

Territorial evidence and cooperation: Linking analysis and action

INTERACT-ESPON Synthesis Report, final results by winter 2006/2007





ESPON Coordination Unit
CRP HT - BP 144
L-4221 Esch-sur-Alzette
Luxembourg

info@espon.eu
www.espon.eu



INTERACT Point Qualification and Transfer
Jernbanegade 22
DK-8800 Viborg
Denmark

ip.qt@interact-eu.net
www.interact-eu.net

The present report has been prepared as part of the INTERACT-ESPON cooperation. The report was drafted by Kai Böhme on the basis of inputs from Camila Cortés Ballerino, Alexander Dubois, Erik Gløersen, Johannes Klein, Saskia Newry, Jos Muskens, Kaisa Schmidt-Thomé, Philipp Schmidt-Thomé, Dominic Stead, José Gabriel Sterling, Thomas Stumm, Jacques Robert, Lisa Van Well and Wil Zonneveld. To some extent the text is taken directly from these inputs which have been prepared in form of the five thematic ESPON-INTERACT studies. These studies are available on the INTERACT and ESPON websites.

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Foreword

Territorial cooperation and applied territorial research can contribute to tailor-made policy mixes and actions supporting territorial competitiveness and cohesion in Europe. When territorial cooperation under INTERREG and European applied territorial research under ESPON join forces the interplays between (a) European and local knowledge and analysis and (b) action can become important means for territorial development in Europe.

INTERREG is a European Community Initiative offering local and regional actors a platform for cross-border, transnational and interregional cooperation. This is designed to strengthen economic and social cohesion throughout the EU by stimulating local and regional actors to take action together with colleagues from other countries.

INTERACT has been set up to review the diversity of INTERREG activities and facilitate mutual learning between INTERREG programmes from all strands and from all over Europe. The main focus of INTERACT activities has so far been on the management side of INTERREG programmes, i.e. the governance of territorial cooperation.

ESPON, the European Spatial Planning Observation Network, has been set up to support policy development in the field of European territorial development. The main aim is to increase the general body of knowledge about territorial structures, trends, perspectives and policy impacts in an enlarging European Union.

The report presents the findings of the cooperation between INTERACT and ESPON in 2004 – 2006. The aim of this cooperation was to stimulate the mutual exchange between territorial cooperation under INTERREG projects and applied territorial research in ESPON. Bringing together experiences made within INTERREG projects and knowledge provided by ESPON, mutual learning has been stimulated, synergies between the programmes have been developed and gaps and possible future activities have been discussed. For ESPON this was also an important platform for dialogue with potential users of the knowledge provided on European territorial development.

The heart of the cooperation were five thematic studies and six events related to these studies. These studies and events have been the backbone of the present report. We would like to thank the authors of the studies, the participants who actively participated in the seminars and workshops, as well as all project and programme representatives who provided information, responded to questionnaires and have been available for interviews for their contributions.

The results are disseminated in an open and transparent fashion in order to continually nourish discussion of the interplay between territorial cooperation and applied territorial research.

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Summary

Territorial cooperation often, but not always, focuses on thematic priorities related to specific territorial characteristics of the regions involved. The knowledge of the specificities of an area in combination with suitable cooperation networks can contribute to developing tailor-made policy mixes for cross-border and transnational territories.

This underlines the fact that European territorial cooperation (INTERREG) and applied territorial research (ESPON) can mutually benefit from each other. In order to further investigate the possibilities for mutual learning INTERACT and ESPON have cooperated on a series of studies and events investigating INTERREG activities and ESPON results. The purpose of this was to stimulate discussion and information dissemination between the two communities.

The main findings highlight (a) the communication difficulties between these two communities, (b) the territorial focus and location of transnational cooperation, and (c) first ideas on possible synergies and gaps in the interplay between territorial cooperation and applied territorial research.

Communication challenges

So far there has only been a very limited interaction between INTERREG projects and applied ESPON research. The activities carried out are interlinked and both INTERREG projects and ESPON research aim at informing and contributing to policy strategies at various levels of decision making. In this process INTERREG projects and ESPON research can mutually benefit from each other and do so increasingly. Some of the main reasons why the communication is only developing slowly can be identified:

INTERREG III projects and applied ESPON research started simultaneously. Numerous INTERREG project partners have generally expressed their interest in ESPON results but pointed out that these have been available too late to be integrated in their projects. Indeed, the first results of the applied ESPON research were only available in late 2004 when most INTERREG activities were already well underway.

The different communities are not very well inter-linked. In addition to the question of time, lack of knowledge about the existence and availability of applied ESPON results is hampering communication. Indeed, many INTERREG project partners do not know about ESPON. Also within INTERREG project partners tend to have only little knowledge about projects in other programmes which could connect with their own activities thematically or geographically.

There is no common language. Whereas ESPON works exclusively in English, INTERREG cooperation takes place in many different European languages. Therefore, information available in English might not necessarily be easily accessible to all INTERREG cooperation partners. The same is true for the communication between projects from different INTERREG programmes as they might use different languages and thus cannot easily access each others' information.

INTERREG projects and applied ESPON research use different terminologies. The terminology used by ESPON reflects mainly the language of European and national policy makers which differs from the terminology used by the regional and local actors engaged in INTERREG.

A central access point to information on INTERREG projects is missing. For the applied ESPON research looking into INTERREG activities, the lack of a collective source for project information has been a major obstacle. The ESPON-INTERACT cooperation spent considerable resources on the collection of information about 8 512 of the approx 9 000 projects funded under INTERREG III.

Territorial focus and location of transnational cooperation

The territorial focus and location of transnational cooperation has many dimensions. In the following the main conclusions with regard to INTERREG activities approaching the territorial structure have been collected. Thereafter a few additional aspects are highlighted regarding three selected topics: Hazards, spatial visions and cross-border projects.

Territorial structure

Territorial structures have been approached by a wide range of INTERREG projects. The majority of them are IIIB projects but there are also considerable numbers of IIIA and IIIC projects active in this field. The projects approached issues related to urban networking, polycentric urban development, rural-urban cooperation, transportation and communication at various geographical levels. In the majority of the projects the territorial structure has been dealt with as a means of improving the competitiveness and cohesion of an area.

The urban system has been approached to increase territorial integration. Projects in this field have been working on challenging the European core-periphery pattern, strengthening transport links and medium-sized cities and stimulating the development of secondary nodes. The development of centres of excellence, often in medium-sized towns, is increasing the economic cohesion of the European territory by decentralising economic competitiveness outside the metropolitan areas. Moreover, these growth poles often also act as regional gateways, essential for supporting the endogenous development of surrounding communities. For these often small communities, the emphasis is put on the revitalisation and regeneration of the policy tools at their disposal, enabling them to adapt to the changing political and economic context.

Economic growth and potentials for balanced economic development have been approached at all levels. Projects in this field worked with strengthening metropolitan areas and their role in global competition, stimulating economic complementarities between cities and local economic development. The projects show that there is a permanent interplay between the need for improving (a) competitiveness capitalising on the potentials of all regions, and (b) cohesion reducing the disparities between areas. Territorial cooperation can play an important role in this interplay through the connection of areas and their potentials, and capitalising on comparative advantages.

Territorial governance the key to fully utilising an area's potentials. Territorial cooperation projects are used for building coalitions of cities in order to increase their competitiveness with major metropolitan areas. Other projects work on new ways of approaching regional develop-

ment, planning and territorial management or the issue of vertical integration in regional development. In all cases territorial cooperation aimed at the empowerment and the building of renewed capacity for action of local and regional actors and to stimulate their ability to be proactive in the development of their territory.

Stimulating economic and social development is a cooperation topic in rural areas. Territorial cooperation focuses not only on urban but also on rural areas. Striving for agricultural diversity, economic diversification in rural areas and an improved business environment are key aspects in this context. This corresponds to the fact that agriculture is increasingly losing its importance for the economic development of rural areas and that other sectors and local entrepreneurship therefore need to be stimulated.

Provision of services of general interest is addressed by cooperation in remote areas. The provision of services and facilities is addressed by a range of projects e.g. in terms of multifunctional sites offering a wide range of services, mobile services moving around in an area but also the improvement of services provided in small and medium-sized cities as poles in a wider region. Actions may also include the facilitation of service provision across national borders.

Consumption and amenities are territorial development potentials. Territorial cooperation projects address issues of consumption and amenities not least as a feature of rural-urban relations. The activities can range from increasing awareness and use of local products to rural tourism and sound management of the landscape, built environment and environment.

Sustainable transport and secondary networks are territorial cooperation features. Territorial cooperation projects in the field of transport tend to have larger financial envelopes than other projects. Their work focuses often on issues of sustainable transportation and the development of secondary networks. In the transnational areas also larger transportation structures are also addressed.

Territorial cooperation can promote the diffusion of innovation and knowledge. In particular in the field of ICT, improved service provision and the diffusion of innovation and knowledge are key issues. The concrete actions

include e.g. cross-border implementation of telecommunication techniques for education (e-learning) and health care (medical interfaces).

Demographic development is an emerging issue for cooperation on territorial structures. Issues related to demographic development are interesting for all types of regions, e.g. both regions facing demographic decline and also growth regions. The few projects addressing demographic development often do so embedded in a wider cooperation subject, partly also related to rural-urban relations. A very few projects focus entirely on the issue of population development and migration.

There is no one-size fits all approach to the development of the territorial structures. This is clearly illustrated by the range of projects, each of which takes its point of departure in the territorial specificities of the project areas or the areas of the project partners.

Metropolitan areas are not so often involved in cooperation on urban networking and rural-urban relations. Generally the main cooperation partners for urban networks come from second tier cities and for rural-urban relations the partners are mainly from rural areas and small and medium-sized cities.

Hazards

Hazards as a topic for territorial cooperation have been a special feature of the review.

Hazards projects have been launched under a variety of programme priorities. Territorial cooperation addressing hazards and risk management has partly been launched under priorities which do not explicitly address hazards. This means on the one hand that the programmes have been flexible, and on the other hand, that regional and local actors felt a need for risk management related projects.

Floods are the most popular hazards cooperation issue. Territorial cooperation addresses a variety of hazards involving avalanches, droughts, earthquakes, extreme temperatures, floods, forest fires, landslides, storm surges, technological hazards and winter storms. Among these, floods have been addressed by the projects significantly

more often than any other hazards. This is followed by technological hazards (which include a wide range of different hazards) and landslides.

Territorial cooperation does not follow the territorial hazards pattern at European level. The areas with the highest risks or reoccurrence of specific hazards are not necessarily the areas with the highest cooperation intensity on that specific hazard. This can partly depend on the possibilities opened by the respective programmes and partly on the fact that the European picture is based on larger regions which cannot always reflect local peaks.

Spatial visions

Integrated strategic development concepts for larger cross-border or transnational territories can be important means for targeting regional development efforts and also for the development of priorities within cooperation programmes.

All three strands of INTERREG involve cooperation on territorial development perspectives for larger territories. They aim at facilitating a strategic approach to the development of the area or assisting focused decision making within the programme cycle. There are more activities of this kind under INTERREG IIIB, but a number of IIIA programmes and projects under IIIC also deal with spatial visions, development concepts and perspectives.

Spatial visions have a clear thematic focus. Traditionally, spatial visions have a wide thematic focus. Increasingly however, territorial cooperation on larger spatial visions is adopting a clear focus. This reflects the specific territorial potential and challenges of the transnational or cross-border area in question.

The application strategy of spatial visions is becoming more important. Generally, it can be seen that application strategies and mental ownership of relevant stakeholders have received a higher importance in INTERREG III activities as compared to INTERREG II. Well differentiated application strategies showing a strong stakeholder-orientation can especially be found in cross-border development concepts.

Cross-border cooperation

Cross-border projects funded under INTERREG IIIA are certainly reflected in the conclusions above. However, there are a few conclusions which concern these projects in particular:

Cross-border cooperation concentrates largely on issues of the Lisbon-Gothenburg Strategy. Indeed, about one fifth of all cross-border cooperations address the issue of economic growth, employment and competitiveness. This is closely followed by knowledge sharing, innovation and research. Thereafter come topics related to cross-border social interaction, environment and quality of life.

Hard infrastructure projects have higher budgets. At first glance it appears that in cross-border cooperation hard infrastructure projects are less addressed than projects with soft priorities (in terms of numbers of projects). This is mainly caused by the fact that average budgets of a project focusing on transport or ICT issues tend to be 2 to 3 times higher than the average budget of projects on other themes.

There are thematic clusters of cross-border cooperation. Examples for this are: Cross-border cooperation focusing particularly on economic growth, competitiveness and employment tend to be located in areas with large economic disparities. Cross-border cooperation focusing on knowledge sharing, innovation and research are mainly located in an arc around the northern, western and southern peripheries of Germany.

Possibilities for mutual benefit

Territorial cooperation projects and applied European territorial research have considerable possibilities to mutually benefit from each other.

Territory matters for cohesion and competitiveness. This is a clear message derived from applied ESPON research as well as from many INTERREG projects. The territorial specificities of an area are decisive for defining tailor-made policy mixes and actions to further stimulate competitiveness and territorial cohesion in Europe.

ESPON research provides insights on the framework conditions. The comparative European picture on territorial structures, trends and policy impacts has mainly been addressed by applied ESPON research and in selected INTERREG projects. This picture offers the possibility to consider areas in a larger territorial context and to uncover comparative advantages in relation to other areas.

INTERREG stakeholders have the tacit knowledge on the potentials of their area. The detailed picture on the preconditions for development involves good factual knowledge about an area but also a great deal of tacit knowledge. The tacit knowledge of an area and its territorial potentials and challenges are valuable assets for regional and regional actors. Together with the comparative European-wide analysis, this local knowledge provides a good picture of the development potentials and challenges of a specific area.

A few topics might deserve more attention in future. Generally, programme activities show a good coverage of the relevant territorial topics. However, it has been suggested that a few topics should receive greater emphasis in both territorial cooperation and applied research: demographic developments and coping strategies, flows between territories, water as a resource, renewable energy as a development potential, ties between rural and urban areas, hazard vulnerability reduction, climate change and institutional capacity.

The European and local pictures need to communicate. In order to achieve a situation where the European and the local or regional picture can complement each other and enrich decision making, they need to find a common language and communicate about the information needs of the one from the other. In that respect the INTERACT-ESPOON cooperation has made first steps to establish this communication and identify areas where more European wide comparative knowledge is needed and where already existing knowledge could be taken on board in future territorial cooperation. The main points of this are reflected in the final chapter of this report.

To improve the mutual benefit, communication needs to be strengthened. The dialogue between territorial cooperation and applied European territorial research which started during the INTERACT-ESPOON cooperation

needs to be further strengthened in the years to come in order to assure mutual benefits and facilitate the interplay between analysis and action. Both INTERACT and ESPON communities have prepared for this in their programming documents, but it needs also the active participation of all members of the respective communities.

1. Introduction

Territorial cooperation offers local and regional actors the possibility to enter into common activities and exchange of experience designed to strengthen economic and social cohesion throughout the EU by fostering the balanced development of the continent through cross-border, transnational and interregional cooperation.

During the Structural Funds Period 2000-2006 INTERREG III has provided an EU funding framework for territorial cooperation. Approx 9 000 territorial cooperation projects have been funded under 64 cross-border (strand A), 13 transnational (strand B) and the interregional (strand C) programmes.

The INTERREG projects have addressed a number of territorial features contributing to territorial competitiveness and cohesion in Europe. Furthermore, the projects have been meeting points for local and regional actors facing comparable territorial development conditions.

These projects have been developed on a bottom-up basis taking into account local and regional knowledge about the needs of the cooperation areas. This, in addition to the decentralised management of INTERREG, implied that there is no comprehensive overview on which project activities are taking place where in Europe.

In parallel to the European territorial cooperation activities, comparative European applied territorial research has been conducted by ESPON. This applied research provides up-to-date insights on the territorial structures, trends, perspectives and policy impacts in an enlarged European Union.

In order to simulate the mutual exchange between territorial cooperation projects and applied territorial research, INTERACT and ESPON worked together on a series of studies and events. The main purpose of this was to stimulate discussion and information dissemination between the two communities with the underlying questions:

- (a) Is there any specific comparative European territorial knowledge which would further facilitate territorial cooperation on the ground?

- (b) Are there any topics or geographical features that stand out in European applied territorial research which might deserve additional attention by territorial cooperation activities?

To approach these questions, five thematic studies with corresponding events approaching both the INTERREG and ESPON community have been conducted:

- Accessibility, transport and communication networks (event: 21-22 June 2005 in Prague, Czech Republic)
- Environmental hazards and risk management (event: 29-30 November 2005 in Valencia, Spain)
- Polycentric urban development and rural-urban partnership (event: 25 April 2006 in Den Haag, the Netherlands)
- Spatial visions and scenarios (events: 24-25 February 2005 in Brussels, Belgium, and 27-28 February 2006 in Milan, Italy)
- Cross-border cooperation (event: 14 June 2006 in Riga, Latvia)

Each of these studies and related events discussed current ESPON and INTERREG projects on the themes covered in order to simulate mutual learning, the exploitation of potential synergies, and to provide new ideas for future activities in these fields. Whereas the studies focused on providing an overview and input for discussion, the events offered an important platform for networking also between different INTERREG projects and partners. For ESPON this facilitated the dialogue with potential users of the knowledge provided on European territorial development.

The idea to match the bottom-up view on the development of the European territory – as developed in INTERREG projects – with the comparative view on European territorial development, presented by ESPON, faced a challenge in the decentralised structure of INTERREG. This made it necessary to spend considerable time and resources on collecting information on INTERREG projects. Indeed, the information needed to be collected from the ground by contacting single programme secretariats and partly even project partners.

This challenge has influenced the work on the five studies where the first studies still had to rely on fragmented information on INTERREG project activities whereas the later studies could base themselves on a rather comprehensive view of INTERREG project activities. Thus the level of information has been successively improved from study to study.

In this report the most important findings from these studies are summarised. However, they are not presented one by one but have instead been integrated under three major chapters, where almost all studies have contributed to each chapter.

Similarly, the results from the workshops and discussions have been integrated in the various chapters in order to provide a lively picture of territorial cooperation and research in Europe.

The main findings and conclusions of these efforts are highlighted in the summary of the report which precedes this introduction.

Two background chapters on territorial cooperation and applied territorial research set the scene for the discussions ahead.

There is also a short introduction on the European territorial cooperation presenting the main characteristics of INTERREG and also some information on territorial hotspots of INTERREG activities.

Territorial developments in Europe are presented by a first general introduction into the main findings deriving from ESPON research and thereafter a few more detailed presentations of territorial patterns related to the main topics of European territorial cooperation policies.

These two background chapters are followed by three chapters bringing together the experiences of INTERREG projects and knowledge provided by ESPON.

The first of them focuses on territorial structures and presents main reflections in the field of urban networking (polycentric development) and cooperation between rural and urban areas. In both cases this involves also accessibility, transportation and communication issues.

This is followed by a chapter on natural hazards. It discusses location of various types of natural hazards in Europe and of INTERREG projects addressing shows that hazards and risk mitigation and touches also on the issue of technological hazards.

The next chapter focuses on territorial development perspectives. In this chapter the work on spatial visions and scenarios as well as larger territorial development strategies mainly carried out in transnational cooperation but also in cross-border and interregional cooperation are discussed. This discussion is also related to the ESPON work on territorial development scenarios for Europe.

The third chapter of this group focuses on cross-border cooperation. This chapter provides a brief overview on the coverage of territorial development issues in cross-border cooperation.

The main conclusions of all these chapters are finally brought together in the last chapter of this report. This chapter provides food for thought regarding the dialogue required between the different communities and discussions for future territorial cooperation and research activities and themes.

All in all the report gives a flavour of the cooperation between ESPON and INTERACT and what it has achieved in bringing INTERREG activities and ESPON findings closer to each other. The events and discussions with stakeholders have shown that these types of activities are very much needed. Although the single studies have been particularly challenging because of the lack of necessary information, the results provided interesting stimulus for discussion during the related various events – and hopefully also for the readers of this report. Last but not least, the events have been valuable dialogue platforms which certainly deserve more attention in future.

As for the projects mentioned and partly presented in this report, it has to be noted that these are only examples of possible territorial cooperation activities in a field. The ambition is neither to provide comprehensive overviews on project details nor to present best practice projects.

2. INTERREG cooperation

INTERREG III is a Community Initiative which aimed to stimulate interregional cooperation in the EU between 2000-06. It is financed by the European Regional Development Fund (ERDF).

INTERREG III is designed to strengthen economic and social cohesion in the European Union (EU) by promoting cross-border (strand A), transnational (strand B) and inter-regional (strand C) cooperation.

- Cross-border cooperation between adjacent regions aims to develop cross-border social and economic centres through common development strategies. In total there are 64 INTERREG IIIA programmes and the issues addressed in these cooperations are the promotion of urban, rural and coastal development, strengthening the spirit of enterprise, developing small and medium-sized enterprises including those in the tourism sector, developing local employment initiatives, assistance for labour market integration and social inclusion, initiatives for encouraging shared use of human resources, and facilities for research and development, education, culture, communication, health and civil protection, measures for environmental protection, improving energy efficiency and renewable energy sources, improving transport, information and communication networks and services, water and energy systems, increasing cooperation in legal and administrative areas, and increasing human and institutional potential for cross-border cooperation.
- Transnational cooperation involving national, regional and local authorities aims to promote better integration within the Union through the formation of large groups of European regions. In total there are 13 transnational INTERREG IIIB programmes. They follow the recommendations of the ESDP (European Spatial Development Perspective) to encourage a sustainable and balanced development of the European territory. These programmes also promote better integration between the Member States and candidate countries and other neighbouring countries. The issues addressed are drawing up regional development strategies at transnational level, including cooperation between towns or urban areas and rural areas, promot-

ing effective and sustainable transport systems, together with better access to the information society with the aim to facilitate communication between island or peripheral regions, and promoting protection of the environment and natural resources, particularly water resources.

- With INTERREG IIIC, interregional co-operation between regional and other public authorities across the entire EU territory and neighbouring countries is promoted. The cooperation covers the entire EU territory, although the programme is formally divided into four zones. The activities under the programme allow regions without joint borders to work together in common projects and develop networks of cooperation. The cooperations under INTERREG IIIC give access to the experience of other actors involved in regional development policy and create synergies between "best practice" projects and the Structural Fund's mainstream programmes. The overall aim is to improve the effectiveness of regional development policies and instruments through large-scale information exchange and sharing of experience (networks) in a structured way.

Altogether approx. 9 000 projects are funded by these three INTERREG strands. 7 702 IIIA, 810 IIIB and 264 IIIC have been identified and taken into consideration by the research projects on which this report is based. The focus and type of activities carried out by these projects varies between the strands and depends also on which programme they are funded by and the socio-economic and territorial preconditions in the regions.

The involvement of stakeholders in INTERREG projects differs widely throughout Europe. The map gives a first impression on the level of engagement in transnational and cross-border cooperation.

The green circles on the map reflect the number of transnational project cooperations in which actors from a region are involved in. The picture shows clear differences in the cooperation intensity within cooperation areas and regions. Generally, inland regions tend to be less involved in transnational cooperation, whereas the highest number

of project participants can be found in Andalusia (Spain), Provence-Alpes-Côte d'Azur (France), Slovenia, Mecklenburg (Germany), Denmark, Southern Sweden, Southern Finland, Estonia, Latvia and Lithuania.

The brown layer on the map reflects not the number of cross-border INTERREG projects, but the number of cross-border programmes in which a region participates. This includes also Euroregions¹, Scandinavian types of Euroregions² and Working Communities³, which are important forerunners of INTERREG IIIA. The picture shows that membership in a Euroregion or similar is not only limited to cross-border regions as delineated by INTERREG IIIA programmes, but has a larger territorial coverage. Nearly all INTERREG IIIA regions cooperate in at least one Euroregion or Working Community and several cooperate in five or more programmes. However with the exception of the Douro and Alto Trás-os-Montes regions in Portugal and the Traunstein, Kempten, Lindau and Oberallgäu regions of Germany, many "hot spots" of Euroregion or Working Community cooperation do not necessarily exhibit a high intensity of INTERREG IIIA projects.

The most INTERREG IIIA projects per region can be recorded in the Spanish-Portuguese programme and in the Austrian border regions with Germany and Italy, followed

by the Swedish-Norwegian and the Ireland-Northern Ireland programme. Generally, Austria tends to have a very high intensity of INTERREG IIIA cooperation with all of its neighbours. Lower project intensity is seen in border regions in the Member States which joined in 2004 or later, partly due to the fact these programmes started later than the other programmes. However, it also has to be taken into account that the number of projects depends on the type and size of single projects as well as on the financial envelope of the programme. As both these factors differ widely between the programmes, the number of INTERREG IIIA projects in which a region participates is not presented in map format.

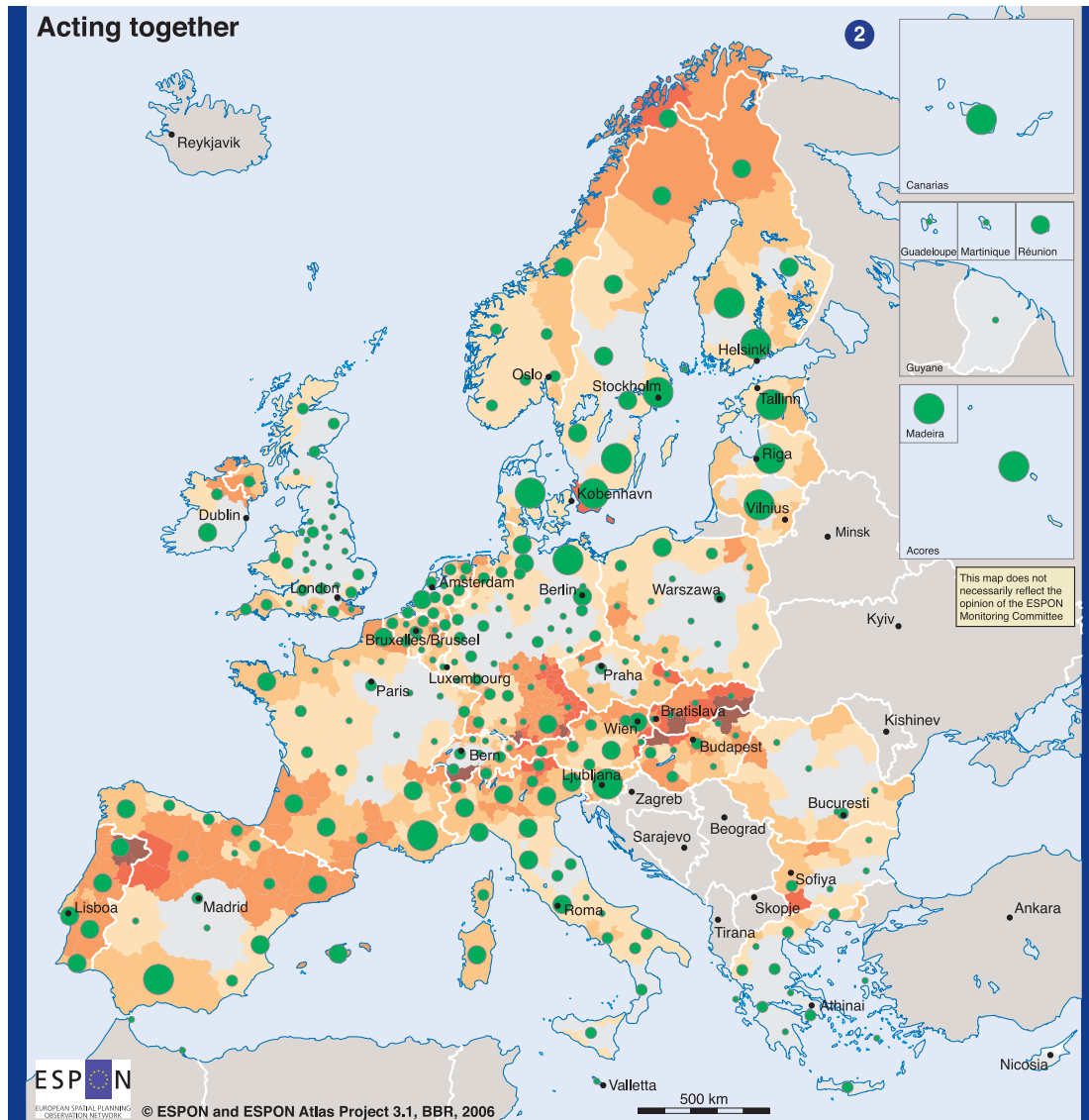
Keeping the diversity of INTERREG under review and facilitating mutual learning between INTERREG programmes from different parts of Europe and different strands is one of the tasks of INTERACT. INTERACT stands for INTERREG Animation Cooperation and Transfer. INTERACT has a wide geographic scope covering the EU Member States and neighbouring countries. The core of the INTERACT Programme is to set up information and communication networks, to define information frameworks and flows, to proactively disseminate information and to stimulate exchange of experiences.

