	Sectors	Typologies	Determinant
11	8	5	3	Innovation & Research
68	23	9	4	Global/local interaction
27	23	10	4	Quality
10	10	6	3	Use of resources and funds

List of basic indicators and relative sources

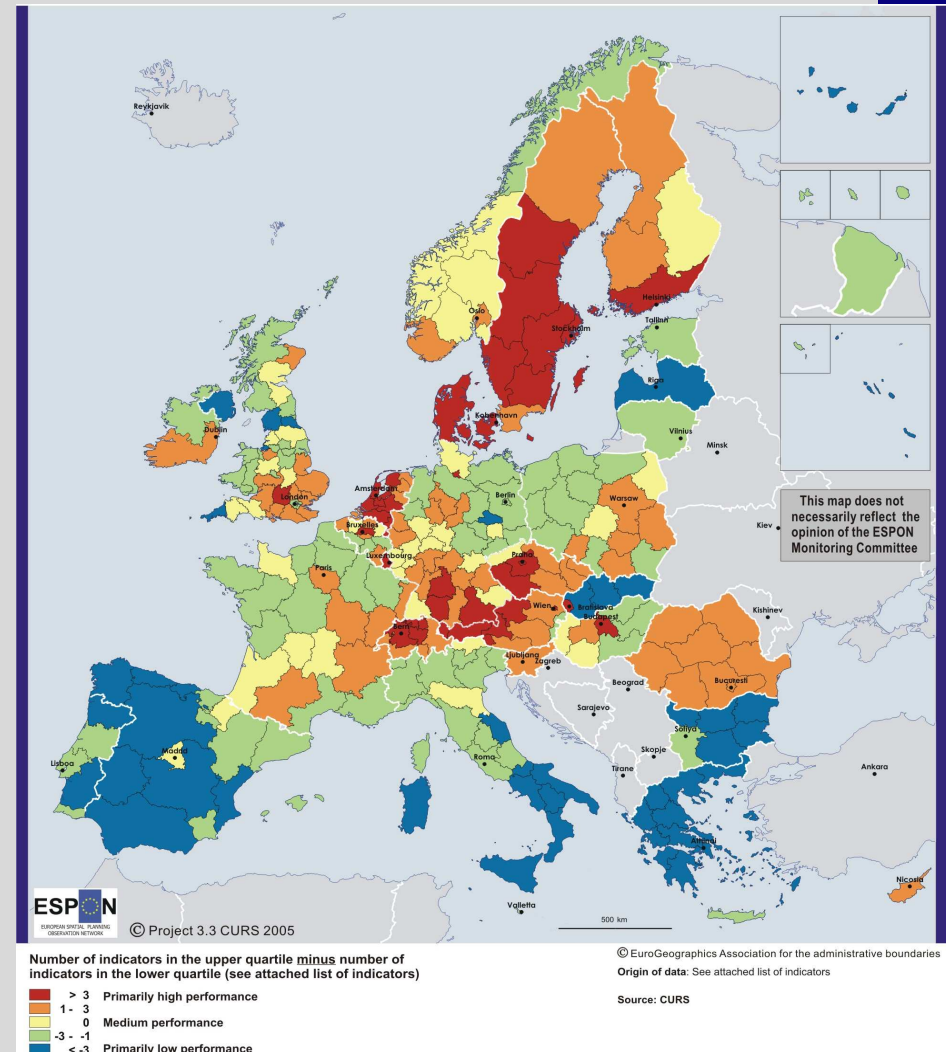
Determinant	3.3 Indicator	42 Spring indic. (2003)	Espon references
Innovation & Research	Internet users	II.3.1	project 1.2.2
	Firms with internet access	II.3.2	project 1.2.2
	Municipalities with internet access		
	Universities students		project 1.1.2 (w. gaps) ESPON DB
	Innovative dependency index		ESPON DB (w. gaps)
	Population with tertiary education		ESPON DB (w. gaps)
	Population in life-long learning	I.5	
	Science Parks members of (ISAP)		project 2.2.1
	Business Innovation Centres		project 2.2.1
	Universities and High level research centres		project 2.2.1 (partly)
Global local interaction	Old technologies	III.3.3	project 1.2.2
	New technologies	III.3.3	project 1.2.2
	Environmental International Agreements	V.7.2	
	Population change		ESPON DB
	Tourists inbound		
	Tourists outbound		
	Student inbound		
	Student outbound		
	Researcher inbound		
	Researcher outbound		
Active people	I.1.1	ESPON DB	
Manufacturing enterprise			
Product trademarks			
Energy Self-sufficiency Index	V.2	project 2.1.4	
FDI intensity	III.6.6		
Trade integration of goods	III.6.4		
Trade integration of services	III.6.5		

	Vulnerability		project 1.3.1
	Typology Multimodal Accessibility Potential	V.3	project 2.1.1
	Total general government revenue	g/f	
	Labour - cost index (2000:100) - NSA	e	
	Long-term interest rate	d	
	Credit institutions		
	Insurance companies		
	Companies		
	Stock market capitalisation - end of period - Billiards of euro - NSA	III.6.1	
Quality	GDP per capita (PPS)	a.1	ESPON DB
	Consumption per capita		
	Level of employment	I.1	ESPON DB
	Consumer price Index	III.1.1	
	Hospital beds		
	cultural opportunities		
	Hotels beds		
	Typology Multimodal Accessibility Potential		project 2.1.1
	Municipal waste generation	V.5	
	Hazardous waste generation		
Recycling Municipal waste			
Degree of Hazard		project 1.3.1	
Greenhouse emissions	V.1		
Gross abstraction			
Confidence in EU commission			
Confidence in EU council ministers			
Confidence in EU parliament			
National parliament % of voting			
European parliament % of voting			
Early school leavers	IV.5.1		
Inequality of income distribution	IV.1		

	Persons living in households where no one works	IV.7	
	Level of poverty	IV.2.2	
	Female employment	I.2.1	
	Fertility rate		
	Life expectancy		
Resources and funds	R&D expenditure	II.2.1	project 2.1.2
	Firm National aids	III.5	
	Human capital expenditure pps per capita	II.1	
	Employment expenditure pps per capita		
	EU funds spending		project 2.2.2
	Economics resources	III.1.1	
	Climate and natural resources expenditure pps per capita		
	Efficiency of accessibility		project 2.2.1
	Public Health expenditure pps per capita	III.5	
	Poverty and age expenditure pps per capita	III.5	

