

ESPON 2.2.1: The Territorial Effects of the Structural Funds - *Third Interim Report* -

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This report represents the interim results of a research project conducted within the framework of the ESPON 2000-2006 programme, partly financed through the INTERREG programme.

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Table of Contents

List of maps, tables and figures.....	1
Introduction	3
PART A	7
1 Executive Summary.....	8
1.1 The Spatial impacts of the Structural Funds at the <i>micro</i> level.....	10
1.2 The Spatial impacts of the Structural Funds at the <i>meso</i> level	12
1.3 The spatial impacts of the Structural Funds at the <i>macro</i> level	19
1.4 Overall conclusions	22
2 Scientific summary of the concepts, methodologies and typologies used.....	28
2.1 Concepts	28
2.2 Methodologies.....	28
2.3 Typologies.....	29
2.4 Indicators.....	30
3 Networking with other ESPON projects	31
4 Towards the final report – next steps	33
5 Formal requests	34
5.1 Terms of reference and Addendum.....	34
5.2 Reflections on the response of the CU to the SIR.....	35
5.3 Indication of ESPON performance indicators achieved	37
PART B.....	38
6 Methodology.....	39
6.1 WP 1 – Concepts and methods for measuring territorial impacts.....	40
6.2 WP 2 – Hypothesis for the measurement of the territorial dimension	42
6.3 WP 3 – Reference framework for the analysis	46
6.4 WP 4 – The geography of Structural Fund spending, 1994-99	48
6.5 WP 5 – Comparative analysis of national regional policies	53
6.6 WP 6 – Thematic case studies	55
6.7 WP 7 – The impact of Interreg on polycentric development.....	58
6.8 WP 9 – Development of policy recommendations.....	59
7 Policy concepts forming the analytical points of departure	60
7.1 An emerging European Spatial Policy	60
7.2 Concepts and causal connections	61
7.3 Spatial concepts and the Structural Funds: a problem of scale?	66
7.4 European Structural and Cohesion policy.....	68
8 Structural Funds activities in the light of spatial policies	75
8.1 Spatial discussion of strategies	75
8.2 The sectoral discussion of interventions	87
8.3 Power of delivery mechanisms and the partnership principle	103
9 The spatial dimension of the Structural Funds – the geography of spending	110
9.1 Micro level	113
9.2 Meso Level	116
9.3 Macro level	128
9.4 The macroeconomic impact of Structural policies.....	132
9.5 Demographic development in the light of structural policy	134
9.6 Structural aid and employment.....	138
10 Case studies on the territorial effects of Structural Funds	143
10.1 Background information on the case study regions	144
10.2 Structural Fund influences on spatial positioning	152
10.3 The Lisbon themes in the case studies	174
10.4 Governance aspects.....	193
10.5 Summing-up Structural Fund influences on polycentric development.....	210
10.6 Conclusions	220
11 The contribution of Interreg to polycentric development.....	223
11.1 Typical achievements of Interreg co-operation	223
11.2 Learning on polycentricity in BSR Interreg projects.....	226
11.3 The influence of the geography of co-operation.....	230
11.4 Implementation in different forms of learning	233

	11.5 Conclusions.....	237
12	The relationship between national regional policies and the Structural Funds policies	238
	12.1 From traditional regional policy to economic development in the regions.....	239
	12.2 Overall strategic approach and policy content.....	240
	12.3 Spatial targeting	246
	12.4 Policy instruments.....	252
	12.5 Conclusions on the interrelationship between NRP and ERP in the EU 15	262
	12.6 National regional policies, territorial cohesion and polycentricity	263
13	Conclusions and tentative policy recommendations.....	267
	13.1 The aim of the study	267
	13.2 Polycentric development as an operationalisation of territorial cohesion	267
	13.3 Structural Fund programmes and territorial cohesion & polycentricity	267
	13.4 The limited funding calls for better integrated policies	268
	13.5 Polycentricity & Structural Funds intervention: an implicit connection?.....	269
	13.6 Spending mostly targeted at urbanized areas in total terms	272
	13.7 Limited territorial impacts: connectivity, accessibility and spatial positioning stand out.....	273
	13.8 Micro level impacts: mostly qualitative.....	276
	13.9 The <i>meso</i> level: economic specialization the main impact	277
	13.10 Macro level	278
	13.11 Tentative policy recommendations.....	279
14	References	282

Annex 1: Selected aspects of Structural and Cohesion Fund spending and employment

Country and case specific annexes can be found at

<http://www.nordregio.se/espon2.2.1.htm>

List of maps, tables and figures

Maps

Map 1: Structural Fund spending per capita 1994-99 (1 st draft).....	9
Map 2: Cohesive and divergent cross-border developments between 1994 and 1999	15
Map 3: Potential accessibility by road and transport-related Structural Funding	21
Map 4: Annual average Structural Fund spending as a share of GDP in 1999	23
Map 5: The map of Structural Fund assisted areas for the period 2000-06	72
Map 6: Connectivity to transport terminals and Structural Fund Spending.....	91
Map 7: Potential accessibility by road and transport-related Structural Funding	93
Map 8: Structural Fund spending and net public capital stock in Spain (1 st draft)	97
Map 9: Structural Fund spending per capita 1994-99 (1 st draft).....	111
Map 10: Cross-border economic disparities in 1999	121
Map 11: Cohesive and divergent cross-border developments between 1994 and 1999....	123
Map 12: Structural Fund spending and relative economic growth.....	131
Map 13: Annual average Structural Fund spending as a share of GDP in 1999	134
Map 14: Structural Fund spending per capita and annual average population change	137
Map 15: Structural Fund spending per capita and annual average change in employment	141
Map 16 & 17: Spatial coverage of National Regional Policy and European Regional Policy	251

Tables

Table 1: Dissimilarity indices of GDP in PPS in 1995 and 2000 at NUTS 0, 2 & 3	10
Table 2: Overview, spending in polycentric and non-polycentric regions	11
Table 3: Structural Funds influence on polycentric development	24
Table 3: Number of performance indicators achieved.....	37
Table 4: Selection of the number of programmes per country – rationale	45
Table 5: Selected programmes for analysis	46
Table 6: Structural Fund spending typology.....	52
Table 7: The European Pentagon	63
Table 8: Breakdown of Structural Funds by Objective (1994-99) ⁽¹⁾	71
Table 9: Strategies of the 1994-96 and 1997-99 Objective 2 programmes by country	82
Table 10: Structural Fund and Cohesion Fund Expenditure in Objective 1 countries 1994-99	88
Table 11: Outputs of the 1994-99 Objective 1 programmes and 1995-99 Objective 6 programmes (Finland and Sweden).....	102
Table 12: Structural Fund implementation responsibilities (level of Managing Authority function). Period 2000-06.....	104
Table 13: The Taylor Model for Structural Fund Implementation.....	105
Table 14: Dissimilarity indices of GDP in PPS in 1995 and 2000 at NUTS 0, 2 and 3	112
Table 15: Structural Fund (SF) assistance for different types of functional urban areas...	113
Table 16: Structural Fund (SF) spending in polycentric and non-polycentric regions	115
Table 17: Structural Fund (SF) spending in international, national, and regional FUAs	117
Table 18: Structural Fund (SF) assistance in rural and urban areas.....	127
Table 19: Structural Fund (SF) spending in international FUAs in, and outside, the Pentagon (core-periphery).....	129
Table 20: Structural Fund (SF) spending supporting polycentric development at the European level.....	129
Table 21: Specialisation aspects influenced by the Structural Funds.....	158
Table 22: Structural Funds influences on rural-urban relations	168
Table 23: Structural Funds influences on links (relational polycentricity).....	170
Table 24: Structural Funds and Lisbon Themes	178
Table 25: Structural Funds relation to governance.....	199
Table 26: Structural Funds influence on polycentric development	211

Table 27: Structural Funds influence on distribution of population	213
Table 28: Structural Funds influence on functional/economic specialisation.....	214
Table 29: Structural Funds influence on connectivity/accessibility/transport.....	216
Table 30: Structural Funds and strengthening of international co-operation	218
Table 31: Structural Funds and diminishing regional divergence.....	219
Table 32: Thematic focus of Interreg IIC projects in the BSR.....	226
Transport, Communication and Accessibility	226
Table 33: Type of project foci	227
Table 34: Learning about polycentricity through Interreg	228
Table 35: Project impacts on daily work	236
Table 36: Bachtler's conceptualisation of classical and modern regional policy.....	240
Table 37: The overall strategic approach of NRP and its interrelationship with ERP	241
Table 38: The strategic content of NRP and its interrelationship with ERP	243
Table 39: Interrelationship between national regional aid and Structural Fund maps.....	247
Table 40: Yuill's classification of national instruments for regional development (EU15)...	252
Table 41: Interrelation between national and European regional policy instruments (co-funding)	253
Table 42: The relationship between national and European regional policy governance....	256
Table 43: Integration of spatial objectives in the national regional policies of the EU15 ...	265
Table 44: Integration of spatial themes in domestic regional policy	266
Table 45: Dissimilarity indices of GDP in PPS in 1995 and 2000 at NUTS 0, 2 & 3	272
Table 46: Structural Funds influence on polycentric development.....	274

Figures

Figure 1: Structural spending per capita and border cohesion type.....	16
Figure 2: The coincidence of European and national regional policies in relation to Structural Fund spending	18
Figure 3: Organisation of working packages	40
Figure 4: The ESPON 3.1 Hyper-cube of territorial cohesion	62
Figure 5: Structural Fund governance and implementation	106
Figure 6: Construction of "virtual border regions"	118
Figure 7: Size of border region economy and disparity across border.....	119
Figure 8: Structural spending per capita and border cohesion type.....	125
Figure 9: Structural Fund assistance and population density	126
Figure 10: Annual average population change 1995-1999 (%) and total Structural Fund spending per capita (Euro), NUTS 3.....	135
Figure 11: Employment change 1995-2001 and employment rates for the EU15 countries	139
Figure 12: Annual average employment change 1995-2001 (%) and total Structural Fund spending per capita (Euro), NUTS III	140
Figure 14: Importance of the levels of polycentricity	229
Figure 15: Modes of Trans-national Co-operation	231
Figure 16: Motivation for co-operation related to joint and common problems.....	233
Figure 17: Learning in Trans-national Co-operation.....	234
Figure 18: Perceived benefits of trans-national co-operation.....	235
Figure 19: Criteria for partner selection.....	236
Figure 20: Spatial targeting and strategic focus of NRP in the Member States	246
Figure 21: The coincidence of European and national regional policies in relation to Structural Fund spending	263

Introduction

The study presented here represents the Third Interim Report of the ESPON 2.2.1 project "Territorial impacts of Structural Funds". The focus here is on the contribution of the Structural Funds to the aims of spatial development policies, with particular emphasis on territorial cohesion and polycentric development. The study has sought to establish the possible links between Structural Funds intervention and the promotion of territorial cohesion and polycentric development (as a particular operationalisation of territorial cohesion, as discussed in more detail in the scientific summary section).

Territorial Cohesion is seen to address the potential, the position and the relative situation of a given geographical entity. It can be analysed and operationalised at various geographical levels or scales, i.e. at the *micro*, *meso* and *macro* levels. Polycentricity addresses the aspects of morphology, accessibility, functional specialisation and co-operation links of an area. Polycentric development is used as a bridging concept merging the policy aims of economic growth and balanced development.

The Structural Funds aim to re-balance the economic and social disparities between regions in Europe thus overcoming imbalances in socio-economic development (measured mostly in terms of GDP and unemployment). By contributing to this primary aim, the Structural Funds also potentially contribute to the objectives of a balanced territorial development and territorial cohesion. The overarching research question for this study has been formulated as: ***Can the Structural Funds, by contributing to their primary aim of economic cohesion, also contribute to the objectives of a territorially balanced and polycentric development?***

In the context of this project both the Structural Funds and the Cohesion Fund were analysed, though in the report reference is usually made to 'Structural Funds' as a shorthand expression. After the quantitative data on Structural Funds spending was compiled for the second Interim Report, a further quality check was made, with the national authorities responsible for the Structural Funds in each country being asked to comment and if necessary correct the data presented to them. The financial data compiled here corresponds to approximately 93,5 percent of the total Structural Fund spending during the 1994-99 period.

In this third interim report we have concentrated in particular on the following aspects in analysing the territorial impacts of the Structural Funds:

1. Case studies

The assessment of the aims of the Structural Funds (SF) provided by the report shows that there is something of a 'coincidence' between the aims formulated in the Structural Fund programmes and the aims of European spatial development policy. Furthermore, the assessment of the relationship between European regional policies and national regional policies illustrates that the Structural Funds have considerable leverage effects in the countries receiving the highest *per capita* assistance in particular.

A common theme of the case studies is that awareness of the concept of polycentricity is clearer in the 2000-2006 programming period documents, as well as being clearer among the stakeholders interviewed, than in the 1994-1999 period.

Another issue discussed in the case study analysis is whether funding to the urban regions/territorial nodes in Europe supports the peripheral areas or further disadvantages them. This is a central part of the wider debate on polycentricity, and it has special relevance in the examples where the case study region consists of both dense urbanised parts and sparsely populated rural (peripheral) parts.

As is shown in more detail in the methodological description in the scientific summary (and the case study analysis itself), the case study selection process sought to encompass and take into account the versatility of the EU regions, both in terms of the nature of the regions (geographical and functional characteristics), and the funding and development trends ('hot spots' and 'cold spots'). Here the typologies developed in ESPON 1.1.1 and ESPON 1.1.2 were also addressed. The policy themes addressed here included the impacts and policy approaches related to polycentricity, spatial positioning, governance and the Lisbon priorities. Accessibility, functional specialisation and governance were among the areas where Structural Funds interventions were seen as having territorial impacts in the regions analysed.

2. The Spatial Dimension of the Structural Funds as analysed in light of spending geography

The regional map of Europe is characterised by substantial territorial dissimilarities, not least with regard to economic prosperity. In this report we have concentrated both on Europe-wide regional disparities, as well as on disparities between adjoining areas and cross-border economic disparities.

The analysis below illustrates that in addition to the different development trends at various geographical levels, the implications of pursuing the same policy aim at various levels may also be contradictory or even counterproductive, depending on the level in question. Developments towards more polycentricity at the *macro* level may also imply certain concentration tendencies, which lead to more monocentric developments at the lower (*meso*) level. This is well illustrated for instance by looking at the geography of Structural Fund spending according to the types of Functional Urban Areas identified by ESPON 1.1.1.

More specifically the analysis undertaken concentrated on the following areas:

- Structural Fund assistance for different types of functional urban areas
- Spending in relation to spatial discontinuities
- Cross-border cohesion (in relation to economic development in GDP terms, demographic development and employment).

3. Structural Funds governance and management and relationships between national and European regional policies

Here an overview of national regional policies in the Member States and their interrelations with European regional policy is presented, describing the salient aspects of national regional policy scope, strategies, instruments, governance, implementation and delivery. Thereafter, an assessment is provided of the interrelationship between national and European regional policy in the Member States and the spatial themes of territorial cohesion and polycentricity.

The analysis shows that the 1994-99 programming period was characterised by a number of developments that over time made the programmes more coherent, albeit not intentionally so, with the objectives of territorial cohesion (and, although less so, polycentric development). It is further argued that with regard to the 2000-2006 programming period the widening of policy objectives has contributed to making the Structural Fund programmes significantly more consistent with the objectives of territorial cohesion and, in some cases, polycentric development.

In order to investigate further the question of the precise nature of the interconnectedness of national and European policies in the regional field, the European level analysis undertaken in the report is supplemented by an examination of the national regional policies implemented in each Member State. Many of the factors discussed as 'influential' to the evolution of the Structural Funds and their potential to deliver increased territorial cohesion apply to some extent also to both national and European regional policies. Here we seek to answer the question of whether this implies that national regional Policy (NRP) and European regional Policy (ERP) can be seen to increasingly overlap? And further, we ask whether this is a positive or negative development as regards the potential of regional policy to deliver increased territorial cohesion? While in the Second Interim Report the analysis of European regional policy covered both past and current European regional policies, the present analysis is focussed predominantly on current national regional policies in the Member States. Its main aim is to inform the development of both hypotheses and policy recommendations on the future shape of regional policy in an enlarged European Union (2007+).

Building on the work undertaken by Bachtler, the view of regional policy adhered to here, views 'new' or 'modern' regional policy as increasingly targeting both equity and efficiency, shifting the policy-focus from redistribution to competitiveness.

4. Interreg – pilot stage of the study on the impact of Interreg on polycentricity and territorial cohesion.

Intrinsic to Community Initiative Interreg IIC was the launching of a new approach to territorially designed European regional policies. The focus here was on stimulating actors from the regional and local levels to catch up with European policy developments and to contribute to achieving them in a 'bottom-up' manner. Thus one of the major effects of the Interreg IIC and IIIB programmes in this regard has been the contribution made to European integration within the trans-national programming areas as well as

the emergence of trans-national *macro* regions of different kinds. Two of these Interreg programmes, namely, the Baltic Sea Region and CADSES (the Central European, Adriatic, Danubian, South-East European Space), also include regions from the new Member States and Candidate Countries, and are therefore considered to be of considerable importance to the integration of future EU Member States. The ability of the Interreg initiative to promote territorial integration and cohesion is an important element in the analysis of the spatial development mechanisms. Here the focus is on two aspects: (1) The promotion of new sub-regions and (2) The Promotion of European policy issues and co-operation.

5. Conclusions and policy recommendations

In the section providing the conclusions and the tentative policy recommendations, the nature and potential for territorial impacts through Structural Funds interventions is addressed. The distinction between the **direct** (effects discernible among those directly targeted by the intervention/investment in question) and **indirect** (broader effects that are also discernible amongst those that have not been the direct addressees of the intervention in question) effects of the Structural Funds shows that overall, the indirect effects are considered to be just as important as the direct ones – a fact that is often forgotten in the debate. A more detailed look at the various types of effects and impacts however shows that the direct and indirect effects tend to occur in different areas. This provides a further basis for the policy recommendations addressing, amongst other things, the processes of area designation and programme implementation.

PART A

1 Executive Summary

The aim of the project is to assess the spatial impacts of the Structural Funds. For this purpose a two-fold approach has been applied. Firstly, the project works with a European wide picture of Structural Funds, presenting overall findings on their spatial implications. In the second step, the work focuses on an in-depth analysis of specific aspects and areas in order to discuss a more detailed picture of the territorial effects and impacts of the Structural Funds. In this report, the initial results from both steps are presented.

The focus of the work here is on the spatial impacts of the Structural Funds that contribute to the wider aims of European spatial policies, such as territorial cohesion and polycentric development at various geographical levels. As regards the need to operationalise these spatial policy aims, the report focuses on morphology, accessibility, functional socio-economic specialisation, and co-operation patterns.

There are two ways in which the Structural Funds may influence these spatial development aspects:

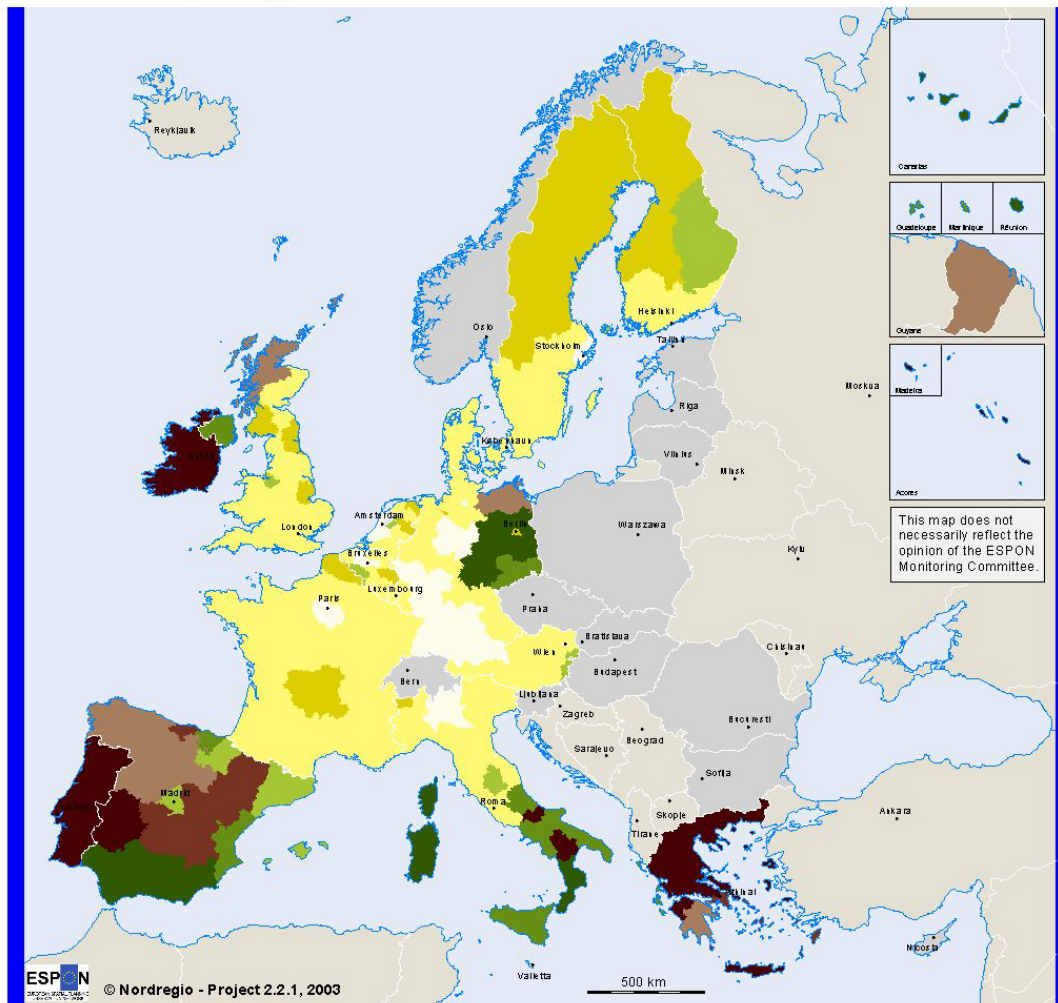
- There is a potential inherent in the spatial nature of the Funds themselves. By deciding which areas are eligible for what types and what intensity of interventions, a main channel of influence within spatial development is defined.
- The concrete type of intervention also influences spatial development. Some policy forms have more explicit spatial impacts than others, either in terms of cushioning the adverse effects of investment and disinvestment decisions, or by speeding up investment decisions.

As part of the establishment of a European wide picture of the Structural Funds, the project has attempted to localise and categorise Structural Fund assistance for Objectives 1, 2, 3, 5b and 6, which corresponds to approximately 93,5 percent of the total Structural Fund spending during the 1994-99 period. Cohesion Fund assistance has also been integrated into the analysis.

The map clearly reflects the dominance of Objective 1 areas and presents the general core-periphery image of Europe. It does however allow for a more differentiated picture of the regional distribution generally revealing that regions with major cities receive less funding *per capita* than do their neighbouring regions (e.g. Madrid, Barcelona, Bilbao, Athens, Berlin, Amsterdam, Hamburg, Paris or Stockholm) with some exceptions for old industrial regions (e.g. Bremen, Merseyside or Tyneside).

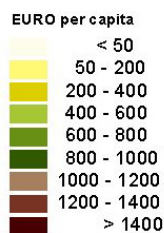
The review of the contribution of past and current Structural Fund programmes to the objectives of territorial cohesion and polycentricity, reveals that Structural Fund programmes have been drafted as regional economic programmes.

Map 1: Structural Fund spending *per capita* 1994-99 (1st draft)
Structural Fund spending, 1st draft



Structural Fund spending 1994-99 (Objective 1,2,3,5b,6 and Cohesion Fund)

Geographical Base: Eurostat GISCO



Origin of data: National data collection

Source: Nordregio

The degree of correspondence with the goals and concepts of European spatial development policies could in most case be seen as coincidental. This implies, however, that Structural Funds programmes can contribute to achieving increased territorial cohesion and polycentricity.

Nonetheless, the discussion on these spatial development concepts illustrates that they can display inherent inconsistencies when reviewed and/or applied at various geographical levels. Consequently, the potential contribution of the Structural Funds to achieving these spatial policy aims will depend on the geographical level in question.

Referring to the Dissimilarity Index, the actual development trends differ regarding the level in question, e.g. there are trends towards increased territorial cohesion at the *macro* level (NUTS 0) while at the *micro* and *meso* levels the trends predominately point towards decreasing territorial cohesion (NUTS 2 & 3)

Table 1: Dissimilarity indices of GDP in PPS in 1995 and 2000 at NUTS 0, 2 & 3

EU15 at:	Dissimilarity index		Units change 1995-2000	indicating:
	1995	2000		
NUTS 0	0.465	0.460	- 0.005	increasing cohesion
NUTS 2	0.339	0.341	+ 0.002	decreasing cohesion
NUTS 3	0.531	0.620	+ 0.089	decreasing cohesion

Source: New Cronos

In addition to the different development trends at various geographical levels, the implications of pursuing the same policy aim at various levels may also be contradictory and counterproductive across the various levels. Developments that increase polycentricity at the macro level may imply certain concentration tendencies, which lead to more monocentric developments at the lower (meso) level. This is easily illustrated by looking at the geography of Structural Fund spending according to the types of Functional Urban Areas identified by ESPON 1.1.1. In order to buttress the European polycentric urban system and the number of globally important functional urban areas (macro level) it seems reasonable to concentrate funding on existing European, and perhaps some promising national functional urban areas, so that they can improve their competitiveness. In order to improve trans-national, i.e. Baltic Sea, and national polycentric urban systems (meso level) it thus seems more plausible to stress funding on national, and perhaps on some promising regional functional urban areas, to support them in strengthening their position. Aiming at polycentric development at the regional or local level (micro level), one certainly wants to give Structural Funds assistance to local functional areas in order to improve their position with regard to regional functional areas, while to a certain degree it can be considered desirable to assist regional functional urban areas to develop towards a more polycentric spatial pattern.

Because of the ambiguity between levels, the project has made the effort to distinguish between the spatial effects at the micro, meso and macro levels. This is further reflected in the structure of the single working packages, the summary and in the policy recommendations.

1.1 The Spatial impacts of the Structural Funds at the *micro* level

The first observation to make at the *micro* level is that during the 1994-99 period, **polycentric regions received less funding per capita than other regions**. Also as regards the total amount of funding, less than half went to regions that were polycentric or had a clear potential for polycentric development, which constitute 60 percent of the regions categorised.

Table 2: Overview, spending in polycentric and non-polycentric regions

	Spending per capita	Percent of total spending	Number of regions
Assistance to non-polycentric regions	425 €	50,6	84
Assistance to regions with potential for polycentric development	326 €	31,6	75
Assistance to polycentric regions	255 €	17,8	52

Source: ESPON 2.2.1 using the FUA level of polycentricity typology of ESPON 1.1.1.

Indeed, this picture correlates with the findings of the ESPON 1.1.1 project, which states that polycentric countries perform better economically than do non-polycentric countries. Transferring this conclusion from the national to the regional level, this would explain why non-polycentric countries exhibit a lower level of economic performance and thus received less assistance.

When it comes to the spatial effects of the Structural Funds, the case studies illustrate that **at the *micro* level the strongest effects occur as the result of direct programme measures**. Structural Fund measures addressing local/regional traffic-infrastructure and economic specialisation have shown a certain potential. In this respect current Objective 2 programmes stress the strategic need to address the poor transport infrastructure links between the urban core and the hinterland, as well as other programmes that target measures on urban areas. These in turn range from urban development and the regeneration or socio-cultural facilities to measures targeting the special needs of industrial, mining, fishing or rural areas or communities. In broader terms, the need to stabilise settlement patterns in a region has also been identified in some predominantly rural regions (e.g. Lakonia, Grevena and Madeira). Similar influences have also been identifiable in both Calabria and Toscana.

Most decisions involving spatial issues will occur as a result of intra-programme priorities. The Commission can, through the guidelines it provides in respect of the drafting process for programme documents, further influence these decisions.

In addition, with regard to governance, the Structural Fund programmes undoubtedly have an important impact. By favouring 'bottom-up' approaches to policy-making and delivery, they contribute to the strengthening and **empowerment of the regional and local levels of governance**. This also involves facilitating local-level dialogue through the implementation of horizontal partnership and by the creation of sub-national and often local organisations with specific functions associated with Structural Fund implementation. Thus governance measures have important indirect spatial impacts as they provide fertile ground for local and regional spatial development action. This is also supported by the analysis of Interreg IIC projects which illustrates that these contributed to learning and awareness rising regarding polycentricity at regional level, especially when it comes to questions of morphology and transportation.

By stimulating partnership work and 'bottom up' policy-design, in line with the subsidiarity principle, the Funds have also **facilitated the tailoring of policies to needs and preferences** expressed by those living and operating in the affected territory.

Despite the limited quantitative effects, important qualitative effects have been identified relating to a number of areas on the *micro* level, such as

- the deployment of economic development resources,
- the promotion of the strategic dimension in policy-making,
- the introduction of new types of interventions,
- enhanced partnership, and
- the promotion of new learning and innovative dynamics.

1.2 The Spatial impacts of the Structural Funds at the *meso* level

At the *meso* level, a number of interesting aspects can be observed. Of particular interest here is the rural-urban dimension of the Structural Funds (also related to population density issues), secondly, the relationship between Structural Funds and spatial discontinuities, thirdly, the type of contributions made to spatial development, and finally the leverage effects of the Structural Funds on national policies.

Focusing on urban areas of regional importance

An attempt to chart the characterisation of spatial discontinuities was carried out by charting inter-regional disparities across borders between neighbouring regions. The data utilised here (GDP/head in PPS 1995-1999) refers to economic changes relative to the EU 15 average. Within the EU15 the largest cleavages in 1999 are between the capitals and other financial centres and their surrounding regions. London (Inner), Luxembourg (Grand Duchy), Brussels, Hamburg and Paris (Île de France) top the list, with most other capital regions (where these constitute separate NUTS regions) lying not far behind. The "second wave" of disparities is in a way however far more interesting. Moreover, when excluding the capital regions, among the remaining 50 largest divides, not one includes "equal" partners on both sides of the border, i.e. it is almost exclusively a clear-cut matter of a divide between a large city region and its more rural neighbour. Therefore Cross-border "anti-cohesion" within the EU15 could be said to stem more from the urban structure and the level of polycentricity than from real territorial imbalances. These "islands of wealth and prosperity" are the source of the largest discontinuity with regard to GDP *per capita*, bringing about the fact that, in general, the larger the joint economy of the border region is, the higher is the inequality across the border.

An attempt to see to what degree Structural Fund assistance has been used in rural or urban areas (in 1994-99) illustrates two tendencies:

- Concentrating on assistance *per inhabitant*, suggests that **densely populated areas receive less funding than do sparsely populated ones**. Sparsely populated rural areas receive on average about three times as much assistance, *per inhabitant*, than do densely populated urban areas. The exception are areas of

medium human intervention, where the urban areas show an absolute peak of 726 € *per capita*.

- Looking at total spending, **approximately 70 percent of the assistance went to urban areas**. Concentrating on the distinction between areas with high human intervention versus areas with low human intervention, it becomes clear that approximately 50 percent of the Structural Fund assistance went to areas with high human intervention, whereas less than 40 percent went to areas with low human intervention.

This picture, which sees urban areas receiving most funding, can be further elaborated upon by looking into which types of urban areas receive the funding. When comparing the territorial distribution of funding allocated in 1994-99, functional urban areas of national importance received slightly more funding than those of international importance, but the **lion's share went to functional urban areas with regional profiles**.

High Structural Fund spending in areas with low spatial discontinuities

Coming back to the question of territorial discontinuities and linking these cross-border discontinuities to Structural Fund spending necessitates moving from the true regional level to that of the "virtual border region". Measuring the theoretical regional economic impact of Structural Fund spending (annual average spending as a share of the virtual border region's GDP in 1999) implies a weak but not insignificant correlation between the two, where **high levels of spending coincide with lower gaps across the border and vice versa**. While border regions where Structural Fund spending as a share of GDP exceeded the EU15 average spending, had a median divergence of 11 index points across the border, this divergence was 25 corresponding points for those regions where structural spending was below the Union average. One self-evident inference here is that structural spending in terms of relative volume is (especially within the framework of Objective 1) directed towards such regions that display a weak economic performance and hence normally also have smaller cross-border variations.

Moving on to the issue of cohesion dynamics the picture is further complicated. Viewed from the point of diminishing or increasing differences across borders the reasons for the changes stem from a multitude of simultaneous incidents. In order to group these in a meaningful way, we have applied a simplified modification of the time-honoured Webb classification (which is normally used in regional demographics) on cross-border economic changes. As before, the data utilised here (GDP/head in PPS 1995 and 1999) refers to economic changes relative to the EU15 average. Although often being the case, a "decrease" does not here necessarily involve an absolute decrease of GDP per inhabitant, merely a slower growth rate than for the Union on average. And vice versa, "growth" indicates a GDP/head growth faster than the EU15 average. Looking at the legend of Map 2, the left side of the circle includes all such possible incidents that lead to decreasing cross-border disparities. The right side of the circle correspondingly depicts all such occurrences that lead to an increased economic gap across the border.

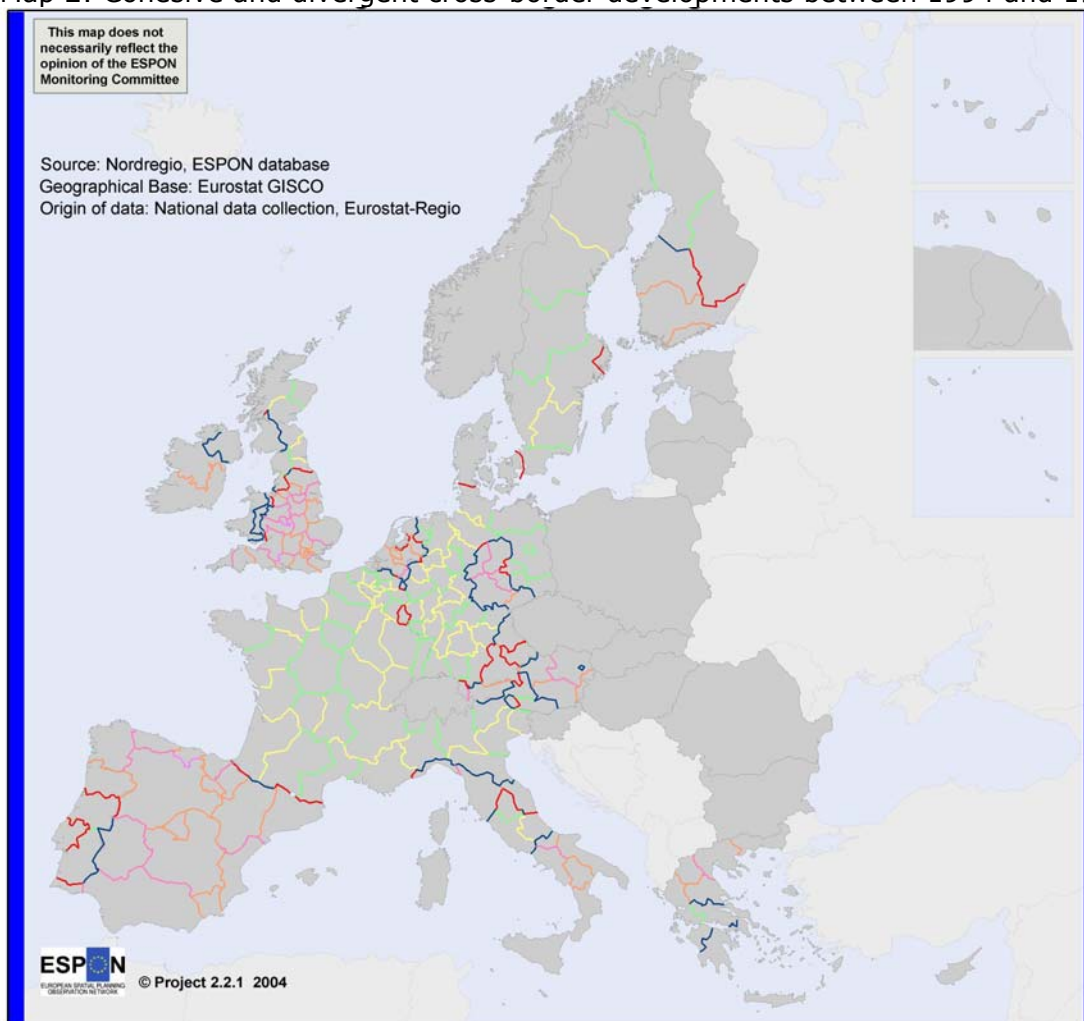
The first set of cases is then subdivided into three parts, each depicted with a different colour.

- The first case (pink/purple) could be characterised as a 'win-win' case. The economic growth of both regions across the border was positive (i.e. higher than the Union average) but this growth was stronger for the weaker region, thus narrowing the gap between the two. Roughly 14 percent of all border regions belong to this group, with some 14 percent of the EU's population living across such borders. Most of these can be found in the UK (England exclusively) and Spain and in the new German Länder. This group has the lowest average GDP *per capita*.
- In the second case (blue) the poorer region's economic growth was positive whereas the richer region's was negative, also resulting in increasing cross-border cohesion. Both in terms of the numbers of borders and in terms of their population coverage, this group is similar to the one above. Regions in Germany (East), Italy and the UK account for most of this cohesive development, with Austria and Greece also well represented. Proportionally this group also contains many international borders.
- In the last of the three cases (green) leading to increased cross-border cohesion economic growth in both regions has lagged behind the corresponding average of the Union. However, as a blessing in disguise the poorer half has had a less dramatic decrease than the richer one, leading to a narrowed gap between the two. This group covers nearly a fourth of all EU15 borders and also more than a fifth of its population and has the highest average Gross Domestic Product of all groups. With 23 of these regions lying in France, that country is clearly dominant in the category. In Belgium and Germany there are also many such borders, although proportionally Sweden has the highest share.

The second batch of cases describe the opposite development, i.e. increasing cross-border disparities:

- Starting at the top, cross-border cohesion has decreased in the group depicted (orange) due to both regions displaying healthy economic growth rates, though the richer one has seen faster growth than its cross-border adversary. Spain, the UK and the Netherlands dominate this group. Apart from those in the latter two, most of these borders are located outside the main economic core of the EU15.
- The red colour portrays cases where the economic gap across the border has widened further still due to negative development in the poorer region, combined with a positive development in the richer one. This is the smallest group of regions (11.5 percent) with a correspondingly small share of the total EU population (9.5 percent). These borders are not concentrated clearly to any specific country, although proportionally such increasing disparities are most frequent in Portugal.

Map 2: Cohesive and divergent cross-border developments between 1994 and 1999



Decreasing disparity across border 1995-99

Change in GDP/capita was positive for both regions.
Change for the poorer region was higher.

Change in GDP/capita for the poorer region was positive.
Change in GDP/capita for the richer region was negative.

Change in GDP/capita was negative for both regions.
Change for the poorer region was lower



Increasing disparity across border 1995-99

Change in GDP/capita was positive for both regions.
Change for the poorer region was lower.

Change in GDP/capita for the poorer region was negative.
Change in GDP/capita for the richer region was positive.

Change in GDP/capita was negative for both regions.
Change for the poorer region was higher

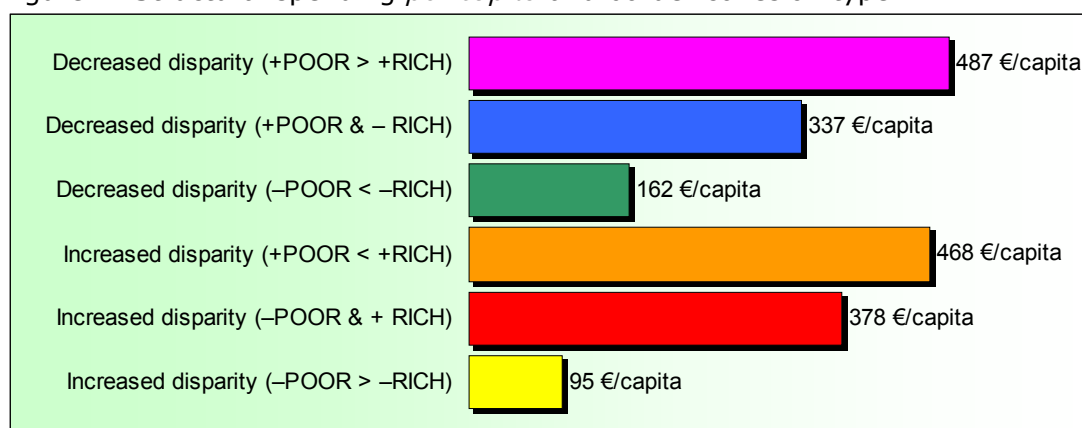
- In the largest group of border regions (yellow), development for both regions has been negative, and the production drop per head for the poorer region has been more substantial than for its richer counterpart, thus resulting in decreased cross-border cohesion. Borders within Germany and France dominate this class, while Belgium also has several. Taking into account the small number of regions in Sweden, this anti-cohesive development is very prominent there.

All in all, cross-border cohesion on the regional level thus seems to have increased during the programming period, in stark contrast to the simultaneous decrease in "general" interregional cohesion. Regions along borders where the difference has been fairly small have (on average) moved closer to each other, whereas the opposite holds true for borders where the economic gap was already large. To make matters worse, the single group of

border regions displaying the worst possible case (increasing disparity due to the richer becoming richer still and the poorer becoming poorer still) are also those where the disparity was largest at the outset (21 index points in 1995, increasing to 28 in 1999). However, no clear-cut pattern exists with regard to the wealth of the border region and in which direction its cross-border cohesion is developing.

Linking once more this dynamic data to the level of structural spending reveals that the correlation between Structural Fund spending on the one hand and increasing cross-border economic cohesion on the other seems to be fairly strong. Figure 1 sums these figures up per border type (the colour coding corresponds to that in Map 2 above).

Figure 1: Structural spending *per capita* and border cohesion type



Source: Nordregio, ESPON database version 2_3

The **largest *per capita* spending occurred along such borders where relative economic growth was positive on both sides of the border.** This concerns both the classes with increasing as well as decreasing disparities, though spending was slightly higher along those borders with increasing cohesion (487 vs. 468 €/capita). Compared to the **border category where both regions saw a negative development with the poorer partner losing more, *per capita* spending was less than a fifth of the maximum value.** For such borders displaying – from the point of view of cross-border cohesion – the worst case scenario (i.e. the rich got richer, while the poor got poorer) *per capita* spending was also nearly a fourth lower. All in all, one probable conclusion here is that **structural actions, at least coincide with, even if they do not necessarily enhance, cohesion on this interregional cross-border scale.**

Focus on transport and socio-economic profiling measures

Turning from the question of territorial cohesion and spatial disparities to the question of polycentricity at the *meso* level, we can see that the Structural Funds can contribute to polycentric development through programme-based priorities. The main aspects with relevance to polycentric development are endogenous development and increased regional competitiveness (socio-economic specialisation), followed by aspects of accessibility. Indeed, the case studies illustrate that considering both the direct and indirect effects economic specialisation turns out to be of greater importance than accessibility. These are, however, not sufficiently specified in order to guarantee a polycentric focus in programming documents.

In addition to the direct effects of the Structural Funds pointing towards polycentric development, there are also considerable indirect effects. By their very nature, the Structural Fund programmes promote cross-sectoral approaches to economic development and can indeed be used as a flywheel for other policies. This is also underlined by the analysis of Interreg IIC projects, where a clear peak of learning aspects was on the trans-national dimension of polycentricity and here in particular on transportation issues, followed by questions regarding socio-economic specialisation.

The leverage effects on national regional policy

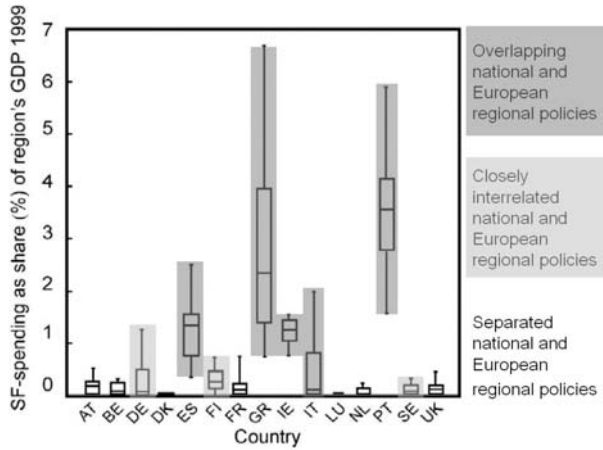
There is mixed evidence with regard to the influence that the Structural Funds may have on domestic policy priorities. In particular at the *meso* level, the indirect and leverage effects of EU Structural Fund policies, need to be considered more closely. The Structural Funds can function as an eye-opener for seeing regional development in specific, often spatially influenced terms. Especially with regard to non-objective 1 activities, the promotion of spatially sensitive procedures and policy concepts are major achievements of the Structural Funds going beyond the actually financed activities. The analysis of the correlation between National and European Regional policies provided a qualitative overall assessment of whether national regional policy in each country is separated, coherent or coincident with European regional policy:

- In a majority of countries, the two policies can be considered as being 'separated': Austria, Belgium, Denmark, France, Western Germany, Luxembourg, the Netherlands and the UK;
- At the other extreme, in Eastern Germany, Greece, Ireland, the Italian *Mezzogiorno*, Portugal and Spain, the two policies are to be considered coincident (overlapping);
- Finally a further cluster of countries groups together those where NRP and ERP do not coincide, though they are certainly closely interrelated (either due to their geographical scope, or due to the overall approach and strategies implemented). These countries include the Italian Centre-North and the Nordic Countries of Finland and Sweden.

This typology on the **interrelationship between national and European regional policies shows a clear core-periphery picture**, with separated policies in the core of Europe and more related policies in the peripheral parts of the EU15, the only exception here being Germany, which can be explained by the relative weight given to Eastern Germany.

This is also reflected in a clear **relationship between the national and European regional policies and the Structural Fund share of a region's GDP**. As illustrated in the figure below, those countries that are categorised as 'coincident' are also the countries where the share of Structural Funds with respect to the region's GDP is highest. In countries categorised as 'separated' the share is low, while the countries seen as 'closely interrelated' are grouped in an intermediate position.

Figure 2: The coincidence of European and national regional policies in relation to Structural Fund spending



Source: ESPON 2.2.1

Thus it can be argued that the **amount of Structural Fund money allocated to a country matters as regards the leverage effects that the Structural Funds have on national regional policies.**

Overall mostly indirect contributions to territorial cohesion at the *meso* level

Summing up then on the observable influences that the Structural Funds potentially have on spatial development at the *meso* level, it becomes clear that that the strongest effects are indirect. This relates in particular to the leverage effects on national policies, which neatly illustrates the fact that the Structural Funds mainly influence policy in the less favoured areas of the periphery of the EU15.

As regards the issue of spatial discontinuities, the results are more ambiguous. On the one hand our findings show that the Structural Funds enhance territorial cohesion at that level. On the other hand we have seen that the higher levels of spending go to areas where the discontinuities are not that strong. This can be explained in part by the fact that if the regions on both sides of the border are economically weak, disparities tend to be lower, while at the same time both areas receive substantial funding. In cases where one of the regions is better off, the disparities tend to be larger while the amount of assistance going to the areas is, on the whole, lower.

This may also relate to the issue of rural and urban areas or densely and sparsely populated areas. Here we have seen that while rural areas receive more spending *per capita*, the bulk of assistance goes to urban areas, and within this group preferably to functional urban areas of regional importance – i.e. urban areas of national or international importance receive less.

As regards the areas of intervention at the *meso* level, the case studies illustrate that the Structural Fund contributions to spatial development aim to focus clearly on issues of accessibility and socio-economic specialisation. Indeed, functional specialisation in particular is regarded as being more important at the *meso* level than at any of the other levels.

1.3 The spatial impacts of the Structural Funds at the *macro* level

Supporting polycentric development at the European level mainly implies strengthening promising and already strong functional urban areas that are already internationally competitive while also showing the potential to become European hubs. Focusing on functional urban areas that are of importance at the *macro* level – i.e. those with international profiles – it becomes obvious that those beyond the Pentagon received substantially more assistance than those inside. Indeed these regions received six times as much funding *per capita*, i.e. 78 Euro versus 484 Euro. Thus, at first sight, the geography of Structural Fund spending works towards territorial cohesion and polycentric development at the *macro* level.

A more elaborate picture is available if we use the ESPON 1.1.1 typology on regional endowment with FUA areas of influence. Following this typology, about 17 percent of the funding went to areas that can be viewed as already strong nodes in a European polycentric system. About 30 percent went to areas strengthening the European polycentric pattern, while only 12 percent was spent on areas that in the long run may contribute to polycentric development at the European level. The lion's share however (41 percent) went to regions that are unlikely to show up in any European polycentric pattern at the *macro* level.

With regard to the Structural Funds contributions to territorial cohesion at the *macro* level, four aspects in particular are of interest. These are, the relation to economic growth, unemployment, demographic development and transportation.

The indirect impacts of the Structural Funds on economic growth

Our analysis of Structural Fund spending and relative economic growth shows that there are no countries that demonstrate a clear-cut positive relationship between (relative) regional economic growth and the level of spending. This relationship is discernible (albeit only vaguely) in France and Italy, while in Sweden for example the reverse holds true. Countries such as Greece and Portugal however display a near random pattern. Thus one possible conclusion here could be that if the Structural Funds have a discernibly positive impact at all, it is not found in relation to the economic growth indicator. This is largely consistent with our previous hypotheses on the impact of the Structural Funds, i.e. that **the indirect and qualitative impact is likely to be proven more interesting than the impact on changes in the economic performance**. Furthermore, it illustrates the importance of the national context for regional development. No counterfactual information is however currently available that would allow us to make conclusions on how the situation would change without the Structural Funds.

Higher employment increases in areas with high spending

The analysis shows that regions receiving more Structural Fund assistance demonstrate both better and worse employment dynamics than those relating to the EU as a whole. Apart from substantial national differences, one aspect that probably reflects this random pattern is the fact that not all funds have increasing employment as their primary goal. Therefore, when separating the Objective 3 programme, which has job creation as a primary objective, the correlation is stronger (albeit still weak). However, scrutinizing the variables further a connection with levels of spending and employment change does

emerge. **For all 73 NUTS II regions where Structural Fund spending *per capita* was higher than that of the EU15 average, the median employment increase was 1.4 percent per year, while for those regions receiving less funding than the EU average, the corresponding increase was only 1.0 percent *per annum*.**

High spending in areas with negative population development

Unsustainable demographic development is one of several pressing socio-economic issues that continue to attract significant levels of public attention and debate. Most of the areas that are the primary targets of structural policy are hampered or severely affected by unfavourable demographic trends. Our analysis reveals that on the **regional level the direction and intensity of population changes does not appear initially to coincide with Structural Fund spending *per capita***. As such, there seems to be little difference between regions undergoing either positive or negative demographic developments as to whether they are likely to be high and low receivers of assistance. A closer look at the population development in relation to Structural Fund expenditure during the period in question however reveals small but not insignificant differences. **Structural Fund spending in regions with a negative population development on the whole was, on average, more than 60 percent higher than in regions with an increasing population**, or 493 Euro *per inhabitant* in the former group as opposed to 304 in the latter. Similarly, **among the 100 regions with the lowest assistance levels *per capita*, the population increased more than twice as fast as in those 100 regions with the highest assistance**. On the whole, in all regions receiving funding over the EU15 average of 359 Euro *per inhabitant*, population increased by 0.7 percent over the period, whereas it increased 1.3 percent in those regions receiving less than the European average. There are only 100 regions where relatively high spending and relatively positive demographic development coincides, covering 11 percent of the EU15 population. One fourth of these are in Eastern Germany and one fifth in Greece. This result can also be found across Ireland (apart from the region of Border), in 17 regions in Spain and in most of coastal Portugal (11 regions).

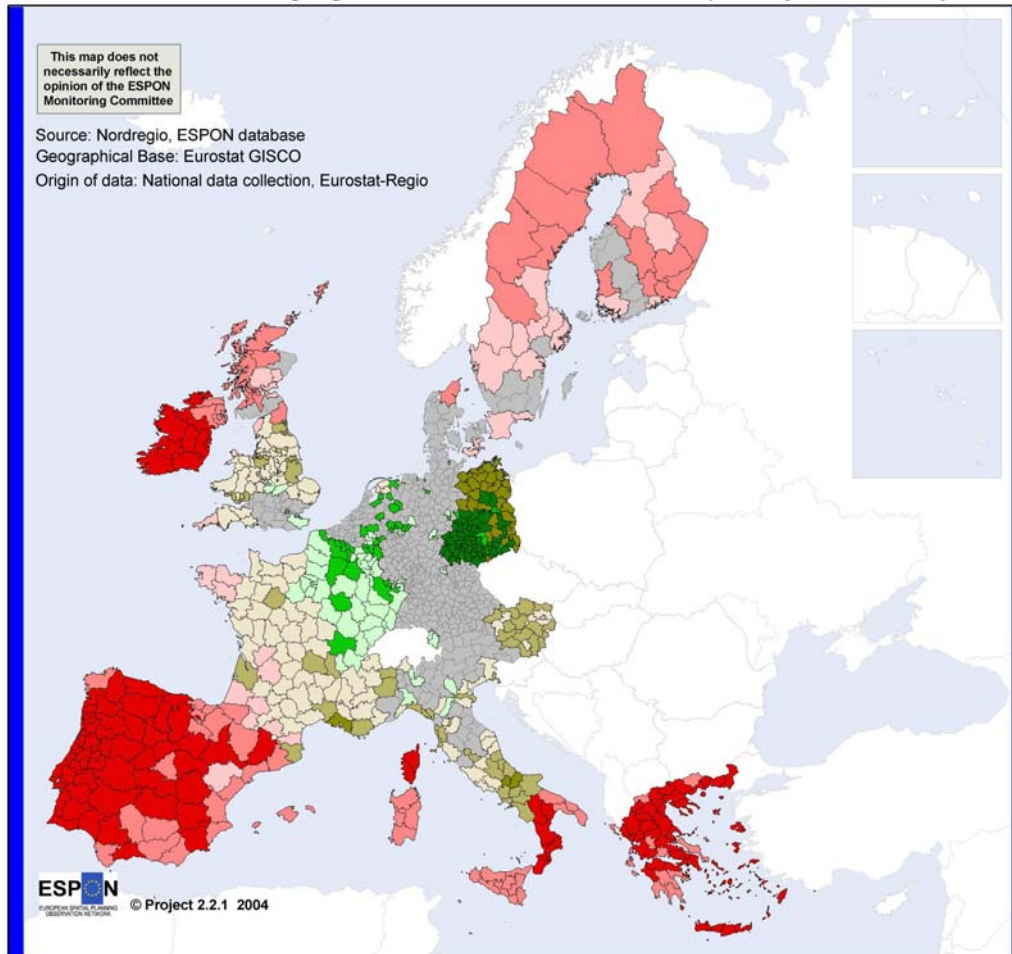
High spending in areas with low European accessibility

As regards the areas of intervention, at the *macro* level, transportation infrastructure is a significant measure in achieving polycentric development. While at the *meso* and *micro* levels, proximity is of less importance and the focus of increased polycentricity is on functional specialisation and competitiveness. A short analysis of the connection between Structural Fund spending on the one hand and transport-related issues on the other is of great interest, not least when considering its large share of the total funding. In the context of the investigation, only Structural Fund spending *per capita* related to productive infrastructure has been considered, i.e. the ERDF parts of Objectives 1 and 2 and the infrastructure part of the Cohesion Funds in 1994-99.

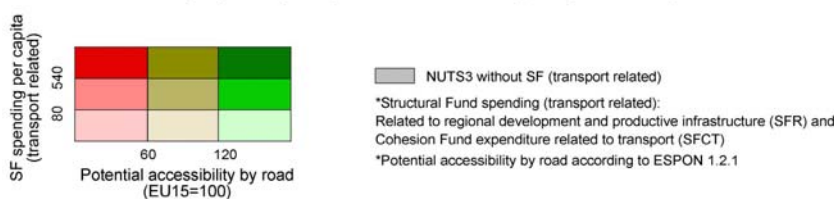
The map shows the cross-analysis of these sections of Structural Fund spending with the potential accessibility by road figures as presented in the ESPON 1.2.1 project. It clearly illustrates a core-periphery pattern where Portugal, Ireland, large parts of Greece, Spain, and Southern Italy are marked by relatively low accessibility and high Structural Funds assistance for productive infrastructures, while large parts of the Northern Periphery, i.e.

Finland, Sweden and Scotland, show similarly low accessibility while receiving less assistance. Eastern Germany is characterised by medium to good accessibility paired with high levels of assistance. Furthermore, large parts of the Pentagon or 'Blue Banana' do not receive any assistance related to productive infrastructure.

Map 3: Potential accessibility by road and transport-related Structural Funding



Potential accessibility by road (EU15) and Structural Fund (transport related)



In relation to the potential accessibility and related Structural Fund spending a picture emerges where poor accessibility and high spending seem to go hand in hand. Some 40 percent of the EU15 population have a potential accessibility by rail equal to or below the EU15 average and at the same time receive Structural Fund assistance related to transport investments, a similar percentage (38 percent) is found in respect of potential accessibility by road. In both case those regions obtain more than 80 percent of the EU15 (productive infrastructure related) Structural Fund assistance.

Moreover, 23 percent of the EU15 population have a potential accessibility by rail that is less than the half the EU15 average, while obtaining 68 percent of the total

Structural Funds budget related to productive infrastructure. Regarding potential accessibility by road, those percentages are very similar, 24 percent of the population of the EU15 have a potential accessibility by road equal to or lower than half of the EU15 average while receiving 66 percent of the total budget.

At the other end of the scale, 7 percent of the EU15 population have a potential accessibility by rail and by road that is more than 50 percent above the EU15 average, while receiving only 4 percent of the Structural Funds budget related to productive infrastructure.

Overall, slight contributions to territorial cohesion at the *macro* level

Taking these four aspects together it can be concluded that **the geography of Structural Fund spending makes only a minor contribution to territorial cohesion at the *macro* level.**

As regards the fields of intervention, direct contributions towards spatial development aims are mainly visible in the field of accessibility. However, **considering both direct and indirect effects the field of socio-economic specialisation is of even higher importance than that of accessibility.** This is particularly so when it comes to the international positioning of areas outside the pentagon.

In addition to the details of financial assistance **agenda setting and establishing of new ways of thinking** are also crucial aspects through which the Structural Funds influence spatial development patterns at the *macro* level.

1.4 Overall conclusions

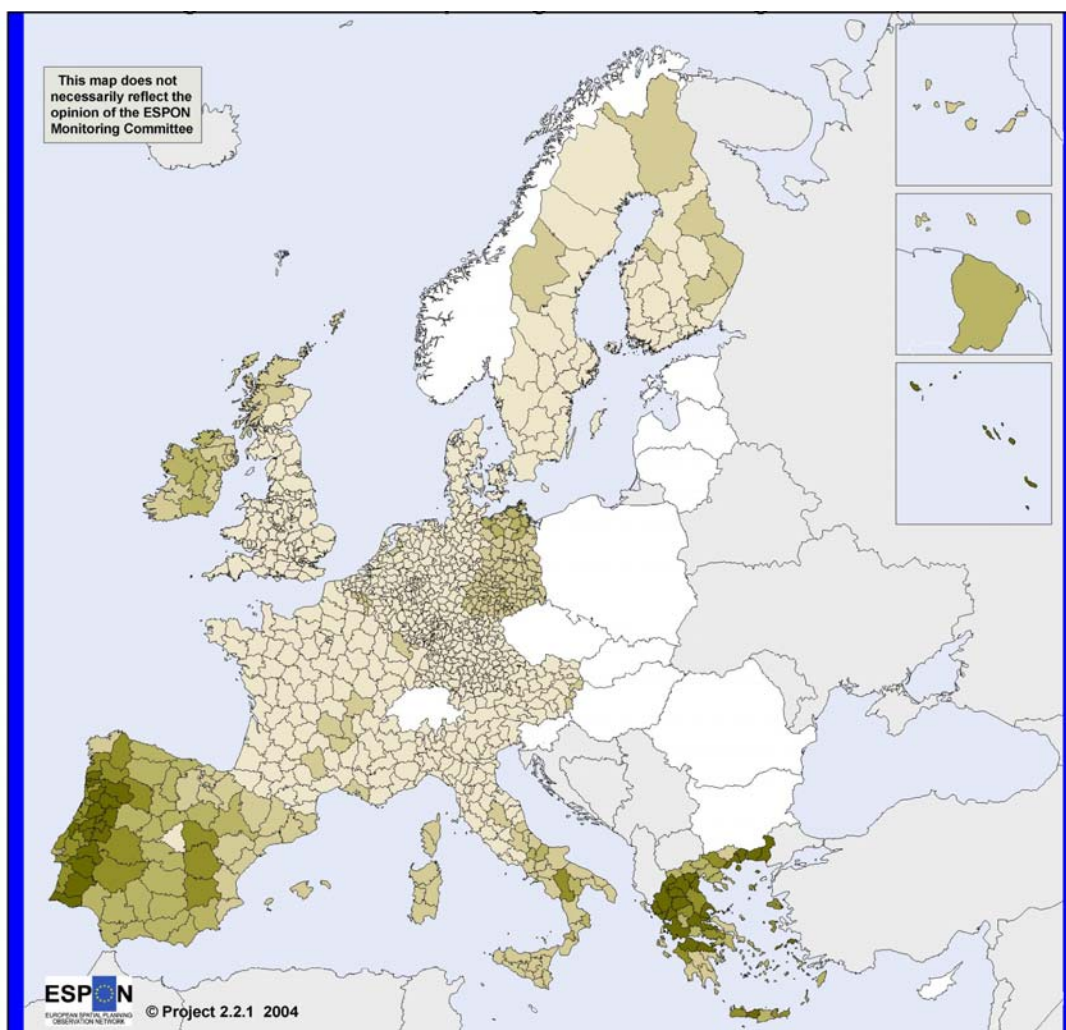
Throughout the project attempts have been made to maintain a balance between the analysis of impacts resulting from the amount of assistance given to different types of territories and the effects of different types of measures and policy formulations.

The geography of spending in terms of the contribution to GDP

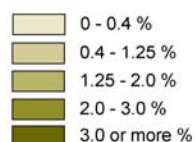
The reason that the indirect and leverage effects became a particular concern for this study is easily revealed when looking at Structural Fund spending in terms of its contribution to GDP. Structural Fund assistance as a share of GDP constituted on average some 0,28 percent of the total EU15 GDP in 1999. Only the cohesion countries scored above this average, with peaks for Portugal and Greece with 1,89 and 1,86 respectively. However, at the regional level the scope becomes wider. The span is largest in Greece and Portugal. The extreme case being Grevena in Greek Macedonia, where the share of assistance rises to 13 percent of GDP. These figures differ markedly to those presented in the second Cohesion Report, as neither sequel effects nor national co-funding have been taken into consideration.

Map 4 presents an attempt to highlight the macroeconomic potential of the Structural Funds. We have made two hypothetical assumptions here, namely: (a) that all allocated funding is *de facto* on the temporal scale paid equally across the entire programming period, and that (b) the GDP of each region in 1999 represents an average in respect of the GDP score during the period when funding was actually disbursed.

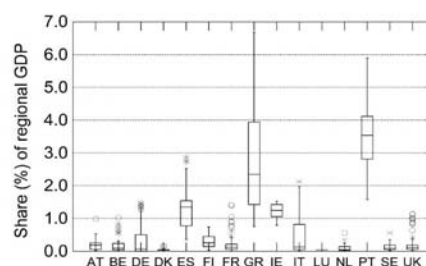
Map 4: Annual average Structural Fund spending as a share of GDP in 1999



Annual average Structural Fund spending as a share (%) of regional GDP in Euro, 1999



Source: Nordregio, ESPON database
Geographical Base: Eurostat GISCO
Origin of data: National data collection, Eurostat-Regio



In the lower left corner of the map is a box plot diagram showing the spread of this ratio between all regions within a country. Among the 50 European regions with the highest share, 26 are in Greece, 20 in Portugal and 4 in Spain. All in all, in around a third (352) of all NUTS III regions the share of Structural Fund spending was above the EU15 average. These regions cover around 31 percent of the total EU15 population. 113 of these regions were in Germany, 52 in Spain and 51 in Greece, while in Italy and Portugal such regions numbered more than 30.

On the whole, a large majority of the regions with the highest shares were Objective 1 or 6 regions. Dividing Europe into two groups – on the one hand those regions where the

macroeconomic impact is larger than in the EU15 on average, and on the other hand those regions where it is smaller – provides an average macroeconomic impact of nearly one percent for the first group but only as little as 0.07 percent for the second one.

The direct and indirect contribution to spatial development aims

In addition to these contributions to local economic development, the question of how well this funding is utilised and which leverage effects it has are decisive for the spatial effects it may produce.

In respect of this we should recall the fact that spatial development aims are not a core issue for the Structural Funds, thus they are only rarely seen to directly address issues such as polycentric development or territorial cohesion. However, both the meta-analysis and the case studies illustrate that in many cases these aims have in fact been addressed indirectly.

The case studies in particular focused on aspects such as the distribution of population, functional specialisation, accessibility, international co-operation and the diminishing of regional divergences in order to operationalise polycentric development. Furthermore, attempts were made to rank both the direct and the indirect effects.

Table 3: Structural Funds influence on polycentric development

Geographical level of influence/effect		MICRO	MESO	MACRO	SUM	TOTAL SUM
Type of influence/ effect						
Aspects explicitly targeting polycentric development	Direct		↔	↔	↔	
	Indirect	↑	↑	↔	↑	↔
Distribution of population	Direct	↑			↔	
	Indirect	↑	↔		↔	↔
Functional/economic specialisation	Direct	↑	↑	↑	↑	
	Indirect	↑	↑	↑	↑	↑
Connectivity/accessibility /transport	Direct	↑	↑	↑	↑	
	Indirect	↔	↑	↔	↔	↑
Strengthening of international co-operation	Direct	↑	↑	↑	↑	
	Indirect	↑	↑	↔	↑	↑
Diminishing regional divergence	Direct	↑			↔	
	Indirect	↑	↔	↔	↔	↔
SUM		↑	↑	↔		
↑ = aspect influenced by Structural Funds ↑ = some Structural Funds influence ↔ = hardly any influence of Structural Funds						

Source: ESPON 2.2.1

The distinction between the **direct** (effects discernible among those directly targeted by the intervention/investment in question) and **indirect** (broader effects that are also discernible among those that have not been the direct addressees of the intervention in question) effects of the Structural Funds shows that overall, the indirect effects are considered to be

just as important as the direct ones – a fact that is often forgotten in the debate. A more detailed look at the various fields of effects however shows that the direct and indirect effects tend to occur in different areas.

As illustrated in the table, most effects are found in the fields of (a) connectivity and accessibility, and (b) socio-economic functional specialisation.

It is hardly surprising that the highest single effect is seen in the field of direct effects on **connectivity and accessibility**. This relates in particular to improvements in accessibility at the regional and national levels. The impact on the trans-national transportation system is however considered to be of slightly lesser importance. Indirect effects are rather rarely encountered in this field. Structural Fund influences on accessibility seen in the case studies moreover to focus mainly on road transportation within a regional or partly national sphere of influence, and on measures related to air services. Air service related measures have been of particular importance in peripheral parts of Europe, as here improvements in road networks only result in minor gains in terms of accessibility.

In the area of **socio-economic functional specialisation**, the sum of the direct and indirect effects accumulates to a similar level as that in the field of connectivity and accessibility. In this case however the main emphasis lies with the indirect effects as regards specialisation within a region, and to a certain extent, on the placement of the region in a trans-national context. Indirect effects in respect of the national context and direct effects in relation to the regional and national context are here considered to be of medium-range importance. The areas in which the Structural Funds can best contribute to existing profiling activities are in the fields of R&D and tourism. In both cases the geographical scope is mostly on profiling within a regional or, on occasion, a national context. A few cases have been unearthed where funding could assist profiling activities of an international character. These were mainly linked to specific existing endogenous potentials and key actors in the region that already had international key competences. Such is the case in Norrland with regard to car testing, in the Southern and Eastern region of Ireland with regard to pharmaceuticals, or in Sachsen with regard to automobile production.

Another field that scored highly with regard to spatial effects is that of **strengthening international co-operation**. Here the direct effects are considered to be of more importance than the indirect ones, showing particular significance with regard to contacts at the *meso* level.

Aspects such as **diminishing regional divergence** and the **distribution of population** appear however to be less affected by the Structural Funds than the other above-mentioned aspects.

In addition to those sub-themes of polycentricity, governance themes rate highly in almost all case study regions. It was argued on a number of occasions that the governance impact (either direct or indirect) is in fact one of the most important impacts of the Structural Funds, while in many cases quantitative goals remain unattained. The consistency of national and European policy goals outlined in programme documents is the highest rated

theme here. In addition, in all of the case studies we can see that examples relating to the promotion of learning remain high on the agenda. Financial practices enabling the enlargement of partnerships rated very low in assessing the impacts of the Structural Funds' working methods, as did the theme of trying to avoid 'technocratic elite pluralism'. This seems to suggest that the partnerships are not necessarily particularly inclusive, or at least no special effort was made to widen them. As such, the case study analysis seems to suggest that the partnership approach is a novelty, but that it mainly encompasses the policy elites while not doing enough to embrace voluntary organisations or other similar bodies.

Towards policy recommendations

The interim results show that in respect of contributions towards territorial cohesion and polycentric development at the *micro* level, the concrete programme measures are likely to be of the greatest importance, whereas at the *meso* level the policy orientations are central. While at the *macro* level it is the distribution of funding that is most often highlighted.

As it is argued here that the Structural Funds can contribute to polycentric development by a variety of approaches, in order to clarify the impact we need to distinguish between direct and indirect influence.

Direct Structural Fund contributions to polycentric development

The study has thus far shown that the Structural Funds contribute to the aims of spatial policies such as polycentric development in a rather coincidental manner. Direct quantitative impacts are seldom discernible outside the Cohesion Fund areas receiving most funding. In terms of indirect impacts however the sheer volume of funding is less decisive, as such indirect effects and impacts can be found in areas with very different support intensities. In order to further intensify these impacts, intended and direct contributions may be supported by:

- *The integration of polycentricity into Structural Funds programming*
Utilisation of the *meso* and *micro* levels (i.e. the individual programme level) are in our view the most efficient way of introducing the concept of polycentrism into the discourse of Structural Fund policies. The present guidelines for the programmes could be amended to include an analysis of how the funds could contribute to 'the development of a balanced functional region' or 'a balanced urban and regional system'.
- *Area designation*
Area designation, paying attention to functional urban areas (e.g. by not fragmenting these into different programme areas), may increase the possibilities of contributing to polycentric development. Fuller consideration of the type of functional areas to be supported – and, in particular, of what kind of assistance best suits which kind of functional urban area – might thus be issues worthy further discussion. While a fuller consideration of the spatial discontinuities between neighbouring regions might provide new aspects.

- *Structural Funds priorities and measures supporting polycentric development*

In general, the existing Structural Funds interventions seem to be sufficient for addressing territorial cohesion and polycentric development. Thus, no direct polycentric development at measure or priority level is needed. However, issues supporting polycentric development at various levels could be strengthened. Particular consideration should thus be given to the fields of functional, socio-economic specialisation and accessibility matters. While both direct and indirect aspects need to be taken into account here.

The Indirect Structural Fund contributions to polycentric development

In an environment of reduced funding in a number of areas, indirect effects and discursive power become increasingly important. Tentative policy recommendations in this field thus include:

- *Intensified policy discourse*

For polycentric development to become a more explicit policy objective within the Structural Funds, there is a greater need for increased clarity over its meaning.

- *Supporting new thinking*

Structural Funds could also be used to promote the goals and concepts of European spatial development policies in less direct ways, such as by funding studies, evaluations and promoting new thinking in this area.

- *Leverage of national practice*

There has thus far been no effective mechanism for linking the objectives of the Lisbon Agenda with EU regional policy. One solution to this problem may be that of using the EU Structural Fund and the Cohesion Fund as levers for national policies.

- *Promoting trans-national links*

Territorial cohesion and polycentrism comprise morphological aspects as well as the flows between various centres. Europe, in the context of the Structural Funds, may support polycentric development.

2 Scientific summary of the concepts, methodologies and typologies used

Following the guidelines given for all ESPON reports, this section will briefly address the issue of the concepts, methodologies, typologies and indicators used and developed in this project. A more detailed discussion of the conceptual work is to be found in the section on policy concepts (page 60), while a detailed description of the methodological approaches is documented in the chapter on methodology (page 39) and the typologies are discussed as part of the analytical work presented in the chapter on the spatial dimension of the Structural Funds (page 110).

2.1 Concepts

The present Interim Report, as well as previous reports connected with this project, contains substantial sections discussing the main concepts used in the assessment of the territorial effects of the Structural Funds. For this we have drawn upon ongoing debates in the European spatial planning and the European regional policy fields, as well as on the common ESPON platform. The two main concepts used thus far are *territorial cohesion* and *polycentric development*.

In accordance with the work of ESPON 3.1, territorial cohesion is understood as an umbrella concept and as an integrated part of the cohesion process covering the territorial aspects of cohesion and the EU objectives of balanced and sustainable development.

The concept of polycentric development is understood as an operationalisation of territorial cohesion. It is a bridging concept as it merges two not always congruent policy aims, namely those of economic growth and balanced development. Referring to the debates ongoing in ESPON 1.1.1 and 3.1, four dimensions of polycentric development are considered as crucial. Firstly, there is the morphological dimension addressing the pattern and size of functional urban areas. Secondly, there is the functional dimension focusing on the (socio-economic) specialisation of functional urban areas in the context of international competitiveness. Thirdly, there is the relational dimension underlining the importance of links between functional urban areas complementing or competing with each other, mainly understood in terms of accessibility. And fourthly, there is an additional relational dimension, namely, the question of co-operation patterns.

In addition to these four dimensions, there is also the issue of scale, which stresses the fact that simultaneous polycentric development at the *micro*, *meso* and *macro* levels may be contradictory.

2.2 Methodologies

Following the methodological suggestions presented in the tender, the project follows a twofold approach.

Firstly, the project works with the European- wide picture of the Structural Funds, presenting overall findings on their spatial dimensions. This work mainly involves three aspects:

- a series of meta-evaluations regarding the spatial dimension of the past Structural Funds period (1994-99),
- a number of analyses of current Structural Funds programmes and their complements (2000-06) looking for the spatial targeting presented in their strategies etc. and,
- a data collection exercise presenting data on the types of regions in which the Structural Funds spending (during 1994-1999) was located. It has been possible to locate and develop typologies for Structural Funds assistance in Objective 1, 2, 3, 5b and 6 areas, as well as in the areas where Cohesion Fund assistance was available.

Secondly, the project works with a more detailed picture of the territorial effects and impacts of the Structural Funds. This involves an in-depth analysis of specific aspects and areas. Based on the first phase of the work, the hot and cold spots of Structural Fund spending will be identified for further analysis.

Up to and including the Second Interim Report, the results presented concentrated on the first phase. For the present report however, work on the Europe- wide picture has been continued and complemented by the first in-depth studies on selected regions and by learning about polycentric development through Interreg activities. Furthermore, the picture derived from our work on the Structural Funds was complemented by studies on national policies allowing us to better see the correlation between European and national regional policies.

2.3 Typologies

The mapping of the geography of the Structural Funds is the basis for the development of a series of typologies. The underlying basic typology is thus the amount of Structural Fund spending *per capita*, and the type of spending.

Based on this, and on relations to regional GDP *per capita*, changes in regional GDP are used to further develop analysis showing the first steps towards developing the typologies. This specifically relates to the work on hot and cold spots in the case studies.

Furthermore, the information collected on the geography of the Structural Funds has been applied to the typologies developed in other ESPON projects. In particular, the typologies of functional urban areas developed by ESPON 1.1.1 and the typologies of urban-rural population developed by ESPON 1.1.2 have all proven useful.

2.4 Indicators

The ESPON 2.2.1 project carried out an extensive data collection exercise regarding the geography of Structural Fund spending during the 1994-99 period. It has been possible to locate Structural Funds assistance for Objectives 1, 2, 3, 5b and 6 programmes for all EU 15 countries, which amounts to approx 93,5 percent of the Structural Funds spending during the previous period. The project lead has decided not to collect any further data for the 1994-99 period, as based on discussions with the national experts and other information sources this would be unlikely to significantly raise the data coverage.

As a result of this exercise it has been possible to provide the ESPON database with information on Structural Fund spending during this period at the NUTS II and III levels.

Structural Fund spending during the 1994-99 period at the NUTS III level divided into

- regional development, productive infrastructure,
- agriculture, fisheries, rural development,
- social integration, human resources and
- basic infrastructure, European cohesion.

Following the tender, it was not planned to extend the data collection to the current programming period 2000-2006 and there were no resources for so doing. Please note that the collection of spending data for the previous period required most of the time and resources spent during the first year of the project. Furthermore, data for the current period would be of little use as there is no spatial development data to compare it to, neither can spatial impacts be assessed at such an early point in programme implementation.

3 Networking with other ESPON projects

The ESPON 2.2.1 team has made considerable efforts in respect of networking with other trans-national project groups (TPGs). Generally, such co-operation with other TPGs can be divided into three categories:

- *Overall ESPON co-ordination and common platform:*
 - ESPON 3.1 – Integrated tools
In particular with regard to the conceptual debate and to the work on tentative policy recommendations there was a good level of co-operation with ESPON 3.1, which in part also involved methodological discussions.
- *Structural Funds related co-operation:*
 - ESPON 2.2.2 – Pre-accession aid
The project design and the methodological approaches of ESPON 2.2.1 and 2.2.2 are similar. Thus good co-operation and a useful exchange of experience have been facilitated. This relates in particular to methodological debates and to the work on the formulation of a working hypothesis involving meta-evaluation exercises and the review of current Structural Funds programmes. Intensified co-operation as regards conclusions and recommendations is also envisaged.
 - ESPON 2.2.3 – Structural Funds in urban areas
After the Second Interim Report, co-operation between ESPON 2.2.1 and 2.2.3 has been reduced to aspects of information exchange. This relates specifically to the design and analysis of case studies, as in both projects, case studies on the territorial effects of the Structural Funds have been carried out.
- *Spatial development related networking:*
 - ESPON 1.1.1 – Polycentric development
As polycentric development is considered to be a major concept in the assessment of the territorial effects of the Structural Funds, close contact with the ESPON 1.1.1 project was established. The focus here is mainly on conceptual discussions, with this resulting e.g. in the use of the ESPON 1.1.1 typology on functional urban areas in this project. However, joint discussions also involved the further elaboration of policy recommendations.
 - ESPON 1.1.2 – Rural-urban partnership
The work carried out on rural urban relations and on the typologies of rural and urban areas is considered to be an essential element in the analysis of the use of the Structural Funds. Accordingly, there have been intense discussions with our partners from ESPON 1.1.1 focusing mainly on the conceptual and typology work.
 - ESPON 1.2.1 – Transportation
Transport infrastructure and accessibility are important aspects when it comes to the territorial effects of the Structural Funds. Thus the overlap of partners working in these projects has undoubtedly facilitated the smooth flow of information.

In general, networking with the other projects has been straightforward and very useful. More time for in-depth discussions on methodologies, approaches or the interpretation of results, could however have proven useful. Notwithstanding this however the rather strict agenda and the usual time pressures for each project necessitated that such interactions be focused predominantly on the more pragmatic aspects of co-operation.

4 Towards the final report – next steps

The present report reflects the interim findings of the project. For a number of Working Packages further work is envisaged during the remaining months of the project until the delivery of the final report in March 2005. The major areas of work outstanding concern:

- *The Spatial Dimension of Structural Funds*

As regards the analysis of the spatial dimension of the Structural Funds, a final update of the database, typologies and maps provided will be carried out. Furthermore, the possible co-ordination of the final results with the findings provided by the ESPON 2.2.2 project on Pre-Accession Aid is also envisaged.

- *Case Studies on Territorial Effects*

The case study work presented in this report will be further elaborated. This relates in particular to the inclusion of the still outstanding case study on Extremadura as well as to smaller improvements in the existing case studies, in terms of completion and further polishing. This will certainly also be reflected in the overall analysis.

- *Interreg Contributions*

This report presents the initial findings of the work on Interreg. This work will be continued in the coming period by mainly focusing on further investigations of single projects. Here the focus will be on illustrating whether and/or how the increased levels of learning and awareness regarding the various aspects of polycentricity have been implemented in every day life. As to the selection of suitable projects, not only the Baltic Sea Region but also other programming areas will be considered for inclusion. Furthermore, the extension of the questionnaire to other programming areas is currently under discussion, in order to see whether the degree and type of learning differs across Europe.

- *Policy Recommendations*

Finally, the policy recommendations will be reworked taking into consideration new findings and the latest policy developments. With this aim in mind, close co-operation is envisaged with selected stakeholders as well as the parallel ESPON 2.2.2 project.

5 Formal requests

The Terms of Reference for this project, the *Addendum*, the ESPON Crete, Matera and Lillehammer Guidance Papers and the official response to the Second Interim Report, all shape the official framework of this project. All are integrated into the work carried out for this report. In the following, we will briefly highlight our responses to the Terms of References, *Addendum* and Responses to the SIR.

5.1 Terms of reference and Addendum

The terms of reference and the *Addendum* to the contract highlight a number of deliveries for the Third Interim Report of this project. According to these, the present report shall address the following aspects:

- Report (including an update of the database) on the territorial impact of the Structural Funds and Cohesion Funds. Report on the particular effects of the Community Interventions under the Interreg programmes.
- Proposal for new appropriate indicators, typologies and instruments to detect regions and territories most negatively and positively affected by the identified trends (with special reference to the policy aims of the ESDP) to be used in territorial impact assessment, and new methodologies to consider territorial information.
- Policy recommendations in view of the implementation of the Structural Funds in relation to measures, eligible areas and delivery mechanisms.

Continuing on from the work on the territorial impacts of the Structural Funds and Cohesion Funds, a more highly developed picture and a series of case studies are now available in this report. With regard to this we would like to 'flag' the discussion on territorial impacts in chapter 9 (page 110). A more detailed appreciation of the discussion raised in this chapter can be gained from the case study analysis in chapter 10 (page 143). The initial results of the contribution of the Community Initiative Interreg to the achievement of polycentric development are available in chapter 11 (page 223).

Regarding the proposal for new appropriate indicators and typologies to be used in the territorial impact assessments, we would like also to flag up the work on Structural Fund spending related to spatial discontinuities, the typologies of polycentric development and rural-urban division. This, as well as the other work done in the field is presented in chapter 9 (page 110).

Preliminary results and tentative policy recommendations have been drawn from the work carried out thus far. Whereas the analysis focuses mainly on the EU 15, special attention was given to the issue of EU enlargement when drafting the preliminary results and the tentative policy recommendations. Thus the chapter dealing with our conclusions and recommendations (page 267) presents findings relevant to the post-enlargement EU and to the new Structural Funds regime after 2006.

5.2 Reflections on the response of the CU to the SIR

During the meeting between the ESPON CU and the ESPON 2.2.1 Lead Partner (28 February 2004), the CU's draft response on the SIR of ESPON 2.2.1 was discussed.

The project lead considers the general comments expressed as being valuable and has thus made an attempt to follow them as closely as possible, the only exception here being the specific contribution to the European spatial policy process expressed in section 2.12, as this may involve an extensive additional workload. An attempt to meet the ideas expressed in section 2.12 of the response is made and presented in the annex, where various pieces of information available within the context of this project have been grouped together in a series of national reports.

The detailed comments raised a number of interesting questions, which in part go beyond the scope of the existing contract, while also being partly covered by the work carried out for the present report.

- *Data*

The project carried out a quality-check of the data used for the SIR. This data covers Objectives 1, 2, 3, 5b, 6 and the Cohesion Fund, which amounts to approx 93,5 percent of the Structural Funds spending during the previous period. The project lead decided not to collect any further data, as based on discussions with the national experts and other information sources it would be unlikely that this would significantly raise the data coverage.

- *Evaluation and quantification of impacts of Structural Funds*

Following the methodology presented in the tender, output will be measured at the EU level in spending terms, whereas the case study work will help to discuss the broader spectrum of impacts at the level of the case study regions.

- *Correlations instead of impacts*

As described in the tender, the spending data will be analysed at the EU level according to its geography (in relation to polycentricity and territorial cohesion) and as compared to spatial developments (e.g. in terms of economic performance or accessibility). Further information on possible correlations, interdependencies and causalities are provided by the meta-analysis and the case studies.

- *Transportation maps*

It was argued in the comments to the SIR that the transportation maps needed to be revised and more fully embodied in the text as the project lead only received them a few hours before submitting the report. This has indeed been done subsequently.

- *Case Studies*

As regards the actual number of case studies (fifteen), the tender is still valid, only the depth has been increased. The case studies, selected according to a range of criteria, are as follows: Norrland (SE), Lappi (FIN), Madeira (PT), Cantabria (ES), Cataluña (ES), Extremadura (ES), Toscana (IT), Calabria (IT), Lakonia (GR), Grevena (GR),

Centre (FR), Southern and Eastern Ireland (IR), Highlands and Islands (UK), Sachsen (Leipzig – Leipziger Land) (DE), and Wallonia (BE). The initial results of the case studies, as well as the rationale for case study selection and the template used are presented in chapter 10 (page 143).