¹ Legally Euroregions differ among each other in terms of internal organisation, but some common factors identified are that all of them are permanent, they have a separate identity from their members, they have their own administrative, technical and financial resources and their own internal decision-making capacity. These types of structures are not considered a new level of local or regional governance, but rather an exchange space for public and private actors to conclude agreements of interest to both sides of the border. Several different names can be used to classify a cross-border structure under the category of Euroregion. Thus some of the cross-border regions are also called Euregio, Euroregion, Europaregion, Grand Region, Regio etc.

² The Scandinavian type of Euroregion was one of the pioneers in cross-border cooperation. It differs from other Euroregions in, amongst other things, the fact that it has been established in a top-down rather than bottom-up manner and their geographical coverage is much smaller than that of other Euroregions.

³ Working Communities refers to the largest scale of cross-border cooperation structures. Basically, these structures are associations of regional or local authorities, or any other type of organisation which decided to sign some type of legally non-binding agreement in order to create a transnational structure for achieving common goals.

Figure 1: INTERREG IIB projects and cross-border cooperation structures



Intensity of participation of NUTS 3 regions in projects of Cross border Cooperations Regions (including Euroregions, Scandinavian type of Euroregions and Working Communities)

- Non participant
- Participants in 1 Programme
- Participants in 2 Programmes
- Participants in 3 Programmes
- Participants in 4 Programmes
- Participants in 5 or more Programmes

Number of transnational project co-operations*

- 1 up to 10
- 11 up to 40
- 41 up to 80
- 81 and more
- no data

*in INTERREG IIB co-operation areas: Alpine Space, Atlantic Area, Baltic Sea Region, CADES, Caribbean Area, Madeira - Azores - Canary Islands, North Sea, North West Europe, Northern Periphery, South West Europe, Western Mediterranean, Indian Ocean Area

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 Regional level: Cross Border Cooperations: NUTS 3,
 Transnational Cooperations: NUTS 2
 Origin of data:
 Cross Border Cooperation:
 ESPON INTERACT Cross-Border Cooperation, KTH
 in further development of ESPON Project 1.1.3, KTH;
 Transnational Cooperation: ESPON Project 2.4.2, BBR
Source: ESPON database

Source: ESPON Atlas (2006), page 57

Figure 2: INTERREG IIIA areas



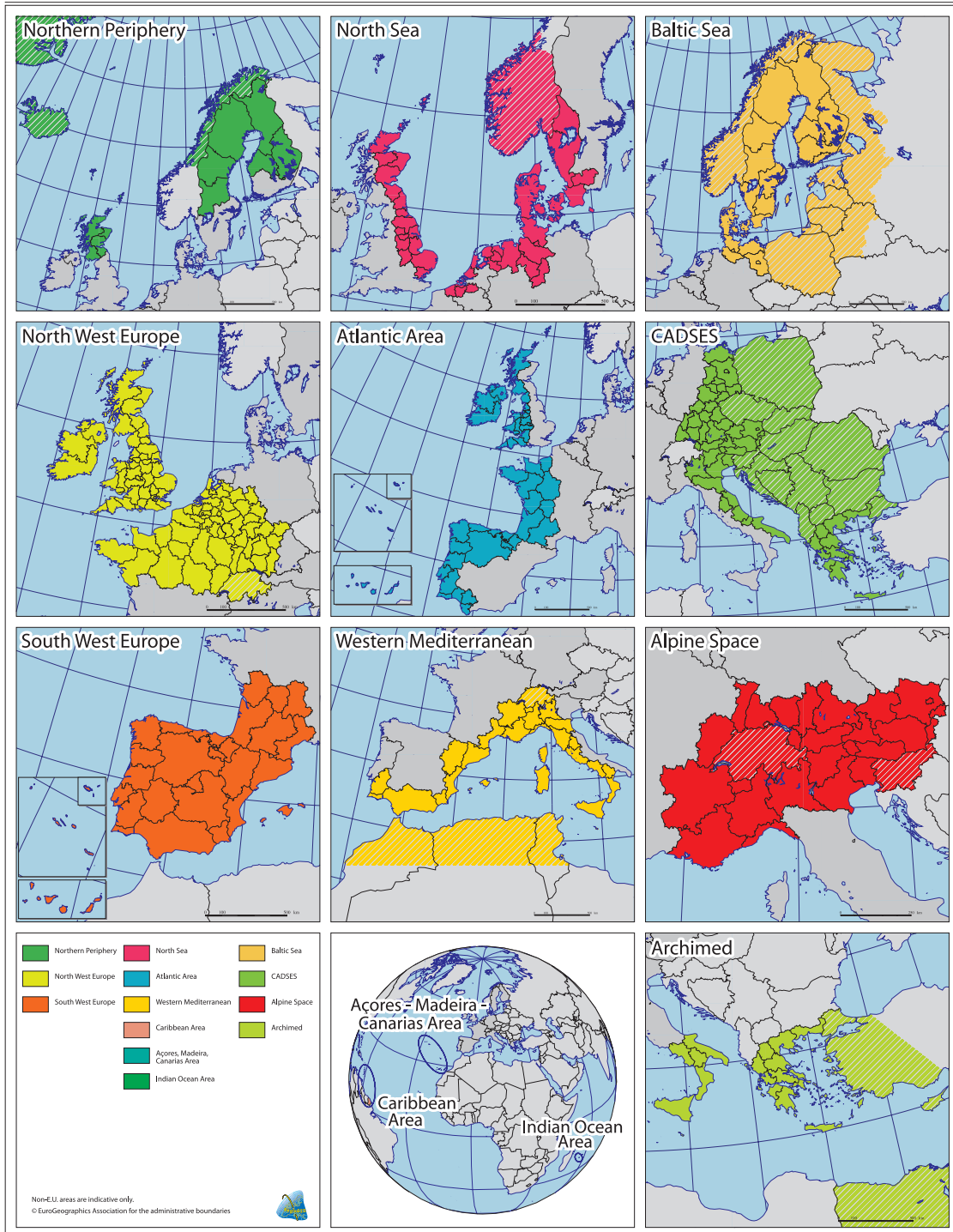
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Source: ESPON-INTERACT INTERREG IIIA Project Database, 2006

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| <ul style="list-style-type: none"> Non participants in INTERREG IIIA 1 Skårgården 2 Kvarken - Mittskandia 3 Bavaria - Austria 4 Austria - Czech Republic 5 Austria - Slovenia 6 Austria - Hungary 7 Austria Slovakia 8 Sweden - Norway 9 Ems - Dollart region 10 Alperhein - Bodensee - Hochrhein 11 Saxony - Poland 12 Sachsen - Czech Republic 13 Rhein-Waal and Rhein-Maas-Noord 14 Brandenburg - Lubuska 15 Italy - Austria | <ul style="list-style-type: none"> 16 Alcotra (Italy-France) 17 Islands (Italy - France) 18 Italy - Slovenia 19 Ireland - Northern Ireland 20 Ireland - Wales 21 Pamina 22 Oberrhein Mitte Süd 23 Bavaria - Czech Republic 24 Fyn - KERN 25 Sonderjylland -Schleswig 26 Storstrom - Ostholstein-Lubeck 27 Germany - Luxembourg - Germanophone Belgium 28 Saarland - Mosel/Lorraine - Western Palatinate 29 Spain - Portugal 30 Spain - Morocco 31 Italy - Switzerland | <ul style="list-style-type: none"> 32 - Öresund Region 33 Greece - Albania 34 Greece - FYROM 35 Greece - Bulgaria 36 Greece - Cyprus 37 Mecklembourg Vorpommern - Poland 38 Euregio Maas-Rhein 39 Euregio Karelia 40 Soth East Finland - Russia 41 France - Switzerland 42 France - Spain 43 Nord 44 Finland - Estonia 45 Grensregio Vlaanderen-Nederland 46 Wallonia - Lorraine - Luxembourg 47 Kent-Sussex - Nord Pas de Calais-Picardie | <ul style="list-style-type: none"> 48 49 France/Wallonia - Flanders 50 Italy - Albania 51 Greece - Italy 52 Greece - Turkey 53 Italy - Balkans - Adriatic 54 Czech Republic - Poland 55 Poland - Slovakia 56 Slovakia - Czech Republic 57 Poland - Ukraine - Belarus 58 Lithuania - Poland - Russia 59 Hungary - Slovakia - Ukraine 60 Hungary - Romania - Serbia - Montenegro 61 Slovenia - Hungary - Croatia 62 Italy - Malta 63 Estonia - Latvia - Russia 64 Latvia - Lithuania - Belarus |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
- /// NUTS3 involved in more than one INTERREG IIIA

Source: ESPON-INTERACT study on cross-border cooperation (2007)

Figure 3: INTERREG IIB areas in Europe



Source: Inforegio Website

3. Territorial developments in Europe

Territorial development is an important element for competitiveness and cohesion in Europe. For policies and concrete actions addressing territorial development in Europe, reliable evidence on the territorial structures, trends, perspectives and policy impacts in an enlarged European Union is indispensable.

In order to accommodate these needs ESPON, the European Spatial Planning Observation Network, has been set up to support policy development and build a European scientific community in the field of European territorial development. The ESPON 2006 Programme has carried out a number of applied research projects in order to provide this evidence to stakeholders in the field of European territorial development.

This evidence can also be relevant to people working in territorial cooperation programmes and projects.

Before discussing some of these aspects in further detail, the following provides some spotlights on the main findings deriving from applied ESPON research.

Increasing the competitiveness of Europe and its regions is one of the main aims of the Lisbon Strategy. This involves focusing on growth and jobs, as well as developing the necessary preconditions for the future mainly in terms of a Knowledge and Information Society. Only one certain type of regions appears to be really successful with regard to the Lisbon Strategy (see below). However there are also examples of other types of areas which are performing well with regard to economic development. The key to success seems mainly to lie in the active use of territorial potentials for the development of economic functions across a wider area, and support through national policies.

Accessible urban areas show the best Lisbon performance. Assessing the 14 official Lisbon indicators, the territorial pattern of Lisbon performance clearly corresponds to the pattern of major accessible urban regions. Furthermore, it appears that regions in the core and the north of Europe are generally in a better position than southern and eastern regions. Indeed, the Nordic countries illustrate that even less urbanised and less accessible areas can score well on the Lisbon indicators.

Innovation potential, such as R&D and creativity, has a distinct territorial pattern. Combining data on the regional importance of R&D and the number of private sector researchers in a region, the statistics demonstrate the relatively weak position of the European periphery, except for the Nordic Countries. Focusing on single regions, the metropolitan areas of Europe are mainly situated in regions of above average importance in terms of R&D. This territorial pattern is largely replicated in the regional share of cultural employment, which includes “creative” jobs that normally stimulate the processes of innovation.

Accessibility and infrastructure are important for regional development. With regard to multi-modal accessibility, there is a core-periphery pattern across Europe and also within countries. These might be affected by any rises in energy prices. ICT is often considered to be a “friction-less” substitute for physical movement. However, the route to an Information Society also shows considerable territorial variations.

Accessibility is best in the European core and national capitals. European-wide disparities in multi-modal accessibility show better overall accessibility for regions in the core of Europe and larger urban agglomerations, in particular those with international airports. The European core-periphery pattern is even more pronounced for accessibility by road or by train. This underlines the importance of airports to balanced European-wide accessibility.

Increasing energy prices will have negative impacts on accessibility, particularly in rural and more remote areas. Such regions already have to contend with relatively poor accessibility; higher transport costs will compound this problem. Thus disparities between areas with high and low accessibility might increase.

ICT accessibility and the Information Society vary territorially. Accessibility to modern information and communication technologies shows European north-south and east-west divides, as well as a rural-urban divide. This is true for the provision of infrastructure, the use of it and the economic benefits from it. However, the territorial differences in terms of Information Society performance are smaller than those of the GDP per capita.

Attractiveness and liveability of an area do not only depend on the hard and tangible factors such as infrastructure or human resources. Soft location factors are of increasing importance for an area to be attractive for both investments and also skilled labour. These soft factors include various kinds of social, cultural, institutional, governance and environmental assets and local knowledge. The potentials associated with these “soft factors”, e.g. support of entrepreneurial spirit, differ widely between areas.

The attractiveness and liveability are also influenced by hazards. The impacts of hazards can be widespread and long-lasting, taking for example the environmental and economical effects of droughts. Only a few places have a very low exposure to the main natural and technological hazards in Europe. Currently hazards do not undermine the competitiveness of a region. However, climate change is expected to increase the risk of hazards in the future.

Areas with special geographical characteristics require often tailor-made policy mixes. There are territories with special geographical features (coastal areas, islands mountain areas, and outermost regions) and territories with special governance challenges (border regions). All types of territories have specific challenges and opportunities related to their development. At the same time these overall categories cover a huge diversity of areas with very different development prospects.

Regions with specific geographical features may face specific challenges for human living and economic activity. Generally, accessibility for islands, mountain areas and outermost regions is below European average and in particular in mountain areas also the agricultural output tends to be lower than in other comparable areas. However, they show a spectrum of territorial and economic development similar to less geographically challenged areas. The exact situation of islands, coastal and mountain areas is often difficult to detect when looking at the overall regional performance, as the conditions may vary widely within the regions.

Cross border integration can strengthen functional regions. The characteristics of a national border differ depending on the political, socio-economic and territorial context. In large parts of Europe, open borders allow for the establishment of cross-border functional regions, in many situations with

a polycentric network of cities. Indeed, nearly one quarter of all larger cities have potentials for commuting areas going across national borders.

Transnational cooperation has a focus on the territorial dimension. Transnational cooperation often, but not always, has thematic priorities related to specific territorial characteristics of the regions involved. They can contribute to developing tailor-made policy mixes for the larger territory and its regions and also shaping transnational identity around territorial features and common projects.

Scenarios looking into the future are important tools for informing policy development and assessing policy choices. The development of scenarios for the European territory is based on knowledge and understanding of important drivers. For territorial development these are among others migrations, economic integration, transport, energy, agriculture and rural development, climate change, further EU enlargements and territorial governance. Probing these suggests that the long-term future may require re-thinking and innovation in several fields of policy.

The long-term future may probably not be a continuation of current trends. The long-term evolution of the European territory (beyond a 20 year horizon) may differ significantly from the anticipated short and medium-term trends. For example, the accelerating globalisation, changes in commodity prices at the world market and climate change are among the factors that can influence territorial cohesion and competitiveness of the Europe.

The future might require new and different policy mixes and approaches. Meeting the challenges and impacts that are likely to affect the European territory in the coming decades, may require policies which are departing in many respects from those applied today. Future policies may even need new approaches to be able to contribute to a European development that promotes competitiveness and territorial cohesion.

3.1 Urban areas as drivers for cohesion and competitiveness

The concentration of economic activities and population in the core of Europe has often been recognised. This “Pentagon” formed by London, Hamburg, Munich, Milan

and Paris as its cornerstones, covers 14% of the ESPON space, 32% of its population, produces 46% of the GDP and enjoys 75% of the R&D investments and the highest levels of multimodal accessibility.

Although these figures will not change rapidly, the GDP growth rates (1995 - 2003) show that catching-up processes are taking place. In particular, regions in Ireland, Greece, Spain and Portugal and the EU Member States which joined in 2004, show high growth rates. If these are sustained Europe might move eventually towards a more balanced pattern of development. However, this catching-up process may take many years.

In the longer-term the enlargement or dispersion of the Pentagon, and strong urban agglomerations in more remote locations, might contribute to increased territorial cohesion, as well as the importance of small and medium-sized towns.

The expansion or dispersal of the Pentagon is most notable in the urban agglomerations perceived as engines for economic development. While many of the strongest urban agglomerations in Europe are located in the core or "Pentagon", others such as Rome, Vienna, Bratislava, Prague, Berlin, Manchester and Copenhagen are in close proximity to this core.

An analysis of functional urban areas with regard to their population and significance in respect to (1) private business head quarters, (2) transport hubs, (3) universities, (4) public administration centres and (5) industry illustrates this. Based on the functions and their importance, urban areas can be divided into Metropolitan European Growth Areas (MEGAs), transnational/national urban areas and regional/local urban areas.

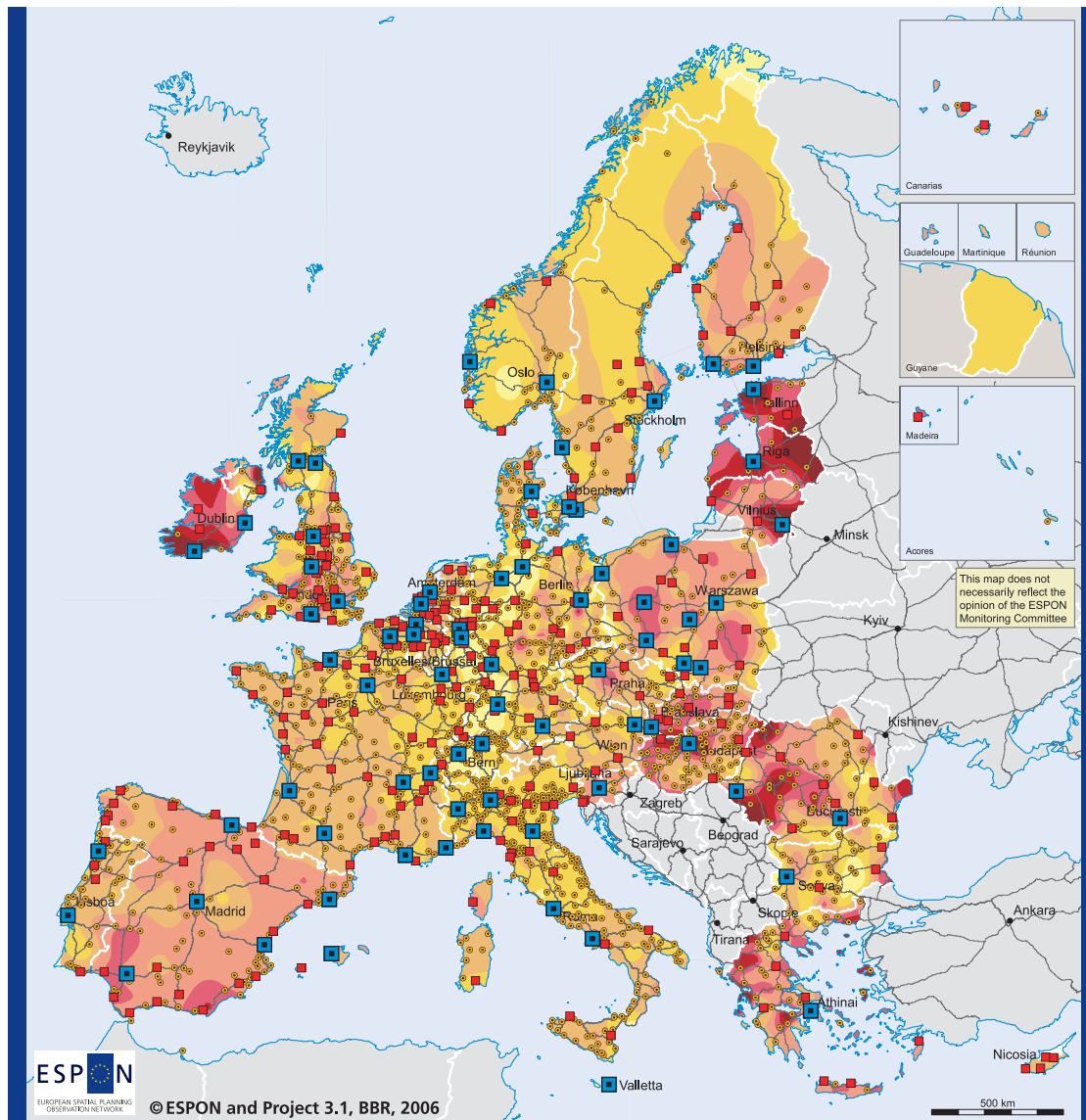
This analysis reveals that the limits of the European core need to be defined more widely today; the cornerstones of this "enlarged Pentagon" might be Manchester, Berlin, Venice, Genoa and Paris. Alternatively, one could depict the integration process as the core spreading along a number of corridors or development axes. One such "extension corridor" is in the UK and stretches through the West Midlands towards Manchester. Another reaches into Central and Eastern Europe, and a third heads into Southern Italy.

There are a number of "isolated hotspots" throughout Europe, which are economic engines outside the Pentagon. Examples are Madrid, Barcelona, and Athens in the south; Dublin in the West; Stockholm, Helsinki, Oslo and Gothenburg in the North; and Warsaw and Budapest in the East.

Urban areas outside the Pentagon also show strongly with regard to economic development, both in terms of GDP per capita in 2003 and GDP per capita growth between 1995 and 2003. Some non-Pentagon areas are even outperforming it in a number of economically significant sectors. For example, the Nordic Countries lead in the ICT sector, while Malta, Slovenia and Estonia are among the pace-setters in broadband and e-commerce.

An important conclusion from the analysis of Europe's metropolitan agglomerations is the significance of their functional specialisation. In particular, smaller as well as larger urban agglomerations all over Europe can be key players for specific functions and can increase their importance over time, eventually also through cooperation on comparative advantages. In the long run this may contribute to more polycentricity and possibly also more territorial cohesion at European level, as a larger number of cities will be of importance with regard to specific functions.

Figure 4: Main economic structure of the European territory



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

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

* Romania 1998 to 2003

Functional Urban Areas (FUAs)

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

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

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for administrative boundaries

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

Source: ESPON database

Source: ESPON (2006) Territory matters for competitiveness and cohesion, page 17

3.2 Rural-urban relations in Europe

The rural-urban dichotomy has long characterised approaches to territorial division, with rural areas perceived as disadvantaged and economically weak. The question of whether this is still valid is fundamental for territorial cohesion at regional level.

Firstly, the diversity of rural areas is as large as that of urban areas. In both cases there are prosperous areas and deprived areas. Secondly, the “tight” connection between rural areas and agriculture should be questioned. Analysis of land use shows, that a lot of agricultural activity takes place very close to urban areas, or even within wider urban regions. Thirdly, different types of rural areas and rural-urban relations offer different development opportunities:

(a) Some rural areas have a symbiotic relation with nearby urban areas. The physical and functional boundaries of urban and rural areas are becoming blurred, while the interdependencies are becoming more complex and dynamic. There are structural and functional urban-rural flows of people, capital, goods, information, technology and lifestyles. The population in these peri-urban rural areas is growing steadily, which also implies challenges related to urban sprawl.

(b) Towns in rural areas are important development poles providing access to a variety of essential services, particularly in sparsely populated regions. The ongoing diversification of the rural economy in many areas emphasises the importance of these towns to their rural areas.

(c) Rural areas in remote locations face diverse demographic challenges and require a more detailed assessment of development opportunities and territorial potentials.

At a European level this distinction is also reflected in the typology of areas ranging from highly urbanised to very

rural. This typology is based on two dimensions. The first dimension is the degree of urban influence defined on the bases of population density and the functional ranking of the urban centres. The second is the degree of human footprint defined on the bases of land covers, which means the share of artificial surfaces and of agricultural land in a region.

This approach shows that areas with high urban influence and high human footprint form a clear line stretching from the west of Germany through the east to southern Poland, northern Czech Republic down to the west of Slovakia and Hungary; with other scattered areas around capital cities and along Mediterranean and Atlantic coasts.

At the other extreme are the remotest rural areas - those with low urban influence and low human footprint. These can be found mainly in the peripheral parts of Finland and Sweden in the north, Ireland in the west, and Greece in the southeast.

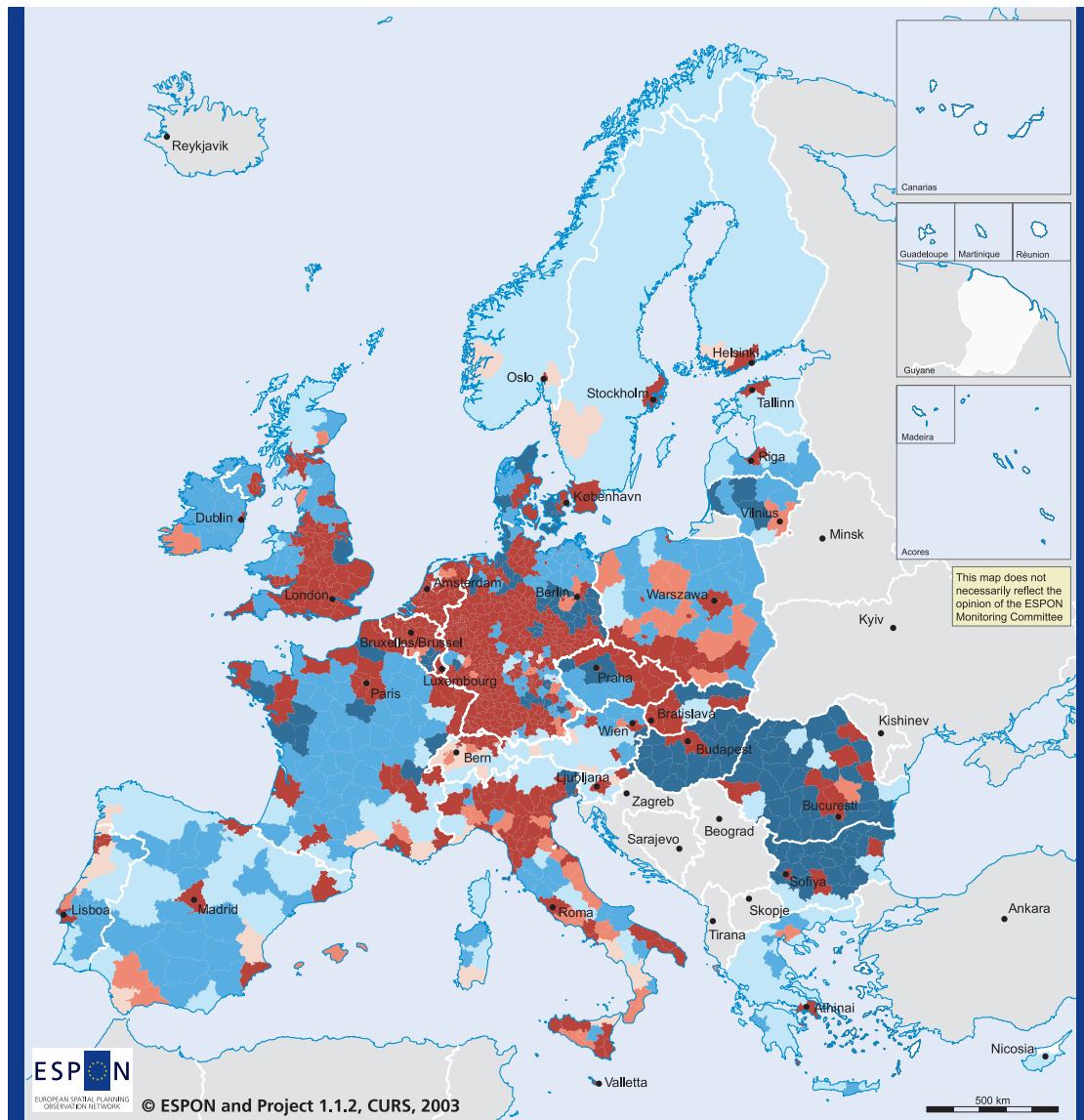
The different territorial contexts shape also the nature of rural-urban relations. Generally, they need to consider tangible factors, as well as intangible or “soft” factors and local entrepreneurial capacity to jointly capitalise on their territorial potentials.