Regional performance of 14 Lisbon Short List Structural Indicators (B case)

the performance on *all fourteen structural indicators* from the short list has been merged into one map. The overrepresentation (eight out of fourteen) of economic indicators is mirrored in the spatial patterns. Thus the hard economic core of Europe is clearly discernible, also encompassing much of the Nordic countries. Norway falls short primarily due to low “performance” on the environmental indicators whereas the opposite holds true for e.g. Romania and eastern Poland due to better performance both on social and environmental indices. The capital regions of Prague, Bratislava and Budapest are also among the top European performers in this respect. Territorial disparities are greatest in Slovakia basically dividing the country into the capital region on the one hand and the rest of the country on the other. The Cohesion Countries (apart from Ireland) as well as southern Italy do also stand out as low performers in this respect, scoring fairly low on all three sectors



A Flash Back: How did we get these results? By a particular methodological approach (STeMA)

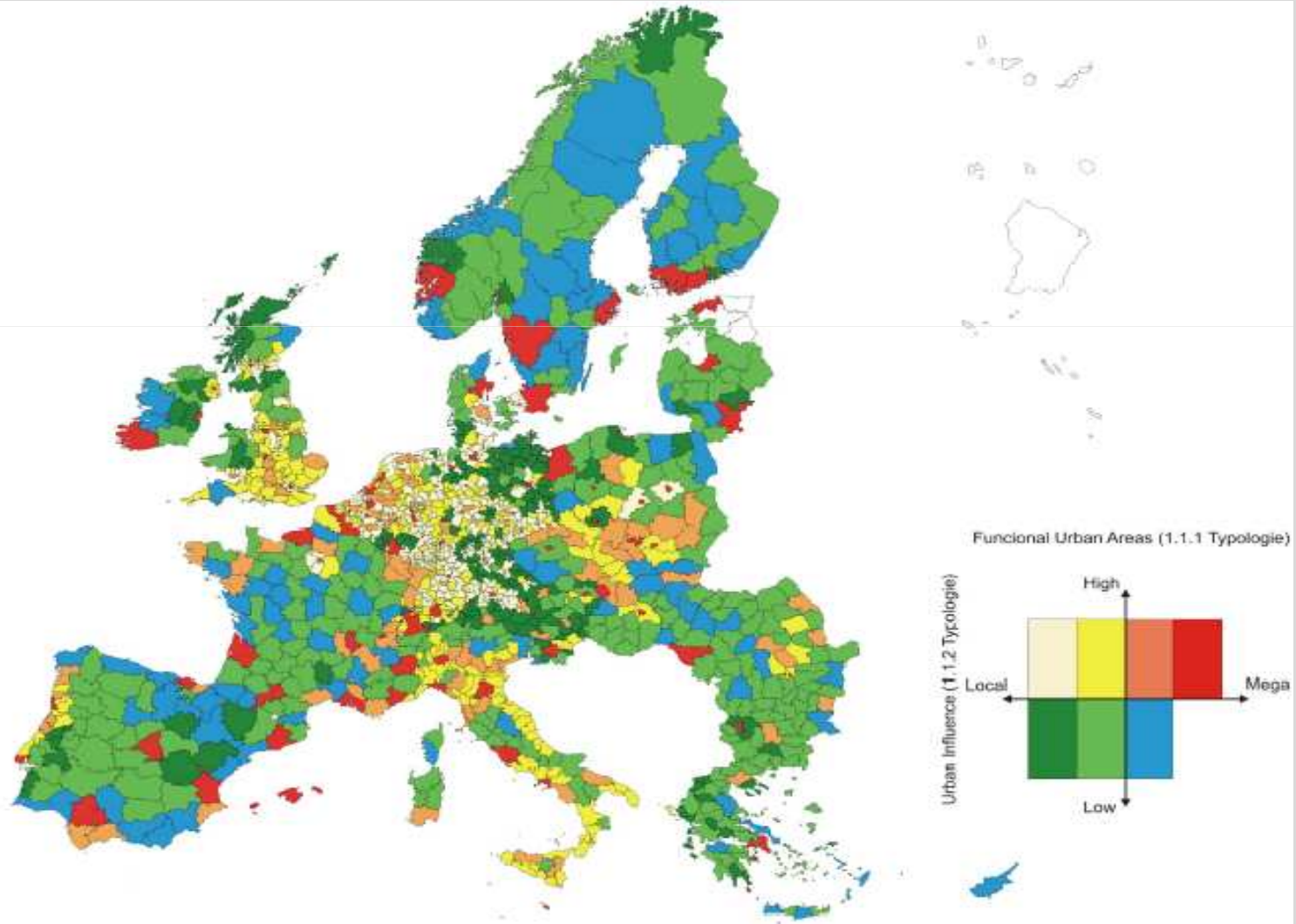
1. **Systemic vision** where **economy, territory and environment are considered as a whole system. By this, we made a revision of the Porter's Diamond** and its integration with Lisbon/Gothenburg Agendas (2005)
2. **Carrying capacity of the economic/territorial/environmental systems as common base for regions and states to be "competitive in sustainability" (composite synthetic indicator)**
3. **Strategic Environmental Assessment** as logical common standard procedure to evaluate the territorial carrying capacity
4. **GIS** as the best instrument to manage the complexity of the knowledge in a system

Other results: the base of territorialisation

- In the chosen hypothesis, the differences between “Regional/Local functional areas” or “No special function areas” emerge. In this case, more depopulated areas are separated from the rural areas where we can find medium-sized cities with regional/local economic bases.
- Reminding that the main arguments of the analysis are:
 - To identify the more competitive and dynamic territories based on knowledge and innovation and relate it with urban and regional characteristics;
 - to know if urban centres and metropolitan agglomerations play a crucial role in providing the framework conditions for a knowledge-based economic development;
 - To understand polycentric model in different scales, which includes the dynamics of urban growth centres and linking peripheral and disadvantaged areas with urban centres (ESPON, Terms of Reference, 2004)
- Considering these three main arguments, the TPG has chosen the Hypothesis C as the more adequate to evaluate behaviour in the four determinants.
- This type of approach allows one to construct an indicator which includes not only the information on the current situation according to its own specificities, but also on the real dynamics of the actions that enable a given goal to be reached: in this case we turn from the simple territorial competitiveness to the **capability to generate territorial competitiveness in sustainability**.