- *Interreg*

The main aim of this working package is to assess whether Interreg IIC (and IIIB) actually contribute to the achievement of the aims of spatial planning policies, namely polycentric development and territorial cohesion. Generally speaking, the outcome is seen in the field of learning and thus the question emerges as to what degree such learning can contribute to the achievement of polycentric development or territorial cohesion. With regard to this, a survey has been set up, with the initial results presented in chapter 11 (page 223).

- *ESPON 2.2.3 data*

The tables referring to ESPON 2.2.3 data are no longer used.

- *Differentiate between weak, potential and strong areas*

The project has worked on a further utilisation and analysis of the data and information from other ESPON projects, in particular the ESPON 1.1.1 project and the report it provided in October 2003. There are however, certain difficulties regarding the transposition of information provided at the FUA level into data at the NUTS III level.

- *Missing counterfactual analysis and causality*

To our knowledge all policy TIAs struggle with the fact that counterfactual analysis at the European level is only possible when using macro-economic models. As indicated in the tender, the project does not, for various reasons, plan on using econometric models, and it was understood that this approach had been accepted as the tender itself was accepted. As regards the question of causality, both the tender and the report point out that an attempt will be made in the case studies to assess this question more fully.

- *Collect spending data for 2000-06*

Following the tender, this was not planned and there are no resources for so doing. Please note that the collection of spending data for the previous period required most of the time and resources spent during the first year of the project. Furthermore, data for the current period would be of little use as there is no spatial development data to compare it to, neither can spatial impacts be assessed at such an early point in programme implementation. However, if DG *Regio* provides the project with the spending data at the NUTS III level, the project will try to integrate it into the analysis.

5.3 Indication of ESPON performance indicators achieved

Table 3: Number of performance indicators achieved

Number of spatial indicators employed in addition to priority 1:	
in total	2
covering the EU territory	2 (EU 15)
more than the EU territory	
Number of spatial indicators applied:	
in total	7
covering the EU territory	6 (EU 15)
more than the EU territory	
Number of EU maps produced	9
Number of Funds fully addressed	6
Number of charts on the institutional related to the Funds in their policy context	14
Number of ESDP policy aims mentioned in the ESDP reference addressed by Funds investigated	10

PART B

6 Methodology

The project has proceeded in accordance with the services proposed in the tender. The focus of the work carried out since delivery of the Second Interim Report in August 2003 was on Working Packages 4 to 8.

In accordance with the services proposed in the tender this has been further elaborated in Working Packages 1 to 8. In Working Package 1 the conceptual debate has led to an improved understanding of the notions of "territorial cohesion" and "polycentric development" which guide this work. In Working Package 2, the work presented in the last Interim Report has been updated after the presentation of the Third Cohesion Report. In Working Package 3, the conceptual debate is worked up into indicators describing European spatial development. The work of this Package, however, relies on the work of the ESPON strand 1 projects, as the focus of this project is on analysing the effects of the Structural Funds (i.e. not primarily on describing and analysing spatial development in Europe). Working Package 4 is one of the core elements of this project and is focused on the collection of regional data on Structural Fund spending. Here emphasis has been put on the improvement of the data presented in the Second Interim Report, including verification of the existing data sets and compilation and verification of datasets at the NUTS III level. This involved the development of national reports on the previous Structural Fund period. A second set of national reports was elaborated under Working Package 5, where the national regional policies and their coherence with the Structural Funds is discussed. These 15 national reports are then brought together in an analysis focusing on the question, to what degree national policies reinforce or counter-balance the territorial effects of the Structural Funds. Within Working Package 6, 15 case studies on Structural Funds cold- and hot spots have been carried out to better illustrate a number of findings derived from the previous Working Packages. In Working Package 7, a methodology was developed to assess the contribution of Interreg to the achievement of polycentricity and used for an initial analysis of Interreg IIC projects in the Baltic Sea Region.

The territorial impact assessment of the Structural Funds will be approached from three directions:

- *Territorial Development*

Working Packages 3 and 4 deal mainly with an analysis of the developments occurring across the European territory at the lowest level possible, where ongoing spatial development and the investments of the Structural Funds will be mapped. Thus far, assessments have been carried out regarding the coincidences between Structural Fund spending and spatial developments in terms of GDP, the change of the relative economic position of a region (economic concentration) and transportation.

- *Governance and Policy Development*

Working Package 5 partly draws upon the work carried out under Working Package 2, which address the policy dimension. This comprises the governance of the Structural Funds in the various countries as well as their conformity to national policies. The aim is to identify a set of potential typologies for spatial policies. Another aspect of this

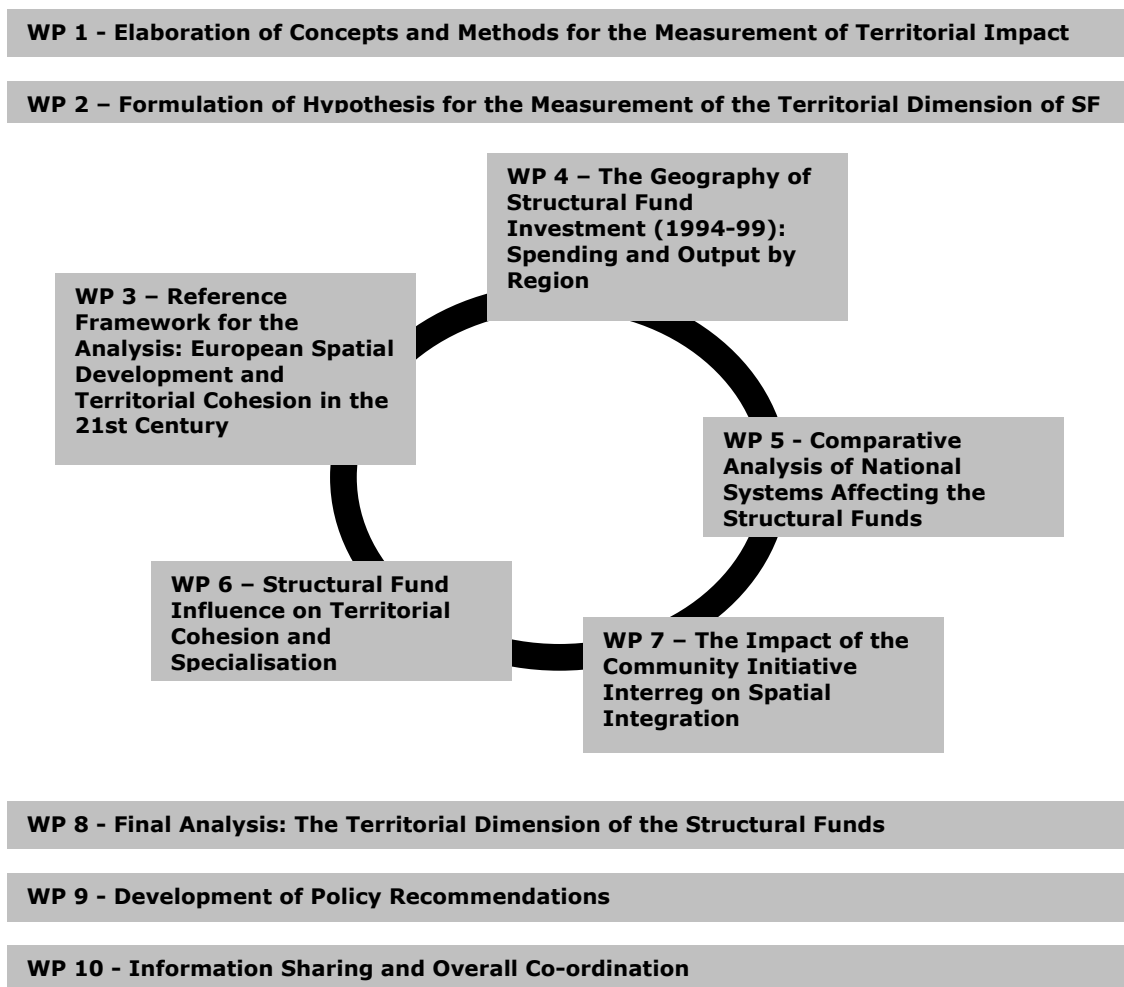
dimension is the influence of Interreg on the formation of trans-national macro-regions. Here, the analysis has already begun in Working Package 7.

- *Causal Links*

Comparing actual spatial development to actual Structural Fund investment by region shows where development and investment coexist. This does not however allow for conclusions on the causal links between them. In order to pin down the territorial effects of the Structural Funds, a number of 15 hot and cold spots have been analysed with regard to their causal relations.

In the following we will discuss the methodological approach taken in each working package.

Figure 3: Organisation of working packages



6.1 WP 1 – Concepts and methods for measuring territorial impacts

Working Package 1 runs from the beginning of the project to its end, and is designed to attune the work to ongoing conceptual and policy debates and to produce a stepwise improvement of the methodology.

Concepts

In the First Interim Report, submitted in March 2003, a conceptual debate around the concept of territorial cohesion was developed. The key words here were territorial balance, spatial integration, the interdependence of various sectors (i.e. economic, environmental and social aspects), and the multi-scalar understanding of territorial cohesion (including the conflict of aims between different geographical levels of cohesion).

This then formed the basis for the further work within this project and we were glad to see that it also formed a considerable input to the conceptual work presented in the Second Interim Report of the ESPON 3.1 project. In this report the concept of territorial cohesion has been developed further towards a hyper-cube integrating the social and geographical dimension of territory, the potential, positional and integrational dimension of cohesion as well as the various geographical scales at which the concept is to be applied. Furthermore, the concept of territorial cohesion has been clearly linked to the concept of polycentric development.

Based on the conceptual debate ongoing within ESPON, and the feedback provided on the First and Second Interim Reports of this project, the discussion focused increasingly on polycentricity at three different scales (*micro – meso – macro*) and the four dimensions (morphology – accessibility – socio-economic specialisation – co-operation).

This discussion formed the basis for the meta-analysis and for the analysis of Structural Fund programmes carried out under Working Package 2 (formulation of a hypothesis) as well as for the interpretation of the results emanating from Working Package 4 (geography of Structural Fund spending), Working Package 6 (in-depth analysis of cold- and hotspots), Working Package 7 (Interreg), and the formulation of tentative policy recommendations (Working Package 9).

Methodology

The projects follow the methodology presented in the tender, and thus far this methodology has proven to be a robust and useful framework for the tasks in hand. For each step, i.e. Working Package, there are methodological discussions in order to adjust the given approach and develop the ideas presented in the tender in further detail.

Generally, the project follows a two-fold approach. Firstly, the project works with the European-wide picture of the Structural Funds, presenting overall findings on their spatial implications. This mainly involves the work carried out within Working Packages 2 – 4. In the second step, the work focuses on in-depth analyses of specific aspects and areas in order to discuss a more detailed picture of the territorial effects and impacts of the Structural Funds.

Up to, and including, the Second Interim Report, the results presented concentrated on the first phase. For the present report, the work on the European-wide picture has been continued and complemented by in-depth studies on selected regions and Interreg activities. Furthermore, the pictures derived from our work on the Structural Funds have been complemented with studies on national policies allowing us to see the correlations between European and national regional policies.

6.2 WP 2 – Hypothesis for the measurement of the territorial dimension

As described in the tender for this project, the main aim of Working Package 2 was to formulate working hypotheses on the territorial impact of the Structural Funds, in order to inspire further stages of the research and to provide a basis for reflection on post 2006 Structural Fund reform. In particular, the work carried out as part of this portion of the study sought to better understand past and current Structural Fund programmes' strategies and implementation mechanisms and their potential for improving the Union's territorial cohesion (and polycentricity), this implied first adopting a shared definition of territorial cohesion (and of polycentricity) and then establishing:

- how past programmes took territorial cohesion into account
- what territorial effects were delivered (qualitative assessment)
- how current programmes are taking into account territorial cohesion
- what territorial effects are likely to be delivered by current Structural Fund programmes.

In order to do so, it has been necessary to understand Structural Fund strategies and implementation mechanisms in the 15 current Member States and their interrelationships with the concepts of territorial cohesion and polycentricity. This has been done through a number of overlapping activities:

- the undertaking of an extensive review of the literature and policy documents
- the analysis of past Structural Fund programmes based on the *ex post* evaluations undertaken for the European Commission that were made available to the research team
- the analysis of current Structural Fund programmes based on previous work, available studies and fresh desk-bound research undertaken by the country experts.

With the aim of understanding the policy contexts in which the Structural Fund programmes operate, the policy content (strategies), the institutional arrangements for implementation and the delivery systems in operation need to be taken into account.

Review of the evaluation documents on the 1994-99 programmes

The study of past programmes has been conducted reviewing a large amount of evaluation documents and literature. This comprised in particular:

- The *ex post* evaluation of Objective 1 programmes (synthesis cross-national report and 11 national reports)
- The executive summaries of the national reports of the Objective 2 *ex post* evaluation (these were kindly made available by DG *Regio*, even though the

reports themselves and the cross-country synthesis report are not yet publicly available)

- The *ex post* evaluation of Objective 6 programmes (synthesis report and country reports for Finland and Sweden).

In addition, a number of thematic evaluations and studies were addressed, including:

- Robert J et al – Spatial Impacts of Community Policies and Costs of Non Coordination, June 2001.
- Faber O et al (2000), Thematic Evaluation of the Impact of Structural Funds on Transport Infrastructures, Final Report, November 2000.
- Kelleher J, Batterbury S, Stern E, The Thematic Evaluation of the Partnership Principle, February 1999.
- Bachtler J, Taylor S, Objective 2: Experiences, Lessons and Policy Implications, Final Report, July 1999.

A substantial part of the research, moreover, is based on the studies carried out by EPRC as part of IQ-Net, a network of Objective 1 and 2 regions that the institute has been managing since 1996. Selected national reports and evaluations have also been looked at as relevant. The full list of documents included in this research is provided in the bibliography.

The focus of this meta-evaluation was on the detection of a clear territorial dimension or territorial considerations in the programming documents. In particular, aspects addressing territorial cohesion and polycentric development and information on physical outputs were investigated.

Analysis of current Structural Fund programmes (2000-06)

The review of the current Structural Fund programmes was also conducted by means of extensive desk-bound research. This also encompassed a preliminary review of trends in national regional policies, to be developed further in the research as part of Working Package 5 (to be presented in the Third Interim Report). This secondary research included a number of recent IQ-Net reports, the outputs from other pieces of research undertaken at EPRC, and a range of thematic evaluations and studies. The full list of the documentation addressed is included in the literature section; however, some of the most useful sources are listed below:

- Bachtler J, Wishlade F and Yuill D (2003), *Regional Policies After 2006: Complementarity or Conflict?* Plenary Paper for the Sub-Rosa Strategic Discussion, final draft, Club Universitaire, Brussels, 13-14 June 2003.
- Bachtler J and Taylor S (2003), *The Added Value of the Structural Funds: A Regional Perspective*, IQ-Net Special Report, June 2003.

- Bachtler J and Raines P (2002), *A new Paradigm of Regional Policy? Reviewing Recent Trends in Europe*, Paper prepared for discussion at the XXIII Meeting of the Sponsors of the European Policies Research Centre, Ross Priory, Loch Lomondshire, 7-8 October 2002.
- OECD, *Policy Fact Sheet: High-Level Meeting on Innovation and Effectiveness in Territorial Development Policy*, 25-26 June 2003, Martigny, Switzerland, 19 June 2003, GOC/TDPC(2003)14/REV1.
- Polverari L and Rooney M, with McMaster I, Raines P, Bachtler J and Böhme K and Mariussen A (2001), *The Spatial and Urban Dimensions in 2000-06 Objective 1 Programmes. Overview on the Objective 1*, June 2001.
- Yuill D (2002), *A Comparative Overview of Recent Regional Policy Development in the Member States and in Norway*, Glasgow, October 2002.

In addition to this secondary research output, the country experts also undertook primary research on a sample of Structural Fund programming documents and complements. The analyses, based on a standardised checklist, covered the following aspects:

- A general assessment of the inclusion of spatial considerations in the programme documentation analysed;
- The characteristics of programme areas and the inclusion in the programmes' background analyses and *ex ante* evaluations of the concepts of territorial cohesion and polycentric development;
- The inclusion of the concepts of territorial cohesion and polycentric development in the programmes strategies;
- The description of selected measures of particular spatial significance (objectives, financial allocations, implementation arrangements, links with national instruments);
- Commentary on relevant delivery mechanisms (partnership, project selection, monitoring and evaluation).

The number of programmes to be analysed, per country, was decided in relation to the Structural Funds allocations, per country, (see table below). For Belgium an additional programme was addressed (in relation to that which the table below would have anticipated), in order to cover both language areas.

Table 4: Selection of the number of programmes per country – rationale

% of Structural Fund allocation	Countries	Category	No of programmes per country	Total programmes per country
Those with from 0-0.50% of total Structural Fund allocation	Denmark, Luxembourg	Very small Structural Fund allocation	1	2
Those with from 0.51-2% of total Structural Fund allocation	Austria, Belgium, Finland, Sweden, the Netherlands, Ireland	Small Structural Fund allocation	2	12
Those with from 2.1-10% of total Structural Fund allocation	France and UK	Medium Structural Fund allocation	3	6
Those with 10+ %	Germany, Greece, Spain, Italy, Portugal	Large Structural Fund allocation	4	20
			Total 40 programmes	

The selection of the programmes to be analysed (listed below) was done according to the results by EPRC/Nordregio research on Objective 1 and 2 programmes. Those programmes that had demonstrated a higher degree of integration of ESDP Policy Guidelines and, in particular, of the theme of polycentricity, were selected.

For those countries with both O1 and O2, one Objective 2 programme was addressed (i.e. priority was given to O1).

The programming documents, their complements and available evaluation studies carried out for the programmes (*ex-ante* evaluation reports, thematic evaluation reports etc.) were analysed by national experts following a joint template.

Based on the national reports, the cross-European analysis presented in this report was conducted.

Table 5: Selected programmes for analysis

	Objective 1	Objective 2	
Denmark		Denmark	1
Luxembourg		Luxembourg	1
Austria	Burgenland	Steiermark	2
Finland	Eastern Finland	South of Finland	2
Sweden	Norra Norrland	Norra	2
The Netherlands		Stedelijke gebieten, Ost Nederland	2
Ireland	BMW and South East		2
Belgium	Hainaut	Meuse-Veustre + Antwerpen	2
France	Reunion, NP de Calais	Alsace	3
UK	West Wales, South Yorkshire/Northern Ireland	West of Scotland	3
Germany	Thuringen, Sachsen, Sachsen-Anhalt	NRW	4
Greece	East Macedonia-Thrace; Ionian Islands, South Aegean Islands, Epire		4
Spain	Galicia, Valencia	Cataluna	4
Italy	Sicilia, Campania, Puglia	Toscana	4
Portugal	Norte, Centre, Alentejo, Lisbon		4
Total			40

6.3 WP 3 – Reference framework for the analysis

Working Package three provides the framework for analysis of the results stemming from the work on the geography of Structural Fund spending (Working Package 4). Thus this working package forms a bridge between the conceptual debate ongoing in this project (Working Package 1) and the thematic ESPON projects analysing European spatial development.

In order to achieve the best possible integration of the results of this project into the wider ESPON context, and because of the limited resources of the project, working package 3 has

been designed in such a way that it translates the results stemming from other ESPON projects into material that is useful for understanding and analysing the information on the geography of Structural Funds collected by this project.

In addition, based on the material presented in the Second Interim Report, effort has been taken to analyse the contribution of the Structural Funds to regional development more generally.

Thus, a major aspect of the work has been related to developing typologies related to GDP spending and to the growth of GDP and Structural Fund spending. Furthermore, efforts have also been made to relate the results of this project to the regional typologies developed by ESPON 1.1.1 (Polycentric development), ESPON 1.1.2 (Rural-urban), ESPON 1.2.1 (Transportation) and ESPON 2.2.3 (Structural Funds in urban areas). This resulted in the creation of a number of tables and maps that are reproduced elsewhere in this report.

In the First Interim Report, a debate on spatial discontinuities was initiated, which was in part related to a similar debate ongoing in ESPON 3.1. Here further work has been carried out, with the initial results being presented in this report.

Gaps in the pre-conditions for structural development are by their very nature only meaningful in relative terms, relative to a moment in time, to a chosen space of analysis, or to a given geographic scale of observation. The most straightforward and widely accepted relative measure of development gaps is the one used at the European level for the definition of Objective 1 regions; namely, regional GDP *per capita* in a given year. From a research point of view, this measure raises a number of problems. Conceptually, for instance, it may seem more accurate to measure structural gaps against endowment rather than actual economic activities. Or from the operational perspective, there are a number of unresolved issues, such as the lack of consistency in the methods used across European countries to measure GDP, or the validity of this approach in relation to the New Economy. For political reasons, it seems difficult to substitute regional GDP *per capita* as the basic measure for regional disparities. Thus, it is convenient to analyse the implications of this measure and to seek ways of complementing it with others more focused on social capital endowment.

The widest gaps in terms of GDP *per capita* in the ESPON space, and those inducing migration flows, are the ones between the EU-15 and the new accession and the remaining Candidate Countries. GDP *per capita* gaps can be so dramatic in some instances here that they can only really be explained by the evidence of deep structural gaps, starting with the lack of infrastructure. A comparison at the national level between countries may provide for the identification of such strategic measures.

European regions belonging to the same geographic space (e.g. the Baltic, the Rhine corridor, the Western Mediterranean, or the Alps) have relatively similar preconditions for development, and in some cases common economic, and to some extent also, political histories. A comparative regional analysis within these areas (for instance, those defined in the Europe2000+ study) may provide useful additional information enabling us to better understand the performance of each region. Moreover, an analysis of the European situation

of the region (border regions, ultra-peripheral regions, islands, regions in corridors, etc.) is also capable of providing useful insights into the relative situation of each region with reference to a number of cross-sectoral themes. Perhaps with a stronger European emphasis, the analysis relative to the so-called 'Small Europes' (e.g. cross-border macro-regions) could also be undertaken to learn more about relationships that are, to many people, at the forefront of European integration. In addition, undertaking intra-regional analysis for some case studies would be an interesting way of exploring why the gaps between counties or cities (or perhaps even neighbourhoods in the same municipality) are higher than gaps at other scales. The general lack of GDP data at the appropriate scale has however hampered attempts to carry out such an analysis.

All of the discontinuities mentioned above (relative to different spatial aggregates) can be mapped in conventional thematic maps, using typologies to classify regions into categories depending on Structural Fund allocation and GDP *per capita*. Such discontinuities can also be mapped using a mosaic design to highlight regions where discontinuities are higher than for their neighbouring regions. Finally, it is also possible to represent discontinuities in terms of flows between regional centroids and common borders (straight lines between centroids illustrating "proximity" and giving width to frontiers according to the discontinuity at issue). While the first option is the easiest to produce and read, the second and third options may also provide for interesting outcomes, despite being more difficult to develop and read.

6.4 WP 4 – The geography of Structural Fund spending, 1994-99

The mapping of the geography of the Structural Funds spending for the period 1994(5)-1999 was the main task in WP 4, which consisted of the following specific steps:

- checking data availability on the EC, national and regional levels,
- data gathering Structural Fund co-financing,
- structuring the expenditure data per NUTS II and NUTS III regions,
- developing the supporting tools for data classification and organization (MS EXCEL based), based on a Structural Fund spending typology,
- creating European and country maps on Structural Funds spending for the programming period,
- identifying European and country expenditure patterns and relating them to the development trends and the physical outputs of the Structural Fund programmes.

Data availability and sources

With regard to the identification of available data, an extensive search took place in March 2003 for the already existing data on Structural Fund expenditure, preferably at the NUTS III level. The web sites of the relevant directorates-general (Regional Policy, Employment, Environment, Fisheries, Agriculture) and available reports were checked at this point and

several persons in DG REGIO and in the national and regional Structural Funds co-ordination were contacted.

In order to facilitate the data gathering process and the information search at the national and regional levels, the partner responsible for WP4 prepared a 'wish list', explaining in detail the data requirements (detailed programmes, projects) and giving preliminary indications of where to find the national data on the web. In general and if available, the Structural Fund spending data should reflect:

- Amount in Euros.
- Final allocation (instead of initially planned resources)
- Structural Fund participation (instead of the total budget of the programmes or projects), where necessary determined through percent calculations
- Final (or quasi final) situations when the programmes are still to be officially closed.
- In co-operation projects (not INTERREG, RECITE, ECOS), the final Structural Fund participation assigned to the lead region.
- Where available, data on the NUTS III level. In other cases on the NUTS II level.

The 'wish list' and these specifications were disseminated among the national experts in early April 2003, in order to start data gathering on the national and regional levels.

The following data sources and information resources have been used:

- CEC reports and official information on the Structural Funds, the Cohesion Fund, and sector policies.
- National Structural Fund administrations and databases.
- Regional Structural Fund managing authorities.
- Intermediary organisations with general information on Structural Fund Programmes on the regional or national levels, such as BBR in Germany and ÖROK in Austria.
- EU-wide and countrywide Structural Fund Evaluations.

The results of this extensive search were however inconclusive. On the one hand, ample information was found in respect of each kind of EU expenditure, per fund involved and per Programme. On the other hand however, this information was mostly organized per country or larger region (e.g., in Spain NUTS II, in Germany NUTS I, etc.), which makes data collection and detailed information on the NUTS III level particularly difficult in some countries, especially in Spain, Italy, Greece, Germany, Austria, the UK, and France. On occasion, a whole region was eligible for funding, while at other times only parts of a region

were so eligible. This affects the funding *per capita* figures on the NUTS III level. Objective 1 Programmes were in most cases organised on a wider regional scale (NUTS I and II), whereas Community Initiatives and Objective 3 and 4 Programmes mostly counted with Programmes on the national scale and not with an *a priori* regional distribution of the Funds.

Another obstacle in identifying useful data has been the lack of final expenditure data, as in some countries the programmes are still to be closed or to be revised, with official data therefore being unavailable for the time being. Because of this, in some cases the national experts had to use figures on planned initial expenditure, or on unofficial final expenditure.

A third problem was the lack of coherence in the currency units, since most data on the Structural Fund Programmes for 1994-1999 still exists in national currencies and not in Euros. This problem was solved while using a common timeline for converting national currencies into ECU and Euros.

Data treatment and description

As regards the treatment of the Structural Fund spending Data, 1994-99, different strategies were applied in order to overcome the existing difficulties and to obtain comparable data for all EU Member States.

For cases where Structural Fund spending data was definitely not available on the NUTS III level from the programme managers, from either national or European sources, we applied a number of strategies to structure the overall spending per NUTS III regions.

The proposed instruments for structuring the expenditure data per NUTS III regions were as follows:

- Closer analysis of the involved NUTS III region in larger Objective 2 Programmes, because the eligible areas are defined on the NUTS V level and in most NUTS II regions are geographically concentrated. Example: The OP Aragon 1994-1996 and 1997-1999 is programmed on the regional (NUTS II) level. After further consideration however, it turns out that the eligible areas are all concentrated in the NUTS III area of Saragossa.
- Contacting Structural Fund programme managers and intermediary bodies, such as BBR (Germany) and ÖROK (Austria) at the national and/or regional level. They were able to indicate distributions of Structural Fund spending in their regions, or to offer national/regional analysis on the same subject.
- Distributing the amount spent according to population percentage, using the aggregate spending for the respective NUTS I and NUTS II region and the percentage of the corresponding NUTS III regions.
- In cases where only data on *per capita* spending was available, distributing the amount spent in a NUTS III region, carrying out a simple multiplication of absolute population figures with *per capita* spending.

In order to classify and organise the collected data, a supporting tool was developed and used during the data collection stage.

The tool is comprised of one overall database, which was used to transfer the data into a Geographical Information System and allow the mapping of the data. At the same time, EXCEL sheets for each country were developed which facilitate the data introduction for the national experts.

In order to test the adequacy of the tool, a pilot study of the Structural Fund spending data for Spain and Sweden was carried out. After checking the tool, it was disseminated among the national experts in April 2003.

The final step before mapping the obtained data was the development of a Structural Fund spending typology. Given the variety of spending typologies among the different EU member states, it was not possible to use a more detailed typology. One feasible way to classify the Structural Fund spending was, however, the use of different classes according to the predominant funds involved (ERDF, ESF, EAGGF, IAGF, Cohesion), and according to the predominant character of the Structural Fund programme (Objective 5b - rural development, Objective 3 - social integration and human resources). The resulting typology is reflected in the following matrix:

Following this approach it was possible to locate and categorise most of the Structural Funds assistance for Objectives 1, 2, 3, 5b and 6, which corresponds to 93.5 percent of the Structural Fund investments between 1994 and 1999. Furthermore, Cohesion Fund assistance has also been taken into account. Community Initiatives, Innovative Projects, Objective 4 and Objective 5a Programmes have however not been included, as Structural Fund expenditure is relatively low and/or the regional distribution of the Funds is extremely difficult to trace. Indeed, the reason for omitting a number of programmes is simply the lack of consistent data. For Objectives 1, 2, 3, 5b and 6 we have obtained the most consistent and comparable data in order to accomplish the analysis.

In addition, the developed categories of the spending typology correspond to the availability of consistent data. In some cases more precise distribution data has been available for a selection of regions, but here the need was for comprehensive European level comparable data. Therefore this rough typology has been developed allowing some general insights into the type of spending. This information has however to be treated cautiously, as it does not reflect topics covered at programming or measure level and in certain cases different funding sources are collapsed into one category, e.g. in the case of Objective 5b both ERDF and EAGGF funding are considered as 'rural development'.

Furthermore, the funding information was not always available at the NUTS III level. In such cases the available funding data was then distributed to the NUTS III regions relative to their population share. As such, these figures are partly proxies. The precise procedure and sources used in the single countries are described in the national reports, which are to be found in the annex. The final information contained therein has been double checked with the national experts, in order for us to be confident that the information is sufficient robust to provide the basis for the later analysis.

Table 6: Structural Fund spending typology

TYPE OF SPENDING	REGIONAL DEVELOPMENT, PRODUCTIVE INFRA-STRUCTURE R	AGRICULTURE, FISHERY, RURAL DEVELOPMENT A	SOCIAL INTEGRATION, HUMAN RESOURCES S	BASIC INFRA-STRUCTURE, EUROPEAN COHESION C	INNOVATION AND EXPERIMENTAL SPENDING I
Objective 1/6 – ERDF	<input checked="" type="checkbox"/>				
Objective 1/6 – ESF			<input checked="" type="checkbox"/>		
Objective 1/6 – EAGGF		<input checked="" type="checkbox"/>			
Objective 1/6 – IAGF		<input checked="" type="checkbox"/>			
Objective 2 – ERDF	<input checked="" type="checkbox"/>				
Objective 2 – ESF			<input checked="" type="checkbox"/>		
Objective 3			<input checked="" type="checkbox"/>		
Objective 4			<input checked="" type="checkbox"/>		
Objective 5a		<input checked="" type="checkbox"/>			
Objective 5b		<input checked="" type="checkbox"/>			
Projects Cohesion Fund				<input checked="" type="checkbox"/>	
Leader II		<input checked="" type="checkbox"/>			
Adapt/ Employment			<input checked="" type="checkbox"/>		
Rechar II/ Resider II/ Retex/ Konver/ SME	<input checked="" type="checkbox"/>				
Peace	<input checked="" type="checkbox"/>				
Urban	<input checked="" type="checkbox"/>				
Regis II	<input checked="" type="checkbox"/>				
Pesca		<input checked="" type="checkbox"/>			
Innovative Actions Art. 10 ERDF (RIS, RTT, RISI, Terra, NSfE, Culture, TEP)					<input checked="" type="checkbox"/>

Source: ESPON 2.2.1

Based on the obtained information an overall database has been developed for all EU countries and their corresponding Structural and Cohesion Fund spending between 1994(5) and 1999. The database has been used in the compilation of a series of national reports that were then distributed among the national Structural Funds experts. The expert responses to the national reports were then used to improve the database at the NUTS III level.

Finally, the potential data availability of Structural Fund spending during the current period has been investigated, with the results of the investigation showing that the effort needed to also collect data for the current period would imply an extension of the tasks envisaged in the tendering document, which would in itself neither add to the quality of the study nor be feasible within the given budget.

6.5 WP 5 – Comparative analysis of national regional policies

The Second Interim Report addressed the interrelationship between the Structural Funds and the spatial concepts of territorial cohesion and polycentricity. In doing so, the report analysed the strategies of the programmes, the governance underlying programme implementation and the delivery mechanisms in each country.

However, European regional policy is not the only instrument for the support of less developed regions. It is supplemented and complemented by a range of other instruments, including spatially discriminating policies (like urban policy or rural policy), sectoral policies (for example, policies for R&D or innovation) and the regionalised allocation of public expenditure (for example, expenditure for the health sector, education and so on). National policies entail some implications for the achievement of increased cohesion within the Union, including territorial cohesion, as has been outlined in the Third Report on Economic and Social Cohesion, published by the European Commission last February.

More specifically, in addition, European regional policy is in many countries just a component of explicit regional policy: national regional policy is often implemented alongside the interventions co-sponsored by the European budget through the Structural and Cohesion Funds, not least in the form of aids to firms in areas that are eligible for regional support under Article 87(3)(a) and (c) of the EC Treaty.

To address the potential of the Structural Funds to deliver increased cohesion, the analysis could not leave out of consideration the potential impact of national regional policies. To this end, the analysis of European regional policy undertaken for the Second Interim Report has been supplemented by an examination of the national regional policies implemented in each Member State (Working Package 5).

The research for this part of the ESPON 2.2.1 project was led by EPRC and was conducted through different stages and with different inputs from both the project's country experts and EPRC's country experts.

In synthesis, the work undertaken can be summarised in two main tasks:

First, a review of current national regional policy characteristics in the EU15;

Second, a categorisation of countries according to

- a) The interrelationship between national and European regional policy, and
- b) The inclusion in national regional policies of a spatial dimension, and of the concepts of territorial cohesion and polycentricity.

The review of the main characteristics of national regional policy across the EU15 was undertaken by EPRC. The output of this review is the country fiches on National Regional Policy in each one of the 'older' EU 15 Member States. These country fiches discuss the following: (i) a brief historical contextualisation of the current approach to regional policy in each country; (ii) the strategies of national regional policies; (iii) the main instruments; (iv)

the spatial targeting of national regional policy; and, the governance of regional policy in each country. This first part of the research for WP5 was based on evidence gathered by EPRC through an on-going research programme sponsored by 10 EU Member States and Norway. The country fiches were sent to the project's country experts, prior to finalisation, so to receive possible comments on their part.

The second part of the research has entailed the elaboration of a typology of national regional policies in the EU15 and their relation with, on the one hand, European regional policy (i.e. the Structural Funds), and, on the other, with the territorial concepts of territorial cohesion and polycentric development. The basis for the comparative analysis undertaken by EPRC was provided by an assessment produced by the project's country experts who were asked to provide their feedback to EPRC on the basis of a common template. The template asked the country experts to assess the degree of coincidence or complementarity existing between national and co-funded regional policy in relation to strategies, governance and method. The country experts were also asked to assess the degree of inclusion in national regional policy strategies of the territorial concepts under examination (with a simple ranking: strong inclusion, some inclusion, none). This assessment was supplemented by descriptive supporting evidence.

The comparative work carried out by EPRC led to the identification of a typology based on three groups of countries: countries where national regional policy is separated from European regional policy; countries where the two policies are coherent; and countries where the two policies are overlapping. This classification was undertaken by looking at the following issues:

- The overall strategic approaches of national as opposed to European regional policies implemented in each country (economic development programmes in the regions, programme based, or aligned to Structural Funds);
- The policy content (equity vs. efficiency);
- The spatial targeting, i.e. the philosophy of spatial targeting (all regions vs. spatial targeting), and the outcome of the spatial targeting exercises (i.e. the degree of overlap between state aid and Structural Fund designated maps);
- The policy instruments (same instruments, national instruments mainly co-funded, national instruments mainly non co-funded)
- The governance of national regional policy vis-à-vis European regional policy in each country (in terms of territorial level of responsibility and competent agents).

The three groups identified regarding the interrelationship between national and co-funded regional policies in the countries under examination, were finally matched with the assessments made on the inclusion of territorial cohesion and polycentricity by the country experts, providing insights on the overall spatial approach of regional policy in each country and at a pan European level.

6.6 WP 6 – Thematic case studies

Case studies were undertaken in order to provide us with more empirical data and concrete examples in responding to the two key research questions addressed in this project, i.e. *firstly*, what (if any) can be seen to be the territorial impact of the Structural Funds implemented in 1994-1999 in the case regions in question, and *secondly*, what (if any) is the relationship between this impact and territorial cohesion and polycentricity. As for the particular focus of the case studies in question, the key underlying assumptions, as outlined in the Second Interim Report were:

- The main focus of the case studies will be on explanatory factors as regards the relationship between the spatial performance of a region and the type of Structural Funds investments, as well as the overall amount of funding.
- The case studies are intended to highlight the consistencies (and inconsistencies) in regional and local implementation strategies and measures within the Structural Funds framework.

Both of these issues were considered in relation to territorial cohesion and polycentricity, which have been key concepts throughout this study and therefore provided the epistemological and conceptual backbone of the study.

In selecting the case studies, the first step was the closer investigation of the database of the Structural Funds and Cohesion Fund spending data during the period 1994-1999 for all NUTS III regions in the EU15, in order to identify regions that could provide interesting observations as to the degree of funding, what kind of funding they received and their economic performance in relation to the EU15 average. Thus the following five criterion were used to identify and select the regions:

1. *High* Structural and/or Cohesion funds spending *per capita* and no or **negative** change in GDP (PPS) relative to the EU15 average 1996-2000 indicator (GDP index).
2. *High* Structural and/or Cohesion funds spending *per capita* and **positive** change in GDP (PPS) relative to the EU15 average 1996-2000 indicator (GDP index).
3. *Low* Structural and/or Cohesion funds spending *per capita* and **positive** change in GDP (PPS) relative to the EU15 average 1996-2000 indicator (GDP index).
4. High Structural Fund spending *per capita* for each of the spending types (R, S, A, CT, CE)
5. High relative Structural Fund spending *per capita* for each of the spending types (R, S, A, CT, CE)

All in all, thirteen categories were created from these five criteria, as different regions were selected for each of the 5 spending types. To begin with, regions that were statistically interesting for each of the thirteen categories in a EU15 context were identified, and not surprisingly, only regions in countries eligible for support from the Cohesion funds, together

with the eastern part of Germany emerged as 'interesting' in the context of this exercise. The aim of the case studies was however not only to look at the regions that had received the highest total sums of financial support from the Structural Funds and/or the Cohesion fund, and therefore a similar exercise was performed for each of the EU15 countries (except Luxemburg). Two to thirteen NUTS III regions were selected for each country, depending on how relevant each of the thirteen categories was considered to be. The criteria used to identify regions, i.e. what was considered to be high or low spending *per capita* and/or change in GDP index, varied considerably between the different countries. This more mechanical financial exercise was, in the second stage of the selection process, accompanied by a more qualitative selection based on qualitative selection criteria in order to identify cases that would be interesting and would provide us with the maximum of both geographical and thematic coverage across the EU15. Here the Structural Fund spending, GDP development and substantive policy concerns were all addressed, together with the typologies of ESPON 1.1.1, 1.1.2 and 2.1.1.

The case studies selected thus included: Norrland, Lappi, Madeira, Cantabria, Toscana, Calabria, Lakonia, Centre, Southern and Eastern Ireland, Highlands and Islands, Sachsen (Leipzig – Leipziger Land), Grevena, Cataluñya, Extremadura and Wallonia. The actual analysis undertaken in each case was based on both qualitative and quantitative data.

The focus of interest with each of the case studies was elaborated, both in terms of the financial relevance of the Structural Funds within the region in question and in terms of other characteristics of interest, which also took into account the wider concerns with the integration and synergy between the national and European policies, as well as the role of the region in terms of European polycentricity. As for their role in the wider spatial system, the role of each case study region in relation to polycentricity at the European, national or regional level in general, and in relation to the eight indicators used by ESPON 1.1.1, were taken as a starting point. This provided the starting point for the functional profile and specialisation of the region as outlined in ESPON 1.1.1, as well as in the urban-rural typology developed in ESPON 1.1.2.

The national experts were also tasked with identifying changes and trends in functional specialisation, and where possible to delve into the social and environmental aspects, as well as providing indicators on industrial profiles and accessibility, where possible. Here both the status quo and future trends were to be addressed, relating the regionally specific trends to perceived international mega trends or driving forces.

Another key theme was that of governance, as one of the main working hypotheses based on previous work was related to the governance impact of the Structural Funds, arguing that the governance impact of Structural Funds interventions was in many cases likely to be greater than the actual financial impact. The traditional governance aspects of the Structural Funds, such as *networking* and organizational innovations, *citizens participation*, identity-building and visibility, and *awareness of EU policies* are all important here, though (and perhaps more interestingly, it was argued) the primary reasons behind the governance impacts of the Structural Funds listed above are to be seen in the fields of

- Intensified policy discourses,

- Supporting new thinking,
- Leverage of national policies and
- Promotion of trans-national links.

These were each addressed in turn, also relating the regionally specific findings here to the analysis undertaken in the previous working package on policy convergence/divergence between national and European regional policies. It was thus asked, based on the work done within WP 5, whether there in fact is consistency between policy processes and programmes on the national and European level and whether there are indications of openness and learning within regional development activities and governance structures (nationally and in the European context). The national experts were asked to provide examples of the identifiable changes that have taken place in policy discourse as far as territorial cohesion or polycentricity are concerned, since the implementation of the intervention, while the causal relationship between the intervention and these changes was also to be addressed. In addition, the national experts were asked to provide concrete examples of governance innovations or changes in national or regional practices, i.e. were there policy innovations that could be attributed to the Structural Funds programmes implemented? It was also argued that policy learning can occur across borders, thus raising the question of the trans-national links and policy initiatives that can be attributed to Structural Funds interventions and/or management practices. It was tentatively argued that there may be synergy effects here due to co-funding mechanisms, management practices or organisational innovations. (This issue of trans-national learning is to be addressed in more detail in the chapter 11 of the present report.)

It has been widely documented that while the Europeanization of territorial policy has provided a common framework and methodology, there are major differences (both regionally and nationally) as to the concrete ways in which partnership is understood, operationalised and organized. Therefore one of the interesting issues to be addressed in the case studies was the concrete realization and implementation of partnership models in regional development, based on examples from the case study regions relating, for instance, to the involvement of new types of actors from the local and regional level in programme activities, as well as potentially new programme management solutions that seek to connect the programming system to more traditional ways and institutions of democratic decision-making. It was also argued that there may be indications of the accumulation of financial resources or aspects of the programming cycle that either enable the inclusion of new actors and organisations in partnerships or alternatively seem to exclude some types of actors and organisations from structural funds activities, perhaps also there are examples relating to organisational practices, co-financing solutions or similar, where resources have been pooled in a constructive way in order to avoid such problems?

6.7 WP 7 – The impact of Interreg on polycentric development

The main aim of this working package is to assess whether Interreg IIC (and IIIB) contribute to achieving the aims of spatial planning policies, namely polycentric development and territorial cohesion.

We envisage two possible methods of approaching this task.

- The first alternative would be to assess the degree of polycentricity of the project participants in a number of Interreg projects. This alternative implies a mapping of the actual project networks as they existed through an Interreg project. This approach has been followed by a number of ESPON projects such as ESPON 1.1.1 or 3.1.
- A second alternative would be to concentrate on the results of Interreg projects. In general, the results are to be seen in the field of learning as illustrated by various evaluations, and thus the question emerges as to what degree such 'learning' can contribute to the achievement of polycentric development or territorial cohesion? This question can best be approached by analysing the increases in awareness of place- based opportunities and spatial positioning in both the trans-national and the European contexts.

In order to avoid duplication of work already carried out under the framework of other ESPON projects, the project team decided to utilise the second approach developed by a previous project on learning in trans-national co-operation. The particular focus of interest is on the learning experiences that such projects may have resulted in, relating specifically to European co-operation and the awareness of spatial dimensions. The basic question informing the research was, to what degree does Interreg contribute to the awareness of the idea of polycentric development in Europe, as advocated in the European Spatial Development Perspective (ESDP)? Polycentricity is here understood as a function of size, physical links, collaboration and the degree of specialisation of a city region. The possible learning experiences might have come both as a result of the project organisation and co-operation, and as a result of the topic or specific investigations undertaken within the context of the project. Indeed it is often the case that these two aspects are interrelated.

At the outset we decided to concentrate on Interreg IIC co-operation in the Baltic Sea Region, and for this purpose a scanning of the projects, their focus of work and in particular their network has been carried out. This involved categorisations of the projects according to their thematic topics, the question whether they work on joint or common challenges and the composition of their project teams. Furthermore, a database with contact details for all project partners was also compiled.

In parallel, a questionnaire has been developed seeking to assess whether collaboration in an Interreg project has increased the participants' awareness and/or understanding of polycentric development. Their understanding of polycentric development has been assessed according to the geographical level (*micro – meso – macro*) and the four dimensions (morphology – accessibility – socio-economic specialisation – co-operation). This questionnaire was then distributed to participants in Interreg IIC projects in the Baltic Sea

Region, with the initial findings of this procedure being presented elsewhere in this report. During the autumn of 2004, it is envisaged that this analysis is to be finalised. Furthermore, the question of whether it is sensible to extend the scope of this approach either to the current Interreg IIIB period in the Baltic Sea Region or to another Interreg IIC/IIIB area will also be discussed.

6.8 WP 9 – Development of policy recommendations

Similarly to Working Package 1, Working Package 9 runs over the entire project duration in order to assure the policy relevance of the work carried out.

After the delivery of the First and Second Interim Reports, the analytical work carried out was accompanied by a discussion on policy relevance and possible policy recommendations deriving from that work.

In addition, close co-operation with the ESPON projects 1.1.1 (polycentric development), 2.2.2 (pre-accession aid), 2.2.3 (Structural Funds in urban areas) and 3.1 (integrated tools) as regards possible policy implications and recommendations has led to numerous cross-fertilising debates.

Based on these discussions tentative policy recommendations have been drawn up. These are presented and further discussed elsewhere in this report.

7 Policy concepts forming the analytical points of departure

7.1 An emerging European Spatial Policy

To date there is no European Spatial Policy *per se*, as spatial development is still a field of competence of the Member States and not of the Union as such.

This having been said, over the last decade, a resurgence of interest in national and supranational spatial planning, and in the preparation of spatial planning studies has taken place for (A) trans-national regions such as the Baltic Sea Region, the North Sea Region or the North-West Metropolitan Area, (B) the territory of the European Union as a whole, as the European Spatial Development Perspective and foregoing studies such as Europe 2000 and Europe 2000+, and (C) the European continent, namely the Guiding Principles of Sustainable Spatial Development of the European Continent, prepared by the European conference of ministers responsible for regional planning (CEMAT).

This was in part a response to economic integration and to the single market, as well as to the improvement of transport networks and new infrastructure such as the Channel Tunnel. It can also however be interpreted as a recognition of the importance of this sector of policy for major EU projects such as Economic and Monetary Union and enlargement.

This process has led to an awareness of the role that spatial planning can play in the process of European cohesion, both at the European and the national levels. This gradual process culminated in the 1999 approval of the European Spatial Development Perspective (a framework policy-document of a non-binding character), which was adopted by the informal Council of Ministers responsible for Spatial Planning, after a long and laborious period of intergovernmental debate.

As has been pointed out by Robert et al (2001), this document rests on a number of provisions of the EC Treaty (e.g. support for harmonious and balanced development, competitiveness, improvement of the quality of the environment and of quality of life, in art. 2) and has even been considered as an informal and specialised extension of the Treaty, detailing and specifying a number of its provisions in an approach where strong coherence arises from territorialisation.

In reality the ESDP is a compromise between the different traditions and aims of national governments on the one hand, and the EU on the other, and is for this reason broad and rather general in content, including policy objectives (in a hierarchy of 3 Policy Guidelines, 13 Policy Aims and 60 Policy Options) that are at times overlapping and not always clear and coherent in relation to each other.

Despite the general and non-binding character of the ESDP, the adoption of this document marks a renewed interest in the territorial dimension as a framework for other policies, including cohesion policy. In the Second Report on Economic and Social Cohesion (2001), the concept of territorial cohesion was for the first time brought alongside those of economic and social cohesion.

Since then, a refinement of spatial concepts and the identification of the spatial implications and synergies with community policies has taken place in the framework of the ESPON programme, to which this study also belongs. Among others, the programme explores and clarifies the concepts of territorial cohesion and polycentric development, two crucial themes for the orientation of future cohesion policy.

7.2 Concepts and causal connections

This study deals with the question of the territorial impact of the Structural Funds, thus requiring that a definition be made of territorial impacts. Given the context of this study, such a definition needs to relate to the debate on spatial policies ongoing at the European level. Thus, for assessing the territorial impacts of the Structural Funds it is necessary to take spatial policy aims as a point of reference. Taking into consideration the fact that the Structural Funds are an integral part of European cohesion policy, and that the ESDP aims to add a territorial dimension to this, the concept of territorial cohesion thus seemed to provide a logical point of departure.

In the First Interim Report a conceptual debate around the concept of territorial cohesion was developed, taking its point of departure from the discussion put forward in the Second Cohesion Report. This provided an introduction to the debate on territorial cohesion, including the challenge of operationalising a policy concept and addressing criticisms of the understanding of cohesion as the levelling out of disparities. A combination of the arguments put forward in the ESDP, in the Second and Third Cohesion Reports, and within the context of the Structural Funds themselves, illustrated that balanced development and territorial cohesion on the one hand and competitiveness on the other, are essentially two sides of the same coin, as well as a question of scale. The discussion of the interrelations of various administrative/geographical levels illustrated that the regional level is the most appropriate level for analysing the support for European policy messages. In addition to the question of scale, the discussion of territorial cohesion showed that a cross-sectoral focus was needed. This is underlined both by Pezzini's definition of "territorial development policies" and by the policy aim of the ESDP reconciling conflicting sector policies.

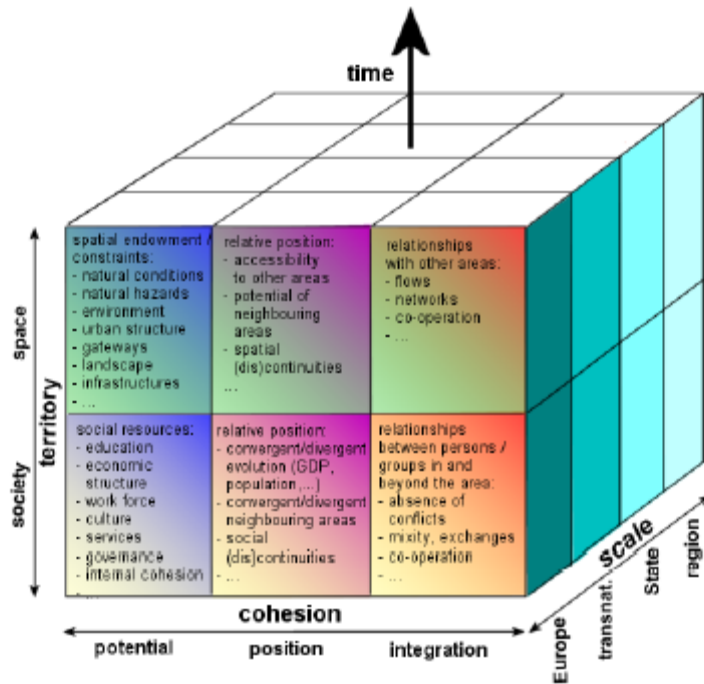
This debate formed the basis for the further work within this project and we were glad to see that it has also formed a considerable input into the conceptual work presented in the Second Interim Report of the ESPON 3.1 project. In this report the concept of territorial cohesion has been developed further towards a hyper-cube integrating the social and geographical dimension of territory, the potential, positional and integrational dimension of cohesion, and the various geographical scales at which the concepts are to be applied.

Making this concept more concrete and bridging the gap between the two archetypes of European spatial conceptualisation, such as the Blue Banana and the European Bunch of Grapes, the ESPON 3.1 SIR finally translates territorial cohesion into accessibility and polycentric development.

Figure 4: The ESPON 3.1 Hyper-cube of territorial cohesion

The "hyper-cube" of territorial cohesion

PhDB consultant with contribution of Cf. Grasland, 2003



Source: ESPON 3.1 Second Interim Report

Based on these developments, as well as on the discussions held during the ESPON seminar in Crete, and the response to our First Interim Report from the Co-ordination Unit, we have developed an understanding of the territorial dimension for the assessments on which this report is based.

Compared to the First Interim Report, polycentric development has taken a more prominent position, equalling that of territorial cohesion in the first report. Indeed, EU enlargement calls for a new territorial paradigm proceeding from core-periphery to territorial balance and polycentricity. The aspect of accessibility plays a minor role here, as there are two other projects concentrating primarily on the in-depth assessment of accessibility.

Territorial cohesion (TC)

Territorial cohesion is to be understood as an umbrella concept and as an integrated part of the cohesion process, covering the territorial aspects of cohesion and the EU objectives of balanced and sustainable development.

Indeed, the structure of the European territory is currently imbalanced, as illustrated especially by the core-periphery (pentagon) concept, but also by the trans-national diversities, regional imbalances, large intra-regional disparities and the diversity of development potential throughout Europe. In addition, market forces are driving further geographical concentration, as investment patterns in the more important global services are favouring the pentagon and the larger metropolitan urban areas, with capital cities being the most dynamic areas in many countries. Similarly, in the new Member States, the regional centres are in many cases the dominant forces, while local parameters favour

access and the supply of relevant services, while amenities in and around the urban centres supporting quality of life are gaining in importance.

Table 7: The European Pentagon

	EU 15	Of which, pentagon	EU 27	Of which, pentagon
Km ²	3,2 million	18%	4,3 million	14%
Population	382 million	41%	490	32%
GDP in PPS		49%		46,5%

This forms the background to the development of the umbrella concept of territorial cohesion that may help to make a broad range of policy interventions more consistent. In ESPON 3.1 SIR this concept is operationalised by using a hyper-cube bringing together the social and geographical dimension of territory, the potential, positional and integrational dimensions of cohesion, as well as the various geographical scales at which the concepts are to be applied.

The aspect of territorial potentials is close to the concept of endowment discussed in the First Interim Report of this project. It expresses the fact that territorial cohesion can only be achieved by entities that have enough resources to develop their own identity and to act as partners in a co-operation process that will bring added value. Thus such 'potential' includes the resources available in an area as well as the constraints it is submitted to.

Cohesion does not only rely upon the individual situation of entities but also on the their relative situation. This underlines the fact that position varies depending on the spatial context considered. The aspect of integration is closely related to the concept of spatial integration discussed in the SPESP as well as in the first interim report of this project. It focuses on the effective relations that link an area to other areas of the considered territory, both in terms of material and immaterial links. Integration allows for the enhancement of the potential of a territory but may also strengthen disparities.

Summing up, it can be argued that territorial cohesion underlines the fact that the trans-national territorial dimension possesses a potentially large added value for effective development policies. The broader territorial scale is considered necessary for exploring regional potential, strategies for trans-national areas ensure efficiency and synergies, strategic alliances between territorial entities (i.e. metropolitan urban regions), closer co-operation on themes such as transport, tourism, innovation potential etc, and common marketing in global competition.

Relating to the Lisbon strategy it is argued that (in order to become competitive and dynamic) the territorial structure needs to support the possibility of exploring potentials and comparative advantages, as well as avoiding diseconomies due to (physical) overheating. The urban poles as places with most realisable development potential, i.e. as engines for improving competitiveness and dynamism thus take a central role in the policy debate. This

further underlines the umbrella concept of territorial cohesion as being spatialised through the idea of polycentric development.

Polycentricity: a bridging concept between competitiveness and balance

The concept of polycentric spatial development can best be described as a 'bridging concept' as it merges the two policy aims encompassed in the ESDP, namely, the aims of 'economic growth' and 'balanced development.' This bridging effect is also distinguishable in relation to the different interests of the Member States, encapsulating the economic and social cohesion objectives, particularly as regards the need to encourage a move towards a more balanced view on competitiveness.

Following the ESDP, polycentric development implies the encouragement of settlement patterns at all geographical levels (European to local) that enhance competitiveness, regional balance and new urban rural relations. This implies an understanding of regional development more sensitive to the need to focus more on potentials (e.g. possible specialisations in the world market) and less on problems. Furthermore, it implies an integrated territorial approach, where small and medium sized cities are considered as being the motors of regional development.

For this study the concept of polycentric development has been operationalised by breaking it down into four key dimensions:

- *Morphology – settlement patterns*

The most prominent dimension of polycentric development regards settlement structures, i.e. the distribution of population over a territory. The question of where smaller, medium sized and larger cities are placed is related to migration tendencies and inertia, and as such this is a factor that is difficult to influence through the Structural Funds. These trends are also such where influence of any particular policy instrument will only become visible in the long run.

- *Transportation links and accessibility*

Polycentric development is also about the connections between nodes in a polycentric pattern. In particular, the question of proximity and accessibility with regard to co-operation and competition between activities placed in different nodes emerges. It is here that the Structural Funds can exercise significant influence through their support for infrastructural investments.

- *Functional socio-economic specialisation*

Undoubtedly the main reason for co-operation or competition lies in the attractiveness of a place, and thus in its specialisation. Thus the aspect of socio-economic specialisation development of key competences and clusters needs to be considered. This aspect can also be influenced through the Structural Funds, in particular with regard to the aim of structural change etc.

- *Co-operation*

Whereas accessibility and specialisation target the potential for the development of relational and functional polycentric development, its network 'embeddedness' illustrates the use of such potentials. This aspect is however rather difficult to measure. Nevertheless, as the Structural Funds – not least through the Community Initiative Interreg – address this issue, it needs to be taken on board.

Furthermore, polycentricity can be discussed at various geographical levels. This resulted in a three level approach proposed for ESPON. This approach implies that strengthening sustainability, global competitiveness and cohesion through a polycentric development model of the European territorial structure is to be discussed on at least three geographical levels:

- *Polycentricity at the regional/local level*

The aim is to move from one or few dominating regional centres to several centres providing regional services. Key aspects are economic integration and specialisation. This may also involve strategic alliances between cities in areas where critical mass is problematic. Despite the morphological and proximity aspects, the division of labour and functional specialisation within the regional urban system are important indicators.

- *Polycentricity at the trans-national/national level*

The aim is to go from dominating major cities to a more balanced tissue of cities, improving economic performance and services through clusters and networks of neighbouring cities. The mixture of functions performed in a functional urban area often depends on its size. Thus one option for improving the balance of a national urban system is seen in forming a national centre by bringing together several local or regional centres. In addition to the mass a national urban centre must also show a sufficient specialisation within the national urban system, and thus integration into the national urban system.

- *Polycentricity at the global/European level*

The aim is to support a more balanced territorial structure at the European level by encouraging the development of functional urban areas (or clusters of cities) of global importance outside the pentagon, which is currently seen as the only important global zone within the enlarged EU. This can be achieved by strategic alliances (networking, combining strategic strength) between functional urban areas and by strengthening the international competitiveness of a functional urban area. In both cases the focus is on the strengthening of the global position by strengthening the (endogenous) potentials of European or global importance. These potentials can be of varying nature, such as certain economic specialisations or cultural international peak-competences such as e.g. museums.

Keeping in mind the relational approach to polycentricity, it can however be argued that cities of all categories/sizes can be part of trans-national co-operation networks and thus can play a role in functional polycentricity and in the division of labour. Indeed, the ESPON 1.1.1 project touches on the fact that in some respects the smaller rather than the larger

cities have become global, because of a specific specialisation, which allows them to act as partner or sub-contractor and become integrated into international business. Thus all cities, independent of their size, can become nodes in a European wide functional network, i.e. a step towards relational polycentricity.

The understanding of polycentric development used in the analysis of current Structural Funds programmes differs from the definition used in the earlier study on the urban and spatial dimension of Objective 1 and 2 programmes in the 2000-2006 Structural Funds period. In this previous study the ESDP policy aims of dynamic, attractive and competitive cities and urbanised regions, indigenous development, diverse and productive rural areas and rural-urban partnership were included as indicators of polycentric development.

7.3 Spatial concepts and the Structural Funds: a problem of scale?

Having defined the meaning and scope of the concepts under analysis,, it is now necessary to understand how these concepts can be linked to the Structural Funds.

As regards territorial cohesion, it can be argued that, at least at the European level, the Structural Funds contribute by default to this objective. Indeed, the main purpose of European Structural and Cohesion Policy is that of overcoming the imbalances in socio-economic development across the countries of the European Union and of delivering balanced and harmonious development throughout Europe, although, initially, this was confined to the field of economic activities. The criteria for area designation, based on European averages of GDP and unemployment, underlines the pan-European focus of these policies.

The understanding of territorial cohesion adopted in this study, as illustrated above, is broader than the simple levelling-out of disparities. Therefore the analysis of past and current Structural Fund programmes has been focussed on the extent to which, both on a strategic level and in the implementation mechanisms adopted, the funds support the development of the regions' endogenous potential, their endowment factors and ultimately their competitiveness and attractiveness. As will be argued in the next chapters, these themes are central in current Structural Fund programming, albeit only more recently so as explicit policy objectives.

The considerations above apply also to considering territorial cohesion delivered by the Structural Funds at the national and regional/local scale of policy. It is however more difficult to assess the extent to which Structural Fund strategies reflect the objective of territorial cohesion at this lower scale. Looking at the programme level in particular, one of the most recurrent criticisms of past and current Objective 2 programmes concerns the fragmented geographical areas that characterise a number of them (the Austrian Objective 2 map of the last programming period, or the current map for the Lombardy region in Italy, for example) it is difficult to pursue the objectives of balanced regional growth and competitiveness. This problem is further exacerbated by growth poles being in some cases left out of the maps altogether. Fragmented maps can also be a constraint in terms of policy concentration, as different strategies may need to be applied to parts of a territory with different characteristics, thus increasing the likelihood of a dispersion of effort and a lack of

policy efficiency. Generally speaking, it is difficult to envisage the Structural Funds as having an effect on territorial cohesion where the delimitation of eligible areas results in fragmented maps, unless their strategies are explicitly targeting territorial cohesion related objectives and are used as a lever for converging national policies in this direction.

Moreover, any attempt to uncover the implications of the Structural Fund programmes on territorial cohesion at the national level may prove rather difficult. It has been noticed in a number of reports and policy documents that while disparities between countries have progressively been reduced across the EU, the disparities within countries have often widened. The Fifth Report of the Department for Development Policies, of the Italian Ministry of Economy and Finances, for instance, demonstrates that, in terms of variations of GDP *per capita* in the period 1995-2000, a number of countries with high relative growth rates have also witnessed an increase in internal regional disparities (i.e. Germany, Spain, Ireland, Portugal, the Netherlands, Sweden and Finland). After having looked at the economic performance of each region over the same period of time, the report concludes that 86 percent of the regions included in the fifth of regions with a lower income in 1995 had remained in the same group in 2000, while 14 percent had up-graded to the immediately higher tier. At the same time, of the regions that figured in 1995 in the second less well performing group, 83 percent had remained in the same class in 2000, while a remaining 10 percent had been downgraded to the last group.

Assessing territorial cohesion and its evolution within countries is a particularly sensitive matter in that it implies addressing the problem of the implicit balance sought between developing competitiveness and the growth potential of areas already capable of development, and devoting resources to the endowment of less competitive areas that are in need of structural adjustment measures. This point has become even more crucial after the enlargement of the Union, after which one third of the EU's population lives in countries with a GNP *per capita* below 90 percent of the EU average, compared to a figure of one sixth in the EU15. The ratio of income *per capita* in the top and bottom 10 percent of regions has also increased from 1:2.6 in the EU-15 to 1:4.4 in the EU-25. As accession has also lead to a reduction in average employment rates as well as to increases in the unemployment rate, regional disparities measured in both indicators are also likely to rise in the enlarged EU.

Given these constraints, the analysis that follows will concentrate on the qualitative assessment of the implications of Structural Fund strategies and implementation mechanisms on the policy objectives that have been utilised to qualify territorial cohesion, without attempting to unpack in detail the scale at which the Structural Funds deliver territorial cohesion.

The same consideration applies to the analysis of the theme of polycentric development. The concept of polycentricity, however, is less directly linked to European regional policy than is territorial cohesion, and as such evidence of support for polycentric development (as illustrated in the paragraph above) has been sought in the analysis carried out, which focused on the extent to which the programmes in their strategies and implementation mechanisms support the creation of functional growth poles, centred on urban

agglomerations, as well as intra-regional and interregional economic and social networking and strategic alliances between cities and functional complementarity.

7.4 European Structural and Cohesion policy

The history of European regional policy is characterised by a progressive increase in the importance of, and the financial resources attributed to, structural and cohesion policies. This has been strengthened by the increasing status given to regional policy in successive Community constitutional legislation and in the series of reforms to the operation of the Structural Funds from 1975 onwards.

As early as 1957, Article 2 of the Treaty of Rome outlined the Community objective of supporting the balanced and harmonious development of the economic activities of the Member States. However, at this time no specific instruments existed for this purpose. The Treaty foresaw the creation of the European Social Fund (ESF) and the European Agriculture Guidance and Guarantee Fund (EAGGF) – which were created respectively in 1958 and 1962 – but these were only small scale and did not respond to a clear strategy for regional development.

It is only from 1975, with the setting up of the European Regional Development Fund (ERDF) that the involvement of the European Community in regional policy begins in earnest. A detailed description of the evolution of the ERDF between 1975-1988 is outlined in the box below.

In 1986, the Single European Act added to the Treaty of Rome a new Title on Economic and Social Cohesion in acknowledgement of the fact that economic and social cohesion within the Community was an essential prerequisite for the success of the Single Market.

A major reform of the Structural Funds was introduced in 1988, to enhance the effectiveness of the use of community resources. One of the most important features of this reform was the shift from individual project support to a programme-based approach. It also increased the Structural Fund budget, which was doubled from 7.2 billion ECU in 1987 to 14.5 billion ECU in 1993 (1988 prices), concentrated on the least developed regions and targeted on five priority objectives. The reform also entailed a stronger commitment to the coordination of the activities of the three Structural Funds and the other Community financial instruments.

As a result of the 1988 reform, the areas eligible for assistance were defined for the first time according to Community-wide criteria, resulting in a map of assisted areas through the EU: a GDP *per capita* threshold of 75 percent of the Community average for the Objective 1 areas and (mainly) labour market criteria for Objectives 2 and 5b areas. After the reform, assistance was channelled through multi-annual programmes (110 Community Support Frameworks (CSFs) and almost 1,000 Operational Programmes (OPs) and global grants), defining priorities for the use of Commission funding, and drawn up and implemented by partnerships involving the Commission, national government, local authorities and other actors (J Bachtler & R Michie 1993). In addition to these CSFs, 12 new Community Initiatives were launched in 1989, to target particular development needs.

In 1992, the Maastricht Treaty once again strengthened the Community's involvement in regional development, with Economic and Social Cohesion becoming one of the Union's promoted objectives (Article 2), with a redefinition of the aims and of the interventions of the Structural Funds and the creation of the Cohesion Fund (in 1994).

Box 1: Evolution of the ERDF from 1975-1988

In 1978, the first step towards the Community defining its own regional policy measures was taken with the creation of a 'non-quota' section of the ERDF. Limited to five percent of total resources, this section could finance specific Community regional development schemes determined by the European Commission. This funding was used, from 1980 onwards, to finance the first special, multi-annual schemes for areas seriously affected by crises in the steel, ship-building and textile industries, the development of certain Mediterranean regions and the development of rural areas with few alternatives to agricultural activities. These schemes pioneered the use of 'integrated development operations', for specific regions, and, later, 'integrated development programmes'.

During the early 1980s, the quota system was increasingly considered to lack the flexibility required to respond to changing regional problems. A reform of the ERDF in 1984 introduced a system of ranges for the allocation of resources, with upper and lower limits being set out for the funding that each Member State could receive, based on the severity of its regional problems. By this time, the budget for ERDF had progressively increased to 7.5 percent of the Community budget, a nine-fold increase as compared to 1975.

Although most of the funding continued to be used to finance industrial investment and infrastructure projects, the 1984 reform made provision for 'mainstream' ERDF to be used to finance programmes of regional development support. Building on the experience of the 'non-quota' schemes of multi-annual assistance, the ERDF created a combination of 'Community programmes' and 'National Programmes of Community Interest (NPCI).

The 'Community programmes', initiated by the European Commission, were the forerunners of the present-day Community Initiatives. They began, in 1986, with the STAR and VALOREN programmes for telecommunication services and energy development respectively in the less-favoured regions of the Community, and were progressively supplemented by RENAVAL (conversion of shipyards) and RESIDER (restructuring of steel areas) in 1988.

The NPCIs, which were initiated by the Member States (and approved by the Commission), were used to fund national regional aid schemes or regeneration programmes for specific problem regions. They encompassed and superseded the integrated development operations and programmes formerly funded under the non-quota section of the ERDF, most notably the Integrated Mediterranean Programmes, which covered the whole of Greece, the Italian *Mezzogiorno* and southern France.

Source: Bachtler J with Josserand F and Michie R (2002), EU Enlargement and the Reform of the Structural Funds: the Implications for Scotland.

Soon after the adoption of the Maastricht Treaty, a second major reform of the Structural Fund regulations took place (in 1993). This period also marked a major increase in EC spending, increasing the financial allocations of the Structural Funds for 1994-99 to an average of 23.6 billion ECU per year (1992 prices). The newly created Cohesion Fund, moreover, provided a further 12.5 billion ECU for the four countries with a *per capita* GDP lower than 90 percent of the Union's average (Greece, Ireland, Portugal and Spain). The 1993 reform introduced the principles of additionality, partnership, programming, and concentration and broadened both the coverage of the Funds (to 51.6 percent of the EU population) and the scope of the measures by:

- merging the former Objectives 3 and 4 into a new Objective 3 with a wider remit encompassing the integration of persons excluded from the labour market;
- creating a new Objective 4 to facilitate adaptation of employees to industrial change and restructuring.
- establishing a new Objective 6 for the sparsely populated areas of Finland and Sweden, which joined the EU along with Austria in 1995.

- simplifying the programming process, including the use of 'Single Programming Documents'
- strengthening the monitoring and evaluation obligations to improve effectiveness and accountability.

As a result, the Objectives for the 1994-99 period were:

- Objective 1 - Objective 1 - the structural adjustment and development of less developed regions;
- Objective 2 - the re-conversion of regions severely affected by industrial decline Objective 2 areas and programmes were revised in the middle of the programming period (running for two three-year phases, i.e. from 1994-96 and from 1997-99).
- Objective 3 - to combat long-term unemployment and to facilitate the occupational integration of young people and those excluded from the labour market;
- Objective 4 - to assist workers in employment to adapt to industrial change and new production systems through retraining;
- Objective 5a - to speed up the adjustment of agricultural and fisheries structures;
- Objective 5b - to facilitate the development of rural areas; and
- Objective 6 - (introduced in 1995 with the accession of Finland and Sweden) to promote the development of regions with exceptionally low population density.

Four of these seven objectives (Objectives 1, 2, 5b and 6) are spatially restricted in their remit. There is no explicit spatial restriction applied to Objectives 3, 4 and 5a. With respect to area designation processes, important changes were made to the procedures for selecting Objective 2 and 5b areas. Under the revised Regulations, the Member States took the lead role in proposing areas to be designated under Objectives 2 and 5b; of particular importance, the Member States could take account of national policy priorities and use could be made of national statistical data in devising area designation proposals. This represented a significant change over the position in the 1989-93 period when the Commission had been more influential in the process.

The end of the 1994-99 programming period marked the emergence of a new approach to European regional policy. For the first time in 25 years, the resources allocated to Structural and Cohesion policies were reduced: The 'Agenda 2000' debate led to an agreement in 1999 which allocated €195 billion (1999 prices) to the Structural Funds in the EU15 Member States, with annual spending declining from €29.4 billion in 2000 to €26.7 billion in 2006. A further €18 billion was allocated to the Cohesion Fund, with €47 billion for the applicant countries of Central and Eastern Europe. The spatial coverage of the funds was also

reduced, from 52.1 to 40.2 percent of the EU population. The allocation of funds to the EU15 Member States for the 1994-99 programming period is outlined in the table below.

Table 8: Breakdown of Structural Funds by Objective (1994-99) ⁽¹⁾

	Obj. 1	Obj. 2	Obj. 3	Obj. 4	Obj. 5a agric.	Obj. 5a fish.	Obj. 5b	Obj. 6	Total	C.I. ⁽²⁾
Austria	162	99	329	60	386	2	403	-	1432	144
Belgium	730	341	396	69	170	25	77	-	1808	288
Denmark	-	119	263	38	127	140	54	-	741	102
Finland	-	179	254	83	331	23	190	450	1503	151
France	2190	3769	2562	641	1746	190	2236	-	13334	1605
Germany	13640	1566	1681	260	1070	75	1227	-	19519	2211
Greece	13980	-	-	-	-	-	-	-	13980	1154
Ireland	5620	-	-	-	-	-	-	-	5620	484
Italy	14860	1462	1316	399	681	134	901	-	19752	1897
Luxembourg	-	15	21	1	39	1	6	-	83	19
The Netherlands	150	650	923	156	118	47	150	-	2194	422
Portugal	13980	-	-	-	-	-	-	-	13980	1061
Spain	26300	2415	1474	369	326	120	664	-	31668	2781
Sweden	-	157	342	170	90	39	135	247	1178	126
United Kingdom	2360	4580	3377	-	186	89	817	-	11409	1573
EUR15	93991	15352	12938	2246	5270	885	6860	697	138201	14018
%	68.0	11.1	9.4	1.6	3.8	0.6	5.0	0.5	100	-

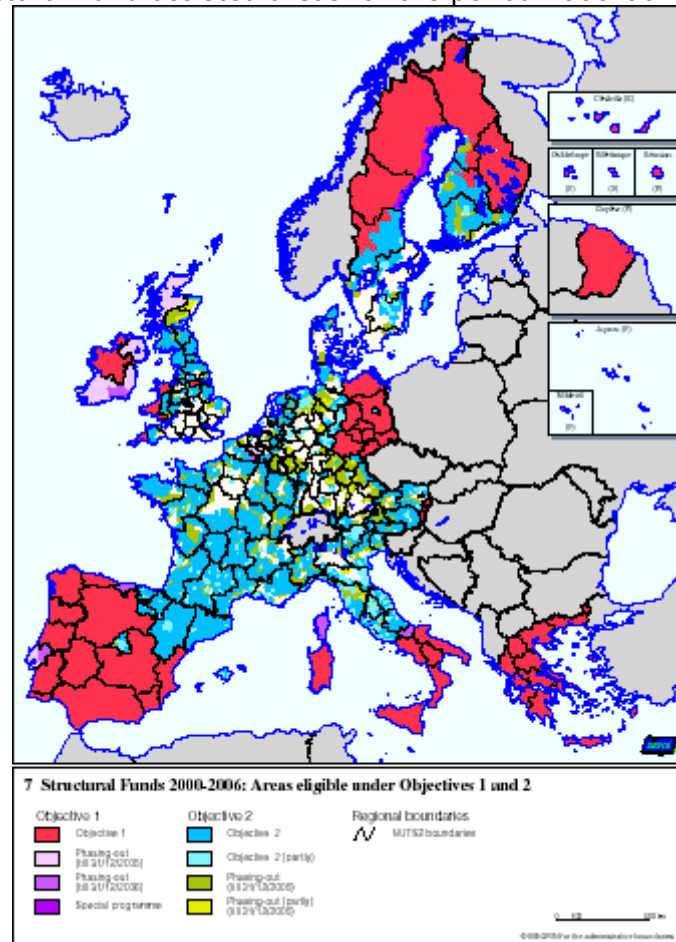
Notes: (1) In million ECU at 1994 prices (2) Community Initiatives, including 200 million ECU (at 1995 prices) resulting from a revision to the financial forecasts decided by the Council in order to fund the PEACE Initiative, but excluding around 64 million ECU for networks.

Source: European Commission (1996) *First Report on Economic and Social Cohesion*, OOEPC, p. 145.

The budget cuts agreed upon within the Agenda 2000 debate, as well as the agreement on the principle of concentration were introduced in order to increase the effectiveness of Structural Fund spending. Effectiveness was further strengthened, by reducing the previous six Objectives to three, and by reducing the Community Initiatives to four:

- Objective 1: to promote the development and structural adjustment of regions whose development is lagging behind (with a GDP *per capita* of less than 75 percent of the European average.)
- Objective 2: to support the economic and social conversion of areas facing structural difficulties. The overall population in Objective 2 regions could cover up to a maximum of 18 percent of the overall European population and could include residents in areas undergoing socio-economic change in the industrial and service sectors, declining rural areas, urban areas in difficulty and depressed areas dependent on fisheries.
- Objective 3: to support the adaptation and modernisation of policies and systems of education, training and employment. Areas eligible for financing under the Objective 3 were all areas not covered by Objective 1.

Map 5: The map of Structural Fund assisted areas for the period 2000-06



Source: Second Report on Economic and Social Cohesion.

Currently there are 114 Objective 1 programmes, 96 Objective 2 programmes and 12 (national) Objective 3 programmes (and numerous Objective 3 regional Operational Programmes).

While territorial cohesion is only now achieving prominence in the policy-making arena, the theme of Sustainable Development was vigorously trumpeted by the EC during the 2000-06 programming period as (along with equal opportunities) a horizontal theme to be mainstreamed across the entire scope of programmes. The recommended approach was that support for these themes should not be restricted to particular parts of programmes (e.g. specific priorities and measures) but should be mainstreamed, i.e. integrated into every phase and level of Structural Funds development and operation. For most programmes, however, sustainable development has tended to be equated with environmental sustainability, a scope suggested by the detail of the 2000-06 Structural Fund Regulations and the Commission's own Guidance. Where the themes have been explored in the SPDs, programmes have stressed the environmental component of the three dimensions of sustainable development: a commitment to economic growth; a consideration of social cohesion and quality of life concerns; and, a determination to ensure environmental sustainability.

The Lisbon Council of March 2000 set the challenge of economic and social cohesion within the overarching EU policy priority of improving competitiveness. Economic and social cohesion will present a major policy challenge in the enlarged Union, as enlargement will lead to a severely imbalanced EU territory in terms of the widening disparities between Member States and especially between regions, and in the capacity of Member States to address regional problems. Thus far, progress has been slow in EU15 and will be even more difficult to achieve in the new Member States; moreover, there is currently no mechanism for linking the Lisbon agenda with EU regional policy.

The question of the sustainability of development (as agreed at the Gothenburg Council) was also seen as integral to the future of structural and cohesion policy, and to the EU's competitiveness objective.) Current programmes are subject to extensive sustainability requirements, but research suggests that progress here is uneven. A 'step change' will thus be needed in learning, commitment and practice if the ambitious and integrated response required by the Gothenburg objectives are to be achieved.

Looking to the future, the shape of the Structural Funds after 2006 is still unclear. The Commission considers that the key elements of future policy direction will be the agreements made at the Lisbon Agenda and the Gothenburg summit, and that the most important element in delivering the identified targets will lie in addressing the intermediate and least-favoured areas and exploiting their latent capacities. In the Commission's latest proposals, outlined by a Commission representative at a meeting of a regional grouping, two-thirds of the structural and cohesion policy budget will be devoted to Objective 1 and regions excluded from Objective 1 simply on statistical grounds, with the remaining third allocated to Objective 2 and a new Objective 3. It is proposed that Objective 3 addresses trans-national cooperation and the completion of the trans-European networks, though proposals have not yet been finalised.

It is proposed that Objective 2 addresses regional competitiveness policy, with all regions potentially eligible (at NUTS I or NUTS II level, as appropriate, and with the final choice being left to the Member State). This would include areas phased out of Objective 1 because of their improved economic performance, which would receive a premium (i.e. they will be entitled to a 10 percent higher rate of intervention), while handicapped areas - mountains, islands and sparsely populated areas will also receive a 10 percent higher co-financing rate. Thus the Policy will increasingly be based on soft, indirect and intangible measures.

The Commission has identified six potential priorities, presented in the Third Cohesion Report:

- *Innovation and the knowledge based economy:*
Regional innovation systems (stimulation of business networks, SME cooperation especially with Universities and technology centres, advance business centres, technology audits, technology forecasting, clusters policy etc.) and entrepreneurship (diversification, business planning, incubators, spin outs of technology based companies).

- *Accessibility and services of general economic interest:*
Helping in particular areas with geographical handicaps (e.g. mountains, islands and sparsely populated areas) with broadband communications and mobile telephone infrastructure to achieve a universal service; secondary transport networks (i.e. securing for isolated areas secondary access to the EU's main framework of transport routes), services of general interest, transport, and telephone services, and social infrastructure.
- *Environment and risk prevention:*
Renewable energies: biomass/hydro/solar energies. Environmental transport modes, urban transport and multi-modality, sewage treatment and water treatment, the regeneration of brown field sites, and the prevention of natural or technological disasters.
- *Education, employment and social support:*
Employability and social inclusion: equal opportunities and life-long learning for those regions most affected.
- *Human capital and labour supply:*
The focus here is on continuing training measures, active labour market measures to ensure access to the labour market for all and social inclusion support measures.

Apart from financial allocations, the debate has predominantly been concerned with the 'value added' of EU intervention. This encompasses a redefinition of roles and the distribution of tasks between the Commission and Member States, as well as the need to simplify the processes for managing, delivering and controlling the Structural Funds.

8 Structural Funds activities in the light of spatial policies

Analysing the territorial impacts of the Structural Funds requires an understanding of the Structural Funds in terms of spatial policies and concepts. This chapter aims to discuss the Structural Funds by using the terms and concepts provided by the conceptual framework of ESPON.

Firstly, we will discuss the strategies of the Structural Funds programmes of the previous (1994-99) and current (2000-06) period. A review of thematic evaluations of the previous period and programmes and programme complements of the current period allows us to give an initial picture as to what degree Structural Fund strategies are in line with the policy aims and concepts provided by ESPON.

However, strategies reflect only the foremost intentions. Therefore, we will *secondly* also discuss Structural Fund interventions during the previous period. We will attempt to do so by looking at the sector policy aspects of the policies implemented. With respect to the spatial policy concepts, we focus on interventions in the fields of transport infrastructure, environmental infrastructure, the development of human capital and the promotion of information society.

Finally, we will address the governance and delivery aspects of the Structural Funds. This section reflects the conviction that not only the direct implications programmes and spending are of importance, but increasingly also the indirect effects of programme management and government have similar effects. Thus, we will discuss the soft and indirect effects of the Structural Funds, i.e. how the management of Structural Fund programmes has progressively been integrated into national policy contexts.

8.1 Spatial discussion of strategies

For the purpose of this study - understanding the territorial effects that the Structural Fund programmes have thus far delivered and are likely to deliver in the future - the timeframe taken into consideration is that of the 1994-2006, i.e. the previous and current programming periods. In the following sections the strategies of past and present Structural Fund programmes for the Objectives 1 and 2, and of the 1995-99 Objective 6 programmes will be briefly described and assessed in terms of their likely contribution to territorial cohesion.

Objective 1 strategies

The programmes of the 1994-99 period

In the 1994-99 programming period, the Structural Funds and the Cohesion Fund contributed an estimated €114 billion (in addition to a match-funding of national public and private resources of a further €95 billion) to regional economic development, covering a population of about 92 million inhabitants, one quarter of the total population of the EU as a whole. This has been assessed as having contributed to narrowing the gap in GDP *per capita* between the Objective 1 regions and the rest of the EU from 64 percent of the EU average in 1993 to 69 percent in 2000 (ECOTEC 2003).

The main idea developed in the following paragraphs is that the 1994-99 programming period was characterised by a number of developments that overtime made the programmes more coherent, albeit not intentionally, with the objectives of territorial cohesion (and, although less so, polycentric development). The programmes did not however explicitly target territorial cohesion as such, as has been pointed out in the *ex post* Objective 1 evaluation,

Reflecting its lack of focus as a policy priority, there is little evidence that the interventions have significantly reduced spatial disparities within the Objective 1 regions. In some cases at least they have contribute to the generation of growth within capital city and other relatively strongly performing regions.... Reduction of internal disparities tended not to be an important explicit objective, with priority implicitly given to the achievement of overall improvements in national and regional performance. (ECOTEC 2003:136)

The main objectives of the Structural Fund programmes in the 1994-99 period were those of reducing the disparities in GDP and unemployment between the regions of Europe, primarily by identifying market failures and existing growth constraints. These objectives were primarily targeted through investments in the following priority areas:

- *Business development* – this was the main area of spending, especially as regards industrial investment support and SME development. This area of intervention accounted for almost half of all spending carried out in the period (45 percent). In some programmes, especially in Austria and the Netherlands, emphasis was placed on R&D.
- *Physical infrastructure* – these represented a significant portion of spending in Objective 1 programmes across Europe, accounting for about 11 percent of the funds. Spending concentrated mainly on transport infrastructure, energy and environmental projects. This category of spending was particularly dominant in the strategies implemented in the Cohesion Countries.
- *Human Resources development* – the resources spent under this heading varied widely from country to country; particular emphasis on these themes was placed in Ireland and the UK.
- *Agriculture and Rural development* – this was also an important element of most Objective 1 strategies and figured especially in Germany and Austria.

The programmes of the current period (2000-06)

Over time objectives other than income growth and employment were also integrated into the programmes strategies, such as the promotion of environmental sustainability/sustainable development, the endorsement of equality of opportunities between women and men, the promotion of social inclusion, and the development of the Information Society. These are, in line with a wider understanding of the concept of cohesion, coherent with the concept of territorial cohesion discussed in this research.