Among the tangible factors to mention are natural and human resources, investments, infrastructure and business premises, which traditionally have been seen as the main determinants of economic performance.

The intangible factors include various kinds of social, cultural, institutional, and environmental assets and local knowledge, which contribute to the territorial capital that is the platform for regional development.

The challenges of rural-urban relations should certainly not be forgotten either.

Figure 5: Rural-urban typology



Source: ESPON (2006) Territory matters for competitiveness and cohesion, page 17

3.3 European accessibility patterns

Measurement of Europe-wide accessibility provides important evidence for European cohesion and transport policies. The quantity and quality of a region's infrastructural endowment, as well as distance to population and/or economic centres, plays an important role. The concept of potential accessibility has been developed in order to cover these aspects in one indicator: the opportunities to be reached (here: number of people) in a certain territory (here: all of Europe) weighted by the effort in terms of distance, time or cost (here: time).

There is a clear distinction between the centre and the peripheries of Europe in terms of accessibility by road for movement of people (see map). The regions in Belgium, the Netherlands and in the western parts of Germany have highest accessibility values in Europe leading partly to a level which more than doubles the European average. But also regions in northern and eastern parts of France, in the south-east of England, in Switzerland, western parts of Austria and northern parts of Italy have very good accessibility by road. In all these regions which are also located around the geographical centre of Europe, the combination of good road infrastructure in form of dense motorways and the high concentration of population leads to these favourite positions. Accessibility by road decreases towards regions located outside the core. At the same time it has to be noted that locations close to the Eastern fringe of the European core region have improved their accessibility by road during the past 5 years, which suggest that the core is enlarging or dispersing.

The potential accessibility by rail adds some other characteristics to this pattern. The highest rail accessibility is primarily in the cities serving as main nodes in the high speed rail networks and along major corridors. Potential accessibility by air shows highest values around major airports, which are dispersed across Europe. The picture is of a patchwork of regions with high accessibility by air sur-

rounded by regions with low accessibility. Combining the various transport modes, the measurement of multimodal accessibility shows an arc where accessibility is highest. It stretches from Liverpool and London to northern Italy, via Paris, Lyon, Benelux and the Rhine regions. High values are also found in a number of less central agglomerations such as Madrid, Barcelona, Dublin, Glasgow, Copenhagen, Malmö, Gothenburg, Oslo, Rome, Thessalonica and Athens.

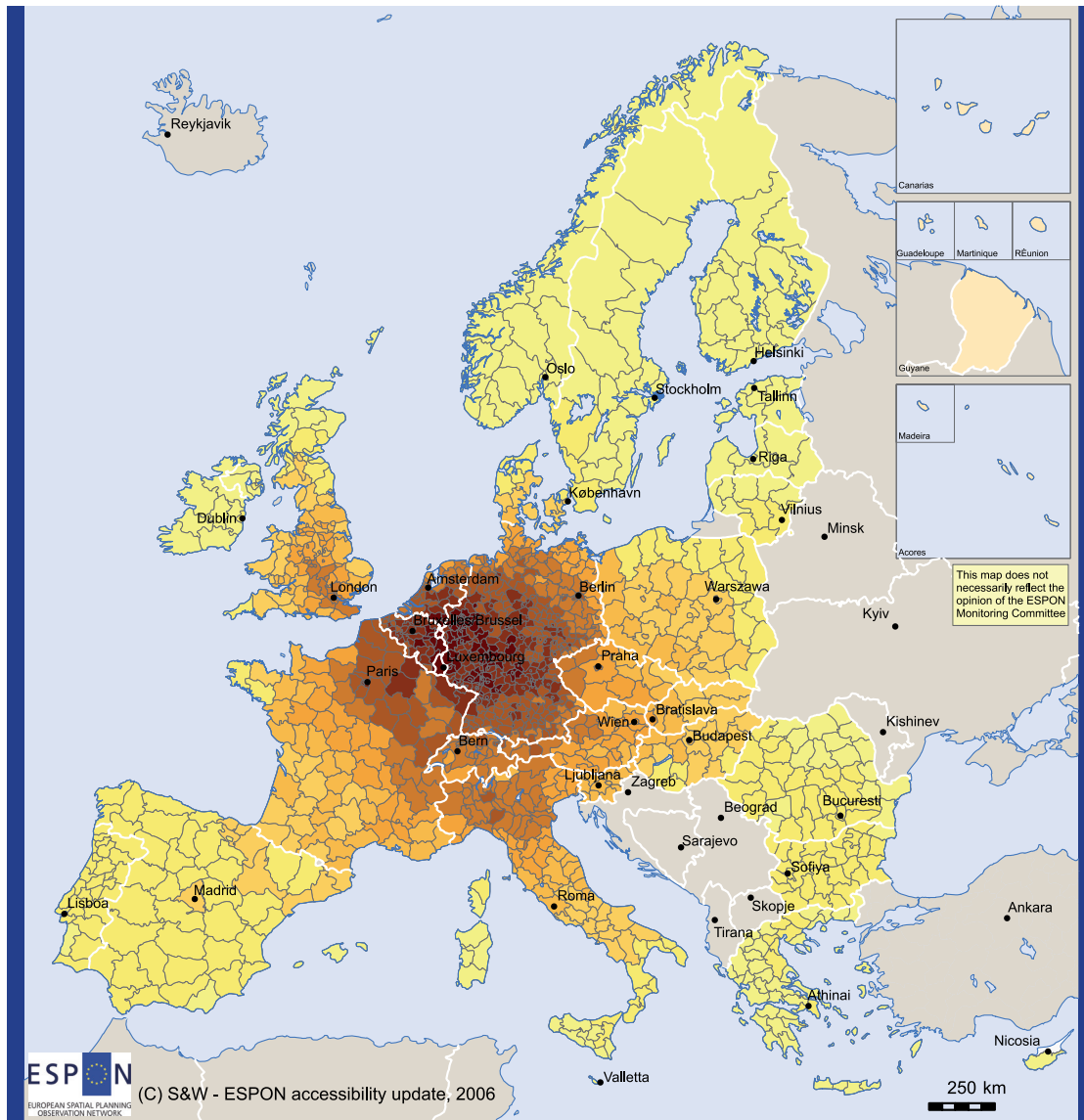
In contrast numerous regions in Portugal, Spain, Ireland, Scotland, Wales, Norway, Sweden, Finland, southern Italy and Greece have very low values of multimodal accessibility. Several regions of Germany, Austria and France also have below average accessibility values, and most regions of the Member States that joined the EU in 2004 and 2007 are in the same situation with the exceptions of their capital city regions. This underlines, that low accessibility is no longer a concern solely for regions of the traditional periphery.

Connections to the main communication networks are an important influence on global accessibility within and between regions. This connectivity can be measured by evaluating the accessibility of any place based on its minimum access time by road to the closest transportation node (motorway entrance, railway station, commercial port etc.).

There is a clear difference between western and eastern regions in connections to motorways, because of differences in the density of motorway networks. The connectivity to the high-speed rail stations by car shows an even more selective pattern, resulting from unequal regional endowment with high-speed rail stations throughout Europe. The connectivity to commercial airports is also regionally unequal, but is improving as more regional airports operate.

In particular for the connection to the main communication networks secondary transport networks are of high significance.

Figure 6: Potential accessibility by road in 2006



Potential accessibility
Road, 2006 (EU27 = 100)

	- 25,0
	25,1 - 50,0
	50,1 - 75,0
	75,1 - 100,0
	100,1 - 125,0
	125,1 - 150,0
	150,1 - 175,0
	175,1 - 200,0
	200,1 -

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

Source: ESPON (2007) S&W accessibility update

3.4 Density of border crossings

To what extent do the number of international road and rail crossings of a cross-border region explain the propensity to cooperation over borders?

In a survey among INTERREG IIIA project partners 37% of respondents felt that having many road, rail and waterway border crossings presented an opportunity for fruitful cross-border cooperation. In land border areas, a road or rail crossing may provide the essential infrastructure for trade, commuting and face-to-face social interaction. Density of border crossings may be particularly important in the beginning of the transition period for the EU member states. For instance at the German-Polish border, the intensification of border crossings from Poland to the west is the characteristic feature of the border traffic in Poland during the transformation period. The yearly number of crossings of the Polish-German border increased very fast in the first half of the 1990s, which was associated with an intensive development of near-the-border trade.

Integrating the geographic type of borders (river, high mountain, low mountain, green, sea border) with the density of land border crossings per 100 km shows some interesting patterns.

There is the general assumption that regions with “green” borders and a high or very high density of border crossings, such as the Ems Dollart region or the Lithuania-Latvia-Belarus cross-border regions might have greater potential for cross-border cooperation and European integration. On the other hand, regions with a low density of border crossings and a natural barrier such as a mountain range or river and lower density of border crossings, such as the Sweden-Norway or Spain-Portugal programmes would have less potential for various forms of cross-border

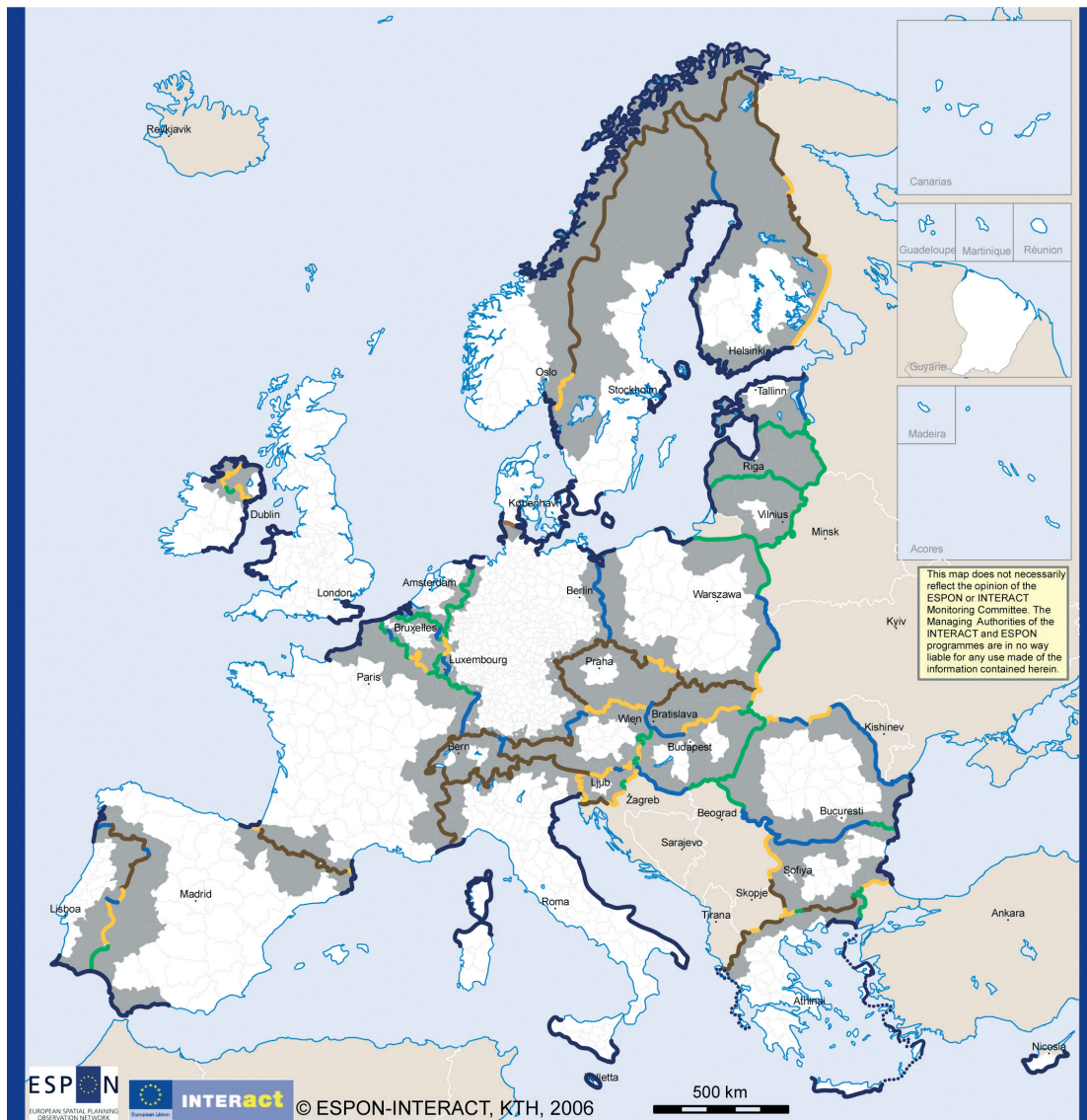
cooperation aimed at integrating these regions in terms of economic or social development. For instance, as the example of the Spain-Portugal programme points out, the frontier between Portugal and Andalusia has a physical expression in the Rivers Guadiana and Chanca. The recent connection between Huelva and Faro by a bridge over the Guadiana has improved the situation, but the road network is still not sufficient: there are still 60 km of cross-border area bearing no human or economic flows. The railroad networks of each country are arranged in-bound and cross-border public transport is not up to its potential. Port and airport infrastructure at both sides of the border are complementary, but the lack of connections handicaps their combined use.

Sea borders are also presumed to create a barrier to integration via greater cooperation. For example, the Gulf of Finland, extending between Finland and Estonia and all the way to the city of St Petersburg, divides this region. At the same time it is also regarded an important resource for the development of tourism, as well as for environmental projects.

Examining actual intensity of INTERREG IIIA projects within the cross-border regions shows that the hypothesis outlined above is not necessarily true. INTERREG IIIA programmes such as Sweden-Norway, Kvarken-Mittskandia (Sweden-Norway), Bavaria-Austria, Italy-Austria, France-Italy or Spain-Portugal are programmes with very high or high project intensity, despite having borders that are largely made of up natural or physical (lack of border-crossing infrastructure) barriers.

Thus interpreting potential for integration in cross-border regions in light of current project intensity may or may not be a useful enterprise.

Figure 7: Type of land border and density of border crossings in INTERREG IIIA areas



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Source: KTH, Land crossings in border regions Database (2006) for location of rivers and green areas. Nordregio 2004/DG Regio for location of mountains

- Type of Border:**
- River
 - High Mountain
 - Low Mountain
 - Green
 - Sea border
 - Border Regions

Source: ESPON-INTERACT study on cross-border cooperation (2007)

3.5 The territorial dimension of the Information Society

Access to the Information Society via modern information and telecommunication infrastructure and its use are key aspects of regional competitiveness in the light of the Lisbon Strategy.

Telecommunication is an exceptionally fluid sector where things change rapidly. However, the Information Society is not only about the provision of information and telecommunication infrastructure, but comprises a lifecycle with different stages. The stages of the information society lifecycle are (a) readiness to use ICT means, (b) availability and use, and (c) impact of the use. Combined they form the information society performance index reflected in the map.

To fill the three pillars with life, the readiness aspect is measured with regard to wealth, skills/education and the adoption of basic technologies. The growth aspect considers the access to the Information Society for private households and business. The indicators used include access to PCs, mobile phones, internet, broadband and the presence of firm websites. The question of the impact of the Information Society is measured by means of high-tech employment and ICT patterns. The graph below the map presents a more detailed view on the construction of this indicator.

The map provides an overview on how the European regions are doing with regard to the Information Society index.

The overall European picture shows that, some regions in the northern countries, along with the core of Europe, are furthest ahead in terms of ICT accessibility and the information society lifecycle.

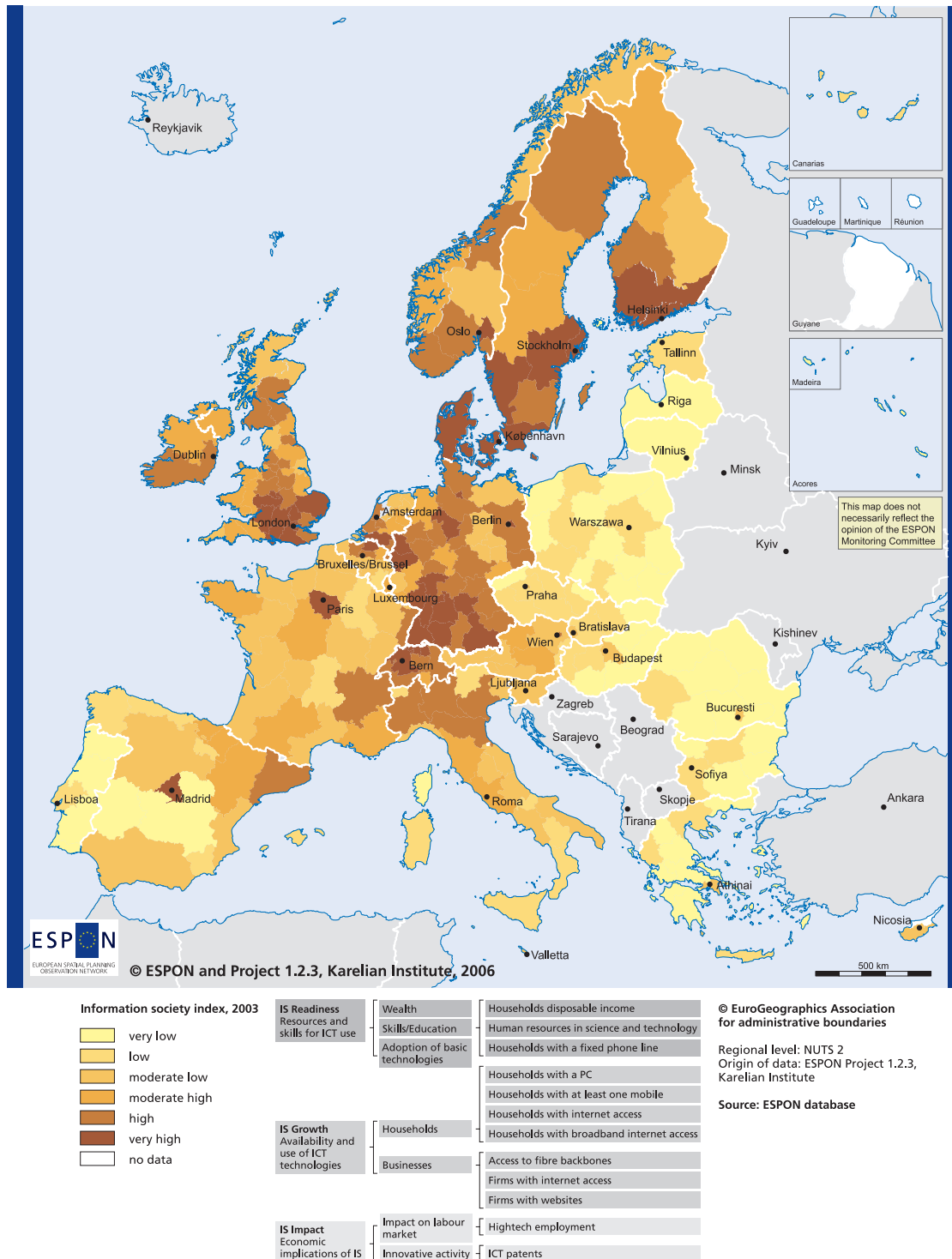
In greater detail this means that regions with very high performance can be found in particular in the UK, the Nordic Countries, Germany and Switzerland. The regions of Paris and Madrid and single regions in Belgium and the Netherlands also show a very high performance.

Zooming even further into the single areas reveals that most metropolitan areas show higher values than their surroundings. This is particularly articulated e.g. the regions of Paris, Madrid, Bern, and the urban agglomeration in Germany.

While national differences are significant, there are also considerable intra-national inequalities. In particular remote and peripheral regions generally seem to lag behind the respective national average. Areas with the highest values in the index are most likely to gain from the impacts and development of new innovations in the field.

Competitiveness is not only influenced by the access to infrastructure, but also by the use of the infrastructure and the capability to capitalise on their impacts. Therefore, regions with good accessibility to modern information and telecommunication infrastructure are not necessarily those that benefit most from the Information Society. Furthermore catching-up process in infrastructure development might not necessarily imply catching-up in terms of benefits from the Information Society.

Figure 8: Information society readiness, growth and impact, 2003



Source: ESPON (2006) Territory matters for competitiveness and cohesion, page 28

3.6 Regional variations of hazards in Europe

Natural and technological hazards affect the European territory. When disasters occur they damage business and communities. The environmental and economic impacts of oil spills or drought can be widespread and long-lasting.

Few people are aware of the level of vulnerability of the territories where they live, work, study, or take holidays. Floods, droughts, forest fires, storms and similar hazards do not respect political boundaries, yet have significant territorial impacts. Risk management helps to protect life and investments. There is a territorial component to risk management.

Since the regions in Europe experience different types of hazards and risks a simple aggregation would lead to a distorting image of the actual hazard problem and perception of risk. In this case of multi hazard risk mapping, the question of weighting the relevance of certain hazards was evaluated in order to display hazards and risks from a European perspective. The Delphi-method was adapted for the specific use of hazard weighting. To avoid distortion by regional bias, experts with a clear European perspective were chosen, and also the geographical provenance of experts was considered.

The map combines spatially relevant hazards that have been weighted from a European perspective. Strikingly few large areas have a very low exposure to this basket of hazards. On these criteria, the safest places are mainly in Scandinavia and South-central France, while the Pentagon

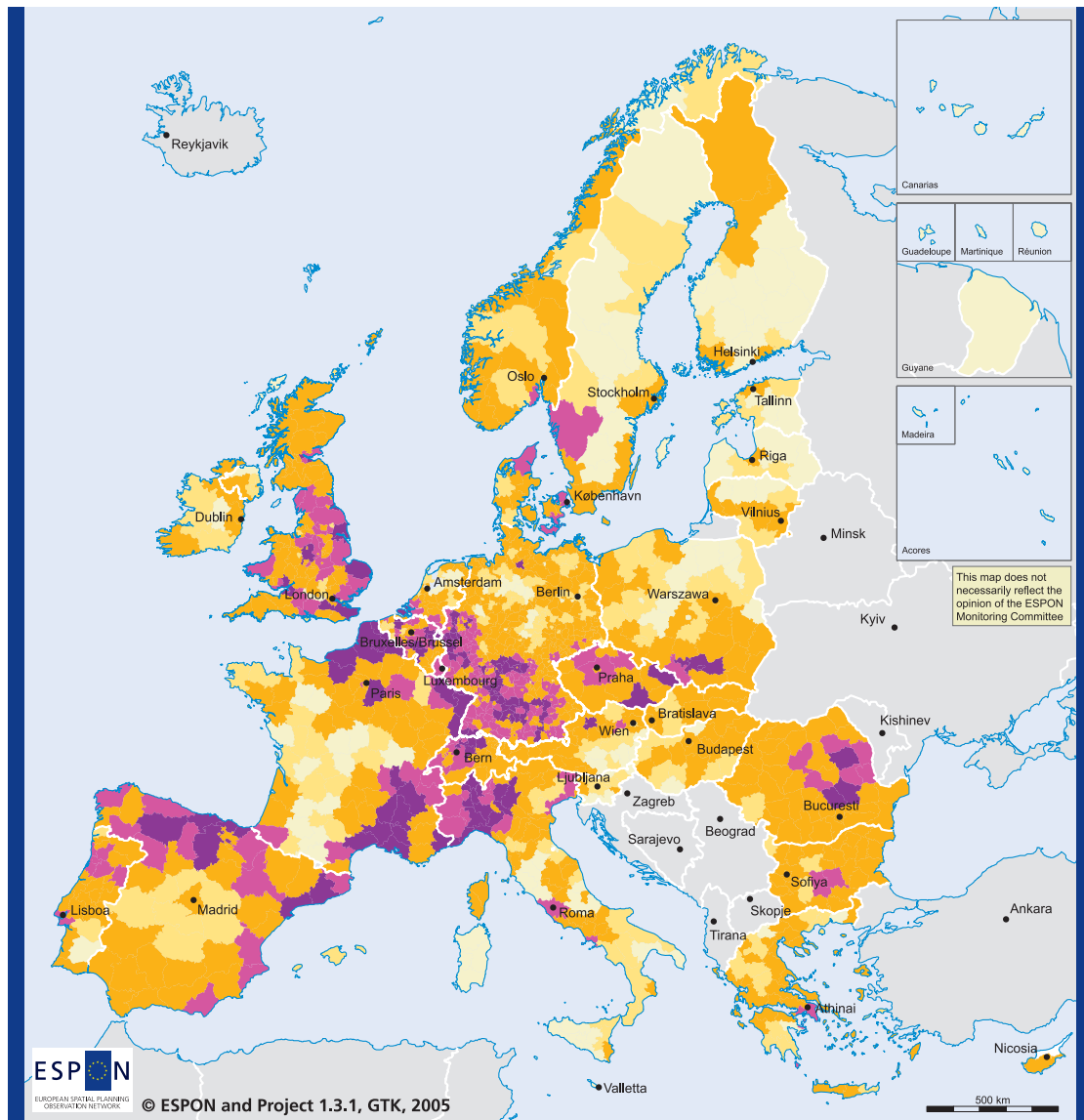
has an array of hazards. Quite clearly the existence of hazards within a territory does not necessarily undermine its competitiveness.

The aggregated hazard map shows that the highest hazard classes form a kind of scorpion-shape covering parts of southern, western, central and Eastern Europe. The two arms and the claws of this high hazard scorpion start off on the coastal areas of the United Kingdom and the Iberian Peninsula, respectively, and the head is found in central and southern Germany. The tail is then more scattered towards Eastern Europe, and finally turns southwards, petering out in Greece. Some hotspots are located outside of this “high hazard scorpion”, i.e. central Italy and parts of southern Scandinavia. Most of the NUTS3 areas have a medium and some a low aggregated hazard. Besides isolated spots, only few large areas have a very low aggregated hazard, mainly in northern Europe and central-south France.

In the map analysis one has to take into account that the 15 hazards used for this map are based on current knowledge that is comparable among all EU 27+2 countries. Only 4 hazard types represent the technological hazards. The maps thus serve as an overview on the European regions, but detailed analysis for regional and local purposes should use best available data.

Climate change potentially increases the risk and magnitude of some natural hazards. For example, dry spells and heat waves might increase in the Mediterranean. Evidence-based spatial planning practice will have a vital role to play in mitigating risks.

Figure 9: Aggregated natural and technological hazards



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- Hazard classification**
- 0-10 percentile
 - 10-25 percentile
 - 25-75 percentile
 - 75-90 percentile
 - 90-100 percentile
 - no data

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

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

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

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

Source: ESPON database

Source: ESPON (2006) Territory matters for competitiveness and cohesion, page 83

3.7 Economic disparities in cross-border regions

Economic disparities are a major concern of cohesion policy in Europe. Whereas disparities between countries are decreasing, disparities between regions are increasing. This is true for Europe as a whole, as well as for disparities between regions in a country and disparities between neighbouring border regions.