The Map of territorialisation

Hypothesis C



Other results: the interaction matrix

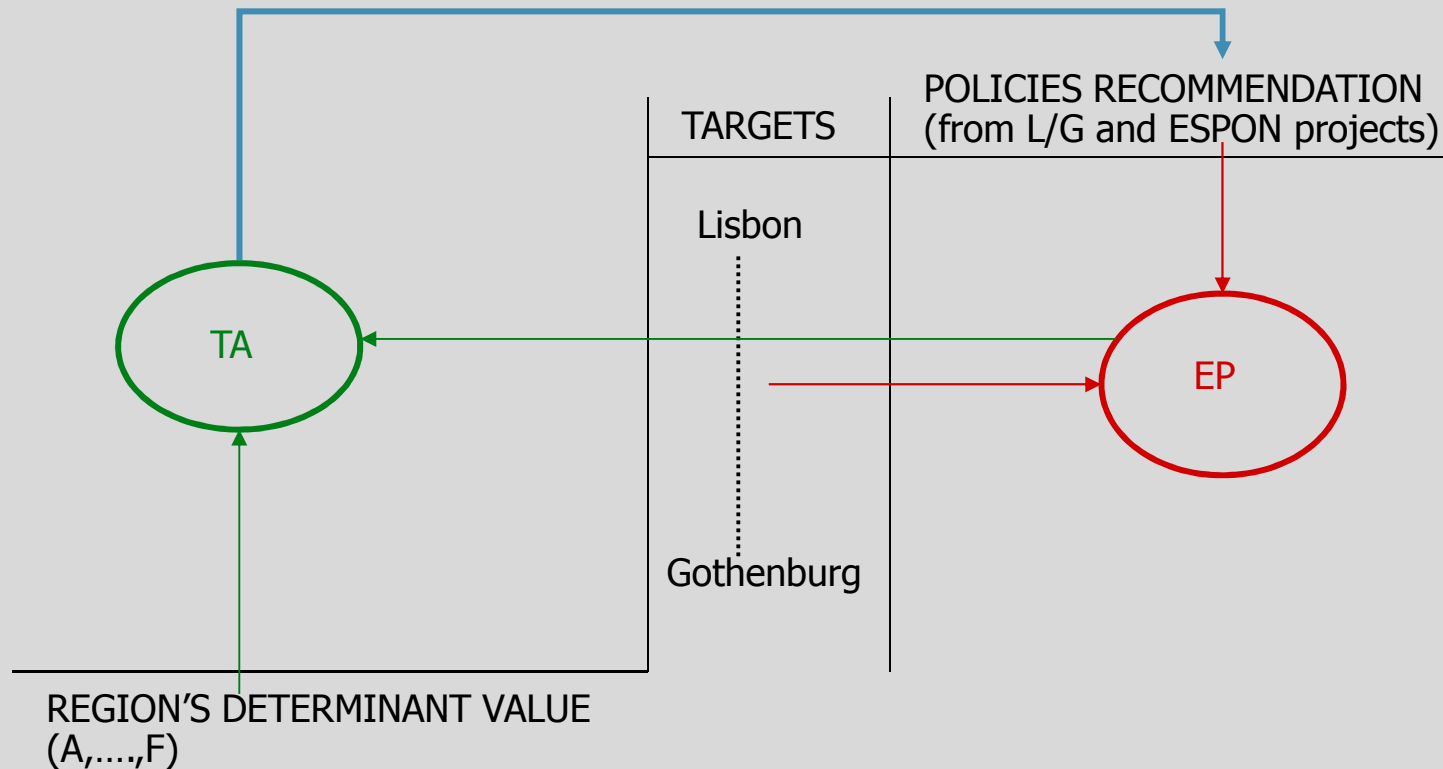
Table 11: Interaction matrix between indicator and Territorial typologies: Hypothesis C

Determinant	Value	1 High urban influence with Mega functions (A1)	2 High urban influence with Transnational or National functions (B1)	3 High urban influence with Regional/Local functions (C1)	4 High urban influence with No special function (D1)	5 Low urban influence with Transnational or National functions (E1)	6 Low urban influence with Regional/Local functions (F1)	7 Low urban influence with No special function (G1)
Innovation & Research	A	A	A	B	B	C	C	D
	B	A	B	B	C	D	D	E
	C	B	B	C	D	D	E	F
	D	C	C	C	D	E	F	F
Global/Local	A	A	A	B	B	C	C	D
	B	A	B	B	C	D	D	E
	C	B	B	C	D	D	E	F
	D	C	C	C	D	E	F	F
Quality	A	A	A	B	B	C	C	D
	B	A	B	B	C	D	D	E
	C	B	B	C	D	D	E	F
	D	C	C	C	D	E	F	F
Resources & Funds	A	A	A	B	B	C	C	D
	B	A	B	B	C	D	D	E
	C	B	B	C	D	D	E	F
	D	C	C	C	D	E	F	F

cross values

A	absolute
B	very high
C	high
D	medium low
E	low
F	very low

The "Policies impact assessment" matrix



ACTION 1: assess the targets relating to the policies with a qualitative rank (outcome=effects=EP)

ACTION 2: assess the effects of the policies in relation to the regional value, for each determinant (outcome= territorial answer/reaction=TA)

ACTION 3: assess of the TA for each region according to a *impact matrix* and, if not sustainable (overcome the A value), change or regret of that policy for that territory

3.3 Logical network toolbox

1.- Select determinant...

- Global_Local
- Quality
- Resources_found
- Innovation_Research

2.- Define logic objects ...

POLICY CHOICES

POLICY EFFECTS

3.- Define computation rules..