This widening of policy objectives has contributed to making the Structural Fund programmes in the current programming period significantly more consistent with the objectives of territorial cohesion and, in some cases, polycentric development. Current Objective 1 strategies are more clearly orientated towards growth and competitiveness than in the past programming period. This increased coherence is certainly still an un-intentional element of the programme strategies, given that no definition of territorial cohesion or polycentric development existed when the programmes were developed and that the only available conceptual framework for European Spatial Policies, the ESDP, was non-binding and in fact only seldom mentioned in the programmes.

Whilst in the 1994 programmes

The interventions [...] reflected the particular needs of the individual regions – being typically based on extensive prior analysis, closely aligned with established national and regional strategies and involving a high level of continuity with the structural interventions of the preceding programme period. [...] Compared with the previous programming period they involved a greater strategic emphasis on the stimulation of indigenous potential rather than outside investment. Nevertheless, they mostly lacked a clearly articulated underlying ‘model’ of how the particular region could best develop. Along with the excessive number of separate measures in some programmes and other factors, this probably worked against the achievement of a truly integrated approach. (ECOTEC2003: 94)

Current programmes strategies are often more articulated and defined on the basis of an underlying development paradigm based on the stimulation of competitiveness through the full exploitation of endogenous potentials. This correlates with the debate on endowment and competitiveness as part of the territorial cohesion discussion presented in the First Interim Report. Referring to the aspect of geographical scale, the strategies mainly refer to endowment as a means of achieving (territorial) balance within the programming area. Thus it may be argued that there are potentially contributions to territorial cohesion at the *micro* or *meso* level, depending on the size of the programming area.

This is clearly in line with the concept of territorial cohesion discussed later on in this report.

Current Objective 1 programmes mainly target three major policy objectives:

- Economic growth, competitiveness and job creation,
- Social and territorial cohesion,
- Infrastructure provision and accessibility.

Different approaches and development models underlie these overall *foci* depending on the specific regional socio-economic conditions and the thematic *foci* of regions and Member States involved in programme drafting. In some cases, for example, a strong underlying strategic principle of ‘growth through innovation’ is evident, often based on ‘learning economy’ strategies. In other programmes, broader development strategies have been incorporated, emphasising a wider range of growth-promoting measures including social

modernisation, infrastructure improvements, rural and coastal development, assistance to entrepreneurship, and strategies of industrial transformation.

Even if coincidentally, current Structural Fund programmes do demonstrate a certain degree of policy coherence with the concept of territorial cohesion. The concept of polycentricity is however less visible in the strategies. Links to the concept of polycentricity depend even more than links to the concept on territorial cohesion on the question of scale. Contributions to polycentric development at the *micro* level will differ substantially from support for polycentricity at the *meso* or *macro* level, because at the *micro* level measures in the field of infrastructure and physical development can achieve considerable contributions. At the *meso* and *macro* levels however the focus is more on specialisation and on use of idle potentials.

Looking at the programmes examined in this project (listed in the chapter on methodology) it becomes clear that territorial cohesion and balance are often crucial elements of the strategies currently being implemented. This is particularly evident for instance in the Italian, Irish and Spanish programmes:

- The Italian programmes all support endogenous growth to be attained through the valorisation of the natural, cultural, environmental and human resources. The concept of potential is at the core of regional development strategies: the overarching and long-term aim is that of overcoming the under-utilisation of the area's resources. Some hints of polycentricity can also be found in the strategies and measures implemented, e.g. interventions for city clusters and city networks are found in the Sicilian OP, whereas both the OPs for Sicily and Campania include measures for the internationalisation of enterprises, the promotion of trans-national and trans-border cooperation and the relationships with other areas of the Mediterranean Sea.
- Balanced regional development is identified as a key objective to be achieved over the period of the current Irish NDP, to which the strategies of the programmes funded by the Structural Funds relate. Alongside the unprecedented economic growth which occurred during the last planning period, a range of issues emerged which posed a threat to the sustainability of future growth and called for a stronger focus on balanced development within and between regions. For the Southern and Eastern Region OP, the primary objective of the Government over the term of the NDP 2000-2006 is the consolidation of the Region's economic growth and the promotion of further growth that will encourage the development of the Region in a sustainable, socially equitable and spatially balanced manner. The positive effects of the development of urban centres on their hinterlands means that there must be continued investment in such centres as major growth drivers and as the basis for sustainable development. However, the fact that the recent economic successes of the Region have been concentrated in and around the major urban centres has led to capacity constraints in these areas, particularly in Dublin, while other parts of the Region are lagging behind in terms of infrastructure and industry/services base. Moreover, social exclusion is a feature

of many areas within the Region, particularly in the major urban centres. This translates into a strategy – complemented by the interventions implemented under the national Operational Programmes - focussed on the support of: transport infrastructure for improved access to domestic and foreign markets; modern telecommunications networks; technology infrastructure accessible to enterprises in all sectors; a well-developed educational system; a highly qualified and skilled work force; high quality physical infrastructure, including inter-urban transport and energy transmission systems; an adequate supply of housing; a good overall quality of life; and a high quality and sustainable environment.

- Territorial cohesion is also present in the strategies of the Spanish programmes analysed, that are supported by detailed spatial background analyses, as well as in the Portuguese ones, where, for example, measures are implemented in respect of the strengthening of territorial and institutional cohesion, and for exploring and using the endogenous resources for the re-structuring of the regional economic system.

The same considerations apply to the British programmes analysed: the SPD for South Yorkshire, for example, acknowledges spatial considerations such as the ESDP and policy statements relating to 'balanced urban and rural development' and 'urban and rural development and their contribution to balanced territorial development'. In the text, it is stated that the emphasis of the ESDP - on a more multi-centred European area - is helpful, giving shape to Priorities 1 and 5 of the SPD (Stimulating the emergence of new and high technology growth sectors and Supporting business investment through strategic spatial development). In particular, the SPD highlights the emphasis on urban areas as regional growth poles, on rural development for modernisation and on synergies between the two.

The strategies of the Greek programmes also support territorial cohesion. They target the objectives of economic competitiveness (especially through the exploitation of innovative technologies), improvement of the quality of life, and the endowment of human resources, though the focus here is predominantly on accessibility and transport infrastructure (crucial for the islands economies) and rural development. The *Epirus* programme, nonetheless, also foresees interventions in support of urban centres becoming regional centres of development.

The Austrian and German programmes also appear to be consistent with the objective of territorial cohesion. The programme for Burgenland frames its entire strategy by outlining the importance of ÖROK and in particular by emphasising the importance of two spatial development strategies (from 1981 with a focus on indigenous development and from 1991 with a focus on technology, innovation, globalisation, cross-border co-operation), which provide guidance to regional policy in Austria. Among the German programmes analysed, perhaps the strongest territorial approach can be found in the OP for Sachsen, where reference is made to global challenges and the enlargement of the EU, before calling for the compensation of locational disadvantages in structurally weak regions. The programme's strategy is articulated in a 'pyramid' of goals divided into economic, infrastructural, environmental, employment and rural/fishery aspects. The respective measures are

allocated to these headings, accordingly. In both countries, however, economic and social aims clearly dominate the strategies. Territorial aspects are first of all considered from this perspective, i.e. the appeal to improve the competitiveness of the respective region by way of improving the existing conditions for the economy (usually in the field of infrastructure endowment).

Other programmes have a more marked socio-economic focus: the programme for Hainaut (Belgium), for instance, although some emphasis is placed on the theme of regional attractiveness (and image) and on accessibility issues.

Looking at the Objective 1 programmes in peripheral and scarcely populated areas of Finland and Sweden, two different pictures emerge. For the Eastern Finland programme balanced spatial development is central to the whole programme, reflecting an understanding of territorial balance marked by polycentricity and the differentiated roles assigned to urban and rural areas. While both are seen as necessary, the role of urban areas as engines of growth is essential. This is also in line with national regional policy as a whole where urban areas are increasingly seen as promoters of growth and the impact of regional centres through e.g. educational institutions (universities, centres of expertise). Yet the rural areas dominate the programme areas and long distances and the peripheral location of the regions in question are discussed in a more detailed fashion than (territorial) balance. Transport and road infrastructure as instruments for improving accessibility remain dominant throughout the strategy, highlighting once again the centrality of the needs of the more rural areas.

The Swedish programme for Norra Norrland focuses on the comprehensive goal for the whole programme of achieving business growth equal to that of other successful regions in the country and in Europe, and of attaining full employment within the framework of sustainable development and gender equality. The programme underlines the fact that "the survival and development of the region should be assured by more and growing businesses contributing to balance in the region", the strategy is mainly focussed on businesses and education establishments as such, while spatial problems are not dealt with through a spatial approach.

Overall, policy objectives that can be linked to polycentric development are less evident as policy aims of the Objective 1 programmes analysed, with some notable exceptions. For example, in Germany, the programme for Sachsen Anhalt sees the need to develop a system of cities, capable of working as a development engine in the region. All three East-German regions analysed in the context of this research identify a structural problem in their settlement structures and want to establish a more polycentric system of cities, which can develop or strengthen their potentials. In the Portuguese OP for the North region, despite the lack of reference to the word 'polycentricity', it is stressed that the strategies implemented in the programme aim to strengthen population settlements and production areas in the inland areas, beside the existing centres on the coast. At the same time, the balanced development of the urbanised ring around Porto is one of the topics of the OP. The most striking inclusion of the theme of polycentric development in the programmes analysed is perhaps to be found in the Spanish OP for the Comunidad Valenciana: here it

is stressed that strengthening the population centres other than Valencia with new social and cultural infrastructures and services, as well as administrative decentralisation, are priorities in the territorial model of the region. In the initial analysis, the problem of the spatial concentration on the coastal and urban areas is highlighted and a more polycentric balanced development is presented as an opportunity for the development of the region.

Objective 2 strategies

The programmes of the 1994-99 period

Among the strategic aims of the 1994-99 Objective 2 programmes, job creation is the most common overall objective. Strategies have mainly been focused on the types of intervention used by regions tackling industrial decline and re-conversion. This has included support for the business environment (mainly aid to business for industrial investments and business infrastructure), investment in infrastructure, land recovery, environmental protection, and human resources development. Many programmes have also included interventions for R&D and technology transfer, tourism development and, in some cases, improvement of rural areas (e.g. several French programmes).

Table 9 below provides a brief country-by-country overview of Objective 2 strategies during the 1994-96 and 1997-99 programming periods.

Almost all of the Objective 2 SPDs have clearly presented explicit strategic objectives, averaging four per programme. The translation of objectives into actions is based around priorities and measures, with programmes each incorporating an average of four priorities, focusing on areas such as: industrial development; services, tourism and other specific sectors; inward investment, RTD/innovation; environmental issues; community economic development; human resources; physical planning-related action; and technical assistance.

There is considerable national (and regional) variation in the use of Structural Fund expenditure. For example, there is a strong concentration on aid direct to firms in Denmark, Austria, Sweden and Italy. Community economic development measures only really feature in the UK and French SPDs, while economic infrastructure is significant in Germany and urban regeneration in France. Basic infrastructure support is most prominent in Spain, Finland, the Netherlands and the UK, and the highest allocations for environmental measures are in Spain, France and Germany.

At the priority level, the majority of programmes contain some sectoral targeting, particularly explicit in the case of the Netherlands are strategies that identified key industries as a focus for the priorities: transport and distribution (logistics), producer services and tourism. Many of the UK strategies also contained sectoral priorities, sometimes called 'drivers for change'.

For the 1997-99 're-programming', strategies were in many cases 'rolled over' from the first period, with the main categories of intervention remaining broadly the same. In some cases however the relative weight of the different areas of intervention changed significantly from 1994-96 to 1997-99. The most significant changes in the strategies were at the measure level, as the new programmes contained increasing numbers of measures, covering a wider

range of actions. Increased attention was given to business development, RTD/innovation and environmental issues, mainly at the expense of investment in economic and other infrastructure.

Although many of the Objective 2 areas are highly heterogeneous regions, and in some cases comprised geographically of discrete sub-areas, relatively few of the SPD strategies contained a spatial dimension. Only in the UK was there a fairly consistent geographical orientation incorporated into some of the priorities. Here, the focus of targeting was on need rather than opportunity, with additional resources being directed at the areas of greatest disadvantage.

Table 9: Strategies of the 1994-96 and 1997-99 Objective 2 programmes by country

Country	Key Features
Austria (1995-1999)	€293 million (Structural Funds and national): Styria over 60%, Lower Austria (19%), Upper Austria and Vorarlberg (8% each). Priorities: support for restructuring and modernization of economic structures in industry, tourism (72% of total, mostly business support) and HR development (26%).
Belgium	Wallonia: €196 million, of which 99% concentrated on Meuse Vesdre. Approach centred on the restructuring of industrial sectors and the development of large infrastructure, plus development of endogenous capacities for the economic conversion of the area. Main instruments: aid to enterprises, SME support infrastructure, territorial attractiveness (improvement of sites, port and airport transport infrastructure), HR development and productive diversification (tourism). Flanders: €442 million for Limburg and Turnhout (€171 million from the Structural Funds). Similar strategies for both: promotion of employment, competitiveness of local firms, improvement of the environment, and technology and innovation. Priorities: industrial development, services and environment.
Denmark	€119 million for North Jutland and Lolland (plus €134m national resources). Different strategies for the two regions: - North Jutland: Overall strategy changed during programme period from 'internationalisation' (with a focus on exporting) to 'globalisation' (taking a wider view of competitiveness). Emphasis on technological innovation was also downgraded in favour of market and organisational development. - Lolland: main objective was job creation and maintenance. Emphasis on making better use of the area's own potential. Focus on longer-term objectives such as the development of knowledge and qualifications, the use of new technology, and the environment.
Finland (1995-1999)	Total financing for 1995-1999 1022 mill. Euros, with two regional programmes. Strategy focused on the increase and renewal of jobs, diversification of productive structure, improvement of competitiveness of companies and labour force 'know-how', and increasing interregional international cooperation.
France	19 O2 programmes with similar objectives, with specific aims reflecting local priorities. In most regions key aims included: strengthening the business fabric, mainly by supporting investment in production equipment; improving infrastructure for enterprises and major capital works; HR development; improving urban areas, local amenities and public facilities; investment in applied research and technology transfer; developing activities promoting diversification (mainly tourism); and environmental measures. The nature of the eligible areas affected the type of programmes with, for example, the modernisation of port operations being a key aim in several areas. Direct aid to businesses was a key feature of nearly all of the programmes.

Germany	€1.6 billion Structural Fund monies and €3.9 billion national resources for 9 SPDs. Significant variation between regions. By far the largest programme was Nordrhein-Westfalen, which received more than half of total German Objective 2 funding during the period. Regions shared the main goal of creating a competitive economic structure as a prerequisite for the creation of employment. Most programmes designed in a similar way with 4-6 priorities tackling issues relating to physical infrastructure; promotion of R&D, innovation and technology transfer; investment in industry and promotion of SMEs; environment, HR development; and other measures such as tourism and regional networking. Business support measures accounted for the largest category of allocations.
Italy	€1.4 billion allocated to the 11 O2 SPDs. Structural Fund aid accounted for 63% of overall resources. The larger Objective 2 programmes were in Piedmont, Liguria and Tuscany - accounting for half of the total Objective 2 allocations. Three main types of strategy (often combined in the same regions): the concentration of instruments aimed at the reinforcement of industrial structures, often through the strengthening of SMEs; diversification from large-scale industry or SME structure through tourism and/or promotion of other sectors; and the rebalancing of eligible areas through investment in infrastructure, land recovery, and environmental protection.
Luxembourg	Limited resources:€16,8 million (plus €49,2 million national public and private resources). Priorities: innovation measures, support infrastructure for SMEs, environmental management and territorial attractiveness. Predominance of direct aids to businesses, reclaiming of industrial sites, diversification of productive activities towards tourism etc.
The Netherlands	€669 million from the Structural Funds plus € 1,535 million from national sources. With the exception of Arnhem/Nijmegen, all regions put the highest priority on industrial development. Several regions - (Groningen/Drenthe, Twente, South Limburg) combined this with measures for the commercial service sector plus support for diversification of economic structures. Promotion of tourism also common. Shift away from direct business support towards improving the business environment.
Spain	€2.4 billion from the Structural Funds for the 7 regions. ERDF resources mainly devoted to infrastructure and business aid. ESF mainly used for the development of training facilities and schemes under certain priorities.
Sweden (1995-1999)	Total of €576 million (21% from the Structural Funds, 44% from Swedish public funds, 35% from private sector sources) for the five programmes Creation of new job opportunities was the most important strategic aim. Gender equality also prioritised. About two-thirds of O2 resources were used to promote small businesses employing fewer than 200 workers. Significant allocation also for competence development, development of the industrial environment and local development.
UK	£3.4 billion from the Structural Funds plus £4.1 billion from national sources. Similar overall strategies: to help eligible areas diversify away from declining economic activities. Most programmes designed in a similar way with 4-5 priorities and c. 16 supporting measures. Community economic development introduced as a new Priority in most programmes. Also, 'horizontal' themes an important feature of the 1997-99 programmes. Reduction in the proportion of funds allocated to physical infrastructure (from 36% to 27%) and increased focus on interventions to assist SMEs (from 8% to 17%) to promote innovation and technology transfer, and other 'softer' forms of support.

Source: CSES (2002), Ex Post Evaluations of the 1994-99 Objective 2 Programmes. Country Executive Summaries, April 2003.

The programmes of the current period (2000-06)

For the 2000-06 period, a high degree of policy continuity is evident in the Objective 2 strategies, with shifts generally reinforcing trends already underway or reflecting the nature of the 'new' Objective 2. Strong links to wider national/regional economic development strategies emerged, while more explicit strategic thinking introduced a number of changes, including an increasing focus on soft aid, new technologies and innovative methods of

financing. More flexible programmes emerged in many regions, mainly as a response to the seven-year programming period and rapidly changing economic framework conditions.

Many regions have made strategic commitments in relation to the horizontal themes. More often than in the previous programming periods, programmes from across the EU now make reference to these horizontal themes at the level of the strategic objectives. Moreover, various forms of action designed to address the horizontal themes through the priorities and measures further enhance this.

The strategic balancing of differing regional problems has continued to be a major challenge for strategy definition in many regions, and many of the 2000-06 Objective 2 programme strategies are very wide ranging, with measures encompassing a broad combination of traditional and modern interventions. In part, this reflects the coverage of the new Objective 2 regions, which include both urban and rural areas and designated and transitional areas. For some regions however the eligible area is highly fragmented, requiring a multiplicity of separate targeted initiatives.

One response to this has been the more widespread appearance of spatial/territorial development elements among the programmes. While most strategies have priorities and measures that apply to the eligible area as a whole (distinguishing between designated and transitional areas in many cases), there is also a significant degree of geographical targeting. Several programmes have an explicit strategic commitment to balanced territorial or spatial development, especially in the Benelux countries, France, Spain and the UK, but also in some other countries such as Germany (e.g. Alsace, Aquitaine, Basse-Normandie, Cataluñya, East Midlands, Kempen/Antwerpen, Limburg, North-East of England, Sachsen-Anhalt, Western Scotland). In part, this takes the form of spatially targeted measures, focusing on urban, industrial, mining, fishing or rural areas or communities. As examples: the Alsace programme has a series of territorial actions focused on selected districts of Mulhouse and urban regeneration in the potash mining areas; the Kempen/Antwerpen programme has specific urban development support measures concerned with urban infrastructure, sustainable transport and socio-cultural facilities; the Bremen programme has a measure for the development of certain city quarters, while the West Finland programme has a measure for the 'activation of sub-regional and local communities' to develop the social environment and support the balanced development of towns and sub-regions in the Objective 2 area.

This approach is also evident in the proposed implementation arrangements, which involve programme management procedures or project selection criteria that promote balanced development across the eligible area. For example, the French programmes provide scope for more initiatives to be brought forward through 'bottom-up', multi-sectoral partnerships of the *pays* (in rural areas) and *agglomérations* (urban areas). This builds on new national policy orientations and on the lessons of programmes such as Leader.

Looking in more detail at the few Objective 2 programmes analysed by the country experts, it emerges that just over half of these appear to be in line with territorial cohesion, either because this objective is explicitly mentioned, or because the coherence can be inferred from the programme strategies implemented. The policy objectives related to this theme

are also strongly represented in the programmes for the South of Finland, Alsace (France), Cataluña (Spain) and Scotland (UK).

The strategy of the Finnish Objective 2 programme has at its core the integration of “International and competitive business activity, an attractive living environment, and a strong cluster of expertise and functioning connections”. Of these only the latter has direct relevance in terms of spatiality, though expertise and an attractive living environment can be seen as indirectly contributing to the territorial balance and promoting the role of the urban growth centres.

The Catalan programme, on the other hand, implements a strategy targeting competitiveness, employment and development of the productive environment, improving the environment (including natural and water resource management), support for the Knowledge Society; R&D, innovation; the promotion of local and urban development, with a view to improving the balance between the coastal area and the mountain and rural hinterland.

The West of Scotland SPD, supports territorial cohesion by contrasting the geographical concentration of high levels of deprivation, long-term unemployment and low skill levels – as such multiple deprivations have a strong spatial aspect in the Programme area. The city of Glasgow and the local authority areas of North and South Lanarkshire and Renfrewshire are considered the key territories in this context. There is also reference to the need to respond to the balance between the urban core and rural hinterland to increase cohesion. This programme also represents one of the few examples of the inclusion of strategies for polycentric development: it articulates its strategy around areas of need and opportunity and sets out to address the poor transport infrastructure links between such areas, whose nature and scope have thus far limited access to new employment and development opportunities. Many key strategic sites in the region have a geographical proximity to deprived areas and there is a cross-agency commitment to secure the benefits of such economic development for all in the region. Among others, the programme includes an intervention for the development of the region’s ‘competitive locations’ to support the needs of indigenous businesses seeking to expand, or SMEs looking to locate into the region, and which can lead to significant opportunities for job creation. The measure also aims to improve the image and accessibility of the area, particularly through urban regeneration plans. Funding is available for projects that support the development of specific strategic sites and urban regeneration areas consistent with the approach to strategic spatial development of the region, complementing the development of specific clusters and growth sectors.

To conclude, the French SPD for Alsace is an excellent example of (inferred) incorporation of the theme of polycentricity in the programme strategy. The objective of reinforcing the territorial balance of the Alsace Region is clearly spelt out in the programme strategy. It is closely linked by the programme with the concept of sustainable development and forms one of the key headings of the ‘development strategy’ that is presented before the description of the programme priorities. The objective of balanced development is closely intertwined with the emergence of the ‘pays’ and ‘agglomérations’, the new instruments for

local governance recently introduced in France.¹ Furthermore, this objective is also relevant for those areas whose situation justifies specific measures designed to strengthen the social cohesion of Alsace: the Vosges *massif*, the weakest rural areas, the regional natural parks and the potash basin area.

Interestingly, according to the programme these specific measures are 'complementary.' Indeed they all define the overall objective of territorial cohesion in the different Objective 2 areas. They aim:

- to promote global strategies for urban development, with a particular focus on fighting social exclusion and the regeneration of the 4 designated problem neighbourhoods in Mulhouse, building upon the experience acquired through the Urban initiative;
- to promote the diversification of the economic structure in the potash fields area, taking into account the end of the mining industry after 2004 and the related economic and urban conversion;
- to reinforce medium-sized cities and market towns in rural areas and turn them into focus points around which local development, local services, housing developments and cultural activities can be crystallised;
- to support partnership agreements between cities within the '*pays*' in rural areas and the '*agglomérations*' in urban areas; the exchange of experience at the trans-national level can also be conducted through the Community Initiatives Interreg III, Urban and Leader +;
- to preserve the environment through actions undertaken by the regional natural parks and measures aimed at maintaining the quality of rivers and underground water reserves.

Objective 6 strategies (1995-99)

Strategies implemented for the sparsely populated areas of Objective 6 were inevitably targeted on the problems of peripherality that these regions face: out-migration of young people, falling population, severe unemployment, a decrease in the number of jobs, and below average levels of education, among others. As the problems associated with peripherality were the main reason for the existence of these programmes it could be argued that they should naturally reflect spatial considerations. Still, the *ex post* evaluation of these programmes stresses that spatial considerations have not always adequately been taken into account in the definition of the strategies for the programmes. For example, the designated programme areas did not always reflect the nodal areas of the regions' economic development:

¹ Within ESPON 1.1.1 the concept of '*pays*' is translated to "project territory" in English and defined in the following way: "A 'project territory' is a territory defined by a common project developed by local authorities and recognized by the central government, which supports it with funds. The projects aim at stimulating coherence, mainly between the agglomeration and its surroundings." (p.54 in WP2 report for ESPON 1.1.1)

Regional borders, too, have to be considered in strategic planning. An important starting point is the concept of a nodal area. A nodal area consists of a centre and surrounding areas that are functionally related, that is, of a centre and its sphere of influence. When programme areas are defined, it is important to make sure that nodal areas are not split. It is problematic if the sphere of influence is within the programme area but the centre is not. This hinders regional development because universities, polytechnics and many other expert organisations that are important for regional development are located in centres. In both countries, borderlines between nodal areas were not always considered when Objective 6 areas were defined, resulting in practical problems during programme implementation. The situation was especially difficult in Sweden where, for example, Umeå, the capital of Västerbotten was outside the Objective 6 Area. In the on-going programme period, this has been corrected and Umeå now belongs to the Objective 1 Area. (Katajamäki 2002),

On a more general level, though, the interventions implemented under the programmes were primarily focussed on the following objectives, all of which are in line with the concept of territorial cohesion:

- the diversification of the regional economy
- the enhancement of local competitiveness, attractiveness and quality of life for local communities
- the promotion of HR development
- the fostering of rural development.

In addition, environmental issues were integrated across the interventions.

In practice though it was acknowledged that a far too fragmented set of interventions was often implemented within this strategic framework, with an overall loss of strategy focus and concentration, and, consequently, also of efficiency. Moreover, for this reason, it should be stressed that the fact that the strategies implemented did reflect, to a large extent, the themes of territorial cohesion does not necessarily mean that the funds channelled to Objective 6 did indeed deliver increased territorial cohesion.

8.2 The sectoral discussion of interventions

As underlined in previous paragraphs, the Structural Fund programmes in the 1994-99 period were primarily concerned with income and job creation; as such they generally lacked an explicit territorial focus. There are however a number of elements that make these strategies consistent with the objectives of territorial cohesion (less so polycentric development, if not at a local scale). Looking at the sectoral aspects of the policies implemented under the Structural Funds in the light of the various dimensions encompassed by the 'hypercube of territorial cohesion', it can be argued that the programmes did envisage interventions in line with the objective of territorial cohesion, by supporting investments in:

- Transport infrastructures

- Environmental infrastructures (contributing to the inclusion of the principle of environmental sustainability and sustainable development in other sectoral policies)
- Development of human capital and knowledge
- Promotion of the Information Society, TLC and of the knowledge economy particularly from 2000 onwards.

Transport infrastructure

Structural Fund programmes, especially as regards Objectives 1 and 6 (and particularly in the cohesion countries) supported an enormous effort in respect of the development of transport infrastructure. A recent evaluation on the impact of 1994-99 Objective 1 Structural Fund programmes on transport infrastructures, estimates that across Europe, the Structural Funds provided some €13.7 billion for investments in transport in Objective 1 regions. This figure is above and beyond the additional €5 billion provided by the Cohesion fund for the four cohesion countries. The table below reproduces the expenditure breakdown provided in this study (cf. table).

Table 10: Structural Fund and Cohesion Fund Expenditure in Objective 1 countries 1994-99

Type of infrastructure	Structural Funds % (Operational Programmes for Transport in Germany, Greece, Ireland, Italy, Portugal, Spain)	Cohesion Fund %
Motorway/other roads	56	69
Railways	24	23
Ports	4	3
Airports	5	4-5
Other transport infrastructure and TA	11	NR

Source: Oscar Faber et al (2000), Thematic Evaluation of the Impact of Structural Funds on Transport Infrastructures, Final Report, November 2000.

The Structural Funds' contributions to the development of transport infrastructure have been twofold: on the one hand, the Structural Fund provided leverage to national resources, allowing a faster and more certain completion of the planned investments. As the above-mentioned study underlines,

it was noticeable that projects were implemented with difficulty where the Structural Funds represented a relatively small part of the total project cost. It seems that where the Structural Funds comprised a significant portion of funding, say 25-30%, of the project cost, this would assist more rapid implementation (Faber et al 2000)

On the other hand, Structural Fund co-financing was a further stimulus towards the introduction of higher environmental standards, both because of the types and standards of infrastructure created (including the obligation to carry out an Environmental Impact Assessment, and because of the impacts on the environment induced by the infrastructures created (e.g. reducing emissions given the reduction of journey times).

The above-mentioned evaluation, which did not include the analysis of regional OPs, also contained measures for transport infrastructure, estimates that the investments co-funded determined an impact in terms of employment generated (direct/indirect) of 2.3 million person years. The main effects of the Transport OPs identified by the evaluation are synthesised in the box below.

Box 2: Effects of the 1994-99 Transport OPs

- Development of road networks and missing links;
- Development of high-speed rail links and substantial electrification investments
- Important interconnections between less developed and developed areas within the Objective 1 area or the country in question
- Improvement of airports for ultra-peripheral regions
- Funds representing leverage effects for developing Public Private Partnerships
- Important employment creation (2.3 million person years for direct and indirect job creation)
- Reduced peripherality in more remote regions notably through important time savings
- Lower traffic congestion in more populous, urban areas and generally improved economic opportunities
- Increased cross-border activities.

Source: Oscar Faber et al (2000), Thematic Evaluation of the Impact of Structural Funds on Transport Infrastructures, Final Report, November 2000.

In addition to the review of existing studies and evaluations, the project has also carried out own analysis regarding Structural Fund spending and (a) connectivity and (b) potential accessibility.

Transport infrastructure (and connected with this, the enhancement of accessibility) is one of the major goals in several Structural Funds programmes. Therefore a short analysis on the connection between Structural and Cohesion Fund spending on the one hand and transport-related issues on the other is of great interest, not at least when considering its large share of the total funding. In the context of the investigation, only Structural Fund spending per capita related to productive infrastructure has been considered, i.e. the ERDF parts of Objectives 1 and 2 and the infrastructure part of the Cohesion Funds in 1994-99. In the following this will be referred to as "SfT".

Financing of this type has primarily targeted regions with a low transport infrastructure endowment compared to the EU average.² The average SfT for regions eligible for Objective 1 support was 683 euro per capita, which is more than thrice the overall EU15 average (206 euro per capita) and as much as ten times higher than the average for Objective 2 regions (65 euro per capita). This means that slightly over a fifth (22 percent) of the EU15 population have received nearly three quarters (72 percent) of the total SfT budget, in spatial terms corresponding to 40 percent of the EU15 territory.

² Thus some regions in the following two maps appear grey, as these have not received any such funding.

Box 3: Elucidating the ICON Connectivity Indicator

The concept of connectivity differs substantially from customary measurements of e.g. accessibility or peripherality as – in contrast to these – the main focus here lies on the density of the transport network rather than on what can be reached via this network. Consequently several regions that in standard accessibility estimates are classified as remote or peripheral can despite this have a good connectivity, provided that the infrastructure is there. And vice versa.

The ICON Connectivity Indicator (connectivity to transport terminals) estimates the connectivity of a given place as the minimum time by road it takes to reach the closest transportation nodes for each transport mode (e.g. the closest motorway entrance, railway station, commercial sea port and airport) and the utility that the node provides in terms of service provision (see table below). ICON is the sum of the minimum access time by road to the closest connecting node in the network plus an additional time which encapsulates a measure of the deficit of utility (in relation to a pre-defined quality level) not obtained from all available alternatives.

For each network ($i=1\dots n$) a value ($ICON_i$) is calculated. These partial values are then summed up in proportion to their relative contribution to transport endowment (table below). Therefore, the aggregated value of ICON is:

$$iCON = \sum_{i=1}^{i=N} p_i iCON_i$$

Table: Level of services of the transport terminals and the contribution of each transport mode to the transport endowment

Transport network	Min. level of service	Max. level of service	Pi
Road network	85 km/h	100 km/h	55
Rail network	75 trains/day	100 trains/day	15
Comercial airports	0,5 Mpass/year	15 Mpass/year	20
Comercial Seaports	0,5 Mtonnes/year	10 Mtonnes/year	10

The ICON value weighted by surface ($ICON_n$) is calculated by way of transferring the value of the ICON of each location to the cells of a grid (0.5×0.5 km) which covers the entire region, and diffusing this value according to an estimated average speed of the road network in order to attribute a value of ICON to each of the cells providing differential values within a single region. For each NUTS region, the ICON is calculated as follows:

$$ICON_n = (\sum_c N_c * S_c * ICON_c) / S$$

Where:

$ICON_n$ = ICON weighted by surface (hours) of NUTS region n

N_c = number of cells with a certain value of $ICON_c$ inside the NUTS region n

S_c = area of the cell (km^2)

S = total area of NUTS region n

Source: ESPON Project 1.2.1, Mcrit

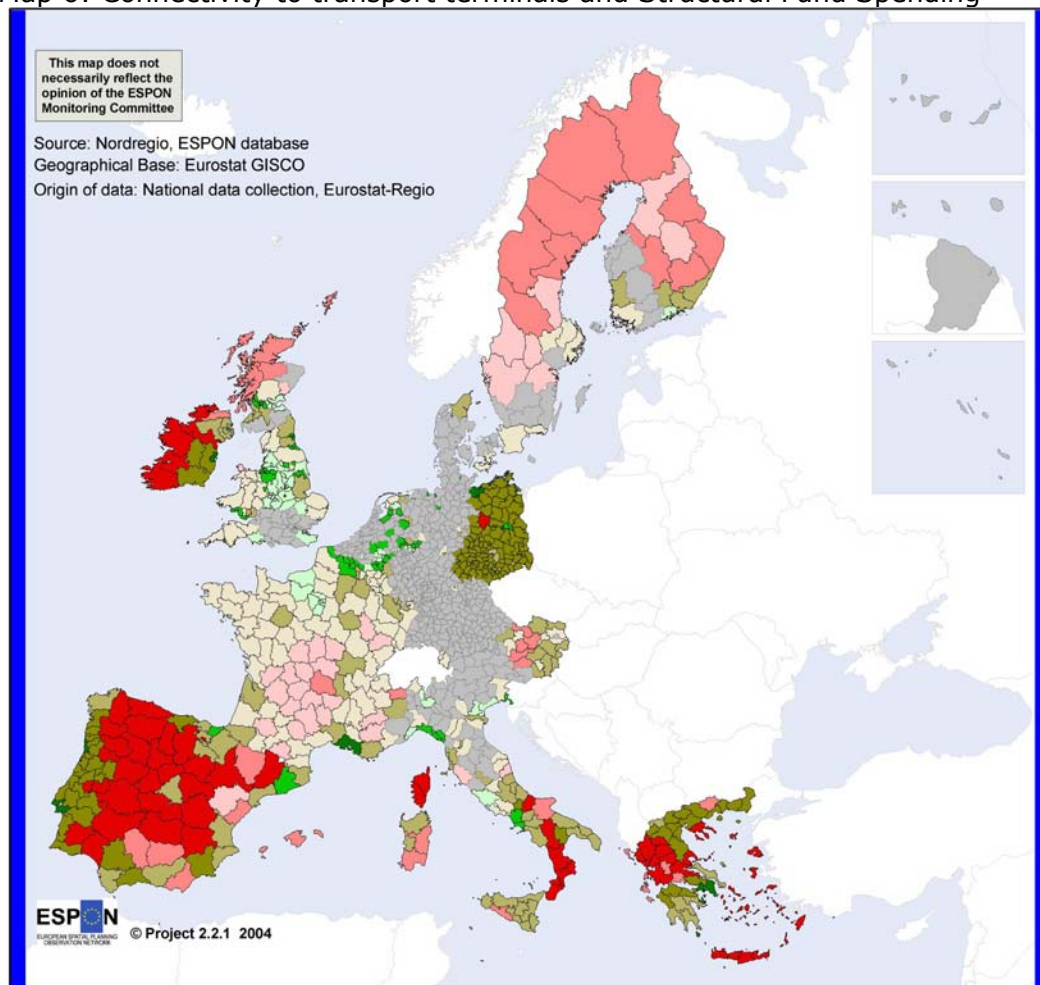
Connectivity to transport terminals and transport-related Structural Fund spending

The number of EU15 citizens that can be connected by road to a transport terminal with a minimum level of service within less than half an hour and living in regions targeted by SFT funding, amounts to a quarter of the total population. These regions receive 24 percent of the total SFT budget of the entire Union. On the other hand, regions with a corresponding required travel time of more than one hour represent only 9 percent of the total population but receive a similar share of the SFT budget.

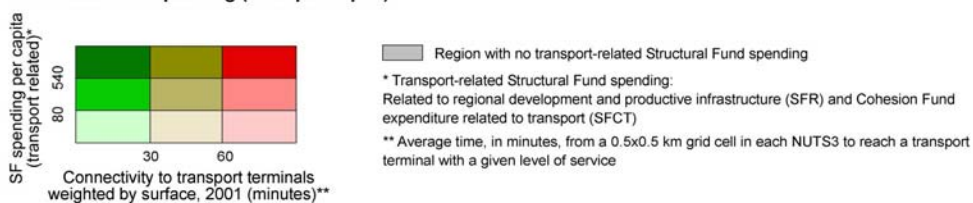
The spatial distribution of regions with low connectivity and high SFT per capita brings about two main groups (see Map 6): one formed by the main commercial seaports of the Objective 1 regions and the other by the north-central European regions. Athens, Marseille, Barcelona, Bilbao and Naples, where the importance of their seaports gives to the NUTS a low ICON, comprise the first group. The second group consists of a cluster of regions found mainly in the triangle between London, Hamburg and Brussels. The high density of different transport infrastructure networks gives these regions a high connectivity.

Sometimes even neighbouring areas can have very differing connectivity. In eastern Germany three neighbouring regions (Stendal, Havelland and Berlin) display this pattern. The high connectivity for Berlin (a required travel time of less than 30 minutes to reach the endowments) compared to its neighbouring regions (>45 and >60 minutes respectively), explained by the international airports in Berlin.

Map 6: Connectivity to transport terminals and Structural Fund Spending



Connectivity to transport terminals (minutes) and transport-related Structural Fund spending (Euro per capita)



Box 4: Potential accessibility – method and interpretation

Potential accessibility is a construct of two functions, one representing the activities or opportunities to be reached and one representing the effort, time, distance or cost needed to reach them (Spiekermann & Wegener, 2002):

$$A_i = \sum (W_j) f(c_{ij})$$

where A_i is the accessibility of area i , W_j is the activity W to be reached in area j , and c_{ij} is the generalised cost of reaching area j from area i . The functions $g(W_{ij})$ and $f(c_{ij})$ are called activity functions and impedance functions, respectively. They are associated multiplicatively, i.e. are weights to each other. That is, both are necessary elements of accessibility. A_i is the total of the activities reachable at j weighted by the ease of getting from i to j .

The interpretation is that the greater the number of attractive destinations in areas j is and the more accessible areas j are from area i , the greater is the accessibility of area i . This definition of accessibility is referred to as destination-oriented accessibility. In a similar way an origin-oriented accessibility can be defined: The more people live in areas j and the easier they can visit area i , the greater is the accessibility of area i . Because of the symmetry of most transport connections, destination-oriented and origin-oriented accessibility tend to be highly correlated.

Accessibility by road is characterised by a clear distinction of centre and periphery. Accessibility by road is the only modal accessibility indicator that reproduces the 'Blue Banana', the central area nowadays called the European pentagon.

Potential accessibility by rail provides also a core-periphery pattern in Europe. However, there are two important distinctions from the accessibility by road. The first is that highest accessibility is much more concentrated in the central areas and is visible primarily in the cities serving as main nodes in the high-speed rail networks and along the major rail corridors. Second, it becomes apparent that investments in high-speed rail links and networks can enlarge the corridors of higher potential accessibility by road. This is mainly visible in France where the TGV lines towards the Mediterranean Sea and the Atlantic Ocean lead to corridors of clearly above European average accessibilities.

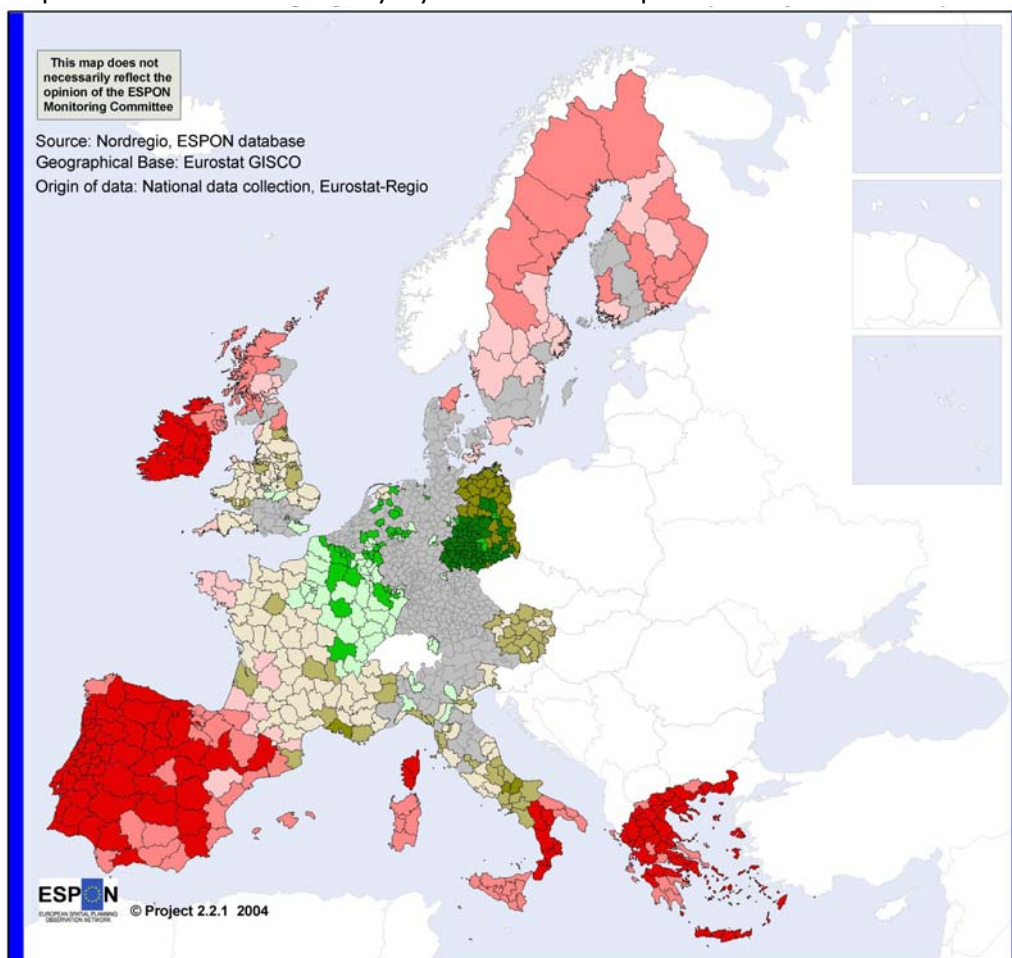
Potential accessibility and transport-related Structural Fund

Central Europe and mainly the Pentagon area have the highest values for both the potential accessibility by road and by train. This centre-periphery correlation shows a similar pattern to the ICON indicator, where also the highest values for connectivity are located in the Pentagon area.

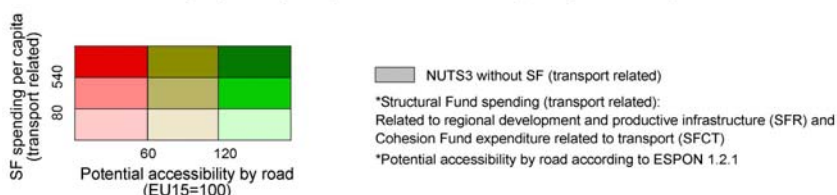
Some 40 percent of the EU15 population have a potential accessibility by rail equal or below the EU15 average and at the same time receive Structural Funds assistance related to transport investments; a similar percentage (38 percent) is found for the potential accessibility by road. In both cases those regions obtain more than the 80 percent of the EU15 budget of the Sft. This pattern is the same when its spatial distribution is considered where the 42 percent of the EU15 area is covered by this 80 percent of the Sft budget.

23 percent of the EU15 population have a potential accessibility by rail less than the half the EU15 average and obtain 68 percent of the total Sft budget. Regarding potential accessibility by road, those percentages are very similar, 24 percent of the population of the EU15 have a potential accessibility by road equal or lower than the half of the EU15 average and receive 66 percent of the total Sft budget. At the other end of the scale, 7 percent of the EU15 population have a potential accessibility by rail and by road more than 50 percent above the EU15 average and they receive the 4 percent of the total Sft budget.

Map 7: Potential accessibility by road and transport-related Structural Funding



Potential accessibility by road (EU15) and Structural Fund (transport related)



Environmental sustainability and sustainable development

Structural Fund programmes have also had an impact on improvements in the environmental sustainability of the policies implemented. The themes of environmental sustainability and of sustainable development are a result of evolutions in the policy agenda of over 2 decades, they are summarised in the box below. With the gradual incorporation of new political priorities into policy, these themes have naturally filtered through to the Structural Funds, with increasing requirements set out by each successive round of new Structural Fund regulations. Environmental appraisals were required for Structural Fund programmes already from 1988, but it is only in the 1993 regulations that a stronger emphasis was placed on the theme of environmental sustainability as a necessary element of Structural Fund strategies for economic development.

Box 5: The gradual integration of the theme of environmental sustainability into Structural Fund policies, 1988-2000.

The horizontal theme of environmental sustainability emerged from a wider global debate on sustainable development. The impetus in the EU for the integration of environmental protection and economic development – and its wider espousal of sustainable development – came from international initiatives, which set the framework for EU action.

The seminal event was the call made by the World Commission on Environment and Development (WCED)³ in 1987 for a global effort to integrate economic development and environmental protection. Our Common Future - the WCED report often referred to as the 'Brundtland Report' – urged that the major economic and sectoral agencies of governments should be made directly responsible and fully accountable for ensuring that their policies, programmes and budgets supported ecologically and economically sustainable development. Going beyond the conventional view of environmental policy, the WCED stressed that it was not simply a matter of environmental agencies implementing their own policies, but of other sectoral specialists recognising the environmental dimension within their work. This idea of environmental integration was taken further at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992.

From a sustainable development perspective, the programme of the resulting 'Agenda 21' addressed the integration of environment and development in decision-making, particularly at the strategic level of policy, planning and management.⁴ Adopting a long-term perspective and cross-sectoral approach, the programme called upon countries to ensure a three-way integration into decision-making at all levels and in all areas of government based on economic growth, social inclusion and environmental protection. Further impetus was given by the debate associated with the Kyoto Treaty and the ambitions of the EU to ratify the Protocol by 2002.

Translating international and domestic sustainability commitments into the European policy environment, a succession of policy initiatives was launched from the 1980s onwards. In particular, the EU Environmental Action Programmes helped to introduce the concept of environmental integration into EU policy areas.⁵ Whilst acknowledging sustainable development as an essential component of economic growth, the Third Environmental Action Programme (1982-86) called for a strategy to integrate environmental policy with socio-economic development, while the Fourth Environmental Action Programme (1987-92) further developed the theme of integration by advancing the idea of environmental responsibility. In 1993, the European Commission adopted Towards Sustainability, the Fifth Environmental Action Programme for the period 1993-2000. This represented a fundamental shift in outlook from earlier programmes by taking a holistic view of issues, reflecting the wider aims of sustainable development and integrating environmental concerns into the social and economic dimensions of policy. The programme considerably broadened the existing approach by requiring the integration of environmental concerns into all other areas of activity, including economic development processes supported by EC financial support mechanisms.⁶

The most recent development was the adoption of the Sixth Environmental Action Programme by the Gothenburg European Council, specifying the guidelines for environmental work within the EU over the next ten years. Apart from specifying priority areas for future action, the programme moves towards clearer specification of its strategic objectives and, crucially, the need to define measurable goals and timetables in areas such as land use, the urban environment and resource use.

Alongside the periodic action plans, two important elements of European policy in this area should be noted.⁷ First, the basic treaties of the EU were amended, initially in the 1992 Maastricht Treaty, which added further environmental objectives into the Treaty of Rome, stating that, "environmental protection requirements must be integrated into the definition and implementation of other Community policies". The Treaty of Amsterdam in 1998 went further by adopting the threefold definition of sustainable development and stating that the Union's financial instruments were required to work, simultaneously and in the long-term interest, towards economic growth, social cohesion and the protection of the environment. (Similarly, in the case of equal opportunities, equality for men and women was described as a basic democratic principle underpinned by the Treaty.)

Second, environmental integration has been regularly addressed at the summit meetings of the European Council. Beginning with an agreement to develop a structured reporting system on the issues at the Luxembourg Council in December 1997, subsequent councils have progressively considered environmental integration strategies in sectoral policies, environmental appraisal as part of policy development and the mainstreaming of environmental policies. At the most recent, Gothenburg Council (July 2001), the summit adopted a Sustainable Development Strategy, elevating ecological issues onto a par with social and economic aspects in the drafting of all future policies.

Source: Taylor S, Polverari L and Raines P (2002), *Op. Cit.*

³ World Commission on Environment and Development (1987) *op. cit.*

⁴ United Nations Conference on Environment and Development (1992) *Agenda 21: The United Nations Programme of Action from Rio*, UN, New York.

⁵ Johnson S and Corcelle G (1995) *The Environmental Policy of the European Communities*, Second Edition, Kluwer Law International, The Hague.

⁶ CEC (1995) Progress Report on Towards Sustainability, COM(95) 624 final, Commission of the European Communities, Brussels; also CEC (1993) Towards Sustainability - A European Community Programme of Policy and Action in Relation to the Environment and Sustainable Development, Official Journal No C138, 17 May 1993, Commission of the European Communities, Brussels.

⁷ Clement K (2000) *Economic Development and Environmental Gain*, Earthscan Publications Ltd, London, pp.30-58.

As described in Taylor, Polverari and Raines (2002), a crucial driver in prompting stronger content in the Structural Fund regulations and increased follow-through into programmes has been the process of critical evaluation and assessment undertaken by independent evaluators and EC auditors. In particular, the development of increased regulatory requirements was prompted by a series of reports that consistently revealed inadequate consideration of the environment in the Structural Funds. Following a number of critical independent reviews of the Structural Funds and the environment the European Court of Auditors published a report in 1992 that found little evidence to support any claims of environmental conformity within the Structural Funds.

As a result, provisions were significantly strengthened in the 1994-99 Structural Fund regulations, by obliging the Member States to meet four obligations in preparing the programmes:

- to analyse the environmental situation of the programme area;
- to appraise the environmental impact of the strategy proposed in accordance with the principles of sustainable development and in agreement with the provisions of Community law in force;
- to make arrangements to associate the competent environmental authorities designated by each Member State in the preparation and implementation of the operations foreseen in the plan; and
- to ensure compliance with Community policy and legislation concerning the environment.

Further insight on this theme was provided by the 1996 Interim Review of the Fifth Environmental Action Programme, which noted that, while there had been progress on the integration of environmental approaches both within the Community and individual Member States, sustainable development was still seen as the business of those who dealt directly with the environment. These criticisms led first to the introduction of stronger environmental obligations with respect to the Objective 2 programmes for the 1997-99 period and then fed naturally into the Agenda 2000 document and the regulations adopted for the current rounds of the Structural Fund programming in 1999.

It is not surprising, given this background that, as underlined in the Sustainable Development Evaluation (GHK, 2002), Structural Fund programmes have contributed to accelerated change towards Sustainable Development. The Structural Funds have contributed to environmental sustainability and sustainable development in at least three ways:

- first, by directly supporting environmental interventions, such as the measures for water and waste management, pollution reduction, wise management of the natural environment and others that characterise current as well as past programmes. With the Cohesion Fund, moreover, large environmental infrastructures were realised in the cohesion countries;

- second, by introducing environmental obligations across non-environmental measures, especially in respect of business development measures. This has been a crucial aspect in that it has also led in some cases to a change of existing national schemes and legislations, extending the environmental benefits out with the scope of European policies to national policies; and
- finally, and most importantly, as underlined in the evaluation on Sustainable Development (GHK 2002), by contributing to a modernisation of the 'development model' underpinning economic development strategies: the 'Structural Funds programmes are considered to be responsible for a 'modernisation' of supply led regional economic development policy, traditionally based on infrastructure provision and training programmes. This modernisation is characterised by recognising and supporting a wider range of policy requirements and outcomes for regional development' including 'IT development, R&D investment, territorial planning and integrated urban and rural development, HR development (especially the promotion of entrepreneurship and vocational training), social exclusion measures and environmental protection and improvement (ibid).

Knowledge and human capital

The development of knowledge and human capital is an essential aspect of territorial endowment as described in the First Interim Report of this research and of territorial cohesion as intended in this report. Long term, sustainable growth is based upon the development of all aspects of the endogenous capitals of a region, including its human resources and knowledge base. The Structural Funds in the past programming period (and, as will be seen, in the current programming period also) have contributed to this aim by (a) supporting training initiatives, lifelong learning and the development of skills for the labour market, mainly with interventions supported by the European Social Fund, and (b) though funding RTDI investments.

The dominance of the 'Archipelago Europe', with its concentration of nearly half of all European research capacity, has focussed attention on the need to address these RTDI imbalances.

Objective 1 regions have 26.6 percent of the population of EU15, they account for 15 percent of the GDP of the Union, but only 4 percent of the Union's RTD personnel, and only 2 percent of patenting activities – seven times less than their economic weight.

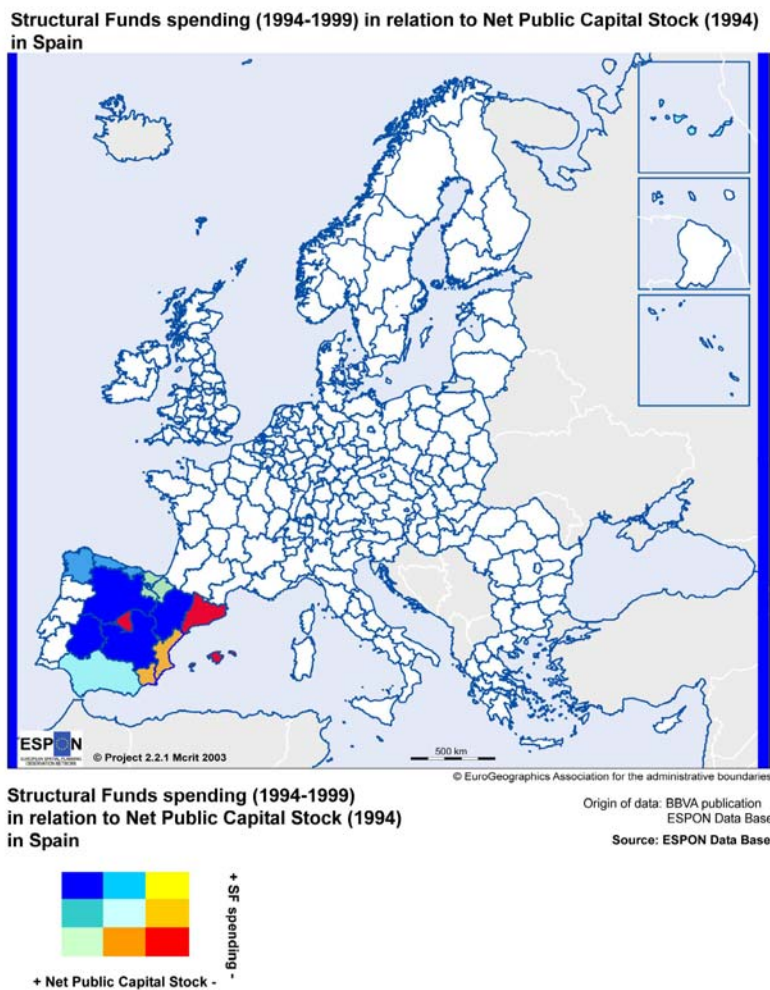
In response to these imbalances, Structural Fund investment in RTD increased significantly between the first (1989-93) and second (1994-99) programming periods, from 1.4 to 5 billion EURO. (Higgins, Tsipouri & van der Lande 1999)

The RTDI content of Structural Fund programmes (particularly the Objective 2 programmes) has evolved over the last decade, in line with growing awareness of the importance of technology transfer and innovation to regions seeking to regain a competitive advantage and a deeper understanding of the barriers to establishing these dynamic, interactive processes (Bachtler & Taylor 1999). Across successive programming periods, rising expenditure has been dedicated to RTDI policies, across an increasingly diverse and

sophisticated range of interventions. The policy orientation has changed, with the science and technology focus of early programmes being replaced by a stronger emphasis on applied policies, targeted at raising the ability of regional firms to compete.

Initiatives increasing the demand for technological solutions to business problems have been complemented by policies enabling existing regional research organisations to respond. In addition, the balance of interventions being supported has changed, with a shift away from the focus on infrastructure which characterised the early programmes (science and technology parks, equipping of research-oriented laboratories), towards softer and more demand-side measures, including support services to assist businesses to identify and implement projects to raise their technology and innovation levels.

Map 8: Structural Fund spending and net public capital stock in Spain (1st draft)



ERDF policies have also routinely been complemented by human resource development measures – unusual among ESF interventions in that they tend to target those who are

already highly qualified in relevant fields – helping employees to raise or adapt their technical skills, or introducing technical or research staff into firms. An element of policy addressing a particular deficit of Objective 2 areas and receiving increasing attention is the diffusion of established technologies to lagging firms. In addition, policies explicitly promoting the adoption and exploitation of new communication and information technologies are increasingly central within the policy measures.

The Information Society

As has been seen, accessibility is one of the most crucial factors in the achievement of territorial cohesion. Accessibility relates to both physical and non-material aspects such as telecommunications technologies. The EU has placed increasing emphasis on the Information Society (IS) over the last decade and this has been reflected in the strategic objectives of the European Commission for the Structural Fund programmes for the 2000-06 period.

The Information Society can thus be seen as emerging as a policy area in its own right, and as a horizontally perceived area of activity addressed through the Structural Funds among other instruments. The development of the Information Society has been particularly closely connected to the Lisbon Council's objective of making Europe more competitive and dynamic (in fact "the *most* competitive and dynamic economy in the World"). The Information Society was in this context seen as a prerequisite of this competitiveness. In addition to the horizontal approach, a more explicit IS policy initiative was also launched, with the introduction of the comprehensive eEurope Action Plan, which was in turn connected to the Commission's Communication 'Strategies for jobs in the Information Society'. The Broad Economic Policy Guidelines provided the economic policy context in terms of innovation policy and stressed the need for well functioning capital markets and more competition in product markets in order to foster innovation. Side by side with this explicit policy activity, the Structural Funds were identified as a major contributor to regional development measures within IS development.

In the EU, Europe's core regions and the most IS-oriented Member States have the greatest potential advantages. While ICTs hold the promise of helping overcome the spatial disadvantages of some less favoured regions, for example enabling firms to overcome distance and gain access to remote markets and sources of information, or enabling information processing or creation work to be decentralised from core regions: 'there is nothing inevitable about the realisation of this benign vision. [It is just as likely that] information activities will become increasingly centralised in information-rich core regions and that the electronic highways will be used to control, rather than liberate, remote or peripheral regions' (Cornford J, Gillespie A and Richardson R 1996)

The less-favoured regions in the least ICT-oriented states need to maximise the quantity and quality of activity supported, exploiting the scope of ICTs to address their own specific disadvantages and achieve competitive advantage. They may be poorly prepared for this, not only in terms of infrastructural endowments, but also in the readiness of their firms, institutions and citizens to adjust to the wider implications of the information society, adopting new practices and modes of organisation and interaction.

The contribution of the Structural Funds to the development of the Information Society has been long-standing, particularly in terms of infrastructural and strategy-building actions. The following three examples illustrate the type of role played by the Funds to date.

- Investment in infrastructure under STAR and TELEMATIQUE. STAR, the Special Telecommunications Action for Regional Development, provided 780 Mecu of ERDF funding between 1987 and 1991 to accelerate levels of advanced telecommunications infrastructure investment in seven Member States. It was predominantly focused on supply measures (improving infrastructure, including network digitalisation, public data networks and cellular mobile radio), and was superseded by the TELEMATIQUE programme.
- Investment in strategy building. A first initiative was the 1994 Interregional Information Society Initiative (IRISI), involving six regions and supported by DG XIII (Telecommunications) and DG XVI (Regional Policy and Cohesion). This was then extended in the form of the Regional Information Society Initiative (RISI), which was launched in late 1997. The initiative focused on strategy building, with no additional resources for implementation, although regions could apply for RISI+ support, which provided finance for more implementation-oriented activity. The initiative has been evaluated, providing useful lessons for strategy building in this complex area.
- Other actions. Selected 1997-99 Objective 2 programmes already included an explicit Information Society dimension, e.g. in the UK (North East England, West Cumbria and Furness, Industrial South Wales, Yorkshire and Humberside, East Midlands, Greater Manchester), Italy (Marche, Piemonte, Toscana) and France (Aquitaine, Champagne-Ardenne, Languedoc-Roussillon, Picardie, Bretagne).

The Information Society has also become more significant in the policies and strategies of EU Member States - at both the national and regional levels. The rationale for the development of regional level IS strategies is multifaceted. First, the economic development role of regions is becoming more important and, as the experience of regional and local authorities in economic development planning increases, they are more able to react to the groundswell of ICT-related developments. Second, the spatial dimension of the new knowledge-based development has been increasingly recognised. The concept of the 'learning region' has emerged which stresses that regions need to be able to adapt to fresh ideas and evolve new organisational patterns - a key concept when applied to the challenge of the Information Society.

The Commission views the new 2000-06 programming period as one where the focus and volume of activity in the area of Information Society should increase significantly. Although many regions have promoted aspects of the IS under previous Structural Fund programmes - for example, support for telecommunications infrastructure, IT skills training, information access - the novel aspect of current thinking about the IS is that it requires programme managers to take a strategic approach to the provision, awareness and exploitation of ICT. As Taylor and Downes (2001) note however, any review of the importance of the Information Society in the programmes is likely to encounter a number of practical

difficulties, the central problem being that there is no standard definition of the intended scope of the IS concept.

From an analysis carried out within the framework of the IQ-Net network on partners, Objective 2 SPDs (2000-06) show that the role of the IS in the 2000-06 SPDs is commonly restricted to particular aspects of the strategies. Relatively few SPDs include a detailed or comprehensive analytical treatment of the regional situation as regards IS development. In some cases, the limited IS analysis in SPDs is linked to the parallel availability of more rigorous analyses which have informed the development of dedicated IS strategies in the region. Similarly, in most SPDs, the IS and/or ICTs are not explicit elements of the overall statement of strategic objectives.

At the priority and measure level however, the IS concept is clearly visible. All programmes have at least one priority with relevance to the IS, and most have more (though no programmes have priorities explicitly dedicated to the IS). Overall, there is no standard, ideal combination of IS policies, though the IS dimension can be incorporated into a variety of policy aims. This is reflected in the diversity of IS-related measures found in the SPDs:

- infrastructure: a common measure in past programmes, this typically involves support for ICT infrastructure and the ability of individuals and businesses to make use of it;
- business environment: a more frequent and targeted option than infrastructure improvements in the 2000-06 round, such measures aim to improve the IS-related equipment and resources of the business economic infrastructure;
- business development: as well as addressing supply issues, many IS-influenced measures aim at promoting demand for ICTs;
- RTDI: a range of measures is included here, such as support for technological development, the innovation capacity of businesses and training;
- equity: IS measures can address issues of urban and rural exclusion by using ICTs to improve social and economic access for disadvantaged groups and communities;
- training: human resource development is an essential element as serious skills gaps are putting a brake on the development of the IS;
- equal opportunities: given the recognised differences in gender access and usage of ICTs, there is clear scope for IS-related measures to address imbalances;
- sustainable development: many Structural Fund programmes aim to pursue sustainable development and to facilitate IS, though an explicit link tends not be made between these parallel objectives; and

- strategic initiatives: co-financed activities in this area include developing coherent strategic responses to the IS challenge, and improving information for decision-making.

Mainstreaming the IS in the Structural Funds has however remained difficult. The next stage for regions will thus be that of following through the reorientation of strategies into the programme implementation stage.

Outputs from the Objective 1 and the Objective 6 1994-99 programmes

It is not possible within this study to draw an overview of the outputs, results and impacts achieved by the Structural Fund programmes implemented in the past programming period. Attempts at this have been undertaken in dedicated studies, i.e. in the *ex post* evaluation of the programmes, but these underline that quantifying the outputs, results and impacts of past programmes is a particularly challenging task, for a number of reasons: first of all, the lack of monitoring data for the programmes; monitoring systems in the 1994-99 period focussed mainly on financial data and left aside the issue of physical monitoring. Second, even when physical monitoring data is available for the programmes, this is often unrealistic (e.g. based on the assumptions made by project applicants) and/or based on definitions that are not harmonised across (and often even within) programmes, which hinders the possibility for aggregation. Finally, with regard to particular impacts, assessing the impacts delivered by the programmes as opposed to other initiatives implies the need to address double counting, displacement effects and additionality, but this is often complicated due to the programmes' territorial, functional and financial overlap with other initiatives.

This having been said, Table 11 below still provides an insight into the effects delivered by Structural Fund programmes in the 1994-99 programming period (1995-99 for Austria, Finland and Sweden) with regard to Objectives 1 and 6, based on the quantifications made in the *ex post* evaluations for these Objectives. The table covers five main areas: transport infrastructures realised; HR development (training under ESF); SME support; RTD initiatives for SMEs, and employment generated, reflecting the information available from the above mentioned evaluation reports (it is structured in particular on the basis of the data provided in the Objective 1 *ex post* evaluation); as can be seen, not all data is available across all countries.

Other information on the outcomes of the programmes that would be of interest to this study – such as the outputs and results in terms of ITC development, urban renewal and others – are not available on a country-by-country basis in the reviewed evaluation documents.

Table 11: Outputs of the 1994-99 Objective 1 programmes and 1995-99 Objective 6 programmes (Finland and Sweden)

Country	Transport				HR		SME support	RTD	Employment
	Motorway constructed (Km)	Other roads constructed (Km)	Other roads improved (Km)	Rail constructed (Km)	No. ESF training beneficiaries	No. of unemployed ESF trained	No. of SMEs supported	No. of SMEs supported for RTD projects	Employment created
Austria (1995-1999)	n.a.	n.a.	n.a.	n.a.	12,369	n.a.	263	15	5,387 (+6,067 secured)
Belgium	22	n.a.	33*	n.a.	142,525	n.a.	2,512	103	17,035
Finland (O6)	-	-	-	-	110,000	n.a.	3,700 new firms	n.a.	3,200+ 9,000 saved (estimated)
France	n.a.	3	21.5	n.a.	230,695	n.a.	361	n.a.	5,200 (estimate)
Greece	316	n.a.	615	441	521,691	100,394	1,263	70	390,000
Germany	n.a.	n.a.	3,500*	n.a.	700,000 (up to 1998)	n.a.	26,555	1,900	57,214
Ireland	n.a.	n.a.	2,211	n.a.	n.a.	n.a.	n.a.	n.a.	212,874
Italy	n.a.	253.6	493.6	n.a.	1,378,182	n.a.	105,344	n.a.	73,727
The Netherlands	18.5	n.a.	n.a.	n.a.	25,683	n.a.	309	n.a.	7,342
Portugal	43	n.a.	23,237*	188.7	1,374,506	74,839	5,008	n.a.	6,656
Spain	3,650.5	n.a.	482	n.a.	4,453,444	217,240	61,916	25	n.a.
Sweden (O6)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,000+ 1,800 maintained (estimated)
UK	n.a.	18.55	n.a.	127.2	n.a.	n.a.	10,657	n.a.	22,249 (Merseyside only)

Source: ECOTEC (2003) & Katajamäki (2002)

8.3 Power of delivery mechanisms and the partnership principle

Structural Fund governance and delivery mechanisms

As has been seen, the importance and role attached to Structural Fund programmes has dramatically increased over time. In line with this, the management of Structural Fund programmes has progressively been integrated into national policy contexts. This has however proved to be a complex process and thus has occurred in different ways and with different characteristics in the various Member States.

Given the different domestic policy contexts and the different scale and scope of funding, the roles played by national governments, regional administrations and sub-regional actors are often significantly different across the EU and, in some cases, also within the Member States. The allocation of responsibilities and roles in the management and implementation of the programmes is a useful indication, along with the strategies implemented, of the degree to which the programmes are likely to contribute to territorial cohesion and of the level to which this may occur.

Structural Fund governance

In broad terms, and bearing in mind that any typology of institutional arrangements in implementing the funds is to a certain extent arbitrary, as no typology would be able to capture the many factors in the equation, nor the dynamic aspects that characterise Structural Fund policy-making, a broad distinction can be operated in relation to the degree of centralisation of Structural Fund policy-making and implementation, looking in other words at where responsibility for the management of the funds lies (Managing Authority). In the past programming period, while in some countries such as Austria, Belgium, Germany, Italy and the Netherlands, Structural Fund programme management was devolved; in others, i.e. Denmark, Finland, France, Greece, Ireland, Luxembourg, Portugal, Spain, Sweden and the UK, Structural Fund implementation was dominated by central government departments, either because management responsibility fell under the competence of national government administrations or because it was assigned to representatives of the national governments in the regions (this was the case for example of England, France, Greece, Portugal, Spain). As has been noted (Bachtler J and Taylor S, 1999):

In some countries this central government role is more marked than in others, as in France, Sweden, the UK, Luxembourg, Denmark and Finland. Either central government departments (the National Agency for Industry & Trade in Denmark, the Ministry of Interior in Finland, the Ministry for Industry & Trade in Sweden) or the regional representatives of central government (e.g. the Regional Prefects in France or Government Offices in England) chair the Monitoring Committees and take responsibility for the final funding decisions, although some aspects of programming management may be devolved or delegated to special executives or committees.

It is evident that the degree of centralisation of each country and the existence or non-existence of regional authorities has had an impact in the governance of Structural Fund programming from the early days: the federal states for example managed the funds from the beginning in a devolved framework. A number of scholars, though, have argued that the

implementation mechanisms inaugurated with the Structural Funds have had an influence on national governance, facilitating in a number of countries a shift towards devolution and regionalisation. Fabbrini and Brunazzo (2003), for example, observe that the European regional policies by their nature are bound to undermine centralist models for the organization of the territorial systems of the member states of the European Union (EU), although they are not necessarily going to generate quasi- federal solutions.

Whatever the causalities of the on-going devolutionary trends affecting Italy, the UK and the Nordic Countries may be, looking in particular at Structural Fund implementation, it appears that a number of countries that would generally be viewed as 'centralised' in the past programming period can now be considered to have become more devolved or regionalised: i.e. Sweden, the UK and, to a certain degree, also Ireland. In the case of the first two countries, the Structural Fund programmes are now managed under the responsibility of new regional bodies, whereas in the latter case (Ireland), the move towards regionalised implementation is due to the subdivision of the national territory into two NUTS II units and subsequent approval of two distinct (but almost identical) regional OPs. In this case, though, despite the creation of two regional Assemblies responsible for the implementation of the two regional OPs, the role of the national government remains strong and indeed, predominant (in particular as regards the coordination of the CSF/NDP).

Of course the subdivision between the centralised and devolved implementation of the funds is not clear-cut, for example, while in Finland and Spain national Ministries figure as Managing Authorities, regional governments also play a role. In addition, differentiations also exist within countries, for example in Italy the management of Objective 2 programmes is more devolved than that of Objective 1 programmes, for which the national Ministry of Economy and Finance operates a strong coordinating role, as the responsible authority for the Community Support Framework for the whole of the *Mezzogiorno*. Bearing this caveat and those others mentioned above in mind, the table below presents an overview of the current degree of centralisation or devolution/regionalisation of Structural Fund implementation in each Member State.

Table 12: Structural Fund implementation responsibilities (level of Managing Authority function). Period 2000-06

Centralised	Intermediate	Devolved/regionalised
Denmark	Ireland	Austria
Greece		Belgium
Finland		Germany
France		Italy
Portugal		The Netherlands
Spain		Sweden
		UK

Table 13: The Taylor Model for Structural Fund Implementation

Type of System:	Member State	Project Appraisal	Project Selection
<p><i>Subsumed Systems:</i> Structural Fund project generation, appraisal and selection functions are largely embedded within established domestic policy channels. Projects are generated and appraised, and decisions made on Structural Fund co-financing through pre-existing systems, by the relevant competent authorities where, at the programme development stage, participating economic development organisations (e.g. government departments, agencies) bring forward those aspects of their strategies and programmes, which the Structural Funds could co-finance. These organisations are then allocated envelopes of funding to implement those schemes or projects that are accepted for inclusion in the programme. Where business development schemes are co-financed, firms apply to the scheme managers, and are awarded funds for projects that may include a EU contribution. These applicants do not complete separate Structural Fund forms, or go through a separate decision-making process, and the relevant agency often decides alone on both the domestic and EU parts of the funding package.</p>	<p>Austria, (Greece), Germany, (Luxembourg) (Portugal) Spain</p>	<p>Secretariat, expert panels and/or technical committees</p>	<p>Dedicated Structural Fund Committee</p>
<p><i>Mixed Systems:</i> Structural Fund decision-making is undertaken on the basis of pre-existing national administrative structures, however with procedures which give some visibility to Structural Fund programmes and interventions.</p>	<p>Finland, France, Ireland, Italy</p>		
<p><i>Differentiated Systems:</i> Can be found where Structural Fund programmes are considered to be separate instruments. Here, a range of economic development actors, through a discursive consultation process, develop Structural Fund policies, with applications then being invited under the programme. Recommendations on the award of Structural Fund co-financing are prepared by secretariats, single competent agencies and/or panels of experts, using a framework agreed among the programme partners (often approved by the Monitoring Committee). Decisions are then taken on a partnership basis by dedicated decision-making committees. Committees are typically composed of a representative selection of programme partners brought together to make project decisions on behalf of the whole programme or a geographically targeted part of it.</p>	<p>Belgium, Denmark, The Netherlands, Sweden, UK</p>	<p>Usually single competent authorities</p>	<p>Usually single competent authorities</p>

Source: Taylor, Bachtler & Rooney (2001), Op. Cit.

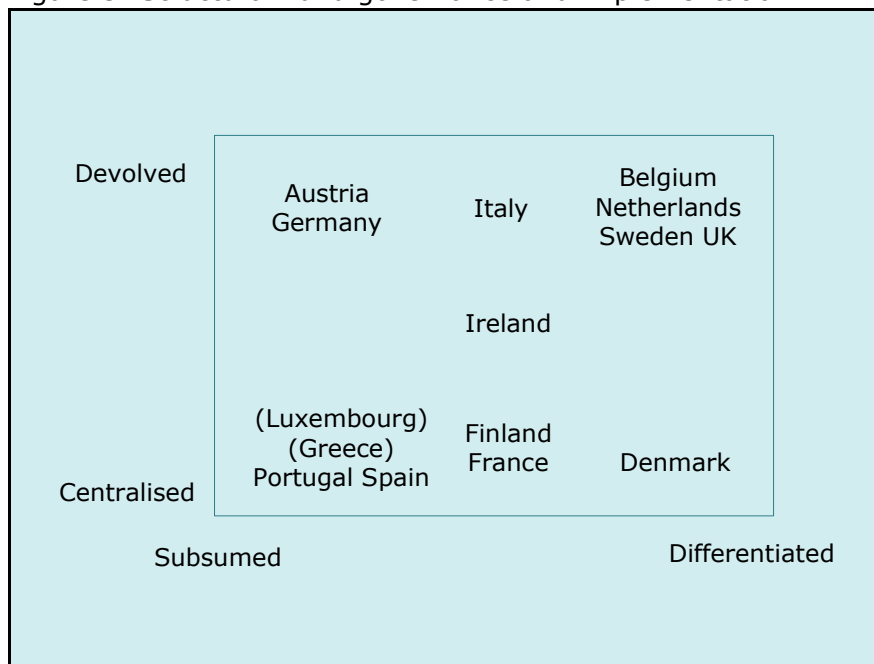
Structural Fund delivery

Another useful distinction that may help us to better understand Structural Fund implementation in the various EU countries is that suggested in the framework of IQ-Net research by Taylor in relation to the delivery of Objective 2 programmes: this approach looks at the centres for decision-making on co-funding allocation as a criterion for differentiation and is based on the 'administrative additionality' of the organisations in charge of this, i.e. the extent to which decision-making is undertaken using specially established systems, or pre-existing administrations. This model can also be applied to the Objective 1 countries: the Member States can be seen to exist on a continuum: at one extreme lie those countries where dedicated systems can be found, established on an *ad hoc* basis for deciding upon Structural Fund co-financing. At the other end of the spectrum are those countries where Structural Fund programmes are channelled through domestic policy decision-making. These two extremes have been labelled, 'differentiated systems' and 'subsumed systems'.

In reality, most Member States' systems display elements of both of these approaches and can therefore be considered mixed. In Italy, for example, Structural Fund programmes are the responsibility of the regional administrations but with the creation within the regional administration of an *ad hoc* Structural Fund Unit (in general the Managing Authority for the programme is represented by the Region's President, while an *ad hoc* DG acts as the programmes secretariat).

A cross-analysis of the two typologies above is meaningful in understanding how differentiated the governance of Structural Fund programmes is pursued across the Union (see Figure 5 below).

Figure 5: Structural Fund governance and implementation



The Structural Funds have also contributed to the blossoming of levels of governance lower than that of the regional level, through the creation of *ad hoc* organisations at the local level, usually displaying the functions of implementation and delivery (e.g. project generation and/or selection). This has occurred for example in both Austria and Finland.

In Austria, to face the challenge of implementing Structural Fund programmes, which had a brand new approach in terms of the domestic regional policy tradition, Regional Management Offices (RMO) were created with the functions of: development and implementation of regional projects and programmes; information particularly in relation to EU Structural Funds and other EU action programmes, and increasing visibility and accessibility of these funding sources in the region, promoting networking and regional level development. The RMOs are comprised of representatives from pre-existing organisations, such as government owned companies, municipalities organised as an association and owners of an operative company; associations of municipalities, politicians etc. and are funded through a mixture of sources, such as membership subscriptions from the municipalities, funding contracts from the Land (including Structural Fund co-financing), contracts from Leader, project-related funding and other service contracts. Since their establishment, the regional managers and management offices are seen as having played an important role in identifying regional projects, communicating between various different involved actors, creating and encouraging networking at the regional level, and of having a knowledge of the EU and other funding sources that could be used to support regional level initiatives. The utility of these organisations is such that a debate is now taking place in Austria to assess whether they should be retained after 2007, even though Structural funding in the country will by then be minimal.

In Finland, the Ministry of the Interior has overall responsibility for the design and coordination of regional policy, while the Ministry of Trade and Industry, is responsible for the implementation of regional policy through a network of 19 regional business service offices throughout Finland. Structural Fund implementation reflects the centralised historical tradition of regional development: the regional councils, created in 1994, were assigned the role of coordination, planning and implementation of national and EU regional policy but with only a marginal role compared to that of the central government and the municipalities. Structural Fund management, though, assigned to Programme Managing Committees, was placed in the regional councils in each of the six Objective 2 areas, and was composed of representatives of the region, the local offices of the national ministries and social partners. While project funding was largely decided upon by the central ministries or by their local offices, the Regional Management Committees examined and formally adopted all projects, giving them some control over how the SPDs were implemented at the regional level.

In those countries that have been classified as differentiated, the creation of *ad hoc* organisations for programme management, acting in close coordination with local partnership, is often the result of a pre-existing national centralised policy-making approach combined with a weak sub-national level. In Denmark, for example, the programmes encouraged governance at the local level by influencing the creation of regional business partnerships. For example, in

1994, when the geographical coverage of Objective 2 was expanded to cover the whole of Lolland, a network of business people on Lolland decided that it would be better to promote the interests of business on the island as a whole, rather than in separate initiatives by business centres scattered throughout the nine (mutually competing) municipalities. They decided to create a co-operative alliance between the businesses and the public and private organisations, which supported them (CSES 2003).

Partnership, 'bottom-up' policy-making, the programming method: improved policy integration

Although the cross-sectoral nature of the policies for territorial cohesion were discussed above, it is worth underlying, while dealing with delivery mechanisms, that Structural Fund programmes have encouraged cross-sectoral approaches through the introduction of partnership mechanisms of decision-making and by promoting local-level debate and action on policy priorities and interventions. Already in 1999 the Thematic Evaluation of the Partnership Principle underlined that

Partnership, although a relatively recent innovation, has already become deeply embedded in all stages of Structural Fund programming. There are major differences in partnership practice and consequences between different Structural Fund Objectives and Initiatives. This is especially so between territorial and sectoral funds on the one hand and Objectives 3 and 4 on the other. However, across all funds an extension of partnership can be seen to include more socio-economic actors and so called horizontal partners and an extension of the roles and activities of partners in terms of Structural Fund programming tasks. (Kelleher, Batterbury & Stern 1999)

The partnership principle applies to both horizontal and vertical aspects of policy coordination. On the one hand, the Structural Funds have encouraged different actors, from diverse socio-economic sectors and backgrounds, to pull together and contribute dialectically to the definition of policies and, in some cases (e.g. in the UK), their delivery. On the other hand, they have encouraged dialogue between actors from different territorial scales, enabling the integration of different perspectives and visions on the needs acknowledged with regard to the functions to be attributed to the territories. Structural Funds in this area have been an exceptional motor of innovation, often inaugurating practices and methods that have subsequently then been exported into the national policy realm.

In Sweden, for example, national regional policy has recently been re-oriented towards new programme-oriented models, i.e. the Regional Growth Agreements (which will, in 2004-07 become Regional Growth Programmes). These are the key instruments of county-level coordination in that they provide a coordination framework for both regional planning and government spending in the regions (Yuill 2003). This new formula for economic development foresees a clearer distribution of responsibilities between government and local authorities, encouraging the municipalities within county boundaries to engage in and combine efforts towards furthering economic development.

Structural Fund programming, by favouring 'bottom-up' approaches to policy-making and delivery, has also contributed to increasing the potential for policy innovation at the local levels. In Italy, for example, new policy instruments called PITs (Programmi Integrati Territoriali, Integrated Territorial Programmes) or PISL (Programmi Integrati per lo Sviluppo Locale, Integrated Local Development Programmes) have been introduced within the context of the current programmes characterised by a 'bottom-up' definition of policy priorities and by a cross-sectoral approach.

The PISL introduced in the Objective 2 SPD for Toscana region for example, has been defined as 'a set of integrated actions', of an inter-sectoral nature, which encompass both material and non-material infrastructural interventions and aids to enterprises converging towards a specific common objective, such as to justify a single implementation and project selection procedure. This set of integrated actions is a coherent set of interventions, of an inter-sectoral nature, economically and functionally indivisible and based on an idea-strength and shared through partnership-based procedures.

Acting on a local territorial scale, the PISLs are the outcome of a 'bottom-up' programming effort by the local social, economic and institutional partners, which are coordinated by the provincial authorities. Project selection is undertaken on the basis of the analysis of expected impacts forecasted. The core principle of the PISL is that of integration, *in primis* territorial integration, i.e. the coordination and unity of the interventions in a territorial (local) dimension. These instruments also promote environmental integration, i.e. the achievement of local environmental objectives; financial integration, i.e. the optimal use of resources (public and private, including project financing); functional integration, i.e. the integration of actions which belong to different priorities and measures of the SPD, e.g. infrastructures and aids to businesses (at least two different measures), providing, as such, enhanced scope for the delivery of increased territorial cohesion.

The Leader Community Initiative has also promoted integration and partnership involvement and is a good example of a case where Structural Fund programmes are facilitating the implementation of integrated strategies on the territory and, as such, promoting territorial cohesion.

More generally, prior to Structural Fund implementation in most countries there were no programme-based, multi-annual strategies for economic development. The Structural Funds represented a major improvement in the approach to policy-making. The programming method generated more comprehensive approaches to economic development, where different types of interventions (e.g. infrastructure development, business support and training courses) would be pooled together towards the objective of socio-economic development.

9 The spatial dimension of the Structural Funds – the geography of spending

Structural Fund programmes have been drafted as regional economic development programmes. Past research stresses that while spatial considerations inform their design and are explicit in many instances, a variety of approaches are apparent across the different programmes, including those that emphasise largely sector-based or macroeconomic issues, and have little spatial or urban focus.

The degree to which there is accordance with, or correspondence to the goals and concepts of European spatial development policies could be seen in many cases as coincidental. However as has been argued, there is evidence to suggest that Structural Fund programmes could contribute to the delivery of (depending largely on national policies) increased territorial cohesion.

Raising the question of the coherence between policy aims in the field of European (and national) regional policies and European spatial development policies is however of itself insufficient. As such, the assessment of goal coherence needs to be complemented by insights on the geography of spending, i.e. on which types of areas receive Structural Fund assistance.