Economic disparities within cross-border regions are facts that must be taken into account in cross-border cooperation schemes, particularly those regions on the frontier of the European territory.

In a survey INTERREG IIIA project partners were asked if cross-border local or regional economic disparities had a: 1) positive effect creating the preconditions for cooperation; 2) a negative effect, making cooperation more difficult; or 3) neither a positive nor negative effect, only 2% of the respondents felt that cross-border disparities were a negative factor. 42% felt that this was a positive precondition for cooperation and 56% claimed that the effect was neither positive nor negative.

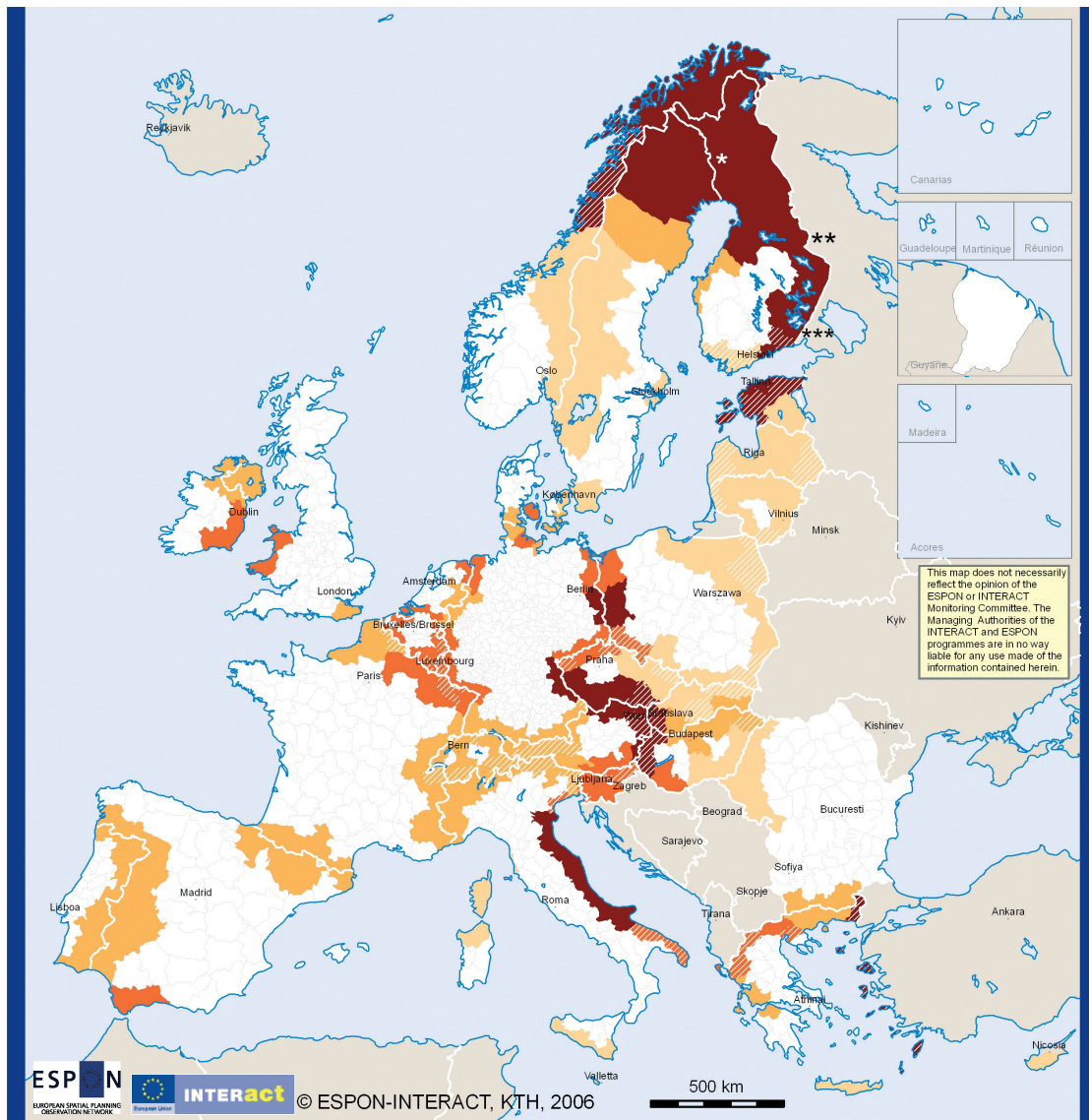
To measure cross-border disparities within INTERREG IIIA programming areas the economic strength (measured as percentage of the EU25 average GDP in euro per capita in 2003) of the NUTS3 regions involved in each programme has been considered. Four categories were developed: Very high performing regions (> 112% of EU25 average in

euro per capita), high performing regions (<112% but >80% of EU25 average in euro per capita), low performing (<80% but >39% of EU25 average in euro per capita) and very low performing (<39% of EU25 average in euro per capita). In the next step, the economic strength in euro per capita as a percentage of the EU25 average for the highest NUTS3 region within the programme and the lowest region in the programme were considered, as well as the spread of difference between them.

This method produced two types of results. The first is the actual degree of economic disparities within INTERREG IIIA cross-border programmes: INTERREG IIIA programme areas without significant disparities, areas with low levels of disparities, areas with high levels of disparities and areas with very high levels of disparities.

The map shows that INTERREG IIIA programmes exhibit varying degrees of economic disparities. Not surprisingly those programme areas at the periphery of Europe or on the border between old member states and new member states or accession countries show the highest degree of economic disparities, such as Brandenburg-Lubuska (Germany-Poland), Bavaria-Czech Republic, Italy-Balkans-Adriatic, Estonia-Finland or Nord (Norway, Sweden, Finland and Russia). Areas without significant disparities characterise much of the new external border regions of the EU (with low relative levels of performance) and the Norwegian-Swedish border area (with high relative levels of performance).

Figure 10: Level of economic disparities between areas of INTERREG IIIA programmes approximated to NUTS 3 regions



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Source: KTH, Cross Border Regions Database (2006) for identification of border regions
 Economic data for EU25 and Candidate Countries from EUROSTAT, 2003; for Norway and Switzerland from National Statistics Offices, 2003

Economic disparities, based on Euro-per-inhabitant as percentage of EU 25 average, 2003

- Non border regions
- Areas without significant disparities
- Areas with Low levels of disparities
- Areas with High levels of disparities
- Areas with Very High levels of disparities
- NUTS 3 regions included in more than one INTERREG IIIA Programme

* INTERREG IIIA Nord: Programme area includes Murmansk, Russia

** INTERREG IIIA Euregio Karelia: Programme area includes Karelian Republic

*** INTERREG IIIA South East Finland - Russia: Programme area includes Leningrad Oblast and St. Petersburg Oblast, Russia

Source: ESPON-INTERACT study on cross-border cooperation (2007)

3.8 Territorial development scenarios

There are many possible ways of how the European territory might develop over the next decades. Considering a continuation of the current developments with constant policy aims, a possible baseline scenario developed by the ESPON project 3.2/Scenarios goes as follows:

“By the latter half of the decade, it was clear that the multiplicity of problems the Community was facing required a comprehensive approach at the European level. In order to deal with problems on several fronts, most EU sectoral policies were largely continued. Renewed efforts were required for the Lisbon strategy, demanding extra investments in R&D and education. Meanwhile the socio-economic rift between the old and new member states demanded that regional policy also had to be continued with vigour. To this end, investments were made in new infrastructure to improve the accessibility of these regions. Finally, after the accession of Bulgaria and Romania, the focus would be on integration rather than further expansion, at least in the following decade. No major changes were made to European immigration policy either: the EU would continue to facilitate movement between member states, but be more circumspect regarding immigration from abroad. One policy area which did undergo major reform is the Common Agricultural Policy (CAP). Partly under pressure of international organisations such as the WTO, this was subjected to extensive budgetary cutbacks and saw a substantive shift towards rural development.

By 2015 new spatial developments were becoming perceptible. Over the past ten years, Europe had enjoyed moderate economic growth as a whole, generally keeping pace with the US and Asia. Economic performance was strongly diversified within the EU however. Metropolitan regions were the main engines of growth, and it is here that the change in land use was the most pronounced. As agricultural land transformed into (sub)urban development, more remote natural areas transformed into farmland. A clear catching-up process of the new member states was evident: many regions in East Europe were exhibiting growth rates twice that of the EU15. The infrastructure investments had widened the radius of high-accessibility areas in Europe, particularly the connections between major cities. As time wore on, a greater emphasis was placed on mass transit, due to the escalating energy

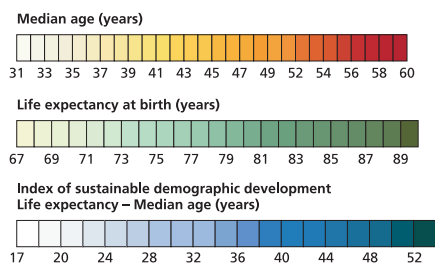
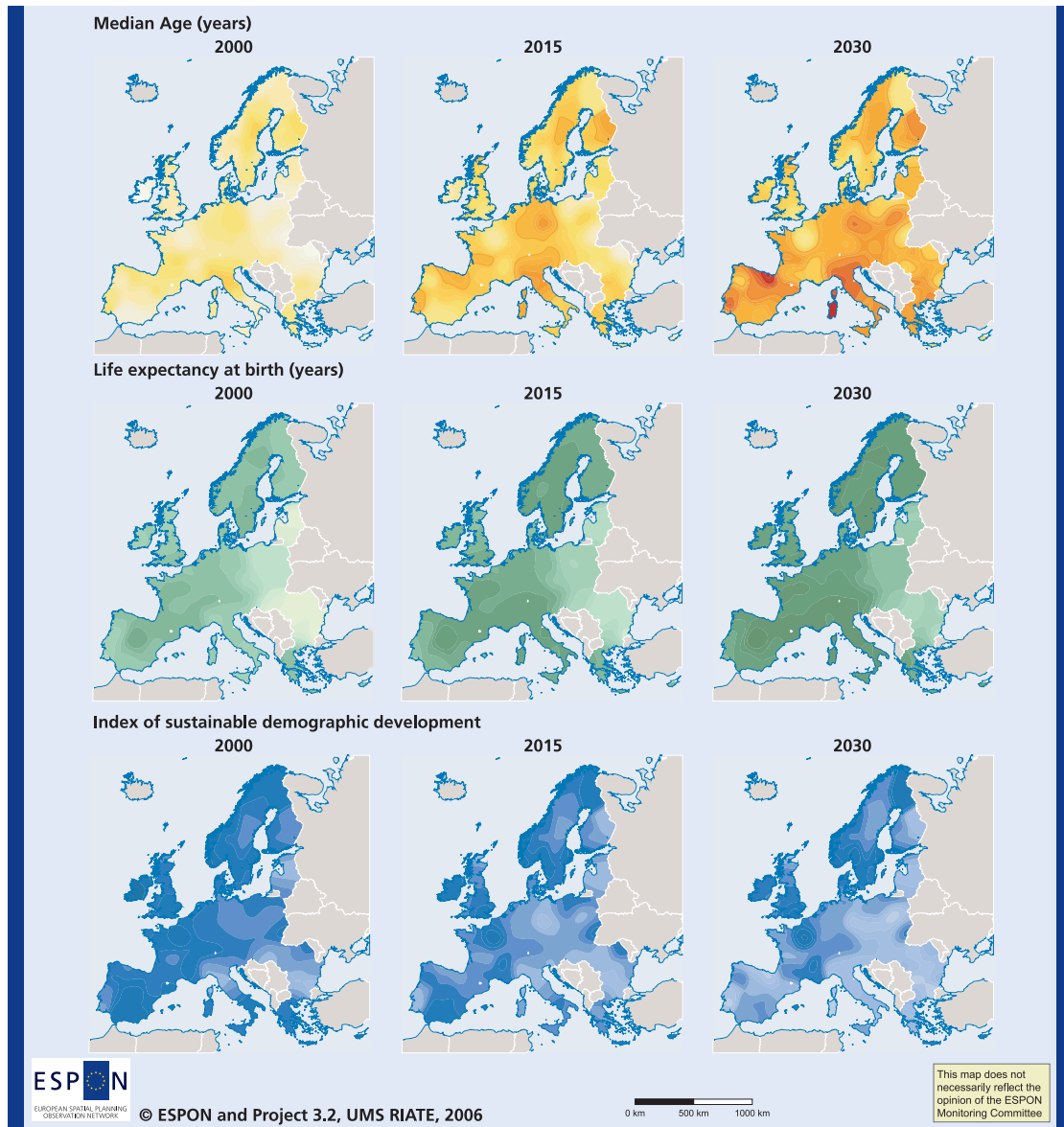
prices. At any rate, the Pentagon was expanding. However, given the low starting point of the new member states, there was still much more catching up to do. Unemployment, for example, continued to be higher than in the EU15, and life expectancy lower. It was nevertheless clear that the overall standard of living and life expectancy in Europe continued to be among the highest in the world. The number of Europeans remained stable, due to relatively low fertility rates and immigration levels. Consequently, the composition of the population grew markedly older, especially in relation to the rest of the world. This ageing process was most pronounced in East Germany and Northern Italy.

By 2030, other territorial developments began to emerge. Climate change was making some areas in Europe increasingly inhospitable, particularly rural Spain, which struggled with perennial water shortages. Meanwhile, at the epicentre of continental Europe (e.g. Germany, France, Switzerland and Austria), melting glaciers and increased precipitation increased the frequency and destructive power of floods. The chequered implementation of Natura2000 resulted in controlling, but not reversing, the decline in biodiversity. By 2030, population ageing had produced some strains on the labour market, particularly in Eastern Europe, but also in Italy and parts of the Iberian Peninsula. Despite this, the new member states had continued their catching-up process, but progress slowed down as wage levels approached the EU15, and most growth was concentrated in metropolitan areas. New labour markets became available with the accession of the Balkan states in 2020 and Turkey in 2030. All in all, there are some indications that socio-economic disparities in Europe had decreased somewhat at the macro level (East versus West Europe), had grown even more acute between metropolitan regions and peripheral rural regions. Finally, the gap between rich and poor within cities had widened, producing social strife and sometimes erupting into violence.”

This and other scenarios developed by the project are also accompanied by a number of analytical and perspective maps.

The maps presented here illustrate the demographic perspectives according to assumptions on which the baseline scenario is based. The maps on the median age in the

Figure 11: Baseline scenario – demographic perspectives



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Origin of data: Projections based on data from UNPP 2004, ESPON database 2005 and ULB 1991

Source: ESPON database

Source: ESPON (2006) Territory matters for competitiveness and cohesion, page 93

years 2000, 2015 and 2030 show an increasing median age in all parts of Europe. In many parts of Europe the median age of citizens was in the mid or late thirties in 2000. This will change substantially over the next decades. In 2030 the median age will be above 40 in most parts of Europe and even beyond 50 in some places. Italy and in particular the North of Italy, Northern Spain, Eastern Germany, some parts of Finland and Scotland will experience a median age in the mid-fifties. Only Ireland, Southern England, some parts of Eastern Europe and Scandinavia are expected to have a median age below 40 in 2030.

At the same, the life expectancy at birth is increasing all over Europe and will be over 80 for the majority of areas in Europe, with slightly lower numbers some area in the east of the EU.

The index of sustainable demographic development takes those two developments together, which are both linked to the potential attractiveness of an area. The combined picture shows an increasing territorial divergence of the demographic development in Europe. According to this scenario, in 2030 the north-western and the northern Europe manages to keep relatively values in this index, whereas the southern and more over eastern part of the EU show decreasing values in this index on sustainable demographic development. These developments will affect the labour market, social welfare systems and service provisions in various areas in Europe.

These and other insights on territorial differentiations of possible future developments in Europe offer useful inputs for policy decisions and project activities dealing with medium- and long-term territorial development aspects.

4. Cooperation on territorial structures

The European territory and its challenges and potentials are characterised by some main structures and patterns. These territorial patterns are reflected in the settlement structure, i.e. the distribution of population, buildings and infrastructure in the area. The location of smaller, medium-sized and larger cities is characterised by long-term stability, gradually influenced by new investments, transport and communication infrastructure, location decisions and migration tendencies. This is also related to the question of economic hotspots and the distribution of GDP per capita.

Urban areas are generally considered as economic for economic development, incubators of culture and innovation, repositories of scientific and artistic knowledge, centres of strategic decision-making. Consequently a wide range of INTERREG projects address the role of urban areas and how to capitalise on their energy in all parts of Europe. For this purpose the ESDP policy aim of polycentric urban development has been an important element in territorial cooperation dealing with competitiveness and cohesion in Europe.

At the same time the dichotomy between urban and rural is decreasing and rural-urban partnerships are promoting an integrated concept of cities and the countryside, based on their territorial and functional interdependencies. INTERREG projects have promoted rural-urban relationships with regard to specific issues where rural and urban areas are interrelated.

In times of mobility and globalisation, accessibility and connectivity of places are regarded as important development factors. Consequently, the issue of transportation and communication has been taken up by a wide range of INTERREG projects which address territorial structures in terms of connections between cities, access to cities from the surrounding regions, as well as inner urban transportation.

This chapter will present an overview on the INTERREG activities carried out with relation to polycentric urban development and rural-urban relationships. The types of actions carried out will be discussed as well as the geographical dimension of these activities taking into account latest ESPON findings. Based on this some overall conclusions and considerations for future action will be presented.

Generally, the activities carried out are based on the programming documents and the priorities and measures developed by INTERREG programmes. A first assessment of the programming documents shows that polycentric urban development is addressed in a few IIIB programmes and also indirectly present in a very few IIIA programmes. Rural-urban relationships show only a very limited presence in programming documents and can mainly be traced, when at all, in IIIB programmes. As the programming documents for IIIC do not engage with concrete topics, nothing can be said here at programming level.

At project level it appears that there are a considerable number of IIIB projects addressing these issues as well as projects in strand A and C programmes. The review of projects shows a large variety of actions and topics to approach the rather abstract policy terms of polycentric urban development and rural-urban relationships on the ground.

4.1 Translating territorial structures into action-oriented concepts

Polycentric urban development and rural-urban relationships are important features for the development of the territorial structure in Europe. As these are rather abstract policy concepts, they need to be translated into more concrete terms in order to see how INTERREG activities approach them.

For analysing INTERREG projects dealing with polycentric urban development and rural-urban partnership, the following definitions have been applied:

- *Understanding polycentricity*
Three themes and three geographical levels can be distinguished when discussing how INTERREG projects addressed polycentric urban development:
- *Urban system*
This focuses on the aim of a balanced territorial structure with multiple connected centres. Key issues are related to housing, living environment, land-use management and transportation.

- *Potentials for balanced economic development*
This relates polycentric development to potentials for balanced economic development. Key issues are the location of production and local territorial contexts for entrepreneurship.
- *New integrated systems of governance*
This interprets polycentric development in terms of enabling towns and regions to further develop their capabilities. Key issues are institutional arrangements and the empowerment of local and regional entities.

All three issues can be dealt with at the European (macro) scale, in wider geographical areas such as IIIB programme areas (meso scale), or at a lower, regional (micro) scale.

- *Understanding of rural-urban partnership*
Six themes are used to describe rural-urban relations in the framework of INTERREG projects:
 - *Economic and social development*
This focuses mainly on rural-urban relations in the fields of employment, labour market, training, education, urban regeneration, rural development, agricultural diversification, food production & marketing, and innovation.
 - *Services and facilities*
Here, the key aspects of rural-urban relations are local amenities, services, commerce, settlement structures, cultural facilities.
 - *Transport, energy, information*
Transport networks, information networks, commuting and energy supply are key features here for rural-urban interaction.
 - *Consumption and amenities*
This focuses on tourism, recreation, leisure, landscape & environment, cultural heritage and open space as fields for rural-urban relations.
 - *Demography*
Housing, elderly and young people and healthcare are key issues for rural-urban relations in this field.
 - *Governance*
The key aspects of rural-urban relations in the field of governance are integrated development, new strategies and planning instruments.

This approach to defining rural-urban relations reflects the fact that the label “rural-urban” is often perceived as too abstract for the concrete work of INTERREG projects. By switching the vocabulary towards problem-oriented concepts such as “access to services” or “open space” it becomes possible to assess the rural-urban dimension.

Based on these definitions, firstly an assessment of programme documents was carried out showing to which degree and how these topics are covered at priority or measure level. Thereafter projects were analysed to illustrate how these aspects were addressed by INTERREG projects. Finally, the locations of these projects were compared to ESPON findings which to show the correlation between territorial characteristics and INTERREG activities of an area.

4.2 Polycentricity and rural-urban issues at programme level

The INTERREG programme documents provide a good first indication on the role polycentric urban development and rural-urban relationships play in INTERREG. Generally, the understanding of these two concepts is rather wide and influenced by perceptions of an area’s territorial context, particular challenges and objectives.

In INTERREG IIIA programmes have only very limited explicit focus on rural-urban partnerships, and no direct references to polycentric development have been found in the priorities. Nevertheless, some topics which are closely related to polycentric development have been identified in some programmes. As an example in both the INTERREG IIIA Programme Upper Rhine Centre-South (Germany-France-Switzerland) and the Franco-British Programme, a priority is dedicated to the promotion of balanced territorial development. The INTERREG IIIA Programme Italy-Switzerland also prioritises to some extent balanced and sustainable economic development in the cross-border area.

In INTERREG IIIB programme documents these two topics are more frequently addressed. Six out of fourteen mention explicitly the cooperation of complementary between urban and rural areas, and all but one programme address polycentric development in their programme documents. Sometimes this is rather indirectly by promoting actions

which can be understood as an operationalisation of the concepts.

Rural-urban relations are often subsumed under larger fields of action, such as “spatial structuring” in the Atlantic Area, “competitiveness and sustainability” in the Alpine Space. In the case of MEDOCC rural-urban relationships are mentioned in one priority, whereas the corresponding measure mentions cooperation between urban and rural zones. The programme document for the Northern Periphery in general may serve as an example of the complex way in which policy issues are addressed: Priority 3 is in particular related to the overall aim of securing the settlement pattern and the viability of the local communities. Measure 3.1. (‘Community development’) is above all focussing on new ways of delivering private and public services in sparsely populated areas, which in itself is an issue about rural-urban relationships since the majority of these services are located in population centres. Nevertheless measure 3.2 (‘Public management and spatial planning’) is more clear and explicit about rural-urban relationships: “A better understanding of the interdependency of urban and rural areas and ways in which this relationship can be developed positively needs to be pursued. There are dangers that the larger centres of population will grow at the expense of surrounding rural areas”. A number of issues related to the “rural-urban dimension” are relevant for all participating regions.

For the analysis of the project activities, the focus has been shifted to a the more operational understanding of rural-urban partnership presented above in order to also catch activities which more implicitly deal with rural-urban relations.

How the issue of polycentric development has been approached at programme level can be shown by the two examples MEDOCC and Atlantic Area:

- The programme document of the INTERREG IIIB Programme MEDOCC outlines the main points to be dealt with regarding polycentric development of the area: (a) the economic integration of different macro-regions in order to foster the development of Zones of Global Economic Integration, and (b) the development of strong networks of medium-sized towns for enhancing a polycentric MEDOCC area.

More concretely this implies focussing on the integration of macro-regions inside the MEDOCC area by elaborating spatial visions, but also through developing new methods and objectives concerning territorial development, as well as forming strategic alliances between cities and towns.

- In the Atlantic Areas the thematic focus on the priorities and measures is twofold. On the one hand the programme document emphasises the importance of the territorial structuring of the Atlantic Area. This structure can be improved by reinforcing the role of metropolitan areas as gateways to larger European and global markets and by strengthening the linkages between small and medium-sized towns. On the other hand, increased polycentricity can be achieved through the promotion of centres of excellence, selected to promote a more balanced economic development across the Atlantic Area. More generally, the development of territorial strategies is promoted as a tool for enhancing the polycentric urban development of the region.

In INTERREG IIIC no explicit considerations for polycentricity or rural-urban partnership could be found in the programme documents. As the programme documents do not list specific thematic priorities or measures, the analysis focuses mainly on the project level.

4.3 Polycentricity projects at different geographical levels

INTERREG projects dealing with polycentric urban development show a multitude of possible dynamics that can be initiated by territorial cooperation simulating polycentric development. The variety of activities illustrates also that there is no one-size-fits-all approach to polycentricity, as it is related to the territorial, economic and governance pre-conditions in each region.

The following table provides a few examples of INTERREG projects which address polycentricity. It allows us to distinguish between the three thematic dimensions (structure of the territory, economic development and governance) as well as between the three geographical levels (micro, macro, meso).

Figure 12: Grid analysis of main project themes on polycentric development

	Micro	Meso	Macro
Structure of the territory	<p>Polycentric regional structure (Metropolitan Areas+)</p> <p>Compact city structure in peripheral nodes (Vital Cities)</p> <p>Integration of settlement and transport systems (Öresund Bo, SITRALP)</p>	<p>Spatial integration of trans-national zones (Via Baltica)</p> <p>System of medium-sized towns (REPUS)</p>	<p>Counterweight to core parts of Europe (Blue banana) (SIC!)</p>
Economic development	<p>Develop economic profiles of regional sub-centres (Baltic Palette II)</p> <p>Transmit economic impuls to the metropolitan hinterland (CIUMED)</p> <p>Creation of a joint labour market (SVILMA/Italy-Adriatic)</p>	<p>Networks of innovation/ Competence centres (TECPARKNET)</p> <p>Improving the competitiveness of the region (Austria-Slovakia-Hungary)</p>	<p>Enhanced economic integration of metropolitan regions (PolyMETREX Plus)</p> <p>Connection to global markets (North East Cargo Link)</p>
Governance	<p>Integrated spatial development instruments (PolyDev, URBE VIVA)</p> <p>Promoting growth initiatives (Revitalisation) (MECIBS, REVITA)</p> <p>Urban regeneration</p>	<p>Joint strategies for development of second-tier towns (DEFRIS, MECIBS)</p>	

Source: ESPON-INTERACT study on polycentric urban development and rural-urban partnership (2006), page 48

4.3.1 Urban system

INTERREG projects focussing on matters concerning urban systems address the issue of a more polycentric organisation of the territory from different angles. Key objectives range from the development of territorial integrated areas to improvements of the position of small and medium-sized towns in peripheral areas. The projects address different spatial dynamics to contribute to a more balanced and less fragmented territorial structure and urban system in Europe.

Projects dealing with the urban system typically tend to approach the issue of balanced territorial development by increasing their capacity to become more integrated at European scale. The development of centres of excellence, often in medium-sized towns, is increasing the economic cohesion of the European territory by decentralising economic competitiveness outside the metropolitan areas. Moreover, these growth poles also often act as regional gateways, essential for supporting the endogenous development of their surrounding communities. For these often small communities, the emphasis is put on the revitalisation and regeneration of the policy tools at their disposal, enabling them to adapt to the changing political and economic context.

Challenging the European core-periphery pattern

The overall European territorial structure and imbalances at European level are not a key issue for INTERREG projects. The *SCI!* project (CADSES) is an exception here, as it is taking up the challenge and aims at reinforcing the coherence of a large transitional area, going from Berlin to Venice, articulated around major metropolises and overall providing an alternative to the Blue Banana in order to contribute to a more polycentric development in Europe.