LOGICAL TABLE

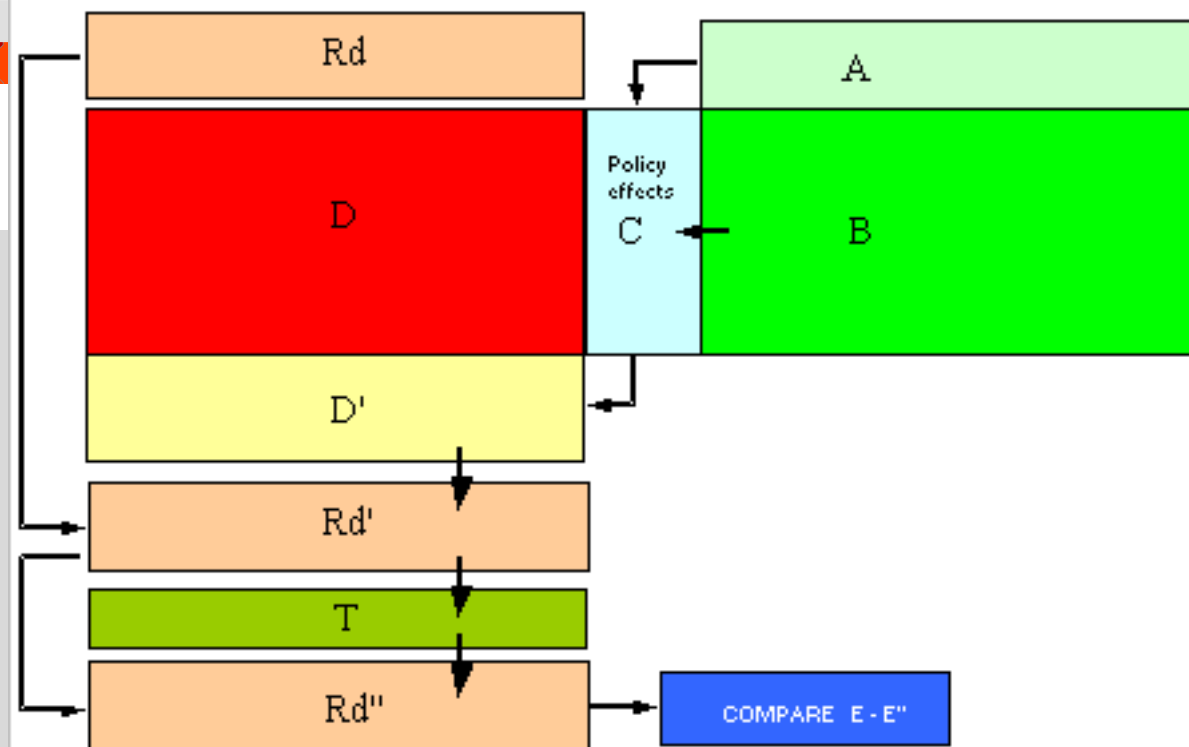
TERRITORIAL IMPACTS

4.- View results

MAP TOOL

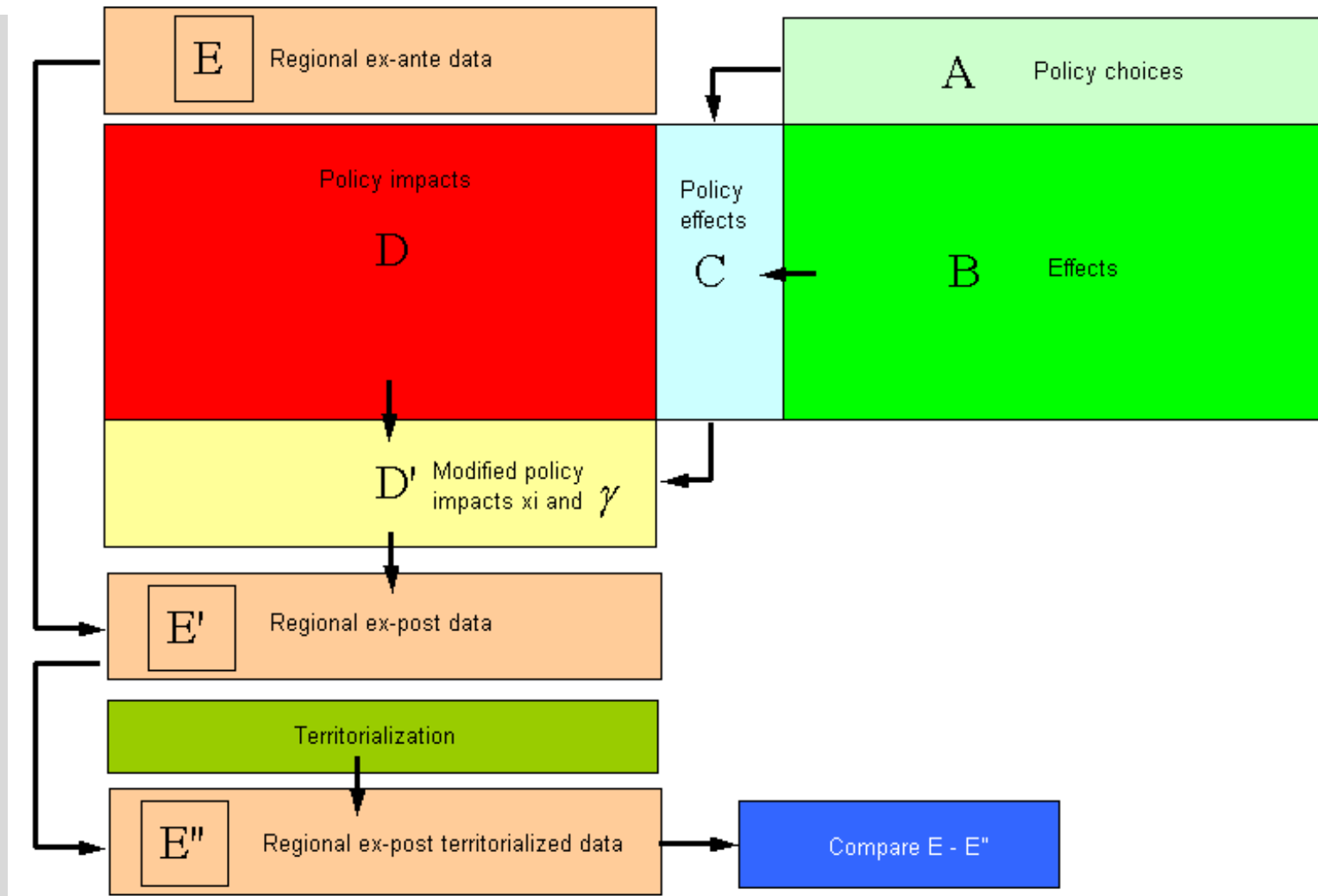
The toolbox is a software application that provides for a systematic procedure to define highly abstract concepts (e.g. "sustainable development", "territorial cohesion"...) as a combination of more concret concepts and specific statistic indicators (e.g. GDP/capita, number of firms with Internet access, CO2 emissions...) and calculate them for preselected territorial units (e.g. European regions).

The software platform selected to implement the toolbox has been Visual Basic on Microsoft ACCESS. The toolbox uses Geomedia Viewer, a royalties-free desktop mapping application by Intergraph, to display results graphically, and it can be easily linked to any other standard Desktop mapping or GIS application such as Mapinfo or ArcGIS.



The design of the toolbox and the theory behind it has been developed by the University of Rome "Tor Vergata", also responsible for testing and using it within the ESPON 3.3 project, and the software implementation by MCRIT (Barcelona).

The toolbox uses as a reference data ESPON regional statistical indicators, aggregates them according to the network-like conceptual structures to be defined by the user, and provides as a result relative values of each region from the simple indicators up to the highest more abstract concept. .