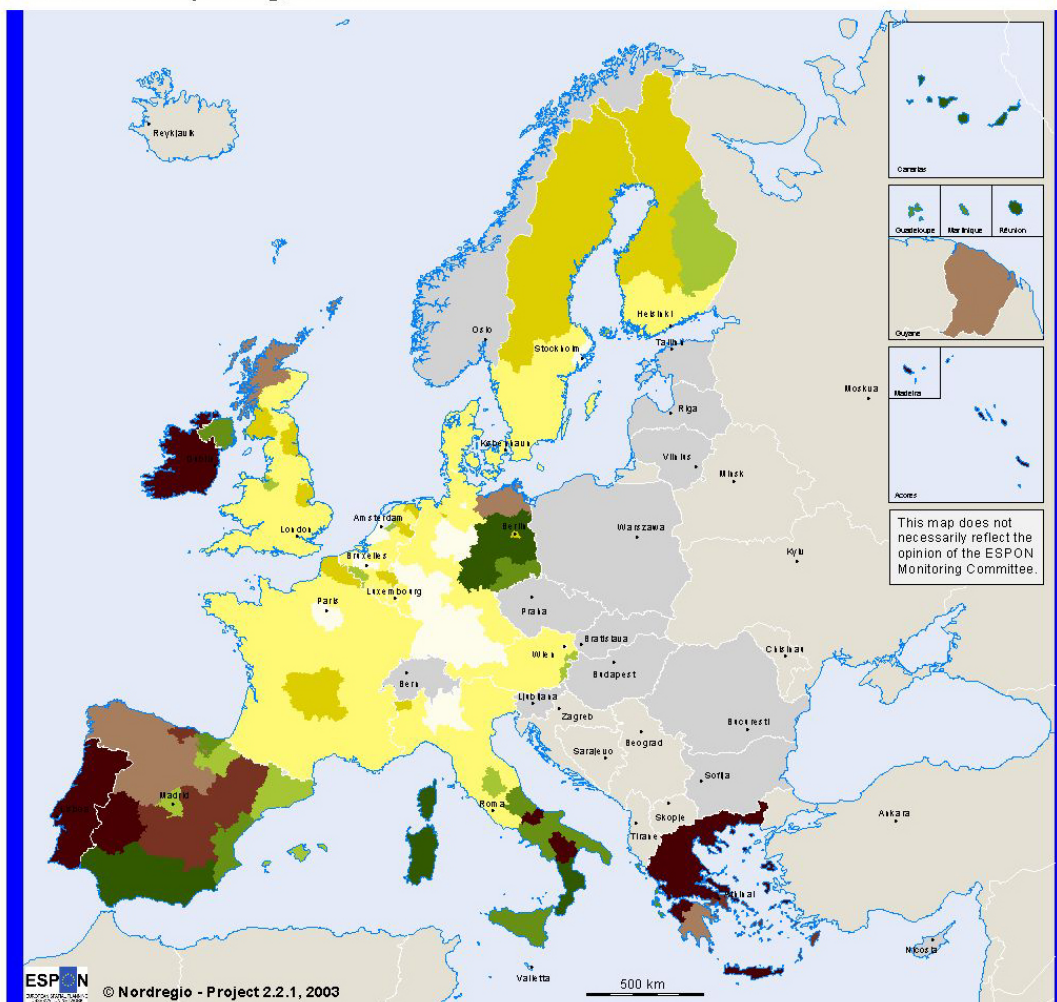
During this project extensive efforts were made to gather consistent data on the geography of Structural Fund spending during 1994-99. As such, it has been possible to localise in a consistent manner Objective 1, 2, 3, 5b and 6 assistance, which corresponds to approx 93.5 percent of the Structural Funds assistance. Furthermore, the Cohesion Funds have also been taken on board. The chapter on the working methodology provides a more detailed background to the way in which this data has been collected and systematised.

Map 9 clearly reflects the dominance of Objective 1 areas and presents the general core - periphery image of Europe. It does however allow for a more differentiated picture of the regional distribution generally revealing that regions with major cities receive less funding *per capita* than their neighbouring regions (e.g. Madrid, Barcelona, Bilbao, Athens, Berlin, Amsterdam, Hamburg, Paris or Stockholm) with some exceptions for old industrial regions (e.g. Bremen, Merseyside or Tyneside).

In the following we will present an interpretation of the spending information and its territorial effects. When talking about territorial cohesion or polycentric development, it is however important to distinguish between development at different geographical levels.

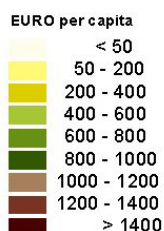
Map 9: Structural Fund spending per capita 1994-99 (1st draft)

Structural Fund spending, 1st draft



Structural Fund spending 1994-99 (Objective 1,2,3,5b,6 and Cohesion Fund)

Geographical Base: Eurostat GISCO



Origin of data: National data collection

Source: Nordregio

Whereas “regions” (on any level) are the primary spaces of Structural Funds action, during the period 1994-99, cohesion predominantly occurred at the inter-national rather than the region level, with interregional cohesion not being manifest to any larger extent. Furthermore, the smaller the measuring unit, the less movement towards interregional cohesion can be observed. Partly then, cohesion seems to carry a fractal dimension to it which is somewhat analogous to the famous Steinhaus Paradox. This is exemplified by the distribution of GDP (adjusted for purchasing power) in 1995 and 2000 across the EU15 (Table 14). The Dissimilarity Index is the sum of the differences between the share of GDP and the share of

regions, providing an indication of how evenly (in this case) GDP is distributed amongst all European regions. The value 0 would indicate that all regions have a similar GDP, while the value 1 would indicate a contrary situation.

Table 14: Dissimilarity indices of GDP in PPS in 1995 and 2000 at NUTS 0, 2 and 3

EU15 at:	Dissimilarity index		Units change 1995-2000	indicating:
	1995	2000		
NUTS 0	0.465	0.460	- 0.005	increasing cohesion
NUTS 2	0.339	0.341	+ 0.002	decreasing cohesion
NUTS 3	0.531	0.620	+ 0.089	decreasing cohesion

Source: New Cronos

At least for GDP then the trend alluded to above seems to have been corroborated. Simply by adjusting the scale of analysis we can then observe varying degrees of cohesion. This constraint is important to keep in mind when analysing socio-economic development across the European territory. Another aspect to this is that the measurement example above does not disclose any *spatial* patterns whatsoever in the distribution of GDP or in changes to it, for which numerous other methods, which need not be described here, are available.

A second constraint relates to the existence of the ever sought-after estimations of the actual *spatial effects* of Structural Fund interventions. The largest restriction here lies in the impossibility of establishing causal relationships between the variables, other than through use of simple macroeconomic statistical exercises. Given the relatively limited amount of available input information across the entire EU15 territory, this task is however better suited to the case studies presented in chapter 10 of this report. Thus the main issue of measuring the impact of the programmes' on the European territory remains in the background, while in the meantime we are forced to simply study the relations, correlations or coincidences between the variables.

Nonetheless, the discussion on spatial development concepts, such as territorial cohesion and polycentric development, illustrated that these concepts often display their inherent inconsistencies when applied at various geographical scales. Consequently, the potential contribution of the Structural Funds to achieving these spatial policy aims will depend on the geographical level in question.

This is best illustrated by looking at the geography of Structural Fund spending according to the types of Functional Urban Areas identified by ESPON 1.1.1. In order to bolster the European polycentric urban system and the number of globally important functional urban areas (*macro* level) it seems reasonable to concentrate funding on existing European, and perhaps on some promising national functional urban areas, so that they can improve on their competitiveness. For improving trans-national, e.g. Baltic Sea, and national polycentric urban systems (*meso* level) it seems more plausible however to stress funding in national or perhaps some promising regional functional urban areas to support them in strengthening their position. Aiming at

polycentric development at the regional or local level (*micro* level), one certainly wants to give Structural Funds assistance to local functional areas in order to improve their position compared to regional functional areas and to a certain degree it can be considered desirable to assist regional functional urban areas to develop towards a more polycentric spatial pattern.

An assessment of where Structural and Cohesion Fund assistance has been used during the 1994-99 period shows that more than half has been used in what is categorised (by ESPON 1.1.1) as functional urban areas of local or regional importance, less than 20 percent went to the *meso* level, approx 10 percent to the *macro* level and approx 15 percent to areas not categorised as functional urban areas. The significant difference, as regards total spending is also related to the type of measures stressed at the various levels. The spending *per capita* shows a similar pattern, the *macro* and *meso* levels received approx 220 Euro *per capita*, whereas the *micro* level had about 50 percent more (approx. 320 Euro *per capita*). Regions without any functional urban areas are placed in-between the *micro* and *macro/meso* levels as regards spending *per capita*.

Table 15: Structural Fund (SF) assistance for different types of functional urban areas.

	International FUA	National FUA	Regional/Local FUA	Non FUA
SF spending <i>per capita</i> in €	212	220	321	255
SF spending on regional development and productive infrastructure (in % of total)	5,9	9,4	32,5	9,0
SF spending on agriculture, fisheries, rural development (in % of total)	0,6	1,8	6,7	1,7
SF spending on social integration and human resources (in % of total)	3,4	5,1	14,2	3,6
Cohesion Fund spending on transportation and environment (in % of total)	1,4	1,4	2,8	0,6
SUM	11	18	56	15

Source: ESPON 2.2.1 using the FUA typology of ESPON 1.1.1.⁸

9.1 Micro level

Traditionally, regional policy has focused on equity or efficiency encompassing mainly designated aid to classical problem areas.

Structural Fund programmes have often had an impact on the spatial distribution of economic development resources – not just within the Member States, but also within regions, as resources are channelled to the needier areas. (Bachtler/Taylor 2003:15)

⁸ The calculations are based on the ESPON 1.1.1 database on the types of functional urban areas within each NUTS III region. For NUTS III regions with more than one functional urban area, the Structural Fund assistance has been divided according to the number of functional urban areas present in the NUTS III region.

This is illustrated by the traditional focus on less favoured areas and on very small designation areas.

Within the ESPON 2.2.3 projects, attempts have been made to analyse the territorial effects of the Structural Funds in urban areas, i.e. at the *micro* level. The assessment of the Structural Funds in different types of urban areas however presented a rather fragmented picture.

Another approach might be to follow the overall policy ideas underlying ESPON and look into Structural Fund assistance at the *micro* level according to whether it goes to regions that are of a polycentric nature or not.

With this in mind, the ESPON 1.1.1 project developed a typology of regions that considered the degree of demographic equilibrium between the two largest functional urban areas influencing a NUTS II region. Thus it became possible to identify the regions that were mainly under the influence of one single urban area – i.e. monocentric – or influenced by two or more urban areas – i.e. polycentric.

Using this typology as point of departure it can be concluded that approx. 50 percent of Structural Fund assistance goes to non-polycentric regions, whereas about 32 percent go to regions with a potential for polycentric development, while only 18 percent of the assistance goes to polycentric regions. This division is however the result of Structural Fund geography and not of the amount of regions falling into the various categories. Of the NUTS II regions studied here, 84 were categorised as non-polycentric, and 127 as potentially or already polycentric regions (see Table 16 below).

This emerging picture that polycentric regions receive less assistance, is amplified further when looking at the spending *per capita*, which is clearly less in polycentric than in monocentric regions. Polycentric regions received on average 255 € *per capita*, regions with the potential for polycentric development received 326 € *per capita*, while regions that are dominated by the influence of one urban area (i.e. the second urban area shows a relatively weak influence) received 399 € *per capita* and regions that are influenced by only one or none urban areas – mostly rural areas under the primacy one urban area – received on average 655 € *per capita*.

Leaving aside questions of functional specialisation and accessibility and turning instead to the demographic aspects, it is obvious that the Structural Fund during the 1994-99 period mainly supported non-polycentric regions.

This certainly needs to be seen in the context of the programmes' content. At the *micro* level most decisions with regard to spatial issues will occur as a result of intra programme priorities, moreover, the Commission through the written guidelines for the programme documents can also influence them.

Table 16: Structural Fund (SF) spending in polycentric and non-polycentric regions

ESPO 2.2.1 interpretation of ESPON 1.1.1 classification	SF assistance to non-polycentric regions		SF assistance to regions with potential for polycentric development	SF assistance to polycentric regions
ESPO 1.1.1 classification	Regions with less than two FUA areas of influence	Regions with strong relative weight of first FUA and weak relative weight of second FUA	Regions with average relative weight of first and second FUA	Regions with low relative weight of first FUA and strong relative weight of second FUA
SF spending				
SF spending <i>per capita</i> in €	655	399	326	255
SF spending on regional development and productive infrastructure in % of total	4,1%	23,8%	19,1%	9,9%
SF spending on social integration and human resources in % of total	1,8%	11,1%	8,0%	5,3%
SF spending on agriculture, fishery and rural development in % of total	0,9%	4,0%	3,6%	2,3%
Cohesion Fund spending in % of total	1,0%	3,9%	0,9%	0,3%
SUM	7,8%	42,8%	31,6%	17,8%
Number of regions in the category	22	62	75	52

Source: ESPON 2.2.1 using the FUA level of polycentricity typology of ESPON 1.1.1.

More generally, the Funds are broadly considered to be responsible for the ***strengthening and empowering of the regional and local levels*** of governance, by facilitating local-level dialogue through the implementation of horizontal partnerships and by the creation of sub-national and often local organisations with specific functions associated with Structural Fund implementation. This often spills over from the domain of European regional policy, to pervade also national practices (such as in Sweden with the new regional policy bill passed in 2001 or, more generally, in Italy and the UK with the recent constitutional reforms).

By stimulating ***partnership*** work and ***bottom up policy-design***, in line with the subsidiarity principle, the Funds have also facilitated the tailoring of policies to needs and preferences expressed by those living and operating in the affected territory. In some cases, project selection is undertaken at the local level, enhancing the potential for acknowledging and exploiting the strengths and weaknesses of the territories. As has been illustrated, moreover, through the funds, innovative approaches to socio-economic development and instruments

have been utilised, including *territorially based integrated forms of programming*, such as the previously mentioned PISL and PITs in Italy.

In terms of concrete contributions to polycentric development at the *micro* level, Structural Fund measures addressing local/regional traffic-infrastructure and economic specialisation have shown a certain potential. In this respect we have previously discussed current Objective 2 programmes that stress in their strategy the need to address the poor transport infrastructure links between urban core and hinterland, as well as other programmes that target measures on urban areas, including urban development, regeneration or socio-cultural facilities, as well as measures on industrial, mining, fishing or rural areas or communities.

9.2 Meso Level

The rapidity of technological change, combined with market liberalisation and deregulation, has greatly increased the exposure of regions and countries to international competition. Enterprises have greater flexibility in the production and delivery of goods and services, while investment is also now more mobile. Especially within Europe, barriers to trade, investment and factor mobility have been reduced and governments are less able and willing to provide protection to sectors and firms. In this more globalised production environment, competition is increasingly seen as occurring between regions and cities, rather than between countries. Competitive success is thus now based on the ability to adapt and innovate, and to produce new ideas, products and services.

Through area designation territorial cohesion may be addressed and there is also potential for implicit polycentric development. The selection of areas eligible for support (at least as regards the regionalised interventions, i.e. those implemented under the current Objectives 1 and 2, and, in the past, Objectives 5b and 6) can represent a way for the increased spatial targeting of policies to take place. Of course, as has been pointed out in the discourse developed in this report, area designation can also represent constraints on the achievement of territorial cohesion and polycentricity, depending on the criteria underpinning such an exercise. It has also been underlined that in some cases, exclusion from the support of the regions' growth centres has indeed had the effect of not enabling the pursuit of a coherent strategy for competitiveness and growth.

With regard to territorial cohesion and polycentric development at the *meso* level, an initial impression can be gained by discerning to what degree Structural Fund assistance goes to functional urban areas of national importance as compared to other areas. This picture will then be discussed in further detail by introducing the spatial discontinuities and the rural-urban dimension.

Spending concentrating on national centres

Drawing upon the typology of FUAs developed within ESPON 1.1.1 an initial assessment can be made as to whether Structural Fund assistance supports urban areas holding national key

positions more than those of international or regional importance. For strengthening polycentric development at the *meso* level, the focus is on national FUAs strengthening the national settlement patterns and fighting the dominance of the international FUAs.

Looking into how funding was actually distributed in the 1994-99 period, it becomes obvious that national FUAs received slightly more funding than international ones, but that the lion's-share, both in terms of total spending and spending *per capita*, went to functional urban areas with regional profiles.

Table 17: Structural Fund (SF) spending in international, national, and regional FUAs

	SF spending <i>per capita</i> in €	Share of total SF spending in %
International FUA	212	11
National FUA	220	18
Regional/local FUA	321	56
Non FUA	225	15

The picture differs markedly from country to country, though the national breakdowns do generally confirm the Europe-wide picture. This implies that the Structural Funds did not particularly contribute to strengthening nodes in national polycentric urban patterns through their geography of spending. Accordingly, the contribution of Structural Funds to polycentric development at the *meso* level remains rather limited.

Spending in relation to spatial discontinuities

Turning our attention to territorial cohesion at the *meso* level, the picture begins to change. An increasing important issue of European cohesion policy at the *meso* level relates to the fact that regional disparities in economic development **within** countries are often larger than those **between** countries. Increasing disparities between regions challenge cohesion at the *meso*, i.e. national, level. A sufficient degree of national cohesion is thus now considered necessary in order to maintain a growing Europe, i.e. achieving European cohesion in a more competitive environment. This is perhaps best illustrated by the ongoing debate on 'rural-urban partnerships and rural areas *versus* urban areas' as regional growth centres.

Cross-border cohesion

The regional map of Europe is characterised by substantial territorial dissimilarities, not the least with regard to economic prosperity. Hitherto we have concentrated more on Europe-wide regional disparities, but hereunder the focus will lie on adjoining areas and cross-border economic disparities. The magnitude of this wealth gap is as a rule determined by on which level the phenomenon is examined: richer countries are bordered by poorer ones; within countries wealthy cities and regions are bordered by impoverished ones; within regions and cities prosperous neighbourhoods stand side by side with destitute ones, and so on. And as

usual, the smaller the scale, the larger the differences tend to be. Following is a short account on certain aspects of relative cross-border economic inequalities observed on NUTS 2 level. The word relative is here of significance, since absolute differences would entail a different picture. However, as the primary interest is connected with Structural Fund and Cohesion Fund spending we have here selected the former point of view.

We have in general excluded sea "borders" unless there exists both a fixed rail and a fixed road link, thus e.g. Øresund is included as a "border" but not the English Channel or the Strait of Messina. With regard to both data availability and the objective of this project we have also chosen to study only internal EU15 borders. All in all this delimitation results in some 417 separate land borders within the EU15.

Typically a (EU15) NUTS 2 region shares a land border with between three and five neighbouring regions. The most extreme region within the area of study – the Spanish Castilla y León – has as many as 11 bordering neighbours. On the other hand, apart from all islands not land linked, there are 13 EU15 regions with only one neighbouring region within the study area.

When trying to link cross-border inequalities to regional policy spending there at least theoretically exists the possibility that funding spent in one region effects the situation in the neighbouring one, and vice versa. As a result of this an analysis focusing on regional entities on both sides of the border becomes imperative. For analytical purposes we have therefore created "Virtual border regions". These are constructed so that each pair of regions, lying on both sides of a land border, has been merged to a new region (Figure 6). This method involves that data from most regions is calculated twice, thrice, or more (directly depending on the number of neighbouring regions) would the entire EU15 be summed up.

Figure 6: Construction of "virtual border regions"



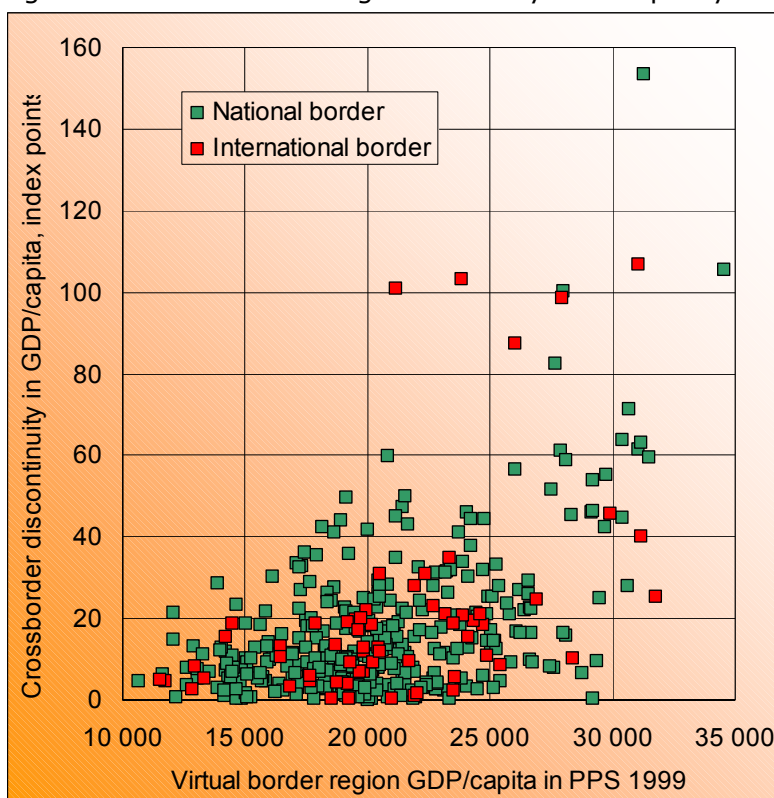
From the perspective of the Structural Funds, this mode of procedure (theoretically) also presupposes that all Structural funding is utilised for cross-border actions. This brings about a problem with the approach, as funding spent in a region with several borders likely effects cross-border cohesion in all directions, not only across just that specific border currently under scrutiny. We are therefore once more constrained to merely observing coincidences and

correlations rather than causalities. However, from the point of view of multiterritorial cohesion, this aspect could be characterised as being equally imperative as any other.

Economic divides within EU15

The sharpest economic cleavages of the entire EU15 are along its eastern boundary, i.e. on the borders with the post-planning economies. Although no exact data exists, probably the largest land divides are to be found along the Finnish border with Russia (i.e. Murmansk Oblast, the Republic of Karelia and Leningrad Oblast), where disparities in for instance GDP per head (measured in purchasing power) can extend to a ratio of 1:4. Also along the Mediterranean such abysmal gaps most likely exist.

Figure 7: Size of border region economy and disparity across border



Source: ESPON database version 2_3

However, within the EU15 the largest cleavages in 1999 are between the capitals and other financial centres and their surrounding regions. London (Inner), Luxembourg (Grand Duchy), Brussels, Hamburg and Paris (Île de France) top the list, with most other capital regions (where these constitute separate NUTS regions) not laying far behind. This is hardly a surprise as these cities not only act as the main financial centres of Europe but also contain much of the politico-administrative apparatuses of their respective countries. Thus “the second wave” of disparities is in a way more interesting. Also when excluding the capital regions, among the remaining 50 largest divides, not a single one includes “equal” partners on both sides of the border, i.e. it is almost exclusively a clear-cut matter of a divide between a large city region

and its more rural neighbour. Therefore Cross-border “anti-cohesion” within EU15 could be said to stem more from the urban structure and the level of polycentricity than from real territorial imbalances. These “islands of wealth and prosperity” are the source for the largest discontinuity with regard to GDP per capita, bringing about that, in general, the larger the joint economy of the border region is, the higher is the inequality across the border. Furthermore, since most capital or large city regions within EU15 are not bordering another state, taken as a group, disparities across international borders are substantially lower than equivalents across national ones (Figure 7).

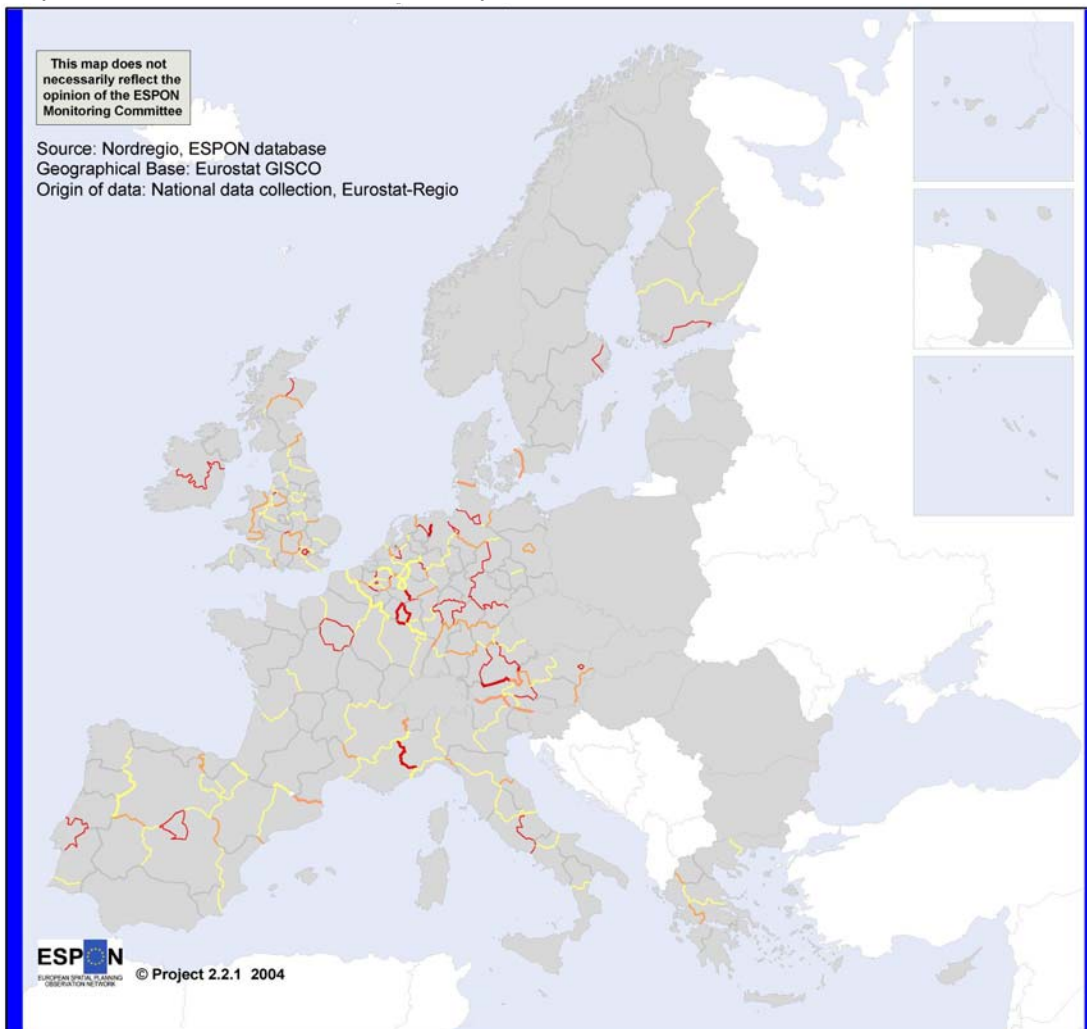
Adding a spatial dimension to the situation at the end of the programming period, Map 10 presents the relative difference in GDP per capita in 1999 adjusted for purchasing power and measured as deviation from the EU15 average. Thick lines represent international borders and thin lines correspondingly national ones.

The red colour denotes such borders where the wealth gap is substantial (more than 30 index points). All in all these borders number 63, of which 53 are national ones and the remaining ten international (the Grand Duchy of Luxembourg accounting for four of these). As these are based on NUTS 2 units, and Germany alone accounts for a fifth of all EU15 NUTS 2 units, the largest number (27) of borders with a very high discrepancy is to be found there, the contours of former East Germany still for the most part clearly visible. Much of the remaining large economic gaps constitute borders separating capital regions from their surroundings. These can be found in all countries apart from Germany.

Such borders where the discrepancy is not huge but still significant (orange for between 20 and 30 index points, yellow for 10-20) number 175 in all. In this category the UK with 39 such borders is clearly overrepresented. Also Germany, Spain, Italy and France have in this respect a relatively fragmented economic landscape, albeit the number of regions (and hence the number of borders) in these countries also being quite substantial.

On the other hand economic disparities across nearly half (43 percent) of all European internal borders could be characterised as negligible, or at least not noteworthy. Sweden has the most balanced pattern (Stockholm being the only exception) and Portugal as well has in this respect small internal variations. Also for roughly half of all French and Greek borders this is the case.

Map 10: Cross-border economic disparities in 1999



**Territorial discontinuity on GDP per capita between contiguous regions.
GDP in PPS in 1999 indexed to the EU15 average**

Between countries	Inside country
Negligible difference (deviation <10 index points)	Negligible difference (deviation <10 index points)
Small difference (deviation 10-20 index points)	Small difference (deviation 10-20 index points)
Medium difference (deviation 20-30 index points)	Medium difference (deviation 20-30 index points)
Large difference (deviation >30 points)	Large difference (deviation >30 points)

Linking these cross-border discontinuities to Structural and Cohesion Fund spending necessitates moving from the true regional level to the “virtual border region” one. Measuring the theoretical regional economic impact of spending (annual average spending as a share of the virtual border region’s GDP in 1999) implies a weak but not insignificant correlation between the two, where high levels of spending coincide with lower gaps across the border and vice versa. Whereas such border regions where spending as a share of GDP exceeded the EU15 average spending, had a median divergence of 11 index points across the border, this divergence was 25 corresponding points for those regions where structural spending was below the Union average. One self-evident inference is that structural spending in terms of relative volume is (especially within the framework of Objective 1) directed towards such regions that

display a weak economic performance and hence normally also have smaller cross-border variations.

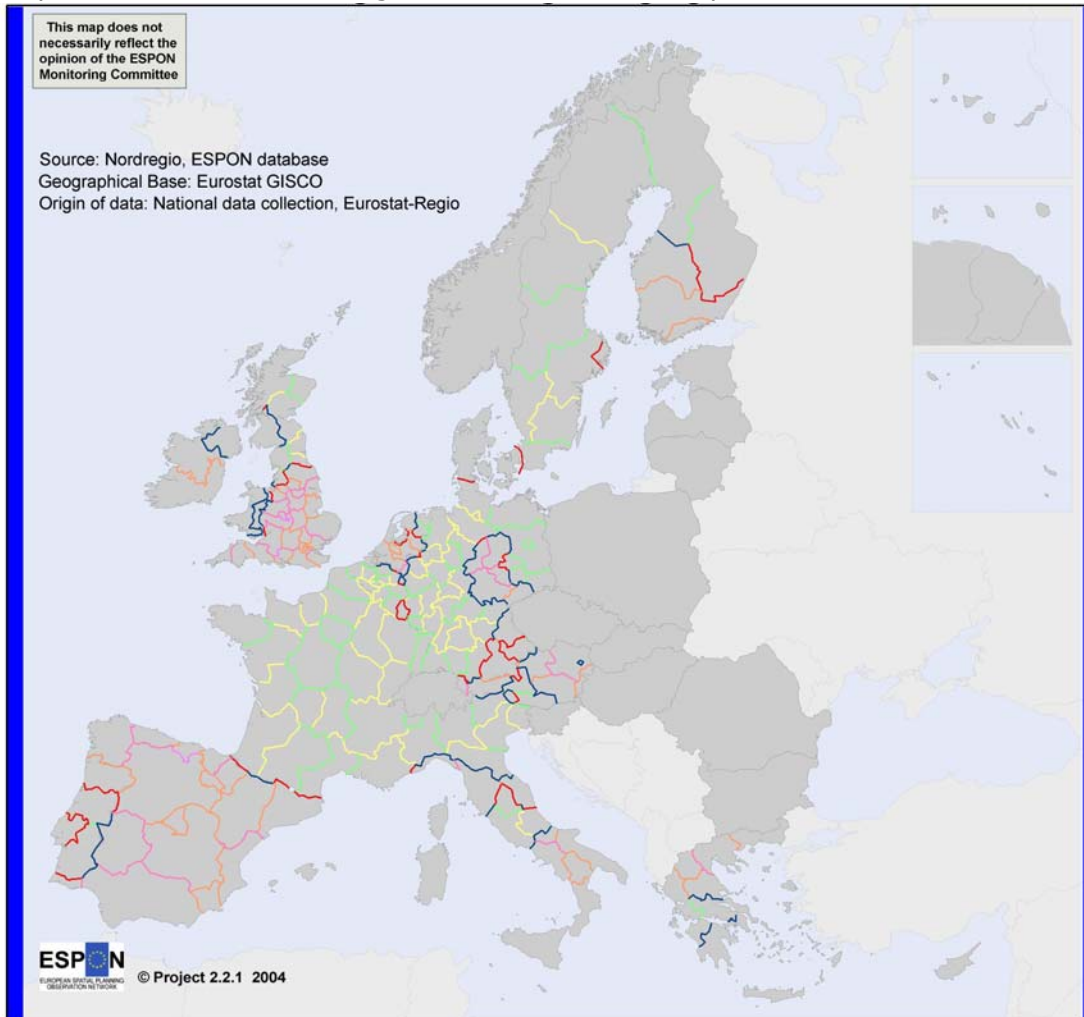
Changes in the European contiguous economic space

Moving on to the issue of cohesion dynamics the picture is further complicated. Viewed from the point of diminishing or increasing differences across borders the reasons for the changes could (and do) stem from a multitude of simultaneous incidents. In order to group these in a meaningful way, we have here applied a simplified modification of the time-honoured Webb classification (which is normally used in regional demographics) on cross-border economic changes. As before, the data utilised here (GDP/head in PPS 1995 and 1999) refers to economic changes relative to the EU15 average. Although often being the case, a “decrease” does not here necessarily involve an absolute decrease of GDP per inhabitant, merely a slower growth rate than for the Union on average. And vice versa, “growth” indicates a GDP/head growth faster than the EU15 average. Looking at the legend of Map 11 below, the left side of the circle includes all such possible incidents that lead to decreasing cross-border disparities. The right side of the circle correspondingly depicts all those occurrences leading to an increased economic gap across the border.

The first set of scenarios is then subdivided into three parts, each depicted with a different colour. The first scenario (pink/purple) could be characterised as a win-win scenario. The economic growth of both regions across the border was positive (i.e. higher than the Union average) but this growth was stronger for the weaker region, thus narrowing the gap between the two. Roughly 14 percent of all border regions belong to this group, and also some 14 percent of all EU population live across such borders. Most of these can be found in the UK (England exclusively) and Spain and in the new German Länder. This group has the lowest average GDP per capita.

In the second scenario, indicated by blue colour, the poorer region’s economic growth was positive whereas the richer region’s ditto was negative, also resulting in increasing cross-border cohesion. Both in terms of numbers of borders and in terms of their population coverage this group is similar to the case described above. Regions in Germany (East), Italy and the UK account for most of this cohesive development, with Austria and Greece also well represented. Proportionally this group also contains many international borders.

Map 11: Cohesive and divergent cross-border developments between 1994 and 1999



Decreasing disparity across border 1995-99

Change in GDP/capita was positive for both regions.
Change for the poorer region was higher.

Change in GDP/capita for the poorer region was positive.
Change in GDP/capita for the richer region was negative.

Change in GDP/capita was negative for both regions.
Change for the poorer region was lower



Increasing disparity across border 1995-99

Change in GDP/capita was positive for both regions.
Change for the poorer region was lower.

Change in GDP/capita for the poorer region was negative.
Change in GDP/capita for the richer region was positive.

Change in GDP/capita was negative for both regions.
Change for the poorer region was higher

The last of the three scenarios (green) leading to increased cross-border cohesion is the least desirable one, at least from the point of view of the regions themselves. Here economic growth in both regions has lagged behind the corresponding average of the Union, but as a blessing in disguise the poorer half has had a less dramatic decrease than the richer one, leading to a narrowed gap between the two. This group covers nearly a fourth of all EU15 borders and also more than a fifth of its population and has the highest average Gross Domestic Product of all groups. With 23 of these regions laying in France that country is clearly dominant of the

category. Also in Belgium and Germany there are many such borders, although proportionally Sweden has the highest share.

The second batch of scenarios describes the opposite development, i.e. increasing cross-border disparities. Starting at the top, cross-border cohesion has decreased in the group depicted with an orange colour due to both regions displaying healthy economic growth rates, but the richer one having had a faster growth than its cross-border adversary. Spain, the UK and the Netherlands dominate this group. Apart from in the latter two countries, most of these borders are located outside the main economic core of the EU15.

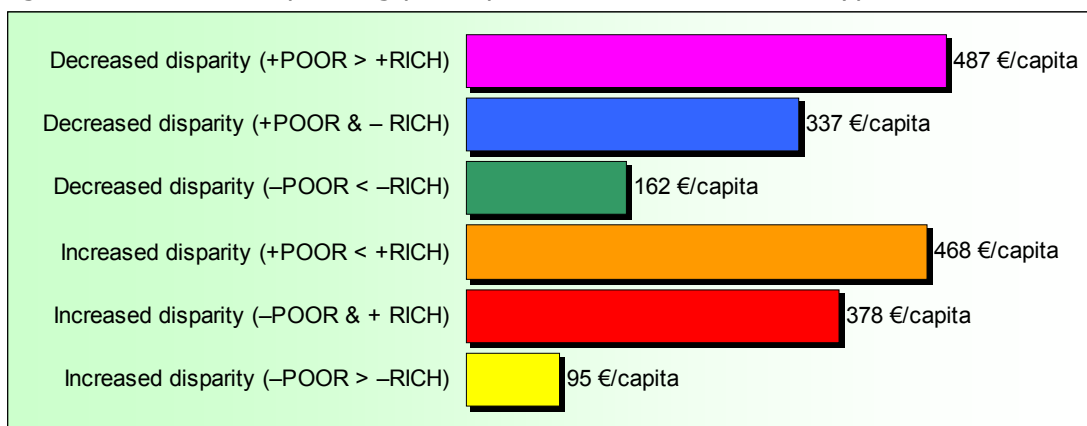
The red colour again portrays what in many ways could be characterised as the worst-case scenario. The economic gap across the border has widened further still due to negative development in the poorer one, combined with a positive ditto in the richer one. Fortunately, this is the smallest group of regions (11.5 percent) with a correspondingly small share of the total EU population (9.5 percent). These borders are not concentrated clearly to any specific country, although proportionally such increasing disparities are most frequent in Portugal.

Finally, in the largest group of border regions (yellow), development for both regions has been negative, and furthermore, the production drop per head for the poorer region has been more substantial than for its richer counterpart, thus resulting in decreased cross-border cohesion. Borders within Germany and France dominate this class, and also in Belgium they are several. Taking into account the small number of regions in Sweden, this anti-cohesive development is very prominent there.

All in all cross-border cohesion on the regional level thus seems to have increased during the programming period, in stark contrast to the simultaneous decrease in "general" interregional cohesion. The average cross-border discrepancy at those borders displaying decreasing disparities is 14 index points at the end of the period, whereas the corresponding figure for borders where disparities have increased is as much as 21. Or in clear text: regions along such borders where the difference has been fairly small have (on average) come closer to each other whereas the opposite holds true for borders where the economic gap already has been large. To make matters worse, the single group of border regions displaying the worst possible scenario (increasing disparity due to the richer becoming richer still and the poorer becoming poorer still) are also those where the disparity was largest at the onset (21 index points in 1995, increasing to 28 in 1999). However, there exists no clear-cut pattern between the wealth of the border region and in which direction its cross-border cohesion is developing.

Linking once more this dynamic data to the level of Structural Funds spending reveals that the correlation between spending on the one hand and increasing cross-border economic cohesion on the other seems to be fairly strong. In the figure below this is summed up per border type (the colour coding corresponds to that in Map 11 above).

Figure 8: Structural spending per capita and border cohesion type



Source: Nordregio, ESPON database version 2_3

The largest per capita spending occurred along such borders where relative economic growth was positive on both sides of the border. This concerns both the classes with increasing as well as decreasing disparities, but spending was slightly higher along those borders with increasing cohesion (487 vs. 468 €/capita). Compared to the border category where both regions had a negative development with furthermore the poorer partner loosing more, the per capita spending was less than a fifth of the maximum value. For such borders displaying – from the point of view of cross-border cohesion – the worst case scenario (rich got richer, poor got poorer) the per capita spending was also nearly a fourth lower. All in all a probable conclusion thus is that structural actions, if not enhance, at least coincide with cohesion on this micro scale.

Summing up

All in all the exercises above provide contradictory results when comparing socioeconomic development and structural spending across the European territory. In most cases the regional socioeconomic “behaviour” does not coincide markedly with amounts or levels of spending. However, when regions are grouped along certain parameters some correlation can be observed. Economic performance, both in terms of regional macroeconomy and employment, demographic development and other issues display, as a group, some correlation with levels of spending, albeit more often not so for the individual region. A most interesting aspect is the dichotomy between on the one hand a decreasing overall territorial cohesion and on the other and an increasing ditto when measured on a cross-border micro or local scale.

The rural-urban dimension of spending

The discontinuities discussed are partly the result of settlement patterns, i.e. varying population densities and the rural-urban division. An attempt to ascertain to what degree Structural and Cohesion Fund assistance has been used in rural or urban areas (in 1994-99) illustrates two tendencies:

Concentrating on assistance *per inhabitant*, suggests that densely populated areas receive less funding than do sparsely populated ones. Sparsely populated rural areas receive on average about three times as much assistance, *per inhabitant*, than do densely populated urban areas.

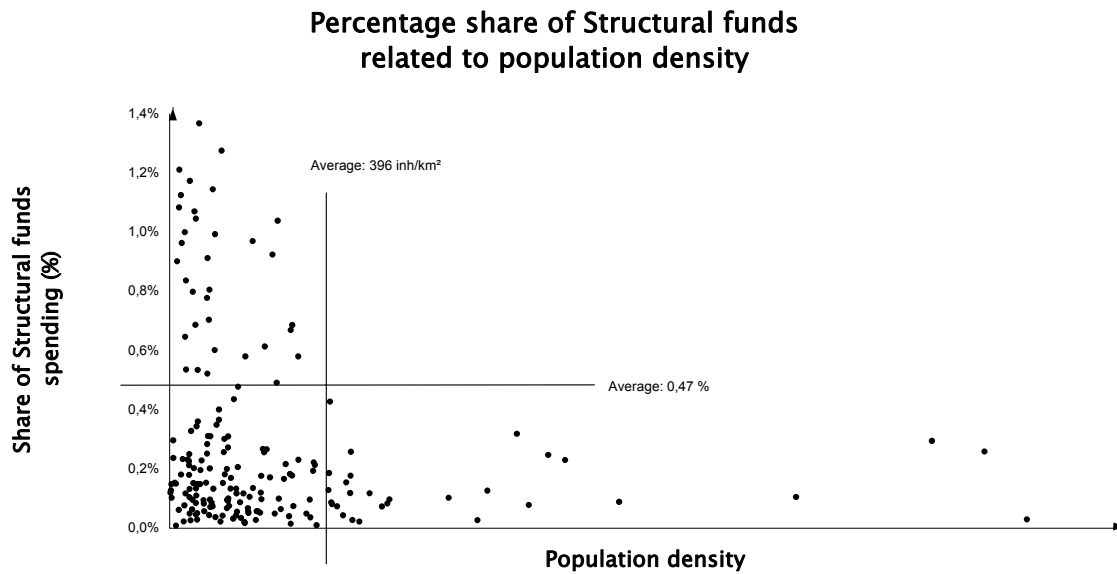


Figure 9: Structural Fund assistance and population density

Source: ESPON 2.2.1 and ESPON database

Looking at total spending, the table below illustrates that approx. 70 percent of the assistance went to urban areas. In terms of spending *per capita*, rural areas score better than urban areas, within the exception of areas of medium human intervention, where the urban areas show an absolute peak with 726 € *per capita*. Concentrating on the distinction between areas with high human intervention versus areas with low human intervention, it becomes clear that approx. 50 percent of the Structural Fund assistance went to area with human intervention, whereas less than 40 percent went to areas with low human intervention.

The discussion on assistance for rural and urban areas, leads to the general question as to whether there are certain types of areas that are to be subject to regional policy measures. Following the trends of modern regional policy encompassing all regions and supporting business environments, by addressing regional capabilities and increased competitiveness, the demand for national balance is opened up to a discussion of polycentric development at the *meso* level. This discussion focuses mainly on economic competitiveness' and the national benchmarking of urban areas.

Table 18: Structural Fund (SF) assistance in rural and urban areas

	Urban regions with high human intervention	Rural regions with high human intervention	Urban regions with medium human intervention	Rural regions with medium human intervention	Urban regions with low human intervention	Rural regions with low human intervention
SF spending / <i>capita</i> in €	221	581	726	267	555	633
SF spending on regional development and productive infrastructure in % of total	23,8%	4,3%	4,9%	1,6%	10,1%	12,0%
SF spending on social integration and human resources in % of total	14,1%	1,6%	1,9%	0,5%	4,4%	3,8%
SF spending on agriculture, fisheries and rural development in % of total	3,1%	0,9%	1,0%	0,4%	3,1%	2,5%
Cohesion Fund spending in % of total	2,3%	0,5%	0,4%	0,0%	1,7%	1,1%
SUM	43,3%	7,3%	8,2%	2,5%	19,3%	19,4%

Source: ESPON 2.2.1 using the urban-rural population typology of ESPON 1.1.2.

When we consider the issue of polycentric development at the *meso* level, economic specialisation turns out to be of greater importance than accessibility, while at the *macro* level, transportation infrastructure is a significant measure in achieving polycentric development through regional enlargement. At the *meso* and *micro* levels however, proximity is of less importance and the focus of increased polycentric development is on strengthening national or international specialisation and competitiveness. Still, to a certain degree, accessibility matters. The Greek Objective 1 programmes that highlight the issue of national transport infrastructure neatly illustrate this.

At the same time, endogenous development and competitive territories are important elements of the Structural Funds strategies. Strategies relating to the current Objective 1 programmes in particular reflect this, as do e.g. some British programmes that consider the idea of polycentric development to be helpful, stressing the role of urban areas as regional growth poles etc. Another example here is that of the Eastern Finland Objective 1 programme, addressing territorial balance intended as polycentricity and the differentiated roles of urban and rural areas, both of which are needed to bolster the role of urban areas as 'engines of growth'.

These examples illustrate the fact that the programme-based priorities of the Structural Funds can be seen as contributing to spatial policy aims. The main aspects here with relevance to polycentric development (endogenous development and increased regional competitiveness)

are, however, not sufficiently specified in order to guarantee a polycentric 'twist' in programming documents. Indeed, the examples presented in this report should basically be considered as co-incidental in this regard, and as such as unintended contributions to the aims of polycentric development.

The same is true with regard to territorial cohesion. Reflecting its lack of focus as a policy priority, there is little evidence that the interventions have significantly reduced spatial disparities within the Objective 1 regions. In some cases at least they have contributed to the generation of growth within capital cities and other relatively strongly performing regions.

In addition to the direct effects of the Structural Funds pointing towards polycentric development, there are also a considerable number of indirect effects. By their very nature, Structural Fund programmes promote cross-sectoral approaches to economic development and can thus be used as a flywheel for other policies.

EU programming has promoted a strategic dimension in regional policy-making, while regional development has become more integrated and coherent, through the multi-sectoral and geographically focused approach of programmes. The Structural Funds have also contributed over time to the building of policies on *evidence*: strategies are based on consideration of territorial potentials and needs (*ex ante* evaluations, SWOT analyses). In a number of the Member States, prior to Structural Fund implementation there were no programme-based, multi-annual strategies for economic development and the Structural Funds represented a major improvement in the approach to policy-making.

There is mixed evidence of the influence of the Structural Funds on domestic policy priorities. For the most part, the EU programmes do not appear to have 'bent' expenditure against the direction of national policy trends. However, they have played an important role in pioneering new types of interventions (in areas such as community economic development and the horizontal themes) and they have also been associated with institutional innovations in the management of regional development.

9.3 Macro level

Turning to the macro level, an initial glimpse at the impacts at this level is provided by distinguishing the funding that went to regions within the Pentagon with that which went to regions outside the Pentagon. Focusing on functional urban areas that are of importance at the *macro* level – i.e. those of international importance – it becomes obvious that those outside the Pentagon received substantially more assistance than those inside. Indeed these regions received six times as much funding *per capita*, i.e. 78 Euro versus 484 Euro.

Table 19: Structural Fund (SF) spending in international FUAs in, and outside, the Pentagon (core-periphery)

	No of international FUAs receiving SF assistance	SF spending <i>per capita</i> in international FUAs	Total SF spending in international FUAs
Within the Pentagon	17	78 €	1,800 M€
Outside the Pentagon (EU15 only)	28	484 €	22,000 M€

A more elaborate picture is available by using the ESPON 1.1.1 typology on regional endowment with FUA areas of influence. Following this typology the table below illustrates that about 17 percent (columns 1 and 2) of the funding went to areas that can be viewed as already strong nodes in a European polycentric system, whereas about 30 percent (columns 3-5) went to areas strengthening the European polycentric pattern, while only 12 percent (column 6) was spent on areas that in the long run may contribute to polycentric development at the European level. The lion's share however (41 percent -- column 7) went to regions that are unlikely to show up in any European polycentric pattern at the *macro* level.

Table 20: Structural Fund (SF) spending supporting polycentric development at the European level

ESPON 2.2.1 interpretation of ESPON 1.1.1 classification	SF assistance to areas that are already strong in the European polycentric system		SF assistance to areas that may develop into nodes in the European polycentric system			SF assistance to areas that may develop in the long-run	SF assistance to areas that are unlikely to show up in the EU system
ESPON 1.1.1 classification	Regions with global nodes overrepresented	Regions with European engines overrepresented	Regions with strong MEGAs overrepresented	Regions with European engines and potential MEGAs overrepresented	Regions with potential MEGAs overrepresented	Regions with weak MEGAs overrepresented	Regions with other FUAs overrepresented
SF spending							
SF spending / <i>capita</i> in €	78	329	529	103	458	920	491
SF spending on regional development and productive infrastructure in % of total	0,5%	8,1%	5,9%	3,0%	6,9%	7,1%	25,5%
SF spending on social integration and human resources in % of total	1,8%	3,6%	3,1%	3,0%	3,0%	2,9%	8,8%
SF spending on agriculture, fisheries and rural development in % of total	0,3%	1,5%	0,2%	0,7%	1,4%	1,3%	5,3%
Cohesion Fund spending in % of total	0,0%	1,3%	1,4%	0,2%	0,7%	0,9%	1,6%
SUM	2,6%	14,5%	10,6%	6,9%	12,0%	12,2% ^x	41,2%

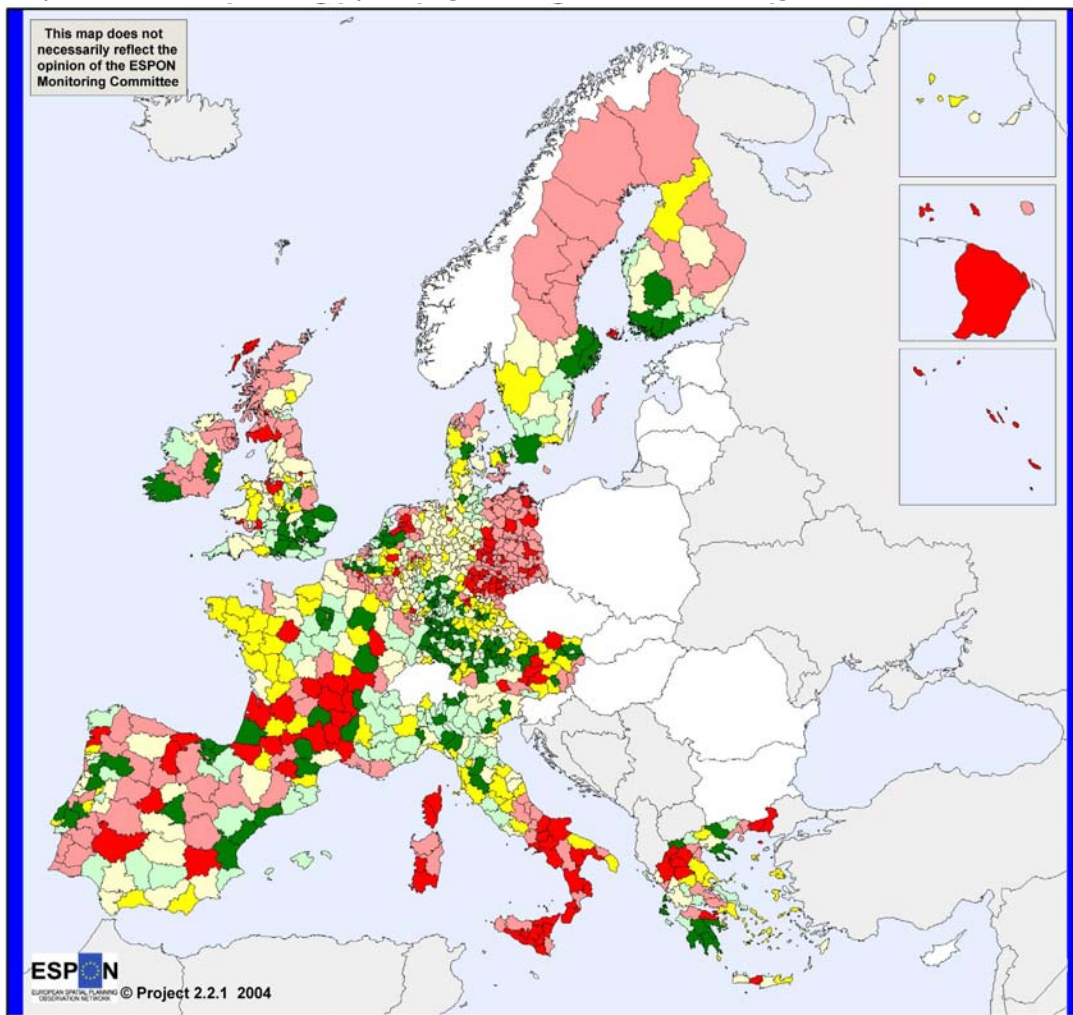
Source: ESPON 2.2.1 using the FUA areas of influence typology of ESPON 1.1.1.

The macro picture is not however solely formed by the dominant FUAs. We have already outlined a fairly strong connection between the amount of money utilised *per inhabitant*, the region, and the corresponding level of GDP. In general, poorer regions received more, and richer ones less, with the largest exceptions being Ireland and northern Fennoscandia, Pais Vasco and Umbria along with some large city regions (e.g. Madrid, Merseyside). This hardly comes as a surprise as a low GDP score is one of the main criteria for high assistance. Similarly it was further established that changes in the relative position of a region do *not* substantially correlate with Structural Fund spending. One explanation of this weak correlation is that changes in regional economic performance tend first and foremost to go hand in hand with the national changes. In other words, most regions located in countries with high economic growth do also themselves display high growth rates and *vice versa*. Naturally, as the sum of all regional growth equals the national sum for growth, substantial exceptions to this rule would imply large interregional disparities and concentration tendencies within a given country. Data on the NUTS II level for the period 1996-2000 indicates that most regions in the EU15 adhere fairly strictly to this rule. As a result, a comparison between the relative change in each region and the amount of funding it receives does not display any meaningful patterns across the entire EU territory.

In order to overcome this constraint, the map below therefore depicts regional GDP per capita growth during the four-year period 1996-2000 in relation to the similar growth in the respective country. Dark colours indicate a higher growth rate for the region than in the country as a whole, while light colours correspond to a lower one. The second axis depicts the amount of Structural Funding allocated *per capita* during the entire programming period 1994(95)-1999. This data is then also related to the amount of funding for the whole country, so we can see that red-coloured regions have received proportionately more funding *per inhabitant* than the regions of the country on average and green-coloured regions correspondingly less. This enables a circumvention of the problem of large national differences.

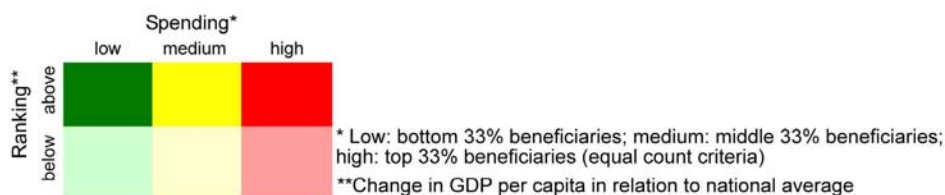
Regions receiving most funding (in the national context) and similarly displaying higher economic growth rates than regions in their respective countries on average (dark red) could be characterised as adhering to the general goals of cohesion policy. This is the smallest category both in terms of the number of regions (13 percent of all EU15 NUTS III regions) and in terms of population coverage (11 percent). These regions are mostly in the southern European cohesion countries as well as in southern Italy and eastern Germany, including Berlin. Furthermore a batch of some 20 regions in France (mostly in the south), more than ten in the UK, six each in Austria and the Netherlands, and two in Belgium belong to this group. Of the Nordic countries only Åland is included.

Map 12: Structural Fund spending and relative economic growth



Structural Fund spending per capita in Europe (objective 1, 2,3, 5b, 6 and Cohesion Funds) (1994 - 1999) and change in GDP per capita in relation to national average (1996-2000)

Geographical Base: Eurostat GISCO
Origin of data: National data collection, Eurostat-Regio
Source: Nordregio, ESPON database



At the opposite end of the scale are the regions where economic growth has not been equally fast, and where spending has been lower (light green). These regions could also be characterised as adhering to the general objectives of cohesion policy. These regions are however rather more difficult to position geographically. In terms of sheer numbers, most of them are in south-eastern France, northern Italy and southern Germany. These regions cover around one fifth of all of the EU15 population.

At the other extreme are regions that, despite substantial funding (again, in the national context), demonstrate poorer growth rates than most regions in their respective countries

(light red). With more than a fifth of all regions this is the largest group in number, though it covers only 16 percent of the EU15 population. These regions are mostly located in eastern Germany, northern parts of the UK (most of all Scotland), as well as southern Italy. In addition, many fairly populous regions both in southern and North-Eastern France, 13 regions in Spain and eight in Portugal as well as most of the regions of northern parts of Fennoscandia adhere to this pattern.

In terms of population coverage the dark green group is the largest (20.7 percent). In a sense, this group is the most problematic from the point of view of European territorial cohesion as these regions continuously dominate the uppermost positions with regard to regional economic growth rates and are as such 'responsible' for most of the polarisation tendencies. This is so despite the predominantly low shares of structural aid within each country. Most of these regions are inside the Pentagon, with more than half of all European capital regions being in this group, the most notable exceptions here are Rome and Vienna.

On the more general level there are no countries that demonstrate a clear-cut positive relationship between (relative) regional economic growth and the level of spending. This relationship is discernible (albeit only vaguely) in France and Italy. For example in Sweden the reverse holds true, while countries such as Greece and Portugal display a near random-like pattern. Thus one possible conclusion here could be that if there indeed is a discernible positive impact of the Structural Funds, it is not found in relation to the economic growth indicator. This is largely consistent with our previous hypotheses on Structural Fund impact, i.e. that the indirect and qualitative impact is likely to be proven more interesting than the impact on changes in the economic performance. Furthermore, it illustrates that the importance of the national context for regional development. However, there is no counterfactual information that allows conclusions on what the situation would be like without Structural Funds.

9.4 The macroeconomic impact of Structural policies

Hitherto, the discussion has been based on mere levels of Structural and Cohesion Fund spending. This however actually does not reveal very much (theoretically) about the actual economic impact this funding has on the regional level. At this *macro* scale we do not have the ability to estimate the true impact of this funding, though Map 13 does present an attempt to at least highlight its macroeconomic potential. We have made two hypothetical assumptions here, namely: (a) that all allocated funding is *de facto* on the temporal scale paid equally across the entire programming period (six years for EU12 and five years for Austria, Finland and Sweden); and that (b) the GDP of each region in 1999 represents something of an average of the GDP during the period when funding actually is disbursed. We are of course well aware that both assumptions are more or less hypothetical across the entire EU15, nonetheless this exercise does allow for a rough assessment of how significant a role the Structural Funds (could or do) play in a region's economy.

Structural assistance as a share of the GDP constituted on average some 0.28 percent of the total EU15 GDP in 1999.⁹ Only the Cohesion countries were above this average, with the highest rates being for Portugal and Greece with 1.89 and 1.86 percent respectively. These figures are rather high, corresponding to around four percent of these countries' total general government outlays (i.e. public expenditure). Although they are still quite high, the ratio of Structural and Cohesion Fund spending to GDP was substantially lower for Ireland (1.06 percent) and Spain (0.78 percent). While at the other end of the scale we find Luxembourg, Denmark and the Netherlands, where the share of GDP taken up by such forms of structural assistance was less than one per thousand.

On the regional level the scope becomes even wider. In the lower left corner of the map is a box plot diagram¹⁰ showing the spread of this ratio between all regions within a country. The span is largest in Greece and Portugal. The extreme case being Grevena in Greek Macedonia, where the share of assistance rises to 13 percent of GDP.¹¹ Among the 50 European regions with the highest share, 26 are in Greece, 20 in Portugal and 4 in Spain. All in all, in around a third (352) of all NUTS III regions the share of Structural and Cohesion Fund spending was above the EU15 average. These regions cover around 31 percent of the total EU15 population. 113 of these regions were in Germany, 52 in Spain and 51 in Greece, while in Italy and Portugal such regions numbered more than 30.

On the whole, a large majority of the regions with the highest shares were Objective 1 or 6 regions. Dividing Europe into two groups – on the one hand those regions where the macroeconomic impact is larger than in the EU15 on average, and on the other hand those regions where it is smaller – provides an average macroeconomic impact of nearly one percent for the first group but only as little as 0.07 percent for the second one.

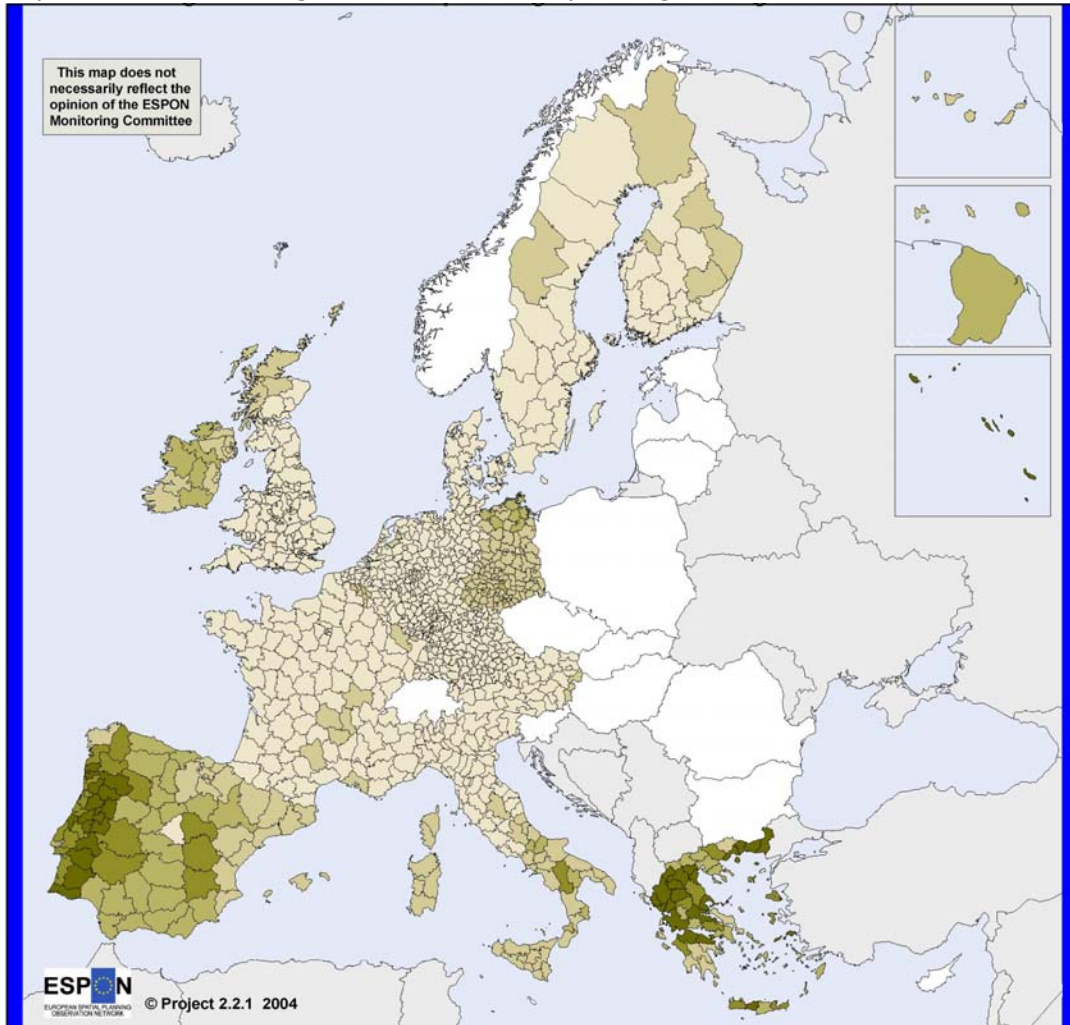
It is most likely then that such vast amounts of funding – especially as much of it is directed towards investments – cannot but help to contribute to local economic development. In many cases Structural and Cohesion funding constitutes the lion's share of total public investment in a poor region. How well this financing is utilised, and for what kind of investments, has however to be investigated on a programme-by-programme basis. Some indicative analysis of this issue is provided in the case study section.

⁹ This figure varies considerably (i.e. is lower) from the ones reported e.g. in the Second Report on Economic and Social Cohesion, as those used the HERMIN model for calculating effects. Furthermore, those figures were based on committed funding as opposed to funding actually disbursed, and the data reported here does not include community initiatives or smaller funds.

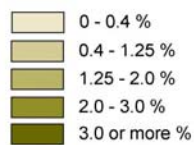
¹⁰ The centre vertical line (inside the box) marks the median of the sample. The length of each box shows the range where the central 50% of the regions fall, with the box edges at the first and third quartiles, the entire box therefore contains all observations within the 25th and 75th percentiles. The absolute value of the 75th minus the 25th percentile is called Hspread, and the "whiskers" (the vertical lines) mark the distance from the box edges to $Hspread \times 1.5$ below the first and above the third quartile. Single outlying regions within $\pm Hspread \times 3$ in the extreme quartiles (circles) and extremely outlying regions located outside this range (stars) are not plotted above the 7.0%-limit. Box plots originate from the work of: Tukey, J.W. (1977): *Exploratory data analysis*, Addison-Wesley, Reading, Massachusetts.

¹¹ The region has only some 40 000 inhabitants.

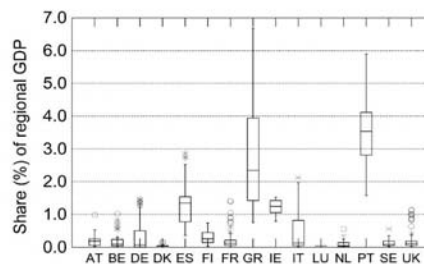
Map 13: Annual average Structural Fund spending as a share of GDP in 1999



Annual average Structural Fund spending as a share (%) of regional GDP in Euro, 1999



Source: Nordregio, ESPON database
 Geographical Base: Eurostat GISCO
 Origin of data: National data collection, Eurostat-Regio



9.5 Demographic development in the light of structural policy

Unsustainable demographic development is one of several pressing socio-economic issues that have received much public attention and debate. Although not explicitly a concrete goal in European structural policy, the issue of more balanced demographic development is nonetheless an integrated aspect in the subject of balanced territorial development. True enough, most areas that are primary targets of structural policy are hampered or severely affected by unfavourable demographic trends. The issue bears several dimensions to it. In

some areas (e.g. much of Greece, central Italy) low fertility is the main concern, in others it is high out-migration (e.g. northern Finland, north-eastern France), while in the worst cases it is both of these (northern Sweden and northern and western Scotland, eastern Germany). In a regional policy context however we very rarely hear about the other side of the coin, namely the challenges posed by having too sizeable a population growth, thus bringing about overheated housing markets, congestion, urban sprawl, and other such related issues. Notwithstanding this however our main focus lies on the first type of challenge, as it is these types of challenges that are more in line with the current focus of structural policy.

The total population change for the entire EU saw a slight increase of some 4 million persons, corresponding to 1.1 percent of the population (or 0.27 percent per year) during the four-year period 1995-99. In 1999 the population of all those ca. 400 regions losing inhabitants (taken as a group) was some 1.6 million persons less or 1.5 percent smaller than in 1995, whereas the corresponding increase for all regions with a population gain (again, taken as a group) was some 5.6 million persons or 2.1 percent of the population. On the whole then we have a situation where there is a large group of regions faring reasonably well in terms of demographic development and a smaller group of regions where development is extremely unfavourable, with population in the former group growing faster than it is declining in the latter.

Figure 10: Annual average population change 1995-1999 (%) and total Structural Fund spending *per capita* (Euro), NUTS 3

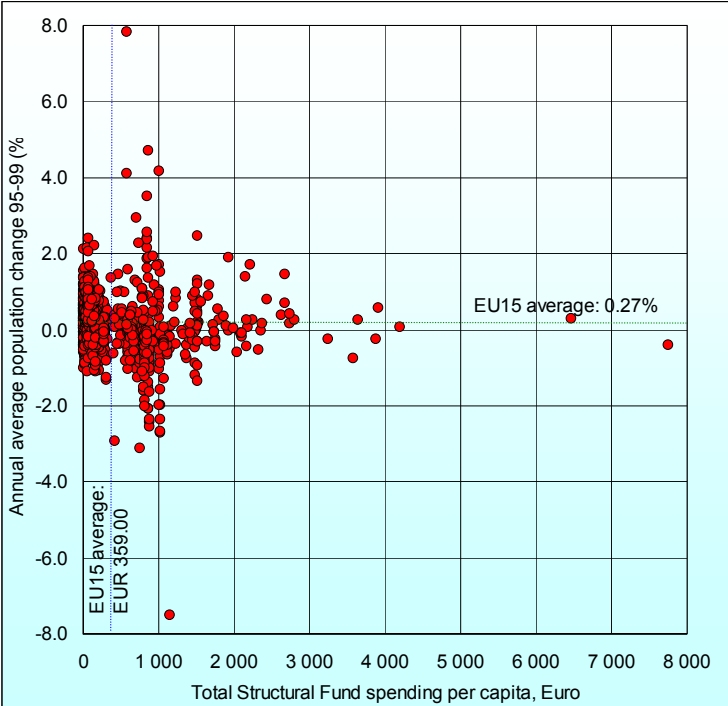


Figure 10 shows the Y-axis annual average change of the population during the period 1995-99, whilst the X-axis depicts the total Structural and Cohesion Fund spending *per capita* in Euro. The data includes all 1093 Nuts III regions within EU15. On the regional level the direction and intensity of population change does not appear initially to coincide with that of Structural Fund spending *per capita*. Moreover, there seems to be little difference between

regions undergoing either positive or negative demographic development as to whether they are likely to be high and low structural aid receivers. One hypothesis here could be that structural actions in some regions have probably contributed to changing previously negative trends into positive ones, or at least having reduced the negative trends. How the counterfactual situation would look like without financial assistance is not possible to assert.

A closer look at the population development in relation to Structural Fund expenditure during the period in question however reveals small but not insignificant differences. Spending in regions with a negative population development on the whole was, on average, more than 60 percent higher than in regions with an increasing population, or 493 Euro *per inhabitant* in the former group vs. 304 in the latter. Similarly, among the 100 regions with the lowest assistance levels *per capita*, the population increased more than twice as fast as in those 100 regions with the highest assistance. On the whole, in all regions receiving funding over the EU15 average of 359 Euro *per inhabitant*, population increased by 0.7 percent over the period, whereas it increased 1.3 percent in those regions receiving less than the European average.

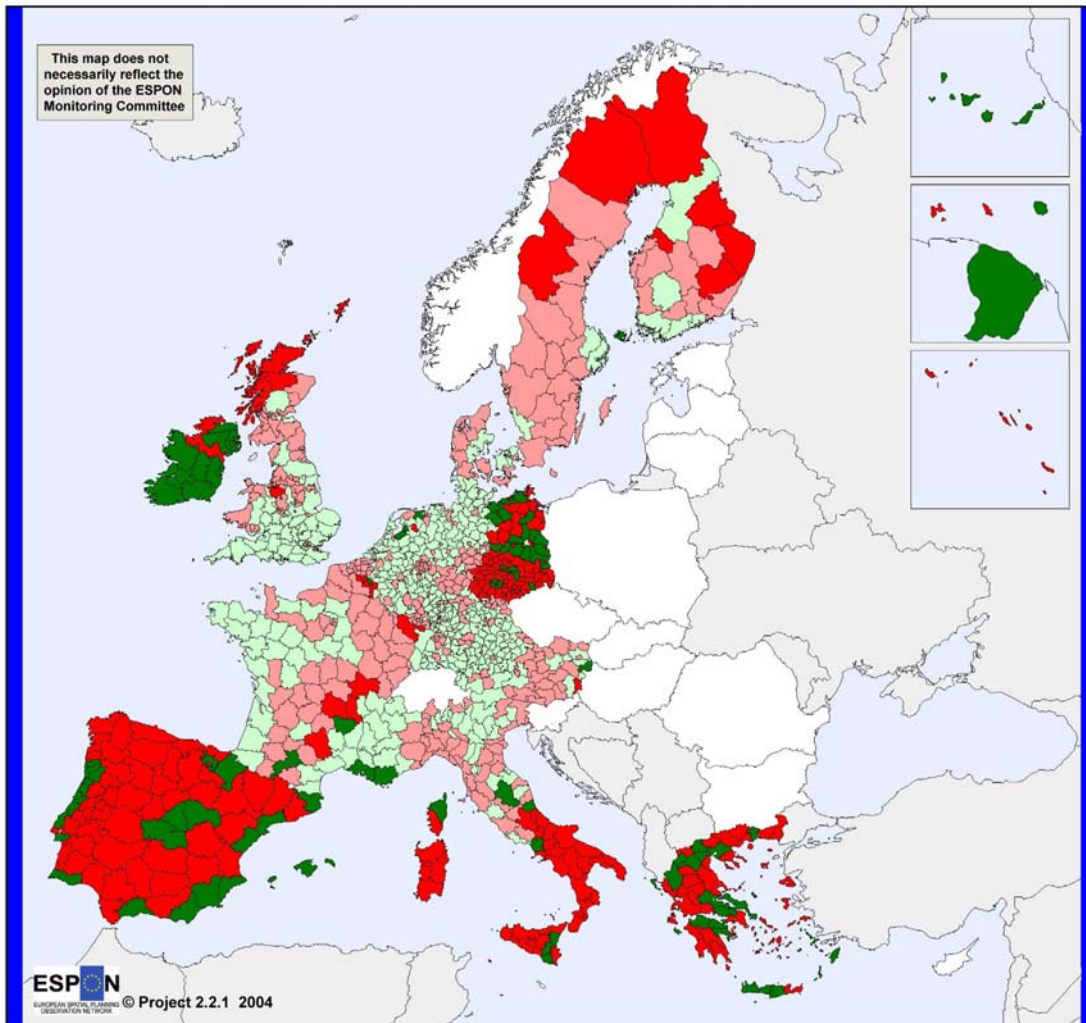
These averages, however, reveal nothing of the territorial dimension of the events. The map below depicts these changes on the physical space of the Union. Once more, all EU NUTS III regions are divided into groups on two axes, namely whether they have received more (dark colours) or less (light colours) Structural and Cohesion funding *per capita* during the programming period and whether the region's population change has been over (green) or under (red) the EU15 average of 0.27 percent per year.

The dark green areas represent those regions where relatively high spending and relatively positive demographic development coincide. One fourth of these are in Eastern Germany and one fifth in Greece. This result can also be found across Ireland (apart from the region of Border), in 17 regions in Spain and in most of coastal Portugal (11 regions). This is the smallest group numbering only 100 regions and covering only 11 percent of the EU15 population.

The dark red areas on the other hand are regions where the demographic developments have – despite high spending – been worse than in the EU as a whole. This group covers roughly a fifth of the entire EU population. In general it is mostly peripheral regions that are to be found here, predominantly from the southerly Cohesion countries, southern Italy, northern Fennoscandia and Scotland, as well as 88 regions in the former East Germany, with most of the remaining regions coming from France and Belgium.

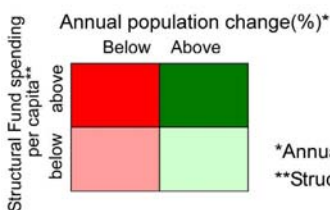
The largest group of regions (both in terms of the actual number of regions and in terms of their 36 percent population coverage) is that where demographic developments have been positive, but the amount of spending *per capita* lies below the EU average. These are mostly to be found within the Pentagon/ Blue Banana, but also in the south-eastern parts of France, as well as its Atlantic coast.

Map 14: Structural Fund spending *per capita* and annual average population change



Structural Fund spending, Euro per capita (1994-1999) and annual average population change 1995-1999 (%), NUTS3*

Geographical Base: Eurostat GISCO
 Origin of data: National data collection, Eurostat-Regio
 Source: Nordregio, ESPON database



*Annual population change average for EU15: 0.269
 **Structural Fund spending, Euro per capita at NUTS3. EU15 average: 358.92 €

The general level of demographic development within these groups however differs substantially from the overall averages depicted earlier. In the group of regions receiving most funding and having a positive demographic trend (dark green), population increased on average 3.7 percent during the period, which was substantially higher than the 2.8 percent for the group undergoing positive development but receiving less funds than the EU average (light green). On the other hand, those regions exhibiting a negative demographic trend and receiving less funding than the EU average (light red) had a population loss of 0.3 percent. The remaining category (dark red) with a population decline of 1.0 percent, clearly suffered the worst in terms of demographic development. Thus it appears that Structural and Cohesion

Fund spending correlates such that for the – in demographic terms – well-to-do regions, funding appears to go hand in hand with average performance.

9.6 Structural aid and employment

As indicated in chapter 7.4, employment is more of an indirect than direct goal in Structural Funds terms in 1994-1999 (with the exception of Objective 3), though within the EU as a whole it certainly has become one of the most dominant policy objectives. At the Lisbon European Council of March 2000, an employment rate target of 70 percent by the year 2010 was set for the whole EU. This ratio refers to the share of persons aged 15-64 years that are employed. At the same time that this goal was set the corresponding average rate was 63.1 percent, a figure which had risen to 64.2 percent only two years later. If this trend were to continue however it would still not be sufficient to meet the target set.

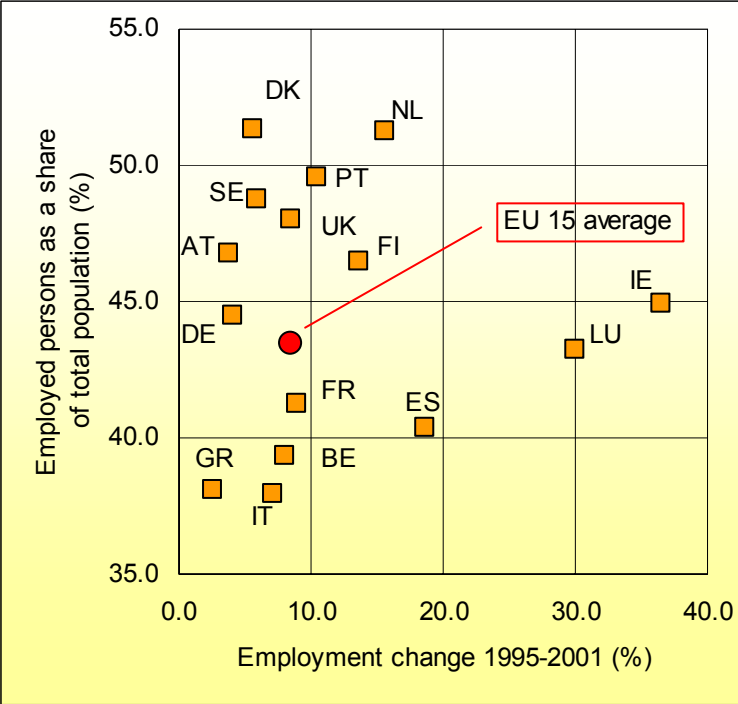
Changes in the number of employed persons remain one of the primary indicators of regional economic dynamics. Apart from directly reflecting economic cycles in a given region, other aspects such as the demographic structure, migration or the current level of employment also affect this indicator. On the whole too much focus in popular labour market discourse is placed on the number or share of unemployed persons. However problematic unemployment is for the individual, the real issue remains not this relatively small group of the population (as little as 3.6 percent of the EU population in 2002), but rather much wider question of the relative proportion of persons employed as a whole. Or more precisely, the ratio of persons working to the ratio of all those not working. In the final analysis of course it is this quotient that entails how large the expected tax levy to support the entire population can be, and thus the overall economic welfare of the country, region or locality.

As is the case with most economic issues, regional economic development is often mirrored more in the national correspondent than in pure regional dynamics. As such, with regard to employment it is important to keep in mind these national differences when moving onto the regional level. European countries display a wide range of employment rates. This is in part indicative of the demographic situation and of the prevailing labour market conditions, but also to a large extent a reflection of cultural differences and of the differing role of family. The total share of persons employed in 2002 in the EU was 43.5 percent of the total population. On average this translates to 1.3 persons to be supported for every one person working in the EU. In Denmark – which has the highest employment rate in Europe – as well as in the Netherlands, more than half of the population was employed. In Portugal, Sweden, the U.K., Austria, Finland, Ireland and Germany employment rates were also higher than the average for EU15. The figure below sets the basic outlines for the regional analysis. On the *Y*-axis we see the employment ratio of the country measured as the number of persons employed in relation to the total population in 2002, while on the *X*-axis we have the employment change during the period 1995-2001.

European countries display a wide range of employment rates. This is in part indicative of the demographic situation and of the prevailing labour market conditions, but also to a large extent

a reflection of cultural differences and of the differing role of family. The total share of persons employed in 2002 in the EU was 43.5 percent of the total population. On average this translates to 1.3 persons to be supported for every one person working in the EU. In Denmark – which has the highest employment rate in Europe – as well as in the Netherlands, more than half of the population was employed. In Portugal, Sweden, the U.K., Austria, Finland, Ireland and Germany employment rates were also higher than the average for EU15.

Figure 11: Employment change 1995-2001 and employment rates for the EU15 countries



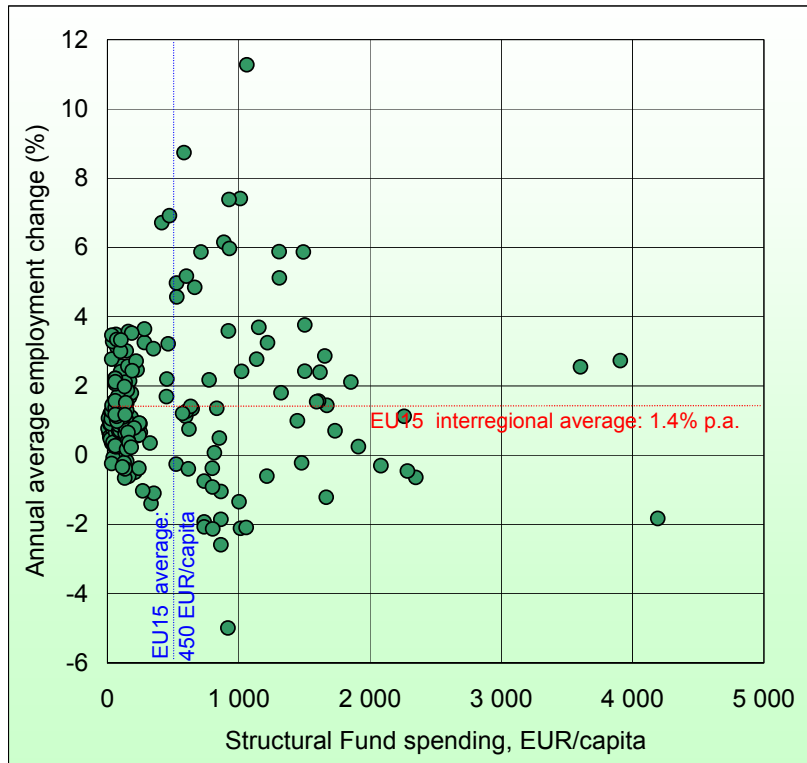
Data source: Eurostat

On the other hand, changes in the relative number of persons employed reflect wide varieties among member states. In Ireland and Luxembourg, employment has increased by 36 percent and 30 percent respectively. While in Spain, the Netherlands, Finland and Portugal the rate of change has been above 10 percent. For the whole EU, this rate was 8 percent. At the other end of the scale we find Greece, Austria and Germany, where this change has been less than 5 percent. It could be argued that those countries displaying a low employment rate would be the ones in need of the highest increases in order to sustain economic growth, but the issue is probably not as straightforward as that. Productivity *per employee*, or the amount of unpaid or voluntary labour, or other issues reflecting cultural values and the organization of society, also play a role here. Nonetheless, these national peculiarities are important to bear in mind when moving onto the regional level.

Bearing in mind the large national differences illustrated above, it is hardly surprising that on the regional level there is scarcely any apparent pattern discernible. Figure 12 presents on the

Y-axis the annual average change in employment during the period 1995-2001¹² while on the X-axis we see the total Structural and Cohesion Fund spending *per capita* in Euro. The data here is for all 211 Nuts II regions within the EU15 (and as such should show smaller variations than were the data from the NUTS III level).

Figure 12: Annual average employment change 1995-2001 (%) and total Structural Fund spending *per capita* (Euro), NUTS III



No clear-cut correlation is visible between the variables. Regions receiving more Structural and Cohesion Fund assistance demonstrate both better and worse employment dynamics than for the EU as a whole. Apart from substantial national differences, one aspect that probably reflects this random pattern is the fact that not all funds have increasing employment as their primary goal. Therefore, when separating the Objective 3 programme, which has job creation as a primary objective, the correlation is stronger (albeit still weak).