Strengthening transport links and medium-sized cities

Urban structures of larger areas, e.g. such as INTERREG IIIB? programme areas, are often addressed in relation to the transport infrastructure. Projects such as *Via Baltica Nordica* (Baltic Sea Region), *COINCO* (Atlantic Area) and *HST-Connect* (North West Europe) address, each in its area, the issue of improved accessibility for the emergence of economically integrated more cohesive and significant areas. Outside the main metropolitan areas, a polycentric urban structure is often related to the role of small and medium-sized towns. The project *REPUS* (CADSES)

focuses on the potential territorial dynamics medium-sized cities can have at the meso scale. Thus it aims at increasing the awareness of the potentials of medium-sized towns and developing strategies directed towards a Regional Polycentric Urban System in Eastern Europe.

Stimulate the development of secondary nodes

Most of the INTERREG projects addressing polycentricity in terms of urban structures focus on the micro scale. The main strategies of these projects are to stimulate the development of secondary nodes as potential development alternatives to central areas. Examples are *Baltic Palette II* (Baltic Sea Region), *Metropolitan Areas+* (Baltic Sea Region) and *RIMED* (CADSES). Furthermore, there are projects focusing on medium-sized cities in less densely populated areas, such as *Vital Cities* (CADSES). Other projects are more research oriented, such as *POLYNET* (North West Europe).

In cross-border cooperation the focus is mainly on functional and spatial integration regions. Examples for this are the project *Öresund Bo* (Öresund Region) and the project *SITRALP* in the Alcotra region (Italy-France).

4.3.2 Potentials for balanced economic development

A more balanced geography of growth in the EU is approached by INTERREG projects at different geographical levels. The projects show that there is a permanent interplay between the needs to improve (a) competitiveness, capitalising on the potentials of all regions, and (b) cohesion, i.e. reducing the disparities between regions in Europe. The projects show that dealing with economic cohesion in an area is often linked to the necessity of improving the competitiveness of this area as a whole.

Strengthening metropolitan areas and their role in global competition

From a European-wide perspective potentials for balanced economic development are addressed by INTERREG projects in different ways.

- Enhanced inter-connections between participating metropolitan areas is the approach taken by some projects such as *PolyMETREX* (IIIC South), *Baltic Palette II* (Baltic Sea Region), *SDEA* (Atlantic Area), *RIMED* (CADSES), *SIC!* (CADSES), or *COINCO* (Atlantic Area).

- Strengthening European economic regions to compete with the European core is another approach taken by INTERREG projects such as *Baltic Palette II* (Baltic Sea Region), *C2M* (MEDOCC), or *ATI* (South West Europe). This involves certainly also issues such as the connection to global markets and the removal of barriers hindering trade which are features addressed for example by *North East Cargo Link* (Baltic Sea Region) and integrated economic development featured for example by *RIMED* (CADSES) or *CIUMED* (South West Europe).

Stimulating economic complementarities between cities

Stimulating economic complementarities between cities and fostering the development of innovation networks is the main focus of projects at meso scale. *TECNOMAN* (CADSES) for instance emphasises the need for the individual regions to sharpen their economic profile in order to increase their potential role in the larger regional network. Collaborating on complementary profiles and innovation enable regions also to increase spill-over effects between regions and to reduce their overall vulnerability to economic change. Projects such as *REVITAE* (IIIC East), *CINCO* (Atlantic Area), *BALTMET* (Baltic Sea Region), *TEC-PARKNET* (CADSES), *NENSI* (North West Europe) and *ATI* (South West Europe) are promoting the development of such networks of innovation. However also other fields of complementarities can be of interest. The projects *MNAA* (Atlantic Area) and *ENoCC* (IIIC West) emphasise such networks competence centres in respectively materials and logistics. Also IIIA projects focus on the issue of economic development dynamics at the meso level. Indeed, the development of joint economic strategies in certain areas targets a stronger positioning of the cross-border region in a wider transnational perspective, thus focusing on improved competitiveness of the region as a whole. An example is *Helsinki-Tallinn Science Twin City* (Finland-Estonia), focusing on the joint development of specific high-tech sectors and thus strengthening the position of the Twin-City region in these sectors. Another example is *JORDES* (Austria-Slovakia-Hungary), aiming at converting the region into a growth pole of transnational importance.

Stimulating local economic development

At the regional and metropolitan scale, projects such as *BALTMET* (Baltic Sea Region), *Baltic Palette II* (Baltic Sea Region) and *ATI* (South West Europe) take into considera-

tion the potential that each urban node has to stimulate economic development in its hinterland. They focus on the importance of the urban centres as the promoters of economic development to other parts of the territory. This focus is also taken by the *CIUMED* project (South West Europe) stressing the need for larger urban areas. Also the more regionally focused IIIA projects are of high interest concerning economic development, primarily targeting the improvement of the cross-border labour market by fostering a better match between the supply and demand sides, as well as improving the qualitative aspects of the labour market. The project *A cross border-labour market in the Öresund region* (Öresund Region) emphasises the possibility to provide a broader recruitment foundation for employers, an improved exploitation of the resources of the labour force as well as increased choice possibilities for employees. The *SVILMA* project (Adriatic New Neighbourhood Programme) addresses the issue of employment and seeks to create common training possibilities and eventually to create an integrated labour market.

4.3.3 The governance dimension of polycentric development

Projects focusing on the governance dimension of polycentric development are mainly concentrating on the local and regional level. They pursue among other aspects the development of joint strategies and new instruments for territorial planning in order to give local actors a greater capacity to influence the development of their region. The empowerment and the building of renewed capacity for action of the local actors influence their ability to be proactive in the development of their territory. There are examples of INTERREG projects which addressed the development of new integrated systems of governance, enabling regions and towns to further develop their capabilities and pro-active approaches to territorial development. In particular in less metropolitan areas, the underlying aim is to position themselves as credible alternatives to metropolitan “winning” areas. In this context, the development of viable networks of small and medium-sized towns can be seen as central to this theme. The greater interdependencies between towns and regions in Europe make it more relevant to develop new horizons for cooperation in order for them to have an active role in their future development.

Cooperation to compete with metropolitan areas

New governance systems can also be interpreted as the

building of a coalition of interest by cities with similar or complementary profiles, enabling them to position themselves, collectively, in a wider transnational perspective. The *MECIBS* (Baltic Sea Region) and *DEFIRIS* (Baltic Sea Region) projects are good examples of such approaches, aiming at building long lasting coalitions of interest, enabling their partners to cope with strong competition with the nearest metropolitan areas.

New ways of regional development, planning and territorial management

The issue of new systems of governance in general and the modernisation of planning tools in particular has been mainly tackled by INTERREG projects focusing on the regional and local scales. Projects like *Innovation Circle* (Baltic Sea Region), *PolyDev* (CADSES) and *AMAT* (MEDOCC) emphasise the proactive role that local and regional actors have to take in regional development issues. The project *ESDP Steps* (IIIC South) for instance acknowledges that current spatial planning and urban management tools are not appropriately designed to meet the objectives of the ESDP. The development of new ways of dealing with urban management, a key objective of projects like *InterMETREX* (IIIC West), *URBE VIVA* (IIIC South) and *VISP* (North Sea), is made concrete through the development of comprehensive visions of the urban territory.

Vertical integration

Next to the issue of multi-sector coordination at the horizontal level, several projects emphasise the need for (vertical) cooperation, for different regional and local actors to work together. The project *Town-Net* (North Sea) brings together regions around the North Sea having a similar pattern of small and medium-sized towns. The *SPAN* project (North West Europe) advocates the development of participatory approaches in the cooperating regions, as well as the multi-level governance principle. To bring together a variety of actors is also at the heart of the projects *ALPCITY* (Alpine Space), *VISP* (North Sea) and *EUROPOLIS* (North West Europe), enabling local communities to contribute actively to their development. Several projects focus on the improvement of local endogenous development potentials, e.g. *NEWTASC* (North West Europe), *BRAIN DRAIN* (North West Europe) and *DART* (North West Europe). Also the *MECIBS* (Baltic Sea Region) project for instance links the issue of revitalisation of declining industrial areas to governance capacity and the regeneration of local communities.

The *ALPCITY* (Alpine Space) project has similar objectives: The regeneration of small towns is considered as crucial to develop a polycentric urban system in the Alpine Space.

4.4 Problem-oriented approach to rural-urban projects

INTERREG projects dealing with rural-urban relationships are rather difficult to trace, as they usually deal with these relationships as a side effect of activities focusing on other more concrete tasks.

Although the terminology rural-urban partnership is only rarely used, INTERREG projects across all strands address the potential and challenges to this partnership. Breaking down the issue into single “problem” or action fields related to rural-urban partnerships shows the variety to aspects and approaches taken in INTERREG projects in order to improve rural-urban partnerships in their area.

Generally, only a small number of INTERREG IIIA projects on rural-urban relationships can be identified.

Projects in strand B partly address the relationship between territorial characteristics of an area and the importance attached to rural-urban relationships in an INTERREG programme. INTERREG IIIB projects focusing on rural-urban relationships tend to be clustered in areas characterised by higher levels of agricultural land-use and/or lower levels of population density. It is for these reasons that INTERREG IIIB programme areas are of particular interest in terms of the identification of rural-urban relationships as an important and recognised subject for cooperation.

Although INTERREG IIIC differs from the A and B strands with nospecific thematic priorities or measures, a number of projects have been identified which focus on certain aspects of rural-urban relationships.

In total 107 concrete examples of INTERREG III projects have been identified which are addressing rural-urban partnership. There may however be more projects which either work with a different definition or started after the finalisation of this assessment in early 2006.

The following sections will briefly discuss some of the fields of rural-urban relationships taken up by INTERREG projects and also highlight some examples of concrete projects.

4.4.1 Economic and social development

It should not come as a surprise that the second largest group of INTERREG projects addressing rural-urban relationships is about economic and social development. The origin of thinking is after all highly related with the recognition that in many rural areas in Europe agriculture is becoming less important to the local and regional economy and that other sectors of the economy therefore have to be stimulated in their development.

Striving for agricultural diversification

The emphasis of many projects striving for agricultural diversification is on the production of so-called quality products, often with an emphasis on environmentally friendly methods of production. The strategy of agricultural diversification requires the set-up of networks as locally produced (end-)products have to end on the consumer table. This is for instance approached by the *IRENE* project (CADSES), where IRENE stands for Innovative Rural Development Strategy Based On Local And Trans-National Economical Networks. Examples of an agricultural diversification strategy are projects like *AGRO* (Atlantic Area), *VEREDAS* (Madeira-Azores-Canary Islands), *SIMOCA* (CADSES), *AGROINTEC*, *ECOVERGER*, *BIOFEP* and *FESERRAE* (all South-West Europe), *LOF* (IIIC North), *URGENTE* (IIIC South-West) and *EFARMER* (IIIC East). The quality approach goes hand in hand with efforts to brand a place or region as a tourist product, an idea which is followed up by the *GAPMEDOCC* project (MEDOCC).

Economic diversification in rural areas

The strategy of economic diversification aims at expanding the range of activities in rural areas, to bring in new economic activities. Nearly all projects in this category aim for the setting up of small and medium-sized enterprises. In almost all 10 example projects reviewed there is awareness that the business environment of rural areas in many ways is not friendly for the success of this strategy. Many SMEs have difficulties to find a sufficient economic base – an issue dealt with by *Four Corners* (Baltic Sea Region) – or have limited access to services and facilities unlike their counterparts in urban areas – an issue approached by *Embrace* (CADSES). The title of the project *SCRI* (Northern

Periphery) is meaningful in this respect. This acronym stands for “Structure for Commercialisation of Rural Innovation”.

Improving the business environment

The third and final sub-category of projects aiming to improve social and economic development has the same overall objectives as the previous one. The main difference is that the projects are not specially targeting the creation of SMEs or the stimulation of entrepreneurship. The prime objective is the business environment in general. Overall, projects focus more on the role local and regional government can play to improve the general conditions of entrepreneurship compared with projects in the other two sub-categories. *RURAL INNOVA* (IIIC South) is an interesting example.

4.4.2 Services and facilities

The majority of projects addressing rural-urban relations in terms of services and facilities are outside the core of Europe. Nine out of fifteen projects reviewed in this category are targeting sparsely populated areas: The Northern Periphery and the mountainous areas of the Alpine Space. These projects address what is a key policy issue in such areas, the provision of services of general interest. Quite a number of projects in this category address services in general rather than only certain types of services. The *QUALIMA* project (Alpine Space) is a good example of what is considered to be at stake; namely an acceptable quality of life. On the operational level the project is targeting the creation of multifunctional sites, where a variety of services can be offered in order to save overhead costs. Another strategy is the creation of mobile services; by moving services around to enlarge their catchment area. Also services can be offered to certain population groups which are less mobile. *PUSEMOR* (Alpine Space) and *DESERVE* (Northern Periphery) are examples in this field. Several other projects focus on a particular type of services, mainly health care. Examples are *ATSURuAR* and *Sustainable Health Care Networks* (both Northern Periphery). The project *Community Learning Networks* (Northern Periphery) addresses the education system.

Another important group of projects targets the issues of services and facilities in an indirect way. These projects are focusing on the maintenance and improvement of service levels provided in small and medium-sized cities. Examples

for such projects are *Baltic Balance* (Baltic Sea Region), *REPUS* (CADSES), *Small Town Networks* (Northern Periphery), *CIUMED* and *ATI* (both South West Europe) and *SusSeet* (IIC West).

4.4.3 Transport, energy and information

The rural-urban dimension of transport, energy and information is addressed by few INTERREG projects. A number of these projects are concerned with improving access to information and communication as a way of reducing some of the disadvantages of low levels of physical accessibility in remote rural areas. Improving the virtual accessibility of rural areas can have various effects on urban-rural relationships, such as creating more varied opportunities of employment in rural areas and increasing accessibility to online broadband facilities and services. Examples of broadband projects include *ANT* (Alpine Space), *BIRRA* (Northern Periphery), *INFOBAND* and *PEBA* (both Madeira-Azores-Canary Islands). The *ANT* project (Alpine Network) for example supports innovative IT projects and promotes transnational and intraregional networking, know-how transfer and education of local innovators. The *BIRRA* project (Broadband in Remote and Rural Areas) involves a number of activities centred on learning from best practice in more advanced regions and identifying solutions relevant to specific regional conditions.

Few INTERREG projects concerning transport and mobility directly address rural-urban issues. Exceptions are for example the project on the *rehabilitation of cross-border routes for hiking* (France-Spain) and the *REVER-MED* project (MEDOCC), concerned with establishing “greenways” – sustainable transport routes between urban and rural areas for pedestrians and cyclists.

4.4.4 Consumption and amenities

A relatively large number of INTERREG projects is concerned with consumption and amenities that address urban-rural issues. Three spatial clusters of projects are apparent: One in the Netherlands and northern France, a second one in the Pyrenees and a third one on the mouth of the Baltic. The remaining projects concerned with consumption and amenity are fairly evenly spread across the EU territory. In thematic terms, three areas of action can be distinguished:

Rural tourism

This first group of projects seeks to develop the potential of rural areas for recreation and tourism, catering mainly for an urban clientele. A substantial number of these projects focus on sustainable tourism. Most of these projects are funded through strand A, especially in rural areas which are within close proximity of urban areas. Other projects concerning rural tourism can mainly be found in strand C. The INTERREG IIIA Ireland-Wales TWIGS project (Tourism Wales and Ireland Green and Sustainable) for instance aims to promote collaboration between various agencies and communities to achieve synergies in the development of quality green tourism, develop best practice in the development of authentic rural tourism, engage local communities in the development of quality green tourism and create action plans for the development of green tourism.

Local products

In the second group of projects focussing on local products many projects seek to increase awareness about traditions and regional products and increase the local market for products in order to stimulate the rural economy. Many projects in this group are funded by INTERREG strand A, particularly in the more rural parts of Europe. There is a strong link between these projects and some of those identified under the heading of economic and social development (see above).

Landscape, the built environment and environmental protection

The third group of projects under the heading of consumption and amenities focus on landscape, the built environment and environmental protection. In most of these projects the focus is on the exploitation, management and/or protection of areas with specific landscapes, habitats or buildings. The location of these areas is diverse. Some are rural – e.g. *BIRD* (Baltic Sea Region), *HERITOUR* (CADSES), *MACARURAL* (Madeira-Azores-Canary Islands) –, others are periurban – e.g. *SEPTENTRION* (North West Europe), *EURMET* (South West Europe), *LIFESCAPE* (North West Europe) – and others urban – e.g. *GreenKeys* (CADSES), *SOS II*, *SAUL* (both North West Europe). The majority of projects in this group are found in INTERREG strand B, particularly in more urban parts of Europe.

4.4.5 Demography

A main subject for concern in many European rural areas is depopulation. This has a clear link to rural-urban relationships as in almost all cases of areas facing depopulation the key issue is migration to cities and urban regions elsewhere. As it is nearly always the case with migration, this type of outward migration is selective. Younger people especially tend to move in search of job opportunities or higher education (brain drain). Many INTERREG projects classified under the five themes of rural-urban relations consider depopulation as an important issue. The idea is that if rural areas become more attractive in terms of, for example economic development and presence of services and facilities, people are more inclined to stay or return. There are a small number of projects entirely focussing on the issues of population and migration. Two projects focus on youth groups: *ROOTS* (Madeira-Azores-Canary Islands) and *PICYBU* (Northern Periphery). The IIIB project *SOHO/SOLO* (Atlantic Area) has an interesting subject namely to encourage people to migrate towards the participating regions.

4.4.6 Governance

The main difference between projects classified under governance and all other projects related to rural-urban relations is that the objective and approaches are much wider than in all other projects. An example of a comprehensive project is *COHESION* (CADSES) addressing the diminishing competitiveness of many rural areas. Integrated planning is called for to overcome the shortage of resources available. *NS RURAL* (North Sea) is another example of a comprehensive approach. Furthermore, there are a handful of projects aiming at delivering concrete policy instruments. All projects with this aim are INTERREG IIIC projects. *ALICERA* (IIIC North) has the objective to introduce a new education instrument called *RAL*, *Rural Action Learning* which should contribute to capacity building and the mobilisation of certain groups of rural societies. *FARLAND* (IIIC West) focuses in particular on local and regional government agencies with the objective to develop an integrated Land Development approach because so many policy issues are inter-linked. *ICNEW* (IIIC East) has similar objectives.

Under the heading of governance two projects stand out not only because they seem to have common objectives. *URBAL* (North Sea region) and *RISE* (IIIC East) focus on areas which are neither urban nor rural. In the *URBAL* project these areas are designated as URBAL-spaces – a term reflecting the joining of rural and urban areas. *RISE* adds the dimension of densely populated rural areas. As the definition of densely populated varies between from country to country, these two projects are very close in their content.

4.5 Conclusions and ideas for the future

INTERREG projects contribute in various ways to improving polycentric urban development and rural-urban relationships in Europe. Key concerns of these projects are competitiveness, liveability and cohesion of specific places and territories. The character and size of the areas addressed by INTERREG projects range from local to European.

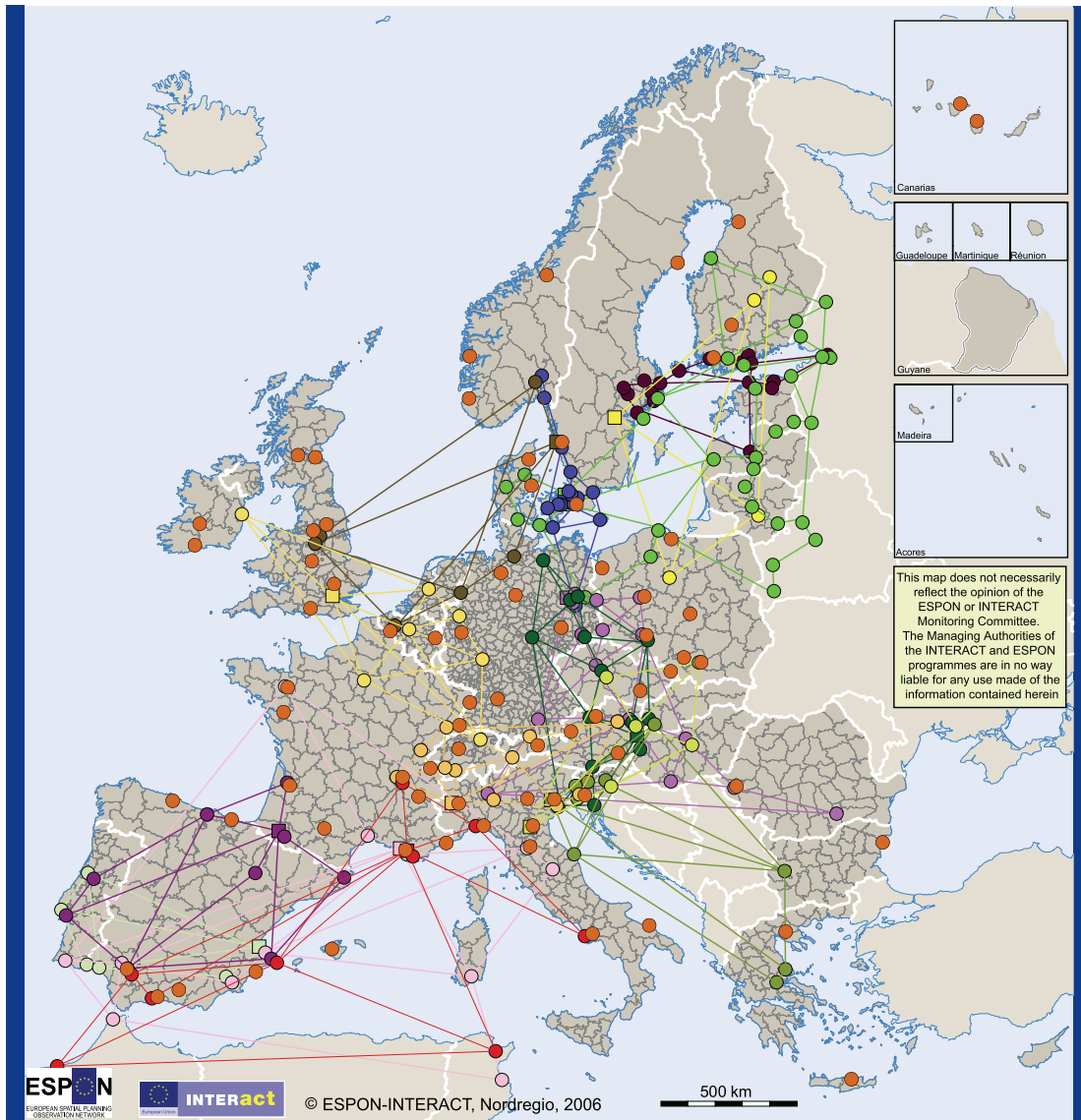
4.5.1 INTERREG activities on polycentricity in second tier cities in economic strong regions

With regard to polycentric urban development the main topics addressed by INTERREG projects are the structure of territory, the potentials for balanced economic development and integrated approaches to territorial governance. The focus of cooperation is often on sharing experience among cities with similar positions in the regional urban hierarchy, or a similar physical context. Concrete actions within single cities can also be taken as part of the projects.

Furthermore, the projects connect only in exceptional cases with the main metropolitan areas in Europe. The focus is rather on second tier cities, which are in close proximity to the main metropolitan areas. European regions without close links to the main metropolitan areas tend not to participate in polycentric development projects.

It seems also that the economically strong areas have tended to cooperate through INTERREG rather than seek to connect with weaker regions.

Figure 13: Second tier cities and main INTERREG IIBB projects dealing with polycentric development



© EuroGeographics Association for the administrative boundaries

Source: ESPON 111 for the MEGA and cluster classifications
ESPON-INTERACT project database for the INTERREG projects

Type of cluster:

- Second tier nodal regions

Projects in measures linked to polycentric development:

Squares refer to the lead partners and circles to other partners involved in the project.

- | | | |
|-------------------|---------|--------------|
| AlpCity | C2M | Polynet |
| AMAT | COINCO | RePus |
| ATI | Defris | SIC! |
| Baltic Palette II | MECIBS | VISP |
| CIUMED | PolyDev | Vital Cities |

Source: ESPON-INTERACT study on polycentric urban development and rural-urban partnership (2006), page 42

4.5.2 INTERREG activities on rural-urban issues concentrated in certain areas

The main topics addressed by INTERREG projects are economic and social development, provision of general services, transportation, ICT, consumption and amenities, demographic challenges and governance approaches.

With regard to the issues addressed, it might be surprising that essential aspects of rural-urban cooperation such as water and energy flows seem to be absent by INTERREG projects dealing with rural-urban relations.

Many of the reviewed INTERREG projects consist of local sub-projects in which concrete actions are carried out. Concrete actions in rural-urban projects are by nature situated on the local micro level, which might explain why the link between the sub-projects often seems to focus on the sharing of experience.

Furthermore, larger cities seem not to be involved in INTERREG projects addressing rural-urban relations.

Mapping the lead partner locations of projects on rural-urban partnership, there are two large clusters of projects: One in the North-West of Europe, the other one in the South-West of Europe, including France. Two smaller clusters are situated in Scotland and Macaronesia (Azores, Madeira, Savage Islands, Cape Verde and Canaries).

The map shows the lead partner of INTERREG projects addressing rural-urban relationships on the background of the rural-urban typology of ESPON.

4.5.3 Inspirations for future activities

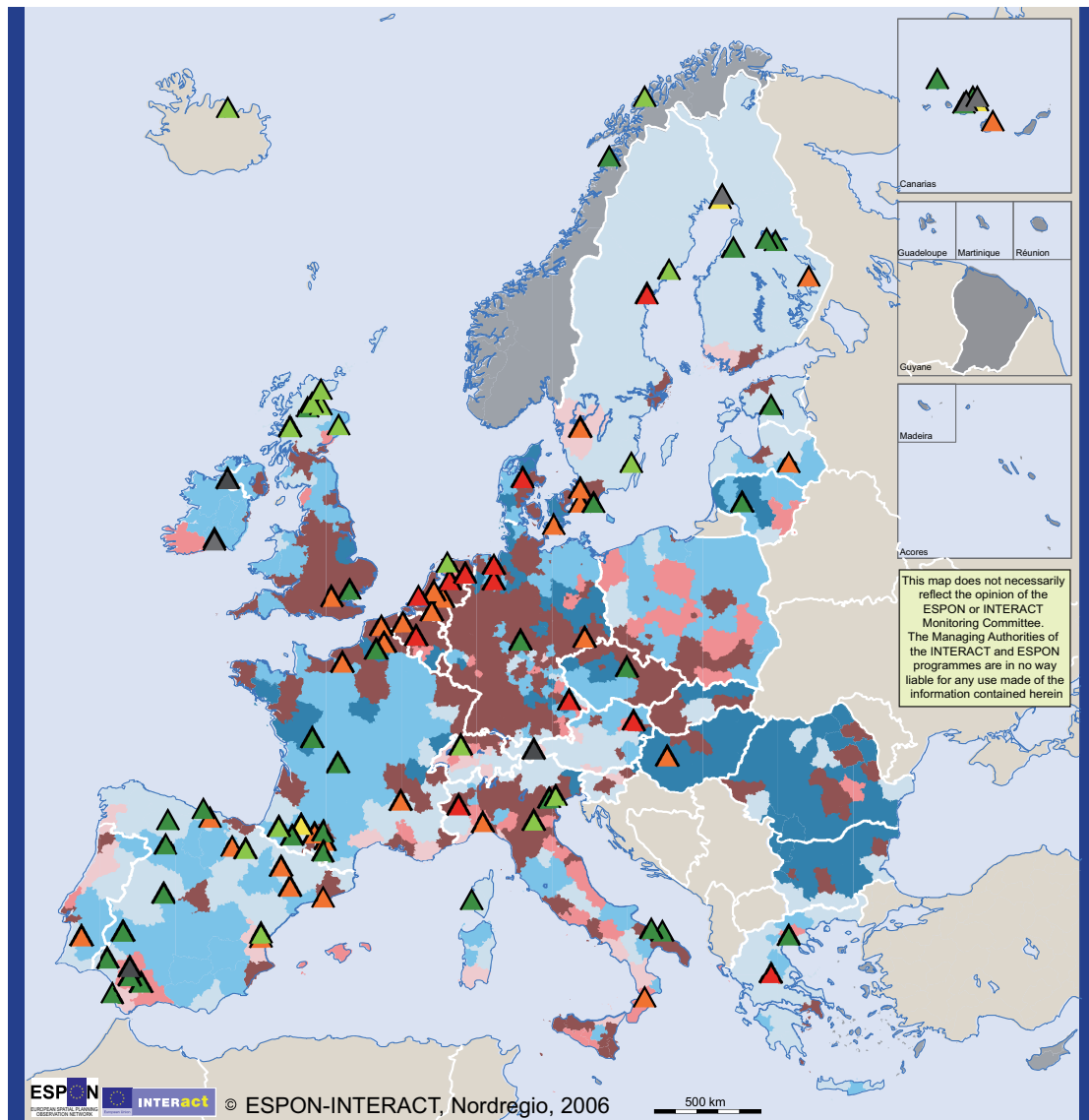
The fields presented in which INTERREG projects are fostering polycentric urban development and rural-urban partnership can provide stimulating input for future projects.