Global & Local																																																	
EI & FI & ICE												Social Interaction (SI)																																					
EI & FI											International Coop. on Envir. (ICE)																																						
Economy interaction (EI)								Financial Interaction (FI)				Population Mobility (PM)																																					
ESSI & Int & SL							Productive system identity (PSI)																																										
ESSI & Int				Strategic Localization (SL)				TI & CE																																									
Internationalization (Int)			RDA & Vuln		Costs (CS)			Tourism (TI)								Cultural Exchange (CE)																																	
		Trade Integration (Tint)			FP & LC		Credit&Insur ance attitude (C&IA)		Management attitude (MA)						Researcher mobility (RM)		Student mobility (SM)																																
Q_ESSI	Energy self- sufficiency Index	Q_FDlin	Foreign Direct Investments Intensity	Q_Tig	trade integration of goods	Q_Tis	trade integration of services	R&D A	R&D Accessibility	Q_Vuln (NH)	vulnerability	Q_LTIr	Long term interest rate	Q_FP	Fiscal pressure	Q_LC	Labour Cost	Q_ME	Manufacturing enterprise	PTm	Product trademarks	Q_Bank	Credit Insitutions	Q_InsC	Insurance Companies	Q_STM	Stock Market Capitalisation	Q_BC	Companies	Q_GEC	General environment concerns	Q_SEC	Specific environment concerns	Q_AcP	Active population	Q_PCh	Population change	Q_InT	Tourism Inbound	Q_OutT	Tourism Outbound	Q_InRes	Researcher Inbound	Q_OutRes	Researcher Outbound	Q_InStud	Student Inbound	Q_OutStud	Student Outbound

Table with indicators at base level. Aggregation procedure computes the determinant, which is at top level.

DEFINE POLICY CHOICES

Employment	Homogeneisation of enterprise costs	<input type="checkbox"/>
	Support enterprise creation	<input type="checkbox"/>
	Support employer mobility	<input type="checkbox"/>
	Support equal opportunities	<input type="checkbox"/>
Transport/network	Development of telecommunication networks	<input type="checkbox"/>
	Development of energy networks	<input type="checkbox"/>
	Increase of phisical accessibility	<input type="checkbox"/>
Natural Resources	Use of renovable resources	<input type="checkbox"/>
	Active Protection of Natural resources	<input type="checkbox"/>
	Reduction of Natural Resources consumption	<input type="checkbox"/>
	Natural hazard prevention	<input type="checkbox"/>
Climate	Energy policies	<input type="checkbox"/>
	Flexible Mechanisms	<input type="checkbox"/>
	Climate Active Protection	<input type="checkbox"/>
Public Healt	Social Programme Financing	<input type="checkbox"/>
	Safety	<input type="checkbox"/>
	Support Welfare	<input type="checkbox"/>

Policies and actions : Houses the list of the all possible policies and relative actions included in the Lisbon/Gothenburg strategy and that the Structural Funds can finance to realise this strategy. Policies and actions are the same for all the four determinants

Global/Local G&L

				Lisbon / Gothenburg Agenda - Policies for:																	
				Employment				Transport/network			Natural Resources				Climate			Public Health			
				Homogenisation of enterprise costs	Support enterprise creation	Support employer mobility	Support equal opportunities	Development of telecommunication networks	Development of energy networks	Increase of physical accessibility	Use of renewable resources	Active Protection of Natural Resources	Reduction of Natural Resources consumption	Natural hazard prevention	Energy policies	Flexible Mechanisms	Climate Active Protection	Social Programme Financing	Safety	Support Welfare	
Effects	Ci	Bj'	Bj	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transnational cooperation improvement	0.00	0	18					1			3	3	3	2	3	3					
Promotion of local products	0.00	0	15	2	2		1	2		3	2	3									
Energy efficiency	0.00	0	11	2					3		3			3							
Internationalization	0.00	0	4	1		2				1											
Improvement territorial attractiveness	0.00	0	25		3	1				3	3	3		2	2	2	2	2		2	2
Increase networking	0.00	0	10			1		3		3						3					
Increase financial global market	0.00	0	5	2				3													
Increase cultural connections	0.00	0	7				1	1		2						3					

Logical table

	I2			
I1	a	b	c	d
A	A	A	B	B
B	B	B	B	C
C	C	C	C	C
D	C	D	D	D

Logical tables : Define how indicators/typologies... agregates. They are the same for all variables and for the four determinants.

Territorial typologies: Hypothesis C

		1 High urban influence with Mega functions (A1)	2 High urban influence with Transnational or National functions (B1)	3 High urban influence with Regional/Local functions (C1)	4 High urban influence with No special function (D1)	5 Low urban influence with Transnational or National functions (E1)	6 Low urban influence with Regional/Local functions (F1)	7 Low urban influence with No special function (G1)
		1	2	3	4	5	6	7
Determinant R & F	A	A	A	B	B	C	C	D
	B	A	B	B	C	D	D	E
	C	B	B	C	D	D	E	F
	D	C	C	C	D	E	F	F

Territorialization tables : Define how indicators/typologies... territorialize. They are the same for all variables and for the four determinants.