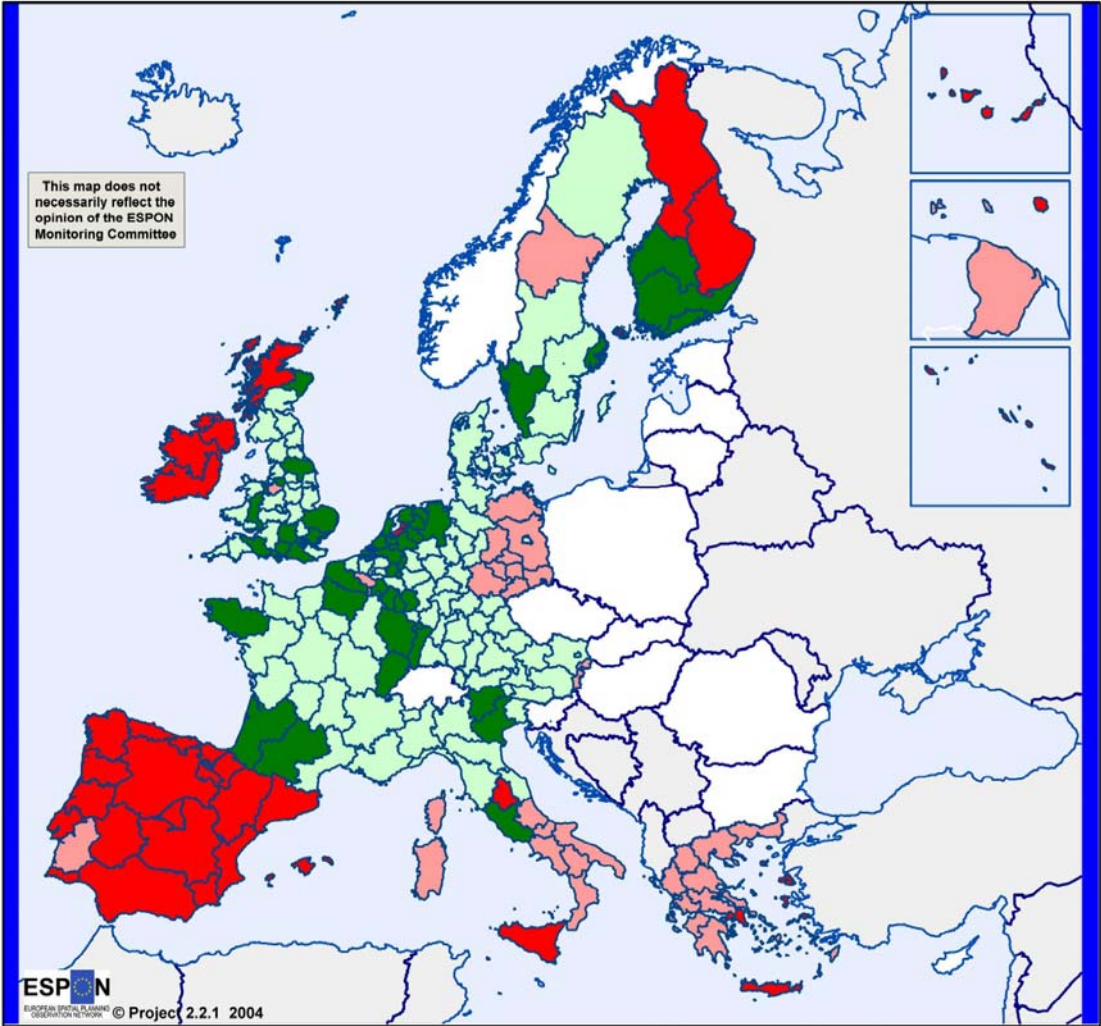
Scrutinizing the variables further a connection to levels of spending and employment change emerges. For all those 73 NUTS II regions where Structural and Cohesion Fund spending *per capita* was higher than that of the EU15 average, the median employment increase was 1.4 percent per year, while for those regions receiving less funding than the EU average, the corresponding increase was only 1.0 percent *per annum*.

Map 15 depicts these variables from a territorial dimension. A division is made along the dotted lines in Figure 12 above, i.e. whether a region has received more (red) or less (green)

¹² There are variations as to regional data availability. The exceptions to the period 1995-2001 are listed in Appendix 1. In order to overcome these, we here refer to annual averages instead of to total changes during the period, which also implies that we are reduced to describing the data using median values or interregional averages.

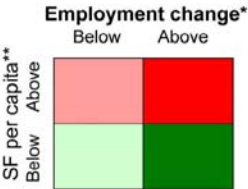
Structural and Cohesion funding *per capita* during the programming period and whether the region's annual average employment change has been over (dark colours) or under (light colours) the EU15 average of 1.4 percent *per annum*.

Map 15: Structural Fund spending *per capita* and annual average change in employment



Structural Fund spending, Euro per capita (1994 - 1999) and annual average employment change between 1995-2000*

Geographical Base: Eurostat GISCO
Origin of data: National data collection, Eurostat-Regio
Source: Nordregio, ESPON database



* Employment change between 1995-2000, EU15 interregional average: 1.398
Period of change depends on national data availability

**Regional Structural Fund spending, Euro per capita in relation to EU15. A verage: 350.31 €

Regions coloured dark red are those where employment change has been more favourable than in most EU regions and which have received more funding than the average EU region. These regions represent some 18 percent of the EU population. The median change in employment for this group amounts to 3.4 percent more jobs each year during the period 1995-2001.

Nearly half (18 out of 38) of these regions are located in Spain, with six in Portugal and three respectively in Greece and Finland. Most of these regions have Objective 1 or 6 status.

On the other hand, regions coloured light red are those that have also received more funding than the average EU region but where the employment change has been worse than the interregional EU average. For these regions the median employment change was a reduction in the number of employed persons by half a percentage unit per year on average. This is also the smallest category in terms of population (11 percent of the EU15 total). Nearly a third, or ten out of 35, of these regions are in Greece and nine in Germany, exclusively in former East Germany. Southern Italy is also well represented with seven regions.

Regions where the employment change has been worse than that for most EU regions and where Structural and Cohesion Fund spending has been below the average *per capita* level in the EU (light green) nonetheless had a (median) employment increase of 0.7 percent per year on average. This is by far the largest of the four groups covering half of the total EU population and nearly as much, percentage-wise, of the regions (93 regions in total). More than two thirds of these regions are located in Germany, the UK and France. Furthermore large tracts of Sweden, Denmark and eight regions in Austria and Italy respectively are included.

Finally, the regions coloured dark green have benefited from less support than the average European region, while their job creation level has been above that of the typical EU region. The median employment increase in this group was some 2.1 percent per year during the period.

Thus, summing up the four categories, those regions that received more funding *per capita* than in the EU as a whole seem to have performed slightly better in employment terms than those receiving less. The imbalance within the groups however is larger in those regions that have received most funding, as opposed to those receiving least, i.e. in the latter group employment changes range between -1.4 percent and +3.6 percent while in the former they range between -5.0 percent and +11.3 percent.

10 Case studies on the territorial effects of Structural Funds

The assessment of the aims of the Structural Funds has shown that there is something of a 'coincidence' between the aims formulated in the Structural Fund programmes and the aims of European spatial development policy. Furthermore, the assessment of the relationship between European regional policies and national regional policies illustrates that the Structural Funds have considerable leverage effects in the countries receiving the highest *per capita* assistance in particular.

The analysis of Structural Fund spending shows moreover, that spending is mainly targeted on urbanised areas. As regards the correlation of spending geography to the aim of polycentric development, it can therefore be argued that polycentric development at the macro level is more likely to be supported than polycentric development at the *meso* level.

All of these observations, laid out in much more detail elsewhere in this report, provide further useful arguments in better assessing the territorial effects of the Structural Funds. The causal relation, however, cannot be addressed based on these assessments alone. Rather, in order to come a step closer to seeing causal relations and viewing the funding in relation to mechanisms of spatial development, a series of case studies were perceived as necessary, focussing on Structural Fund 'cold spots' and 'hotspots' in greater detail. The various criteria used in the selection of these case studies, as well as the methodology used to undertake them were discussed in more detail above. By employing this case study method, and through utilisation of the data gathered on the allocation of the Structural Funds across different regions it then becomes possible to attain a better picture of the impact of funding on the spatial development of Europe in general and on Europe's polycentric aims and development in particular.

A common theme of the case studies is that awareness of the concept of polycentricity is clearer in the 2000-2006 programming period documents, as well as being clearer among the stakeholders interviewed, than in the 1994-1999 period. This confirms the findings presented in the analysis of the Structural Fund programmes and evaluations. Two examples where increased awareness of polycentric development can be seen are with regard to the Highlands and Islands (UK) and the Southern and Eastern region (Ireland). The case studies present strategic maps showing nodes and linkages, gateways and flows. Even though this is not necessarily portrayed as investigating or evaluating the polycentric patterns of the region or country, it can definitely be interpreted as such. The picture becomes rather more blurred however when the actual impacts of polycentricity are sought.

Another recurring point of discussion in some of the case studies is the question of whether funding to the urban regions/territorial nodes in Europe supports the peripheral areas or further disadvantages them. This is a central part of the wider debate on polycentricity, and it has special relevance in the examples where the case study region consists of both dense urbanised parts and sparsely populated rural (peripheral) parts.

In the Southern and Eastern region in Ireland the considerable industrial growth which has taken place around urban centres in the region has not filtered through to many more remote and coastal areas.

In Sachsen, discussion in respect of the focus of Structural funding has also centred on this point. Here is it argued that:

“The cities provide greater potential in terms of education and R&D, a higher density of technology and capital intensive companies, and a higher level of accessibility. The allocation of SF to these nodes is more likely to improve competitiveness and to induce growth – though this is likely to be at the expense of rural regions and hinterlands, with the further disadvantage of increasing centralisation.”

Thus, looking for the explicit inclusion of European spatial policy objectives in general, and polycentric development in particular, does not provide us with much insight. Instead we have chosen to concentrate upon a number of the aspects supported by the Structural Funds that could conceivably make a direct or indirect contribution to territorial cohesion and polycentric development.

These issues include what we have termed ‘spatial positioning’, as well as the themes of the Lisbon agenda and the main aspects in the current governance debate. After a brief introduction to the case studies we will present our findings on these issues commencing thereafter to translate them into an assessment of Structural Fund influences on polycentric development. Last but not least, we will highlight the main findings of the case study work in the concluding section.

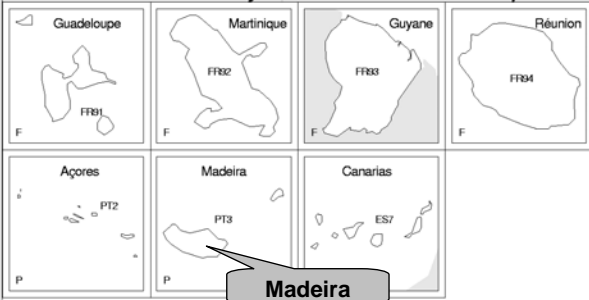
10.1 Background information on the case study regions

The case studies on the territorial effects of the Structural Funds have been selected with great care, with attention being paid to the development of a set of studies reflecting a broad variety of regions, different types of MEGAs, differential accessibility in terms of regions, border regions, low population density areas, areas with different socio-economic specialisation profiles, areas with different geographic handicaps, environmental aspects and regions with different governance characteristics. This has been done in order to ensure a broad span of regions, thus allowing for generalisation, but also because we were curious as to whether certain issues would score better in particular types of regions than in others. This aspect of the study was however limited by the actual number of case studies we were able to carry out.

In what follows we provide information on how the various case studies have been profiled. More information on the actual case study selection and working methodology can be found in the chapter on the working methodology of this project as well as in the boxes providing brief overviews of each individual case study.

MAP

THE EUROPEAN UNION –NUTS level 1



LEGEND

— National level
 = NUTS level 1

0 150 750 km

Cartography: Eurostat –GISCO, 07/2003



The hypothesis related to territorial cohesion

The selection of case studies was based on the identification of relevant “cold” and “hot” spots, with “cold” regions being those with high Structural Funds spending and negative development in terms of GDP, while “hot” regions were those with low or high Structural Funds spending and positive development. Case study regions representing clear “hot” spots in this sense included Madeira (Portugal), Toscana (Italy), Cantabria (Spain), Lakonia and Grevena (Greece), Lappi (Finland) and Southern and Eastern (Ireland). Case study regions identified as “cold” spots were to be found in Calabria (Italy), Cataluñya (Spain), Highlands and Islands (United Kingdom), Sachsen (Germany) and Norrland (Sweden).

As mentioned in the Second Interim Report (p. 105), polycentrism has been identified as a major concern or policy ideal to be followed, and therefore the aim has thus been to select case studies on the basis of variable scale, in other words, at the same time addressing the position of regions within transnational or cross border regional constellations, as well as in a *micro* or *meso* regional context. The case studies undertaken here also attempt to capture the discernable policy trends relevant to polycentrism, such as supporting urban networks (e.g. in the case of Sachsen), reducing disparities (e.g. Grevena) and strengthening regions with specific geographical features such as peripheral regions (e.g. Madeira, Lappi, Norrland, Highlands and Islands).

The strategic positions and spatial roles of the case study regions

The selected case studies illustrate the territorial impacts of the Structural Funds in regions that have very different characteristics and where the preconditions for regional development differ enormously. In terms of functional urban regions (FUAS) for example, the Irish Southern and Eastern region includes Dublin, which is seen as a MEGA functional urban area. The same applies to the Cataluñya case study, with the MEGA here being Barcelona. The regions of Toscana, Centre and Sachsen all have more than one FUA of transnational or national scale, whilst at the other end of the scale the Greek case study regions (Lakonia and Grevena) contain no functional urban areas at all.

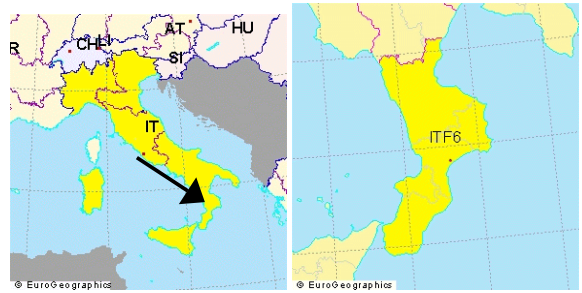
The case study regions also exhibit great variety when takes into account their role in the wider spatial system. The assessment of the spatial role of the case study regions on the *micro*, *meso* and *macro* levels is based partly on the data provided by ESPON 1.1.1, and partly on the assessment of national experts based on documentary material and interviews. Here we can refer in particular to the example of Calabria, which - although located in the European periphery - has two FUAS of European importance, namely Gioia Tauro (transport) and Vibo Valentia (tourism). Meanwhile, Dublin is considered to be of European importance in terms of population, transport, industry and administration. The FUA of Leipzig in the region of Sachsen is of European importance in the field of higher education due its well-respected university.

The issues of connectivity and cooperation, as well as a number of more geographical aspects, made several case studies particularly interesting as regards deeper analysis. Once again we can refer to the example of Calabria here, one of the least developed regions in Italy and one

Case Italy – CALABRIA

Introduction

- **Calabria**
- population: **2 057 600**
- **15 100 km²**
- **136 inhabitants/km²**
- GDP-Index 2000: between **54,6** and **66,6%** on NUTS III
- change from 96: between **-2,3** and **+3,7 %-points (!)**
- includes 5 provinces (on NUTS III level)
- **NUTS II: IT93**
- Failure to exploit tourism potential
- Relatively homogenous regional structure
- Relatively high education
- Low activity and high unemployment rate
- Environment: outstanding coastal stretches and mountain ranges, no huge problems



Structural Funds

Programmes

1994-1999

- **Objective 1**
- misc. **national Objective 1** programmes

2000-2006

- **Objective 1**
- **URBAN II** Crotone
- **Interreg III B** Archi-Med

Spending 1994-1999

- **818€** per capita
- Regional funding: 1129 Meuro
- Social funding: 270 Meuro
- Agricultural funding: 284 Meuro
- **HOT SPOT**: high Structural Fund-spending and positive GDP-change (National)
- **COLD SPOT**: high Structural Fund-spending and negative GDP-change (National)

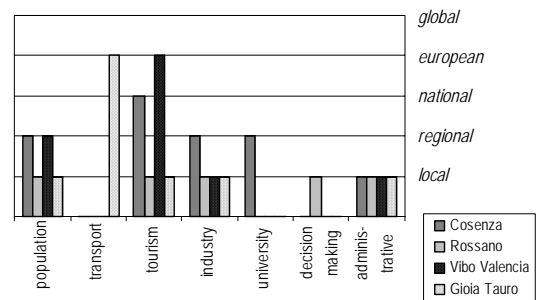
Functional and spatial status quo

Functional profile/specialisation of the region

- **9** Functional Urban Areas
- ESPON 1.1.1 FUA Economic base: either **service**, **strong service** or **primary**
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: **Peripheral** ("peripheral" in all NUTS III except one)
- Very weak productive basis (agriculture and industry contributing to less than one fourth of the regional GDP, thus is the tertiary sector over-dimensioned)
- Relative nearness to international markets
- Predominance, among industrial activity, of traditional sectors

Role in the European spatial system

- ESPON 1.1.1 FUA sample typology



- FUA overall classification:
Cosenza, Rossano, Vibo Valencia, Gioia Tauro: **regional/local**
- ESPON 1.1.2 FUA Urban-rural typology:
mostly **Rural, high human intervention**, 1 Urban, medium human intervention and 1 Urban, low human intervention

Conclusions

The polycentric approach influenced the Structural Funds programme for 2000-2006. Even though not directly quoted, interventions in line with polycentricity can be identified. At the moment, there is however no clear evidence that the implementation process is having practical, identifiable results but influence can be seen on regional and local governance. The most significant experience from a polycentric point of view, the hub of Gioia Tauro port development, seems to be only indirectly related to Structural Funds.

The developments have however created synergies with Structural Funds, and there are side effects also strongly affected by EU funding. The tourism sector should be mentioned as a sector with strong support and influence from EU funding.

of the least developed in Europe in terms of the GDP index. The region remains isolated from the flows of international exchange, while national financial transfers make the regional economy dependent on external factors. The main problems with regard to communication and transport are basically related to their management, i.e. to the lack of an efficient network of services. Yet on the other hand the infrastructure initiative undertaken in and around the port of Gioia Tauro has spurred an important process of development in the surrounding areas. Madeira is another case study example of note here, where the Structural Funds have successfully contributed to better internal and external accessibility. Cataluña, one of the richest regions in Spain, having a GDP *per capita* close to the EU average, is traditionally considered to be of strategic and geo-political importance (e.g. Latin arc, French border and Mediterranean co-operation). A favourable strategic location, and both the ongoing development and type of communications networks across the region make it interesting in terms of analysing polycentrism at the European scale.

Grevena is an isolated mountainous region in the European periphery with low population density and until recently, inadequate transportation links. Previously, the areas close proximity to Albania and the former Yugoslav Republic of Macedonia may have been considered as a significant constraint on economic growth and regional development. Notwithstanding this however the region's wider geopolitical position in the Balkans can actually be seen as an important element of dynamism. Therefore the relationship function in general and projects related to the improvement of transport infrastructure are considered to be highly important for the overall spatial development of the region.

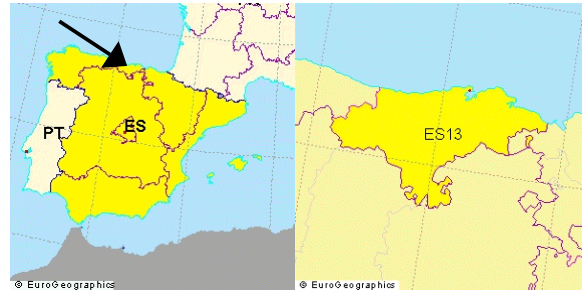
The issue of border region location proved also to be an aspect of some interest in the case studies of Norrland, Sachsen and Lappi. Norrland has been active in cooperating with regions in neighbouring countries and thus in promoting a shift to a more cross border approach as far as regional development planning is concerned. Meanwhile, its neighbouring region in Finland, Lappi, has been active in the further development of cooperation with North-western Russia and the Barents region in particular. The region of Sachsen borders two new EU-countries, and thus the case study discusses how the border situation towards accession countries impacts on the broader development pattern.

The regions of Highlands and Islands, Lappi and Norrland all have an extremely low population density and a dispersed population pattern each presenting a significant challenge to their potential development in terms of polycentricity, territorial cohesion and spatially balanced development. Remoteness and high transportation costs due to long distances and sparse population are thus seen as major barriers to economic development. As such, the Structural Funds programmes in these regions focus on long-term and strategic themes, developing such things as social capital and trying to create a more polycentric structure and cohesive economy within the regions as well as addressing the difficulties associated with peripherality. In all of the above mentioned regions measures facilitating educational changes, e.g. regional institutes for higher education, play an important role.

Case Spain – CANTABRIA

Introduction

- Comunidad Autónoma de Cantabria (Autonomous Community)
- 5 300 km²
- population: 500 000
- 100 inhabitants/km²
- GDP-Index 2000: 73,3%
- change from 1996: +4,2%-points
- NUTS: II/III ES 13
- Close connection to País Vasco (commuting)
- Differentiation between a) Coastal Zone (East-West) and Besaya Valley (North-South) with industry and sectoral restructuring problems, gaining population and the two main cities (Santander and Torrelavega) and b) Mountain rural zone with underdevelopment problems, losing population
- Problems of accessibility (caused by topographical situation: coastlines vs. mountains)



- High level of education
- High unemployment rate
- Environment: great variety of habitats, problems with industrial sites

Structural Funds

Programmes

1994-1999

- Objective 1
- Directly regionalized funds

2000-2006

- Objective 1 phasing out till 2006
- Interreg IIIB South West Europe
- other national Objective 1-programmes

Spending 1994-1999

- 1 308 € per capita
- Regional funding: 501 Meuro
- Social funding: 100 Meuro
- Agricultural funding: 62 Meuro
- Cohesion fund: 27 Meuro
- **HOT SPOT:** high Structural Fund-spending and positive GDP-change (National)

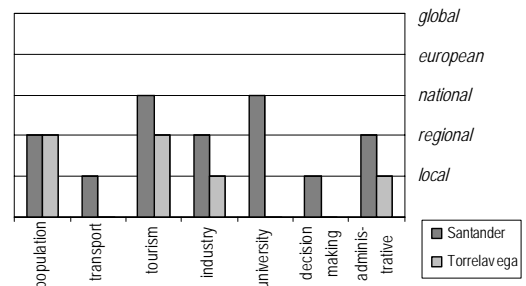
Functional and spatial status quo

Functional profile/specialisation of the region

- 2 FUAs Santander and Torrelavega
- ESPON 1.1.1 FUA Economic base: **Diversified**
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: **Peripheral**
- Important port (commercial, ferry to UK, fishery)
- Fishery sector is one of the dominant sectors
- Ship building sector has broken down in the 80ies
- Industrial specialisation in supply to car industry and the chemical sector
- Mountain areas in the hinterland and most of the coast line are destinations of regional and national tourism

Role in the European spatial system

- ESPON 1.1.1 NUTS III Polycentricity typology: **at least one of the FUAs is transnational/national FUA**
- ESPON 1.1.1 FUA typology of **Santander and Torrelavega**



- FUA overall classification
Santander: **transnational/national**
Torrelavega: **regional/local**
- ESPON 1.1.2 Urban-rural typology: **Rural, low human intervention**
- In the Spanish city system Santander is a second tier town

Conclusions

Structural Funds have had a certain impact on the development of the territory in Cantabria. New transport and education infrastructures have been created and new actors, institutional infrastructures and partnerships have been established – in the region and together with other European regions. The region was not specialised in specific functional areas at a macro context and the Structural Funds or other regional measures have not changed this.

Investing in expertise and higher education, as well as attempting to identify and further develop suitable niche areas of innovation are also common approaches in the regions of the Northern Periphery. In both Norrland and Lappi regional development is becoming increasingly targeted on growth centres, clusters and polycentric spatial patterns. Structural Funds intervention is also increasing R&D input in these regions. As such, utilisation of 'clusters' and a strategic approach to regional innovation, partnership and cooperation models are thus now increasingly seen as the main tools in the promotion of a region's international competitiveness and as the most useful instruments in overcoming the permanent handicaps of remote and sparsely populated regions.

A specialisation in tourism was clearly discernable in several case studies, whilst in regions such as Calabria, tourism is perceived as having an important, though as yet under-exploited, development potential. In such places however, improvements in the tourism structure undoubtedly need to be accompanied by the introduction of high level services and the creation of an integrated approach to the tourism industry. The economic wellbeing and job creation effects of tourism may also help in maintaining the population in rural areas. In Lappi for instance tourism is a niche area of innovation, while expectations exist for tourism-generated economic development beyond the already existing major tourism centres. In Toscana, where the region is already a world-renowned tourist destination, Structural Fund investment has thus been predominantly targeted at the modernisation of the tourism sector in terms of the provision of services and service delivery.

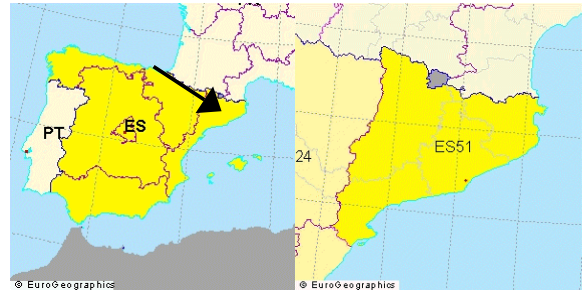
Explicit aspects related to polycentrism can be identified in at least three of the case studies. In the case study of Catalunya the issue of polycentricity and various spatial scales is problematised by asking whether the capital of the region (Barcelona) is in fact overly dominant in Catalunya, and thus whether Structural Funds intervention is used to increase the centralisation of connections from the inland areas of the region to Barcelona and, in the widest sense, whether funding is thus actually increasing Spanish centralisation. The case study of Sachsen recognises probable core-hinterland problems affecting urban-rural partnerships. Here also the relation function is interesting, addressing as it does the importance of the Saxon triangle (a network of cities) as a tool to ignite the regional economy, improve accessibility and service provision as well as the linkage between core and hinterland. The region of Southern and Eastern Ireland includes Dublin, the economic core of the country. Development disparities have however increased between the designated area and rest of the country. Due in part to this fact, concepts such as polycentricity and balanced development are now gaining policy prominence in both Irish policy thinking and practice. Here again the relation function and accessibility in particular were highlighted, as "without investment from the Structural Funds transport bottlenecks would have been much worse in Ireland". In addition, the desire, through the preparation of gateway strategies, to target growth and positive regional development to areas beyond Dublin was also discussed.

Environmental aspects were discussed especially in those case study regions where tourism is an important element of regional development. This was so for example in Toscana, where in

Case Spain – CATALONIA

Introduction

- **Cataluña**
 - **32 000 km²**
 - population: **6 130 000**
 - **1 916 inhabitants/km²**
 - GDP-Index 2000: between **92,6%** and **106,5%**
 - change from 96: **-2,1** and **+3,3%-points**
 - incl. 4 NUTS III
 - **NUTS II: ES 51**
- Marked regional character
 - 2/3 of population is concentrated in Barcelona province
 - Diversified economic base: mainly industry and services. Agricultural sector has an important social role
 - Outstanding high mountains and coastal areas, attracting tourism. Rural or medium-mountain areas are most problematic.



Structural Funds

Programmes

1994-1999

- **Objective 2**
- **Objective 3**
- **Objective 5b**
- **Community Initiatives: Leader, Rechar II, URBAN Barcelona, Konver II**

2000-2006

- **Objective 2**
- **Interreg IIIB South West Europe**
- **URBAN II Sant Adrià de Besòs**

Spending 1994-1999

- **600 €** per capita
 - Regional funding: 1367 Meuro
 - Social funding: 1358 Meuro
 - Agricultural funding: 195 Meuro
 - Cohesion fund: 759 Meuro
- **COLD SPOT:** high Structural Fund-spending and negative GDP-change (on NUTS III: Lleida, National)

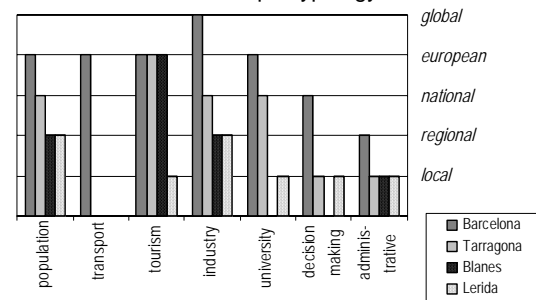
Functional and spatial status quo

Functional profile/specialisation of the region

- **13** Functional urban areas
- ESPON 1.1.1 FUA Economic base: **Diversified** except 1 "strong primary" and 1 "industrial"
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: **Central** (2 "intermediate", 2 "peripheral" and 1 "central" on NUTS III)

Role in the European spatial system

- ESPON 1.1.1 FUA sample typology



- FUA overall classification
Barcelona: **MEGA**
Tarragona: **transnational/national**
Blanes, Llerida: **regional/local**
- ESPON 1.1.2 Urban-rural typology:
two **Rural, low human intervention**, one **Urban, low human intervention** and one **Urban, high human intervention**

Conclusions

Structural Funds during 1994-1999 helped to create new jobs and contributed substantially to the sustained economic growth of the Catalan economy. The largest projects dealt with waste management, motorway infrastructure and car production. With regard to the regional motorway projects, these have contributed to the notion of polycentrism in Catalonia by linking inner medium-sized cities to Barcelona. At a micro scale, the metropolitan motorway projects likewise foster polycentrism within the metropolitan area of Barcelona. The industrial projects are strategic projects at regional level.

the current Structural Funds period, funding is targeted to territorial consolidation and endowment as well as environmental preservation and valorisation. Madeira's case study argues that the over dominant tourism sector leaves other local resources unused, while it may also be a threat to environmental stability. In the Greek region of Lakonia, regional development can be build on the assets of a rich and varied cultural heritage and on the quality of the natural environment. Therefore the strategic aim is to develop the region's endogenous resources, restructuring the economic fabric, improving the quality of life and protecting the local environment. In addition, the other Greek case study region, Grevena, recognises the natural beauty of its mountains as an asset. Together with the unique and unspoilt natural heritage, the physical environment offers scope to the expansion of sustainable tourism activities. According to the case study report, the Structural Funds have had a significant impact on the promotion of regional sustainable development in Grevena in the sense that environmental problems are now taken more seriously. In Région Wallonne, ongoing decline in traditional industries has led to an increasing number of brown-field areas, creating environmental problems and challenges regarding water purification and waste management.

Almost every case study concentrated to some extent on governance changes. The description of policy impacts in Région Wallonne is also suggestive of many of the processes found in the other case study regions, as "Structural Funds programmes have significantly influenced governance processes within policy-making bodies and beyond by introducing more strategic linkages and strengthening partnerships between local actors." The common elements of governance changes are related to learning, introducing new actors to regional development planning, regionalisation, partnerships, and to sharpening strategic approaches. Indeed, increased levels of co-operation between the public and private sectors, new working methods, and the impact of partnerships were considered to be the main positive effects of the Structural Funds (e.g. Norrland). In Lakonia it was noted that, governance innovations, including for instance cooperation between local authorities, organisations and SMEs have played an important role in the economic growth of the region and in the implementation of programmes and projects. While Structural Funds interventions have encouraged a more local strategic approach to the targeting and delivery of investments (Highlands and Islands).

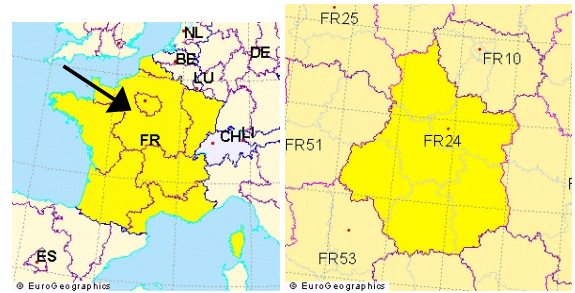
10.2 Structural Fund influences on spatial positioning

Both spatial development policies in general, and the Structural Funds in particular seek to further their aims within the context of considerations of 'comparative position', that is to say, on the advantages and disadvantages different places have in relation to each other, or in relation to the EU average. This can best be expressed in terms of polycentric development – i.e. which type of FUA a place is – or in terms of regional polices – i.e. how much regional GDP a place has. In both cases the spatial position of one place in relation to other places is at stake.

Case France – CENTRE

Introduction

- **Centre**
- population: **2 440 329** (1999)
- **39 151 km²**
- **62 inhabitants/km²**
- GDP-Index 2000: between **81,3** and **104,1%** on NUTS III
- change from 96: between **-3,9** and **-1,0 %-points**
- includes 6 départements (on NUTS III level)
- **NUTS II: FR 24**
- Strong contrast between the relative wealth of its northern area (high performance economic sectors are concentrated) and the fragility of the two départements in the south which suffer from the decline of rural areas



Structural Funds

Programmes

1994-1999

- **Objective 2**
- **Objective 3**
- **Objective 5b**

2000-2006

- **Objective 2**

Spending 1994-1999

- **82€** per capita (between 38€ and 195€)
- Regional funding: 25 Meuro
- Social funding: 96 Meuro
- Agricultural funding: 79 Meuro

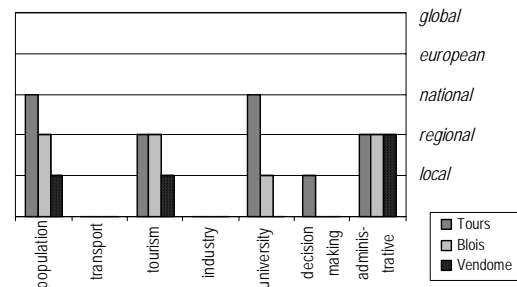
Functional and spatial status quo

Functional profile/specialisation of the region

- **13** Functional Urban Areas
- ESPON 1.1.1 FUA Economic base: N/A
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: **Peripheral** (2 "intermediate", 4 "peripheral" on NUTS III)

Role in the European spatial system

- 1.1.1 FUA sample typology



- FUA overall classification:
Tours: **transnational/national**
Blois, Vendome: **regional/local**
- ESPON 1.1.2 NUTS III Urban-rural typology: mostly **Urban, low human intervention**, one Rural, medium human intervention

Conclusions

The spatial evolution of the Région Centre can be interpreted as between a form of polycentrism and the predominance of two major cities. It is possible to imagine a parallel and separate development of the two main cities, where each one would polarise a portion of the regional space. A polycentric scenario would imply the development of complementarities and exchanges between the two main urban areas, so as to contribute to the development of the region as a whole. On the basis of current trends, turning the axis formed by the Loire into a metropolitan area is not yet real but still plausible. The Structural Funds have focused on the imbalance between the northern and southern part of the region, with the southern part lagging as regards economic development. The results here have however been limited.

As such, when attempting to address the issue of the spatial influences or impacts of the Structural Funds on territorial development, the direct influences on spatial positioning can be taken as point of departure. William (1996:97) wrote about the idea of spatial positioning:

Most local planners have a clear sense of the location within national space of the place for which they are responsible, often without thinking very consciously about it. The capacity to conceptualise or think about one's location or situation within the spatial structure of Europe as a whole is a skill which often needs to be developed. Spatial positioning is the term proposed for this skill. Through such a process, it is sometimes possible to identify opportunities, comparative advantage and possibilities on the basis of which new links and relationships could be developed and strategic policies formulated.

Translating this into a language more appropriate to the Structural Funds, this would imply the image of a place (i.e. a region) as being highly profiled in a given field of socio-economic specialisation and advantageously linked to other places. Therefore, in the following we will mainly address the issue of specialisation, thereafter only briefly touching upon related issues such as rural-urban relations and connectivity.

The degree of the specialisation of businesses and services is one factor determining the degree of spatial positioning influenced by the Structural Funds. Specialisation is however a rather broad concept, and in the programmes there are usually several measures and interventions that could be interpreted as affecting, or attempting to affect, the degree of specialisation in a region.

It has however always to be borne in mind that the aspects of structural change under which functional specialisation is addressed in the Structural Funds can also result in diversification rather than specialisation. This is most apparent in relation to the question of whether a region's economic development strategy focuses on developing key competences (being aware of the fact that this may lead to boosting development as well as vulnerability), or whether it opts for diversification instead (in order to have a broad, and thus perhaps more sustainable, or less risky portfolio of potential growth areas).

In what follows we will highlight the degree to which the Structural Funds have contributed to functional specialisation in each of the case study regions.

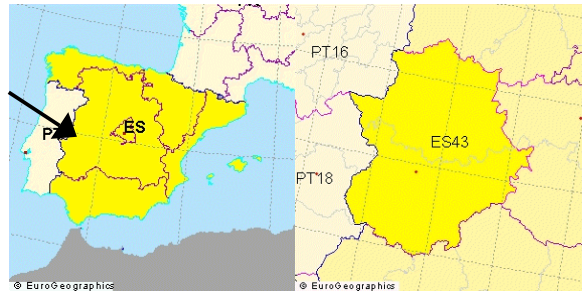
To start with, the term "specialisation" is rarely explicitly used in the documents studied. There are however a series of interventions identified that imply developments towards functional specialisation in a region, e.g. by aiming at the consolidation of, or building on, the region's economic performance or at the creation of long-term employment or the strengthening of the regional economy.

For instance in Lappi the Objective 1 programme has supported "the formulation of clusters and development programmes for each cluster" with a natural resource cluster being prominent here. In Norrland the traditionally strong industrial orientation is to some extent now a

Case Spain – EXTREMADURA

Introduction

- Extremadura
- population: 1 071 000
- 41 600 km²
- 26 inhabitants/km²
- GDP-Index 2000: 49,7% / 56,7%
- change from 96: +3,2 / -0,1%-point
- incl. 2 NUTS III
- NUTS II: ES 43



Structural Funds

Programmes

1994-1999

- Objective 1
- Objective 3
- URBAN Badajoz
- Innovative Actions

2000-2006

- Objective 1
- misc. national Objective 1 programmes
- Interreg IIIB South West Europe
- URBAN II Cáceres

Spending 1994-1999

- 1 492 €per capita
- Regional funding: 1083 Meuro
- Social funding: 354 Meuro
- Agricultural funding: 160 Meuro
- Cohesion fund: 2 Meuro

HOT SPOT: high Structural Fund-spending and positive GDP-change (on NUTS III: Badajoz, National)

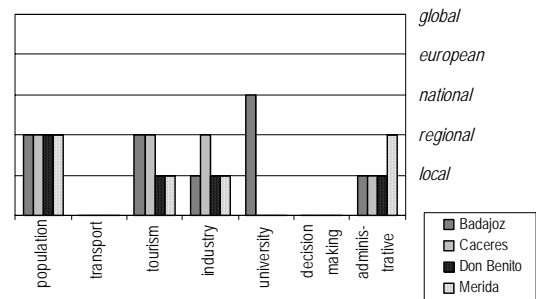
Functional and spatial status quo

Functional profile/specialisation of the region

- 4 Functional Urban Area
- ESPON 1.1.1 FUA Economic base: **Strong primary** (on each NUTS III)
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: **Peripheral** (“peripheral” / “very peripheral” on NUTS III)
- The regional economic structure is dominated by agriculture and tourism (of national importance), the industrial sector is extremely underdeveloped and services are increasingly important.

Role in the European spatial system

- ESPON 1.1.1 NUTS III Polycentricity typology: **only regional/local FUAs, but FUA population smaller than non-FUA population**
- ESPON 1.1.1 FUA typology



- FUA overall classification: Badajoz, Cáceres, Don Benito, Merida: **regional/local**
- ESPON 1.1.2 Urban-rural typology: **Urban, low human intervention** and **Rural, low human intervention**

Conclusions

No info yet.

negative trait, causing unemployment, out-migration and structural problems. The Structural Funds have however been important here in trying to affect the education level of people in the region such that they can successfully match the job opportunities in the emerging service and knowledge economy with the employable population. New businesses strengthened by Structural Funds funding are to be found for example in research (the space research centre) and car testing. In Sachsen Structural Funds funding is used in an attempt to develop "factors of potential" ("Potenzialfaktoren") such as industrial history, car manufacturing and biotechnology. In addition, Leipzig is viewed as a "learning region project". The German examples may in fact provide an example of an alternative strategy for coping with structural change, i.e. via the transfer of the region's old industrial heritage into new knowledge businesses. In addition, the Structural Funds have helped to attract new companies to the region, including large industrial companies such as BMW and Infineon.

In the Highlands and Islands, there are attempts to create a healthcare cluster and a University of Highlands and Islands, both of which could be viewed as strategically important in terms of specialisation and spatial positioning at the national level.

In Grevena the Structural Funds have been used in order to establish a "k-cluster" – knowledge cluster – in the areas of marble, energy, lignite, and hazardous material handling among others.

Overall the objective of the k-cluster is to show concrete cases of good practice on new product development and to transfer them to the largest possible number of regional firms.

In Finland the national "centres of expertise" programme is also visible as regards the focus of the Structural Funds, in the form of "cluster thinking" and the aim of strengthening the 'experience' industry and tourism in Lappi, in addition to natural resources and welfare. In addition, the strategy of inducing regional specialisation from the national level, and prescribing sectors to different geographical regions, could actually be interpreted as an explicit strategy for creating a polycentric pattern nationally, through the degree of specialisation. According to the case study, Objective 1 funding "... has enabled Lappi to practice regional policy that the region in itself considers to be important."

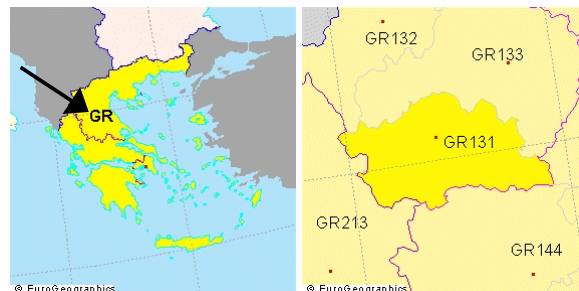
For both Centre and Toscana it is stated that the tourism sector gained significantly from the Structural Funds assistance, with financial assistance to tourism in Centre more than doubling between 1994-1996 and 1997-1999, while several tourist attractions were also developed.

Toscana is of global importance as regards tourism. Structural Funds funding during the 1994-1999 period had both priorities and measures aimed at developing the sector, and it has among other things resulted in job creation.

Case Greece – GREVENA

Introduction

- **Grevena**
- population: **37 964**
- **2 290 km²**
- **17 inhabitants/km²**
- GDP-Index 2000: **44,9% (!)**
- change from 96: **+9,3 %-points (!)**
- part of NUTS II Western Macedonia
- **NUTS III: GR131**
- Isolation and crisis in the local economy due to peripheral geographical situation and its proximity to Albania and former Yugoslavia. The geographical position at the same time an opportunity for the future
- Poor communication
- Low education level



Structural Funds

Programmes

1994-1999

- **Objective 1**
- misc. **national Objective 1** programmes

2000-2006

- **Objective 1**
- **INTERREG III A** Greece/Bulgaria
- **INTERREG III A** Greece/Albania
- misc. **national Objective 1** programmes

Spending 1994-1999

- **7 739€** per capita
- Regional funding: 315 Meuro
- Social funding: 6 Meuro
- Agricultural funding: 5 Meuro
- **HOT SPOT**: high Structural Fund-spending and positive GDP-change (EU and National)

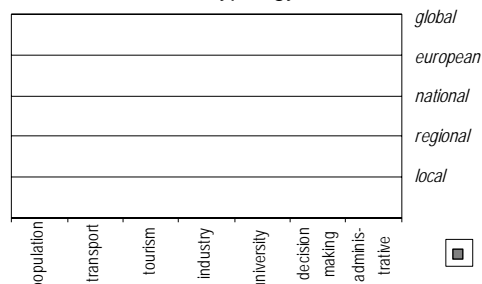
Functional and spatial status quo

Functional profile/specialisation of the region

- **0** Functional Urban Area
- ESPON 1.1.1 FUA Economic base: N/A
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: **Peripheral**
- Depending mainly on agriculture

Role in the European spatial system

- ESPON 1.1.1 NUTS III Polycentricity typology: **no FUA**
- ESPON 1.1.1 FUA typology – no FUA



- FUA overall classification N/A
- ESPON 1.1.2 NUTS III Urban-rural typology: **Rural, low human intervention**

Conclusions

Structural Funds had, and still have, a significant impact on the sustainable development of the region. The regional economy has gotten the opportunity to converge towards the EU average, aiming at the same time at achieving economic and social cohesion. Among the aims in the programmes are innovation and entrepreneurship and development of the region's mountainous, internal and less-favoured areas for reduced regional disparities.

Spatial positioning: functional specialisation

Following the aspects for functional specialisation chosen by the ESPON 1.1.1 project for its typology on polycentric development, the case studies provide initial insights on which of these aspects have been influenced by the Structural Funds.

Table 21: Specialisation aspects influenced by the Structural Funds

Case study region Aspect of specialisation	Calabria	Cantabria	Cataluña	Région Centre	Grevena	Highlands and Islands	Lakonia	Lappi	Madeira	Norrland	Sachsen	Southern and Eastern	Toscana	Région Wallonne	Σ	Rank
Knowledge /Higher education	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑		↑	↑	1
Tourism	↑	↑		↑	↑	↑	↑	↑	↑	↑		↑	↑	↑	↑	2
Industry	↑	↑	↑		↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	3
Economic base		↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑		↑	4
Administrative status	↑		↑		↑		↑		↑				↑			5
Decision-making centres			↑									↑				6
↑ = specialisation aspect influenced by Structural Funds & ↑ = some Structural Funds influence on specialisation aspects																

Source: ESPON 2.2.1

The table clearly indicates that the Structural Funds have had a significant level of influence on the fields of (1) knowledge, research and education and (2) tourism. When it comes to the influence of the specialisation with regard to (3) industry and (4) economic base of a region, the Structural Funds are considered as having had a minor influence on these issues. Very little or no influence could however be traced with regard to (5) administrative status and (6) the location of private business decision-making centres.

In the following we will present some more detailed findings on the influence on these six aspects:

- *Decision-making centres*

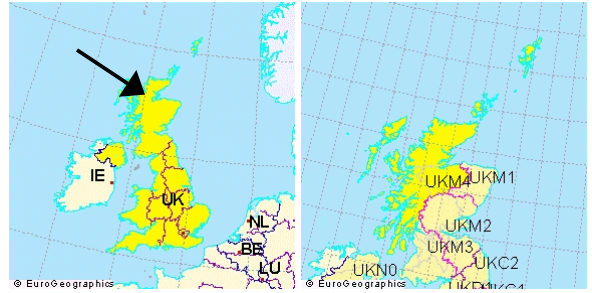
Judging by the indications coming from the case studies, *corporate decision-making or decisions relating to the location of company head quarters* have not been influenced by the Structural funds. Support for SMEs is an important element of the Structural Funds, but in this context of specialisation it would have been more important if support had gone to large companies increasing the private sector decision-making power of a region. Notwithstanding this however some indications of the Structural Funds having had an influence could be discerned in the Southern and Eastern region of Ireland, and in Cataluña, in both cases this was so at the national level. Ireland has been cited as one of the most dynamic economies in Europe in recent years and this has largely been due to

Case UK – HIGHLANDS AND ISLANDS

Introduction

- **Highlands and Islands**
- population: **372 000**
- **30 700 km²**
- **9 inhabitants/km²**
- GDP-Index 2000: between **66,9%** and **121,0%** (with the second strongest with 77,7%) on NUTS III
- change from 96: between **-5,3** and **+6,5 %-points**
- includes 6 NUTS III
- **NUTS II: UKM 4**

- One of the least densely populated areas in Europe
- High unemployment rate



Structural Funds

Programmes

1994-1999

- **Objective 1**
- **SME Community Initiative**

2000-2006

- **Objective 1 phasing out**
- **Interreg III B Atlantic Area**

Spending 1994-1999

- **1 063€** per capita
- Regional funding: 163 Meuro
- Social funding: 53 Meuro
- Agricultural funding: 176 Meuro

- **COLD SPOT:** high Structural Fund-spending and negative GDP-change (EU and National: Shetland Islands, National: a) Lochaber, Skye and Lochalsh, Argyll and the Islands, b) Western Isles)

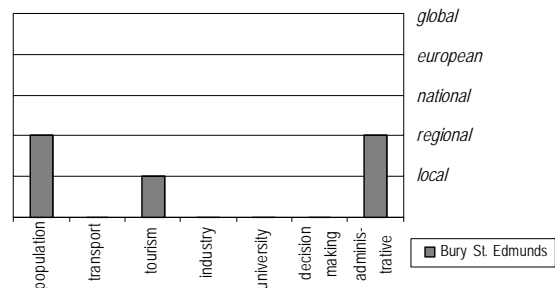
Functional and spatial status quo

Functional profile/specialisation of the region

- 1 Functional Urban Area
- ESPON 1.1.1 FUA Economic base: **diversified**
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: **Peripheral** (4 "very peripheral", 1 "peripheral" on NUTS III)
- Over-reliance on tourism and the primary sectors

Role in the European spatial system

- ESPON 1.1.1 FUA typology



- FUA overall classification:
Bury St. Edmunds: **regional/local**
- ESPON 1.1.2 NUTS III Urban-rural typology:
all **Rural, low human intervention**

Conclusions

The challenge of applying a polycentricity typology to a region with one core urban area that is itself small in national and European terms is clear. Nevertheless, spatial development themes are evident in Structural Funds programmes, albeit in an oblique way. These issues are particularly apparent in the Programmes' commitment to upgrading the regional transport network and, increasingly, improvements in the region's telecommunications infrastructure. Growing influence of the Lisbon agenda in deciding how Structural Funds are allocated has contributed to the furthering of spatial themes such as connectivity and accessibility. The Programmes' support for R&D initiatives has contributed to the development of a traditionally weak part of the regional economy and increased the potential for regional specialization in growth sectors that depend on improving regional, national and European connectivity. Overall, the impact of the SF programmes in terms of spatial development and territorial cohesion is hard to quantify in concrete terms.

The level of regional GDP has actually dropped over the Programming periods and local economies in the region remain poorly integrated. However, the value of Structural Funds in supporting projects with a long-term, regional, spatial perspective – which otherwise would not have been taken forward - is recognised.

FDI. The difference between the 1994-1999 and 2000-2006 programming periods is potentially revealing here however, as it has entailed a shift in focus away from Dublin into supporting other regions as potentially attractive business locations.

- *Administrative status*

For Grevena, Lakonia, Madeira and Toscana we argue that Structural funding has had an "important influence" on the *administrative status* of the region, that is its decision-making power over the public sector. In all four cases this refers to stronger regional status – strengthened regions in the national context, or in the case of Madeira, autonomous region status, and a greatly developed institutional capacity, both in a national and a European context. It seems however in general more common that Structural funding has only a limited or indeed no effect on the administrative status of a region.

- *Economic base*

Nearly all case studies consider Structural funding to have affected the *economic base* of the region to some degree, although few consider the level of influence to be more than "some". In Calabria a measure increasing start-ups was put in place, while in Grevena and Lakonia the tourism sector was reinforced through Structural funding. There is also some evidence to suggest that this generally was true also for Norrland and the case study region of Centre.

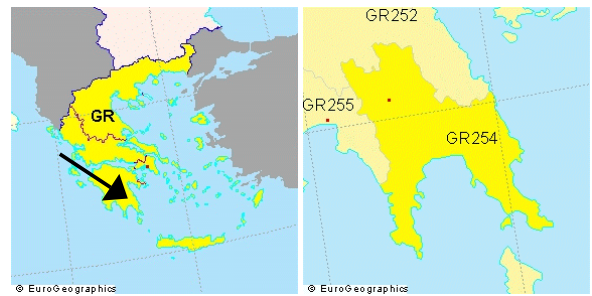
- *Industry*

As regards *industry*, several of the case study regions provide good examples of industry dependent regions, with the Structural Funds assistance designed mainly to reduce this dependence, while also encouraging investment in the service sector. In all of our case study regions the situation of industry, in the widest sense, was viewed as having been influenced by the Structural Funds programmes, although such influence has occurred to varying degrees and in various directions. In Calabria the negative development of the industrial sector persists, in spite of for example the Gioia Tauro port development project. A further example of this can be seen in the Southern and Eastern region of Ireland, where industry/business support is viewed as a rather important aspect in terms of Structural funding, related both to the regional and national levels. In Lakonia the industry sector is still seen as a potential growth area, in spite of continual support throughout the 1994-1999 and 2000-2006 planning periods, while in Lappi the region is still dependent on a few large companies, although the Structural Funds programmes have tried to support increased linkages to SMEs. In addition the region is still profiling itself in terms of a natural resource based industry. In both Sachsen and Southern and Eastern Ireland, industry was considered to be the key aim of the 1994-1999 funding period. In each case this led to growth in the sector. In Toscana and Région Wallonne funding has been targeted at business support training for the unemployed and thus has also led to job creation. In all four of the above-mentioned examples the regional (and on occasion, the national) level should be considered as the central level.

Case Greece – LAKONIA

Introduction

- **Lakonia**
- population: **104 600**
- **3 636 km²**
- **29 inhabitants/km²**
- GDP-Index 2000: **46%**
- change from 96: **+5,8 %-points (!)**
- **NUTS III: GR254**
- Poor communications, no airport, no railway, poor streets
- High tourist potential
- Low education level
- Agriculture the main employment sector
- Topography: central valley (Eurotas River) and two mountain ranges, running North-South



Structural Funds

Programmes

1994-1999

- **Objective 1**
- misc. **national Objective 1** programmes

2000-2006

- **Objective 1**
- **INTERREG III B ARCHI-MED**
- misc. **national Objective 1** programmes

Spending 1994-1999

- **420€** per capita
- Regional funding: 28 Meuro
- Social funding: 16 Meuro
- **HOT SPOT:** low Structural Fund-spending and positive GDP-change (National)

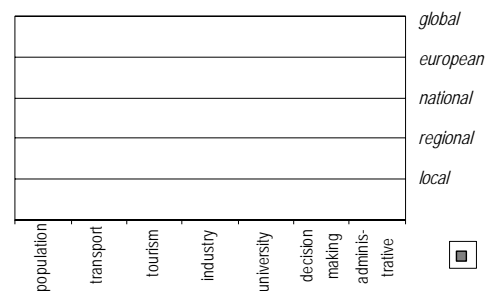
Functional and spatial status quo

Functional profile/specialisation of the region

- no FUAs
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: **Peripheral**

Role in the European spatial system

- ESPON 1.1.1 NUTS III Polycentricity typology: no FUAs
- ESPON 1.1.1 FUA sample typology - no FUAs -



- ESPON 1.1.2 NUTS III Urban-rural typology: **Rural, low, human intervention**

Conclusions

Structural Funds have had, and still have, a significant impact on the sustainable development of the region. The effects can be seen both in economic growth, in improved infrastructure, in job creation, in new activities and sectors and in quality of life aspects for the region.

- *Tourism*

Tourism development as a tool for regional development is often prominent in programmes and projects in several European regions, particularly in regions undergoing a period of structural change. It is however the category of economic development that has received most attention through Structural funding. This sector is connected to several others – both manufacturing and service oriented – while it also employs people from across all parts of the educational spectrum. Eight of the case studies report the “important influence” of the Structural Funds in this regard, with three reporting “some influence”, while several indicated during both the current and previous periods that tourism was, “a potential growth area”, “one of the strongest developing sectors”, “highly important”, “an important economic niche”, or that it had “significant employment potential” and was “considered a vital element for the regional economy”. It is only in Sachsen and Catalunya where the influence of Structural Funds funding on tourism was considered to be none-existent. Whether the indications from the case studies can be viewed as depicting a situation where tourism is now seen as the new regional industry, or merely a new valuing of ‘soft’ factors in the programmes, is thus an important question. It is also important to reflect on the interpretation of tourism as the *new* tool of regional development, as on further reflection it may be that it has only come into fashion once again.

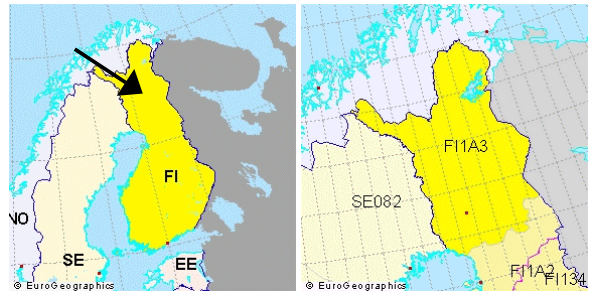
- *Knowledge and higher education*

Knowledge/higher education is the aspect of specialisation that emerges across the case study regions as the one most influenced by the Structural Funds.. It can cover a diverse range of initiatives both for increasing the education level of a region’s inhabitants, but also the knowledge level of business activities, and the region’s position in the international business arena. There are measures/projects included that are connected to e.g. learning ICT (Cataluña, Lappi), improving education infrastructure (Grevena, Lakonia, Madeira), the supply of vocational training (Grevena, Lakonia), increased access across the region to higher education (Lappi, Norrland) or the establishing of research centres on different subjects (environmental and space research centre MRI in Norrland, centre for industrial research, the radio astronomy centre and a research centre on ceramics in Région Centre and the so called Fraunhofer institutes of applied research in Sachsen). The German network of Fraunhofer institutes is similar to the Finnish centres of expertise programme, aiming to increase the knowledge and specialisation degree of businesses in a region, and thereby also in the country. Fraunhofer institutes are high profile applied research institutes, providing significant attraction factors for related businesses, as well as providing a useful source of spin-offs. The Centres of expertise in Finland are the result of other driving forces (governmental regional development policy) though they have similar effects for a region, in the sense that they give a specialisation profile to the region, something that might attract related business activities, or create spin-offs.

Case Finland – LAPLAND

Introduction

- **Lappi**
- population: **195 500**
- **98 937 km²**
- **2 inhabitants/km²**
- GDP-Index 2000: **87,7%**
- change from 96: **+2,9%-points**
- **NUTS III: FI 152**
- High unemployment rate
- High reliance on public sector employment



Structural Funds

Programmes

1994-1999

- **Objective 6**
- **Pesca**
- **Interreg IIA** Nordkalotten/Barents/Sapmi

2000-2006

- **Objective 1** for Northern Finland
- **Interreg IIIA** Finland/Sweden/Norway/Russia
- **Interreg IIIB** Baltic Sea Region

Spending 1994-1999

- **552€** per capita
- Regional funding: 51 Meuro
- Social funding: 31 Meuro
- Agricultural funding: 26 Meuro
- **HOT SPOT**: high Structural Fund-spending and positive GDP-change (National)

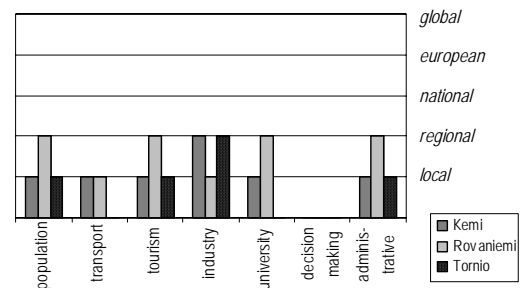
Functional and spatial status quo

Functional profile/specialisation of the region

- **3** Functional Urban Areas
- ESPON 1.1.1 FUA Economic base: **primary**
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: **Peripheral**

Role in the European spatial system

- ESPON 1.1.1 NUTS III Polycentricity typology : **only regional/local FUAs**
- ESPON 1.1.1 FUA sample typology



- FUA overall classification: Kemi, Rovaniemi, Tornio: **regional/local**
- ESPON 1.1.2 NUTS III Urban-rural typology: **Rural, low human intervention**

Conclusions

The main impact of the Structural Funds was perceived to include aspects of learning and governance in the field of regional development, with programme based work. Despite the criticism of growing bureaucracy the new cooperation model with actor networking, can be regarded as a credit of the Structural Funds. Furthermore, it has been evaluated, that the position of regional policy on the national political agenda has been reinforced, giving better positions to the regions to influence their development.

Summing up then, the contributions made by the Structural Funds to various aspects of functional specialisation of importance to polycentric development are wide ranging. The reason why tourism and knowledge/higher education emerge as those most influenced by the Structural Funds are clearly related to the focus of the programming as well as to the popularity of these two aspects in current policy making. Both include activities of potential regional, national or international importance, while both also address hard and soft factors as well as at the same time addressing industrial and service oriented activities. Education can be thus be either vocational training or internationally profiled knowledge intensive research activities, while tourism can be the manufacturing of products for sale to tourists, restaurants or the arrangement of large events, attracting visitors from across the globe.

Spatial positioning: rural-urban relations

Studying the spatial positioning of a region with regard to its socio-economic profile, i.e. functional specialisation, it became obvious that this is strongly intertwined with its morphological aspects. The debate here was often related to the question of rural-urban relations either within a region, in terms of town and hinterland, or in a wider geographical context, in terms of peripherality. In both cases the Structural Funds have little ability to influence the development of settlement patterns. Strategies for developing functional specialisations are however often tied to the desire to stem migration flows draining certain areas. Only in the case of Sachsen could the reverse be viewed, where instead a focus on developing central nodes was apparent.

Regardless of the intention, it seems that the *spatial impacts* of these ambitions are rather difficult to find. As in Calabria, where the case study states that programme measures are based on:

... a better articulation of the role and functions of the cities in a local context; pursuing an integrated policy of physical and urban improvement and social regeneration; building up inter-municipal networks to recuperate the historical centres and developing common services and policies. [...] Though the programming of the above mentioned measures was affected by the concept of polycentrism on a theoretical, strategic level, at present there is no evidence that the implementation of the strategy is producing results that are delivering increased polycentrism.

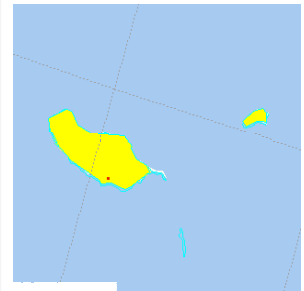
In Région Centre the Structural Funds have been helpful in the process of promoting the "pays", a new legal framework for bringing institutions and actors from different contexts together.¹³ This has increased urban-rural interaction in the region. In Madeira meanwhile Structural funding is considered to have improved interaction, for example through finding alternative economic activities for people in rural areas. Madeira is however a rather different

¹³ Within ESPON 1.1.1 this is translated to "project territory" in English and defined in the following way: "A 'project territory' is a territory defined by a common project developed by local authorities and recognized by the central government, which supports it with funds. The projects aim at stimulating coherence, mainly between the agglomeration and its surroundings. To bring cities and the countryside closer to each other (...) The demarcation and recognition of such areas (also referred to as 'pays') follow the initiatives of local inhabitants and politicians rather than technocratic criteria." (p.54 in WP2 report for ESPON 1.1.1)

Case Portugal – MADEIRA

Introduction

- Região Autónoma da Madeira
- 800km²
- population: 250 000
- 310 inhabitants/km²
- GDP-Index 2000: 72,8%
- change from 1996: +8,2%-points
- NUTS: I/II/III PT3
- Archipelago (4 islands of which 2 are inhabited)
- The archipelago situation problematic concerning exports and imports
- A highly differentiated topographical situation: mountains and coastlines, also connected to population distribution



Structural Funds

Programmes

1994-1999

- Objective 1
- Cohesion Fund Environment
- Cohesion Fund Transport

2000-2006

- Objective 1
- Interreg IIIB Azores – Madeira – Canary Islands
- Interreg IIIB South West Europe
- Misc. national Objective 1-programmes

Spending 1994-1999

- 3 564 €per capita
- Regional funding: 453 Meuro
- Social funding: 130 Meuro
- Agricultural funding: 108 Meuro
- Cohesion fund: 192 Meuro
- **HOT SPOT**: high Structural Fund-spending and positive GDP-change (EU and National)

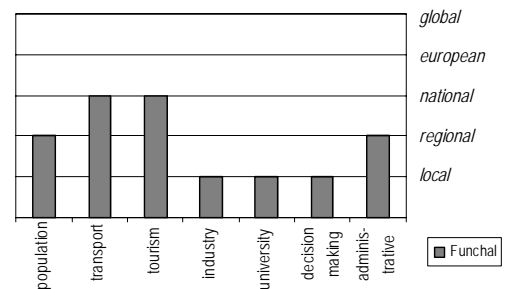
Functional and spatial status quo

Functional profile/specialisation of the region

- 1 Functional Urban Area
- ESPON 1.1.1 FUA Economic base: **Service**
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: **Very peripheral**
- Tourism is the most important economical factor
- A technology park intends to promote innovative and R&D intensive economic activities
- Business activities around shipping (Industrial Free Zone, International Business Centre)

Role in the European spatial system

- ESPON 1.1.1 NUTS III Polycentricity typology: **trans-national/national FUA, but FUA smaller than non-FUA-population**
- ESPON 1.1.1 FUA typology of Funchal



- FUA overall classification: **transnational/national**
- ESPON 1.1.2 Urban-rural typology: no data for Madeira
- National classification of the urban-rural relations: **“densely populated urban region”**

Conclusions

Structural Funds have had significant impact on the development of the territory in Madeira. Basic infrastructure has been improved, and new actors, new institutional infrastructures and new partnerships have been established, in the region and with other European regions.

case where the geographical characteristics make the urbanization problems rather minor, while the rural development possibilities remain limited.

There are numerous other examples among the case studies of regions with special geographical characteristics affecting the analysis of the situation. Norrland and Lappi are extremely sparsely populated, while the Highlands and Islands region is dispersed in its geographical constitution. In addition, Grevena is a region of low population density. Factors such as these clearly affect the preconditions for urban-rural integration. In Norrland the areas eligible for Structural funding during the 1995-1999 period were divided into two programme regions, one for the coastal parts, where the population and the urban areas are predominantly situated, and one for the sparsely populated inland. This arrangement undoubtedly however had a negative impact as it "broke up" the functional relationships that in reality exist between these two parts of the region. Those in fact living in the inland areas depend on the cities, while the economies of the cities are still to a large degree dependent upon the natural resources of the inland areas. For the current programming period the two regions of the previous period have now become one, and thus the point of talking in terms of polycentricity has subsequently been enhanced

Moreover, it is viewed that the Structural Funds programmes for Norrland for 2000-2006 show a greater awareness of the importance of urban-rural relationships as a tool for trying to solve the development problems of the region. As regards measures on how to improve urban rural relations it is stated that infrastructure and research and education activities are the most important elements of the programme measures. The current situation in the region is one of increased immigration to the urban areas, and continued out-migration from the rural areas. Whether this has come as a result of the Structural Funds growth focus or, on the contrary, whether we can say that Structural funding has reduced the negative effects of the out-migration, is hard to say. Perhaps the reality is that funding has helped to ameliorate the negative effects while not really improving the situation in the rural areas. Or is it the case that the rural areas also benefit from positive developments in the urban areas? This refers back to the discussion of the pros and cons of polycentricity.

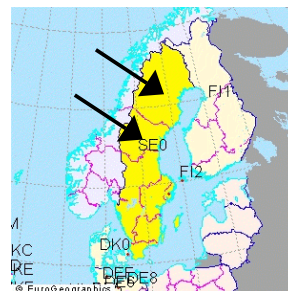
In the Highlands and Islands, another example of a region where the population criterion as regards polycentricity does not apply, Structural funding to the regional university is brought forward for its effect on urban-rural relations. The university has worked as a node linking a range of partners from the periphery to the centre, in the town of Inverness.

The case study for Sachsen clearly indicates a strategy for polycentric development as regards the Structural Funds allocations, even though awareness or use of the concept was not significant in the period 1994-1999. Regarding urban-rural relations there has been a concentration on the larger urban areas as regards the amount of funding, and in a mid-term evaluation of the current Objective 1 programme there may be a potential conflict in this urban focus of investments, between the competitiveness goal on the one hand and the "... harmonious development between cities and regions" on the other. In Sachsen the population

Case Sweden – NORRLAND

Introduction

- Mellersta Norrland and Övre Norrland
- population: **898 400**
- **225 400 km²**
- **4 inhabitants/km²**
- GDP-Index 2000: between **85,9%** and **99,0%**
- change from 96: between **-10,5** and **-5,5 %-points**
- incl. 4 NUTS III (Län/Counties)
- **2 NUTS II: SE 07/SE 08**



Structural Funds

Programmes

1994-1999

- **Objective 2-programmes** for both counties
- **Objective 3**
- **Objective 5b**
- **Objective 6**

2000-2006

- **Objective 1** Övre Norrland
- **Objective 1** Södra Skogslän
- **Interreg III A** Kvarken-MittSkandia
- **Interreg III B** Baltic Sea Region
- **Interreg III A** Sweden/Norway

Spending 1994-1999

- **338€** per capita
- Regional funding: 147 Meuro
- Social funding: 91 Meuro
- Agricultural funding: 66 Meuro
- **COLD SPOT:** high Structural Fund-spending and negative GDP-change (National)

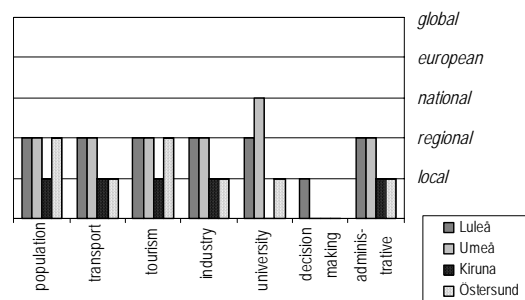
Functional and spatial status quo

Functional profile/specialisation of the region

- **8** Functional Urban Areas
- ESPON 1.1.1 FUA Economic base: 5 **Diversified**, 2(1) "(strong) primary"
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: **Peripheral** ("peripheral" on each NUTS III)

Role in the European spatial system

- ESPON 1.1.1 sample FUA typology



- FUA overall classification
Luleå, Umeå: **transnational/national**
Kiruna, Östersund: **regional/local**
- ESPON 1.1.2 NUTS III Urban-rural typology: **Rural, low human intervention**
- National classification: **sparsely populated rural region**

Conclusions

The main impacts of the Structural Funds are perceived to include learning and governance aspects, as the whole methodology of working partnerships was new. Co-operation and networking were thus repeatedly referred to as the main aspects of policy impact. Direct and indirect territorial impact was found in the R&D sector, education and infrastructure.

concentration in the cities of Leipzig, Dresden and Zwickau continues with a bipolar structure built around Chemnitz and Zwickau being clearly apparent, and according to the case study, with “territorially blind” Structural Funds programmes, the problem of weak urban-rural relations will not be reduced. Similarly, in the Southern and Eastern region of Ireland it is considered important to look closely at the needs of Dublin, in a European perspective, but at the same time to view this in relation to the desire to ensure growth and development in other areas. This integrated view is something new for the current programme period. “In past programming periods documents tend to treat rural development as a distinct area of action”.

Under the 2000-2006 Operational Programme for Economic and Social Infrastructure investment in roads and environmental services have aimed to make it more attractive for industry to locate away from the larger urban centres and thus increase the opportunity for people living in rural areas to be employed locally.

This is consequently a conflict or a perspective that is present in several regions of Europe, and it is not as yet clear whether Structural funding improves or worsens these relations.

In the cases of Grevena and Lakonia in Greece, all programmes are viewed as having a polycentric approach as they support the smaller towns and rural areas, in order to spread growth beyond the city cores. There are however no actions explicitly dealing with urban-rural relations. In Lakonia Structural funding has improved the infrastructure thereby reducing accessibility problems, and any immediate hindrances to urban-rural integration. The evaluation for the Calabria 1994-1999 programme concluded that the measures intended to restore rural buildings for the purposes of tourism also had an impact on maintaining the population in the rural areas, even though this was not an explicit intention. In Toscana a similar development has also been detected. In addition, the diversification of economic activity has contributed to maintaining population settlements in rural and more mountainous areas.

Table 22: Structural Funds influences on rural-urban relations

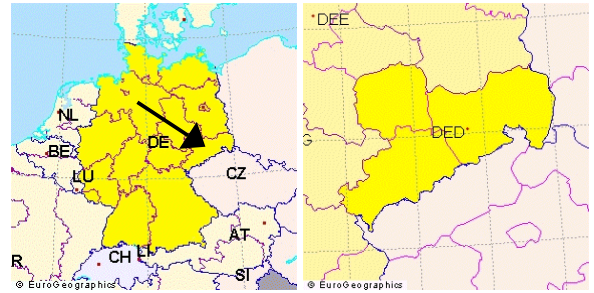
	Calabria	Cantabria	Cataluña	Centre	Grevena	Highlands and Islands	Lakonia	Lappi	Madeira	Norrland	Sachsen	Toscana	Southern and Eastern	Région Wallonne	Σ	Rank
Rural-urban status	↑	↑		↑	↑		↑		↑				↑	↑		1
Promotion of rural-urban interaction	↑			↑	↑		↑	↑	↑						↑	2
Possible concentration trends	↑	↑	↑		↑		↑	↑						↑		3
Population density			↑		↑		↑		↑				↑			4
↑ = Rural-urban relations influenced by Structural Funds & ↑ = some Structural Funds influence on rural-urban relations																

Source: ESPON 2.2.1

Case Germany – SAXONY

Introduction

- Freistaat Sachsen
- population: 4 474 800
- 18 300 km²
- 244 inhabitants/km²
- GDP-Index 2000: between 45,7% and 111,6%
- change from 96: between -16,6 and +16,2 %-points
- NUTS I: DED



Structural Funds

Programmes

1994-1999

- Objective 1

2000-2006

- Objective 1
- URBAN II
- Interreg III A Phare CBC Saxony/Czech Republic
- Interreg III A Phare CBC Saxony/ Lower Silesia

Spending 1994-1999

- 740€ per capita (between 678€ and 1 151€)
- Regional funding: 2515 Meuro
- Social funding: 794 Meuro
- **COLD SPOT:** high Structural Fund-spending and negative GDP-change (EU and National on NUTS III: Leipziger Land)

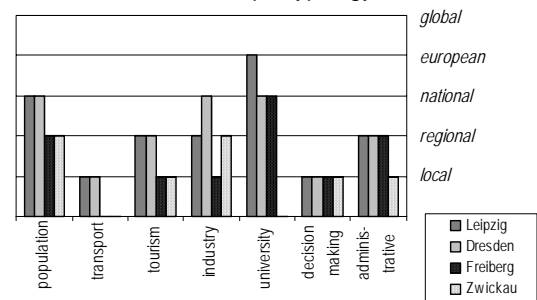
Functional and spatial status quo

Functional profile/specialisation of the region

- 11 Functional Urban Areas
- ESPON 1.1.1 FUA Economic base: mostly **diversified**, **2 industrial**, **1 service**
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential mostly **intermediate**, 3 “central”, 1 “peripheral”

Role in the European spatial system

- ESPON 1.1.1 FUA sample typology



- FUA overall classification
Leipzig, Dresden: **transnational/national**
Freiberg, Zwickau: **regional/local**
- ESPON 1.1.2 NUTS III Urban-rural typology: mostly **Urban**, **high human intervention**, two Rural, medium human intervention

Conclusions

The Structural Funds programmes for Sachsen tries to moderate the process of further decline by way of improving framework conditions and directly subsidising investment. In principle, the period 1994-1999 was not different from the current period. However, whereas the ‘equal shares for all’ was the guiding principle before, with the 2000-2006 programme the new signals will definitely be switched towards stronger concentration on growth poles. In Sachsen this also is visible in the territorial structures, with three strong centres (the Saxony triangle of Dresden, Leipzig and Zwickau) hopefully generating spread effects towards the surrounding less developed parts. However, the territorial awareness in the Structural Funds programmes or in regional development has not been strong. Cross-border co-operation is important, due to the region’s location between strong West German Länder and challenging new member states.

Summing up, the table clearly indicates that the Structural Funds have only a marginal influence on the development of rural-urban relations, in particular with regard to demographic aspects. The rating of the four aspects identified indicates that population density and migration were not influenced that strongly by Structural Funds assistance, though rural-urban relations were to a somewhat larger degree influenced in this way. This result is in line with expectations as there are several measures in the programmes dealing with rural-urban relations, and involving different types of actors in development. In addition, through transport and accessibility interventions and through supporting increased economic diversification in rural areas their isolation is considerably reduced. Migration and population development are also addressed in the programmes, but demographic changes are more complex matters, influenced by many other factors that EU funding cannot affect to any substantial degree. Five of the case studies reported an influence on population density through Structural funding in their respective regions, though in only two cases, namely, Lakonia and Southern and Eastern Ireland, was is considered important.

Spatial positioning: the relation function

It is certainly clear that spatial positioning has as a relational dimension. This relates to the question of accessibility on the one hand, i.e. how easy is it to reach a certain place? This dimension is obviously influenced by infrastructure measures carried out under the Structural Fund programmes. On the other hand, the relational dimension comprises the question of strategic networking between actors in different places. This networking dimension is only tangentially influenced by Structural Funds and where this is the case mainly through the Community Initiative Interreg. As regards networking and partnership within the region, this will be discussed in the section on governance.

Table 23: Structural Funds influences on links (relational polycentricity)

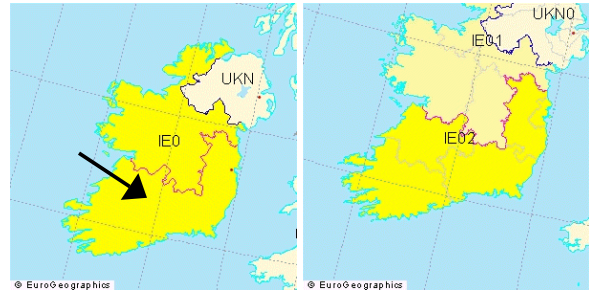
	Calabria	Cantabria	Cataluña	Centre	Grevena	Highlands and Islands	Lakonia	Lappi	Madeira	Norrland	Sachsen	Southern and Eastern	Toscana	Région Wallonne	Σ	Rank
Accessibility	↑	⬆	↑	↑	⬆	⬆	⬆	↑	⬆	⬆	⬆	⬆	↑	↑	⬆	1
Networks (promoting specialisation)		⬆	↑		↑		↑	↑	⬆	↑			⬆			2
⬆ = Link aspect influenced by Structural Funds & ↑ = some Structural Funds influence on link aspect																

The importance of the relational dimension and thus of the influence of the Structural Funds on this, is highest in peripheral and border regions. In the case of Norrland it is stated that the importance of the European context has changed significantly since the former programme period (the first for Sweden). There is now a demand for the stronger internationalization of the economy and for increased competence in EU questions, while the region is now also taking

Case Ireland – SOUTHERN and EASTERN

Introduction

- **Southern and Eastern**
- population: **2 757 700**
- **36 414 km²**
- **73 inhabitants/km²**
- GDP-Index 2000: between **92,3%** and **154,5%** on NUTS III
- change from 96: between **+10,7** and **+33,7 %-points(!)**
- includes 5 NUTS III Authorities
- **NUTS II: IE 02**
- High differences between the growing urban areas, especially Dublin, and the rural underdeveloped areas
- Increased educational level
- Increased activity rate



Structural Funds

Programmes

1994-1999

- **Objective 1**
- Misc. **national OPs**
- **Community Initiatives:** Interreg II CI (EIRE-Wales), Interreg II CI (EIRE-Northern Ireland), Interreg II CI Atlantic Area, Interreg II CI North Western Metropolitan area, SME CI, Urban CI (Dublin-Cork), PEACE CI (Ireland-Northern Ireland)

2000-2006

- **Objective 1 phasing out:** Southern and Eastern Region Operational Programme
- **URBAN II** Dublin – Ballyfermot
- **Interreg III A** – Ireland/Wales
- **Interreg III B** North-West-Europe

Spending 1994-1999

- **1 505€** per capita
- Regional funding: 1573 Meuro
- Social funding: 1363 Meuro
- Agricultural funding: 112 Meuro
- Cohesion fund: 1101 Meuro
- **HOT SPOT:** high Structural Fund-spending and positive GDP-change (EU and National for NUTS III Dublin and South West)

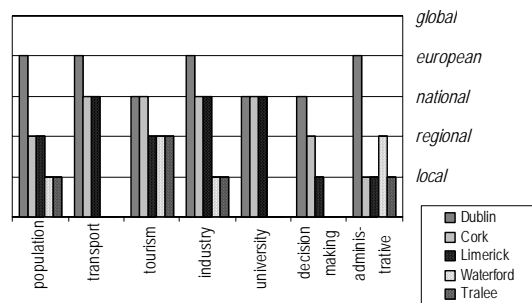
Functional and spatial status quo

Functional profile/specialisation of the region

- **5** Functional Urban Areas
- ESPON 1.1.1 FUA Economic base: **3 industrial, 1 diversified, 1 strong industrial**
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: **Intermediate** (3 "intermediate", 2 "peripheral" on NUTS III)
- Dublin as the highly important economic centre

Role in the European spatial system

- ESPON 1.1.1 FUA typology



- FUA overall classification:
Dublin: **MEGA**
Cork, Limerick: **transnational/national**
Waterford, Tralee: **regional/local**
- ESPON 1.1.2 NUTS III Urban-rural typology:
Dublin: **Urban, high human intervention** otherwise Urban, low human intervention, and one Rural, high human intervention

Conclusions

Direct and measurable impacts of Structural Funds on spatial development trends, approaches and priorities are extremely difficult to assess. However, this case study demonstrates that there are areas where Structural Funds in Ireland have funded priorities, measures and projects or promoted priorities and practices that are in line with the goals outlined in the European Spatial Development Perspective.

It is also possible to track an evolution where spatial development concerns have gradually gained a greater profile in national policy objectives and the Structural Funds programmes. Areas where the impact of the Structural Funds is particularly apparent are in regional governance and the implementation of policy. In these areas the Structural Funds have introduced innovative policy practices, reinforced existing strengths and enhanced regional participation in development planning.

part in several different international co-operation networks within the Northern periphery, the Barents region, the Baltic Sea Region, Bothnian Arc etc. Moreover, the north of Sweden provides an interesting case in this context as, according to the interviews, it displays the characteristics of robust internationalization and Europeanization *with* a strong EU scepticism. Lappi is in a similar peripheral location to Norrland and international co-operation is also here considered important as it entails expanded markets and job-opportunities. For Lappi the co-operation networks aim towards the east, to Northwest Russia, but also within the North Calotte area.

In the case of the Highlands and Islands in Scotland the case study indicates that the impact of the Structural Funds in terms of polycentricity are difficult to discern, though a shift between the two programme periods can be seen, with more emphasis on transport communication in 1994-1999 being replaced by a greater focus on digital communications in the current period.

In Sachsen, international networking is also seen as important, with the region being centrally located but peripheral as it still suffers from the structural problems associated with its East German heritage. The EU context is however often used in the strategic rhetoric:

Both programming periods use the EU context – and the global integration argument – as a standard backcloth to depart with the formulation of the specific strategy. Being part of a global economy (even if on the short end), being part of Europe, and facing the extension of the EU towards the East constitute a general awareness on the part of the actors involved.

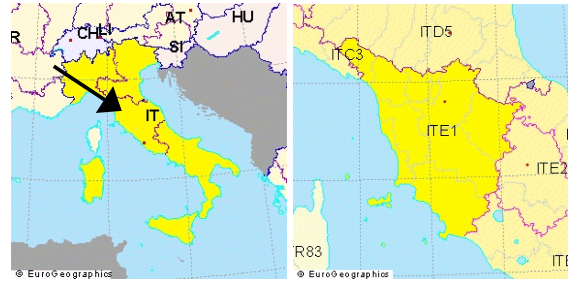
The CADSES network (Central European, Adriatic, Danubian, South-Eastern European Space) is an Interreg funded initiative for trans-national co-operation in spatial planning of which Sachsen is a part, in addition to regions in the new member states, the Balkans, Italy, Greece and others. The new member states are however not only seen as positive partners in co-operation, but also as potential threats, as their accession and their economic situation could remove focus from the development – and the development problems, of Sachsen.

As regards infrastructure links there are several examples from the case studies of the influence of the Structural funding in this respect. There are examples of projects with the aim of strengthening both nodes and links – airports, air links, ports, railway links or motorways. In the Southern and Eastern Ireland region for example there have been attempts to try to reduce the risk of Dublin becoming a “dispersed city” with high-tech industries located around the city edge. In Grevena, infrastructure has been an important part of the EU funded activities, and a number of examples were illustrated in the case study. The Via Egnatia, an ancient and originally Roman road through northern Greece, and the PATHE motorway (“Patras-Athens-Thessaloniki”) are two important parts of the Greek motorway system, and with assistance from the Structural Funds the attempt has been made to reduce the region’s isolation and improve its intraregional and trans-regional communications. According to the case study this strategy has worked well. Similarly for the other Greek case study region Lakonia and for

Case Italy – TUSCANY

Introduction

- **Toscana**
- **population: 3 460 835** (2001)
- **23 000 km²**
- **150 inhabitants/km²** (between 49 and 308 inhabitants/km² on NUTS III)
- GDP-Index 2000: between **89,2** and **133,6%** on NUTS III
- change from 96: between **-4,6** and **+6,3 %-points** on NUTS III
- administration in 10 provinces (on NUTS III level)
- **NUTS II: IT51**
- Shift from agriculture and industry to service sector, but still agriculture plays an important role especially in the less densely populated provinces
- Tourism is very important



- Wide gap between activity rates of men and women
- Relatively low education
- Serious environmental problems

Structural Funds

Programmes

1994-1999

- 1994-96/1997-99 **Objective 2**
 - 1994-99 **Objective 5b**
 - **Community Initiatives:** Resider II, Retex II, SME, Rechar II
 - **Objective 3**
- #### 2000-2006
- **Objective 2**
 - **URBAN II** Carrara

Spending 1994-1999

- **116 €** per capita
- Regional funding: 213 Meuro
- Social funding: 81 Meuro
- Agricultural funding: 115 Meuro
- **HOT SPOT:** low Structural Fund-spending and positive GDP-change (National)

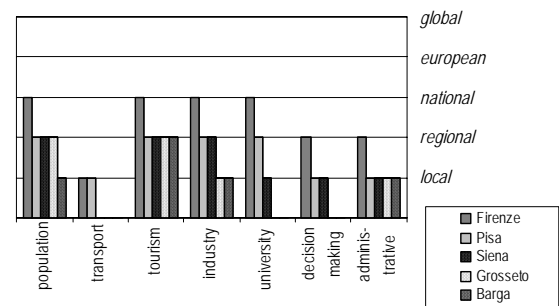
Functional and spatial status quo

Functional profile/specialisation of the region

- **22** Functional Urban Areas
- ESPON 1.1.1 FUA Economic base: **diversified, service, primary**
- 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: **Intermediate** (from "peripheral" to "central" on NUTS III)

Role in the European spatial system

- ESPON 1.1.1 FUA sample-typology of Firenze, Pisa, Siena, Grosseto and Barga



- FUA overall classification:
Firenze and Pisa: **transnational/national**
Siena, Grosseto, Barga: **regional/local**
- ESPON 1.1.2 NUTS III Urban-rural density typology: mostly **Urban, high human intervention**, 2 Urban, low human intervention, 1 Rural, low human intervention

Conclusions

Structural Funds in Toscana have, especially during the later programme period, contributed to increased territorial cohesion and polycentrism, especially at the intra-regional level, but also with broader consequences. This is however due to the favourable pre-existing territorial structures, already polycentric. The Structural Funds are in addition only one aspect of several that have affected the development.