It shows clearly that polycentric urban development and rural-urban partnership can be best approached by focusing on specific territorial challenges. While dealing with challenges such as provision of general services or urban cooperation to stimulate competitiveness, polycentric urban development and rural-urban relations can serve as means to overcome these challenges.

In addition to the projects presented, there are some additional points for the discussion of future territorial cooperation projects:

- Governance issues (multi-level governance) and potentials for endogenous development, development of tools for regional/local development, development of polycentric urban regions can be considered as important topics for projects targeting development at local or regional (micro) level.
- Transnational territorial integration of metropolises and second tier cities, networks of innovation and competence centres are considered suitable topics for territorial cooperation projects targeting larger territories (meso level).
- At European (macro) level, the issue of global integration zones, i.e. larger cooperation areas or clusters of cities which are significant locations at global scale, has so far hardly been approached by territorial cooperation projects.
- Flows between territories, for example. in terms of transport, water, energy etc., are only rarely addressed in INTERREG projects and might deserve more attention in future territorial cooperation projects addressing polycentric urban development and rural-urban partnership.
- Cooperation projects in the fields of polycentric urban development and rural-urban partnership might benefit from the involvement of larger cities and metropolitan areas.

Figure 14: Location of lead partners for the six rural-urban themes



Source: ESPON 112 for the urban-rural typology
ESPON-INTERACT Database

Lead Partners location

- ▲ Consumption & Amenities
- ▲ Demography
- ▲ Economic & Social
- ▲ Governance
- ▲ Service & Facilities
- ▲ Transport Energy & Info

Urban-rural typology
(based on population density, FUA ranking and land cover)

- High urban influence, high human intervention
- High urban influence, medium human intervention
- High urban influence, low human intervention
- Low urban influence, high human intervention
- Low urban influence, medium human intervention
- Low urban influence, low human intervention
- No database available
- Non-ESPON area

Source: ESPON-INTERACT study on polycentric urban development and rural-urban partnership (2006), page 65

5. Territorial cooperation in the field of natural hazards

Natural and technological hazards can adversely influence regional development. When disasters occur they damage businesses and communities. The environmental and economic impact of oil spills or drought can be widespread and long lasting. Few people only are aware of the level of vulnerability of the territories where they live, work, study, or take holidays. Altogether 11 natural hazards have been identified as the most relevant for territorial development. These are avalanches, droughts, earthquakes, extreme temperatures, floods, forest fires, landslides, storm surges, technological hazards, volcanic eruptions and winter storms.

Risk management and hazard mitigation are not major fields of INTERREG cooperation. However a range of related activities have been carried out by INTERREG projects.

INTERREG activities addressing these as well as the broad field of technological hazards are discussed in this chapter. The types of actions carried out will be discussed as well as the geographical dimension of the activities taking into account latest ESPON findings on the geography of hazards in Europe. Based on this some overall conclusions and considerations for future action will be presented. The analysis of projects focuses on the 11 natural hazards identified as spatially relevant by the ESPON Hazards project (see above).

In total 144 examples of INTERREG projects addressing hazards have been identified. Of these 112 INTERREG hazards projects have been included in the quantitative analysis presented in this chapter. The remaining 32 projects deal with general risk assessment and are thus not addressed here.

As the focus is on natural hazards and not particularly on technological hazards, all INTERREG projects that deal with technological hazards are grouped into one single hazard category called "technological hazards".

The overview shows that floods have been addressed by the projects significantly more often than any other hazard. This is followed by technological hazards, which need to be interpreted with care as the category of technological hazards comprises several sub-categories.

Figure 15: Amount of hazards addressed by INTERREG III projects (total sums are not equal to sums of projects, as several project address a series of hazards)

Hazard	INTERREG IIIA*	INTERREG IIIB	INTERREG IIIC
Avalanches	2	3	–
Droughts	-	9	1
Earthquakes	2	5	1
Extreme temperatures	-	5	-
Floods	13	40	3
Forest fires	2	4	1
Landslides	5	8	1
Storm surges	2	10	-
Technological hazards	17	12	2
Volcanic eruptions	-	3	-
Winter storms	1	6	-
Not defined	25	6	4

* Due to data restrictions, only the following 46 INTERREG IIIA programmes have been taken into account: Spain – Portugal, Italy – Slovenia, Ireland – Northern Ireland, France – Spain, South-East Finland – Russia, Sweden – Norway, Franco-British Programme, Italy – Switzerland, Euregio Karelia, Italy - France (Islands), Southern Finland - Estonia, Austria - Germany/Bavaria, Italy – Austria, EUREGIO - Euregio Rhine-Waal - euregio rhine-meuse-north, Ireland – Wales, Italy - France (ALCOTRA), Alpenrhein-Bodensee-Hochrhein, Oresund Region, France - Wallonia - Flanders, Adriatic New Neighbourhood Programme, Austria – Hungary, Upper Rhine Centre-South, France – Switzerland, Wallonia – Lorraine – Luxembourg, Kvarken – Mittskandia, Spain – Morocco, Euregio Meuse-Rhine, Brandenburg – Lubuskie, Austria – Slovenia, Ems Dollart region, Flanders - Netherlands, Greece – Bulgaria, Pamina, Austria – Slovakia, Sønderjylland –Schleswig, Austria – Czech Republic, Fyn – K.E.R.N., Storstrom – Ostholstein-Lübeck, Skargarden, Greece – Albania, Saarland-Mosel (Lorraine) - Western Palatinate, Germany-Luxembourg-German Speaking Community of Belgium/Walloon Region, Greece – Cyprus, Greece - Former Yugoslav Republic of Macedonia, Gibraltar – Morocco.

Source: ESPON-INTERACT study on environmental hazards and risk management (2006), page 9

5.1 Understanding hazards, vulnerability and risks

For the analysis of INTERREG activities dealing with hazards the following definitions for hazards, vulnerability and risks are used (adopted from the ESPON Hazards project):

- *Natural hazard*

A natural hazard is an extreme natural event (of the average environmental, meteorological, hydrological or other natural conditions) that is statistically rare at a particular place and time. A natural hazard can be a source of risk but does not necessarily imply a potential degree or frequency of occurrence. A natural hazard produces risk only if exposures create the possibility of negative impacts.

- *Technological hazard*

A technological hazard is a hazard of human (artificial) origin that can harm people, the environment or facilities. The emission from a technological hazard may leak out of a production facility, a deposit, stockpile, transport corridor, etc. through specific transmission media (water, air, soil).

- *Vulnerability*

Vulnerability is the degree of fragility of a (natural or socio-economic) community or a (natural or socio-economic) system towards hazards. It is a set of conditions and processes resulting from physical, social, economic and environmental factors, which increase the susceptibility of the impact and the consequences of hazards. Vulnerability is determined by the potential of a hazard, the resulting risk and the potential to react to and/or to withstand it.

- *Risk*

A risk is a combination of the probability (or frequency) of occurrence of a hazard and the extent of the consequences of the impacts. Generally, a risk is a function of the hazard and the vulnerability. In the context of this thematic study it was not possible to apply these clear-cut definitions of hazards and risks to the categorisation of INTERREG projects. It was evident that the projects had used a range of differing definitions and expressions (which might also be due to the wording used in the priorities and measures of the INTERREG programmes) to address hazards and risk.

To assess how effectively the various INTERREG strands have contributed to risk management related to hazards a multi-level analysis has been carried out. The analysis involved (a) reviewing INTERREG programme documents, (b) listing and studying the scope of launched projects, and (c) appreciating the achievements of some selected projects.

5.2 Interregional risk projects

The INTERREG IIIC differs from A- and B-strands as the programme documents list no specific thematic priorities to choose from by the applicants. However, INTERREG IIIC has encouraged numerous actors to become engaged in risk projects or networks. Less than twenty projects have been identified as examples of projects dealing with risks at least indirectly. Nine of them have risk management as the main focus. Among the nine “risk projects” the clearly specified themes include floods, droughts, forest fires and volcanic eruptions. Among the activities that are only indirectly risk-related the most references are made to floods.

A closer review of the IIIC projects reveals that nearly all natural hazard types could potentially be addressed by the actions launched (both direct and indirect risk projects). For example, the project *NMF, Network Mountain Forests* (IIIC East) touches upon avalanches and landslides, whereas the network *AMICA, Adaptation and Mitigation – an Integrated Climate Policy Approach* (IIIC West) is likely to deal with extreme temperatures and storms. Only earthquakes and tsunamis have no “home-base” in any project. However, the theme of civil protection addressed by e.g. *SIPROCI, Interregional response to natural and man-made catastrophes* (IIIC East) is certainly very relevant to both of these hazards.

There are Italian partners in all but two of the nine “risk projects”. France is also broadly represented, as well as Spain, Germany, Portugal and Greece. All risk projects have at least three nationalities represented in the partnership, mostly more. The most international partnership has been built by the network *FLAPP, Flood Awareness and Prevention Policy in border areas* (IIIC West).

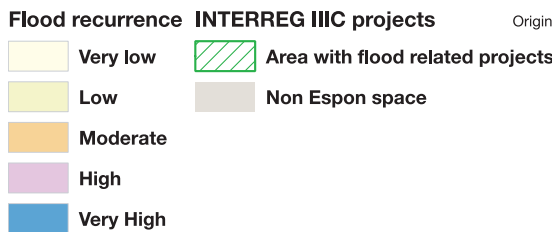
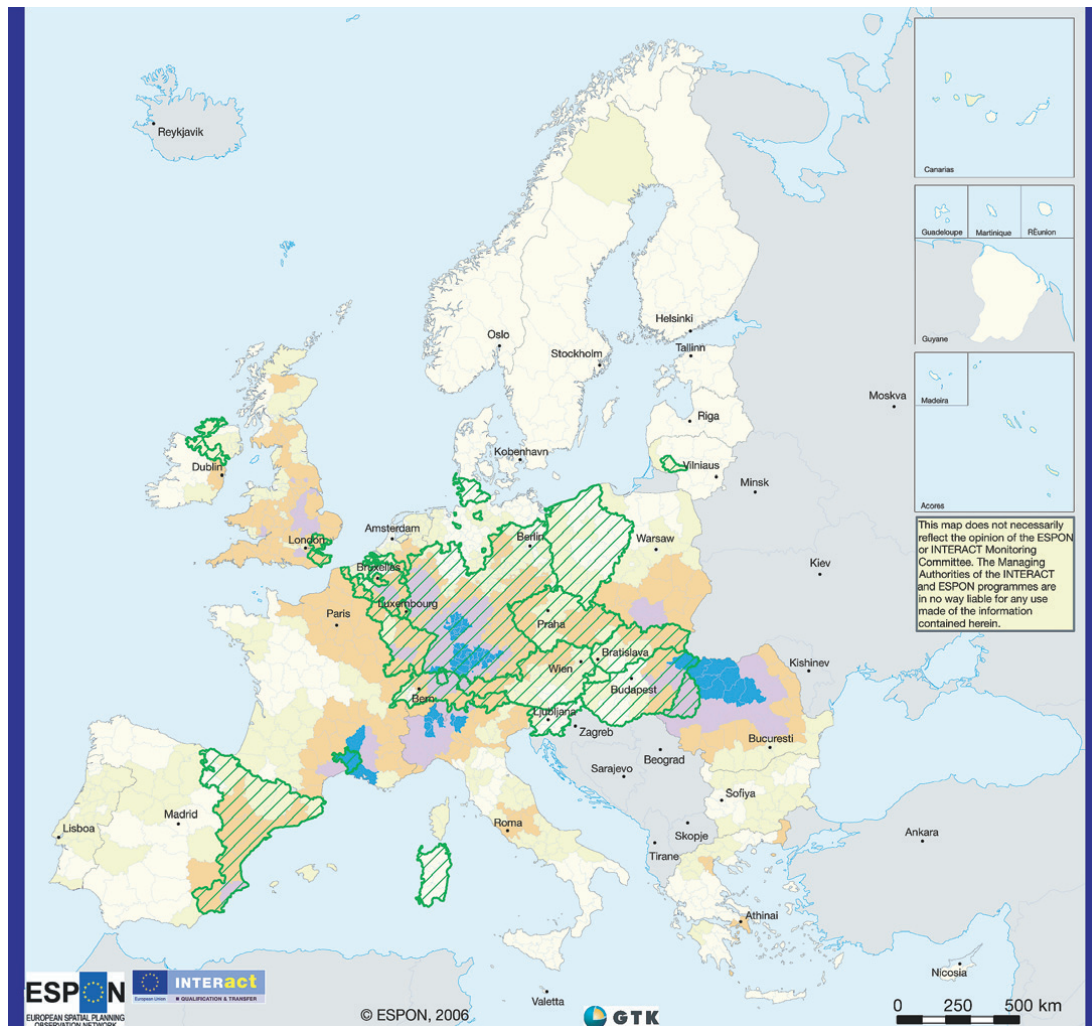
Taking *FLAPP* as an example, there are participants from 14 countries. Within the network, local and regional actors can transfer successful flood management approaches. A special area of interest is to find sustainable solutions for cross-border cooperation. *FLAPP*, which was initiated by the Euregio Meuse-Rhine, builds on various earlier activities in international water management. It brings together a considerable share of European expertise in the field. Thus the manual of good practices in cross-border flood management, which will be produced by the network, is probably going to become a key reference in its field. At least in

the networking activities a wide array of topics has been addressed, among others flood mapping, early warning systems, stakeholder awareness and the role of spatial planning in flood risk management. Recommendations for the development of relevant EU policies are also anticipated.

The mapping of INTERREG IIIC projects on floods reveals that the coverage of the flood projects is high in central Europe, whereas it is here also extending further towards Eastern Europe than in the INTERREG IIIA or IIIB activities. Indeed, only IIIC reaches parts of the most eastern areas with very high flood risk.

The area covered by drought related INTERREG projects of all strands goes well beyond those areas that are identified as potentially experiencing the highest drought potential increase by climate change. On the other hand, many areas that are presumed to experience more droughts in the future did not yet have any related INTERREG activities (Member States which joined during the last 10 years, central and northern part of the Iberian Peninsula, parts of France and Italy). Only Greece seems to have covered the drought aspect rather strongly.

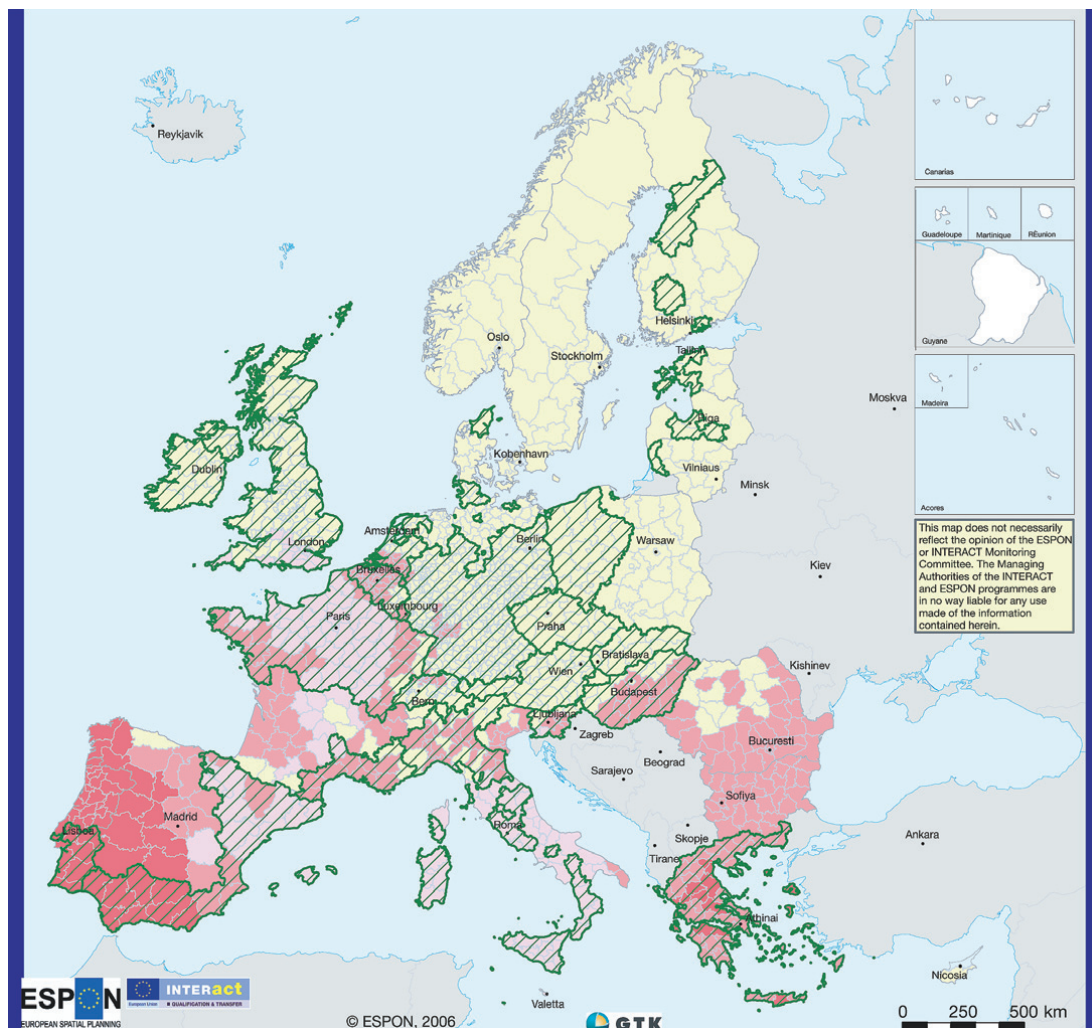
Figure 16: Flood recurrence and INTERREG IIIC flood related projects on NUTS3 level



Origin of the Data: © EuroGeographics Association for the administrative boundaries
 Large flood areas © Dartmouth flood observatory
 Flood areas © ESA - Earth Observation - Earth Online
 Rhine Atlas 2001 IKRS-CIPR-ICBR
 Flood related projects
 © ESPON-INTERACT INTERREG III project database
 The map is based on the results of ESPON 1.3.1.
 It displays the hazard recurrence based on average number of large flood events on NUTS3 regions 1987-2001. The first class "Very low hazard intensity" includes the regions without large flood events.

Source: ESPON-INTERACT study on environmental hazards and risk management (2006), page 27

Figure 17: Change of dry spell length affecting drought potential and drought related INTERREG IIB and C projects



INTERREG IIB and C projects related to droughts

Area with drought related projects

Change of dry spell length (climate change induced) affecting drought potential

- No Data
- No impact on drought potential
- Very low impact on drought potential
- Low increasing impact on drought potential
- Moderate increasing impact on drought potential
- Non Espson space

Origin of the Data: © EuroGeographics Association for the administrative boundaries
 ARIDE final report (2001)
 The Prudence project model database
 Drought related projects
 © ESPON-INTERACT
 INTERREG III project database

The map is based on the results of ESPON 1.3.1. The map represents the connection between change of dry spell length (The Prudence project model database) and drought potential, based on precipitation deficit recordings 1904-1995.

Source: ESPON-INTERACT study on environmental hazards and risk management (2006), page 22

5.3 Transnational risk projects in large parts of Europe

In the case of INTERREG IIIB, 4 out of the 13 programmes have clear indications of risk management in their priorities. The focus is either on general prevention of disasters (Alpine Space) or on water resources (floods in North West Europe and CADSES; droughts in MEDOCC). A more detailed listing of the measures mentioned under each priority indicates the risk focus of each programme more clearly. This is the case especially in both the MEDOCC and CADSES Programmes. Furthermore, approximately half of the programmes touch upon hazards or risk management, when judged by the wordings of the measures. In other words, reviewed this way, the programmes of the North Sea Area, Madeira-Azores-Canary Islands and ARCHIMED are also dedicated to the issue although the priorities do not indicate this. The key foci of the measures in the reviewed programmes remain more or less the same as at priority level: (a) Floods and coastal risks, (b) droughts and desertification and (c) risk management in general. Here, direct references are also made to forest fires and earthquakes in the ARCHIMED Programme.

All together 72 examples of direct “risk projects” have been identified in INTERREG IIIB programmes. Most (major) IIIB zones have risk projects. Some of the “risk projects” have been launched under other priorities and measures than those mentioned above (e.g. in the North Sea Programme). This means on the one hand that the programmes have been flexible, and, on the other, that regional actors felt a certain need for risk management projects.

Floods – European expertise in transnational flood management

Within INTERREG IIIB, a high number of projects addressed floods. These projects have clearly contributed to something that could be called European expertise in transnational flood management. The map shows that areas which are highly flood prone and have not received attention by INTERREG IIIB activities so far are located in the Eastern areas.

However, these lessons still need to be compiled to support future activities. An example of a theme that could be built on a rather well studied base in the next programming phase is flood mitigation through sensitive land-use planning.

Especially North West Europe launched various projects in this field. Clearly, some kind of a southern counterpart for the North-Western flood mitigation cluster is missing.

Droughts

The series of projects on droughts, desertification and forest fires has laid a ground which could grow in size and in depth and be able to take effect in regional practices. Innovative hydro-meteorological modelling alone is not yet enough if key stakeholders are not brought into the discussion.

Forest Fires

Considering the devastation that forest fires have caused in the recent years, there is an obvious lack of INTERREG projects on forest fires. The projects such as *Grinfomed and Medifire* (MEDOCC) and *INCENDI* (IIIC South) thus create high expectations in terms of transferable lessons. Especially long-term vulnerability reduction should be promoted, i.e. identifying key interconnections between land use planning and the forest fire risk. The map shows that generally, the areas with high forest fires hazards are not necessarily those areas with considerable project activities related to forest fires.

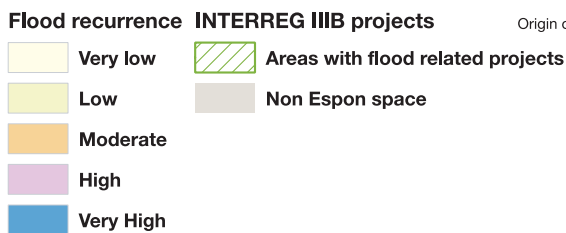
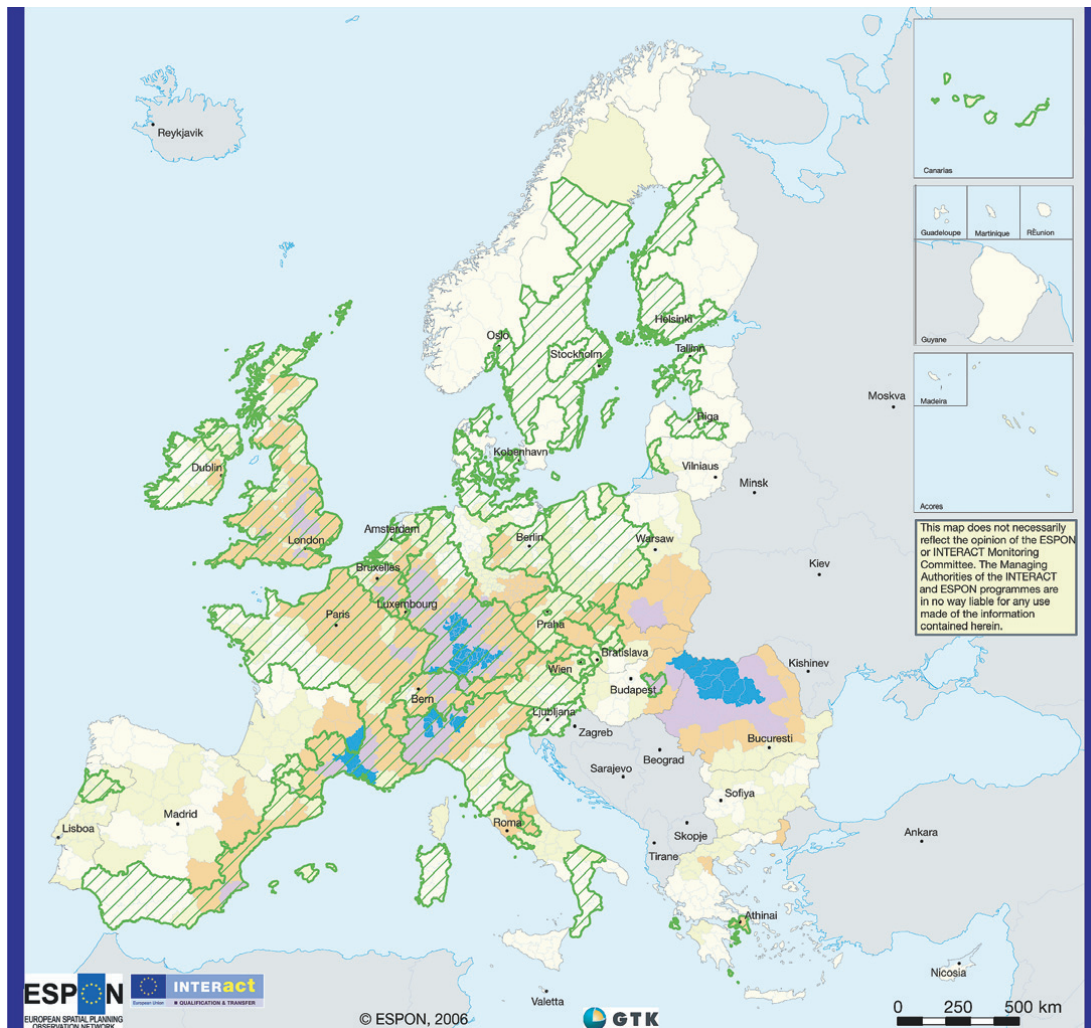
Risk management in mountainous areas

Some kind of a project cluster has also evolved to support risk management in mountainous areas. The Alpine Space has a number of inter-connected projects, which can contribute to a common body of knowledge. These projects include e.g. *DIS-ALP*, *Disaster Information System of Alpine Regions*, *SISMOVALP* and *NAB*, which is about natural space analysis for management of natural hazards. There are also interrelated projects in other programme areas, e.g. CADSES.

Technological hazards

The map shows that most of the INTERREG IIIB activities related to technological hazards have focussed on coastal zones. This implies that coastal pollution and other maritime safety features are of high concern for territorial development.