N2_03	REGION_03	Territo	Q_GEC	Q_SEC	Q_ME	Q_P Tm	Q_E SSI	Q_FD lin	Q_Tig	Q_Tis	Tint	Int	ESSI & Int	Q_R DA	Q_V uln	RDA & Vuln	Q_L Tir	Q_FP	Q_LC	FP& LC	CS	SL	ESSI & Int & SL	Q_ME	Q_P Tm	PSI	EI
AT11	Burgenland	7	B	D	C	B	C	B	A	A	A	B	C	C	B	C	B	D	A	D	B	C	C	C	B	C	C
AT12	Niederösterreich	3	B	D	C	C	C	B	A	A	A	B	C	C	B	C	B	D	A	D	B	C	C	C	C	C	C
AT13	Wien	1	B	D	C	A	C	B	A	A	A	B	C	B	D	B	B	D	A	D	B	B	C	C	A	C	C
AT21	Kärnten	2	B	D	B	B	C	B	A	A	A	B	C	C	B	C	B	D	A	D	B	C	C	B	B	B	C
AT22	Steiermark	2	B	D	C	C	C	B	A	A	A	B	C	C	B	C	B	D	A	D	B	C	C	C	C	C	C
AT31	Oberösterreich	2	B	D	B	C	C	B	A	A	A	B	C	C	B	C	B	D	A	D	B	C	C	B	C	B	C
AT32	Salzburg	2	B	D	B	B	C	B	A	A	A	B	C	C	B	C	B	D	A	D	B	C	C	B	B	B	C
AT33	Tirol	2	B	D	B	B	C	B	A	A	A	B	C	C	B	C	B	D	A	D	B	C	C	B	B	B	C
AT34	Vorarlberg	3	B	D	B	C	C	B	A	A	A	B	C	C	C	C	B	D	A	D	B	C	C	B	C	B	C
BE1	Région de Bruxelles-Cap	1	A	C	C	A	C	A	A	A	A	A	C	A	D	B	B	D	A	D	B	B	C	C	A	C	C
BE21	Prov. Antwerpen	3	A	C	C	C	C	A	A	A	A	A	C	B	D	B	B	D	A	D	B	B	C	C	C	C	C
BE22	Prov. Limburg (B)	2	A	C	C	C	C	A	A	A	A	A	C	B	C	B	B	D	A	D	B	B	C	C	C	C	C
BE23	Prov. Oost-Vlaanderen	2	A	C	B	C	C	A	A	A	A	A	C	B	C	B	B	D	A	D	B	B	C	B	C	B	C
BE24	Prov. Vlaams-Brabant	2	A	C	C	A	C	A	A	A	A	A	C	A	D	B	B	D	A	D	B	B	C	C	A	C	C
BE25	Prov. West-Vlaanderen	2	A	C	B	C	C	A	A	A	A	A	C	C	C	C	B	D	A	D	B	C	C	B	C	B	C
BE31	Prov. Brabant Wallon	4	A	C	C	A	C	A	A	A	A	A	C	A	C	A	B	D	A	D	B	A	C	C	A	C	C
BE32	Prov. Hainaut	2	A	C	C	B	C	A	A	A	A	A	C	B	C	B	B	D	A	D	B	B	C	C	B	C	C
BE33	Prov. Liège	2	A	C	B	B	C	A	A	A	A	A	C	B	C	B	B	D	A	D	B	B	C	B	B	B	C
BE34	Prov. Luxembourg (B)	4	A	C	C	B	C	A	A	A	A	A	C	C	B	C	B	D	A	D	B	C	C	C	B	C	C
BE35	Prov. Namur	2	A	C	C	A	C	A	A	A	A	A	C	B	B	B	B	D	A	D	B	B	C	C	A	C	C
BG01	Severozapaden	6	B	D	A	D	B	B	A	A	A	B	B	D	D	D	D	B	D	B	C	D	B	A	D	B	B
BG02	Severen tsentralen	6	B	D	A	D	B	B	A	A	A	B	B	D	D	D	D	B	D	B	C	D	B	A	D	B	B
BG03	Severoiztochen	2	B	D	A	D	B	B	A	A	A	B	B	D	D	D	D	B	D	B	C	D	B	A	D	B	B
BG04	Yugozapaden	1	B	D	B	D	B	B	A	A	A	B	B	C	D	C	D	B	D	B	C	C	B	B	D	B	B
BG05	Yuzhen tsentralen	2	B	D	A	D	B	B	A	A	A	B	B	D	D	D	D	B	D	B	C	D	B	A	D	B	B
BG06	Yugoiztochen	5	B	D	A	D	B	B	A	A	A	B	B	C	D	C	D	B	D	B	C	C	B	A	D	B	B
CH01	Région lémanique	1	B	C	B	A	C	A	B	A	B	A	C	C	C	C	C	D	B	C	C	C	C	B	A	B	C

Regional ex-ante data : Indicators and agregattions by Nuts2 previous to apply policies.

N2_03	REGION_03	Territory	Q_GEC	Q_SEC	Q_ME	Q_P Tm	Q_E SSI	Q_F Dlin	Q_Tig	Q_Tis	Tint	Int	ESSI & Int	Q_R DA	Q_Vul	RDA & Vuln	Q_LTir	Q_FP	Q_LC	FP& LC	CS	SL	ESSI & Int & SL	Q_ME	Q_P Tm	PSI	EI	Q_B ank	Q_In sC	C& IA	Q_S TM
AT11	Burgenland	7	B	D	C	B	C	B	A	A	A	B	C	C	B	B	B	D	A	D	B	B	C	C	B	C	C	A	B	A	D
AT12	Niederösterreich	3	B	D	C	C	C	B	A	A	A	B	C	C	B	B	B	D	A	D	B	B	C	C	C	C	C	A	C	A	D
AT13	Wien	1	B	D	C	A	C	B	A	A	A	B	C	B	D	C	B	D	A	D	B	C	C	C	A	C	C	A	B	A	D
AT21	Kärnten	2	B	D	B	B	C	B	A	A	A	B	C	C	B	B	B	D	A	D	B	B	C	B	B	B	C	A	B	A	D
AT22	Steiermark	2	B	D	C	C	C	B	A	A	A	B	C	C	B	B	B	D	A	D	B	B	C	C	C	C	C	A	B	A	D
AT31	Oberösterreich	2	B	D	B	C	C	B	A	A	A	B	C	C	B	B	B	D	A	D	B	B	C	B	C	B	C	A	C	A	D
AT32	Salzburg	2	B	D	B	B	C	B	A	A	A	B	C	C	B	B	B	D	A	D	B	B	C	B	B	B	C	A	C	A	D
AT33	Tirol	2	B	D	B	B	C	B	A	A	A	B	C	C	B	B	B	D	A	D	B	B	C	B	B	B	C	A	B	A	D
AT34	Vorarlberg	3	B	D	B	C	C	B	A	A	A	B	C	C	C	C	B	D	A	D	B	C	C	B	C	B	C	A	C	A	D
BE1	Région de Bruxelles-Capitale	1	A	C	C	A	C	A	A	A	A	A	C	A	D	D	B	D	A	D	B	C	C	C	A	C	C	C	A	C	C
BE21	Prov. Antwerpen	3	A	C	C	C	C	A	A	A	A	A	C	B	D	C	B	D	A	D	B	C	C	C	C	C	C	C	B	C	C
BE22	Prov. Limburg (B)	2	A	C	C	C	C	A	A	A	A	A	C	B	C	C	B	D	A	D	B	C	C	C	C	C	C	C	B	C	C
BE23	Prov. Oost-Vlaanderen	2	A	C	B	C	C	A	A	A	A	A	C	B	C	C	B	D	A	D	B	C	C	B	C	B	C	C	B	C	C
BE24	Prov. Vlaams-Brabant	2	A	C	C	A	C	A	A	A	A	A	C	A	D	D	B	D	A	D	B	C	C	C	A	C	C	C	A	C	C
BE25	Prov. West-Vlaanderen	2	A	C	B	C	C	A	A	A	A	A	C	C	C	C	B	D	A	D	B	C	C	B	C	B	C	C	A	C	C
BE31	Prov. Brabant Wallon	4	A	C	C	A	C	A	A	A	A	A	C	A	C	C	B	D	A	D	B	C	C	C	A	C	C	C	A	C	C
BE32	Prov. Hainaut	2	A	C	C	B	C	A	A	A	A	A	C	B	C	C	B	D	A	D	B	C	C	C	B	C	C	C	A	C	C
BE33	Prov. Liège	2	A	C	B	B	C	A	A	A	A	A	C	B	C	C	B	D	A	D	B	C	C	B	B	B	C	C	A	C	C
BE34	Prov. Luxembourg (B)	4	A	C	C	B	C	A	A	A	A	A	C	C	B	B	B	D	A	D	B	B	C	C	B	C	C	C	A	C	C
BE35	Prov. Namur	2	A	C	C	A	C	A	A	A	A	A	C	B	B	B	B	D	A	D	B	B	C	C	A	C	C	C	A	C	C
BG01	Severozapaden	6	B	D	A	D	B	B	A	A	A	B	B	D	D	D	D	B	D	B	C	D	B	A	D	B	B	D	D	D	D
BG02	Severozentralen	6	B	D	A	D	B	B	A	A	A	B	B	D	D	D	D	B	D	B	C	D	B	A	D	B	B	D	D	D	D
BG03	Severoztochen	2	B	D	A	D	B	B	A	A	A	B	B	D	D	D	D	B	D	B	C	D	B	A	D	B	B	D	D	D	D
BG04	Yugozapaden	1	B	D	B	D	B	B	A	A	A	B	B	C	D	D	D	B	D	B	C	D	B	B	D	B	B	D	D	D	D
BG05	Yuzhen tsentralen	2	B	D	A	D	B	B	A	A	A	B	B	D	D	D	D	B	D	B	C	D	B	A	D	B	B	D	D	D	D
BG06	Yugoiztochen	5	B	D	A	D	B	B	A	A	A	B	B	C	D	D	D	B	D	B	C	D	B	A	D	B	B	D	D	D	D
CH01	Région lémanique	1	B	C	B	A	C	A	B	A	B	A	C	C	C	C	C	D	B	C	C	C	C	B	A	B	C	A	A	A	C