Madeira the studies indicate that projects improving the regions' infrastructure – tunnels, port and airport infrastructure – have been central their development.

In Calabria in southern Italy, several infrastructure projects aimed at improving regional and national accessibility have been funded, or are envisioned in preparatory work. A bridge to Sicily is perhaps the most striking example of such projects. Other examples include improved air transportation in three locations improving accessibility both nationally and transnationally, and the improved port of Gioia Tauro, which is very important for Mediterranean container trans-shipment business. Additionally, improvements in the railway system are also to be expected in future.

The focus on developing connections among existing nodes is considered crucial to developing regional, interregional and international links such as the connection of the port of Gioia Tauro with the Tirrenic corridor and also with the Brennero.

In Lappi the EU funded initiatives to develop a more dynamic tourism industry within the broader theme of 'experience tourism' have provided an important additional impetus to improving the transportation infrastructure, as good accessibility for tourists also makes good accessibility for the inhabitants. This is a good example of the fact that infrastructural investments can function as the driving force for development in other sectors.

Spatial positioning: conclusions

This analysis of the case studies illustrates that the Structural Funds can positively influence the spatial positioning of the region in question. This influence is, however, limited to a few key aspects and relies on the existence of certain development trends that can be reinforced. It is thus argued here that the Structural Funds can have an impact, but only provided they are used consistently and together with other appropriate policy instruments and funding sources, as in most cases their volume is rather limited.

The Structural Funds can best influence the spatial positioning of a region with regard to transportation links and functional specialisation in the fields of knowledge and education as well as tourism.

In the other fields reviewed in terms of functional specialisation – i.e. industry, economic base, administrative status and decision-making centres – the influence of the Structural Funds is negligible for the most part, with the findings of the case study analyses needing to be seen in conjunction with the findings on the influence of the Structural Funds across the various dimensions of polycentric development, presented later in this report.

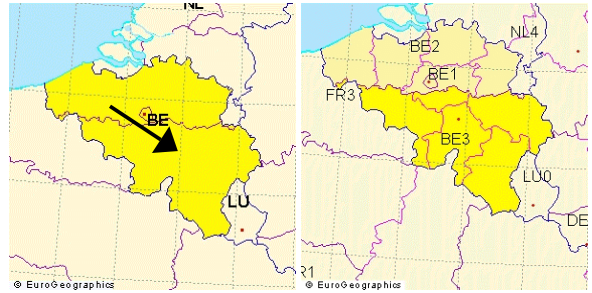
10.3 The Lisbon themes in the case studies

Naturally the relevance and indeed political centrality of the Lisbon strategy and the themes it encompasses does not fit particularly well with the time perspective of the study reported here.

Case Belgium – WALLONIA

Introduction

- **Région Wallone**
- population: **3 333 000**
- **16 800 km²**
- **198 inhabitants/km²**
- GDP-Index 2000: between **46,0%** and **102,4%**
- change from 96: between **-11,4** and **+2,0%-points**
- incl. 5 NUTS II and 20 NUTS III
- **NUTS I: BE 3**



Structural Funds

Programmes

1994-1999

- **Objective 1**
- **Objective 2**
- **Objective 3**
- **Community Initiatives:** LEADER, Konver, Interreg, URBAN, RECHAR

2000-2006

- **Objective 1 phasing out** for Hainaut
- **Objective 2** Meuse-Vesdre basin
- **Objective 2** Provinces Namur and Luxembourg
- **Interreg IIIA** Belgium/France/Luxembourg
- **Interreg IIIB** North West Europe
- **Interreg IIIB** North Sea Region
- **Interreg IIIA** Euregio Maas-Rhein
- **URBAN II** Sambreville

Spending 1994-1999

- **329€** per capita
- Regional funding: 643 Meuro
- Social funding: 366 Meuro
- Agricultural funding: 87 Meuro

COLD SPOT: high Structural Fund-spending and negative GDP-change (on NUTS III: Charleroi, Signies, Tournai, National)

HOT SPOT: high Structural Fund-spending and positive GDP-change (on NUTS III: Mouscron, National)

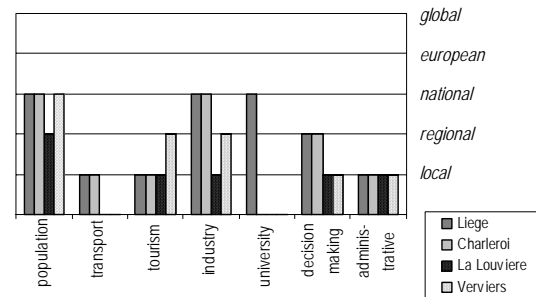
Functional and spatial status quo

Functional profile/specialisation of the region

- **8** Functional Urban Areas
- ESPON 1.1.1 FUA Economic base: mostly **diversified**, 2 "service"
- ESPON 2.1.1 NUTS Accessibility: Multimodal Accessibility Potential: 1 **Very Central**, 3 **Central** and 1 **Intermediate**

Role in the European spatial system

- ESPON 1.1.1 FUA sample typology



- FUA overall classification:
Liege, Charleroi: **transnational/national**
La Louviere, Verviers: **regional/local**
- ESPON 1.1.2 NUTS III Urban-rural typology:
mostly **urban, high human intervention**. Two Rural, high human intervention and four Rural, medium human intervention

Conclusions

The Structural Fund programmes implemented in Région Wallon during the previous and current programming periods have had important spatial impacts on their designated areas, and beyond on the region as a whole. However, it is very difficult to provide an accurate assessment of what this means in terms of polycentric development and territorial cohesion. What can be stated is that added value brought by the Structural Fund programmes, particularly in terms of the processes and emphases of economic development policy.

The Lisbon strategy for employment, economic reform and social cohesion was after all introduced in 2000, with the subsequent Gothenburg strategy (where the European governments committed themselves to a strategy for sustainable development and added an environmental dimension to the Lisbon process), being introduced in 2001, whilst the main focus of our study here is the previous programming period of 1994-1999. At the same time one also needs to acknowledge that the objectives set in Lisbon and Gothenburg are part of a longer path-dependent process of policy co-ordination and priority setting, and as such the seeds of Lisbon and Gothenburg were already sown at previous decision-making points within the European Union, where the competitiveness of the EU was gradually strengthened, while themes such as the Information Society, innovation policy and employment have been on the policy agenda in different forms for a considerably longer time (as is also reflected in the analysis of the Structural Funds programmes during 1994-1999 in our case study regions).

The Lisbon Strategy is a commitment to bring about economic, social and environmental renewal in the EU. In March 2000, the European Council in Lisbon set out a ten-year strategy to make the EU the world's most dynamic and competitive economy. Under the strategy, a stronger economy will drive job creation alongside social and environmental policies that will ensure sustainable development and social inclusion. The Lisbon Strategy touches upon almost all of the EU's economic, social and environmental activities, with the connection between the Structural Funds and the Lisbon strategy marked across all levels of governance.

In line with the broader strategies, the latest report on the follow-up to the Lisbon strategy also addresses the role of the Structural Funds in this context. The investment in innovation and knowledge is a central theme throughout the Lisbon strategy and the connection to the Structural Funds is also made within the follow-up to the Lisbon process (e.g. COM (2004) 29 final/2), where it is argued that nearly 80 billion euros have been disbursed since 2000 to support three of the Lisbon strategy's chief aims, namely, investment in human capital (20 billion), innovation and entrepreneurship (22 billion), and linking up trans-European transport, energy and telecommunications networks (37 billion). As part of the Structural Fund mid-term review, an extra 8 billion euros from the performance reserve was allocated to successful programmes before the end of March 2004, in keeping with the Lisbon strategy priorities (broadband infrastructures in particular). Furthermore, the Structural Funds will also contribute to the implementation of the Growth Initiative as it relates to high output networks, especially for schools and hospitals. Finally, the new Member States have received guidelines for preparing future programmes that focus on the modernisation of networks, the environment, employment, research and innovation. (Ibid, 20) In the ongoing analysis of the territorial impact of the Structural Funds it has been found that the Information Society theme in particular is addressed in a majority of Structural Funds programmes, as are the R&D development concerns, while the social inclusion aspects are less often addressed.

The themes selected for the case study analysis as regards the Lisbon strategy were outlined as follows:

- **An Information Society for all** through improving access to communications infrastructure, especially among excluded groups and using information technologies to renew urban and regional development and promote sustainable development
- **Establishing a European area of research and innovation** through improving the efficiency and innovation of research activities and improving the environment for research
- **Creating a business friendly environment for SMEs** through encouraging interfaces between companies and financial markets, R&D and training institutions, advisory services and technological markets
- **Education and training for living and working in the knowledge society** through the development of local learning centres, and the promotion of new basic skills
- **More and better jobs** through the improvement of employability and reducing skills gaps, encouragement of lifelong learning, reduction of deficits in the service economy and the extension of equal opportunities
- **Promoting social inclusion** through the improvement of skills and the promotion of wide access to knowledge and opportunity.

In each of the case studies national experts were asked to indicate what was the status of including the themes in question during the programming period 1995-1999 (in the programmes, especially in light of evaluations as to the inclusion of the themes), as well as impact, i.e. the current status of these themes in relation to the previous programming period and the possible cases where the priorities and measures, as well as projects had already been reflected in the priorities during the current programming period. National experts were also asked to give a rating as to the impact of Structural Funds activities during the previous programming period as regards the Lisbon relevant themes.

In most cases the Lisbon themes were explicitly addressed in the 2000-2006 programmes, though the picture was more varied during the actual programming period, thus reflecting a process of policy diffusion and learning within the EU context as the Lisbon policy agenda was ultimately reflected at the national and regional levels. For instance in the case of Catalunya, when analysing the move from the 1994-1999 period to the 2000-2006 period, the inclusion of Lisbon related themes is particularly clear, as the strategic objectives include:

1. Favouring real convergence by stimulating business and territorial competitiveness, technological development and implementation of the Information Society, better infrastructures to articulate the territory, diversification of the productive fabric, better qualification of human capital and local and urban development and support to the tourism sector.

2. Favouring the creation of employment, employability and equal opportunities.
3. Favouring sustainable development, social welfare and quality of life through environmental protection and conservation policies, better infrastructure, an improved network of social services, the development of the welfare state and territorial balance.

These aspects of policy diffusion and the Europeanization of the regional priority areas are however perhaps even more relevant to Europe's lagging regions, as indicated by the experiences of Grevena in West Macedonia, where innovation activities and information Society themes have now begun to make an appearance. During the period 1994-2006 a number of important actions took place, in particular in the context of the RIS (Regional Innovation Strategy) and RIS+ programmes. Their implementation in the region of West Macedonia for instance (especially in the case study region of Grevena) has been seen as an important step in connecting the research – innovation – new technologies with the productive sector of the region, aiming at the creation of a new competitive economy, new products and a generally healthy socioeconomic environment.

Table 24: Structural Funds and Lisbon Themes

Case study region	Catalabria	Cataluña	Cantabria	Région Centre	Grevena	Highlands and Islands	Lakonia	Lappi	Madeira	Norrland	Sachsen	Southern and Eastern	Toscana	Région Wallonne	Σ	Rank
Lisbon theme of relevance																
Creating a business friendly environment for SMEs	⬆	↑	↑	↑	⬆	⬆	⬆	⬆	⬆	⬆	↑	↑	⬆	↑	⬆	1
Education and training for living and working in the knowledge society	↑		⬆	↑	⬆	⬆	⬆	⬆	⬆	⬆	⬆	↑	↑	↑	⬆	2
Establishing a European area of research and innovation	⬆	↑	⬆	↑	⬆	⬆	⬆	⬆	⬆	⬆		↑	↑		⬆	3
An Information Society for all	↑	↑	⬆	↑	⬆	↑	⬆	⬆	⬆	⬆		↑	↑		↑	4
More and better jobs	↑		⬆		⬆	⬆	⬆	↑	↑	↑	⬆	↑	↑	↑	↑	5
Promoting social inclusion	⬆		↑		⬆	↑	⬆	↑	↑	↑				↑	↑	6
⬆ = Lisbon themes influenced by Structural Funds & ↑ = some Structural Funds influence on Lisbon themes																

Source: ESPON 2.2.1

In many cases the holistic view as to innovation activity and knowledge creation seems to be the key to success in addressing and promoting Lisbon themes. Examples of relevance for cluster building and knowledge creation as a broad policy objective can be found in a number of the case study regions. Below we have an example of this from the Highlands and Islands.

In what follows we provide a brief overview of the Lisbon themes, as well as some of the ongoing follow-up and monitoring processes, subsequently providing an overview of how the themes have been addressed and what the impact of the Structural Funds has been from the previous programming period to the current one, with examples of activities and projects, where relevant.

Box 6: Promoting the Lisbon agenda (and by extension territorial cohesion)

The new University of the Highlands and Islands provides an example of a recent, innovative initiative with potentially significant spatial development and territorial cohesion impacts that, according to the Programme partners, would have been impossible without the Structural Funds. Innovation was not limited to the type of activity supported, but was also related to the scale of activity possible under the Structural Funds, which opened up new opportunities for the region. The University has a federal, collegiate structure, dispersed across the Highlands and Islands, involving 13 main colleges and research institutions and a network of outreach learning resource centres. Taking advantage of the possibilities offered by information and communication technologies (ICTs), each location has access to shared information sources through a broadband electronic communications network. Video conferencing is used as a method of learning. A key element of the UHI project is to increase the region's knowledge-based skills, by improving the capacity for R&D and technology transfer, especially in indigenous economic sectors. In this way, the UHI helps promote the sustained expansion of local firms. Fisheries development, for example, is the focus of research at the Machrihanish Marine Environmental Research Laboratory, in Argyll. The Catalyst Centre, part of Lews Castle College in the Western Isles, targets tweed-making, food and drinks production and rural development issues. It also supports local firms in developing niche markets in "Gaelic related" sectors.

Although the UHI was not officially sanctioned by the government until after the SPD was originally agreed, the project is included as a final beneficiary in Priority 2, Measure 2: 'Improving regional competitiveness through developing the information society'. According to the mid-term evaluation, the project has accounted for much of the subsequent R&D spend. The ERDF has enabled the project to develop enhanced core facilities at each of the area's main college sites. Inverness College, a central UHI institution, operates from several campuses, both within and outside Inverness. The majority of programmes are delivered in the Longman campus, which also houses the main administration function. The college has been, and remains, an important beneficiary of the Structural Funds and more than € 3.1 million (£1.9 m) has been invested in developing a large number of courses for pre-vocational and vocational training qualifications. The UHI project is regarded as a strategic response to shared regional challenges, arising directly from the stimulus of Programme funding.

Lisbon: Information society technologies

The promotion of an 'Information Society for All' is a key component of the Lisbon strategy, with the need to address the different aspects of Information Society being a necessary starting point here, i.e. addressing the technological, economic, occupational, spatial and cultural dimensions of the Information Society (Webster 2002). The key decision point in European terms was the introduction of the eEurope initiative, launched as a political initiative to support the development of the Information Society, both in terms of ideology, technological development and service content, and in respect of the availability and accessibility of the Information Society to the citizens of Europe in 1999. The goal was further clarified by the Lisbon Council, at which point the aims were defined as a broad political agenda for transforming the societies within the EU to better meet the challenges identified. Thus the Information Society theme is one of the core ideas of the Lisbon strategy addressed here.

Originally the policy objective was formulated:

To ensure the European Union fully benefits for generations to come from the changes the Information Society is bringing. These changes, the most significant since the Industrial Revolution, are far-reaching and global. They are not just about technology. They will affect everyone, everywhere. Bringing communities, both rural and urban, closer together, creating wealth, sharing knowledge, they have huge potential to enrich everyone's lives. Managing this transformation represents the central economic and social challenge for the Union. It will impact profoundly on European employment, growth and productivity for the next five years and for decades afterwards. eEurope is intended to accelerate positive change in the Union. It aims at ensuring this change towards the Information Society is cohesive, not divisive. Integrating, not fragmenting. An opportunity not a threat. In essence, eEurope aims at bringing the benefits of the Information Society to the reach of all Europeans. (Document "eEurope: Information Society for All" accepted at the Special European Council in Lisbon 2000).

The positive, integrative aspects provide an optimistic starting point to the promotion of the policy theme, whilst at the same time there is an awareness of the highly differentiated effects and impacts of promoting the Information Society on different scales across Europe. (Some of these issues are best addressed through case study analysis in the project, with national, regional and local examples of putting the eEurope initiative into practice, e.g. through the Structural Funds but also through other policy instruments available.)

The eEurope strategy document went on to outline the key objectives of eEurope as follows:

- Bringing every citizen, home and school, every business and administration, into the digital age and online.
- Creating a digitally literate Europe, supported by an entrepreneurial culture ready to finance and develop new ideas.
- Ensuring the whole process is socially inclusive, builds consumer trust and strengthens social cohesion.

Subsequent strategic documents were further elaborated in the process of implementation, through Action Plans such as those drafted in Seville 2002 (CEC 2002, COM (2002) 263 final) and Vitoria (at the Informal Meeting of Ministers for Telecommunications and the Information Society Results, Presidency Document, Vitoria, 22-23 February 2002). These were followed by a Council resolution in February 2003 (Council Resolution of 18 February 2003 on the implementation of the eEurope 2005 Action Plan, 2003/C 48/02).

The cases where the promotion of an 'Information Society for all' have been addressed included Calabria, Centre, Grevena, Highlands and Islands, Lappi, Madeira, Sachsen, Southern and Eastern Ireland, Toscana and Norrland. In the following we will provide some examples of IS projects and their possible territorial impacts, as well as addressing the different aspects of IS.

As our focus is territorial and spatial across the analysis, this is necessarily built into the analysis. The other dimensions of IS to be addressed thus include its technological, economic, occupational, and cultural aspects.

We also place special emphasis on policy initiatives and themes where either a cross-thematic inclusion of the different Lisbon themes is promoted, or where cross- and/or trans-border initiatives are developed and utilized, as these are likely to provide for interesting longer term results and impacts, as well as for potential policy innovations worth noting.

In the Swedish case study of Norrland, we have an example of a trans-national initiative within the context of the Information Society and ICT theme, i.e. the LOCREGIS project, presented briefly below.

Box 7: A project example within the development of Information Society

LOCREGIS was a project within the information society sector in the local and regional spheres developed co-operatively between Austria, Sweden and Finland (and in particular their Objective 1 and Objective 6 regions). The aim of LOCREGIS was to prepare an inventory and analysis of information society projects that could strengthen the competitiveness of less favoured European regions through innovative use of information technology. Among its products, LOCREGIS set up networking platforms, a database of information society projects in the partner countries, and developed a system of 'best practice' criteria for evaluating information society projects from the point of view of regional development. The initiative was instrumental in gathering systematic knowledge about the kinds of projects and actions in existence, as well as for encouraging dialogue and networking between actors, as well as between active parties and the bodies responsible for public policy. It also sought to convey a better understanding of the qualities that the public financial support given to the project promoters should encourage, i.e., defining 'best practice' criteria from the point of view of regional development. The stated aims of the initiative also included moving towards larger and more ambitious actions within the field of information society that could contribute to accelerating structural change in ways that reconcile local and regional diversity with national ambitions and priorities.

According to European evaluations, the share of IT-related projects within Objective 1 in Sweden is high. In most cases this is targeted towards creating actual connections i.e. basic infrastructure. According to financial plans for the current programming period, Sweden for instance planned to commit 72% of its ICT Structural Funds investments to infrastructure-related development ("cheaper, faster Internet"). Other countries with high levels in this area include Austria with 51%, Belgium 46%, Germany 27% and Spain 40%. (Tsipouri 2002).

In the case of Calabria, this theme is closely related to the RISI – Arianna, a Regional Information Society Initiative under art. 10 ERDF. Arianna produced studies on the development of the Information Society in Calabria, investigating the diffusion and use of IS instruments. The studies have been used to draft the "2000-2006 Information Society Strategy". During the 1994-1999 programming period, this theme was addressed mostly through the implementation of a large ICT infrastructure platform: TELCAL projects. There have been doubts as to the real impact of the project, due to the technological obsolescence of the structure. A separate Information Society strategy was drafted during this programming period based on the experiences of the Arianna project.

In the case of Toscana during the current programming period the IS has been included as a measure of its own within the broader priority of 'territorial qualification' in the Objective 2 programme. While the current Objective 2 SPD makes reference to the Conclusions of the Lisbon Council, and the Lisbon themes (e.g. the need to support the new economy) are

mentioned among the criteria for selecting projects to be funded in the first priority (aid to firms), beyond this generic reference the theme of the Information Society is in fact the only explicitly addressed Lisbon theme. Undertaking a closer analysis we can however see that a number of sub-themes of relevance to the promotion of Information Society do however emerge, ranging from technological and economic to occupational aspects.

Table 14: IS relevant policies in the Tuscan 2000-06 Obj. 2 programme

Toscana	Measures	Relevance to Information Society
Priority 1: Development and strengthening of SMES	2 out of 8 measures are totally relevant Other 2 measures are partially relevant	<p>Measure 1.4: Aids to intangible investments (soft aids) – Two sub-measures (a- acquisition of qualified services and c- qualification of tourism services) involve: the provision of services for the acquisition and development of telematic services, and the introduction of IS technologies in the tourism enterprises, eg. for booking etc).</p> <p>Measure 1.7: Innovation transfer to SMEs - sub-measure b, born on the indications of a previous RITTS project and on the project RIS+ Toscana, foresees the consolidation of network of enterprises, service centres, research institutes and other similar on the following: 1. ICT, 2. biotechnological application of the IS, 3. technologies for the cultural heritage and formal innovation.</p> <p>Measure 1.1: Aids to productive and environmental investments of industrial and cooperative enterprises - technological investments could probably involve IS investments, but this is not explicitly mentioned in the measure (may be better defined in the PC)</p> <p>Measure 1.2: Aids to the investments of small productive craftsman enterprises and cooperatives – the measure supports technological investments and therefore could be IS-relevant; although the kind of investments listed are not very IS-type (may be better defined in the PC)</p>
Priority 2: Territorial qualification	2 out of 6 measures are partially relevant	<p>Measure 2.1: Infrastructure for tourism and trade - „Among other things, the measure supports the so called 'Vetrina Toscana' (Window Tuscany) for the marketing and commercialisation of products via telematic and multi-mediatc methods (this is all can be understood from the description of the measure)</p> <p>Measure 2.4: Infrastructure for the productive sectors - part of the measure foresees the strengthening of the telematic and communication system for SMEs. The region already has the Telematic Regional Tuscan Network. This is linked to the national PA network and connects the major public authorities and some service centres for SMEs. The measure in this context aims at the following: - provision of infrastructure and improvement of access to the most disadvantaged/remote areas; - creation or support of 'service centres' for enterprises whose activity will be that of promoting the use of the new technologies, guaranteeing the training necessary for this; developing, managing and distributing telematic services; - development of innovative services for the technologic transfer, the match of demand and supply of work, training etc; - creation or improvement of networks, especially between SMEs and linking clients/providers (eg. for e-business, e-commerce).</p>
Priority 3: Environment	1 out of 9 measures has a partial relevance	<p>Measure 3.9: Defense of the soil, hydraulic safety, reduction of systemic risk - one submeasure aims at constituting Centres/laboratories for the development of territorial and environmental information systems which could link public and private subjects working on the territory. The sub-measure realises telematic services (for public authorities, enterprises, citizens) to support the socio-economic development of the areas of the SPD based on territorial information</p>
TA	Partially relevant	<p>Among the activities under the measure there is the realisation of information systems - including hardware and software provision and other necessary equipment - for the realisation of the management, TA, surveillance and evaluation activities.</p>

Source: Table drawn from unpublished research carried out by the author in the framework of the IQ-Net project, May 2001.

It is however indicated in the case study analysis of the Toscana region that most IS relevant themes and policy objectives are pursued through other (national) policy means.

In the case of Cataluñya, the knowledge-based society (innovation, R+D, Information Society) was included in the Objective 2 programme for the 1994-1999 period. As argued previously, when moving from the 1994-1999 period to the 2000-2006 period, the inclusion of Lisbon related themes is particularly clear, as the strategic objectives include many of the Lisbon related themes, including that of the implementation of the Information Society. The same applies to other regions, e.g. Grevena within the framework of West Macedonia Objective 1.

In many cases the technological aspects of the Information Society promotion are most pronounced. For instance in the Highlands and Islands, IT infrastructure has become an increasingly important issue in the region's Structural Funds programmes. The ISDN network underwent substantial improvement funded by the 1994-99 Objective 1 programme, whilst the current programme period put even further emphasis on these themes. Measure 2.2: Improving Regional Competitiveness Through the Information Society, concentrates on physical investments in IT and the telecommunications infrastructure, particularly through projects put forward by local and regional partnerships. Funding has been provided for the development of the University of the Highlands and Islands and the extension of modern broadband technologies to all parts of the region.

As argued above, in most cases the Information Society is addressed as a technological or economic issue rather than putting particular emphasis on its cultural or occupational aspects. In cases where the occupational aspects are addressed, this is done through the inclusion of distance working methods and their development (e.g. in the case of Lappi in Finland, human resources aimed at the development of the information society and distance working are included as a measure under the umbrella priority of the *Development of human resources and expertise*). Needless to say, the technological and infrastructure related issues within the Information Society theme are of particular relevance for the more peripheral regions. The development of the information society has been a long-term objective in Lappi and it has been argued that although the quantitative objectives of job creation set during the 1994-1999 period were only partly met, the measures to develop the information society have created 'value added' by encouraging new businesses to emerge at interface of ICT development. The development of the information society in Lappi provides a more significant challenge compared to the rest of Finland due to the region's sparse population. Therefore Lappi has tried to concentrate on the user-friendly aspects of the information society. Higher education institutions have thus attempted to pursue 'applied' research, which is closely connected to distance working and distance learning. New systems will also be developed to secure welfare services in the most remote areas. As reported by the Finnish case study, many interviewees in Lappi saw the impact as important, and claimed that Lappi is already the most advanced region in Finland in terms of distance and virtual education. Similar experiences were reported for instance in the Highlands and Islands case study referred to above.

Lisbon: European area of research and innovation

Similarly to the Information Society theme, the introduction of the European Research Area in 2000 was a timely process seeking to address those themes that could best contribute to making the EU the most competitive region in the world (*Towards a European research area*, Brussels, 18.1.2000, COM (2000) 6 final).¹⁴

The central aspects in the definition of the European research area as outlined in the Commission Communication on the European Research Area (Commission of the European Communities 2000: *Towards a European research area*, p. 8) include:

- Networking of existing centres of excellence in Europe and the creation of virtual centres through the use of new interactive communication tools.
- A common approach to the needs and means of financing large research facilities in Europe.
- More coherent implementation of national and European research activities and closer relations between the various organisations of scientific and technological cooperation in Europe.
- Better use of instruments and resources to encourage investment in research and innovation: systems of indirect aid (within the Community rules on State aid), patents and risk capital.
- Establishment of a common system of scientific and technical reference for the implementation of policies.
- More abundant and more mobile human resources including:
 - Greater mobility of researchers and introduction of a European dimension to scientific careers.
 - More prominence to the place and role of women in research.
 - Stimulating young people's taste for research and careers in science.
- Greater European cohesion in research based on the best experiences of knowledge transfer at regional and local levels and on the role of the regions in the European research efforts.
- Bringing together the scientific communities, companies and researchers of Western and Eastern Europe.

¹⁴ See also *The European research area: providing new momentum*. COM (2002) 565, Brussels, 16 October 2002, COM (2002) 565 final, as well as *Regional Dimension of the European Research Area* COM (2001) 549 final, 3/10/2001.

- Improving the attraction of Europe for researchers from the rest of the world.
- Promotion of common social and ethical values in scientific and technological matters.

Many of these aspects, in particular those relating to developing and supporting innovation policies and promoting cohesion within research and through research entail explicitly territorial dimensions. The multi-scales or multi-level application and promotion of ERA is equally clear in calling for an efficient European research area that necessarily requires the clarification and addressing of the roles of the public and the private sectors, as well as specifying in particular which measures are most appropriately to be taken at the regional, national, European and international levels (ibid, 22).

In identifying possible themes of action in order to promote the overall objectives of European research area the need to create a larger role for the regions in the European research effort is identified as one of the core goals, and here a bench-marking approach is prioritized in outlining the policy means by which this objective is to be promoted:

- Combined use of the Structural Funds and the European research programmes
- Benchmarking of the research activities of the regions and measures taken to encourage research
- Balance of the best ways of transferring knowledge to the economic sector at the regional level
- Analysis of the role of the "prime regional movers" in the development of a more dynamic European scientific area (ibid, p. 27).

The ERA theme is addressed in most of the case study regions. In Calabria, Grevena, the Highlands and Islands, Lappi, Madeira and Norrland it is considered to be of central importance ('important influence'), whilst in the cases of Centre, Southern and Eastern Ireland, Toscana and Région Wallonne the impact of Structural Funds has been less central, as it is considered to have only had 'some influence'.

The ERA approach is different from region to region and while it can be argued that in small peripheral regions the impact of the Structural Funds programmes and the financing available is of some importance, it needs also to be acknowledged that the vast majority of financing opportunities for the promotion of R&D and the ERA are not connected to Structural Funds activities, but rather to business financing and the major sources of financing connected to the R&D field (e.g. Framework programmes). Here the national picture in most cases remains highly centralized, with the financial opportunities being cumulative and concentrated on the areas with a high degree of R&D activity. In the case of Lappi for instance it was argued in the case study analysis that establishing polytechnics to Rovaniemi and Kemi-Tornio, a centre of

expertise programme for the experience industry (in Rovaniemi) and the active role of Lappi's university in the Structural Funds programmes have all contributed to the establishment of a European area of research and innovation. It was however argued in the interviews that Lappi, as a peripheral region with a small population, is a minor actor at the European level of R&D and that this Lisbon theme does not fit that well into the region's wider profile.

Box 8: An example of regional specialization in the R&D sector: space research in Kiruna

The Environmental and Space Institute (Miljö- och rymdforskningsinstitutet MRI) was established in 1996 with Objective 6 financing, following an initiative on the part of the Swedish Research Council (Vetenskapsrådet). The MRI included three programmes: the Atmospheric Physics Programme, the SMC -Spatial Modelling Centre and the CIRC - Climate Impact Research Centre. While the latter two are currently part of Umeå University's activities, the atmospheric research programme remains part of the Swedish Institute of Space Physics (IRF) and is thus also physically located in Kiruna. In addition to these research-related parts of the MRI there were also a number of more commercially-oriented parts, i.e. the environmental data centre (Miljö Data Centre) that is today part of Metria, (a consultancy company owned by Lantmäteriet, i.e. the national land surveying authority) and MRI Business Development: Kryoteknik.

The idea behind the establishment of the MRI was an attempt to further promote R&D around Kiruna and to provide for a firmer basis between the existing areas of expertise. The centrality of Structural Funds financing was of key relevance here, as it was argued in the interviews that this type of expansion would not have been possible without Structural Funds financing. According to the Objective 6 evaluation there were 60 new jobs created in MRI, in addition to the 200 jobs created in the Kiruna municipality through indirect effects. The County Administrative Board estimated originally that a total of 300-475 jobs would be created over a 10-year period. These expectations could not be fulfilled however and the secondary effects are estimated to be not more than 50 jobs. Yet the project was useful in specialization terms and it was estimated to have played a central role in the specialization drive of Kiruna municipality and the region more widely. There are also important aspects relating to learning that can be garnered from the experience of MRI, as the notion of 'learning' itself has been one of the main impacts of the Objective 6 and other programmes implemented during the 1995-1999 programming period in Sweden.

Given its novelty a significant amount of enthusiasm was engendered at the beginning of the project, even within the general populace of Kiruna. In terms of scientific results, the creation of MRI was viewed as a positive development, bringing 'value added' to existing institutions. Some 'soft effects' were also acknowledged in that it helped to move the image of Kiruna away from that of being solely a manufacturing town. Considerable problems however arose at the end of the programme period because of uncertainty about ongoing support. Specializing in R&D intensive activities can be a way of connecting peripheral regions to the centre, nationally and internationally, but in this case a close relationship between the research community and the local community was not really established. Moreover, becoming a node in a wider polycentric Europe might even imply the loosening of connections with the local environment, in particular in such a highly specialized area of expertise. The issue of the lack of robust connections between research and business development has also been seen as problematic.

It is also problematic to use Structural Funds financing to establish permanent structures in R&D, as the funds are only intended to provide short-term solutions to identified problem areas. As was the case with MRI, the considerable size of the investment was also problematic in other ways, if one considers the short-term temporal perspective involved. Firstly, it can be argued that many other potential sources of financing overlook such areas where high profile Structural funds investments have been made. Thus R&D facilities that are seen to receive an important share of the Structural Funds financing, such as MRI/IRF may risk losing out on other sources of funding at the same time. Secondly, we have the more general problems associated with the nature of SF financing: with 'support' rather than 'investments' giving a certain negative image to such activities that is difficult to erase. There is therefore the risk of dependency, if not real then perceived, which may reflect negatively on activity in the longer run. Together with sources of R&D funding (Framework Programme, national sources) the Structural Funds can also however be used effectively in the R&D sector.

A similar picture emerges from the Swedish case study, where the strong commitment to the development of R&D was by definition an investment in regional growth centres, as the R&D institutions are usually located in the centres. Encouraging interfaces between companies and financial markets, R&D and training institutions, advisory services and technological markets is one of the main programme priorities and within the priority on the development of enterprises

the development of SME received by far the largest share of funding. The connections between those undertaking R&D activity and the wider business community have improved as a consequence of the Structural Fund activities, though there is still clearly room for improvement here. Technological markets and private financing remain underdeveloped areas, in line with what was said about the concentration of resources above. One of the best examples of the building of a regional science centre was the MRI in Kiruna, illustrated in Box 8.

Lisbon: Creating a business friendly environment

As indicated by the Commission Staff Working Paper from 2003 (European Commission 2003), the Structural Funds are the EU's main instruments for financial support to SMEs, and approximately €16 billion is being spent on SME-targeted projects in the period 2000-2006. Approximately one third of this Community aid to SMEs is dedicated to advisory services and to shared business services, such as incubators, networking and clusters. In addition, this Community aid triggers significant levels of matching support from national funds. The focus on SMEs and entrepreneurship has been particularly apparent since the introduction of the Lisbon Strategy (e.g. European Commission 2003 and 2004), which naturally makes it more difficult to chart the overall development of this theme during the previous programming period. At the same time there have been activities launched prior to this, such as the Observatory of European SMEs, which was established by the Commission in December 1992. The specific task of the observatory was to improve the monitoring of the economic performance of SMEs in Europe, mainly through the provision of information on SMEs to policy-makers, researchers, economists and to SMEs themselves.

One of the key areas of importance here has throughout the 1990s increasingly been the theme of 'cluster policy' and the promotion of cluster development through regional policy means (both nationally and across Europe with the support of the Structural Funds). Cluster policy can be seen as consisting of two main types: (1) Supporting the growth of existing or embryonic regional clusters, and (2) Gathering and disseminating knowledge of how industrial development occurs in (successful or unsuccessful) regional clusters and letting this knowledge base inform policy making (nationally and in the European context). Both of these approaches have some specific characteristics, as indicated in the Regional Clusters Report of the SME Observatory (2002), where cluster policy is defined as entailing the following characteristics:

- A shift in focus from individual firms to local/regional systems of firms and firms' 'value adding' environment.
- Less reliance on large firms and more interest in local agglomerations of SMEs.
- Concentrating on indigenous growth processes in contrast to efforts to attract inward investment.

- May also bring forth a policy based on the idea of 'picking the winners', as the focus is on stimulating the already strong, or potentially strong, parts of regional industry. This process of 'picking the winners' can be organised as a 'bottom-up process' involving local authorities, industry and experts.
- Leads to the stimulation of social processes, e.g. encouraging trust-based interaction to increase the flow of knowledge between local players, rather than intervening, for instance, through financial incentives (Boekholt and Thureauux 1999).
- Points to the role of public authorities as facilitators or brokers between companies, and between companies and the knowledge infrastructure.

This policy theme has been identified as relevant and indicative of the impact of Structural Funds as being of 'important influence' in the following case studies: Calabria, Grevena, Highlands and Islands, Lappi, Madeira and Norrland. In addition, the following regions were identified as cases where there has been 'some influence' within this theme when comparing the programming period 1994-1999 to that of the current programming period: Centre/France, Sachsen and Southern and Eastern Ireland. Based on the case study analysis, it seems justified to argue that the level of Structural Fund influence is greater in smaller peripheral regions, whereas the more urbanized and central regions tend to have a broader selection of other policy instruments and financing sources available and therefore despite the possible centrality of the (Lisbon) themes in question, the Structural Funds influence as such remains more limited in relative terms. This is apparent for instance in the case study of Madeira, where it is argued that the situation of the SMEs was particularly difficult due to physical limitations and to the lack of infrastructures and support schemes prior to the introduction of the Structural Funds. Strengthening the endogenous business potential and regional competitiveness are thus key aspects of the Structural Fund programmes, leading to concrete improvements in terms of new forms of infrastructure and interfaces (Madeira Tecnopolo, Business Innovation Centre), new support schemes, new services, etc.

In the case of Sachsen, a majority of the programme priorities targeted SME's, as is apparent in the box below.

In the cases of Lappi and Norrland there is a particularly strong focus on the creation of a business friendly environment for SMEs. In most cases the creation of such a business friendly environment has been supported by the establishment of technology and innovation centres as well as by the encouragement of new forms of co-operation and collaboration between the R&D sector and the business community. In this regard, higher educational institutions in particular have been active in increasing the interaction between R&D actors and innovative SMEs.

Box 9: Programme priorities targeting SME's in the case of Sachsen

- Productive and supplementary investment in infrastructure for businesses, in particular to encourage the establishment of businesses, subsidiaries and branches and the extension, streamlining and conversion of existing businesses; the development of sites and industrial estates, supply and disposal facilities and tourist sites and public amenities; the provision of shared premises and services as part of an investment in technology and innovation centres and joint training centres for businesses.
- Assistance for SMEs, in particular to improve market access.
- Assistance for research and technological development (RTD) and innovation: investment in research departments and industrial laboratories, design and development consultancies, RTD companies and the infrastructure of RTD and innovation centres; support for cooperation measures in this field and for business development schemes in the field of new product and process development; modernisation of information and communication techniques and technological and business consultancy methods.
- Environment: 'end-of-line' investment in industry; redevelopment of derelict industrial sites; establishment of water purifying and waste disposal plants; development of economic channels and processes for recycling.

Lisbon: Education and training

In the field of education and training there are a number of ongoing processes relevant to the goals of the Lisbon strategy. As an example we can cite the adoption, in 2001, by the EU Ministers of Education of a report on the future objectives of education and training systems, which agreed on the shared objectives to be achieved by 2010. A year later, the Education Council and the Commission endorsed a 10-year working programme to be implemented through the open method of coordination. Approved by the European Council, these agreements constitute the new and coherent Community strategic framework of co-operation in the fields of education and training, which had until then remained firmly within the national sphere of action.

The main goals of the working programme included the need to

- improve the quality and effectiveness of EU education and training systems;
- ensure that they are accessible to all; and
- open up education and training to the wider world.

Thirteen specific objectives covering the various types and levels of education and training (formal, non-formal and informal) were agreed upon, concentrating in particular on lifelong learning and addressing areas such as teacher training; basic skills; integration of Information and Communication Technologies; ensuring the efficiency of investment; language learning; lifelong guidance; the flexibility of the systems used to make learning accessible to all, mobility, citizenship education, etc. (Council of the European Union 2001). These issues were also integrated in the follow-up process of the Lisbon strategy as a whole.

Approximately half of the case studies undertaken identified a strong connection between this policy priority and the Structural Funds. This was the case in Highlands and Islands, Lappi, Madeira, Sachsen, Norrland and Grevena, while Toscana, Région Wallonne, Centre, and Southern and Eastern Ireland all identified a lesser connection ('some influence').

In the case of Sachsen this was one of the most central themes, with a direct link between the knowledge focus and territorial planning that can be found in the field of vocational training. The so-called 'Berufliche Schulzentren' (BSZ) have clearly been linked with regional planning aims. According to the regional planning aim, these BSZ shall be concentrated in communities with mid-range supply functions (so called Mittelzentren). A BSZ should be between 1,000 and 3,000 pupils and be centrally located, to provide educational services to a wider region. The evaluation comes to the conclusion that this concentration process happened in a positive sense, now also providing a better service to under-endowed parts of Sachsen. It was moreover further argued that the city region of Leipzig had succeeded in becoming a 'learning region' project, financed with ESF money in the federal programme for the East German Länder.

There are many projects addressing the development of the knowledge society through Structural Funds interventions, and many of these are based upon a broad understanding of the emerging knowledge society, where institutional and individual, technological and organizational capacities meet. As an example of such a project from the Finnish context, the Regional academy is described below.

Box 10: The Regional Academy – a Finnish example

The Regional Academy is a national pilot project supported by the Ministry of Education. The aim of the regional academy is to safeguard every Laplander's learning possibilities, respond to sub-regional development challenges and needs, and to take business policies more often into account. SF intervention has facilitated the creation of a Regional academy by increasing dialogue and cooperation between higher educational institutes and the research community. Sub-regional modes of operation for the regional academy linking the strategies of expertise more closely to regional development and sub-regional identity are currently under preparation (Lapin liitto 2003,12)

Lisbon: More and better jobs

Employment policy was a key element in the Lisbon strategy and the methodology and follow-up processes of Lisbon are of key relevance for the future here. Yet it is worth bearing in mind that the issue of employment has already been on the EU's agenda for a considerably longer period of time (e.g. the 1998 Employment Guidelines based on the Council Resolution of 15 December 1997 can be referred to here). Available policy instruments range from those that are explicitly employment policy-related to a number of themes already discussed in this report, i.e. life-long learning, innovation, Information Society etc.

As with the other areas of the Lisbon strategy, the Open Method of Co-ordination (OMC) provides the methodology by which the policy goals in relation to employment are promoted. Below we list some of the issues raised in connection to the European Employment Strategy, where the OMC can be referred to specifically, in connection to the principles of this method:

- **Subsidiarity:** The method seeks to establish an equilibrium between European Union level co-ordination in the definition of common objectives and outcomes, and Member States' responsibilities in deciding the detailed content of action. The definition of the means and conditions under which programmes and policies are implemented is left

to a large extent to individual Member States, who are responsible for their employment policy under the EU Treaty.

- **Convergence:** The strategy strives to achieve commonly agreed employment outcomes through concerted action, where each Member State contributes towards raising the European average performance.
- **Management by objectives:** The success of the strategy relies on the use of quantified measurements, targets and benchmarks, to allow for a proper monitoring and evaluation of progress.
- **Country surveillance:** The annual reporting leads to the evaluation and comparison of progress made and to the identification of possible 'best practices' among the Member States. This is intended to create peer pressure to improve the quality and effectiveness of policy.
- **Integrated approach:** It has been argued that the Employment Guidelines are not restricted to active labour market policies but extend to social, educational, tax, enterprise and regional policies. The calls for comprehensive employment policies committing Governments as a whole, as well as a wide range of stakeholders, is also of particular interest to the regional analysis provided here, as here the territorial level also emerges as being of relevance.

Quite surprisingly there are very few case studies where the policy objective of creating more and better jobs was of primary importance. These include Grevena, the Highlands and Islands and Sachsen, while in the majority of cases the connection of this policy theme to the Structural Funds is considered to be limited, or only of 'some influence' (Toscana, Région Wallonne, Calabria, Lappi, Madeira, Southern and Eastern Ireland).

In most cases job creation is naturally one of the major objectives of Structural funding, even though the final impact in this respect varies. The ways in which the case study regions had addressed this theme were related to active labour market policies, improving employability and reducing skills gaps; encouraging lifelong learning, reducing deficits in the service economy and extending equal opportunities in the labour market. In the Grevena case study for instance it was argued that the ESF funding for the region during the 1994 – 1999 period aimed predominately to adapt training, guidance and employment opportunities. During the current programming period, aid to business provided in the form of measures related to the improvement of skills and to better training opportunities, thus developing the conditions for job creation and sustainable, balanced growth, were undertaken. Despite this however unemployment continues to remain a major problem.

One should not however overestimate the impact of the Structural Fund programmes here. As argued in the Sachsen case study for instance, there are a number of broader policy challenges and macro economic trends that are more central in this respect. The case study noted that

The process of unification led to a 'transformation shock', eradicating many old structures on the one hand, and selectively implanting new structures on the other. Currently, the public debate on the effectiveness of the massive transfers over the past fifteen years is rather negative. The SF subsidies are not excluded from this overly negative assessment. In fact, one has to question the macro-economic assessment in the evaluation reports, saying that the GDP and employment levels might have been improved by about 2% or 18,000 jobs. But what would have been the alternative to the moderation of the structural change process (or process of decline)?

Lisbon: Promoting social inclusion

The theme of social inclusion is also addressed through the OMC methodology and here the key elements have been said to include methods and actors such as the social protection committee, the common objectives on poverty and social exclusion; national action plans against poverty and social exclusion, common indicators and studies etc. The extent to which these are regionally implemented or territorially sensitive varies however greatly from country to country.

Social inclusion is not one of the first and foremost policy aims of the Structural Funds in the case study regions. Only in the case of Grevena is it identified as a theme where the Structural Funds have had an 'important influence', while in Région Wallonne, Norrland, the Highlands and Islands, Lappi and Madeira is it identified as having had 'some influence' when the connections between the programmes for the 1994-1999 and the current periods are considered.

In the Grevena case it is reported that during the period 1994 – 1999 national and regional policy towards people with disabilities and socially excluded groups shifted significantly in favour of active measures. In the current programming period the ROP of West Macedonia, under the Priority of "Greater opportunities for job creation and the reduction of unemployment", tackled social exclusion. The most significant way in which this policy priority was promoted was through a drive towards the improvement of skills and the promotion of wider access to knowledge and opportunity, thereby addressing both the mobilisation and structural aspects of inclusion.

The connection between the explicit and implicit inclusion of policy themes is interesting here. Even though in some cases social inclusion is addressed as an explicit priority, the actual policy centrality in terms of financing and projects is not always visible (e.g. Highlands and Islands). Social inclusion may be a theme that is only gradually making an appearance on the policy agendas, with the innovation and R&D aspects and Information Society central to the previous programming period making room for more attention to be paid to social inclusion relevant themes.

Lisbon: Conclusions

The discussion of how the Lisbon themes have been influenced by the Structural Funds has shown that four aspects are of particular interest:

- *The relatively low degree of explicit inclusion:*
On average, the Lisbon themes are most often included in an indirect or implicit fashion, which is hardly surprising when considered against the timeframe of the two processes under analysis: when the programmes were drafted and implemented, the Lisbon themes were not yet on the policy agenda. At the same time it is obvious that some of the themes were already central to Structural Funds priorities and measures. Issues such as the promotion of research and development and innovation capacity, SMEs and the Information Society were already addressed during the 1994-1999 period, though this has been intensified during the 1999-2006 period. Better jobs and social inclusion were however seldom addressed as specific priorities during the 1994-1999 period.
- *Social inclusion lowest priority, R&D the highest:*
Competitiveness seems to have been interpreted in quite traditional terms during the 1994-1999 period, as R&D and SME services rate highly, while social inclusion rates much lower. Better jobs rate surprisingly lowly here.
- *The case studies provide for a varied picture, while few conclusions can be drawn on the differences in impact based on particular types of regions:*
Though we cannot draw conclusions on the types of regions and the policy themes they addressed in the 1994-1999 period, it seems that some cases rate consistently higher in addressing Lisbon relevant themes and in promoting competitiveness, while others rate consistently poorly. This may however be more dependent on national policy priorities than the regions themselves. The Nordic regions (Lappi and Norrland), as well as Madeira, the Highlands and Islands and the Greek regions seem to rate highly on most themes, while Catalunya, Centre, Southern and Eastern Ireland, Région Wallonne and Sachsen rate much lower on the Lisbon relevant themes.
- *Consistency between national and European policy priorities remains unclear:*
The fact that some case studies rate consistently lower, while others rate much higher on Lisbon relevant themes is likely to be connected to the realities of national regional policy priorities and in particular to the degree of integration. Moreover, as was seen in connection to the analysis of the governance effects, the consistency of national and European policy goals outlined in the programme documents was rated as the most central policy theme, which would seem to imply that in most cases those themes that are addressed in national policy terms are also central in European ones.

10.4 Governance aspects

Governance: Promoting learning

In the EU context the debates connected to governance have been closely tied to concerns over the democratic nature of EU decision-making and the alternative models for its further development, as was most clearly expressed in the recent constitutional debates. This issue was however also fuelled by the 2001 Commission White Paper on Governance, and by the

subsequent academic and political responses to this that had a regional dimension (e.g. the Sapir Report from 2003). While democracy and other core governance issues have increasingly emerged as issues at the forefront of territorial policy, (in part due to increasing interest in the notion of territorial cohesion, which has itself become ever more central to policy discussions within EU spatial and territorial policy discourse), this has however also occurred within the wider context of the overall Europeanization of policy concepts.

Thus it can be argued that the need to focus on governance (or 'good governance') is widely accepted within the EU and beyond, and the need to build and promote effective institutional structures is increasingly seen as one of the main sources of regional competitiveness, as such structures facilitate cooperation between the various parties involved in both the public and private sectors, and in so doing can improve collective processes of learning and the creation, and the transfer and diffusion of knowledge, which are critical for innovation, as well as cementing networks and public-private partnerships, thus stimulating successful regional clusters as well as regional innovation strategies and policies. (CEC 2004, 58; on the principles of European governance see also CEC 2001). It is further argued that 'good governance' requires a shift from a traditional 'top-down' approach towards a more open form involving all the relevant parties in a particular region. Such partnerships should extend to all the policy areas relevant for economic, scientific and social development (an integrated approach) and should ideally establish a long-term policy horizon (a strategic approach) (ibid.). As these partnerships and related methods and principle relating to governance are central to the whole Structural Funds working methodology, the variety of *regionally and nationally specific* working methods and policy innovations relating to decentralization and the partnership-based mobilization of local actors are issues of particular interest for our analysis here.

As is the case with the findings of the Cohesion Report referred to previously, on the basis of the findings of the projects reported here we can also identify differential degrees of mobilization and involvement by the different actors involved in the various regional (or local) partnerships, and it can be argued that while the aim may be to promote better governance by the extension of partnerships and the broader inclusion of the social partners and the representatives of civil society through the appropriate mechanisms, implementation and follow-up of the interventions (CEC 2004, 24), in most cases, partnerships are still more limited in nature and thus much remains to be done to involve for instance voluntary organizations. By far the most oft-cited examples of local actors are organizational representatives of the local business and R&D communities, while more often than not urban level NGOs are absent from the picture presented by the case study reports on Structural Fund interventions. This can be both a conceptual and a substantive issue, as there was significant overlap in terms of the conceptual classifications of urban actors, while no clear single definition emerged over what constituted an urban NGO. In terms of the substance of interventions, it may be that the data available did not identify all of the relevant actors involved, concentrating instead on the actors that had either programme responsibility (a clear role in the programme planning and implementation) or project ownership, and thus not necessarily on all of the actors involved in a less official capacity.

The increased focus on urban areas in governance terms, as well as on the potential policy impact of good urban management and the strengthening of local self-governance can be traced back to the policy processes underlying the Urban Framework for Action (CEC 1998), which calls for stronger policy integration between various levels of government and policy sectors and for more effective citizen empowerment and involvement. The Commission foresees awareness-raising and capacity-building measures and support for innovative urban development strategies aimed at promoting good urban governance, empowerment and urban security. Such trends are visible in different forms on the national and regional levels, where interest in strategic orientation and regional foresight is increasing. The already firmly embedded process of *regional strategy building*, based on a visionary, goal-oriented way of organising future activities, which can be used as a means to externally promote the region (indicating the regional motivation, interests and goals to the national governments, foreign organisations, stakeholders, potential investors etc.), but equally as a means of internal promotion, formulating, articulating and transmitting information on intentions and future activities (to the citizens, local authorities, companies, public organisations) is increasingly being complemented by a *foresight approach* (which shares many of the characteristics of evaluation, but also has a clearer anticipatory element to it. Both processes are thus essentially about communicative learning, where governance structures and methods are intended to mobilise regional stakeholders to take an active part, thus becoming more aware of, the problems of regional development and the goals and means of its promotion (knowledge, participation, networking, vision, action and follow-up). As such, both processes include a systematic, participatory, future-intelligence-gathering, medium-to long-term vision-building approach aimed at present-day decisions and the mobilisation of joint actions, the main difference being that instead of the predominant focus on analysis in the strategy-building, in foresight the main emphasis is placed on anticipation (involving more future-oriented methods such as scenario-building).

The underlying understanding and logic of governance, as well as the central themes considered of particular interest and the point of departure for the analysis in its entirety thus owes much to previous work done by Nordregio within the framework of ESPON 2.2.3 (The Territorial Effects of The Structural Funds in The Urban Areas). Here both the point of view of an individual citizen and the organisational and institutional aspects of governance are paid heed to. As argued by Camagni

Under these conditions, the roles and responsibilities of local development policies and spatial planning widen, facing new political and cultural challenges. Integrating economic and spatial goals; integrating different sectoral tools; stimulating local co-operation networks and partnerships; guaranteeing the real and effective participation of people and citizens in the construction of territorial 'visions' and strategies; enhancing local competitiveness through appropriate policy tools addressed to collective learning and local relational capital: all these new tasks represent relevant challenges and ask for a rapid evolution of our models of territorial governance. (Camagni 2002:2407)

In the ESPON 2.2.3 analysis and conclusions it was argued that the governance aspects most often associated with Structural Funds interventions in the urban areas mostly relate to two main aspects: *forms of organizational and institutional learning and innovation*, and *citizens' participation*. In some cases governance impacts are seen in a broader light as factors providing the EU with more positive coverage and even increasing the confidence of citizens in European policy-making by more firmly embedding European policies in the local environment and local 'programme ownership' (in particular in the context of URBAN). Thus the governance aspects of the interventions were here categorized under three main themes:

- Networking and organizational innovations (partnership leading to new co-operation networks and more broadly based management structures);
- Citizens' participation and identity-building for the inhabitants;
- Visibility and awareness of EU policies

The importance of such governance processes is reflected in different aspects of the Structural Funds system. In the context of urban areas (ESPON 2.2.3 referred to above), aspects such as urban management, the participation process and comprehensive development strategies were among the key issues.

- Good urban management: The wide array of problems many urban areas face today are such that they have to be tackled through many different policy arenas, creating the need for an integrated approach involving several sectors. The establishment of partnerships between different levels of government (local, regional, national, European) and also between various actors active in the same area is thus considered to be an integral part of good urban management.
- Public participation in developing processes: The active involvement of local citizens affected by interventions in the development and implementation of projects of neighbourhood renewal, is believed to contribute to the success of such interventions.
- Support for comprehensive development strategies: In addition to individual interventions addressing urban needs and interests, at their best, the Structural Funds may provide a platform for the development of more comprehensive urban development action (e.g. in urban renewal actions, where both human, environmental and physical infrastructure issues are addressed in a urban renewal context).

The governance models associated with the Structural Funds have in recent years been extensively studied within the Multi Level Governance approach to European integration (e.g. Marks and Hooghe), while the Structural Funds have been cited as an example of network governance within the broader MLG approach. Here the issue of democracy also needs to be addressed. As it has been argued that the Structural Funds governance model can be

problematic from the point of view of traditional representative democracy and can in fact be taken as a new 'ideal type' of democratic governance, namely the 'elite pluralistic' model of governance (Olsson 2003, 293). While the pluralistic model of governance (as indeed the historically influential pluralist approach to European integration), takes as its starting point the idea that a large number of authorities and organizations have the chance to influence regional development within partnerships and committees, and that these new EU institutions can in some cases be seen to be replacing the traditional *fora* of representative democracy as the dominant institutions responsible for regional development. Thus partnerships provide a forum for representation, but also for negotiation, as within these partnerships different interests are balanced against each other. The question of negotiation and competition, but also of co-ordination thus becomes central as the main challenges relate to the articulation and mutual accommodation of the conflicting interests within the partnerships. The elite-democratic model on the other hand is more confined to a core group of interests, thus involving a more limited number of public officials as well as representatives of external organizations that form a less inclusive group of interests and forum for negotiation than that represented by the pluralist model. This has implications for governance and its various forms, as well as for the nature and quality of democratic accountability.

In formulating the case study methodology, the possibility was entertained that the different regions included in the analysis, as well as the various Member States, are likely to have divergent experiences, practical solutions and concrete policy practices when it comes to dealing with democracy and inclusion in respect of governance issues, be it within a national or a European context. As has been argued by Olsson, the Structural Funds may in fact be part of a wider Europeanization process whereby the traditional 'ideal types' of democratic governance no longer suffice, and thus where new practices and new theoretical constructs are required, as traditional parliamentary models of governance are no longer suited to the new programme-based models of governance, while the currently prevailing models may more accurately be described as elite-pluralist, thereby combining some aspects of the elite ideal type with that of the more traditional pluralist models, though, at the same time not completely breaking with the ideals of traditional representative democracy. Therefore one of the key points of interest for the case study analysis was whether the national and regional experiences of Structural Funds governance provide us with new insights into European governance, and what more general conclusions and policy recommendations could possibly be based on these.

The case studies thus also addressed the question of governance (as ideal types as well as in concrete local and regional terms) by asking whether this indeed was the case in the case study context, and if so, whether there were ways of avoiding the problems of technocratic elite pluralism potentially embedded in institutional/organisational practices and '*projectification*'. It was also felt that the case studies might be able to shed more light on such regionally and locally based 'best practices' while also suggesting ways to best standardise or duplicate them in other regions/member states.

In the theoretical approach to governance and the Structural Funds the analysis is equally indebted to an article by Jan Olsson (2003) on the democracy paradoxes of the (Swedish) Structural Funds system, where five types of fundamental democracy problems were identified and analysed (multi-level, vertical, economic, horizontal, multi-*demos*), within a broader theoretical setting of democratic renewal, inspired by both globalization debates and multi-level governance inspired elaborations of integration studies. Here the analysis of a particular national management system (Sweden) indicates tendencies towards an elite-driven governance model (on the one hand and pluralistic tendencies (based on co-financing mechanisms and partnership-based models of governance) on the other hand, potentially merging into a system that represents both ideal-typical models within a system of elite-pluralism. As argued by Olsson, "even though the institutions of partnership and co-financing seem to be very much in line with pluralism, there are in practice significant élitization tendencies" (ibid, 18). In order to take the pulse of some of the policy ideas associated with governance, in particular in relation to democratic accountability, inclusiveness and pluralism these issues were addressed in the form of the following questions:

- Is there **consistency** between policy processes and programmes on the national and European levels? Are there indications of **openness** and **learning** within regional development activities and governance structures? Are there identifiable changes that have taken place in **policy discourse** as far as territorial cohesion or polycentricity are concerned since the implementation of the intervention? Is there a causal relationship between the intervention and these changes?
- Are there concrete examples of **governance innovations** or changes in national or regional **practices**, i.e. are there policy innovations that could be attributed to the Structural Funds programmes implemented?
- Are there examples of **trans-national** links and policy initiatives that can be attributed to the structural funds interventions and/or management practices? (The synergy here can apply due to co-funding mechanisms, management practices or organisational innovations...)
- How is the **partnership model** in the region in question used to involve new types of actors from the local and regional level in programme activities?
- Are there new programme management solutions that seek to connect the programming system to the more traditional ways and institutions of **democratic decision-making**?
- Are there indications of the **accumulation of financial resources**, or aspects of the **programming cycle** that either enable the inclusion of new actors and organisations in partnerships or alternatively seem to **exclude** some type of actors and organisations from Structural Funds activities, or are there examples (or

organisational practices, co-financing solutions or similar) where resources have been pooled in a constructive way in order to avoid such problems?

- Are there ways of **avoiding the technocratic elite pluralism** that can be embedded in institutional/organisational practices and projectification? Could these be standardised or duplicated in other regions/member states?

The national experts were asked to address the following aspects of governance and rate them.

Table 25: Structural Funds relation to governance

Case study region	Calabria	Cataluña	Cantabria	Région Centre	Grevena	Highlands and Islands	Lakonia	Lappi	Madeira	Norrland	Sachsen	Southern and Eastern	Toscana	Région Wallonne	M	Rank
Aspect of governance																
Consistency of national and European policy goals	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	1
Examples of promoting learning	↑	↑	↑		↑	↑	↑	↑	↑	↑		↑	↑	↑	↑	2
Inclusion of new actors and organisation in partnerships	↑	↑	↑	↑	↑		↑	↑	↑	↑		↑	↑		↑	3
Governance innovations	↑		↑	↑		↑	↑	↑	↑	↑		↑	↑	↑	↑	4
Trans-national links linked to governance practices		↑	↑		↑	↑	↑	↑	↑	↑		↑	↑	↑	↑	5
Links to traditional democratic decision-making	↑				↑	↑	↑	↑	↑	↑		↑	↑	↑	↑	6
Ways of avoiding the technocratic elite pluralism	↑				↑	↑	↑		↑	↑	↑	↑	↑	↑	↑	7
Financial practices enabling enlargement of partnerships	↑					↑			↑	↑						8
↑ = Governance aspect influenced by Structural Funds & ↑ = some Structural Funds influence on governance aspect																

Source: ESPON 2.2.1

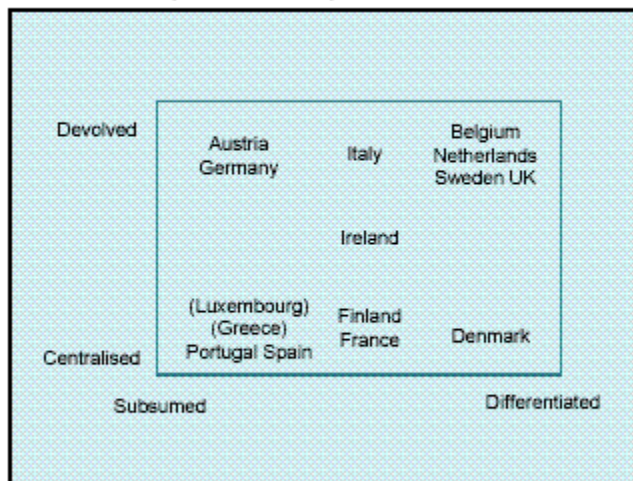
In many cases the governance influence was of a more horizontal or comprehensive nature, with the whole variety of issues addressed in this section of our analysis coming together in a more integrated approach to regional development during the current programming period as compared to the previous one.

The consistency of national and European policy goals outlined in programme documents

It is here that the close connection between the working practices and the methodologies associated with the governance of the Structural Funds, implemented both nationally and regionally, becomes of interest. Though the broad set of rules for the Structural Funds have

been agreed upon and are set in the regulatory framework of the Structural Funds across the EU, there are various degrees of self-governance here, while the working methods are embedded in a much broader continuation of regional development activities, where national and regional specificities are necessarily of relevance. For instance, there are important differences as to the degree of involvement of regional and local authorities functioning within the broader Structural Funds management and governance structure. The typology of national governance models for Structural Funds management developed as part of this project classifies the national governance models as being divided into three main categories, e.g. subsumed, mixed or differentiated (in addition to the devolved or centralized models within these three types).

Figure: Structural Fund governance and implementation



Source: ESPON 2.2.1 SIR

In the following analysis we will ask whether the picture provided by the case study reports confirms this governance typology, i.e. whether the types of actors and governance methods involved in the programme implementation within the UFAs in each of the national cases reflect the national governance model (in particular relating to the degree of decentralization).

In the case study analysis, consistency between the national and European policy goals emerges as an issue area where the Structural Funds have indeed played an important role, though the picture is varied as to the nature (i.e. direct or indirect) of the influence the Structural Funds have played. Here the cases are divided relatively evenly between those where the influence level is considered to be 'important' (six cases, i.e. Grevena, Lakonia, Centre, Lappi, Madeira, Norrland, Southern and Eastern Ireland), while in the other six case studies the reported influence was considered to be more minor (i.e. 'some influence', Calabria, Highlands and Islands, Sachsen, Toscana, Région Wallonne and Catalunya). In none of the case studies reported was it argued that the Structural Funds have not had any influence in this respect.

In some case studies the Structural Fund influence was seen to be important in terms of the need to develop and maintain an increased level of consistency between national and European policy goals. Moreover, the level of influence recorded here seems to be higher in cases where there had previously been a more hierarchical and centralized system of governance. It is thus argued in the case of Lakonia and Grevena for instance that:

In the Greek regions, the introduction of the EU structural policy and European Commission programmes has called for new forms of co-operation between the local authorities and socio-economic city-based forces for the implementation of urban sustainability. The highly centralised and hierarchically organised state and the lack of a viable system of sub-national governance are generally considered to be the main characteristics of Greek intergovernmental relations. The Greek State is the most centralised and interventionist state in the EU demonstrating strong resistance towards decentralisation. Examples of this centralised character are the delayed establishment (only in 1994) of second elected tier of local government, despite the introduction of the relevant form in 1986; the persistent reluctance of the state to rationalise the system of local government finance and competencies distribution, as well as the central role of the state in monitoring the European programmes' allocations to the local authorities. All these have led to the extreme weakness of the local government. More specifically, the financial dependence of sub-national authorities on central state transfers, the functional overlapping of competencies, the controlled and centralised planning development, and the role of political parties as mediators between the central administration and the municipalities are typical of the Greek intergovernmental relations and have led to the emergence of an administratively weak, highly party-politicised and state dependant local government.

In cases of a more decentralised or devolved nature however the level of influence seems to be lower, as indicated for instance in the cases of Catalunya, the Highlands and Islands or Sachsen, all of which are representative of devolved or federalized governance systems. It is thus argued in the case of Catalunya that the influence here is restricted to the implementation of the reporting and evaluation requirements. In the case of the Highlands and Islands it is argued that, "EU regional policy objectives complement the UK Government's regional policy goals. However, the overall strategic frameworks for EU and national UK regional policy are not fully integrated, and they do not correspond precisely". While in the case of Sachsen, the influence of the Structural Funds is apparent, though the awareness of it is low, as the practices connected to the governance structure are no longer particularly new. The level of governance reflecting the standard administrative delineation required for regional planning, as well as partly resulting from the requirements defined by German regional policy (*Gemeinschaftsaufgabe Verbesserung der Regionalen Wirtschaftsstruktur* =GA), through which the individual Länder and the Federal State coordinate regional policy approaches. The primary aim of the GA is thus to support structurally weak regions in the process of adjustment. The two most important measures here relate to investment in companies and infrastructure, potentially generating a primary income effect.

The need to broaden the basis for the partnership governance model and the need to address the governance system of 1994-1999 programming period -where the responsible ministry was

in the driving seat - which is now felt to have been too 'technocratic elite' based, were both issues regularly referred to in the case studies. On the other hand, in some of the more centralized systems the influence of the Structural Funds on policy consistency was thought to have been a rather important part of policy learning (e.g. Finland and Sweden), though this could also be explained simply by these countries more recent accession to the European Union.

Examples of promoting learning

The issue of promoting (policy) learning was one of the starting points for our analysis here. As argued in the ESPON 2.2.3 report on the Structural Funds' impact on urban areas, the issue of learning, within the context of the methodology of the Structural Funds is important in respect of two key aspects of regional development activity:

- **Programming cycle methodology:** ranging from the preparation of the programme with the analysis this entails to implementation, monitoring and evaluation. While the programming cycle may have originated in the EU programmes, it is increasingly also implemented in the development of national (including urban) policy initiatives.
- **A more developed and extensive partnership approach:** partnership may still be limited to the public authorities and to their co-operative relations with counterparts from the business sector and the R&D field, but it is also now gradually being developed in the voluntary sector and in the domestic policy sphere (thus making the synergy effects easier to achieve, when the working methods are shared).

When assessing the case studies from the point of view of the impact of the Structural Funds as regards the issue of learning, nine of the case study regions considered the policy learning influence here to be 'important'. Only the Cataluñya and Sachsen case studies considered the relevance of the Structural Funds here to be minor.

In most cases the learning aspects were seen in terms of the two themes referred to above, i.e. learning to implement and promote the partnership working methodology, as well as implementing the programming cycle methodology. Moreover, the Structural Funds were, in some cases, deemed relevant in terms of the way in which regional development is perceived (a more integrated approach, sustainable and balanced growth emerging as an important policy objective). Other issues addressed here included gender mainstreaming and other horizontal themes.

Governance: Governance innovations

The idea that the Structural Funds may have had an impact on the form and function of governance is often related to the possibility of influence through a variety of policy and governance innovations, which often relate to an increased degree of decentralization or other types of policy diffusion throughout the Member States. Here we asked the national experts to

contemplate the possibility of identifying concrete examples of governance innovations or changes in national or regional practices, which have their roots in Structural Funds work. That is, we asked whether there were in fact policy innovations that could be attributed to the Structural Funds programmes implemented?

In most case studies such policy innovations were said to exist when the current programming period was compared to the previous one. In some cases it was argued that it is difficult to see where the Structural Funds have been the cause of such policy innovations however, as other (national and international) trends also point to similar conclusions, and have had a similar influence (e.g. in the case the Highlands and Islands, UK constitutional arrangements relating to devolution being a case in point here).

The governance innovations reported range from partnership working method and their concrete forms (e.g. Centre, Highlands and Islands, Lappi, Madeira, Norrland) to more integrated programming practices (e.g. Calabria), increased use of evaluation methods (e.g. Région Wallonne and Centre) and increased regionalization/decentralization of the management structure (e.g. Southern and Eastern Ireland).

In some cases there were also certain tensions relating to partnerships, especially as they relate to the distribution of responsibilities and the focus on either the local or regional aspects of policy-making and programme management. One example of the emergence of such an issue in the Highlands and Islands case study is outlined in the box.

Box 11: Local-regional axis in development activity: part of the Structural Funds learning process?

The 'Initiative at the Edge' programme was established in 1998, as a partnership programme involving the most fragile communities on the geographic periphery of the region. The remote community groups work, with the assistance of a designated Local Development Officer, alongside a number of different agencies: the Scottish Executive, Highlands & Islands Enterprise, the Crofters' Commission, Scottish Natural Heritage, Communities Scotland, and relevant local authorities. The initiative aims to overcome the difficulties that some remote communities have in accessing support from the main public sector agencies and others. It offers designated communities a public agency Partnership commitment and a framework in which they can bring together their own ideas for the long-term regeneration of their areas. Rather than introducing a new partnership model, implementation of the Structural Funds has, thus, consolidated the partnership approach.

One potential benefit resulting from the experience of Structural Funds implementation is in overcoming the tension between regional coordination and local fragmentation. Although the establishment of LECs enhances the capacity to manage space by providing a vertical channel, allowing local actors to convey local conditions and priorities to regional 'state managers', it also brings the threat of fragmentation. An integrated and coordinated approach to strategy formulation and implementation is vital in avoiding inter-local competition over, for example, road and ferry routes. The SF programmes provide one of the few opportunities for organisations in the region to consider strategic development challenges affecting the Highlands & Islands as a whole.

More integrated programming practices were already referred to in the introduction to this section of the report, especially in relation to the Italian experiences here. **Increased use of evaluation methods** can also be seen as a theme that is of more general relevance, as all Member States need to draft, manage and implement evaluation working methods and practices. Evaluation is, after all, a key element of policy diffusion and learning within the Structural Funds management structure and working methodology.

The increased regionalization/decentralization of the management structure is in a way a generic theme, and as such it relates to the development of Structural Funds working methods more generally, as well as to specific experiences gained in a number of Member States and their regions. As an example we can refer here to the (perhaps more generally typical or symptomatic) experiences from Ireland.

Box 12: The decentralisation effect of the Structural Funds: Irish Example

Debate about regional government/decentralisation gained momentum after reform of the Structural Funds emphasised geographically based programmes drawn up in consultation with local and regional authorities. In January 1994 eight Regional Authorities were allocated responsibility for the coordination of public services in the regions, for planning the regions overall development requirements and the subsequent monitoring and evaluation of E.U. Structural & Cohesion Funds. This seemed to fit well with the direction of Structural Fund reform. The 1994-1999 programmes for EU Structural and Cohesion Policy laid greater emphasis on the role of regions and the importance of Spatial Planning Policy to guide investments. For instance, revised Structural Fund regulations increased the monitoring and evaluation requirements and consultation procedures required at the regional level. However, in many respects this is a relatively limited role, which does not greatly impact upon the strong role of central government ministries and agencies in policy development, policy implementation and the allocation of resources.

More recently, and again in connection with EU funding requirements, the Government established two new 'group regional authorities' whose territorial coverage corresponds to two new NUTS II regions. To an extent, the new regional structures have increased the influence of the regional level in the development of key policy documents, such as the National Development Plan. They also represent a notable decentralisation of responsibility to the regional level by providing, for the first time, for *regional* programmes in the National Development Plan and for *regional authority management* of such programmes. The regional operational programmes were drawn up by the Government, in consultation with the new group regional authorities. Moreover, the group regional authorities are responsible for the management of the regional operational programme for their region; this contrasts sharply with the previous position where the management of Structural Fund programmes was the exclusive preserve of Government Departments in Ireland.

Relative to the position in the early 1990's, Ireland has undertaken a significant level of regionalisation and has improved synergy between the national and regional levels. To a great extent these developments are related to EU funding requirements. However, changes in the national economy and shifts in approaches to regional policy and economic development policy have also directed the course of change. The process of regionalization should also be viewed as ongoing. For instance, regional-level institutions, and Regional Authorities in particular, are pressing for a greater role in the policy process. The Association of Irish Regions suggests that Regional Authorities are underused and have not fulfilled their potential as key nodes for the co-ordination of strategic approaches to development.¹⁵ The Association puts forward the regional-level as the most practical level for vertical and horizontal integration of strategies and plans.

Governance: Trans-national links

The idea behind the potential diffusion, through trans-national linkages and networking in relation to Structural Funds, is related to the understanding of polycentricity put forward in this project and the fact that territorial cohesion and polycentrism are seen as comprising, not only morphological aspects, but also and more importantly from the point of view of the governance impacts, the flows between various centres.

¹⁵ Association of Irish Regions, (2001) Co-ordination of Strategic Planning in Ireland, Submission to the Department of Environment and Local Government, available from <http://www.midlands.ie>

While direct support occurs when the goals of territorial cohesion are directly targeted by Structural Fund policies, either explicitly or implicitly, indirect support occurs when the Structural Funds are used as a lever for national policies aimed at the objectives of territorial cohesion, the promotion of trans-national links and support for new thinking within economic development. Here the question of interest for the project is whether the Structural Funds contribute to the achievement of territorial cohesion and polycentric development both directly and indirectly, and to what extent does this take place through the promotion and consolidation of trans-national links in particular?

In the case study analysis the role of trans-national linkages is only of secondary relevance, as they are seen as relevant to territorial impact only in cases where partnerships are promoted beyond the national context, i.e. in most cases through the Interreg programmes. Only in a minority of the cases were trans-national links put forward as being of major relevance (Madeira, Norrland, Southern and Eastern Ireland and Région Wallonne). In all of these cases the linkages were outlined within the Interreg context (an issue that will be further developed in a separate sub-chapter of the report, dealing specifically with Interreg).

Box 13: Trans-national connections as a basis for a more pro-active international role for the regions: Swedish example

There are now new partnership forms and constellations that seek to promote the visibility of the region nationally and internationally, while at the time developing a strategic awareness of regional needs and challenges. Examples of such constellations include the establishment of the North Sweden Office in Brussels, as well as *Europaforum*, a political platform functioning since 2001 between all counties in Norrland as a public authority partnership. *Europaforum* seeks to highlight the importance of Norrland in the EU through developing and commissioning regional analysis. Though there has not been an explicit or direct impact, as Structural Funds funding has not been used to finance these initiatives, the more pro-active partnership approach and awareness of the international role of the regions can be indirectly seen to stem from the Structural Funds work.

In some cases such specialisation also entails a trans-national dimension, as indicated for instance in the Région Wallonne case study. Here it is worth noting that while the main policy instruments under analysis (Objective 1, 2 and 6 programmes) did not include a trans-national dimension as this was reserved to the Interreg Community Initiatives, trans-national issues may however be of relevance in the mainstream Objective programmes as far as they relate to specialisation and the role of the eligible regions in the broader European context.

There are also examples of note with regard to the wider networking processed in the area of policy learning and the exchange of experience, a good example being the work undertaken in the IQ-Net presented in the case study for Toscana. IQ-Net is a network of Objective 1 and 2 regions that EPRC has been managing since 1996. The aim of the network is to 'Improve the Quality of Structural Fund Programming through Exchange of Experience'. The network involves a structured programme of applied research and debate, centred on a bi-annual

conference. IQ-Net member regions currently come from 10 different Member States across the EU.

Box 14: Trans-national dimension as an element of specialization: Belgian example

Although trans-national co-operation was not one of the priorities of the Objective 1 programme for Hainaut, some projects did have an inter-regional or international impact. For instance, the project 'Optical Fibre Network' resulted in the creation of an optical fibre infrastructure that was not limited to the borders of the province and the country. This network was constructed along the motorways of Hainaut and was connected with other such networks in the other provinces, in both Région wallonne and Flanders. Moreover, interconnections with networks in France (Lille), Germany and Luxembourg were planned – although the link with Brussels is missing.

Governance: New actors

The emergence of partnerships is one of the most profound aspects of policy diffusion and learning currently taking place within the Structural Funds context. As indicated by the case study report, the impact is only marginal when it comes to financing mechanisms (even though in some cases co-financing practices have introduced new partnership constellations), but in terms of actor participation and new networks the impact has been important.

As argued in the Second Interim Report, the Structural Funds are

...broadly considered to be responsible for the strengthening and empowering of the regional and local levels of governance, by facilitating local-level dialogue through the implementation of horizontal partnership and by the creation of sub-national and often local organisations with specific functions associated to Structural Fund implementation. By stimulating partnership work and bottom up policy-design, in line with the subsidiarity principle, the Funds have also facilitated the tailoring of policies to needs and preferences expressed by those living and operating in the affected territory. (SIR, p. 12).

and

The partnership principle applies to both horizontal and vertical aspects of policy coordination. On the one hand, the Structural Funds have encouraged different actors, from diverse socio-economic sectors and backgrounds, to pull together and contribute dialectically to the definition of policies and, in some cases (e.g. in the UK), their delivery. On the other hand, they have encouraged dialogue between actors from different territorial scales, enabling the integration of different perspectives and visions on the needs acknowledged with regard to the functions to be attributed to the territories. Structural Funds in this area have been an exceptional motor of innovation, often inaugurating practices and methods that have subsequently then been exported into the national policy realm. (Ibid, 84).

These aspects of the impacts of Structural funding have been identified as being particularly relevant in most case studies, both in terms of the inclusion of new actors and in terms of the financial practices (co-financing and the impact of how it is implemented through the promotion and mobilization of new partnership constellations). Here the inclusion of private-public partnerships can be identified as being of particular interest.

Box 15: A Greek example of developing a regional innovation partnership within the RIS framework

Most firms in the region are small and family run with little technological innovation – this situation is compounded by the lack of support services in the region. Consequently, the RIS seeks to elaborate and implement a strategy and actions in support of innovation in regional SMEs and the organizations of technology supply, transfer, and demand. The objectives include:

- Understanding the factors influencing technology development and innovation and identifying the strengths and weaknesses;
- Ensuring a consensus between the public administration, the enterprises, and higher education on the priorities for technology development and innovation support in the Region;
- Selection of specific actions to reinforce the capacity of regional businesses for innovation and technological development;
- Implementing the above projects in collaboration with the Structural Funds, the Community Initiatives designed to support innovation, and private investments.

A strong point throughout the implementation has been the strengthening of relations between the key partners. Despite the fact that it is a small region in terms of surface and population and thus that one could expect a spirit of solidarity to exist, this has not always occurred in practice with prefectures and even municipalities taking individual initiatives without considering the regional dimension. In order to mobilise all of the partners in the RIS exercise, the different studies were carried out through participative working groups involving an expert and members of the Steering Committee with a particular interest in the theme. The eight working groups drew up reports on the wood, fur processing, agricultural products, marble and mining, electricity production and tourism sectors and on two horizontal themes (financial support to SMEs and production systems and development programmes). The procedure of the RIS project, innovative itself, helped many of the participants to realise that a united effort is always much more effective. Finally, the project also helped the partners to understand that good technical preparation and support of a project, particularly EU funded projects, is something that is indispensable to success. The RIS procedure – thinking, selecting ideas, analysing them and supporting them in a bottom – up approach – despite its difficulties, was something finally welcomed by everyone in the Steering Committee.

- IMPACT ON REGIONAL POLICY AND FUTURE PERSPECTIVES

The main impact to date is regional consensus, the raised awareness of regional firms and actors with regard to innovation, and the diffusion of information on technology and innovation processes and policies.

Reaching consensus was a permanent concern and implied the preparation of all decisions, from the creation of working groups to the definition of priorities and the selection of projects, in consultation with the participants in the formulation of the regional innovation strategy.

- STIMULATING INNOVATION IN SUB-CONTRACTING CHAINS

In Dytiki Makedonia, the mining and refining of important lignite resources and the generation of electricity is carried out exclusively by Greece's Public Power Corporation (which with its mine and its four generating stations produces over 70% of Greek electricity).

The RIS permitted the development of a pilot project in this field which aims to expand the importance of local suppliers through the creation of an Information and Technology Transfer Company, designed to foster the modernisation of firms producing products and services for the PPC, to provide technical back-up to suppliers, inform firms about procurement programmes and related tenders, organise events relating to the exploitation of lignite, and help local businesses participate in EU energy sector research programmes.

(Source: Grevena case study)

Another example of the introduction of new types of actor constellations through the Structural Funds working methodology, this time in the case of Madeira is given in the box below.

Box 16: The partnership impact of the Structural Funds: Example of Madeira

In Madeira, either directly or indirectly, the Structural Funds provided the major impetus to the creation and establishment of new regional actors, many of them public or public-private partnerships, such as

- The IFC, the Institute for Structural Fund Management, which was created out of the Planning Department in 2001, in order to manage, control, evaluate and promote more efficiently the Structural Fund Programmes and, specifically the ERDF and the Cohesion Fund projects. More than 60 people work in this public Institute. It has developed such a level of administrative and evaluation capacity that the Institute in Madeira even presents bids for the evaluation of Structural Fund programmes to other Portuguese Regions.
- The Regional Development Agency ADERAM which was created in 1999 in order to support the regional authorities in the elaboration, presentation and implementation of regional development projects in Madeira (especially those supported by the Structural Funds),
- The Science Park and Congress Centre Madeira Tecnopolo has been supported by the Structural Funds and is now itself one of the most active bodies that present and manage Structural Funds funded projects, especially in the field of Innovation, R&D and Information Society.
- LEADER Local Action Groups, which work as Local Development Agencies in rural areas,
- Many new public and private training centres which offer professional training with the support of the ESF. Before 1994, there was only one public professional training centre, while POPRAM II supported the creation of new University careers, the creation of the Professional Tourism and Hotel School, etc.

It is worth noting here that in some cases the working practices and co-financing mechanisms of the Structural Funds are also seen as detrimental to expanding partnerships, as the perceived burdensome nature of the management mechanisms makes it difficult to involve private actors, particularly SMEs (or even more micro businesses) in the partnerships and project activities (e.g. the conclusions of the Finnish and Swedish cases also point in this direction).

Governance: Links to traditional democratic decision-making

The reason behind the inclusion of this aspect in the analysis was that there is often tension between the new governance models and those introduced within the framework of Structural Funds governance when it comes to the democratic accountability (e.g. Olsson 2003), tensions that can emerge as a reaction to both the national and the regional contexts. As an ideal-typical model of governance, the parliamentary model of Structural Funds governance entails the idea that the traditional form of representative democracy remains the ideal, which is supposed to work in practice within the field of EU regional development policy. The most important actors in the partnerships would thus be the popularly elected politicians. Party-based ideologies are strong and integrated across the borders of different local and regional authorities, which also means that there is increasing party competition. Thus, regional development policy is in this view characterized by party politics and competition, expressed in active participation in election campaigns and the media in line with the traditional representative democracy model.