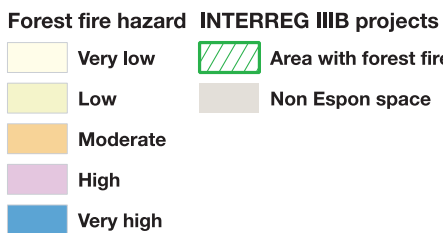
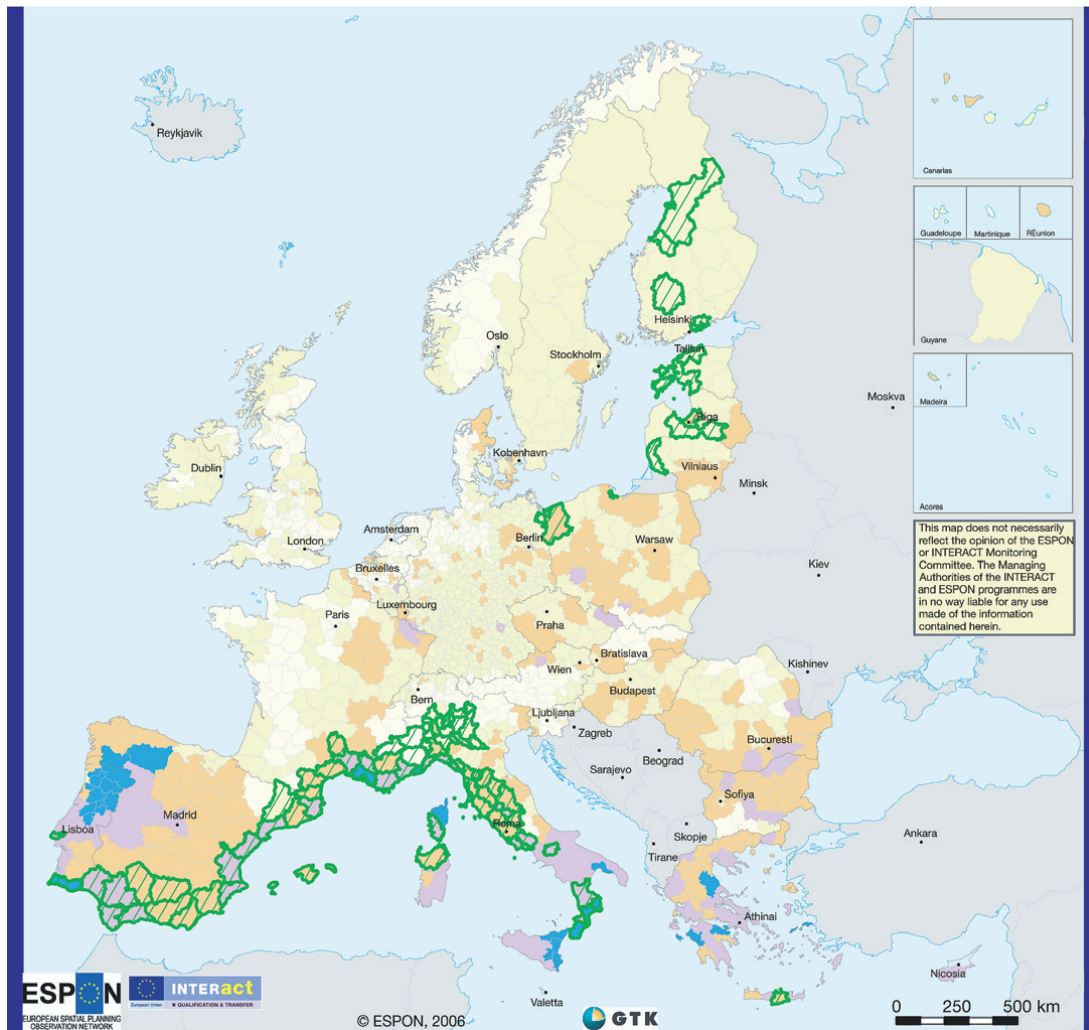
Figure 18: Flood recurrence and INTERREG IIIB flood related projects on NUTS3 level



Origin of the Data: © EuroGeographics Association for the administrative boundaries
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 Rhine Atlas 2001 IKRS-CIPR-ICBR
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 © ESPON-INTERACT INTERREG III project data base
 The map is based on the results of ESPON 1.3.1.
 It displays the hazard recurrence based on average number of large flood events on NUTS3 regions 1987-2001. The first class "Very low hazard intensity" includes the regions without large flood events.

Source: ESPON-INTERACT study on environmental hazards and risk management (2006), page 26

Figure 19: Forest fire hazards and INTERREG IIIB projects

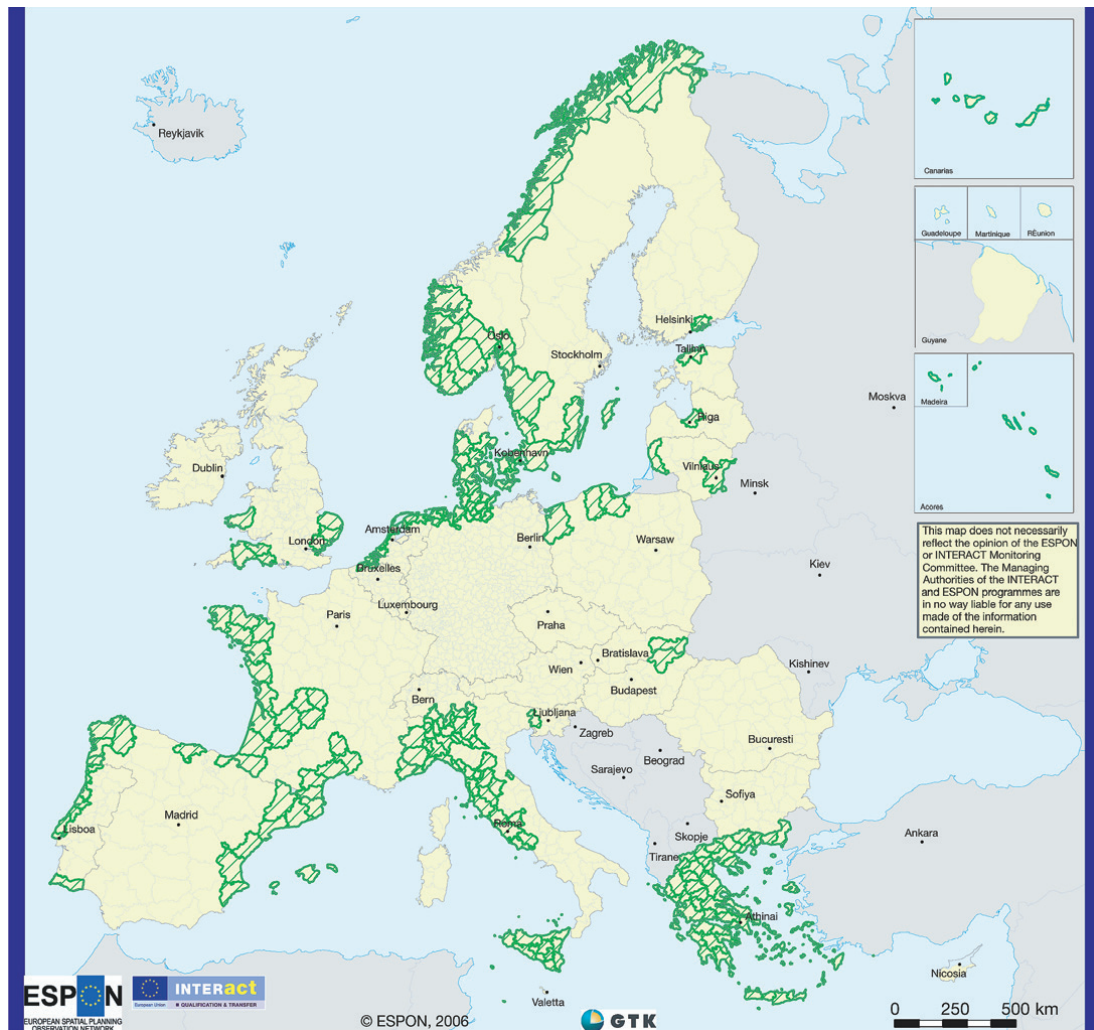


Origin of the Data: © EuroGeographics Association for the administrative boundaries
 Number of forest fires 1997 - 2003: ATSR world fire atlas
 European Space Agency - ESA/ESRIN
 Biogeographic regions: EEA
 Forest fire projects
 © ESPON-INTERACT INTERREG III project database


This map is based on the results of ESPON 1.3.1.
 The classification of forest fire hazard is based on a combination
 of the numbers of observed fires per 1000 sq. km 1997-2003 (ATSR
 and the map of biogeographic regions in Europe (EEA).

Source: ESPON-INTERACT study on environmental hazards and risk management (2006), page 28

Figure 20: Technological hazards addressed in INTERREG IIIB projects



INTERREG IIIB projects

 Area with techn. hazard related projects

 Non Espon space

Origin of the Data: © EuroGeographics Association for the administrative boundaries
 Techn. hazard projects
 © ESPON-INTERACT INTERREG III project database

Source: ESPON-INTERACT study on environmental hazards and risk management (2006), page 33

5.4 Cross-border cooperation approaches risks rather vaguely

In the INTERREG IIIA strand, only 6 out of 53 programmes reviewed with regard to hazards included a clear indication of risk management. Risks were often mentioned in vague terms, in relation to environmental protection. The more deliberate cases focussed on forest fires and civil protection (Italy - France (Islands)) and flood-related risks (Mecklenburg-Vorpommern/Brandenburg - Western Pomerania and Euregio Meuse-Rhein).

Altogether 63 of 3 495 identified INTERREG IIIA projects could be classified as “risk projects”, in early 2005. As many as 22 INTERREG IIIA areas had launched projects related to hazards and risk management, and 14 areas have more than one “risk project”, at that time. Thus looking at the projects the picture appears more varied than the overview of programme priorities would suggest.

The character of INTERREG IIIA projects addressing hazards varies considerably in terms of the focus of activities, the actions taken and the size of the projects. In some areas the IIIA projects seem to have been used to purchase equipment that can potentially be used in preventing disasters in a cross-border context: Fire department vehicles, etc. As each of these often interconnected investments is considered as a project of its own, this group should be kept in mind when analysing the project list⁴: If one considers only the projects where local and regional

actors get engaged in a broader set of cross-border hazard assessment and risk management activities, there are 41 cross-border cooperation projects in 17 INTERREG IIIA areas.

There are only few IIIA areas that have been active in multiple themes with various actors. Within the France – Spain programme, actions launched deal with floods and earthquakes, whereas Southern Finland – Estonia addresses especially maritime safety and civil protection in several projects. The Franco-British Programme has activities in coastal protection and management of technological hazards. Also the area France – Wallonia – Flanders covers a wider spectrum. It addresses floods in the cross-border context and tries to raise farmers’ awareness of erosion problems.

Among the various hazard types the most attention in INTERREG IIIA has been received by technological hazards (17 projects). The map shows that in central and northern Europe most of the cross-border cooperation projects related to risks and hazards focused on technological hazards. In southern Europe, all hazards and risk related INTERREG IIIA projects in turn focused on natural hazards, with the exception of a Spanish-Moroccan project.

Floods were the second most addressed subject by IIIA projects with most of these located in the border areas between Italy and France as well as France – Belgium – Luxembourg.

⁴ Interconnected investment projects have been carried out e.g. in Brandenburg – Lubuska with its various projects related to disaster control. Also in Ireland – Northern Ireland the programme has provided an opportunity to strengthen the maritime safety procedures through series of investments.

Figure 21: INTERREG IIIA areas with risk profile

INTERREG IIIA		
Programme	Risk focus	Priority wording
(DE/PL) Saxony – Lower Silesia	Reducing pollution and risk	Priority 3: The environment. Plans for the quality of water, reduction of environmental pollution and risks, and protection of nature, the countryside and the climate will guarantee sustainable, overall development in the border area.
(DE/CZ) Saxony – Czech Republic	Reducing pollution and risk	Priority 3: Environmental development of the area. Plans for the quality of water, reduction of environmental pollution and risks, and protection of nature, the countryside and the climate will guarantee sustainable, overall development in the border area. Cross-border network systems will help make agriculture and forestry more competitive and take advantage of the effects of the common agricultural policy established on the agenda for 2000.
(DE/PL) Brandenburg – Lubuskie	Reducing pollution and risk	Priority 3: The environment. The essential aims of this priority are the reduction of environmental pollution and risks, in view of sustainable, environmentally friendly development in the border area, the protection of residential areas that are close to nature and to natural resources, elimination of abandoned industrial waste and cleansing of watercourses polluted through mining, and the construction of purification plants and waste water treatment systems.
(IT/FR) Italy – France (Islands)	Combating fires, civil protection	Priority 2: Environment, tourism and sustainable development: This priority involves three themes: protection and upgrading of the environment, development and promotion of tourism in the border area and sustainable economic development. Among the most important measures covered are cooperation in combating and preventing fires and civil protection, waste treatment and recycling, joint promotion and marketing in the tourism sector and services to SMEs in the field of innovation and technology transfer.
(DE/PL) Mecklenburg – Vorpommern/ Brandenburg – Western Pomerania	Catastrophe, disaster and high water protection	Priority 3: The environment. This priority contains measures for the protection of nature and the countryside. Care for the countryside will preserve the attraction of the region's cultural landscapes, secure resources and provide the basis for creating a cross-border catastrophe, disaster and high-water protection facility. Further objectives are the improvement of environmental consciousness and enhancement of the quality of the water in the interior and along the coast.
(DE/NL/BE) Euregio Meuse – Rhein	Floods	Priority 3: Promoting environmental improvement (including agriculture). Key actions concern the improvement of quality of life and the importance of agriculture. Special attention is being paid to overcoming the risks of flooding and the treatment of waste.

Source: ESPON-INTERACT study on environmental hazards and risk management (2006), page 16

5.5 Conclusions and ideas for the future

The review of INTERREG activities shows that hazard and risk related projects should not only focus on single hazards and their effects, but also strongly on vulnerability reduction, (e.g. a fire truck alone does not combat the problem of forest fires). Research examples funded through other EU project initiatives (e.g. the EFFIS project on forest fires) can be useful to identify potential fields for application in INTERREG projects to develop cross-border and interregional strategies to reduce both the potential of hazards as well as potential impacts (risks). Regional decision-making and the involvement of local stakeholders are vital in this context. In general, future projects would be well advised to not only concentrate on the effects of hazards and risks and on the possibilities to combat these locally and regionally, but work on strategies reaching towards the root causes of risks (e.g. land use), and to involve decision makers who can develop mitigation plans. In addition, hazard interactions need to be better respected, as well as potential impacts of climate change.

5.5.1 Geohazards

Hazard sources and the potential extent of damage can be regionally better delimited for most geohazards than for meteorological hazards. Landslides are confined to valleys and slopes, and the geology and climate often determine certain areas of risk. Volcanic activities have mostly local to regional effects, but ash plumes can reach global extents. Earthquakes appear, besides those caused by underground failures and explosions, in tectonically active areas. In this sense it is possible to delineate the immediate hazard and risk of geohazards to those areas where they mainly occur. Tsunamis are confined to coastal areas and can be triggered by all geohazards mentioned above.

Earthquakes are extremely dangerous and affect large areas of the eastern Mediterranean and Eastern Europe. In comparison to the relative importance of earthquakes revealed in the study, it would be strongly recommended to take this hazard more into account in future Territorial Cooperation activities in these areas. Many very old settlement areas have always been located in earthquake prone areas and earthquakes have always affected European civilisations. Old structures are difficult to protect, therefore future projects should focus on enforcing appropriate engineering measures for new structures to be earthquake

proof, the development of disaster management plans and cooperation of regions in cases of disasters. Cross-border cooperation in the field of disasters can be planned well before an earthquake strikes so that relief operations can start without delay. Future projects should focus especially on the eastern and central Mediterranean region as well as overseas territories.

Landslides are among the most widespread geohazards in European regions. “Landslide” is used here as a term to summarise all kinds of gravitational mass movements (rock falls, debris flows, etc.). Landslides can occur on very small spots that are not possible to display on regional level, so that it is to be defined by the relevant programme areas, where such hazards should be taken up in future Territorial Cooperation programmes. In general, it can be said that mountainous areas, in particular those with harsh climates favouring weathering processes, high precipitation rates and a high settlement pressure, are most prone to landslides. Nevertheless, locally these conditions might be very different, according to the geology, morphology and land use. Since terrestrial landslides (rock falls, etc.) into lakes or the sea can trigger tsunamis, this hazard can also play a role in the development of some settlement areas, e.g. in Norway where this hazard combination is most imminent. The need for landslide projects has to be defined locally.

Active volcanoes on the European continent are mostly found in Italy. But they are also of particular relevance for the distant EU areas of France, Portugal and Spain. Since the locations of active volcanoes are known, regional and local settlement development plans should respect safety zones. A considerable problem arises from uncontrolled settlement in hazardous areas, which also puts rescue teams in unnecessary danger. Appropriate land use, evacuation plans and disaster management plans in active volcanic areas, in close cooperation with neighbouring regions, should enable sustainable development of potentially affected areas.

Tsunamis are theoretically possible in all coastal regions, even if they are located far away from seismically active zones. The danger of tsunamis in the Mediterranean is high. It should not be forgotten that the most recent tsunami catastrophe in the Mediterranean caused over 75 000 casualties in 1908 in Italy, Messina. Even though this event occurred nearly 100 years ago, a geological perspective

reveals that this hazard is still imminent as large parts of the Mediterranean areas are tectonically active.

Tectonic activities concern mainly the Mediterranean area. Many distant EU areas also show a tsunami risk pattern. One possibility for project activities here could address relevance and feasibility of installing tsunami warning systems and how this could support regional development and decision-making.

Other georisks comprise factors of geochemistry. Various rock types and sediments have elevated contents of potentially harmful elements such as arsenic, fluoride, nickel, thallium or uranium. For example, the concentration of fluoride in stream waters is high in areas with certain granite types in alkaline volcanic rocks in Italy and in Scandinavia. Elevated concentrations of arsenic are found in large areas around ore potential areas of Portugal, France and Greece as well as in black shale areas of the Pyrenees. Here, the risks are mostly linked to the quality of drinking water. In the case of radiating elements, indoor radon concentrations can be high in uranium rich regions. In coastal regions soils and sediments may locally be extremely acid leading to significant financial loss due to dissolution of concrete foundations and drainage systems. Due to extreme acidity, harmful elements such as aluminium are also released, leading to mass deaths of fish populations in rivers draining through acid soils. Acid soils are typically found in land areas where sulphide-rich sediments are exposed to oxidation due to artificial processes such as ditching and land reclamation. Such regions are especially found in Scandinavia where natural land uplift (glacial isostasy) steadily exposes sulphide-rich sediments in coastal areas.

5.5.2 Meteorological hazards

Meteorological hazards often have a wider and fuzzier impact space than geohazards. Floods can affect large catchment areas (e.g. the entire lower Rhine area), storms can hit very large regions leading to both storm surges and inland damage, droughts can even affect the entire continent. However, it is seldom only the hazard itself that influences regional development. Only in combination with disadvantageous land use practices, infrastructure and settlement patterns can they lead to catastrophic impacts. In the discussion of meteorological hazards vulnerability reduction should therefore play a very important role.

Climate change models and their latest results can provide good input for future project discussions. As an example of a close cooperation between scientists and decision-makers in the field of climate change related issues, the project on *Sea Level Change Affecting the Spatial Development of the Baltic Sea Region*, SEAREG (Baltic Sea Region) has had close cooperation with spatial planners and other stakeholders. The sea level change assessment carried out in this project revealed that even though planning mostly concerns time periods of 10-20 years, climate change perspectives of up to 100 years are very relevant for planning, especially when talking about long-term investments and sustainable development. The resulting scenarios of the SEAREG project have found their way into many discussions and partly also development strategies of regions and towns. The follow up project INTERREG IIIB of SEAREG: *Developing Policies & Adaptation Strategies to Climate Change in the Baltic Sea Region*, ASTRA (Baltic Sea Region) focuses on several impacts of climate change on natural hazards and analyses those in close cooperation with local and regional authorities in case study areas around the Baltic Sea.

Avalanche hazards are, like the landslide hazard described above, very much confined to particular slopes and valleys. Since over 90% of the avalanche accidents with casualties are triggered by human activities in avalanche prone areas, the main focus of future projects with this hazard should concentrate on the safety issue in skiing and mountainous (snowy) hiking areas.

Droughts are a very important hazard that affects large territories in Europe. So far, there have been only few projects dealing with this hazard in INTERREG and it is strongly recommended to focus more on the adverse impacts of droughts on regional development. It should be taken into account that droughts affect not only agriculture but also other industries, as energy production plants and other industries can run at lower efficiency or even shut down due to the lack of cooling water from, e.g. rivers or lakes. Since droughts are difficult to predict, only long-term hazard management, including the sustainable usage of water resources, can prove sustainable solutions. Hazard interactions should be taken into account, as droughts can lead to an increase of the forest fire potential, and heat waves occurring at the same time as with droughts can increase both the drought and the forest fire hazard. Heat

waves occurring at the same time as droughts can increase the impact on energy supply, as the water needed for energy production may get too warm for cooling processes and the use of air conditioning systems causes an increasing demand on power production. It should also be taken into account that the latest climate change scenarios show a potential increase of the drought risk in the Mediterranean area and parts of central Europe.

Extreme temperatures are also difficult to forecast on a mid to long-term basis and therefore the regions that are most prone to this hazard should take long-term precautions. An important approach can be the general living and working conditions in extremely cold climates in the Northern peripheral areas, and this also applies to areas in Eastern Europe that experience strong variations of very hot summers and very cold winters. Materials and installations must be able to resist the temperature variations, and energy support (heating and cooling systems) must be adaptable to extreme situations. In addition, many people suffer during extreme heat waves so additional risks, e.g. for the health care systems, should be taken into account. Potential new projects could develop scenarios of, e.g. extreme temperatures during different periods of the year to determine the vulnerability of an area to those climatic extreme events. These scenarios can then accordingly lead to long term action and mitigation plans.

Flood hazards have received by far the most attention of all hazards in INTERREG projects. One reason for this might be the dramatic recent flood events across Europe, which have served as “focusing events” guiding policy-makers’ attention. In any case, this meteorological hazard, the impact of which is increased by the type and location of settlements and hydraulic engineering (e.g. straightening of rivers), etc., is one of the most frequently mentioned in INTERREG programme priorities and measures. It should be evaluated on regional and local scales whether these projects have actually lead to a decrease in flood potential and vulnerability. This should help to determine the need for more flood projects. In other words, the development of pan-regional (cross-border/catchment wise) cooperation should be endorsed, with a clear focus on the development of flood retention areas and natural flood prone areas. These efforts will be conducted in relation to the implementation of the recent EU Flood Directive, which also links with the Water Framework Directive. Another

important aspect relates to climate change, as flood patterns may change due to earlier snow melting in spring and increased precipitation, especially in central and northern Europe. Extreme weather events also appear likely to increase in the future. Since the flood potential is very high in central and eastern Europe, most of these regions should get better prepared for future extreme flood events, especially taking pan-regional and cross-border policy development on river catchment management into account.

Forest fires have been addressed by INTERREG III projects to a lesser extent. They are a natural hazard, but approximately 90% of these fires are caused by human activities. There are several forest fire research programmes ongoing under the EU Framework Programmes and also in large EU research institutions, but there should be a closer link to the actual implications of forest fires on regional development. It would therefore be highly recommended to take up the forest fire hazard in future INTERREG programmes, especially in the Mediterranean area and parts of Central and Eastern Europe. Additionally, the potential interactions of forest fires with other hazards, such as droughts and extreme temperatures should be taken into account in terms of long term planning potentials concerning these interactions. The effect of climate change on these mentioned hazard interactions should also be respected.

Storm surges have so far been mostly dealt within North Sea areas with few exceptions. The possibility of forecasting storm surges has improved strongly in the 20th century and at the same time integrated coastal risk management has lowered the casualties of storm surges. Climate change models have so far not been able to develop any reliable forecasts on changes of wind/storm surge patterns. Nevertheless it is recommended to include hazard interactions of (winter) storms with (coastal) floods into future storm surge projects, such as already done by the INTERREG IIIB projects SEAREG and ASTRA, for example. These projects also include climate change models, a trend that is recommended to be broadened in future INTERREG activities.

Winter and tropical storms and their reactions to climate change have so far not been covered by scenarios. Since storms belong to the most important natural hazards on a

global scale, Europe could also focus more on the financial effects of storms. In the case of storms the most appropriate mitigation from the regional development perspective could be to initiate a decrease in vulnerability, for example by focusing on the reduction of the consequences of the impacts and strengthening the coping capacity. In other words, the consequences of storms on the infrastructure and the other vital assets of regions should be taken into account. Also the interactions of winter storms with storm surges and floods can be addressed to a larger extent, especially in the North Sea and the Baltic Sea as well as cross-border cooperation programmes to ensure early warning and relief operations.

5.5.3 Technological hazards

In the field of technological hazards the most intense focus should be on accident prevention, e.g. by ensuring that EU and international safety procedures and recommendations are most strictly followed. Besides these, close cross-border cooperation in cases of disaster should be further ensured, especially in the case of monitoring and relief operations (e.g. oil spills). Early and appropriate disaster management is often a decisive factor in disaster control. Appropriate land use planning can help to ensure that, in case of accidents, disasters do not affect settlements, vital infrastructure or protected nature areas. Since technological hazards occur in many places in Europe, areas with a high population density and those with important and/or fragile ecosystems could be prioritised.

6. Cooperation on territorial development perspectives

Will territorial diversity, challenges and potentials be the same tomorrow as they were yesterday?

To gaze into the future it is necessary to understand the driving forces that shape territorial development and various possible future developments and interrelations with the territory each driving force might bring. Bringing them together into integrated prospective documents and developing strategies for integrated territorial development is the final challenge.

Spatial visions, development concepts or perspectives have been elaborated in a number of INTERREG programme areas with the aim to facilitate a strategic approach to the development of the area or to assist focused decision making within the programme cycle.

There are more activities of this kind under INTERREG IIIB, but also a number of IIIA programmes and projects under IIIC deal with spatial visions, development concepts or perspectives.

6.1 Defining spatial development concepts and visions

Spatial visions and scenarios are rather blurred terms. Therefore, it is important to clarify what exactly they mean in interregional, transnational and cross-border cooperation activities carried out under INTERREG.

Transnational spatial development planning and the elaboration of spatial visions

Transnational cooperation generally aims at promoting more integrated and balanced spatial development of larger and contiguous geographical zones (or 'groupings of regions') that cover various EU-Member States and/or neighbouring third countries. It is predominantly multilateral in nature and involves - to different degrees and at different stages - simultaneously public authorities from national, regional and local levels, but also other public, semi-public or private actors. For approximately 15 years, 'transnational spatial development planning activities' have been undertaken in several of these larger contiguous zones. Alongside the basic aims promoted by the ESDP, they generally focus on enhancing a polycentric develop-

ment of metropolitan and urban systems, on designing well-integrated and widely accessible transport and communication systems and on promoting sustainable management of the environment and of cultural /natural resources. These activities have very frequently led to the elaboration of transnational spatial development visions, which cover the entire cooperation area or parts of it. These documents normally contain a relatively precise cross-thematic analysis of the current spatial situation in the cooperation area (often supported with a visual representation), a long-term strategy with objectives for the desired territorial development (mostly without a visual representation) and an application strategy defining potentials for cooperation (e.g. measures/projects). Transnational spatial development planning and a transnational spatial development vision often form part of a continuing process, which involves - according to the specific needs prevailing in the area - periodical review activities or an updating/upgrading of already existing vision documents (i.e. transnational visioning processes).