Regional ex-post data: Indicators and aggregations by Nuts2 previous to territorialize.

N2_03	REGION_03	Territory	Q_G EC	Q_ SEC	Q_ ME	Q_P Tm	Q_E SSI	Q_F Dlin	Q_ Tig	Q_ Tis	Tint	Int	ESSI _Int	Q_R DA	Q_V uln	RDA_ Vuln	Q_L Tir	Q_ FP	Q_ LC	FP_ LC	CS	SL	ESSI_ Int_S L	Q_ ME
AT11	Burgenland	7	E	F	F	E	F	E	D	D	D	E	F	F	E	F	E	F	D	F	E	F	F	F
AT12	Niederösterreich	3	B	C	C	C	C	B	B	B	B	B	C	C	B	C	B	C	B	C	B	C	C	C
AT13	Wien	1	A	C	B	A	B	A	A	A	A	A	B	A	C	A	A	C	A	C	A	A	B	B
AT21	Kärnten	2	B	C	B	B	B	B	A	A	A	B	B	B	B	B	B	C	A	C	B	B	B	B
AT22	Steiermark	2	B	C	B	B	B	B	A	A	A	B	B	B	B	B	B	C	A	C	B	B	B	B
AT31	Oberösterreich	2	B	C	B	B	B	B	A	A	A	B	B	B	B	B	B	C	A	C	B	B	B	B
AT32	Salzburg	2	B	C	B	B	B	B	A	A	A	B	B	B	B	B	B	C	A	C	B	B	B	B
AT33	Tirol	2	B	C	B	B	B	B	A	A	A	B	B	B	B	B	B	C	A	C	B	B	B	B
AT34	Vorarlberg	3	B	C	B	C	C	B	B	B	B	B	C	C	C	C	C	B	C	B	C	B	C	C
BE1	Région de Bruxelles-Cap	1	A	B	B	A	B	A	A	A	A	A	B	A	C	A	A	C	A	C	A	A	B	B
BE21	Prov. Antwerpen	3	B	C	C	C	C	B	B	B	B	B	C	B	C	B	B	C	B	C	B	B	C	C
BE22	Prov. Limburg (B)	2	A	B	B	B	B	A	A	A	A	A	B	B	B	B	B	C	A	C	B	B	B	B
BE23	Prov. Oost-Vlaanderen	2	A	B	B	B	B	A	A	A	A	A	B	B	B	B	B	C	A	C	B	B	B	B
BE24	Prov. Vlaams-Brabant	2	A	B	B	A	B	A	A	A	A	A	B	A	C	B	B	C	A	C	B	B	B	B
BE25	Prov. West-Vlaanderen	2	A	B	B	B	B	A	A	A	A	A	B	B	B	B	B	C	A	C	B	B	B	B
BE31	Prov. Brabant Wallon	4	B	D	D	B	D	B	B	B	B	B	D	B	D	B	C	D	B	D	C	B	D	D
BE32	Prov. Hainaut	2	A	B	B	B	B	A	A	A	A	A	B	B	B	B	B	C	A	C	B	B	B	B
BE33	Prov. Liège	2	A	B	B	B	B	A	A	A	A	A	B	B	B	B	B	C	A	C	B	B	B	B
BE34	Prov. Luxembourg (B)	4	B	D	D	C	D	B	B	B	B	B	D	D	C	D	C	D	B	D	C	D	D	D
BE35	Prov. Namur	2	A	B	B	A	B	A	A	A	A	A	B	B	B	B	B	C	A	C	B	B	B	B
BG01	Severozapaden	6	D	F	C	F	D	D	C	C	C	D	D	F	F	F	F	D	F	D	E	F	D	C
BG02	Severen tsentralen	6	D	F	C	F	D	D	C	C	C	D	D	F	F	F	F	D	F	D	E	F	D	C
BG03	Severoiytochen	2	B	C	A	C	B	B	A	A	A	B	B	C	C	C	C	B	C	B	B	C	B	A
BG04	Yugozapaden	1	A	C	A	C	A	A	A	A	A	A	A	B	C	B	C	A	C	A	B	B	A	A
BG05	Yuzhen tsentralen	2	B	C	A	C	B	B	A	A	A	B	B	C	C	C	C	B	C	B	B	C	B	A
BG06	Yugoiztochen	5	D	E	C	E	D	D	C	C	C	D	D	D	E	D	E	D	E	D	D	D	D	C
CH01	Région lémanique	1	A	B	A	A	B	A	A	A	A	A	B	B	B	B	B	C	A	B	B	B	B	A