Partnerships, monitoring committees and programme management committees would in this view merely be institutions complementary to parliamentary democracy (Olsson op.cit. p. 287). If the tensions referred to above are taken seriously, the Structural Funds management and governance structures would be assessed, not only in terms of how well new partnership models and network constellations are promoted through this new collaborative framework, but

also by the extent to which the traditional forms of representative democracy are taken into account and renewed through the varied forms of policy innovation apparent in the Structural Funds context.

In most cases this aspect of democratic renewal is apparent in the Structural Funds working practices, as indicated by the case study reports, though the impact of the Structural Funds is seen as being of marginal relevance to the overall influence and impact of the programmes and to the programming methodology in this respect when compared to most of the other dimensions addressed in this section. In most cases this aspect is visible in the inclusion of municipalities and their political representatives in the Structural Funds decision-making and management. Only in the case of the Highlands and Islands and in Norrland is this aspect believed to represent 'important influence', in terms of the Structural Funds. In the case of Norrland it is argued that the municipalities included in the partnerships have ensured the continued relevance (and predominance) of more traditional social justice concerns. This means that the issues of regional balance, eligibility and the promotion of equality between the different parts of the programming area have remained high on the agenda, while the special needs of the peripheral inland communities struggling with out-migration, an ageing population and marginality have remained on the political agenda even though the policy discourse has shifted towards the acceptance of polycentricity within the Swedish context, which has also entailed the need to promote growth areas as engines for growth in a broader territorial context.

In most cases it seems however that these aspects of influence have been more procedural, making sure that the municipal decision-makers and politically accountable representatives remain central in Structural Funds governance structures, despite the shift towards novel governance forms, in which administrative (and technocratic) representatives become more predominant. This is however of relevance when it comes to the maintenance of democratic control over an increasingly more technocratic development policy.

Governance: Avoiding technocratic elite pluralism

The inclusion of this governance dimension in the analysis was based on the assumption that while the inclusion of new actors through partnerships has generally broadened the group involved in regional development activities in the Structural Funds context, in many cases the character of the Structural Funds system can still be described as 'top-down' and technocratic, with significant emphasis still being placed on vertical co-ordination between administrative levels, which can at times marginalize the role of popularly elected politicians as well as bringing to the forefront the problems and potential limitations of new partnership working practices and methodologies in respect of accountability and democracy (e.g. Olsson, *op.cit.*, 294). This was however not seen as a threat or problem in the case studies reported here, perhaps partly due to the fact that this question has in most cases not been addressed in the evaluation reports and most of the actors involved in the case study interviews tended to represent the 'programme elites' themselves.

Governance: Conclusions

New working practices and methods: the main impact

The main governance aspects as reported in the case studies undertaken as part of this project were connected to the new working practices and methods associated with the programming cycle, evaluation and partnerships, while there were also indications that the influence of the Structural Funds themes and policy emphasis may have contributed to a more broadly based understanding of regional policy and the governance model required to promote the objectives it encompasses. The policy learning impact is thus of particular relevance, especially in the new Member States (in this case from the previous wave of enlargement in the 1990s with Sweden and Finland), though also across the European Union as a whole. In most cases these impacts were felt across the Member States, and not particularly acutely at any particular territorial level.

The problem of scale

When compared with a similar analysis of urban areas (within the ESPON 2.2.3 project), there are both similarities and differences. Whereas in the urban areas the main aspects of policy impact and governance learning were identified as networking and organizational innovations (partnerships leading to new co-operation networks and more broadly based management structures); increased citizen participation and identity-building for the inhabitants, as well as the visibility and awareness of EU policies, here the picture is more general, emphasising the partnership constellations and working practices. This is not however surprising when we consider that the regional level within which the analysis was undertaken in this project was broader, and thus some of the grass-roots impacts and influences were perhaps more difficult to identify.

10.5 Summing-up Structural Fund influences on polycentric development

As already documented in the review of the spatial dimension of the Structural Funds, explicit targeting is not very common. This is confirmed by the case studies carried out, as only in the case of Région Wallonne was polycentric development directly addressed, both with regard to the national and the trans-national levels. However, in most of the other case studies it was felt that the aim of polycentric development had been *implicitly* addressed.

As noted above, the case studies focused on aspects such as the distribution of population, functional specialisation, accessibility, international co-operation and the diminishing of regional divergence in order to operationalise polycentric development. Furthermore, attempts were made to rank both direct and indirect effects.

Table 26: Structural Funds influence on polycentric development

Geographical level of influence/effect		MICRO	MESO	MACRO	SUM	TOTAL SUM
Type of influence/ effect						
Aspects explicitly targeting polycentric development	Direct		↔	↔	↔	
	Indirect	↑	↑	↔	↑	↔
Distribution of population	Direct	↑			↔	
	Indirect	↑	↔		↔	↔
Functional/economic specialisation	Direct	↑	↑	↑	↑	
	Indirect	↑	↑	↑	↑	↑
Connectivity/accessibility /transport	Direct	↑	↑	↑	↑	
	Indirect	↔	↑	↔	↔	↑
Strengthening of international co-operation	Direct	↑	↑	↑	↑	
	Indirect	↑	↑	↔	↑	↑
Diminishing regional divergence	Direct	↑			↔	
	Indirect	↑	↔	↔	↔	↔
SUM		↑	↑	↔		
↑ = aspect influenced by Structural Funds ↑ = some Structural Funds influence ↔ = hardly any influence of Structural Funds						

Source: ESPON 2.2.1

The distinction between the direct (effects discernible amongst those directly targeted by the intervention/investment in question) and indirect (broader effects that are also discernible amongst those that have not been the direct addressees of the intervention in quest explain) effects of the Structural Funds shows that overall, the indirect effects are considered to be as important as the direct ones – a fact that is often forgotten in the debate. A more detailed look at the various fields of effects however shows that the direct and indirect effects tend to occur in different areas.

As illustrated in the table, most effects are found in the fields of (a) connectivity and accessibility, and (b) socio-economic functional specialisation.

It is hardly surprising that the highest single effect is seen in the field of direct effects on **connectivity and accessibility**. This relates in particular to improvements in accessibility at the regional and national levels. The impact on the trans-national transportation system is however considered to be of slightly lesser importance. Indirect effects are rather rarely encountered in this field.

In the area of **socio-economic functional specialisation**, the sum of direct and indirect effects accumulates to a similar level as that in the field of connectivity and accessibility. In this case however the main emphasis lies with the indirect effects as regards specialisation within a

region, and to a certain extent, on the placement of the region in a trans-national context. Indirect effects in respect of the national context and direct effects in relation to the regional and national context are here considered to be of medium-range importance.

Another field that scored highly with regard to spatial effects is that of **strengthening international co-operation**. Here the direct effects are considered to be of more importance than the indirect ones, showing particular significance with regard to contacts at the *meso* level.

Aspects such as **diminishing regional divergence** and the **distribution of population** appear however to be less affected by the Structural Funds than the above-mentioned aspects.

Morphology

The distribution of population over space is often regarded as one of the most important aspects of polycentric development. Moreover, this is a rather difficult factor to influence through EU funding. In general, it can be said that pre-existing demographic trends have hardly been influenced by the Structural Funds. In some cases however influence has been detected by (a) focussing on rural areas, or (b) by focusing on strengthening the centres of a region.

Stabilising settlement patters in a region (particularly in rural areas)

In the cases of Lakonia and Grevena, the Structural Funds have directly affected the morphology of each region. In both cases we can see a positive influence with regard to the Structural Funds in respect of allowing people to stay in the rural and mountainous areas through the creation of new jobs. In the case of Madeira the Structural Funds also indirectly contribute to stabilising existing settlement patterns through measures improving the living conditions in the rural areas; better links to Funchal and to the airport; and through new industrial zones in the east of the island. Thus the Structural Funds programmes have had an indirect impact on maintaining population levels in the smaller towns and in the rural areas.

Another series of indirect effects – of lower importance - on the morphology of a region can be seen in Toscana, particularly with regard to the maintenance of population settlement in rural and mountainous areas, through support for economic diversification, while in Calabria, the Structural Funds' effect on tourism and on the diversification of rural areas seem to play a significant role in population rebalancing, though there is no quantitative evidence for this.

Concentration on the main centres (creating a nationally balanced picture)

The vast majority of the effects the Structural Funds have on the morphology of a region concern the stabilisation of existing settlement patterns in particular with regard to the rural population. However, the cases of Sachsen and Dublin illustrate that alternative tendencies, where migration trends towards the city centres are enforced, can also be found. In the case of Sachsen, this can be seen as job market activities in the central cities have concentrative effects. Over the past decade there has been a rapid increase and concentration of the

population of the Dublin region, with the aim now being more balanced development and the effective management of population growth. Thus Sachsen and Dublin may thus be considered as cases where the Structural Funds have certainly influenced polycentric development nationally.

Table 27: Structural Funds influence on distribution of population

		MICRO	MESO	MACRO
		Allowing people to stay in the rural areas of a region.	Concentration towards main cities of a region, i.e. a more balanced national picture	
Some influence	Direct			
	Indirect	Calabria Toscana	Southern and Eastern	
Important influence	Direct	Lakonia Grevena		
	Indirect	Madeira	Sachsen	

Source: ESPON 2.2.1

Functional specialisation

The socio-economic specialisation of an area is regarded as being important for the strengthening of competitive nodes in a polycentric system. Instead of focusing on diversity however the emphasis is on specialisation and the development of a *niche* complementing as well as competing with other areas depending on their socio-economic profile. The case study work has shown that socio-economic profiling is the second strongest aspect of polycentrism in terms of contributions in respect of the Structural Funds. When it comes to the direct influences of Structural Funds measures however, the development of socio-economic profiles at the *meso* level comes to the forefront. In terms of indirect contributions however it is the *micro* level that is of particular importance.

Local specialisation through Objective 1 measures

As illustrated in Table 27, in nine of our cases, Structural Fund activities contributed to increasing functional specialisation at the local level, mostly relating to Objective 1. This contribution to specialisation through the promotion of certain profiles that already existed has been achieved predominantly through measures in the field of R&D and tourism, which can be said to have sharpened the internal regional division of labour.

- In respect of **R&D profiling**, this is often related to cluster thinking in Objective 1 programmes and centres of expertise established in different parts of the region, as

e.g. in Sachsen or in Lappi. Another concrete example of this is increasing the R&D input in Northern Sweden, through e.g. the establishment of the Tourism Institute ETOUR in Östersund and the MRI in Kiruna, or Acusticum, a co-operative project between Luleå University of Technology, Piteå music school and local and regional authorities that seeks to develop competences in the areas of music and new media. In the Highlands and Islands, the increasing R&D emphasis concentrated for instance on efforts to develop a biotech cluster and a centre of excellence in Inverness.

- With regard to **tourism**, e.g. in Madeira, Structural Funds assistance directly strengthened the existing specialisation (tourism) of and in the region. While in Lakonia, Grevena and Lappi, profiling in the field of tourism, has also been of importance. Activities in the field comprised e.g. the development of tourism centres as innovative localities. In general, it can be said that support for tourism and SMEs was important for the local economy and especially for the rural development, and in e.g. Grevena also for reinforcement of the mountain areas, i.e. areas with geographical handicaps.

Table 28: Structural Funds influence on functional/economic specialisation

		MICRO	MESO	MACRO:
Some influence	Direct	Southern and Eastern	Grevena Southern and Eastern Highlands and Islands Madeira Norrland	Grevena Madeira Lakonia
	Indirect	Highlands and Islands	Lappi Southern and Eastern Sachsen	Southern and Eastern
Important influence	Direct	Grevena Madeira Lakonia	Calabria Lakonia	Calabria
	Indirect	Toscana Lappi Southern and Eastern Madeira Norrland Sachsen	Toscana Norrland	Toscana Lappi Norrland Sachsen

Source: ESPON 2.2.1

Developing economic nodes of national importance

At the *meso* level, tourism has also provided a strong focus, as have industrial clusters, in addition to those aspects already mentioned at *micro* level, transportation issues, co-operation aspects and the information society were also important.

- As regards **tourism**, the focus was on improving the advantages of the region and reinforcing the development of the tourism sectors. For instance in the case of Lakonia, the region's proximity to the metropolitan region of Attiki, its extremely rich and varied cultural heritage, and the quality of its natural environment have been

supported as development potentials in respect of attempts to strengthen the tourism sector.

- When it comes to **industrial specialisation**, the focus is on clusters of national or even international importance that may contribute to developing the region into a central node in such a network. Examples here include Prato's textile and leather cluster, the Massa Carrara marble industry, and the automobile clusters in Sachsen and Cataluña, all of which have been strengthened through Structural Funds investment.
- In the cases of the Highlands and Islands, Southern and Eastern Ireland and Norrland, support for **trans-national co-operation** in business support networks cross-border economic development such as Barents co-operation in the international sphere, Interreg programmes and the importance of city-twinning were noted as well as the emerging importance of spatial planning across borders, e.g. in the Haparanda-Tornio "euro city".
- In Lappi foundations have already been laid for future's trans-national co-operation particularly in the Barents corridor and the Bothnian Arc, while in the Southern and Eastern Ireland, **transport** links through Interreg and TENs have been mentioned as providing important indirect support for socio-economic specialisation.

The development of economic nodes of international importance

When it comes to the contribution of the Structural Funds to socio-economic specialisation of international importance the aspects mentioned generally correspond to those presented at the *micro* and *meso* levels. Some interesting examples can however be found in respect of the Southern and Eastern region of Ireland, where efforts were undertaken to develop the region into a European centre for R&D and high value/high skill investments, e.g. pharmaceuticals and internationally traded services. Whereas this may sound rather mainstream, the Swedish region of Norrland, has used Structural Funds assistance to further develop their car testing industry and for the establishment of the Environment and Space Research Institute (MRI) in Kiruna (Objective 6 – the biggest single project). As regards the car testing initiative, the goals outlined are "more profound cooperation and networking between the actors in order to develop the industry and increase economic growth," in addition to the "marketing of a world leading test region".

Connectivity

Structural Fund assistance that increases connectivity is the most important single aspect where such measures contribute to polycentric development. This relates in particular to the *micro* and *meso* levels, i.e. infrastructural improvements of local, regional or national importance. The improvement of accessibility relates predominantly to road and air transport, while sea and rail transport examples were much more difficult to uncover. In what follows we will provide some examples.

Table 29: Structural Funds influence on connectivity/accessibility/transport

		MICRO	MESO	MACRO:
Some influence	Direct	Centre	Centre Highlands and Islands	CentreCentre Southern and Eastern Norrland Toscana
	Indirect	Centre Lappi	Centre Lappi Madeira	Calabria Centre Lappi Madeira
Important influence	Direct	Calabria Grevena Toscana Highlands and Islands Madeira Norrland Sachsen Lakonia	Grevena Toscana Madeira Norrland Sachsen Lakonia	Grevena Madeira Sachsen
	Indirect		Calabria	

Source: ESPON 2.2.1

The observable improvements to the **road networks** in Lakonia, Sachsen, Calabria, Grevena, Centre, Southern and Eastern Ireland and Madeira relate to new highways, improved regional road systems, and rural paths. In Grevena for instance, support was given to the improvement of the national and regional road network and to the improvement of the trans-European networks linking the region's productive centres. In Madeira the important influences through road investment stem from the new highway from the airport to Funchal and other towns nearby. In Lakonia support was given to the improvement of the national and regional road network and to connecting Lakonia with the Corinth – Tripoli – Kalamata highway, which provides access to the main urban centres of the Peloponnisos, to Attiki and to the rest of the country. This illustrates that Structural and Cohesion Fund measures have been used to improve missing links in the road network, which can be viewed as an important contribution to polycentric development, as the availability of cross-border road connections are an important issue in border regions.

With regard to the centre-periphery divide in Europe however, the influence of the Structural Funds on the improvement of **air connections** in peripheral areas is of a somewhat higher importance than that of road networks. This is so in respect of Southern and Eastern Ireland, the Highlands and Islands, Calabria, Lappi and Norrland. The type of Structural Fund activities vary, from airport extension in Madeira, to the development of airport services in Rovaniemi and Kittilä (Lappi) or plans for providing more domestic air connections in the Highlands and Islands, to indirect effects, where the socio-economic specialisation supported by the Structural Funds have increased the demand for air services. This is the case in Norrland, where the focus on car testing resulted in more flight connections to Germany.

In five cases, funding contributions to connectivity directly related to **sea traffic**. In Southern and Eastern Ireland and the Highlands and Islands investments have been made in seaports, in

Toscana inter-port investments allow for increased openness to external markets, while in Calabria the port of Gioia Tauro has been turned into a container transshipment hub of European importance. In Madeira, the Structural Funds have contributed to an improved ferry service to Porto Santo, etc. and thus have had a huge impact on internal accessibility and development. Furthermore, the restructuring of the seaport areas has had a positive impact on connectivity and accessibility in a national context. Other Structural Fund measures (training, knowledge infrastructures, Science Park) have also had a positive effect on the development of an Atlantic hub-function.

Rail transport seems to be of less importance when it comes to the Structural Funds contributions to connectivity and polycentric development, with only a few examples (e.g. in Southern and Eastern Ireland and in Norrland). In both cases the focus was on border traffic. In Norrland, the planning of a new railway from Boden to Haparanda aimed at enhancing the ability to provide an efficient transport structure between Sweden and Finland. Despite repeated efforts there has only been limited development within the trans-national regions in the North Calotte to establish better cross-regional rail and flight connections (in most cases to travel between the regional centres in neighbouring countries within North Calotte for instance one has to travel via the national capitals).

A rather more unusual aspect of the improvement in connectivity is the building of so-called 'tourism roads' in Lappi. Indeed, there the focus was on tourism development helping to maintain railroad and air traffic connections at the national level. This illustrates the general dilemma of investments in infrastructure services, where missing links or low standards are often related to rather low demand.

Whereas the examples mentioned above concentrate on the *micro* and *meso* levels, the Structural Funds have also contributed to improved connectivity at the *macro* level. In Calabria, strongly influenced by national spending and national planning, the development of the transshipment hub has, nonetheless, benefited from the Structural Funds. In Grevena support was given to the improvement of the trans-European networks linking the Region's productive centres and also in Sachsen TEN and TINA projects cut through the region linking it with the CEE.

International co-operation

International co-operation is considered an important element of European polycentric development. Although it is not the main focus of Structural Fund programming, the case studies illustrate that the Structural Funds contribute to increasing international co-operation, as such, this aspect ranks third after the more traditional aspects of connectivity and functional specialisation.

Table 30: Structural Funds and strengthening of international co-operation

		MICRO	MESO	MACRO:
Some influence	Direct	Toscana	Grevena Toscana Highlands and Islands Lakonia	Grevena Highlands and Islands
	Indirect	Lappi	Grevena Lappi Madeira Sachsen Lakonia	Grevena Lappi Madeira Lakonia
Important influence	Direct	Grevena Centre Lakonia	Centre Southern and Eastern Madeira Norrland	Madeira Norrland
	Indirect	Centre Norrland	Centre	

Source: ESPON 2.2.1

Basically three types of co-operation can be identified:

- *The partnership and governance approach of the Structural Funds within a region*

In most cases the strengthening of co-operation discussed in the case studies relates to the partnership principle underlying the Structural Fund programmes. This involves co-operation and networking between the SMEs, between local government and SMEs, citizens and administrations, research institutes etc, as well as closer co-operation between the administrations themselves. These relate in the main to the aspects discussed previously in the governance section.

- *Trans-national co-operation in peripheral areas*

Another aspect of co-operation is related to trans-national co-operation and thus is closer to the idea of supporting links for polycentric development. It is hardly surprising that such co-operation was often the result of activities under the Community Initiative Interreg. However, it seems that strengthening international networking is of particular importance in peripheral regions such as the Highlands and Islands, Southern and Eastern Ireland, Madeira, Norrland or Lappi.

- *The European 'presence' of the regions*

The third field of co-operation issues regards the direct link between the regional and the European levels, i.e. the positioning of regions in European networks. This involved activities related to the establishment of regional offices in Brussels, working towards a greater awareness of the EU at the regional level and the higher visibility of the region in Europe. Again, the peripheral regions stand out, with Norrland, the Highlands and Islands and Lappi, even though even here the impact on the 'European presence' is indirect or coincidental at best. For instance in the case of setting up the regional office of North Sweden, Structural Funding was not used, though some interviewees argued that the need

for a greater European presence stems from the Structural Funds process in the first instance. In this sense the causality is rather simple: EU membership has transformed the modes of influence and interest representation as a whole, with or without co-financing from the Structural Funds. This was exemplified by the statement made by the executive director of Lappi regional council when he argued, in a speech made in July 2004 that, “without EU membership Lappi would be a less international and considerably more peripheral region”.

Diminishing regional divergence

In terms of cohesion policy, diminishing regional divergence has always been an important aspect of EU regional policy, as well as a topic of some interest in the debates on territorial cohesion. However, the case studies illustrate clearly that the Structural Funds contribute only to a minor degree to diminishing divergence. Indeed, the ‘degree of influence’ in this field is considered only slightly higher than that of their influence on morphological aspects. Furthermore, the case studies portray a picture according to which the Structural Funds, if they contribute at all to diminishing divergence, do so at the regional level. This picture is not however fully confirmed by analyses of the geography of spending presented elsewhere in this report.

Table 31: Structural Funds and diminishing regional divergence

		MICRO	MESO	MACRO:
Some influence	Direct			
	Indirect	Grevena Lappi Southern and Eastern Highlands and Islands Madeira Norrland Sachsen Lakonia	Lappi Sachsen	Southern and Eastern
Important influence	Direct	Grevena Toscana Madeira Lakonia		
	Indirect			

Source: ESPON 2.2.1

Aspects covered by ‘diminishing divergences’ include strategies that aim to develop the endogenous resources of the region in question, thus reducing its isolation. Through the reduction of intra-regional disparities and the development of rural and/or less-advantaged areas the region in question has already benefited in recent years and is expected to benefit even more so in future. Accordingly, in cases such as Lakonia, Lappi or Grevena, measures encouraging innovation and entrepreneurship have a positive, albeit indirect, impact on the mountainous, on the rural and on the less advantaged areas. In Madeira many parts of the region benefited from the positive economic development of the last few years through improvements in living conditions, specific support for rural areas, the promotion of industrial activities and support for balanced tourism (Funchal, other towns, rural areas). Many Structural

Fund measures (training, health infrastructure, water supply, etc.) also had a positive, albeit indirect, impact on formerly disadvantaged areas. However, it remains difficult to assess whether the changes are solely attributable to Structural Fund intervention.

10.6 Conclusions

Summing up the results of the case studies on the territorial effects of the Structural Funds, four areas of discussion can be emphasised. Firstly, the areas of intervention in which funding has had territorial effects. Secondly, the distinction between direct and indirect influences on territorial development. Thirdly, the geographical level at which the Structural Funds effect territorial development and last but not least, the question of the geographical specificities of such influences.

Areas of intervention in which the Structural Funds have had an influence

The case study work identified a series of areas of intervention through which the Structural Funds influence territorial development in the fields of spatial positioning, the Lisbon agenda, governance and polycentric development. Three main areas of influence can be highlighted:

- *Accessibility*

Improvements in infrastructure relating to better accessibility has been identified as the main aspect of polycentric development to which the Structural Funds can make a contribution. However, it has to be borne in mind that although the amount of Structural Fund assistance targeting transportation issues is large, it is comparatively small considering other European and national funding sources in the field. Moreover, the Structural Fund influences on accessibility seen in the case studies focus mainly on road transportation within a regional or partly national sphere of influence, and on measures related to air services. Air service related measures have been of particular importance in peripheral parts of Europe, as here improvements in road networks only result in minor gains in terms of accessibility. With regard to the mainstreaming issue of sustainable development however, surprisingly few measures concerning rail and sea traffic were recorded in the case studies.

- *Functional specialisation*

Socio-economic profiling is the second strongest aspect of polycentric development in term of the possible influences of the Structural Funds. The areas in which the Structural Funds can best contribute to existing profiling activities are in the fields of R&D and tourism. In both cases the geographical scope is mostly on profiling within a regional or, on occasion, a national context. A few cases have been unearthed where funding could assist profiling activities of an international character. These were mainly linked to specific existing endogenous potentials and key actors in the region that already had international key competences. Such is the case in Norrland with regard to car testing, in the Southern and

Eastern region of Ireland with regard to pharmaceuticals, or in Sachsen with regard to automobile production.

- *Governance*

Governance themes rate highly in almost all case study regions, and it was argued on a number of occasions that the governance impact (either direct or indirect) is in fact one of the most important impacts of the Structural Funds, while in many cases quantitative goals remain unattained. The consistency of national and European policy goals outlined in programme documents is the highest rated theme here. Examples of promoting learning are equally high on the agenda, across the case studies. Financial practices enabling the enlargement of partnerships rated very low in assessing the impacts of the Structural Funds working methods, as did the theme of trying to avoid 'technocratic elite pluralism'. This seems to suggest that the partnerships are not necessarily particularly inclusive, or at least no special effort was made to widen them. As such, the case study analysis seems to suggest that the partnership approach is a novelty, but that it mainly encompasses the policy elites while not doing enough to embrace voluntary organisations or other similar bodies.

Direct and indirect influences

The territorial effects of the Structural Funds are rarely of a direct nature, while it is also rarely possible to follow the influence that they impart in terms of strict chains of causal relations. Indeed, in most cases, their effects can be considered to be rather more indirect or implicit in nature, while the cause and effect mechanism (Structural Funds and spatial development) is not always visible, or straightforward. In addition, the time span between cause and effect inevitably varies, making it even more difficult to measure such potential effects. These realities have undoubtedly affected the case studies in their assessments of the influence of the Structural Funds on development, and on whether a measure or project has had direct or indirect effects. As illustrated elsewhere in this report, the Structural Funds have indeed had considerable leverage effects e.g. in national policies, and also on regional development strategies. Indeed, the agenda setting power of Structural Funds was already highlighted in the Second Interim Report and can only be underlined once again by the case study work undertaken here.

In the case studies it becomes clear that the effects on polycentric development are at best indirect. Undoubtedly the Structural Funds contribute more to the contact link/relation function and the specialisation function than to physical planning for polycentricity. The reason for this may be that the direct and indirect effects of education and employment measures complement each other, and that the physical accessibility measures have indirect/secondary effects in line with this (increased contacts and access to education creates employment etc.)

The geographical level of influence

Territorial effects need to be distinguished according to the geographical level of their influence. Throughout this work we have made an attempt to follow the *micro*, *meso* and *macro* division proposed for all ESPON analysis.

The case study work illustrates clearly that the territorial effects of the Structural Funds are mainly of a local/regional nature, i.e. influencing the *micro* level. At the *micro* level, the Structural Funds can, on occasion, exercise a significant level of influence on accessibility, functional specialisation or on the diminishing of regional divergences.

At *meso* level however the level of influence held by the Structural Funds undoubtedly diminishes, however certain influences have been identified mainly with regard to accessibility, functional specialisation and international networking.

As regards the *macro* level, the case studies only rarely identified areas where the Structural Funds contributed to the spatial positioning of a region in a European context. Accordingly, *macro* level influences are thus predominantly exercised through the actual amount of spending in various parts of Europe rather than through any individual activities.

Geographical specificities of influences

When selecting the case study areas, attention was paid to developing a set of studies that would reflect a broad variety of regions, different types of MEGAs, differences in the accessibility of regions, border regions, low population density areas, areas with different socio-economic specialisation profiles, areas with different geographical handicaps, environmental aspects and regions with different governance characteristics. This has been done in order to ensure a broad span of regions allowing for generalisation, but also because we have been curious as to whether certain issues would score higher in certain types of regions, though this is an aspect that is limited by the actual number of case studies we were able to carry out.

We can therefore conclude that in respect of most issues, the influence of the Structural Funds seem not to be particularly related to geographical specificities. The only exception here is the emergence of a core-periphery pattern with regard to relational spatial positioning. This concerns the higher featuring of air service related measures in peripheral areas, as compared to road and rail services in central areas. Furthermore, it seems that peripheral areas value transnational co-operation more than do central areas.

11 The contribution of Interreg to polycentric development

An important section of the analysis of the spatial impacts of the Structural Funds relates to the role of the Community Initiative Interreg. As Interreg mainly produces intangible results the focus here is not on aspects such as spending or measuring direct influence on territorial cohesion or polycentric development, but instead focuses on the question of learning. For this reason we have chosen a different approach.

Utilising previous research (Böhme et al 2003) a questionnaire has been developed for better assessing the learning effects of the Interreg IIC project in the Baltic Sea Region. The questionnaire was sent out to participants in all 45 projects in the programme with answers being collected from approximately two thirds, with the respondents coming from seven countries – Sweden, Germany, Finland, Denmark, Russia, Estonia and Norway. The focus here was on the degree to which the project had contributed to increasing the awareness of various aspects of polycentricity, and to what degree knowledge related to polycentric development had been gained and is used.

Following this line of argumentation, we can show that the learning and networking aspects of Interreg IIC contribute to disseminating the EU policy idea of polycentricity to regional and local actors and that these actors implement parts of this policy idea.

11.1 Typical achievements of Interreg co-operation

Discussing the contribution of Interreg programmes and projects to polycentric development, some general findings from the Interreg evaluations regarding the results and impacts of these programmes need to be considered.

Generally speaking, the broad geographical scope, as well as the thematic focus, implies that there are a number of overall conclusions as regards the outcome of the programmes. Drawing on previous studies and *ex-ante* evaluations, we will briefly present the typical achievements of such programmes in order to provide a backdrop to the subsequent analysis of Interreg co-operation.

- Project Outcomes

Outcomes constitute what is financed and accomplished (or concretised) with the money allocated to a project. In general, outputs may take the form of new facilities or infrastructure (e.g. rehabilitation of an urban wasteland, a purification plant, tourist accommodation). They may also take the form of non-material services (e.g. training, consultancy, information etc.). The Interreg IIC regulations set clear limits on what is considered eligible and consequently on what type of outcome can be achieved. Generally, the concrete outcome of Interreg IIC projects consists of various kinds of reports and books, websites and a wide range of workshops and conferences. As regards the various publications, a differentiation into analytical and strategic reports is possible, and it appears that the majority of the reports are of an explanatory, descriptive or analytical nature.

Turning to events, such as workshops, seminars and conferences, it is documented that despite the trans-national character of the programmes, a large proportion of events tend to be carried out in projects targeted at domestic audiences and issues. In addition, events are either of an internal character (events which were open for project participants or hand-picked guests only) or of a public nature (events which were open to the general public). Thus, the networking and dissemination effects usually vary accordingly.

Focusing on these types of outcomes, innovative approaches have been investigated and the spatial planning ideas advocated in the ESDP have been promoted and brought forward as regards discussion as to their meaning and application.

- *Project Results*

The results are comprised of the advantages (or disadvantages) that the direct beneficiaries of the project obtain. The results can be observed when an operator completes an action and accounts for the way in which allocated funds were spent and managed. At this point s/he may show, for example, that accessibility has been improved due to the construction of a road, or that the firms receiving advice claimed to be satisfied.

In the case of Interreg IIC, the results are comprised mainly of aspects of the establishment of networks and the first steps towards developing elements of the ESDP. When it comes to networking and international contacts, these are obviously the main objectives of an Interreg IIC programme. Nevertheless, it also appears to be the case that trans-national co-operation is a means of improving national co-operation networks. Generally, it can be assumed that the majority of project participants improve their networks in particular within the public administration sectors. As regards the development of elements of the ESDP, the main focus here is on reports and conferences. The utility of a report, however, does not only depend upon the quality of the content alone, but also on its diffusion. If no final conclusion can be drawn concerning this latter aspect, one can generally note that a majority of project participants will claim to have used the outcome of the project in their everyday working lives. In general terms, an increase in the level of understanding as regards spatial planning and development in a European context results from such initiatives, i.e. participants have a better understanding of such matters after project completion and/or of public administration in partner countries after having participated in a project. Improving knowledge on administrative structures in other countries is thus an important precondition for the emergence of a consensual approach towards European spatial development. The experience of Interreg IIC and of a more flexible framework moreover suggests that more far-reaching results can be expected from the on-going co-operation project funded under Interreg IIIB.

- *Project Impacts*

Impact is defined as "a consequence affecting direct addressees following the end of their participation in an intervention or after the completion of public facilities, or as an indirect consequence affecting other addressees who may be winners or losers" (EC, 1999 Means

collection). Certain impacts can be observed among the direct addressees after a few months or in the longer term. Some impacts appear indirectly, while others can be observed at the macro-economic or macro-social level (e.g. improvement in the image of the assisted region); these are global impacts. At most, changes of perspective could induce shifts in spatial policy making and, in turn, in socio-economic spatial patterns.

As Interreg IIC programmes were very much in the mainstream of both general European policy developments in the fields of EU enlargement and spatial planning, it will also in future be hard to relate developments directly to such a programme. In any case, impacts are likely to occur on a long-term basis, as marginal elements within more general policy trends. They are therefore extremely hard to measure, especially at this early stage. Given the 'soft' aims and results of the programmes it is hardly possible to assess any direct impacts with current evaluation techniques.

In general terms it can be argued that European integration is a general process that concerns all countries participating in Interreg IIC programmes. In its wake, the aim is to establish closer relations at all levels, regional, national and European. Many projects contribute to the promotion of this aspect through comprehensive and geographically widespread activities. Such integration is not, however, to be interpreted as a first step in the formation of a single, trans-national, functional region encompassing a programming area. Finally, the main impact of Interreg IIC programmes should be seen in terms of greater knowledge and understanding of spatial planning in a European context. The Programmes have, together with numerous other developments, contributed to the opening of (mental) borders in trans-national and interdisciplinary co-operation.

The wide range of intangible results, and the emphasis that various Interreg evaluations put on the establishment of contact webs and mutual learning as important effects of projects, suggest the need to further investigate their contribution to polycentric development in that way.

Indeed, concrete contributions to more polycentric development, in terms of improved accessibility, socio-economic specialisation or changed settlement patterns are hardly to be expected from Interreg projects. At best they have addressed these issues in their projects and further analysed them in their project work, reports and meetings.

The question that emerges then is whether, and to what degree, the results of mutual learning or even knowledge creation on these issues is used beyond the project activities? Therefore, it is important to see (A) what they have learned and (B) how this learning is implemented, i.e. to assess the changes of routines as an indication of whether such knowledge has been implemented.

11.2 Learning on polycentricity in BSR Interreg projects

As regards the question of what has been learned, the project scanning for the Interreg IIC projects in the Baltic Sea Region clearly indicates that a number of issues relating to polycentric development have been at the core of various projects.

An initial scan shows that almost one-third of the projects dealt with issues relating to polycentric development and rural-urban partnership, while a further 25 percent of the projects centred on aspects of transportation and communication, which is often closely related to polycentric development.

Table 32: Thematic focus of Interreg IIC projects in the BSR

Thematic Orientation	Projects in %
Transport, Communication and Accessibility	25%
Natural Resources and Risk Management	28%
Polycentric Development and Rural-Urban Relations	29%
Cross-border Co-operation	7%
Spatial Visions and Scenarios	11%

Source: ESPON 2.2.1

Thus it can be argued that approximately 50 percent of the projects carried out have in one way or another addressed aspects relating to polycentric development. Following the results of the questionnaire returned by the project participants approximately 40 percent of the projects specifically addressed polycentric development.

The definitions of polycentricity provided by the projects in their reply to the questionnaire did however differ:

“To ensure a balanced and sustainable development in accordance with economic and social cohesion, and knowledge-based economic competitiveness.

Strengthening a Baltic urban system and a balanced settlement structure by closer co-operation between urban.” (*Baltic Rim Network*)

“Network of biggest neighboured Baltic islands” (*BEST – B7 Exchange of sustainable tourism*)

“Polycentric development implies a dynamic and advanced geography in which, for example, cities and regions that are marginalised on national peripheries will be united across fading boundaries to force new development trajectories.” (*Being neighbour to a large urban area*)

“Polycentric structures within each of the five metropolitan regions is the main area of research.” (*Baltic Palette*)

“Promotion of small harbour cities” (*SuPortNet*)

“Transport corridors” (*SEBTrans*)

"... by investigating into the functional interdependencies between a large urban area (or large city or even metropolitan area) and its surrounding areas." (*Being neighbour to a large urban area*)

These examples neatly indicate the variety of geographical levels in question as well as the thematic focus of the understanding of polycentricity.

Regardless of the definition provided by the project, the assessment of their learning in terms of polycentricity, focused on four levels (regional, national, trans-national and European) and three aspects (morphology, accessibility and functional specialisation) of polycentricity.

Before going into detail on how they addressed polycentricity, it is worthwhile recalling some aspects on the nature of Interreg IIC projects. Indeed, due to the format of the programme projects they often concentrate on the exchange of experience with regard to the development of methods and techniques in the field of spatial development – mainly with regard to public service activities, while also addressing private business development. Furthermore, there is often a focus on natural and cultural resources as well as on social development issues. A small number of projects focus directly on aspects of spatial analysis and planning. For the Baltic Sea Region, the proportions are as follows:

Table 33: Type of project foci

Project Foci	Projects in %
Methods and techniques in the field of private business development	14%
Methods and techniques improving public services	48%
Natural, cultural and social resources	35%
Analysing spatial characteristics	3%

Source: ESPON 2.2.1

The project *foci* illustrates that the majority of the work is neither explicitly on spatial planning aspects nor on the implementation of ideas, but rather on the background work and on the provision of insights. This again supports the general argument, i.e. the need to assess Interreg co-operation in terms of learning rather than with regard to its impact on the actual spatial developments.

The questionnaires sent to the Interreg IIC project participants in the Baltic Sea Region also provide insights as to which aspects of polycentricity have been subject to learning in the projects.

The focus here is on the degree to which project participants – through the project work – have increased their knowledge of differences between urban areas as regards morphology (mainly in terms of population numbers), transport issues such as connectivity and accessibility and functional socio-economic specialisation. Furthermore, distinctions have been made regarding the geographical levels, i.e. the regional, national, trans-national and European levels.

As regards the issue of learning, clearly most aspects were related to the trans-national level followed by the regional level. Learning also occurred in the national and European level context, however this was so only to a minor degree. With regard to the actual topics, learning occurred in particular in respect of transportation issues, followed by morphological aspects and socio-economic specialisation matters. This then is the picture focusing on those answers that clearly indicated that learning occurred in the above-mentioned fields. We have also included those areas where "some" learning took place. Morphological issues led the ranking of the topics.

A more detailed analysis reveals the strongest learning issue was that of accessibility at the trans-national level, followed by accessibility at the regional level and morphology at the regional level.

Table 34: Learning about polycentricity through Interreg

	Size	Links	Specialisation
Regional level	X	X	x
National level	x	X	X
Trans-national level	X	X	X
European level	x	x	x

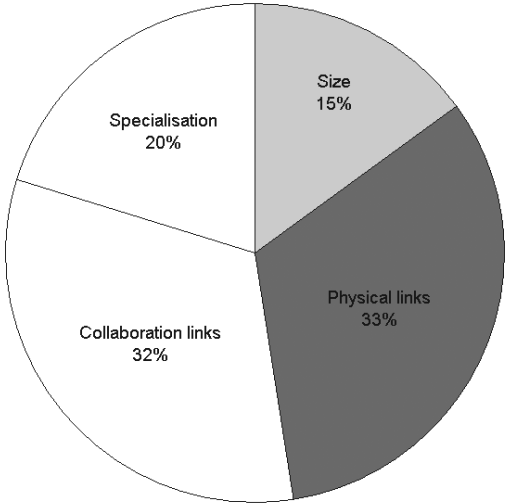
The size of the "x" indicates the ranking of the aspects as regards the learning effect.
 Source: ESPON 2.2.1

In addition to the question of which issues project participants have increased their knowledge of, possible changes in the consideration of which aspects are of importance have been asked for. As regards the increase in the awareness of the importance of the aspects discussed above, a similar, albeit slightly different picture, emerges. In that case the aspects of links at the trans-national level are followed by links at the regional level and furthermore by links at the national level. Only then do aspects such as morphology at the trans-national level or functional specialisation at the European level follow.

The figure below illustrates this strong dominance of physical links over the other two aspects, i.e. size and specialisation. That the issue of collaboration scores as high as it does is probably normal for Interreg projects, where the development of content webs are often considered the main outcome and partnerships at regional and trans-national level are the main components of the project design and work.

Whereas the diagram reflects all replies, the figures are slightly different when concentrating on those answers that stated explicitly that their project addressed the issue of polycentric development. In those cases 24 percent thought that they learned something on socio-economic specialisation, whereas the aspects of morphology and accessibility instead ranked lower with 14 percent and 30 percent respectively.

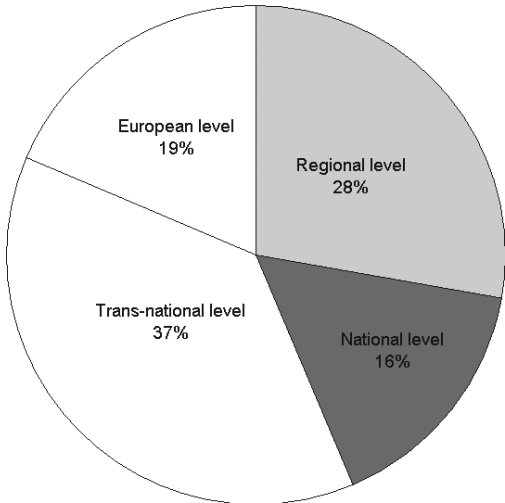
Figure 13: Importance of the dimensions of polycentricity



Source: ESPON 2.2.1

With regard to the question of, at which level of polycentricity awareness of its importance had been increased, the results were not that surprising. The returned answers showed that, in respect of polycentricity, most learning occurred at trans-national and regional levels, while the national and European levels here remained of minor interest.

Figure 14: Importance of the levels of polycentricity



Source: ESPON 2.2.1

Interestingly the European and regional level scores higher (22 percent and 31 percent respectively) when only considering those replies that stated explicitly that their project directly addressed the issue of polycentricity. The figure for the trans-national level is 32 percent and 14 percent for the national level, as compared to the diagram above.

This result is hardly surprising, as the trans-national aspect has obviously been at the core of the co-operation projects and – as discussed elsewhere in this chapter – frequently the trans-national project operates as an umbrella project for regional sub-projects in which considerable work on local and regional level is carried out.

Thus we may conclude that participation in Interreg projects has contributed to learning on various aspects of polycentricity – in particular as regards accessibility at the trans-national level, followed by accessibility at the regional level, specialisation at the trans-national, and morphology at the regional level.

In addition to those learning effects, it can also be said that the projects have contributed to increasing the awareness of the importance of certain aspects of transportation and collaboration at the trans-national and regional levels.

11.3 The influence of the geography of co-operation

The question of which geographical level of polycentricity is considered by a project is also related to the actual geography of the project. In general, one can categorise the types of trans-national contacts established according to the shape and nature of the network involved. From other Interreg IIC programmes, it is known that there are at least five characteristic models in this respect. Each project can correspond to more than one of these modes of co-operation, depending on the shape and nature of the network involved.

- Imbalanced co-operation

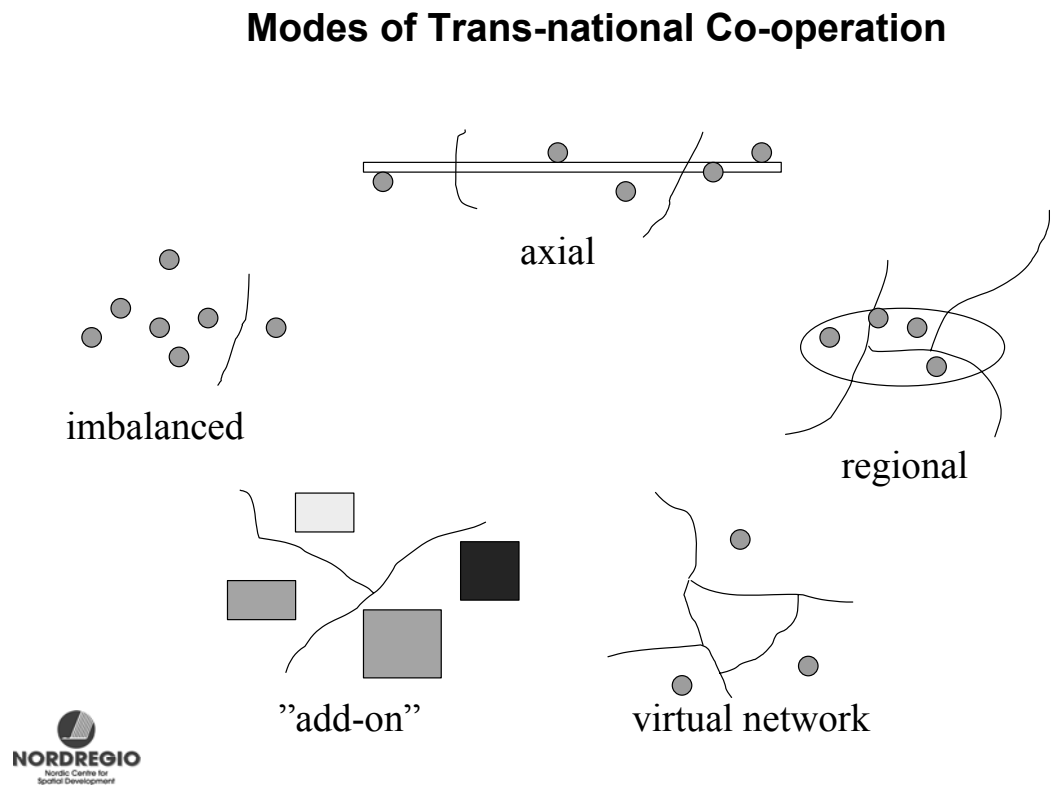
The 'imbalanced type' describes any project in which the great majority of partners belong to the same country. Caution must be used when assessing levels of imbalance: one must take into account national administrative structures which may, for example, lead numerous regional authorities from one country to cooperate with one representative from the central government of another.

- Axial co-operation

The 'axial co-operation type' often corresponds to a project based on an existing or planned transport axis or waterway. Numerous possible aims can be envisaged such as infrastructure development, tourism development, flood protection, water quality preservation etc.

- *Trans-national regional co-operation*
The 'regional co-operation type' describes projects based on an existing or emerging functional region, or on a localised trans-national cluster of enterprises. They are usually characterised by the relative spatial proximity of the partners.
- *Virtual networking*
The 'virtual network' type often refers to projects aiming at the sharing of experience. The hope here is to gather together partners undergoing similar problems (e.g. other metropolitan areas), or working with the same issues.
- *Add-on projects*
The 'add-on type' can be encountered when well-established national co-operation structures co-operate with one another on trans-national projects. This implies the need to adapt national forms of interaction to a new structure.

Figure 15: Modes of Trans-national Co-operation



Source: Nordregio

With regard to polycentricity, it can be argued that trans-national regional and axial co-operation projects are suitable for developing ideas relating to trans-national polycentricity, while the 'add-on' and the 'imbalanced' project types are more likely to relate to polycentricity at the regional level.

Research has however also shown that it is common for all of these types of project co-operation to be organised through regional sub-projects, and that in such cases regional polycentrism can be an issue in all of the projects. As for the Baltic Sea Region, the Baltic Palette is probably the most famous example in this context. This project clearly tries to combine the idea of trans-national polycentrism with the aspects of regional polycentrism.

The focus on the regional level is often also a result of experienced difficulties in the exchange of experience or in the establishment of joint action. Here the overcoming of differences between the various countries and cultures often forms a significant hindrance resulting in most of the actual work and learning being concentrated on one's own region and not so much on the trans-national dimension (Böhme et al 2003). This becomes even more obvious when categorising the projects into those working on 'joint' and those working on 'common' issues.

In the context of Interreg, facing common or joint challenges is understood as the basis for co-operation. Joint challenges and solutions are only, to a minor extent, addressed by the projects. Most projects focus on common issues, i.e. on the similarities between project regions. In the case of Interreg IIC Baltic Sea Region an initial look at the projects show that more than 70 percent of them focus on common issues. This is illustrated both in the themes addressed by the projects and in the modes and geographies of co-operation.

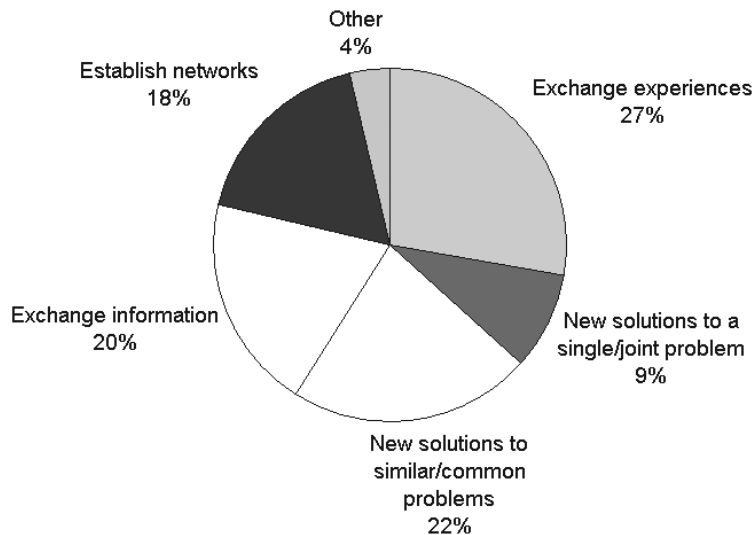
Consequently, the exchange of experience and good practice has a higher priority than finding joint solutions. In both cases, difficulties regarding comparability over national (system) borders have been experienced as hampering elements. Generally, we may conclude that projects dealing with concrete, practical questions often had less trouble in keeping the trans-national project focussed. Projects showing a more general or theoretical focus however more often fell into sub-projects which were, in general terms, only insufficiently connected.

This is often already visible in the motivation with which partners enter project co-operation. In the case of Interreg IIC Baltic Sea Region, only 9 percent of those who entered the co-operation process were motivated by the desire to solve joint problems, while 22 percent wanted to solve common problems and 27 percent wanted to exchange experience on common problems.

Related to the mode of co-operation, the outputs are either of a trans-national character or focus very much on the single sub-projects and regions. Regardless of the geographical orientation, the outputs mostly focus on networking and reporting oriented towards the project partners. Dissemination to a wider audience is rare, as are direct application and implementation-oriented outputs. This underlines the focus on intangible results and learning.

The question however remains to what degree this increased level of knowledge and awareness is used in everyday work, i.e. to what degree is it implemented and how much does it contribute to changing working routines etc.

Figure 16: Motivation for co-operation related to joint and common problems



Source: ESPON 2.2.1

11.4 Implementation in different forms of learning

Following the model developed by Böhme et al (2003) when discussing learning in co-operation projects, the distinction between individual learning and collective/organisational learning needs to be taken into account. Böhme et al identified three moments of learning. Firstly, there is learning about co-operation and on the content in the trans-national project group. Secondly, there is learning in national, regional or local sub-groups of the trans-national project group. In both cases the individual participating can learn something in this new co-operation context. Thirdly, the major question is, how this learning is transported from the individual participant in the project to his/her home base, i.e. the process of sharing this new knowledge with colleagues. This last step is important as regards the use and implementation of knowledge gained in trans-national co-operation.

- *Trans-national learning*

The most obvious task of a trans-national co-operation project is likely to be found in trans-national learning. This can either take the form of learning on a joint genuine trans-national issue or learning from each other in respect of simple exchanges of experience. Both forms contain a number of challenging moments and are only rarely observed in practice.

- *Regional (and national) learning*

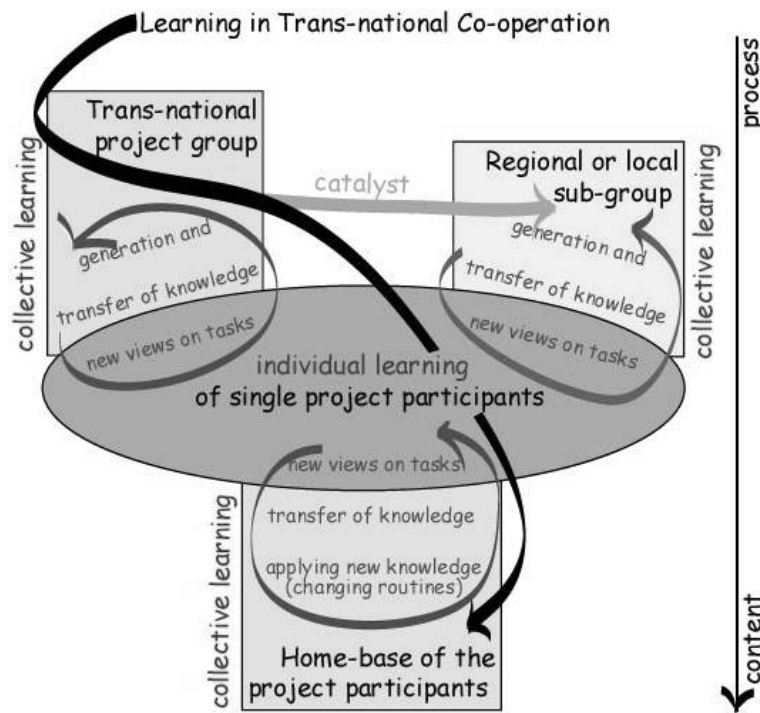
Most trans-national Interreg projects are divided into regional or national sub-projects brought together under a trans-national umbrella. As learning at the trans-national level

has been widely experienced as challenging or even impossible, the focus for the creation of knowledge has often been on the regional sub-projects. This was done partly on purpose from the beginning of a project and partly as a result of the trans-national difficulties. This becomes even clearer when latterly discussing the geographical level at which learning about Interreg occurred.

- *Organisational learning*

Organisational learning addresses the question of how the learning that has taken place at the trans-national and national/regional levels is translated from the persons participating in the project to their home-organisations. This involves the sharing of the new knowledge with colleagues etc. but more importantly it involves the use of the knowledge e.g. through the changing of routines. Only if learning on polycentricity is translated into organisational learning, we can then actually conclude that it is likely to effect spatial developments.

Figure 17: Learning in Trans-national Co-operation

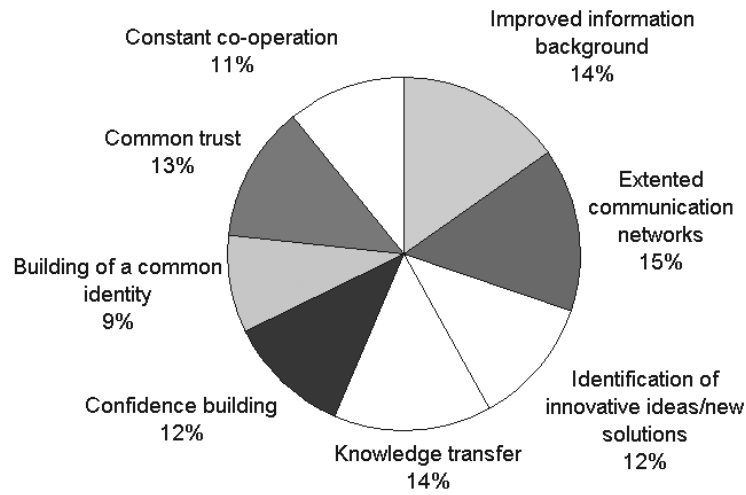


Source: Böhme et al (2003)

An initial insight on this can be gained by looking at the benefits project participants thought they received from their participation.

On the one hand people stated that they benefited from innovative ideas, knowledge transfer and improved information. In terms of learning the roughly 25 percent of participants that intimated that they had benefited from innovative ideas and knowledge transfer are probably the most interesting. In such cases there is a good chance that they will incorporate their gained knowledge on polycentricity into their daily work.

Figure 18: Perceived benefits of trans-national co-operation



Source: ESPON 2.2.1

On the other hand we have the typical benefits of Interreg co-operation such as the creation of trust, common identity, constant co-operation, extended networks and confidence building. As Böhme et al (2003) illustrate overcoming the challenges of trans-national interdisciplinary work is a benefit not to be underestimated. However, with regard to polycentricity, the aspects of trust, common identity and constant co-operation might be of interest. Previously in this report, we argued that polycentricity has a clearly relational dimension including the co-operation of actors in different nodes of a polycentric system. Indeed, the fertile ground nurturing the relational dimension of polycentric development is trust between the actors (13 percent). A common identity (9 percent) will help in the creation of an image of a polycentric space, however constant co-operation (11 percent) patterns are the actual implementation of a polycentric pattern.

This is also underlined by the fact that geography was a major aspect in the selection of partners. Indeed, institutional and geographical components tend to be dominant selection criteria for Interreg co-operations. The fact that project teams have not often co-operated previously underlines the importance of trust and identity building as well as resulting in a rather long period of learning on co-operation and mutual understanding (Böhme et al. 2003)

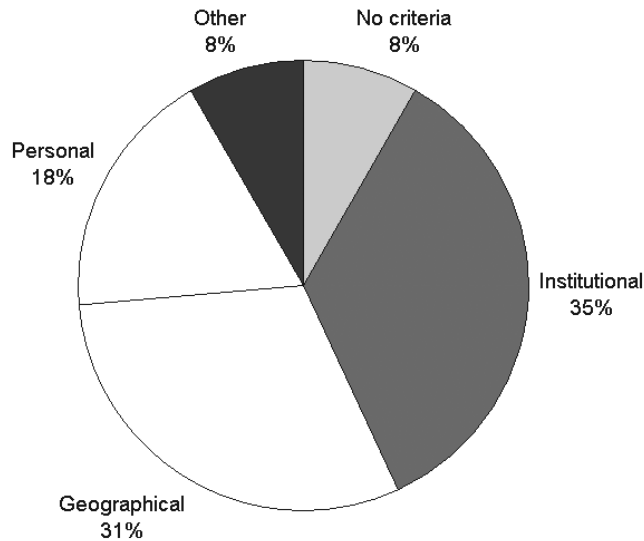


Figure 19: Criteria for partner selection

Source: ESPON 2.2.1

While the above reflects the general benefits, perceived by project participants, the next figure illustrates the impacts on daily work. Half of the respondents considered the project to have had an impact on their daily work. Roughly one third of the respondents assumed that the project had also had an impact on the daily work of others (third parties). Discussing the kind of impact considered it becomes clear that changes in routines rank rather low, whereas knowledge gained was considered to be of premier importance, followed by increased contact networks.

Table 35: Project impacts on daily work

	Concerning my work	Concerning colleagues	No specific impacts on daily work
Benefit and use of contacts	25%	9%	2%
Benefit of gained knowledge/achieved results	18%	15%	0%
Change of working routines and procedures	5%	5%	19%
Other	2%	1%	-

Source: ESPON 2.2.1

11.5 Conclusions

Thus far, the study on Interreg IIC has shown that this Community Initiative has increased participants' awareness and knowledge of polycentricity and has thus clearly functioned as a dissemination instrument for EU policy ideas to regional and local actors.

As regards the content side, the dimensions of polycentric development considered are mainly related to transport issues and co-operation aspects.

Increased awareness and knowledge concern in particular the trans-national and regional levels. While it seems natural that there is a focus on the trans-national level, the importance of the regional level is explained through the obstacles of trans-national, interdisciplinary co-operation, which support the strong role of regional sub-groups. A further explanation here is the orientation of the projects towards 'common' and not 'joint' challenges.

In conclusion, the highest potential that Interreg actually contributes to polycentric development is at regional (*micro*) level as it was mostly in sub-projects that such learning occurred.

At the trans-national level, the building of a common identity and of trust is a good starting point for future developments towards more polycentricity at that level. The establishment of constant co-operation patterns can actually then be regarded as the first step in the implementation of relational polycentricity.

12 The relationship between national regional policies and the Structural Funds policies

In chapter 8, we addressed the interrelationship between the Structural Funds and the spatial concepts of territorial cohesion and polycentricity. In doing so, the report analysed the strategies of the programmes, the governance underlying programme implementation and the delivery mechanisms in each country. It concluded that Structural Fund programmes are consistent overall with the spatial objectives of territorial cohesion and, to a lesser extent, polycentricity, a picture which only partly corresponds to the findings stemming from the analysis of Structural Fund spending. However, the increasing targeting of resources and the subsequent need for concentration; the emergence of new policy paradigms, aiming at the full mobilisation of resources, designed to foster the competitiveness of regions (in line with the Lisbon agenda); the practical translation of this new policy paradigm into new strategies, where cross-sectoral, programme-based and systemic approaches would overcome traditional policy thinking; and, the subsequent consideration of the territorial context of reference as the starting point for policy generation, were all discussed as possible causal factors for such an inferred and yet noteworthy coherence between Structural Fund policies and territorial cohesion and balance.

European regional policy is not however the only instrument for the support of less developed regions. It is supplemented and complemented by a range of other instruments, including spatially discriminating policies (such as urban policy or rural policy), sectoral policies (for example, policies for R&D or innovation) and the regionalised allocation of public expenditure (for example, expenditure for the health sector, education and so on). Moreover, national policies entail a number of implications for the achievement of increased cohesion within the Union, including territorial cohesion, as has been outlined in the Third Cohesion Report.

Additionally, in many countries European regional policy is basically a component of explicit regional policy: national regional policy is often implemented alongside the interventions co-sponsored by the European budget through the Structural and Cohesion Funds, not least in the form of aid to firms in areas that are eligible for regional support under Article 87(3)(a) and (c) of the EC Treaty.

To address the potential of the Structural Funds to deliver increased cohesion, our analysis could not ignore the potential impact of national regional policies. To this end, the analysis of European regional policy undertaken here has been supplemented by an examination of the national regional policies implemented in each Member State. Much of the factors discussed elsewhere in this report – and briefly synthesised above – as influential to the evolution of the Structural Funds and their potential to deliver increased territorial cohesion apply to some extent to both national and European regional policies. Does this however imply that national regional Policy (NRP) and European regional Policy (ERP) can be seen to increasingly overlap? And, is this a positive or negative thing as regards the potential of regional policy to deliver increased territorial cohesion?

This chapter presents the outcome of an analysis of the interrelationship between ERP and NRP. Such an analysis has entailed an examination of the interrelationship between national regional policies in the EU 15 Member States and European regional policy as operated in each Member State. Following this, the interrelationship between the national regional policies implemented in each Member State and the spatial concepts of territorial cohesion and polycentricity will be explored.

While in chapter 8 the analysis of ERP covered both past and current policies, the analysis here is focussed on current national regional policies in the Member States. Its main aim is thus to inform the development of both hypotheses and policy recommendations on the future shape of regional policy in an enlarged European Union (2007+).

The chapter is structured as follows; first, an overview of national regional policies in the Member States and their interrelations with European regional policy is presented, describing the salient aspects of national regional policy scope, strategies, instruments, governance, implementation and delivery. Thereafter, a brief assessment is provided on the interrelationship between national and European regional policy in the Member States and the spatial themes of territorial cohesion and polycentricity. For both aspects a country-by-country synthetic can be found in the annex.

12.1 From traditional regional policy to economic development in the regions

Structural Fund policies have undergone a significant evolution in their strategic approach over the last decade, reflecting the emergence of new policy thinking, in particular on the factors that influence economic development and on how these can be affected through policy. It is not only the Structural Fund policies however that have undergone a period of change in recent years: national regional policies have also undergone a process of evolution as a response to external and endogenous pressures on the policy environment. Indeed Bachtler (2000) was quick to identify a tentative new regional policy paradigm by isolating the innovative features of a 'modern' regional policy (as opposed to traditional regional policy): features that span the conceptual basis of policy, to its characteristics, structure and organisation. This is illustrated in the table below. According to Bachtler, 'new' or 'modern' regional policy increasingly targets both equity and efficiency, shifting the policy-focus from redistribution to competitiveness. It also favours supply-side instruments and 'bottom-up' local economic development initiatives. It embodies a stronger spatial but also a thematic/sectoral targeting of resources, whilst at the same time acting on reduced regional aid eligible areas. It is implemented and delivered by different (broader) actors and mechanisms, allocating a greater role to local public and private actors.

Table 36: Bachtler's conceptualisation of classical and modern regional policy

Criteria	Classical	Modern
CONCEPTUAL BASIS		
	Industrial location theories Key factors are regional attributes e.g. production costs, availability of workers	Learning region theories Key factors are regional capabilities e.g. innovative milieu, clusters, networks
POLICY CHARACTERISTICS		
Aim(s)	Equity or efficiency	Equity or efficiency
Objectives	Employment creation Increased investment	Increased competitiveness (e.g. entrepreneurship, innovation, skills)
Sphere of Action	Narrow (economic/industrial)	Broad (multi-sectoral)
Mode of operation	Reactive, project based	Proactive, planned, strategic
POLICY STRUCTURE		
Spatial focus	Problem areas	All regions
Analytical base	Designation indicators Regional exporting	Regional SWOT analysis
Key instrument	Incentive scheme	Development programme
Assistance	Business aid Hard infrastructure	Business environment Soft infrastructure
ORGANISATION		
Policy development	Top-down/centralised	Collective/negotiated
Lead organisation	Central government	Regional authorities
Partners	None	Local government, voluntary sector, Social partners
Administration	Simple/rational	Complex, bureaucratic
Project selection	Internalised	Participative
Timescale	Annual budget	Multi-annual planning period
EVALUATION		
Stages	Ex post	Ex ante, interim, ex post
Outcomes	Measurable	Difficult to measure

Source: Bachtler 2000

12.2 Overall strategic approach and policy content

Strategic approach

An initial indication of the degree of separation or coherence between European and national regional policies is given by the extent to which national regional policies are, as with the Structural Funds, based on cross-sectoral, multi-annual programmes, with strategies emerging from the 'bottom-up', partnership-based elaboration of policy needs and priorities.

In those cases where NRP has adopted the same principles as the Structural Funds, the two policies have been considered as coherent. Where NRP is in addition aligned with Structural Fund programming, such as for example in the cohesion countries, the two sets of policies have been considered coincident. In some cases, however, national regional policy is not programme based, or is programme based only to a minor degree. In these cases, the two policies have been considered as being separated. This is particularly the case with countries where NRP is still mainly incentive based, or where regional programmes or strategies are part of a broader package of economic development programming for the regions (i.e. for both areas in need and areas within regions not eligible for regional state aid support).

Table 37 below illustrates the results of the classification process described above. From the table, three clear clusters emerge. For the majority of the countries, NRP and ERP are considered as being separate. This applies to all those countries that are largely excluded from Objective 1 eligibility. The two more developed parts of the countries representing a highly dualistic regional development picture (Germany and Italy), i.e. Western Germany and Northern Italy have also been included in this category.

In some of the countries included in this category, national regional policy is linked to regional or sub-regional economic/industrial development programmes. In *Denmark*, for example, national regional policy is embedded in interregional (regional business development initiatives) and sub-regional (regional growth alliances) programmes where national coordination is increasing important. Such national coordination involves bringing together diverse funding sources (including the Structural Funds) to meet 'bottom-up' strategic goals; however given the relatively low weight of the Structural Funds, the two policies can largely be considered as separate. The *UK* is another example where programme based policymaking responding to regional needs and priorities has been taken to heart. Nevertheless, the Structural Funds still tend to operate alongside and thus separate from national regional policy.

Table 37: The overall strategic approach of NRP and its interrelationship with ERP

	<i>Separated</i>	<i>Coherent</i>	<i>Coincident</i>
	Economic development programmes in the regions	Programme-based (Structural Fund model)	Aligned to Structural Funds
Austria	√		
Belgium	√ (incentive based)		
Denmark	√		
Finland		√	
France	√		
Germany	√ (West)		√ (East)
Greece			√
Ireland			√
Italy	√ (Centre-North)		√ (<i>Mezzogiorno</i>)
Luxembourg	√ (incentive based)		
The Netherlands	No NRP		
Portugal			√
Spain			√
Sweden		√	
UK	√		
EU Overview			

Source: ESPON 2.2.1

In other cases, for example in *Belgium*, NRP is mainly based for regional aids. Similarly, in *Luxembourg*, NRP is mainly based on incentives, especially for FDI. Here regional policy is

largely synonymous with national industrial and economic policy, with little overlap with the Structural Funds (even though attempts were made in terms of drawing broadly similar maps).

An intermediate situation between these two extremes is perhaps represented by *France*, where the regional policy approach is an 'all-region' approach, centred on long-term goals for public service provision, medium-term state-region planning contracts and regionally-generated regional planning documents. The Structural Funds fit within this broad planning framework. However, the regional aid component of policy is quite separate.

Austria and the Netherlands are however somehow difficult to categorise. Programme based policymaking obviously takes place at the *Land* level in *Austria* and, where Structural Funds are available, they generally build on, and are closely related to, the *Land* programmes. To that extent, ERP and NRP could be said to be coherent. It is also the case however that, without the Structural Funds, regional policy would have a very low policy profile in Austria. On the other hand, aspects of the EU approach to regional policy do not fit easily with Austrian approaches and traditions. In Austria, there has been a long-standing aversion to map-based policymaking, so much so that, prior to entry to the EU, there was no formal aid area map. The policy focus was on regional problems rather than on problem regions. Moreover, to the extent that there is a national regional policy in Austria, it now takes the form of innovation-oriented policy. In contrast, the Structural Funds are perceived in Austria as being suitable mainly for standard routine investment. For this reason, Austrian NRP is considered as being separate from ERP.

In *the Netherlands*, the prime imperative underpinning the Structural Funds for 2000-06 was that there should be sufficient national co-finance available. Reflecting this, programmes were spread across the relevant national ministries – Objective 2 (industrial), Ministry of Economic Affairs; Objective 2 (rural) Ministry of Agriculture; Objective 2 (urban), Ministry of Internal Affairs. To this extent there was a coincidence between European and national policies, but not really from the point of view of adopting the same strategic approach; rather the aim was simply to ensure that there would be sufficient co-finance available. Within the Ministry of Economic Affairs, the main Objective 2 area is in the north and provides co-funding for the *Kompas voor het Noorden*, the regional programme for the north of the Netherlands. More generally however, the spatial economic policy agenda being followed in the Netherlands does not have a great deal of overlap with the Structural Funds.

Policy content

Of course, one further strategic aspect that can be considered in assessing the degree of separation or consistency of national regional policies with European regional policy is the emphasis placed on the objectives of equity or efficiency. Elsewhere in this report we have discussed how Structural Fund strategies increasingly target endogenous growth and competitiveness support, through complex, cross-sectoral strategies that aim to mobilise and valorise local assets. In essence however ERP remains a policy targeting equity rather than efficiency, and this is implicit in selection of areas for support as *areas most in need*. Nevertheless, over the current programming period, the Structural Funds should continue to be

considered as essentially equity-based, in that they focus on the worst-off areas towards which most resources are to be directed.

Looking at the domestic regional policies implemented in some Member States, however, including many of those that have been moving towards more programme-based approaches, it is the efficiency basis of policy that is being stressed. This is reflected in an 'all-region' approach to regional policy rather than the spatially targeted approach of the Structural Funds. An assessment of the degree of coherence between NRP and ERP in each EU15 Member State as regards their 'equity versus Efficiency' focus is provided in the table below.

Table 38: The strategic content of NRP and its interrelationship with ERP

	<i>Equity (like ERP)</i> (Support to problem regions, e.g. job and income creation)	<i>Mixed</i> (Compromise between two aims)	<i>Efficiency</i> (Competitiveness and endogenous growth)
Austria			√
Belgium		√ (Wallonia equity, Flanders efficiency)	
Denmark			√
Finland			√
France			√
Germany	√		
Greece	√		
Ireland		√	
Italy		√	
Luxembourg			√
The Netherlands		√	
Portugal	√		
Spain	√		
Sweden			√
UK			√
EU Overview	<p>Legend: ■ equity ■ mixed ■ efficiency</p>		

Source: ESPON 2.2.1

As can be seen from the table, half of the countries implement regional policies that are largely efficiency oriented. These include: Austria, Denmark, Finland, France, Luxembourg, the Netherlands, Sweden and the UK.

Austria can be considered as efficiency-oriented in that regional policy generally has a very low profile. Regional economic development is here largely associated with innovation policy, which is targeted generally throughout the country. In *Denmark*, regional policy has, at least since the beginning of the 1990s, been largely efficiency dominated. It should however also be acknowledged that the recent 2003 White Paper mentions the need to support 'lagging' peripheral localities, hence inserting some equity-related considerations.

In *Finland*, the main policy goal of national regional policy as outlined in the Regional Development Act of 2003 (602/2002, which came into force on the 1st of January 2003) is

To create the preconditions for economic growth, industrial and business development, and a higher employment rate, that will guarantee regional competitiveness and well-being on a basis of competence and sustainable development. Further purposes are to reduce differences between regions in the level of development, to improve their people's living conditions, and to promote balanced development among the regions. (Ibid, Section 1)

Clearly, the equity aspects of overcoming regional disparities and balanced development appear to be secondary in relation to the fostering of local competitiveness and endowment.

In *France*, the new government (2002) contributed to a shift in the policy-emphasis towards wealth creation and the full exploitation of resources, with an 'all region' approach centred on long-term goals for public service provision, medium-term state-region planning contracts and regionally-generated regional planning documents. The emphasis here is increasingly on equity (equality of opportunity) rather than on equality (equality of situation).

The situation of *Luxembourg* is somewhat peculiar, with this in the main being due to the country's limited geographical scale. As such, there is very little regional policy. In effect, Regional policy is largely synonymous with industrial and economic policy, focusing to a large extent on FDI.

The main policy goal of national regional policy in *Sweden*, as outlined in the Regional Development Bill passed in 2001 (2001/2002:4, p. 101) is to create well functioning and sustainable local labour market regions, with good levels of service-functions, in all parts of the country.

This policy objective expresses a shift in focus in Swedish NRP towards a more holistic view. This new view is underlined by the change of name from regional policy to regional development policy. The overall idea being that regional development is a policy target for all regions, not just the least favoured.

Finally in the *UK*, domestic regional policy, as outlined in the recent consultation document *A Modern Regional Policy for the United Kingdom* (Department of Trade and Industry 2003) is based on two key goals: (a) enabling leadership so that national, regional and local institutions can exploit the indigenous strengths and tackle the particular weaknesses of each area; and (b) providing the environment for businesses and communities to maximise their potential by tackling market failures in national, regional and local markets through micro-economic reforms, at the national, regional and local levels, to strengthen the key drivers of productivity growth. Again, the ultimate objective here is to improve the economic performance of all regions.

A second cluster, at the other end of the spectrum, groups those countries for which regional policy is predominantly equity-oriented: these are the three cohesion countries (Greece, Portugal and Spain), where EU and domestic regional support are in fact the same, and Germany. In the three cohesion countries the main goal of regional policy is to support investments and growth in the areas that are least developed. This is particularly true for *Spain*, where the objectives of balanced development and of an equitable distribution of income have constitutional status.

In *Germany*, the main co-ordinating instrument is the *Gemeinschaftsaufgabe Verbesserung der Regionalen Wirtschaftsstruktur* (GA). Through this, the *Länder* and the Federal State coordinate regional policy approaches. The primary aim of GA is to support structurally weak regions in the process of adjustment and to help them to improve. The two most important measures in this respect are investments in companies and infrastructure, potentially generating a primary income effect.

Finally, the remaining countries have been classified as being in an intermediate position, although for different reasons. These countries are Belgium, Ireland and Italy. In *Belgium*, the emphasis placed on equity and efficiency differs markedly between the two regions of Flanders and Wallonia. Flemish national regional policy holds a somewhat schizophrenic approach that follows from the difficulty in mediating between an efficiency and an equality approach (Vlaamse Regering, 2000a, p. 50), the emphasis of domestic policy is on moving away from focusing solely on deprived areas, this is for example reflected in the policy for the support of deprived urban areas, where a general trend is to shift the policy emphasis in this part of NRP away from tackling problems towards seizing the opportunities that lie within cities. In Wallonia, on the other hand, regional policy is still very much targeted to areas undergoing industrial decline and restructuring, while it maintains the overarching goal of job creation.

In *Ireland*, the main focus of the National Development Plan (NDP) is the urgent need to address infrastructure bottlenecks and regional imbalances. There is also a renewed sense of urgency and commitment on the need to address social inclusion issues for those who have not benefited from the rapid economic growth of the late 1990s. The overarching goal however is that of creating the basis for an affluent economy and society. Equity and efficiency goals are integrated into a comprehensive and cross-sectoral strategy of which the Structural and Cohesion Funds are also an integral component.

In *Italy*, national regional policy is territorially targeted towards areas that are considered 'underutilised' (formerly known as 'depressed' or 'disadvantaged' areas), both in the *Mezzogiorno* and in the Centre-North of the country. Increasing policy emphasis is however now being placed on the development of endogenous competitiveness factors and on the full exploitation (*valorizzazione*) of local assets. Here as well as in Ireland, an attempt is being made to balance both equity and efficiency goals.

Finally, in *the Netherlands*, policy is essentially efficiency oriented, but two main regional challenges are also targeted through NRP: the development of urban economies and the strengthening of the economic structure of the North of the country.

12.3 Spatial targeting

Linked to the discourse developed above is the theme of the spatial targeting of domestic regional policy. The interrelationship between domestic and European regional policy can be assessed in relation to two aspects: the overall philosophy underpinning the territorial scope of domestic regional policy and the actual overlapping of national regional aid maps with the maps for Structural Fund support.

General philosophy

As already noted, while in some regions domestic regional policies are targeted predominantly on the areas that are most in need, in a number of countries there is now an increasing emphasis on an 'all region' approach. Figure 20 (below) provides a visual representation of this. Clearly the all region approach marks a shift from the approach followed by European regional policy whereby support is strictly targeted to the less developed areas of each country (as was illustrated in the Second Interim Report).

Figure 20: Spatial targeting and strategic focus of NRP in the Member States

All regions			Austria Be/Flanders France Sweden
Mixed	Be/Wallonia	Ireland (⇔) Netherlands	Denmark (↓) Finland (↑) UK (↑)
Spatial targeting	Germany Greece Portugal Spain	Italy	Luxembourg
	Equity	Mixed	Efficiency

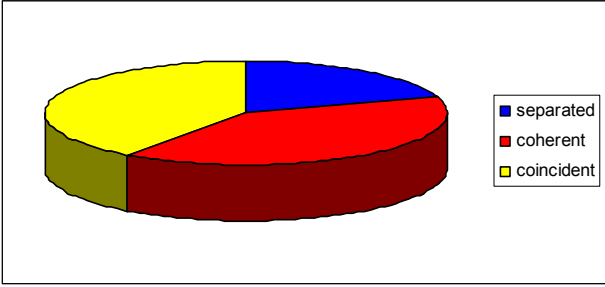
Source: ESPON 2.2.1

In respect of spatial targeting, Greece and Portugal have been classified as countries where regional policy is spatially targeted, however, as in each case the entire country is eligible one may argue that they have an all region approach. The classification here was based on the logic of regional support, i.e. the eligibility because of spatial criteria (whether these were met across the entire country is a secondary issue).

Area designation process and outcomes

Another important distinction between national and European regional policy can be made in relation to the methods and criteria used for area designation purposes and to the effective degree of overlap between the two maps. In some cases, in fact, the area designation exercises were quite separate (with different policy objectives, methodologies and data used), though delivering rather similar outcomes, while in others, on the contrary, countries that tried to achieve coherence did not quite succeed in doing so. Table 39 below illustrates the comparative outcomes of the area designation process (for domestic and EU support). As can be seen, only in France, the Netherlands and the UK can the two maps be considered to be different to a substantial degree. For all other countries the maps are either coincident (given the identical definition of Art. (87)(3)(a) and Objective 1 support) or coherent, i.e. closely aligned.

Table 39: Interrelationship between national regional aid and Structural Fund maps

	Separated	Coherent	Coincident
Austria		√	
Belgium		√	
Denmark		√	
Finland		√	
France	√		
Germany		√ (West)	√ (East)
Greece			√
Ireland			√
Italy		√ (Centre-North)	√ (Mezzogiorno)
Luxembourg			√
The Netherlands	√		
Portugal			√
Spain			√
Sweden		√	
UK	√		
EU Overview			

Source: ESPON 2.2.1

As can be seen from the table, the countries can be subdivided into three main groups:

- Countries/*macro*-regions with a one hundred percent overlap between ERP and NRP designation: the cohesion countries, the Italian *Mezzogiorno*, Eastern Germany, Spain and Luxembourg.
- Countries where the two maps are coherent: these include Austria, Belgium, Denmark, Finland, West Germany, the Italian Centre-North and Sweden.
- A final cluster of countries – France, the Netherlands and the UK – where the spatial scope of NRP and ERP is practically different. This reflects the different philosophies

underpinning national and European regional policies and the subsequent application of different methodologies and criteria for area designation.

Looking first at the minority of countries whose maps for national and European support are largely unrelated, *France* built its national regional aid maps on the basis of sequential criteria with a subdivision of labour market areas so as to remain below the population ceiling assigned. The definition of the Structural Fund map used quite different criteria, a mix of the Commission's hard criteria and national criteria. The outcome resulting from these two separate exercises was that the initial national map was submitted without regard to Structural Fund coverage, except for the fact that areas losing their Objective 1 coverage were automatically included. However, Structural Fund derogation was then recognised as important in resolving difficult issues, particularly the subdivision of labour market areas. The overall coincidence, however, was limited. In *the Netherlands*, the two area designation exercises were quite separate. The Structural Fund area designation was driven by the need to provide co-financing opportunities in industrial, urban and rural areas. This helped to bring Structural Fund priorities into line with national policy. The national aid map was prepared by taking the existing map and then cutting it back to fit the reduced ceiling allocated to the country for the 2000-06 period. Even if this was not a planned consequence of the methodologies used, there was in the end a substantial degree of overlap between the two maps in the North of the country. In the *UK*, finally, the Government does not accept that the areas eligible for Structural Funds and the national regional aid support need be identical, or that one set of areas needs to contain the other. It argues instead that there are some geographical areas where the economic and social conditions make one type of regional aid more suitable than the other; constraining the relationship between the two sets of areas could reduce the effectiveness of both types of aid. National and European regional policies, it is believed, should respond to different needs and have different objectives and instruments. A key difference in both approaches to designation is the absence of GDP *per capita* in the UK exercise, principally because the UK government recognises significant problems of measurement. Thus, EU Objective areas are designated using different criteria to UK national policy and the two sets of maps do not completely coincide. The Structural Fund derogation was however used at a late stage in the process to get round the problem of designating aid areas in London. The final maps agreed, however, had a low degree of coherence, and, according to the Commission, a lower coherence than in the previous programming period.

The coincidence of the two maps for those countries with a large (if not total) proportion of territory included in the Objective 1/Art. (87)(3)(a) derogation is obvious and does not merit further comment here, with the exception of Luxembourg and Spain. For *Luxembourg*, the aim was for coincidence and to retain the same spatial focus as the previous national aid map, though the population ceilings set out in the 1998 Regional Aid Guidelines were exceeded in the process, leading to the introduction of revisions that reduced the initial coincidence. The final maps were coincident, with the exception of one municipality. In *Spain*, emphasis was placed on retaining the status quo on coverage under Objective 2 and (3)(a). The small decline in coverage under Objective 2 made this straightforward for the Structural Funds (most of the fall

was in the Madrid area). For (3)(c) there was an increase in coverage. The increase was distributed *pro rata*. The outcome was a considerable overlap between the two maps due to their similar coverage and to the fact that coherence was stressed when the national authorities asked the Autonomous Communities for new (3)(c) areas. Overall, only 600,000 people are covered by one map or the other, but not both. This is just 1.5 percent of the national population. Areas where the maps do not overlap are mainly to be found in the Madrid region, Zaragoza in Aragon and in Cataluña.

The final group of countries, i.e. those where the two maps are considered related and coherent, albeit not coincident, includes a large majority of the countries involved. These are illustrated in brief below. In *Austria*, the area designation exercises were highly political and taken at the Land level. Objective 2 maps were agreed first since Structural Fund derogation impacted on the national aid map. Structural Fund de-designated areas benefited from phase-out support, most of these were rural and benefited from the national rural development programme. The final outcome was that starting from two similar approaches to population coverage, the national aid area map was more extensive in *Östliche Obersteiermark* and in *Niederösterreich Süd* otherwise the Structural Fund map was generally more extensive. Where Objective 2 areas were outside the nationally designated areas then the areas concerned generally had a strong SME base such that they were less disadvantaged by being outside the national regional aid map. The Structural Fund derogation was used extensively to justify the inclusion of partial NUTS III areas in the national map of regional aids.

In *Belgium*, the two area designation processes were quite diverse: while major difficulties were met in the elaboration of national regional aid maps, the Objective 2 map was quickly approved (after the election of a new government). Traditionally, map coherence has been stressed in Belgium, however, this was not the case with the new maps, particularly in Flanders, where there is no coherence in the west of the region, perhaps reflecting the very low aid area coverage. In Wallonia moreover, significant areas also do not coincide, especially in the south-east of the region. Therefore, although the initial intention was for the maps to coincide, in practice there are very significant differences in the spatial focus of the two maps. In *Denmark*, the key concern was that all Structural Fund areas should lie within the national regional aid maps, so the criteria for designating areas eligible for the regional aid map were adjusted to ensure that this happened and this aim was achieved. Similarly, in Finland the aim was to achieve coherence between the two maps, such that all areas designated for national support would also be eligible for the Structural Funds (with a population ceiling for the Structural Funds exceeding that for national regional aids of an extra 8.7 percent). The outcome of the two designation processes saw the achievement of the desired overlap between the two maps.

In *Germany*, the area designation exercises were initially viewed as separate; however, to ease agreement on the distribution of the Structural Fund quota at the *Land* level, it was decided that there should be at least 80 percent coherence between the two maps. The outcome was that there was more coherence between the two maps than originally envisaged, with over 90

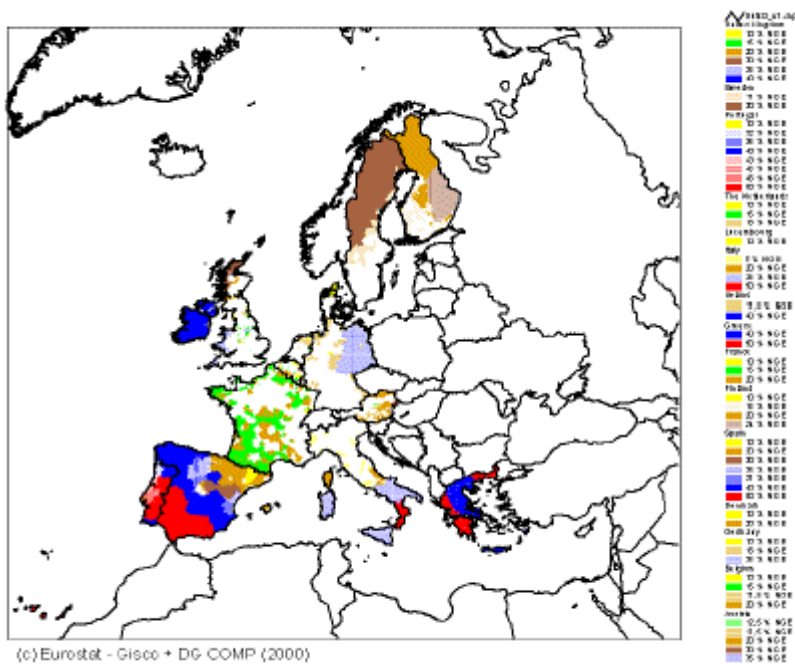
percent of the Structural Fund submission related to areas included in the *original* aid area map.

In *Italy*, apart from the obvious coincidence between the Objective 1 and Article 87 (3)(a) areas, the designation of Objective 2 and (3)(c) maps was problematic. The Italian authorities sought the maximum degree of coherence possible between Structural Fund and regional aid map (as regards Art. 87(3)(c)). In 2000 for both maps, the Italian authorities used as building blocks the so -called *Sistemi Locali del Lavoro (SLL)*, i.e. local labour market/commuting units. However, the different population quotas (13 percent of the national population eligible for Objective 2 and only 10 percent for the regional aid map, under Art. 87(3)(c) derogation), the different prescriptions of the State Aid Guidelines and of the Structural Fund Regulation, as well as the dissimilar approaches adopted by the two competent DGs within the Commission (e.g. as regards the possibility of splitting up individual SLL) meant that the two maps were approved at different times and that they were not wholly overlapping: the use of local labour market units instead of NUTS III as building blocks delayed the agreement on the Structural Fund map and caused a delay in the approval of the (3)(c) map, which relied heavily on the Structural Fund derogation. In practice, at the end of this laborious process, the two maps were closely interrelated, even though not fully coincident.

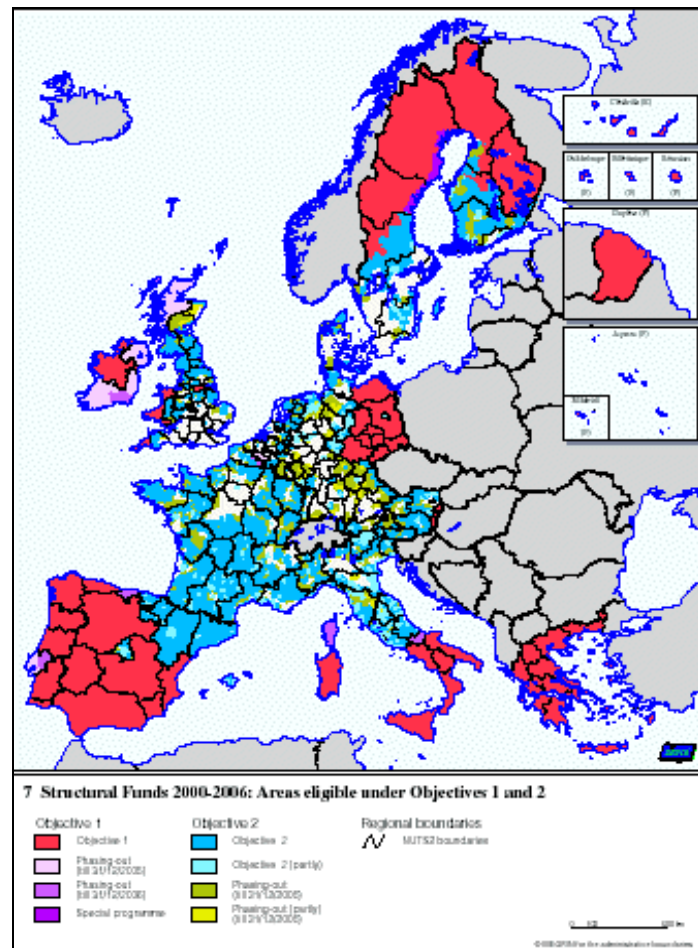
For *Sweden*, the fact that the national regional aid map had a low ceiling made population density the dominant criterion. Other areas designated bordered those areas. The Structural Fund map was based on the previous Objective 6 area and on the special programme area (equivalent to the Objective 6 area). Objective 2 areas were generally areas bordering those in Objective 1. In the end, all national regional aid areas fell within the Structural Fund map.

To summarise, half of the Member States explicitly aimed for complete coherence: (i) Greece: where the entire county was eligible under both maps; (ii) Ireland, Portugal and Denmark: where Structural Fund areas (excluding phase-out areas) fit wholly within the designated aid area boundaries; (iii) Finland and Sweden: where designated aid areas fit wholly within Structural Fund boundaries. Luxembourg and Belgium also aimed for coherence: while this was relatively close in Luxembourg, the much reduced aid area coverage meant that there was only limited cohesion in Belgium. The other countries placed less initial stress on coherence: still, coherence issues were taken into account in the designation process in Austria, Germany, Italy and Spain. In the cases of France, the Netherlands and the UK: map coherence was not initially on the agenda (different objectives, different timing), but map practicalities brought the two maps together (Structural Fund derogation in France; coincidence in the north of the Netherlands; Structural Fund derogation used in London).

The two maps reproduced below thus provide a pan-European overview of the spatial coverage of the two maps (national regional aid and the Structural Fund map).



Source: DG Competition website



Source: EC, Second Cohesion Report

Map 16 & 17: Spatial coverage of National Regional Policy and European Regional Policy

12.4 Policy instruments

Table 40: Yuill's classification of national instruments for regional development (EU15)

Member State	Regional Incentives	Business Environment	Infrastructure Provision	Regional Strategies
Austria	None. Withdrawal of Regional Innovation Premium in late 2000.	Increasing focus on regional innovation potential (RIF 2000 and similar measures).	None Withdrawal of Regional Infrastructure Support in 2000.	<i>Land</i> strategies central to regional economic development
Belgium	New Flemish Decree: call for tenders for small and discretion for large projects.			
Denmark	Support for long-distance commuting from poorest areas.	New government favours business environment support.	Coordinated via RBDIs and the new RGAs in poorest areas.	New regional growth alliances (RGAs) in poorest areas + RBDIs
Finland	None. Aid to Business Act 2000. Pilot SSC in far north.	Centres of Expertise Programme: May 2002 call for tenders.	2002 RDA (Regional Development Act): Policy regionalisation.	2002 RDA: Stress on regional programming.
France	None. Re-operation-alisation of the PAT in 2001. More sub-national business aid.	Stress on national competitiveness and on need for favourable business conditions	Adoption in 2002 of <i>schémas de services collectifs</i> .	<i>Schémas de services collectifs</i> establish framework for <i>contrats de plan 2003</i>
Germany	Investment allowance in new <i>Länder</i> under review (needs new legislative basis 2004).		GA aid for economic infrastructure likely to be cut for State aid reasons	None. GA grant to help develop strategies in weakest regions (August 2000).
Greece	New Development Law proposed (focus on inward investment).	None since CSF III introduced	None since CSF III introduced	None since CSF III introduced
Ireland	New Enterprise Ireland funding approach plus IDA-Ireland support for job quality and embeddedness	Both EI and IDA-Ireland addressing deficits in the regional business environment.	National Spatial Strategy 2002 follows NDP stress on infrastructure deficiencies	None. NDP: stress on tackling regional imbalances. Regional components of NDP
Italy	2003 Finance Law limited grant aid and cut Law 488 budget. Localisation contracts.	Stress on negotiated programmes; related to support for the business environment	None. Objective 1 CSF stressed need for infrastructure.	None. Objective 1 CSF strategic framework. Regional strategies in regional OPs.
Luxembourg	None. Interest subsidy ended Dec. 2000.			
The Netherlands	None.	TIPP: first call for proposals in 2001, two in 2002 and last call in 2003. Being evaluated	1999-2003 regional covenant (now under review).	None. Programming in the north is via the <i>Kompas voor het Noorden</i> (to 2006)
Portugal	Changes to the SIME in July 2002. More repayable aid plus completion premium.	New PPCE contains broader measures to improve the business environment	New PPCE has revised infrastructure component of CSF 2000-06	Regional elements of revised CSF 2000-06
Spain	None			
Sweden	No significant change. IT aid in north (2002-04). De minimis SSC	2001 Bill aims to enhance capabilities of every region.	2001 Bill aims for acceptable service provision in every regions. Regionalised sectoral policy	RGAs and RGP. Also Delegations in inland north & Bergslagen. Municipal cooperation
United Kingdom	RSA under review. More scope to tailor support possibilities regionally.	Movement towards regionally-based business-environment focused initiatives	On-going devolution of economic development powers	Policy regionalisation RDAs in England; Development strategy for Scotland/Wales/NI

Source: Yuill (2003)

Adopting the typology developed by Yuill in the framework of the research for the EoRPA Consortium (Yuill, 2001, 2002 and 2003), current regional policy instruments can be categorised as follows:

- Regional incentives;
- Interventions for the business environment;

- Infrastructure provision;
- Regional strategies

The table above provides a synthetic overview of the main national regional policy instruments in use in each Member State. As can be seen, each country presents a distinctive mix of instruments, some of which are the same instruments utilised under the Structural Funds.

The degree of coincidence or separation between national and European regional policies implemented by each Member State can be assessed, from the perspective of the instruments in use, looking at the extent to which the Structural Funds co-finance national regional policy. Table 41 provides an assessment of this.

Table 41: Interrelation between national and European regional policy instruments (co-funding)

	Separated (mainly non co-funded)	Coherent (national instruments mainly co-funded)	Coincident (same instruments)
Austria	√		
Belgium	√ (mainly, regional aids are mainly co-funded)		
Denmark	√ No regional aids		
Finland		√	
France		√ mainly (exception of PAT scheme)	
Germany	√		
Greece			√
Ireland			√
Italy			√
Luxembourg	√		
The Netherlands	√		
Portugal			√
Spain			√
Sweden	√		
UK	√		
EU Overview			

Source: ESPON 2.2.1

As illustrated by the table, the majority of countries, around 53 percent, operate national and European regional policy through separate instruments. This is the case in Austria, Belgium, Denmark, Germany, Luxembourg, the Netherlands, Sweden and the UK.

Another group of countries – the cohesion countries and Italy – do operate the two policies through the same instruments, in some cases, particularly in respect of regional aids, these are

national instruments that are co-funded by the Structural Funds (e.g. Italy). Finally, Finland and France have been assessed as being in an intermediate position.

Looking at each group in more detail, and starting with the first: in *Austria*, in terms of instruments then there is likely to be overlap at the *Land* level (since Structural Fund programmes are closely related to *Land* economic development strategies). However, there is little or no overlap between innovation-oriented regional policy as operated nationally and the Structural Funds. Similarly in *Belgium*, where regional policy instruments are regional aids, these are related to the Structural Funds in those areas where the Structural Funds are available (the scheme being co-funded in these areas) but otherwise they are completely separate from the Structural Funds. In *Denmark*, there is not much (if any) overlap in terms of regional policy instruments, other than that some of the regional policy coordination mechanisms that have been introduced recently are there to ensure that diverse funding sources (including the Structural Funds) are brought together to meet regionally-agreed goals. The fact that the regional aid map was designed so that it included the Structural Fund areas was not to allow coherent policies to be followed but simply to create the space (in terms of award ceilings) such that aid could be awarded under the Structural Funds. There are no national regional aids in Denmark. In *Germany*, although aspects of German regional policy are co-funded by the Structural Funds, the German authorities are always keen to ensure that it is national regional policy that determines priorities etc., not the Structural Funds. In essence the two policies can thus be viewed as separate.

National regional policy instruments are different from those implemented under European regional policy in *Luxembourg*, where three main aid schemes operate: a regional aid scheme providing financial assistance in the form of either a capital subsidy, an interest-rate subsidy or tax relief on the creation of new firms; an aid scheme for investments by small and medium-sized firms; and a preferential aid scheme for the implementation of research and development projects and programmes. In *the Netherlands*, apart from the operation of the *Kompas* and the Investment Premium in the north, there is no overlap of policy instruments (with the exception of urban policy). In *Sweden*, there is some overlap in the instruments in use in the peripheral North of the country, but none elsewhere. Finally the two sets of instruments can be considered as essentially separated also in the *UK*. UK national regional policy instruments, which involve a plethora of business assistance and regeneration schemes, complement EU regional policy to a certain extent. For instance, EU regional policy places a strong emphasis on using appropriate local and regional partners and long-term planning which fits the current evolution in the UK's approach to regional policy delivery from a heavily centralised to a more regionalised system. Complementarity between National and European objectives is aided by their inclusion in regional economic strategies. It must be noted however that the UK government has recently identified some areas of 'poor fit': for some English regions it has proved difficult to use the Structural Funds to adequately address the priorities in their Regional Economic Strategies.

Looking at the second group of countries, in all of the cohesion countries, it is difficult to identify regional policy instruments that are separate from the Structural Funds. This also

applies to the Italian *Mezzogiorno* (although a recently introduced, and very much discussed, fiscal concession is not co-financed).

Finally, the last two remaining countries are Finland and France. In *Finland*, regional aid policy is co-funded to a significant degree and the regional programming approach that has been developed for national regional policy purposes is very much based on the Structural Fund model. The widespread coverage of the Structural Funds in Finland means that most of the country is covered by the Structural Funds. National regional policy, however, is an all-region policy. As regards *France*, the PAT scheme does not have any overlap with the Structural Funds. Nevertheless, other aspects of French regional policy are relatively widely drawn and (presumably) tie in with the Structural Funds at the regional level, via the regional planning documents.

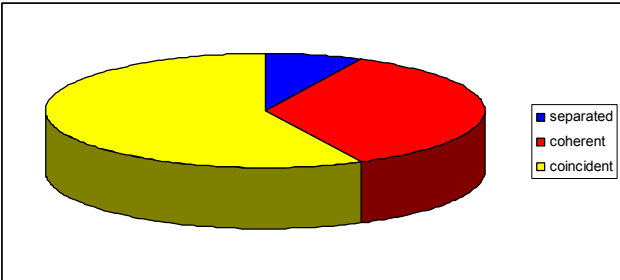
Governance

This section deals with the governance system associated with national and European regional policies in the Member States. As in the previous sections, the Member States are classified into three groupings, namely, separated, coherent or coincident, and the criteria used for this classification is in this case the overall responsibility framework associated with regional policy. This has entailed looking at two aspects:

- First, the territorial level of responsibility, in other words where the key decisions are taken: in some cases while national regional policy is nationally monitored, European regional policy tends to be regionalised (e.g. in Austria);
- Second, the thematic competence of the Ministries/Departments in charge for regional policy, in other words, who takes the key decisions: the decision-making competence for the two policies does not always coincide, in the UK, for example, the two policies are monitored by two different Departments, the DTI (national) and the ODPM (European) respectively.

As the table below illustrates, in about half of the 15 EU Member States the overall framework of responsibility for regional policy is coincident, thus encompassing both National and European regional policy. This is obviously the case with countries where there is no spatial or strategic differentiation between the two policies, though once again, it is also the case in Finland, where the Structural Fund model has permeated domestic policy making, as well as in France, where overall responsibility for both policies lies within one single agency, the DATAR. In other countries, however, there are differences in the governance approaches of national and European regional policy as can be seen below.

Table 42: The relationship between national and European regional policy governance

	Separated (Neither the same territorial level, nor the same competent agent)	Coherent (Same territorial level or same competent agent)	Coincident (Same territorial level and same competent agent)
Austria		✓	
Belgium		✓	
Denmark			✓
Finland			✓
France			✓
Germany		✓	
Greece			✓
Ireland		✓	
Italy			✓
Luxembourg		✓	
The Netherlands			✓
Portugal			✓
Spain			✓
Sweden			✓
UK	✓		
EU Overview			

Source: ESPON 2.2.1

In the post-devolution *UK*, the institutional framework of national and European regional policy has become quite complex. Overall, the lead department for regional policy is the Department of Trade and Industry (DTI), through its Regional Policy Directorate. The DTI has a central role in leading on negotiations with the European Commission on state aids rules/maps for both domestic and European regional policy. The DTI also co-ordinates overall UK Government policy on the Structural Funds and takes the lead on many issues affecting more than one fund or more than one part of the UK. Moreover, most of the main policy instruments and resources for regional policy come from the DTI, particularly Regional Selective Assistance (long seen as the core regional policy scheme) and regionally-differentiated business support policies in areas such as innovation, start-ups and venture capital investment. The DTI also has responsibility for the operation of Regional Development Agencies, increasingly important actors in the regional policy field (see below). At the central level, responsibility for Structural Fund implementation belongs to the Office of the Deputy Prime Minister (ODPM) but recent years have witnessed a decentralisation of regional policy responsibilities, something that has included the processes of de-concentration in England and devolution in Scotland, Wales and Northern Ireland.

A de-concentrated system of regional policy exists in England. As such, Central government has basically unbundled its organisation but not its authority regionally. The move from separate regional government offices for each ministry to integrated government offices in the regions from the early 1990s was made partly to facilitate the administration of the Structural

Funds and this provided an early boost to institutional capacity at the regional level. The role of the government offices has changed radically over the years but they remain important actors, implementing ERP under the auspices of the ODPM. In parallel, recent legislation established a series of new Regional Development Agencies for the English regions and these are increasingly significant actors in NRP implementation. They are charged with the preparation of Regional Economic Strategies and can now determine how to allocate expenditure from a single 'pot' of funding according to the priorities identified in these Strategies. It is worth noting also that the process of creating regionally elected assemblies in North Eastern England continues. These assemblies would be responsible for developing regional strategies in areas such as economic development, skills and employment, spatial planning and housing and have direct responsibility for the RDAs and the Regional Economic Strategies they produce.

In Northern Ireland, Scotland and Wales, regional policy is the legal competence of the devolved territorial administrations. With the establishment of assemblies in each of the 'nations' by the Labour government, regional policy has been devolved to varying extents to the elected assemblies. In Scotland, devolution includes powers over several areas of economic development: control over the budget assigned to Scotland, potential for increasing the resources available for economic development through tax-varying authority and the ability to develop new industrial policies independently of the rest of the UK. Scotland has its own variant schemes of RSA and smaller grant schemes, administered by the Scottish Executive. Such policy-making authority has been limited by the powers 'reserved' to Westminster, notably those relating to the UK's commitments as a Member State of the EU, such as the Community ceilings on industrial assistance and the designation of Assisted Areas within the UK (which remain the responsibility of the DTI). A similar process has been taking place in Wales. A National Assembly has been established, though with fewer powers than in Scotland. With the creation of the new Assembly for Northern Ireland in connection to the Belfast Agreements in 1998, this tradition of distinctive practice has now been brought into line with the other nations of the UK, as its Assembly has similar powers to the Welsh administration (even though the Irish Assembly has been suspended since October 2002). Implementation of ERP is devolved to the Scottish Executive and the National Assembly for Wales. In Northern Ireland the Funds are implemented by the Department for Finance and Personnel.

Looking now at the countries which have been classified as being in an intermediate position, in *Austria*, while overall responsibility is co-shared between the federal and *Land* level, NRP is primarily a responsibility of the national level (Bund); ERP is primarily a responsibility of the *Länder*. NRP falls under the competence of the Austrian Federal Chancellery, Ministry for economy and labour (BMWA), Ministry for transport innovation and technology (BMVIT), Ministry for agriculture, forestry, environment and water management (BMLFUW); ERP is a responsibility of the *Länder* as regards Objective 2 and Interreg issues, although the Chancellery and ÖROK (Austrian conference of Regional Planning) at the federal level have an overall coordination function. Leader and rural areas/development as well as the Objective 3 areas are however a federal responsibility – of the BMLFUW and BMWA respectively.

Reflecting the federal institutional structure in *Belgium*, responsibility for regional policy lies with the sub-national tier, the Flemish, Walloon and Brussels regional governments. The legal basis for regional policy is provided for under national legislation, the 1970 Economic Expansion Law, but the regional governments are responsible for the implementation of policy. The 1970 Law is essentially a framework for regional incentive policy within which the Flemish and Walloon governments have passed appropriate secondary legislation to establish the main lines and conditions of policy within their jurisdictions (it is only post 2000 however that eligible regional aid areas have been designated in the Brussels region). For the purpose of EU regional policy however, the federal government of Belgium is still considered as the only relevant interlocutor by the European Commission and the three Regions must co-ordinate their positions. In Flanders, the implementation of the business support scheme is a joint enterprise between Flemish government and the provincial authorities. The Flemish government urges a coordinated approach on the level of the provinces, e.g. by installing a joint organisation for all relevant agencies, authorities, organisations and business representatives (Vlaamse Regering, 2000a, p. 49). 'House of the Region,' in Esen sets the example for this way of working. It is a co-operative effort between the province of West Flanders, 16 municipalities, and various other regional *fora*, and includes the teams that implement the Objective 2 (previously 5b) and LEADER programmes for the ERP. To ensure this complementary and integrated approach to the NRP and ERP, the Flemish government promotes the negotiation of regional charters, in which funding packages and the establishment of such a 'House of the region' is arranged. In 1999 10 out of 17 regions had agreed to such a charter (Vlaamse Regering, 2000a, p. 52).

In *Germany*, initial overall responsibility resides at the national and regional level, e.g. the Federation together with the *Länder* (regions in EU terms). NRP is the main responsibility of the *Länder* in Germany. The Federation however does contribute towards this, given its overall aim to create equal living conditions throughout the national territory. The GRW is managed by a joint planning committee, composed of Federal and *Länder* ministers, and is usually responsible for the economy or finance.

Overall responsibility for regional policy in *Ireland* lies at the national level, however, slightly differing institutional frameworks are in place for national and European regional policy. At the national level, the Department for Enterprise Trade and Employment is the main Ministry involved in regional policy. The department also has policy responsibility for the key agencies involved in the delivery of regional policy, IDA-Ireland and Enterprise Ireland. These primary national economic development agencies, IDA-Ireland (for multinationals) and Enterprise Ireland (for indigenous industry), both have balanced regional development as a key objective and, over the last two years, have adopted more regionalised structures. The main difference in the operation of NRP and ERP exists at the regional level. While NRP is mainly centralised, ERP is more regionalised. The NUTS II regional level (group regional authorities) has a greater involvement in the delivery of the Structural Funds, while NRP is more centralized. Eight Regional Authorities were established in 1994. The Regional Authorities were allocated responsibility for the coordination of public services in the regions, for planning the regions overall development requirements and the subsequent monitoring and evaluation of EU

Structural and Cohesion Funds. In 1999, Group regional authorities were created, whose territorial coverage corresponds to the two new NUTS II regions. The new authorities are based on the existing regional authority structure and cover: the current regional authority areas of the Border, Midlands and West – named as the Border, Midlands and Western Group Regional Authority, and the regional authority areas of Dublin, the Mid-East, the Mid-West, the South-West and the South-East – named as the Southern and Eastern Group Regional Authority. These have the responsibilities of promoting the co-ordination of the provision of public services in their areas, monitoring the general impact of all EU assistance programmes under the Community Support Framework (CSF) in their areas; and managing regional programmes in the CSF. In *Luxembourg*, both general policy development and implementation responsibility for both national and European regional policy in Luxembourg lies with the Ministry of the Economy, which is part of the national government. For European regional policy, the Ministry of the Economy has set up an Objective 2 Selection Committee (*Comité de sélection*) for the 2000-2006 programming period.

To conclude, in the last cluster of countries responsibility for regional policy – be it domestic or European – falls largely within the same level of governance and actors. In *Finland*, on the whole it is the municipalities and the State that are responsible for regional development with the regional councils as joint municipal boards being responsible for the management functions related to regional policy. The Ministry of the Interior is responsible for the formulation of national targets for regional development in cooperation with other ministries and the Regional Councils. In addition, the Ministry of the Interior is responsible for coordinating, monitoring and evaluating the preparation and implementation of regional strategic programmes and other programmes in accordance with the regional Development Act, in cooperation with other relevant sector ministries and the Regional Councils. The Regional Councils are responsible for drawing up proposals for regional Structural Fund programmes concerning their areas, which are to be financed from the European Community Structural Funds. The programme proposals themselves are developed jointly by the relevant stakeholders, i.e. the State authorities, municipalities and the other public and private bodies involved in programme implementation.

Overall responsibility for regional policy in *France* lies with the *Délégation à l'Aménagement du Territoire et à l'Action Régionale* (DATAR, Delegation for Spatial Planning and Regional Policy), a public body currently under the responsibility of the *Ministère de la Fonction Publique, de la Réforme de l'Etat et de l'Aménagement du Territoire* (Ministry for the Public Service, for State Reform and for Spatial Planning). DATAR is responsible for preparing negotiations with the Commission for the area designation for both NRP and ERP. DATAR also monitors the implementation of NRP policy in the regions with respect to EU competition policy. It is also the Managing Authority for the French National Technical Assistance Programme and in that respect it provides assistance, training and advice to the Mission Europe (European officers' unit) in the SGARs.

In *Greece*, it is the central Government (Ministry of Economy and Finance) that has overall responsibility for regional policy, where as we have seen, national and European regional policy

coincide. Under Law 1662 / 86 for "Local governance, regional development and democratic programming", Greece was divided into 13 regions. Each region was responsible for the planning, programming and coordination of regional development (FEK A 92, 14/7/86)¹⁶. The regions in Greece served as decentralised parts of the central government, thus constituting part of the overall modernisation process of public administration. Law 2503/97 for the "Organisation and Management of the Regions" identified the present legal framework that governs the regions today. According to this Law, "[t]he region is a decentralised and administrative unit of the state" (FEK A 107, 30/5/97)¹⁷. The role of this region, as identified by this Law is to plan, programme and implement policies for its economic, social and cultural development within its territory and within the wider national framework for development (Athanasopoulos, 2000). The Region is administrated by the General Secretary of the Region and the Regional Council. The Secretary is a representative of the Central Government and is responsible for the implementation of Government policies related to the region. The Secretary and the Council do not have competence over certain projects i.e. national projects and projects with a budget of more than 300.000 Euros, for projects under the trans-European networks, (projects funded by national or EU funds come under the CSF), or for CF or Community Initiatives. Central Government is responsible for overseeing the actions of local governance – though it cannot intervene – and for allocating funds to local governance (Athanasopoulos, 2000).

Overall responsibility for regional policy in *Italy* lies within the Ministry of Economy and Finances, formerly the Ministry of Treasury and Budget, where a dedicated department is in charge of the coordination of development and cohesion policies (Dept. for Development and Cohesion Policies). This department is in charge of the negotiations with the Commission for the area designation for both NRP and ERP; it monitors the implementation of NRP policy in the regions in respect of its implications for EU competition policy (e.g. as regards notification procedures); it is the Managing Authority for the Objective 1 CSF, and, in respect of the ERP implemented in the Centre-North regions, is responsible also for the monitoring of the national (i.e. non regional and nor European) part of public co-funding attached to Structural Fund programmes. Overall responsibility lies at the national level (see above), however, the national administration has a much more 'hands-on' approach in the case of the *Mezzogiorno* than is the case with the Centre-North regions. These latter operating their economic development/regional policies with much more independence.

In *the Netherlands*, for the 2000-2006 period central government has drawn up an agreement with the alliance of the three northern provinces, *Samenwerkingsverband Noord Nederland (SNM)*. The agreement is the result of negotiations between the provinces and central government, which has resulted in the investment programme often referred to as *Kompas voor het Noorden* (literally Compass for the North). Of the total budget for this programme, €500 million comes from the Ministry of Economic Affairs (Ministerie van EZ, 2001). The funding for the investment programme for the northern provinces is in fact an earmarked part

¹⁶ FEK A' 92/1986 Law 1622/1986

¹⁷ FEK A' 107/1997 Law 2503/1997

of the budget for the region of one the national programmes for economic development, notably an investment premiums for business sites (IPR) (Ministerie van EZ, 2001). Some €150 million was planned for that programme. The rest of the €500 million was allocated to other projects and measures. The rest of the budget comes from the government fund for strengthening the economic structure, the Fonds Economische Structuurversterking (FES). This fund forms the basis of a renewed interest in the Netherlands for government investment in the economy. The FES was created in 1995 with money from the additional export of natural gas. The funding is sometimes referred to as 'ICES'-monies, referring to the interdepartmental committee that allocates the funding to various infrastructure, research, innovation and social programmes. The main aims and objectives are thus decided in negotiation between central government and the provinces. The provinces are mostly responsible for the implementation of the programme. This includes part of the funding from NRP that is used to co-fund the programmes for the ERP. The Ministry of Economic Affairs coordinates central government decision-making on the investment programme for the northern provinces and the allocation of funding from various other ministries and the European structural funds. The actual implementation of the NRP and the ERP in the northern provinces is done by the alliance of the three northern provinces (SNN), which serves as the accountable body in this process (SNN, 2001). The money from the FES is also used for the GSB programme for urban restructuring. In this case the management duties are undertaken by the Ministry of Internal Affairs, which until 2001 even had an extra minister to co-ordinate the programme. The ministry has an agreement with each of the individual municipalities, although the provinces have assumed a coordinating role between central government and the municipalities, which sees them monitoring the progress. For the GSB programme for urban restructuring a similar way of working was developed, although in this case an agreement was made between central government and the four largest cities, with an additional agreement being reached between central government and the rest of the 26 eligible cities, as they work with slightly different packages of measures and funding (Arnoldus, 2003). The municipalities however implement the actual programmes themselves. Eleven of these 30 cities are also eligible for the ERP (Objective 2). The GSB programme for these cities has been included in the single programming document (with the exception of the cities of Emmen, Groningen and Leeuwarden in the northern provinces). It should also be noted here that the national GSB programme contains a 'European pillar' that concerns the Objective 2 funding of the ERP.

In *Portugal*, overall responsibility (i.e. for the definition of assisted areas, monitoring, evaluation) lies at the national level, within the Ministry of Planning, Directorate General for Regional Development. Traditionally, little responsibility is assigned to the regional level (at least on the mainland, though more responsibility is given directly to the regions of Azores and Madeira).

In *Spain*, responsibility for both national and European regional policy lies within the Ministry of Economics and Finance, Directorate General for Budget Planning and Analysis, where two different divisions are responsible for each policy. The regions are allocated some competences, especially the Basque Country and Navarra, which for historical reasons enjoy greater

autonomy than other regions. As in Italy, more responsibility is attributed to Objective 2 regions, since Objective 1 regions are bound to the Objective 1 Community Support Framework, which leaves them little space for individual action. Nevertheless, since the Basque Country and Navarra are Objective 2 regions where only certain areas are eligible thus attracting lower levels of funding, they are therefore often even more active in national regional policy debates than with the Structural Funds. One example here is the Urban Regeneration/ Local Development Programme IZARTU for urban areas with problems defined by the Basque Government, following the example of the URBAN programme. Since in Spain only one city in each Region could be selected for the URBAN II programme, the Basque Country decided to create its own programme for the other distressed urban areas in the region. No similar national programme however exists.

12.5 Conclusions on the interrelationship between NRP and ERP in the EU 15

At the end of this analysis of the interrelationship between various aspects of national and European regional policy in the EU15 (overall approach, spatial targeting, policy instruments and governance), it is possible to provide a qualitative overall assessment of whether national regional policy in each country is separated, coherent or coincident with European regional policy. This qualitative overall assessment groups the countries under analysis as follows:

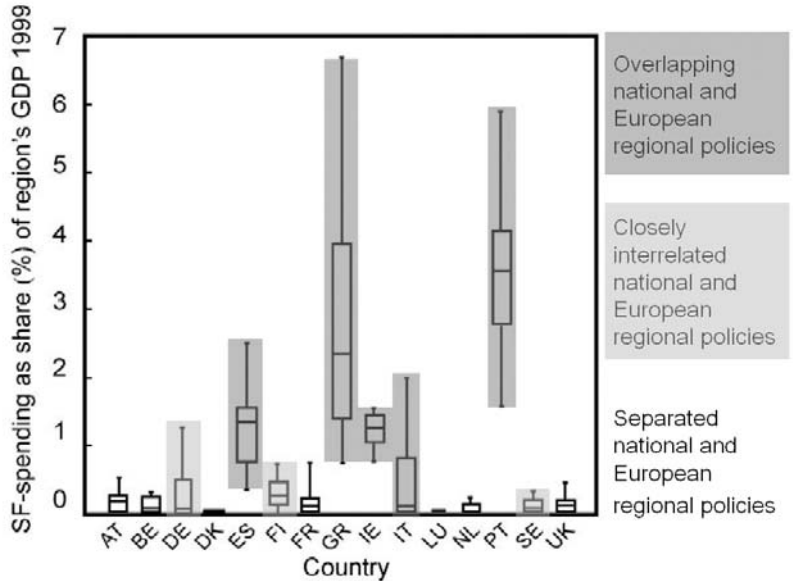
- In a majority of countries, the two policies can be considered as 'separated': Austria, Belgium, Denmark, France, Western Germany, Luxembourg, the Netherlands and the UK;
- At the other extreme, in Eastern Germany, Greece, Ireland, the Italian Mezzogiorno, Portugal and Spain, the two policies are to be considered coincident (overlapping);
- Finally a further cluster of countries groups those countries where NRP and ERP do not coincide, but are certainly closely interrelated (either due to the geographical scope, or due to the overall approach and strategies implemented). These countries include the Italian Centre-North and the two Nordic Countries, Finland and Sweden.

This typology on the interrelationship between national and European regional policies shows a clear core- periphery picture, with separated policies in the core of Europe and more related policies in the peripheral parts of the EU15. The only exception here is Germany, which can be explained by the relative weight given to Eastern Germany. As illustrated earlier, national regional policies differ markedly in the Old and New German *Länder*.

In addition to the core-periphery divide, there is also a clear relation between the national and European regional policies and the Structural Fund share of a region's GDP. As illustrated in the figure below, those countries that are categorised as 'coincident' are also the countries where

the share of Structural Funds on the region's GDP is highest. In countries categorised as 'separated' the share is low, while the countries seen as 'closely interrelated' are grouped in an intermediate position.

Figure 21: The coincidence of European and national regional policies in relation to Structural Fund spending



Source: ESPON 2.2.1

Thus it can be argued that the amount of Structural Fund money allocated to a country matters as regards the leverage effects the Structural Funds have on national regional policies.

Furthermore, we can conclude that the leverage effects of the Structural Funds on national regional policies imply that the Structural Funds have a wider range of indirect effects in Greece, Ireland, Italy and Spain (i.e. those countries seen as overall overlapping) than in the rest of Europe. Thus far this study has not distinguished amongst the various degree of impact the indirect effects of the Structural Funds have in different countries. It can however be argued that the influence that the Structural Funds have on shaping national regional policies in the countries mentioned above means that the effects of national regional policies can, to a large extent, be considered together with the effects of Structural Funds – i.e. the effects of national regional policies may be considered as indirect/leverage effects of the Structural Funds.

12.6 National regional policies, territorial cohesion and polycentricity

While one could argue that regional policy is a spatial policy by definition, not all national regional policies have a strong implicit spatial focus. In addition, even when national regional policy implies a strong spatial focus this is not always linked to the concepts of territorial cohesion and polycentric development.

Table 43 below – which is based on the assessment provided by the country experts - provides a visual overview of the extent to which national regional policy in each EU15 country is spatially oriented, and the degree of integration of the objectives of territorial cohesion and polycentric development.

Following the table, the integration of spatial themes (particularly territorial cohesion and polycentricity) in domestic regional policy is reviewed on a country-by-country basis.

Table 43: Integration of spatial objectives in the national regional policies of the EU15

Country	Overall spatial approach			Territorial cohesion			Polycentric development		
	none	Some	strong	none	some	strong	none	some	strong
Austria		√				√		√	
Belgium			√	√				√ (Flanders)	
Denmark			√			√			√
Finland			√			√		√	
France			√			√			√
Germany			√		√			√	
Greece			√			√			√
Ireland			√			√			√
Italy		√			√			√	
Luxembourg			√			√			√
The Netherlands		√			√		√		
Portugal		√				√		√	
Spain		√			√		√		
Sweden		√			√			√	
UK		√			√		√		

Source: ESPON 2.2.1

On cross-referencing the analysis on the relationship between national and European regional policies with that the spatial dimension of national regional policies, we see that the picture that emerges is a heterogeneous one. As such, it is not possible to link causally the level of inclusion of spatial themes in national regional policies with the degree of separation or coincidence between NRP and ERP.

Table 44: Integration of spatial themes in domestic regional policy

	Strong Spatial approach	Some Spatial approach	Strong TC	Some TC	Strong Polycentricity	Some Polycentricity
<i>Separated</i> (Austria, Belgium, Denmark, France, Luxembourg, The Netherlands, UK)	Belgium, France, Luxembourg, Denmark	Austria, The Netherlands, UK	Austria, France, Luxembourg, Denmark	The Netherlands, UK	France, Luxembourg, Denmark	Austria, Belgium (Flanders),
<i>Coherent</i> (Finland, Germany, Sweden)	Germany, Finland	Sweden	Finland	Germany, Sweden	-	Finland, Germany, Sweden
<i>Coincident</i> (Greece, Ireland, Italy, Portugal, Spain)	Greece, Ireland	Italy, Portugal, Spain	Greece, Ireland, Portugal	Italy, Spain	Greece, Ireland	Italy, Portugal

Source: ESPON 2.2.1

13 Conclusions and tentative policy recommendations

13.1 The aim of the study

The aim of the project was to assess the spatial impact of the Structural Funds. For this purpose a two-fold approach was applied. Firstly, the project works with the European wide picture of the Structural Funds, including both the mapping of the geography of Structural Funds (1994-1999) and an analysis of their spatial implications. Secondly, the work focuses on an in-depth analysis of specific aspects and areas in order to discuss a more detailed picture of the territorial effects and impacts of the Structural Funds, both in terms of the policy content and nationally regionally specific implementation practices. The analysis aims then to address the spatial impacts of Structural Funds with a particular focus on polycentricity and territorial cohesion in Europe.

13.2 Polycentric development as an operationalisation of territorial cohesion

The way in which the key concepts have been operationalised is central to the analytical context here. *Territorial Cohesion* is seen as addressing the potential, the position and the relative situation of a geographical entity. It can be discussed at various geographical levels or scales, i.e. at the *micro*, *meso* and *macro* levels. *Polycentricity/polycentric development* addresses the aspects of morphology, accessibility, functional specialisation and co-operation links of an area, each of which can be discussed at various geographical levels, i.e. the *micro*, *meso* and *macro* levels. *Polycentric development* is seen then as an operationalisation of territorial cohesion, as it is used as a bridging concept merging two not always congruent policy aims, namely those of economic growth and balanced development. The *Structural Funds* focus mainly on overcoming imbalances in socio-economic development measures mostly in terms of GDP and unemployment. In the context of this project both the Structural Funds and the Cohesion Fund were analysed, though in the report reference is usually made to 'Structural Funds' as a shorthand expression of this. *Cohesion Policy* centres on the aspects of competitiveness as outlined in the Lisbon Strategy. The Third Cohesion Report illustrates a shift towards more territorial considerations within cohesion policy and the project has sought to provide a further elaboration of this approach.

13.3 Structural Fund programmes and territorial cohesion & polycentricity

The study has shown that the Structural Fund programmes remain in their essence mainly regional development programmes. The main objectives of the programmes in the 1994-99 period were those of reducing disparities in GDP and unemployment between the regions of Europe. Whilst in 1994, the Objective 1 programmes were seen as lacking a clearly articulated underlying 'model' of how regions could best develop, (which was one of the issues working against the achievement of a truly integrated approach), during the current programming period strategies have become more articulated and defined on the basis of an underlying development paradigm based on the stimulation of competitiveness through the full exploitation of endogenous potentials. Within Objective 2, stronger links to wider

national/regional economic development strategies have emerged when the 1994-1999 and 2000-2006 periods are compared. More explicit strategic thinking has been introduced, which has led to a number of changes, including an increased focus on soft aid, new technologies and innovative methods of financing.

13.4 The limited funding calls for better integrated policies

The total expenditure of European Structural funds is very limited. In 1999 Structural aid, as a share of the GDP, constituted on average some 0.28 percent of the total EU15 GDP. Only the Cohesion countries were above this average, with the highest rates being for Portugal and Greece with 1.89 and 1.86 percent respectively. These figures are lower than those reported e.g. in the Second Report on Economic and Social Cohesion. This is largely explainable by the difference in methodology, as well as by the fact that those figures were based on committed funding as opposed to funding actually disbursed. Despite the long-term nature of the Funds, and the fact that the Structural Funds have important additional leverage effects (i.e. mobilise an important amount of additional national, both private and public resources), this necessarily means that the capacity for reducing disparities through this financial source is limited.

The limitedness of the funding does not necessarily undermine its impact, rather it makes it all the more essential to use the available funds effectively. It is most likely that vast amounts of funding (such as those of the Cohesion countries) cannot but help to contribute to local economic development, especially as much of this funding is directed towards investments. In many cases Structural and Cohesion funding constitutes the lion's share of total public investment in a poor region. How well this financing is utilised, and for what kind of investments, was investigated in the case studies undertaken as part of the project.

The assessment of the aims of the Structural Funds undertaken in this project show that there is something of a 'coincidence' between the aims formulated in the Structural Fund programmes and the aims of European spatial development policy. Furthermore, the assessment of the relationship between European regional policies and national regional policies illustrates that the Structural Funds have considerable leverage effects in the countries receiving the highest *per capita* assistance in particular.

Due to the leverage effects referred to above, one of the main goals of this project has all along been the development of a holistic approach to Structural Fund interventions as a part of the suite of regional development interventions and policies in their entirety. Thus a key focus here has been the consideration of inter-relationships between national regional policies, EU regional policy and EU competition policy.

In order to achieve effective structural policies, national and European policies thus need to be better co-ordinated so as to make them compatible. Here the governance systems also play a role. In a majority of countries, the two policies can be considered as 'separated': Austria, Belgium, Denmark, France, Western Germany, Luxembourg, the Netherlands and the UK. In Eastern Germany, Greece, Ireland, the Italian *Mezzogiorno*, Portugal and Spain, the two policies are to be considered coincident, while a third cluster of countries includes

countries can also be identified where NRP and ERP do not coincide, but are certainly closely interrelated (either due to the geographical scope, or due to the overall approach and strategies implemented). These countries include the Italian Centre-North and the two Nordic Countries of Finland and Sweden.

This typology on the interrelationship between national and European regional policies shows a clear core- periphery picture, with separated policies in the core of Europe and more related policies in the peripheral parts of the EU15. The only exception here is Germany, which can be explained by the relative weight given to Eastern Germany.

The leverage effects of the Structural Funds on national regional policies imply that the Structural Funds have a wider range of indirect effects in Greece, Ireland, Italy and Spain (i.e. those countries seen as overall overlapping) than in the rest of Europe. The effects of national regional policies can, to a large extent, be considered together with the effects of the Structural Funds – i.e. the effects of national regional policies may be considered as the indirect/leverage effects of the Structural Funds.

13.5 Polycentricity & Structural Funds intervention: an implicit connection?

There are *two main ways in which the Structural Funds may influence spatial development*. **Firstly**, there is potential inherent in the spatial nature of the funds themselves and there is the potential expressed in the area designation process. By deciding which areas are to be covered, by what types of interventions and by what intensity of intervention, a main channel of influence within spatial development is defined. In area designation the issue of territorial cohesion at both the *macro* and *meso* levels could be addressed. In theory, area designation could contribute to *micro* level issues as well, but an approach where Member States and national and regional programme stakeholders influence *micro* level priorities is probably more realistic. Area designation specifically targeted to polycentric development is not possible. Area designation paying attention to functional urban areas, e.g. not splitting those, may however increase the possibility of contributing to polycentric development. **Secondly**, the form of intervention also influences spatial development. Some policy forms may have more explicit spatial impact than others. In general however, policy interventions may take two main forms: (1) Cushioning the adverse effects of investment or disinvestment decisions, and (2) Speeding up investment decisions.

The study has thus far shown that the Structural Funds contribute to the aims of spatial policies, such as polycentric development in a rather unintentional manner. This can partly be explained by the novelty of the concept and, by extension, by the fact that the concept was not central to the drafting process of the current Structural Fund guidelines and programmes. It is further argued that the Structural Funds may in themselves have contributed to making polycentricity a necessary and politically attractive priority. Both the practical (instrumental growth- and development oriented) aspects and discursive aspects of this gradual paradigmatic change have been considered. It is further argued that the Structural Funds may also be able to contribute more explicitly to polycentric development

by integrating this policy concept into the Structural Funds instruments and governance systems.

Whilst not taking a normative stance on the question of whether polycentricity should be strived for (and if so, in what relation to other prioritized normative goals and policy priorities), we do argue that territorial cohesion is a necessary but not sufficient condition for polycentric development. ***For structural policies to be polycentric they need to address the issue of polycentricity – monocentricity in an explicit fashion.*** This is not the case in today's Structural Fund programmes. However different forms of interventions may have different capabilities in relation to polycentric – monocentric development. ***Interventions focusing on infrastructure may have a direct impact on accessibility, and can thus be of direct influence to the urban and regional structures.*** On the other hand, interventions focusing on human resources and the business infrastructure have more indirect effects.

The *meso* and *micro* levels (i.e. the individual programme level) are in our view the most efficient levels through which the concept of polycentricity could be introduced into the Structural Fund system and requirements. Within the programming process it is possible to stimulate national and regional partnerships to analyse their urban structures. The need to consider issues regarding the morphology and functions of urban areas can be included in the Structural Fund regulations for Objective 1 as well as in Objective 2 programmes. This may be implemented as part of the SWOT analyses or as a horizontal topic. ***For this to be effective, a set of guidelines for the understanding of polycentricity is also necessary.*** The present guidelines for the programmes could be amended to include an analysis of how the funds could contribute to the 'development of a balanced functional region' or 'a balanced urban and regional system'.

When analysing the relationship between polycentricity and Structural Funds interventions, some interesting findings emerge. Not only was polycentricity a non-issue during the 1994-1999 programming period, it also seems that in funding terms polycentric regions seem to have been the losers here, with over half of the total assistance going to non-polycentric regions¹⁸. Only 17,8 percent went to polycentric regions¹⁹. The potential for polycentric development was however not overlooked completely, as 31,6 percent of the assistance went to potentially polycentric regions²⁰.

During the period investigated, about 17 percent of the funding went to areas that can be viewed as already strong nodes in a European polycentric system, while about 30 percent went to areas strengthening the European polycentric pattern, with only 12 percent being spent on areas that in the long run may contribute to polycentric development at the European level.

The lion's share (41 percent) went to regions that are unlikely to show up in any European polycentric pattern at the *macro* level. Thus on the *macro* level one should not expect a

¹⁸ Regions with less than two FUA 'areas of influence', or regions with a strong relative weight for the first FUA, and a weak relative weight for the second FUA.

¹⁹ Regions with a low relative weight for the first FUA and a strong relative weight for the second FUA.

²⁰ Regions with an average relative weight for both the first and second FUAs.

major contribution to polycentricity if the funding follows a *status quo* pattern (or similar logic to the current programming period despite a geographical shift in funding to the new Member States). The (for the time being unanswered) question here naturally is whether polycentricity should in fact be among the main policy priorities in European territorial policy, and if so, *how should it be defined and operationalised* (on all levels).

The study establishes a fairly strong connection between the amount of money utilised per inhabitant, the region, and the corresponding level of GDP. In general, poorer regions received more, and richer ones less, with the largest exceptions being Ireland and northern Fenno-scandia, Pais Vasco and Umbria along with some large city regions (e.g. Madrid, Merseyside).

Regions receiving most funding (in the national context) and displaying higher economic growth rates than regions in their respective countries, on average, can be said to adhere to the general goals of cohesion policy. This is the smallest category, both in terms of the number of regions (13 percent of all EU15 NUTS III regions) and in terms of population coverage (11 percent). These regions are mostly in the southern European cohesion countries as well as in southern Italy and eastern Germany, (including Berlin). Furthermore a batch of some 20 regions in France (mostly in the south), more than ten in the UK, six each in Austria and the Netherlands, and two in Belgium belong to this group. Of the Nordic countries only the region of Åland is included.

At the other extreme are regions that, despite substantial funding (again, in the national context), demonstrate poorer growth rates than most regions in their respective countries. With more than a fifth of all regions this is the largest group in number, though it covers only 16 percent of the EU15 population. These regions are mostly located in eastern Germany, northern parts of the UK (mostly Scotland), as well as southern Italy. In addition, many fairly populous regions both in southern and North-Eastern France, and some regions in Spain and Portugal, as well as most of the regions of northern parts of Fenno-scandia adhere to this pattern.

In terms of population the largest group of regions here is the one with persistently high growth figures, despite the low levels of structural aid. This group representing 20.7 percent of the European regions consists mainly of regions that are inside the Pentagon, with more than half of all European capital regions being in this group (the most notable exceptions here being Rome and Vienna).

There are no countries that demonstrate a clear-cut positive relationship between (relative) regional economic growth and the level of spending. This relationship is discernible (albeit only vaguely) in France and Italy. For example in Sweden the opposite holds true, while countries such as Greece and Portugal display a near random pattern. Thus one possible conclusion here could be that if there indeed is a discernible positive impact of the Structural Funds, it is not found in relation to the economic growth indicator. This is largely consistent with our previous hypotheses on Structural Fund impacts, i.e. that the indirect and qualitative impact is likely to be proven more interesting than the impact on changes in the economic performance.

Referring to the Dissimilarity Index, the actual development trends differ regarding the level in question, e.g. there are trends towards increasing territorial cohesion at the *macro* level (NUTS 0), while at the *micro* and *meso* levels the trends predominately point towards decreasing territorial cohesion (NUTS 2 & 3)

Table 45: Dissimilarity indices of GDP in PPS in 1995 and 2000 at NUTS 0, 2 & 3

EU15 at:	Dissimilarity index		Units change 1995-2000	indicating:
	1995	2000		
NUTS 0	0.465	0.460	- 0.005	increasing cohesion
NUTS 2	0.339	0.341	+ 0.002	decreasing cohesion
NUTS 3	0.531	0.620	+ 0.089	decreasing cohesion

Source: New Cronos

In addition to the different development trends at various geographical levels, the implications of pursuing the same policy aim at various levels may also be contradicting or even counterproductive between various levels. ***Developments towards greater polycentricity at the macro level may imply certain concentration tendencies potentially leading to more monocentric developments at the lower (meso) level.*** This is easily illustrated by looking at the geography of Structural Fund spending according to the types of Functional Urban Areas identified by ESPON 1.1.1. For improving a European polycentric urban system and the number of globally important functional urban areas (*macro* level) it seems reasonable to concentrate funding on existing European, and perhaps some promising national functional urban areas, such that they can improve their competitiveness. In order to improve trans-national, i.e. Baltic Sea, and national polycentric urban systems (*meso* level) it thus seems more plausible to stress funding on national, and perhaps on some promising regional functional urban areas, to support them in strengthening their position. Aiming at polycentric development at the regional or local level (*micro* level), one certainly wants to give Structural Funds assistance to local functional areas in order to improve their position as compared to regional functional areas, while to a certain degree it can be considered desirable to assist regional functional urban areas to develop towards a more polycentric spatial pattern.

Because of the ambiguity between levels, the project has made an effort to ***distinguish between spatial effects at the micro, meso and macro levels.***

13.6 Spending mostly targeted at urbanized areas in total terms

The study has shown that there is no significant correlation between the type of region and the impact of the Structural Fund intervention. Some of the findings as to the relationship between interventions and polycentricity were reported above. In terms of the funding there are discernible differences however, as the analysis of Structural Fund spending has shown, that ***spending is mainly targeted on urbanised areas.*** As regards the correlation between the spending geography and the aim of polycentric development, polycentric development at the *macro* level is more likely to be supported than polycentric development at the *meso* level.

In relation to potential accessibility and transport-related Structural Funds spending a picture emerges of ***poor accessibility and high spending going hand in hand***. Some 40 percent of the EU15 population have a potential accessibility by rail equal or below the EU15 average and at the same time receive funding related to transport investments; a similar percentage (38 percent) is found in relation to the question of potential accessibility by road. Taken together these regions obtain more than the 80 percent of the EU15 budget of the Structural Funds.

When comparing the territorial distribution of funding allocated in 1994-1999, national FUAs received slightly more funding than international ones, though the lion's share, both in terms of total spending and spending *per capita*, went to functional urban areas with regional profiles.

With regard to assistance per inhabitant, densely populated areas received (in 1994-1999) less funding than sparsely populated areas. While sparsely populated rural areas received, on average, about three times as much assistance, per inhabitant, as did densely populated urban areas.

Looking at total spending, approximately 70 percent of the assistance went to urban areas. In terms of spending *per capita*, rural areas scored better than urban areas, with the exception of areas of medium human intervention, where the urban areas showed an absolute peak of 726 € *per capita*. Concentrating on the distinction between areas with high human intervention versus areas with low human intervention, approximately 50 percent of the Structural Fund assistance went to areas with human intervention, whereas less than 40 percent went to areas with low human intervention.

13.7 Limited territorial impacts: connectivity, accessibility and spatial positioning stand out

Structural Fund programmes have had tangible net economic impact in the Cohesion countries and other larger Objective 1 regions. Outside these areas, economic impacts are difficult to quantify. The Funds have however enabled additional economic activity to take place and the quality of economic development to be improved as well as acting as a catalyst for regeneration across the Member States (regardless of the funding intensity in the country in question).

An overview of the indirect and direct effects on all three scales is provided in the table below.

Table 46: Structural Funds influence on polycentric development

Geographical level of influence/effect		MICRO	MESO	MACRO	SUM	TOTAL SUM
Type of influence/ effect						
Aspects explicitly targeting polycentric development	Direct		↔	↔	↔	
	Indirect	↑	↑	↔	↑	↔
Distribution of population	Direct	↑			↔	
	Indirect	↑	↔		↔	↔
Functional/economic specialisation	Direct	↑	↑	↑	↑	
	Indirect	↑	↑	↑	↑	↑
Connectivity/accessibility /transport	Direct	↑	↑	↑	↑	
	Indirect	↔	↑	↔	↔	↑
Strengthening of international co-operation	Direct	↑	↑	↑	↑	
	Indirect	↑	↑	↔	↑	↑
Diminishing regional divergence	Direct	↑			↔	
	Indirect	↑	↔	↔	↔	↔
SUM		↑	↑	↔		
↑ = aspect influenced by Structural Funds ↑ = some Structural Funds influence ↔ = hardly any influence of Structural Funds						

Source: ESPON 2.2.1

The distinction between the direct (effects discernible among those directly targeted by the intervention/investment in question) and indirect effects (broader effects that are also discernible among those that have not been the direct addressees of the intervention) show that overall, the indirect effects are considered to be as important as the direct ones – a fact that is often forgotten in the debate. A more detailed look at the various fields of effects however shows that the direct and indirect effects tend to occur in different areas.

As illustrated in the table, most effects are found in the fields of (a) connectivity and accessibility, and (b) socio-economic functional specialisation.

It is hardly surprising that the highest single effect is seen in the field of direct effects on **connectivity and accessibility**. This relates in particular to improvements in accessibility at the regional and national levels. The impact on the trans-national transportation system is however considered to be of slightly lesser importance. Indirect effects are rarely encountered in this field.

In the area of **socio-economic functional specialisation**, the sum of direct and indirect effects accumulates to a similar level as that in the field of connectivity and accessibility. In this case however the main emphasis lies with the indirect effects as regards specialisation within a region, and to a certain extent, on the placement of the region in a trans-national context. Indirect effects in respect of the national context, and direct effects in relation to the regional and national context, are here considered to be of medium-range importance.

In the area of functional specialization, socio-economic profiling is the second strongest aspect of polycentric development in terms of the possible influences of the Structural Funds. ***The areas in which the Structural Funds can best contribute to existing profiling activities are in the fields of R&D and tourism.*** In both cases the geographical scope is mostly on profiling within a regional or, on occasion, a national context. A few cases have been unearthed where funding could assist profiling activities of an international character. These were mainly linked to specific existing endogenous potentials and key actors in the region that already had international key competences.

Another field that scored highly with regard to spatial effects is that of **strengthening international co-operation**. Here the direct effects are considered to be of greater importance than the indirect ones, showing particular significance with regard to contacts at the *meso* level.

Aspects such as **diminishing regional divergence** and the **distribution of population** appear however to have been less affected by the Structural Funds than the other above-mentioned aspects.

A general conclusion of the case studies then is that awareness of the concept of polycentricity is clearer in the 2000-2006 programming period documents, as well as being clearer among the stakeholders interviewed, than in the 1994-1999 period. This confirms the findings presented in the analysis of the Structural Fund programmes and evaluations.

The selection of case studies was based on the identification of relevant "cold" and "hot" spots, with "cold" regions being those with high Structural Funds spending and negative development in terms of GDP, while "hot" regions were those with low or high Structural Funds spending and positive development. Case study regions representing clear "hot" spots in this sense included Madeira (Portugal), Toscana (Italy), Cantabria (Spain), Lakonia and Grevena (Greece), Lappi (Finland), Extremadura (Spain)²¹ and Southern and Eastern (Ireland). Case study regions identified as "cold" spots were to be found in Calabria (Italy), Cataluña (Spain), Highlands and Islands (United Kingdom), Sachsen (Germany) and Norrland (Sweden).

The analysis of the case studies illustrates that the Structural Funds can positively influence the spatial positioning of the region in question. This influence is, however, limited to a few key aspects and relies on the existence of certain development trends that can be reinforced. The Structural Funds can have an impact, but only provided they are used consistently and together with other appropriate policy instruments and funding sources, as in most cases their volume is rather limited.

The Structural Funds can best influence the spatial positioning of a region with regard to transportation links and functional specialisation in the fields of knowledge and education as well as tourism. In the other fields reviewed in terms of functional specialisation – i.e. industry, economic base, administrative status and decision-making centres – the influence of the Structural Funds is negligible for the most part.

²¹ This case study will be finalised in the autumn, and therefore its findings were not available for the tentative conclusions of the case studies at this point.

13.8 Micro level impacts: mostly qualitative

Despite the limited quantitative effects, *important qualitative effects have been identified relating to a number of areas at the micro level*, such as:

The deployment of economic development resources;

- The promotion of a strategic dimension in policy-making;
- The introduction of new types of intervention;
- Enhanced partnership; and
- The promotion of new learning and innovation dynamics.

It was however also argued that this 'added value' has been undermined by administrative complexities, fragmented maps (area designation), the n+2 rule, as well as by the risk-aversion implicit in the available funding mechanisms.

In the area of governance, Structural Funds programming has had an important impact on governance innovation and renewal. By favouring 'bottom-up' approaches to policy-making and delivery, it has contributed to increasing the potential for policy innovation at the local level, as well as being considered responsible for the strengthening and empowering of the regional and local levels.

On the regional level there is scarcely any apparent pattern discernible. No clear-cut correlation is visible between the variables. Regions receiving more Structural and Cohesion Fund assistance demonstrate both better and worse employment dynamics than for the EU as a whole.

The regions that received more funding per capita than in the EU as a whole seem to have performed slightly better in employment terms than those receiving less. The imbalance within the groups however is larger in those regions that have received most funding, as opposed to those receiving least.

The 'Lisbon themes' were most often included in an indirect or implicit fashion, due to the timeframe of the two processes under analysis: when the programmes were drafted and implemented, the Lisbon themes were not yet on the policy agenda. At the same time it is obvious that some of the themes were already central to the Structural Funds' priorities and measures. Issues such as the promotion of research and development and innovation capacity, SMEs and the Information Society were already being addressed during the 1994-1999 period, though this has been intensified during the 1999-2006 period. Better jobs and social inclusion were however seldom addressed as specific priorities during the 1994-1999 period. Competitiveness seems to have been interpreted in rather traditional terms during the 1994-1999 period, as R&D and SME services rate highly, while social inclusion rates much lower. Few conclusions can be drawn here on the types of regions more prone to address Lisbon related themes in their programmes.

In terms of the impact of Structural Funds on governance, the case studies reported most impacts on new working practices and methods associated with the programming cycle, evaluation and partnerships, while there were also indications that the influence of the themes and policy emphasis may have contributed to a more broadly based understanding of regional policy and the governance model required to promote the objectives it encompasses.

When compared to a similar analysis of urban areas (within the ESPON 2.2.3 project), there are both similarities and differences. Whereas in the urban areas the main aspects of policy impact and governance learning were identified as networking and organizational innovations (partnerships leading to new co-operation networks and more broadly based management structures); increased citizen participation and identity-building for the inhabitants, as well as the visibility and awareness of EU policies, here the impacts were identified in the emphasis on partnership constellations and working practices. This is not however surprising when we consider that the regional level within which the analysis was undertaken in this project was broader, and thus some of the grass-roots impacts and influences were perhaps more difficult to identify.

On the micro level, the stabilisation of settlement patterns in a region (particularly in rural areas) was identified in some predominately rural regions (e.g. Lakonia, Grevena and Madeira). A similar level of influence is also deemed identifiable in Calabria and Toscana. Additionally, at the micro level, a concentration on the major cities of a region, i.e. a more balanced national picture emerged in Southern and Eastern Ireland and in Sachsen.

13.9 The meso level: economic specialization the main impact

When considering the issue of polycentric development at the *meso* level, *economic specialisation turns out to be of greater importance than accessibility*, while at the *macro* level, transportation infrastructure is a significant measure in achieving polycentric development through regional enlargement. At the *meso* and *micro* levels however, proximity is of less importance with the focus of increased polycentric development here being on strengthening national or international specialisation and competitiveness.

In demographic terms, *the direction and intensity of population change does not appear to coincide with that of Structural Fund spending per capita when analysed on the regional level*. There seems to be little difference between regions undergoing either positive or negative demographic development as to whether they are likely to be high or low structural aid receivers. One hypothesis here could be that structural actions in some regions have probably contributed to changing previously negative trends into positive ones, or at least having reduced the negative trends. How, counterfactually speaking, the situation would be without financial assistance it is however not possible to assert.

In the analysis of the spatial discontinuities, capital regions provide a case apart. When excluding the capital regions, among the remaining 50 largest pairs, not one includes "equal" partners on both sides of the border, i.e. it is almost exclusively a clear-cut matter of a divide between a large city region and its more rural neighbour. Therefore the non-

cohesive patterns within the EU15 could be said to stem more from the urban structure and the level of polycentricity than from real territorial imbalances as such.

The largest number (27) of borders with a very high discrepancy is to be found in Germany, with the contours of former East Germany still, for the most part, clearly visible.

Economic disparities across nearly half (43 percent) of all European internal borders could be characterised as not noteworthy. Sweden has the most balanced pattern (Stockholm being the only exception) while in addition Portugal also has small internal variations in this respect. In addition, for roughly half of all French and Greek borders this is also the case.

Regions along such borders where the difference has been fairly small have (on average) come closer to each other, whereas the opposite holds true for borders where the economic gap was already large. To make matters worse, the single group of border regions displaying the worst possible scenario (increasing disparity due to the richer becoming richer still, and the poorer becoming poorer still) are also those where the disparity was largest at the onset (21 index points in 1995, increasing to 28 in 1999). However, there exists no clear-cut pattern between the wealth of the border region and in which direction its cross-border cohesion is developing.

13.10 Macro level

As argued above, the impacts at the *macro* level are limited, though some are discernible as the connection between polycentricity and Structural Fund spending is analysed.

When one looks at the demographic developments, ***only minor changes have occurred on the macro level.*** The picture is confirmed by the case studies where no influence was found on this level. The total population change for the entire EU saw a slight increase of some 4 million persons, corresponding to 1.1 percent of the population (or 0.27 percent per year) during the four-year period 1995-99. The picture here is increasingly varied however, as regional differences have become increasingly important.

In the analysis of employment trends across Europe, changes in the number of employed persons remain one of the primary indicators of regional economic dynamics. Differences between both Member States and their regions are considerable.

Changes in the relative number of persons employed reflect wide varieties among member states. In Ireland and Luxembourg, employment has increased by 36 percent and 30 percent respectively. While in Spain, the Netherlands, Finland and Portugal the rate of change has been above 10 percent. For the whole EU, this rate was 8 percent. At the other end of the scale we find Greece, Austria and Germany, where this change has been less than 5 percent. It could be argued that those countries displaying a low employment rate would be the ones in need of the highest increases in order to sustain economic growth, but the issue is probably not as straightforward as that. Productivity per employee, or the amount of unpaid or voluntary labour, or other issues reflecting cultural values and the organization of society, also play a role here.

In charting inter-regional disparities across regional borders, we have entertained the possibility that when trying to link cross-border inequalities to regional policy spending, at least theoretically, there exists the possibility that funding spent in one region effects the situation in the neighbouring one. As a result of this an analysis focusing on regional entities on both sides of the border becomes imperative. For analytical purposes the study has therefore included the creation of "Virtual border regions". The data utilised here (GDP/head in PPS 1995 and 1999) refers to economic changes relative to the EU15 average. Here it is worth noting that due to the methodology the study was constrained to merely observing coincidences and correlations rather than causalities.

Not surprisingly, the sharpest economic cleavages of the EU15 are along its eastern boundary, i.e. on the borders with the post-planning economies. Although no exact data exists, probably the largest land divides are to be found along the Finnish border with Russia (i.e. Murmansk *Oblast*, the Republic of Karelia and Leningrad *Oblast*), where disparities in for instance GDP per head (measured in purchasing power) can extend to a ratio of 1:4.

Within the Union (EU15) the largest cleavages in 1999 are between the capitals and other financial centres and their surrounding regions.

While it can be concluded that pre-existing demographic trends have hardly been influenced by the Structural Funds, in some cases at least an indirect influence has been detected in terms of (a) focussing on rural areas, or (b) of focusing on strengthening the regional centres. This relates to the conclusions on possible ways of addressing polycentricity within Structural Funds interventions elaborated above.

13.11 Tentative policy recommendations

Explicit inclusion and operationalisation of polycentricity

As was argued above, if one wishes to better integrate polycentricity into Structural Funds programming, the *meso* and *micro* levels (i.e. the individual programme level) are in our view the most efficient level through which the concept of polycentricity could be introduced. This relates both to the Structural Fund management system and the programme requirements. Within the programming process it is possible to stimulate national and regional partnerships to analyse their urban structures. The need to consider issues regarding the morphology and functions of urban areas can be included in the Structural Fund regulations for Objective 1 as well as in Objective 2 programmes. This may be implemented as part of the SWOT analyses. For this to be effective, a set of guidelines for the understanding of polycentricity is also necessary. The present guidelines for the programmes could be amended to include an analysis of how the funds could best contribute to the 'development of a balanced functional region' or 'a balanced urban and regional system'.

Area designation the key to polycentricity

We have seen that thus far, the majority of funding has been targeted at monocentric rather than polycentric regions. Area designation thus seems to be one of the most feasible

ways of addressing polycentricity. In area designation the issue of territorial cohesion at both the *macro* and *meso* levels could be addressed. In theory area designation could contribute to *micro* level issues as well, but an approach where Member States and national and regional programme stakeholders influence *micro* level priorities is probably more realistic. Area designation specifically targeted to polycentric development is not however possible. In conclusion, area designation paying attention to functional urban areas, e.g. by not splitting them, may increase the possibility of contributing to polycentric development.

Policy sectors with relevance for polycentricity: infrastructure and functional specialization (e.g. tourism and R&D)

There are clear sectoral differences in respect of generating genuine (or potential) impacts on polycentricity. Though the regions with high support intensity seem to be mostly disadvantaged in accessibility terms, infrastructure seems likely to be one of the sectors where impacts could potentially be found. Infrastructure (through influence on spatial positioning and accessibility), tourism and R&D have particular potential in addressing the spatial positioning and strengthening regional specialization. Here the existing policy toolkit of Structural Fund interventions seems to be sufficient and no direct polycentricity measure or priority is needed. If a more explicit polycentric focus is considered desirable, an increased focus on infrastructure spending could be a viable option. At the *meso* and *macro* levels in particular measures designed to support specialisation, the use of development potentials and national and international competitiveness, can also favour polycentric development.

More focus on the effective utilization of limited resources through a focus on governance effects

In an environment of reduced funding in a number of areas, indirect effects and discursive power become increasingly important. Already now, European regional policy has major impacts through indirect effects, i.e. by agenda setting and influencing debates on national regional policies. A more conscious use of such indirect effects may however help to further increase the influence of the Structural Funds. It would also contribute to focusing on specific spatial policy aims within the wider framework of polycentric development in situations where regions face reduced funding opportunities. Policy recommendations in this field include:

- Intensified policy discourse

For polycentric development to become a more explicit policy objective within the Structural Funds, there is a significant need for increased clarity over its meaning. The relative opaqueness of the concept of polycentric development is perhaps a strength in terms of the ability to form a hegemonic policy discourse around it, which then needs to be taken into account by the various actors. At the same time however such an approach faces the danger of not being precise enough to fulfil the role of carrying concept for implementation strategies. There thus needs to be a more distinct interpretation of polycentricity as regards different spatial levels and the correspondence between these levels. Furthermore the merits of polycentrism have thus far not been demonstrated in empirical research.

- *Supporting new thinking*

In particular in the cases of limited funding resources the Structural Funds could also be used to promote the goals and concepts of European spatial development policies in less direct ways, such as by funding studies, evaluations and promoting new thinking in this area. Indeed the *micro* and *meso* levels seemed particularly suited to promoting such new thinking and policy innovation, and it is here also that the *micro* level can see mobilization and empowerment effects among the citizens.

- *Leverage of national practice*

Thus far no effective mechanism for linking the objectives of the Lisbon Agenda with EU regional policy has yet been found. One solution to this problem may be that of using the EU Structural and the Cohesion Funds as levers for national policies. In a similar way, as Objective 3 support has been linked to the adoption of national employment strategies, future Structural Fund support could also be linked to the adoption of explicit spatial development policies in each country. Through the national co-funding obligation, moreover, the Funds could be used to ensure that a portion of the national budgets be tied to the objectives of territorial cohesion, in a similar way as in the past they have contributed to preserving the allocation of national resources to regional development, against competing priorities (especially in periods of austerity).

- *Promoting trans-national links*

Territorial cohesion and polycentrism comprise morphological aspects as well as the flows between various centres. The current Structural Funds programmes may contribute to the support of material and non-material flows between and within regions by increasing their economic competitiveness and accessibility. Interaction between centres showing related profiles, such as potential co-operation partners, is however mainly limited to activities under Interreg. Currently, Interreg is the only EU instrument for actively promoting co-operation. Fostering cooperation between centres with similar development profiles across Europe in the context of the Structural Funds may support polycentric development.

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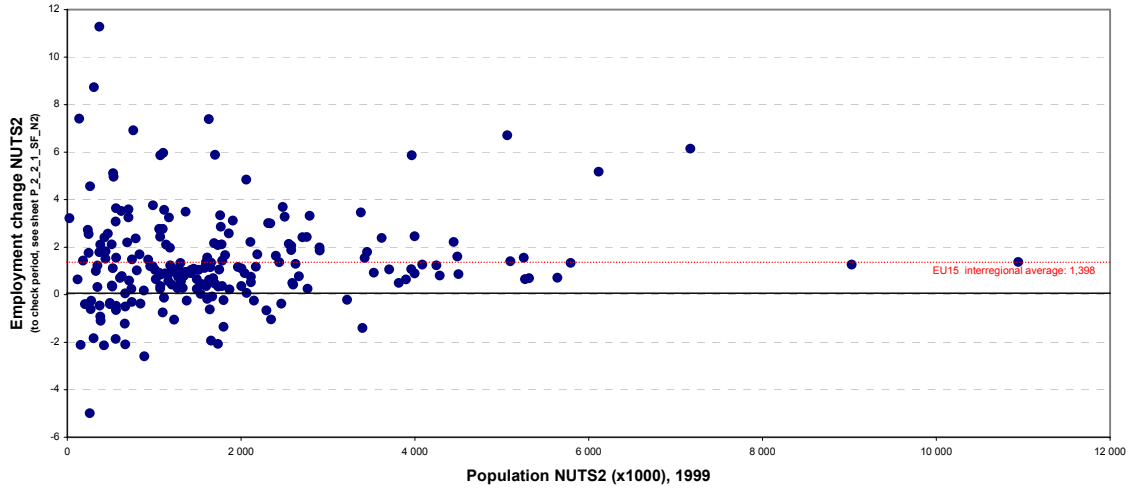
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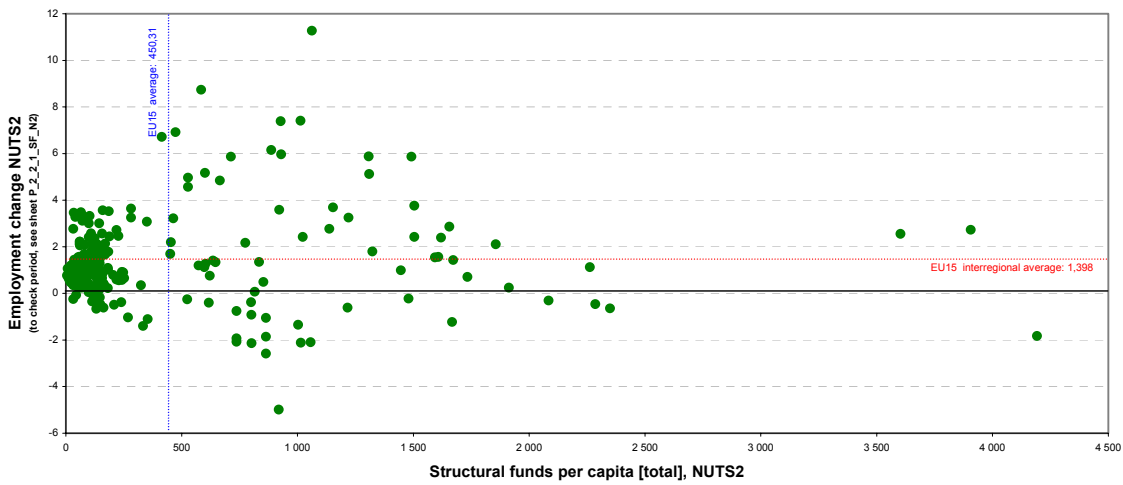
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Annex 1: Selected aspects of Structural and Cohesion Fund spending and employment

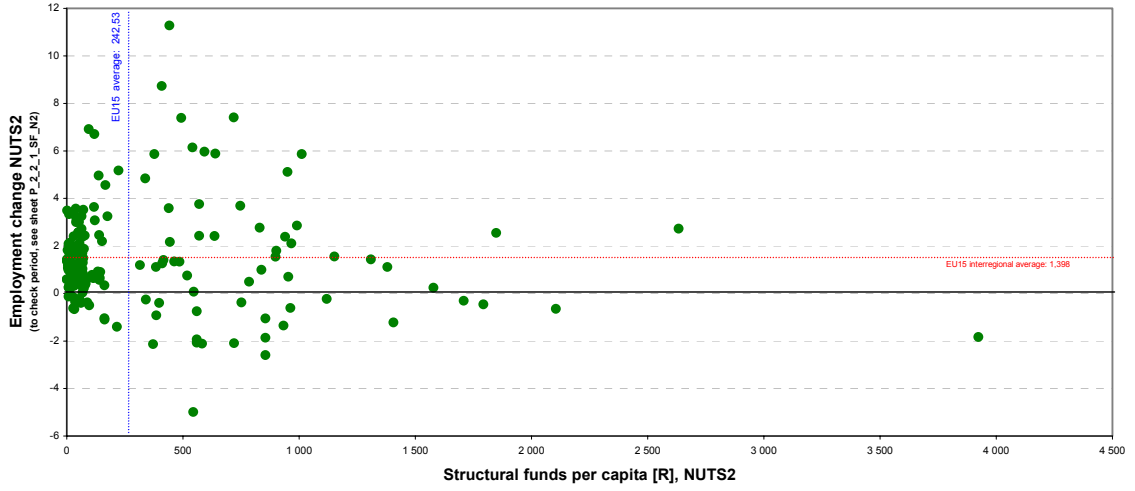
Population NUTS2, 1999 vs Employment change at NUTS2



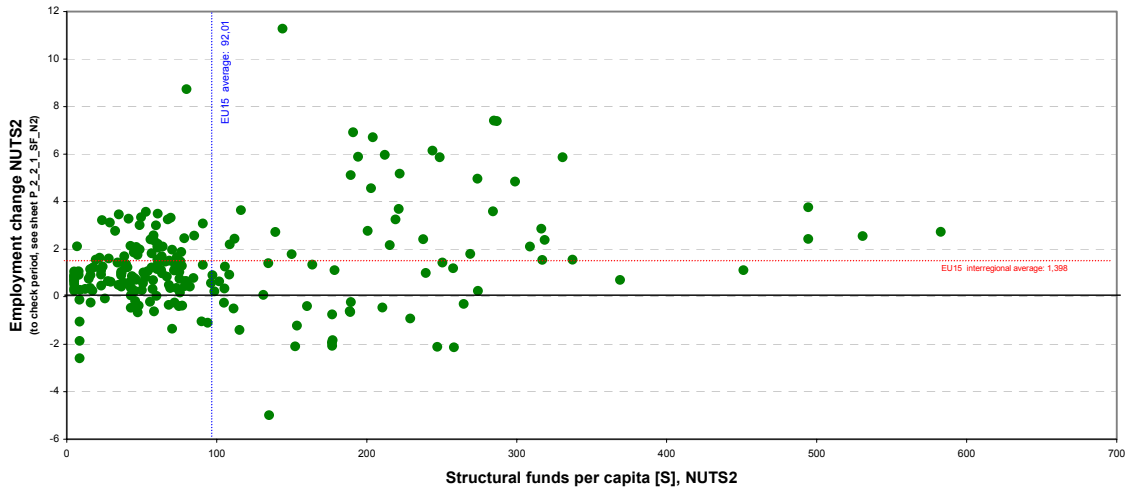
Structural funds per capita (Total) at NUTS2 vs Employment change at NUTS2



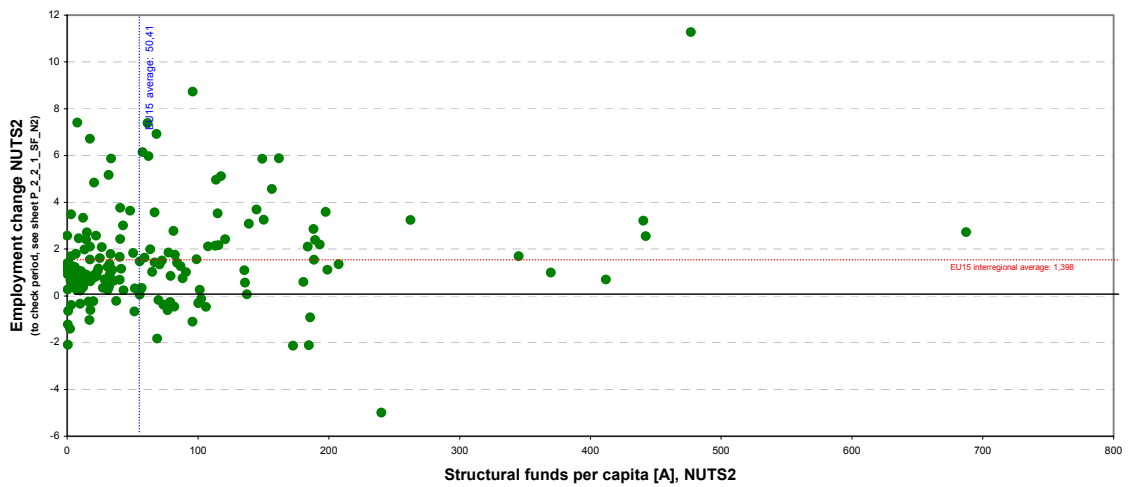
Structural funds per capita [R] at NUTS2 vs Employment change at NUTS2



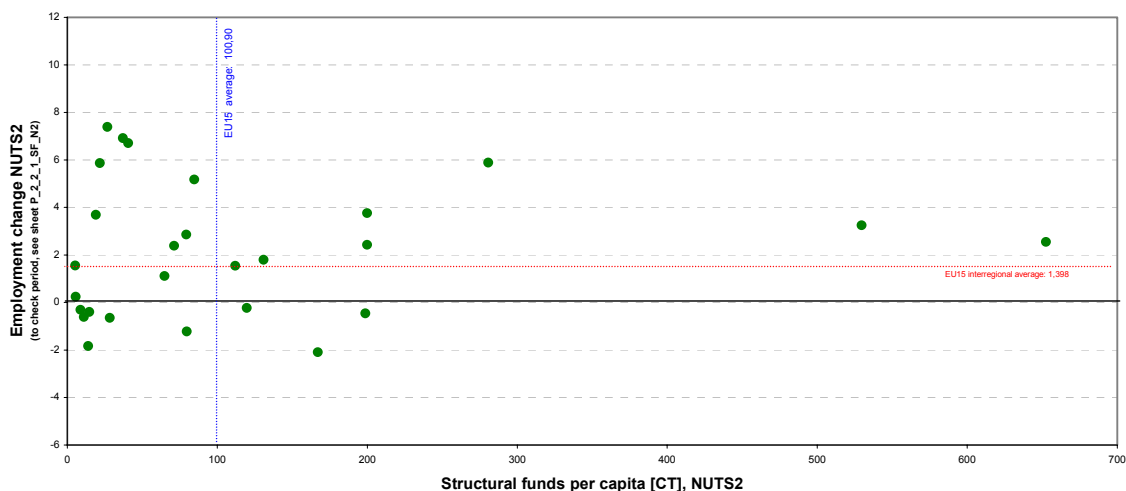
Structural funds per capita [S] at NUTS2 vs Employment change at NUTS2



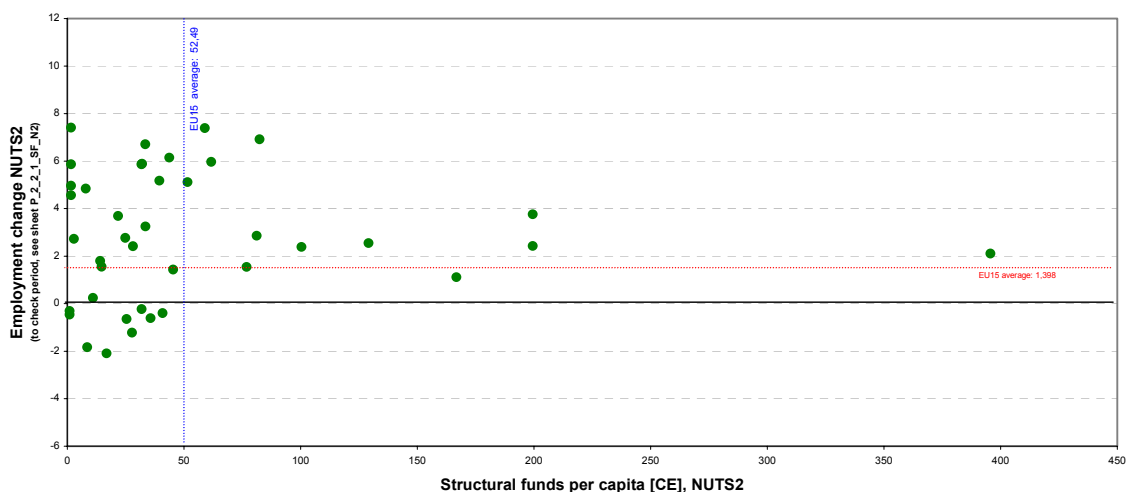
Structural funds per capita [A] at NUTS2 vs Employment change at NUTS2



Structural funds per capita [CT] at NUTS2 vs Employment change at NUTS2



Structural funds per capita [CE] at NUTS2 vs Employment change at NUTS2



Data on employment change refers to the period 1995-2001, except for:

- Tees Valley and Durham, Northumberland, Tyne and Wear, Cumbria, Cheshire, Greater Manchester, Lancashire, Merseyside, East Riding and North Lincolnshire, North Yorkshire, South Yorkshire, West Yorkshire, Derbyshire and Nottinghamshire, Leicestershire, Rutland and Northants, Lincolnshire, Herefordshire, Worcestershire and Warwickshire, Shropshire and Staffordshire, West Midlands, Bedfordshire, Hertfordshire, Essex, Berkshire, Bucks and Oxfordshire, Surrey, East and West Sussex, Hampshire and Isle of Wight, Kent, Gloucestershire, Wiltshire and North Somerset, Dorset and Somerset in the UK (1996-2001)
- Uusimaa and Etelä-Suomi in Finland; Guadeloupe, Martinique, Guyane and Réunion in France; Småland med öarna and Västsverige in Sweden; Inner London, Outer London, Cornwall and Isles of Scilly, Devon, West Wales and The

Valleys, East Wales, North Eastern Scotland, Eastern Scotland, South Western Scotland and Highlands and Islands in the UK (1995-2001)

- Ireland; Chemnitz, Dresden and Leipzig in Germany (2000-2001)
- Koblenz, Trier and Rheinhessen-Pfalz (1995-1998).