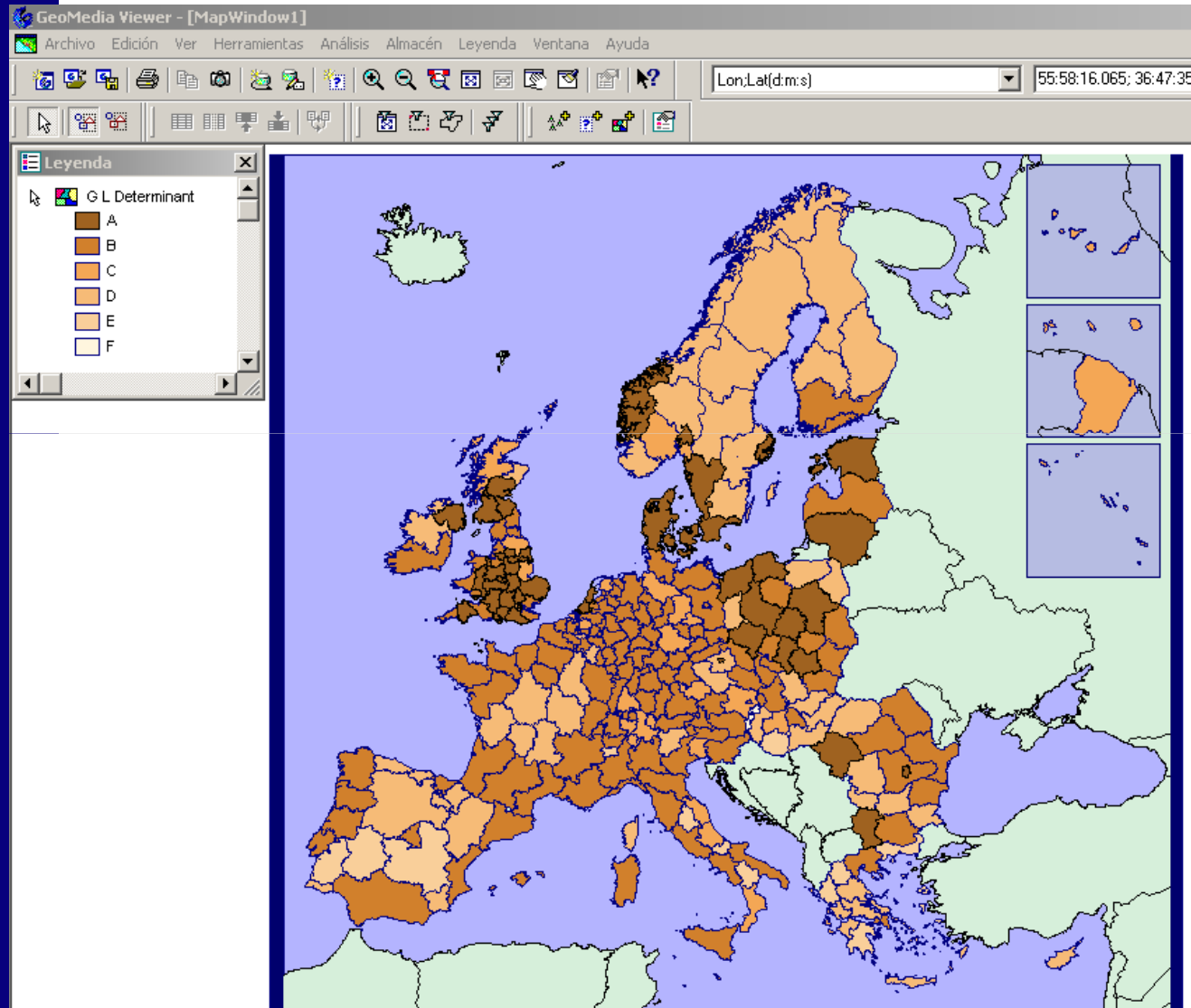
Regional ex-post territorial: Indicators and aggregations by Nuts2 data before mapping.

N2_03	REGION_03	Territory	Q_G EC	Q_S EC	Q_ME	Q_P Tm	Q_E SSI	Q_F Dlin	Q_Tig	Q_Tis	Tint	Int	ESSI & Int	Q_R DA	Q_V uln	RDA & Vuln	Q_L Tlr	Q_FP	Q_LC	FP& LC	CS	SL	ESSI & Int & SL	Q_ME	Q_P Tm	PSI	EI	Q_B ank	Q_In sC	C&IA	
AT11	Burgenland	7																													
AT12	Niederösterreich	3																													
AT13	Wien	1																													
AT21	Kärnten	2																													
AT22	Steiermark	2																													
AT31	Oberösterreich	2																													
AT32	Salzburg	2																													
AT33	Tirol	2																													
AT34	Vorarlberg	3																													
BE1	Région de Bruxelles-Ca	1																													
BE21	Prov. Antwerpen	3																													
BE22	Prov. Limburg (B)	2																													
BE23	Prov. Oost-Vlaanderen	2																													
BE24	Prov. Vlaams-Brabant	2																													
BE25	Prov. West-Vlaanderen	2																													
BE31	Prov. Brabant Wallon	4																													
BE32	Prov. Hainaut	2																													
BE33	Prov. Liège	2																													
BE34	Prov. Luxembourg (B)	4																													
BE35	Prov. Namur	2																													
BG01	Severozapaden	6																													
BG02	Severen tsentralen	6																													
BG03	Severoiztochen	2																													
BG04	Yugozapaden	1																													
BG05	Yuzhen tsentralen	2																													
BG06	Yugoiztochen	5																													

Compare ex ante & ex-post terr: Table comparing the old and new values for each determinant.

no changes
changed before territorialization
changed after territorialization

Mapping tool



a) **EXPERT-USERS** (researchers, consultants, civil servants...).

- 1) Open the EXCEL file of each determinant (Quality...)
- 2) Change the policy check list or any other parameter in the simulator
- 3) Import the datasheet "Regional ex-post territorial" into ArcGIS 9.0 or other GIS tool
- 4) Make any mapa or spatial analysis he/she needs

b) **POLICY-USERS**

- 1) Open the Toolbox Viewer main interface (ESPON33.mdb)
- 2) Change the policy-checks list or any other parameter in the simulator
- 3) Go to **map tool** and use Geomedia Viewer options to change visualization