Cross-border spatial development planning and elaboration of concepts

As a horizontal activity, cross-border spatial development planning generally deals with the effects of society, economy and the natural, structural and social environment on the territorial development of smaller or larger areas immediately located along a commonly shared border. Cross-border spatial planning nowadays involves actors from all levels of governance (i.e. national spatial planning, regional planning, county and local level planning for land-use and building) in various constellations and at different levels of intensity along the EU-borders. One result of such activities is very often the elaboration of comprehensive strategic planning documents for the cross-border territory, which is considered as a single geographical unit. In ideal terms, these cross-border spatial development concepts provide a summary assessment of the current situation and spatial trends in the cross-border territory, define general principles/guidelines as well as a strategic cross-border development perspective with related objectives, and an application strategy with policy options for joint spatial development (i.e. measures, project proposals).

Spatial prognoses and spatial scenarios

This aspect generally refers to methods and techniques that might be used in connection with strategic territorial development planning and the formulation of spatial development policies both in a country-specific context and in the cooperative dimension. They generally aim at systematically describing and forecasting/exploring possible or intentionally desired future spatial constellations and processes. Within this wider context, one can however broadly distinguish two fundamental approaches:

- Spatial prognoses can generally be considered a tool for describing and explaining reality as it exists, with the ultimate aim to predict future developments. The approach is typically quantitative and relies on a reasonably well-developed standard toolkit of methods, ranging from relatively 'simple' trend extrapolations (i.e. projecting past evolutions into the future) to highly complex and differentiated forecasting models.
- The variety of different scenario methods used in the context of spatial planning try – as a common feature - to conceive more than one possible future situation and to explore the paths leading to them. Spatial scenarios are expected to help stimulate strategic planning activities and interdisciplinary communication within planning institutions, but also to improve the flexibility and preparedness of (spatial) policy actors who are confronted with an increasingly uncertain environment.

Based on these definitions, current activities in INTERREG programmes have been reviewed. After the identification of relevant activities and projects these have been studied in further detail.

6.2 Transnational spatial development visions

The different aspects mentioned in the preliminary remarks will be reviewed separately for two main groups of transnational spatial visioning activities:

- The first group consists of already elaborated spatial development visions covering the entire transnational cooperation area. They have been realised either outside the strict context of Community support

programmes (Baltic Sea Region) or as a part of INTERREG IIC-IIIB programme activities (North West Europe, North Sea, CADSES, Atlantic Area). Some of these spatial development visions are currently undergoing an updating and upgrading process (Baltic Sea Region, North West Europe, North Sea), while other vision-elaboration processes have either come to a stand-still (CADSES) or were only very recently completed (Atlantic Area).

- The second group covers newly emerging spatial visioning processes that were launched only very recently in the context of two transnational cooperation areas (Alpine Space, Western Mediterranean) and are as yet only partly accomplished.

In the following these activities will be discussed with regard to (a) main themes addressed, (b) territorial impacts of policies, (c) development goals, (d) application strategies, (e) geographical focus, (f) mental ownership.

6.2.1 Main themes addressed

With respect to the main themes for which issues and/or trends (and possible trend breaks) related to transnational spatial development are discussed, one can observe relatively strong similarities within each of the two main groups identified above.

A first set of similarities can be observed in case of the already elaborated transnational spatial development visions, which were finalised between 1994 and 2000/2001 (Baltic Sea Region, North-West Europe, North Sea, CADSES) or later under INTERREG IIIB (Atlantic Area).

- They address a wide range of themes which are important for spatial development planning and policy. This is certainly caused by the wish to generate a better understanding of particular spatial situations, trends and problems as well of area-internal and wider international relations/inter-dependencies. The most comprehensive assessments can be found in the visions for the Baltic Sea Region and CADSES as well as in the Atlantic Area document.
- Throughout the different documents, assessments generally focus on a present-time situation analysis as well as on some partial past-present trends

analysis for some themes. Most of the documents contain also qualitative statements of forward-looking nature ('future challenges'). Only in the CADSES-vision document, a deliberately future-oriented scenario approach has been adopted for assessing the spatial impacts of European integration and more specifically of the forthcoming Eastern enlargement of the EU.

A second set of similarities can be observed in case of the more recent vision updating and upgrading processes (Baltic Sea Region, North West Europe, North Sea).

- The Baltic Sea Region and the North Sea processes adopt a more narrow thematic focus. A new spatial agenda has become evident in the North Sea Region so the updating process focuses on issues that have become more urgent or important in recent years or which have not been thoroughly addressed in the earlier NorVision document. In case of the Baltic Sea Region, the VASAB-vision upgrading process aims at reorienting the scope of themes to be covered by a future long-term spatial development perspective. The focus is now on the most important transnational themes with a direct relevance for spatial integration of the Baltic Sea Region (i.e. transport corridors, development zones, transnational tourist routes, urban networks).
- Only the updating and upgrading process launched under the North West Europe programme continues to adopt a relatively wide thematic focus, probably for balancing out some weaknesses of the initial INTERREG IIC vision document.

A third set of similarities can be observed for the newly emerging spatial visioning processes, which were launched under the INTERREG IIIB programmes Alpine Space and Western Mediterranean. Both processes generally adopt a wide thematic focus.

- The 'Prospective Study' on the sustainable territorial development in the Alpine Space addresses a wide range of issues mainly related to the economy, social aspects and environment/nature. Furthermore, attention has been paid to highlight main future territorial development trends.
- In the context of the MEDOCC programme, the two INTERREG IIIB projects that can be considered as preparatory work for a spatial vision covering the Western Mediterranean investigated territorial challenges for a larger number themes (AMAT project) or in relation to urban systems and polycentric development (C2M project). The Medisdec-Stratmed project focuses on the elaboration of a spatial vision for the MEDOCC area. It investigates relevant themes in relation to the ESDP, the new European priorities of the Lisbon-Göteborg strategies and the national/regional priorities with respect to territorial cohesion and competitiveness.

Figure 22: Main themes address by transnational spatial development visions

Main themes and related issues addressed	CADSES ^{*)}	Atlantic Area	Baltic Sea Region		North Sea		North-West Europe	
	Status by 2000/2001	Status by 2005	Status by 2000/2001	Focus of recent updating	Status by 2000/2001	Focus of recent updating	Status by 2000/2001	Focus of recent updating
Issues related to the general external and internal context of the transnational area								
Positioning in the European and EU context	++	+	++	+	++	0	++	++
Positioning in the wider international/worldwide context	0	0/+	++	+	+	0	++	+
Basic physical & geographical conditions	++	+	++	0	++	0	++	+
Population structure & demographic change	++	++	++	0	++	++	+	++
Issues related to the economic system and the social situation								
Productive fabric, structural change, industrial reconversion,	++	++	++	+	++	0	+	++
Research, technology and innovation	+	+	++	+	++	++	0/+	++
Trade links among the countries/regions	++	0	++	0	0/+	0	0	0
Competitiveness and productivity	++	++	++	+	++	0	0	++
Economic growth and regional disparities	++	++	++	0	++	0	+	++
Labour market, employment and unemployment structure, patterns of qualification	++	++	++	0	+	0	+	++
Social cohesion and patterns of social disintegration	++	0/+	++	0	+	0	0	+
Changing life styles and new needs of population	+	0	+	0	++	++	0/+	+
Issues related to the settlement system								
PUrban system and city networks	++	++	++	++	++	+	++	++
Rural areas and sparsely populated areas	++	++	++	++	++	+	++	+
New rural-urban relationship	++	++	++	++	++	+	+	++

*) For the document elaborated by the VISION-Planet project.

Intensity of consideration:

0=not at all; += to some extent (with larger gaps); ++ = extensively covered

Main themes and related issues addressed	CADSES ^{*)}	Atlantic Area	Baltic Sea Region		North Sea		North-West Europe	
	Status by 2000/2001	Status by 2005	Status by 2000/2001	Focus of recent updating	Status by 2000/2001	Focus of recent updating	Status by 2000/2001	Focus of recent updating
Issues related to the communication links								
Transport infrastructure, transport flows, internal and external accessibility	++	++	++	++	++	++	++	++
Telecommunication and information infrastructures, overall accessibility	+	+	+	++	+	0	+	++
Energy networks and energy provision status	0/+	0	++	0	++	++	0	+
Issues related to environment, natural and cultural heritage								
Status of environmental media (air, water, soil, etc.)	+	+	++	0	+	0	+	+
Waste management and water management	+	0	+	0	0	0	+	0
Biodiversity, protection of natural heritage, green networks	++	0	++	0	++	0	++	++
Cultural heritage and cultural landscapes	++	+	++	0	++	0	++	++
Climate change and natural hazards	+	++	++	++	++	0	+	++
Issues related to areas with specific problems and potentials								
Border areas	++	++	++	0	0	0	+	0
Coastal zones and islands, integrated coastal zone management	+	++	++	++	++	++	+	+
Mountain areas	++	+	0	0	0	0	0/+	+
Issues related to the governance system								
Basic features of territorial administration	++	++	+	0	0	0	0	0
National/regional spatial planning policies	++	++	++	0/+	0/+	0	0	+
Existing spatial plans and legislation	++	++	++	0/+	0	0	0	+
National/regional sector policies	++	+	+	0/+	+	0	0	+

*) For the document elaborated by the VISION-Planet project.

Intensity of consideration:

0=not at all; += to some extent (with larger gaps); ++ = extensively covered

6.2.2 The overall geographical focus

The already elaborated transnational spatial development visions have all adopted a predominantly 'inward-looking' perspective throughout the different parts of the document (i.e. assessment of territorial challenges/trends, objectives, application strategies). Although this highly focused view on the respective transnational programme area can somehow be understood, it is however equally important to systematically adopt an 'outward looking' perspective that relates the transnational area to the wider European and world-wide context. In doing so, it might well be the case that some aspects identified as particularly relevant for transnational spatial development will slightly change in nature, especially if one considers the increasing Europe-wide and global interdependencies for some specific issues (i.e. international transport flows, direct investment flows and capital movements, global climate change).

A growing interest in adopting a view that goes beyond the formal boundaries of the respective cooperation area can only be observed more recently in the context of the vision updating and upgrading processes. Themes for which such an extended view is most frequently adopted are European and global aspects of transport connections, including the Motorways of the Sea and the connectivity to TEN-T and pan-European transport corridors (Baltic Sea Region, North Sea, North West Europe), the marketing of area-specific assets (Baltic Sea Region) and energy-related issues (North Sea).

An interesting example that has made a more systematic effort to adopt an 'outward-looking' perspective is the newly emerging spatial visioning process, launched under the INTERREG IIIB Alpine Space programme.

The already elaborated transnational spatial development visions all contain approaches for geographically differentiating among sub-zones located in the wider context of a transnational cooperation area. Such a geographical differentiation is mostly elaborated against the specific characteristics or problems prevailing in these sub-zones and normally applied throughout the different main components of the various vision documents (i.e. the assessments of territorial challenges/trends, the objective-systems and the application strategies).

Geographical differentiation is continued to be adopted in the context of the recent updating and upgrading processes (Baltic Sea Region, North Sea, North West Europe) as well as by the newly emerging spatial visioning processes (Alpine Space, MEDOCC).

6.2.3 Application strategies and their stakeholder-orientation

Whereas the newly emerging spatial visioning processes (Alpine Space and MEDOCC) have not yet resulted in an elaboration of concrete operational provisions, the already elaborated transnational spatial development visions all contain a consistent and more or less well-elaborated 'application strategy'.

None of these transnational vision documents has a binding status so operational provisions in the application strategies do not generate 'formal obligations' with respect to plans drawn up/activities realised at lower levels of government (national, regional, local). The application strategies are all mostly indicative reference frameworks, which have the main purpose to orientate and inspire concrete actions that could be realised in the future. All of the initially elaborated vision documents state - directly or indirectly - that their operational provisions should generally be taken into consideration by a wide range of different stakeholders from national, regional and local government levels, but also by other non-governmental stakeholders e.g. research institutes; sector-specific institutions, associative organisations etc.

The stakeholder-orientation of application strategies in already elaborated transnational spatial development visions is strongly conditioned by the way they are presented. By looking at their basic structural features (i.e. themes/topics addressed, degree of further differentiation), one can observe considerable differences with respect to their degree of stakeholder-orientation.

- The most elaborated and well-differentiated application strategies are certainly those of the visions for CADSES, the Atlantic Area and the North Sea. The first two documents formulate a large number of 'policy recommendations' or 'policy proposals' for the same topics previously addressed under the objective-system (goals/policy aims). The initial NorVision-document adopts a slightly different approach. It identifies 9 'key themes'

for integrated planning approaches and sustainable development that are somehow cross-cutting the 10 development vision statements. The application strategy is then further differentiated by a specific annex, in which a large number of concrete project suggestions are elaborated.

- Compared to the above, the application strategies in the initial vision documents of North-West Europe and the Baltic Sea Region (VASAB 2010 document) were not this elaborated and well-differentiated. Although they address the same topics as under the respective objective-system, only a few policy recommendations and suggestions for concrete transnational activities/projects were elaborated in relation to these topics. Due to this, the VASAB process has already quite early focussed on further refining the operational dimension of the initial vision document during the subsequent updating activities realised in 1996 and 2000/2001. Only more recently, however, has a similar objective been pursued by the vision updating process launched under the INTERREG IIIB programme North West Europe.

6.2.4 'Mental ownership' and practical application results

A relatively high level of mental ownership has subsequently been developed by key stakeholders in North Sea Region with respect to the initial NorVision document and its application strategy. This is mainly due to the fact that a quite extensive bottom-up consultation was realised during the elaboration process before the final editing of the NorVision document. It was decided from the start that NorVision would only be an inspiring document that should not substitute national planning documents or aim at becoming a transnational 'masterplan'. The strategic document was also not conceived as a framework for evaluating sector-specific policies at national, regional and local levels. Despite these limitations, the operational provisions were quite substantially taken up by the stakeholders targeted in the area. The themes identified in NorVision were used as a backbone for drafting the INTERREG IIIB North Sea Programme and a significant number of transnational projects have helped to put the visions and strategies identified by NorVision into practice. Due to the broad consultation process realised, new networks not only among planning professionals could also be created. Finally, some evidence exists that NorVision has been taken into account especially by regional planning activities.

Due to the broad bottom-up consultation process adopted during the first-time spatial visioning process in the Atlantic Area, a potentially high level of mental ownership can also be assumed to develop in relation to the recently completed strategic document. As this visioning process as yet lacks application experience, there are however no practical results to further underpin this assumption.

During the other transnational spatial visioning processes (Baltic Sea Region, North West Europe, CADSES), comparatively lower levels of mental ownership have been developed by stakeholders in relation to the initial vision documents. In all of these transnational cooperation areas, the initial processes did not organise broad stakeholder consultations before the final publication of the vision documents. The initial application strategies are mostly 'expert-based top-down approaches' and the subsequent take-up of operational provisions by stakeholders in the respective cooperation areas has in most cases also been quite modest. Only the long-lasting VASAB process in the Baltic Sea Region is an exception to this trend, as the application strategy of the 1994 document was quite early elaborated further (1996-2001) and more extensive use of preparatory bottom-up consultations will now be made during the recently started upgrading processes (since 2004/2005).

6.3 Cross-border spatial development concepts

The four cross-border spatial development concepts elaborated during the second half of the 1990s, have been examined more in-depth. These are:

- Eurocity White Paper in INTERREG IIIA areas France-Spain
- Viadrina 2000 concept in the INTERREG IIIA Brandenburg-Lubuskie
- Euregio Rhein-Waal concept in the INTERREG IIIA area Euregio Rhine-Waal
- PAMINA region concept in the INTERREG IIIA area PAMINA

All four documents are relatively strong with respect to the main themes addressed, but also regarding the most important policy aims promoted by these spatial development concepts.

Equally important are however the sometimes considerable differences that can be observed among the four concepts. They are particularly evident with regard to consideration of territorial impacts of EU/national policies, the geographical focus and the stakeholder-orientation, application strategies and the mental ownership.

6.3.1 Main themes addressed

For establishing a comprehensive diagnosis of the territorial situation prevailing in the cross-border area, quite similar themes were addressed across the four spatial development concepts examined. Only some variations exist with respect to the intensity of their consideration. The most striking case is the Viadrina 2000 concept (Brandenburg-Lubuskie), which could have better taken into consideration a number of strategically important themes in the current situation assessment and should improve thematic consistency throughout the different parts of the document.

In several cases (e.g. France–Spain or PAMINA) a wider range of themes and related sub-themes has been considered during the preparation phase, which were subsequently ‘merged’ under more compact or cross-thematic headings in the final version of the cross-border spatial development concepts.

With respect to future development trends (possible trend breaks), only the ‘Cross-border development and action concept 2000-2010 of the Euregio Rhein-Waal’ contains an explicit trends-assessment for all main themes addressed. The other concepts mainly focus on a present time situation analysis, whereas future trends are in part indirectly mentioned in the context of some theme-specific comments (e.g. France–Spain or PAMINA).

6.3.2 Development goals and policy aims promoted

The objectives of the various cross-border spatial development concepts examined show clear similarities.

- Each of the four cross-border spatial development concepts sets out an overall development goal or a development vision, which briefly highlights a desired future situation that should be reached in a long-term perspective. This is done either directly through an explicit goal/vision statement (Brandenburg-Lubuskie, Euregio Rhine-Waal, PAMINA) or indirectly through the wider purpose assigned to the concept (France-Spain). In the context of the cross-border concepts that were an update of former planning documents (Brandenburg-Lubuskie, Euregio Rhine-Waal), the previously elaborated long-term development goals were still considered valid and only more recent developments had been considered.
- A limited number of strategic aims are formulated for guiding spatial development policy that should be pursued in the cross-border area to actually achieve the long-term development goal. Within each of the four planning documents examined, these strategic policy aims normally constitute a ‘meta-level’ that is situated between the overall development goal/vision and the operational part of the concept (i.e. the application strategy).

The relationship established by the objectives systems of the four cross-border concepts with wider goals or objectives defined for EU spatial development policy, is as follows: Only the ‘Spatial Planning Scheme for the PAMINA-region’ and the ‘White Paper of the Eurocity Bayonne-San Sebastian’ make a direct reference to the ESDP, whereas the other two concepts do not explicitly consider this wider EU-dimension in relation to their development goals and policy aims.

Figure 23: Main themes address by the four cross-border spatial development concepts

Main themes addressed	FR/ES: Eurocity White Paper	DE/PL: Viadrina 2000 concept	DE/NL: Euregio Rhein- Waal concept	DE/FR: PAMINA region concept
Basic physical conditions of the cross-border area	++	++	++	++
Cross-border area and wider European, transnational and national context	++	+	++	++
Settlement structure and urban system/network	++	+	++	+
Rural areas, agriculture and rural-urban relationship	0/+	0/+	++	++
Population structure and demographic evolution	+	++	++	++
Transport infrastructure, transport flows, public transport and overall accessibility	++	+	++	++
Information/communication infrastructures and overall accessibility	++	0	++	0/+
Situation and availability of other public services/infrastructures *)	++	0/+	+	++
Economic fabric, structural change, industrial reconversion, quality of locational factors	++	++	++	++
Research, technology and innovation	++	+	++	++
Labour market and qualification	+	++	++	++
Environment, nature and cultural heritage	++	++	++	++
Current state of cross-border cooperation and level of integration	++	++	++	++

*) e.g. waste disposal/sewage water treatment, fresh water provision, health care services, recreational infrastructures/services

Intensity of consideration:

0=not at all; **+**= to some extent (with larger gaps); **++** = extensively covered

Source: ESPON-INTERACT study on spatial visions and scenarios (2006), page 48

Figure 24: Overall development goals/vision statements formulated in the four cross-border spatial development concepts

<p>FR/ES: Eurocity White Paper</p>	<p>The wider purpose assigned to the White Paper is to promote the emergence of the 'Eurocity Bayonne-San Sebastian' as a truly cross-border European metropolitan area with 600 000 inhabitants that plays an important role in the wider context of the Atlantic Arc and of the EU, mainly through transforming the current juxtaposition of different administrative entities and the loose grouping of medium-sized cities/smaller towns in the cross-border area.</p>
<p>DE/PL: Viadrina 2000 concept</p>	<p>The updated overall development goal has been defined as follows in the concept: 'Raising the standard of living and increasing the economic capacity through creating a cross-border integrated economic region. Future efforts of the Euroregion in this direction should</p> <ul style="list-style-type: none"> • lead to an improvement on the living conditions of the population in the long-term and, considering the different ways of life, reach similar levels on both sides of the border, • increase the economic capacity in order to lower wealth disparities within the Euroregion and to enable a balanced development in the cross-border region under the conditions of a globalised competition.'
<p>DE/NL: Euregio Rhein-Waal concept</p>	<p>The updated overall development vision has been defined as follows in the concept: 'Sustainable development of a European region without borders - the Rhein-Waal region as an area for living and economic activities that is secure in the future and competitive and characterised by a high quality of locational and living conditions within the inter-metropolitan core area of North-West Europe.</p>
<p>DE/FR: PAMINA region concept</p>	<p>The overall development vision has been defined as follows in the concept: 'The PAMINA-area is pre-designated to become a European cross-border model area. The cross-border dimension creates its specificity and allocates to the area a particular attractivity: decisions on both sides of the border are jointly supported, policy shapes the common future in a co-ordinated manner, PAMINA occupies a singular position in the wider Upper Rhine area and positions itself in the global competition. Little by little, the jointly defined development perspectives will be integrated into planning efforts realised at different levels of subsequently be implemented. The joint cross-border development objectives will be backed by a 'cross-border local purpose association' established alongside the provisions of the Karlsruhe-Agreement and new perspectives for a realisation of these objectives will emerge with a further development of legal instruments of European level.'</p>

Source: ESPON-INTERACT study on spatial visions and scenarios (2006), page 50

Figure 25: Strategic policy aims formulated in the four cross-border spatial development concepts

<p>FR/ES: Eurocity White Paper</p>	<p>The White Paper formulates three 'basic objectives' for developing the Eurocity:</p> <ul style="list-style-type: none"> • Creating an Atlantic platform for intermodal change, communication and information, mainly by transforming the current 'transit corridor' into a 'Eurocorridor for development'. • Structuring the Eurocity as a linear and polycentric metropolitan area organised as a network, mainly by practically managing the territory, the infrastructures and the public service offer in a way that they are well linked and at quality level that corresponds to the standards of other European metropolitan areas. • Protection and proactive use of the area's natural heritage potentials, mainly by applying the principle of environmental excellence in the context of the concept of a 'green metropolitan area'.
<p>DE/PL: Viadrina 2000 concept</p>	<p>The concept formulates two 'main objectives' for the future development of the Euroregional territory:</p> <ul style="list-style-type: none"> • The strengthening of economic potentials and the lowering of unemployment, while preserving and developing nature and landscape. • The active support to the establishment of good neighbourly relations.
<p>DE/NL: Euregio Rhein-Waal concept</p>	<p>The future development of the Euregio should be centred around the following three 'strategic objectives':</p> <ul style="list-style-type: none"> • Strengthening of the regional economic structure, • Improvement of the regional economic framework conditions, • Intensifying of the regional organisation and integration.
<p>DE/FR: PAMINA region concept</p>	<p>The future development of the PAMINA area should focus on the following three 'basic principles':</p> <ul style="list-style-type: none"> • Sustainable development of the PAMINA-area: Improvement of the general living conditions and the environment; mobilising synergies through networking and joint action. • Co-ordinated action in the PAMINA-area: Realisation of a joint spatial development policy with the aim to preserve/extend existing qualities, to use diversity and to ensure balanced development through solidarity. • The European dimension of the PAMINA-area: REGIO PAMINA as a pilot area for the implementation of the ESDP and as a test-area that illustrates the leading role of regionalised action and thinking („Europe in a nutshell”).

Source: ESPON-INTERACT study on spatial visions and scenarios (2006), page 51

6.3.3 The overall geographical focus adopted

Across the four different cross-border spatial development concepts examined, one can observe some commonalities and differences among the approaches adopted.

All concepts obviously focus their territorial assessments, their objectives and their application strategies on the targeted cross-border areas. Throughout these main elements of each concept, also a differentiation at the level of sub-areas is elaborated (where necessary) in order to better take into consideration the specific particularities of the cross-border territory.

The main difference among the four concepts is the extent to which the wider spatial context has been taken into consideration: Only the 'White Paper of the Eurocity Bayonne-San Sebastian' (France-Spain) and the 'Cross-border development and action concept 2000-2010 of the Euregio Rhein-Waal' contain specific sections/chapters that aim at 'localising' the cross-border area in the transnational and/or European-wide macro-space.

6.3.4 Application strategies and their stakeholder-orientation

The four cross-border spatial development concepts examined contain well-elaborated application strategies, which are all characterised by a high degree of stakeholder-orientation. The operational part of the respective planning documents adopt either a medium-term perspective with around five years (Brandenburg-Lubuskie) or a long-term perspective with 10 or more years (France-Spain, Euregio Rhine-Waal, PAMINA).

The medium-term application strategy of the 'Viadrina 2000 concept' (Brandenburg-Lubuskie) is generally considered a guiding framework for future INTERREG IIIA interventions. This relatively narrow approach identifies seven thematic support priorities, which are loosely related to the two strategic policy aims previously defined in the cross-border spatial development concept. For these support priorities, the application strategy also identifies a total of 24 different 'fields of action' as well as 40 related 'suggestions for potential projects'.

The application strategies with a long-term perspective (France-Spain, Euregio Rhine-Waal, PAMINA) adopt a comparatively wider approach. Their main purpose is to set out a non-binding orientation framework that aims at promoting general cross-border cooperation in the area, also including support interventions from related INTERREG programmes.

- At a first level, the three long-term concepts normally envisage a limited number of main interventions that are directly related to the previously defined strategic policy aims. The main interventions of the Eurocity White Paper (France-Spain) and the Euregio concept (Euregio Rhine-Waal) are horizontally cross-cutting the different policy aims, whereas those of the PAMINA concept are further differentiated according to a territorial/non-territorial dimension and focussed on specific policy aims.
- At a second level, each of these main interventions is then made further operational by the definition of a larger number of theme- or area-specific measures and of related project proposals that are more or less well-elaborated. A particularly interesting filtering approach has been adopted by the PAMINA concept for identifying and selecting potential measures and pilot projects⁵.

6.3.5 'Mental ownership' and practical application results

The key stakeholders have subsequently developed a high level of 'mental ownership' in relation to these cross-border spatial planning concepts and their application strategies.

Operational provisions in all cross-border spatial development concepts (i.e. the measures and project-proposals) were generally elaborated based on the results of specific 'bottom-up consultation processes'. These consultations were organised during the preparation phase of the documents and involved either a wide range of public and private actors (Brandenburg-Lubuskie, Euregio Rhine-Waal, PAMINA) or mostly actors from various public and semi-public organisms (France-Spain) located in the cross-border area.

⁵ For more information on the filtering process, please see ESPON-INTERACT study on spatial visions and scenarios (2006), page 52.

Due to this participatory approach, most of the finalised application strategies were able to effectively call upon the particular competences of a wide range of public- and private-sector key stakeholders in order to contribute to realising specific goals and policy aims of the spatial development concept (DE/NL, DE/FR, DE/PL). Only the 'Eurocity White Paper' application strategy (FR/ES) seems implicitly to be stronger oriented towards different public policy actors, which can be derived from the general nature of the lines of intervention and measures mentioned.

The above remarks on the 'mental ownership relation' are also partly supported by the level of subsequent take-up of operational provisions through stakeholders located in the respective cross-border areas. For those cases where appropriate information has been made available, one can generally observe that the application strategies allowed initiating and realising a sometimes considerable number of follow-up activities:

- Since the publication of the 'White Paper of the Eurocity Bayonne-San Sebastian' (France-Spain) in June 2000, reflections were launched to progressively integrate its proposals for action into the respective territorial or sector-specific policy planning applied on either side of the border. These activities were intended to help convert this virtual reference framework into a truly joint master plan for the development of the Eurocity. In addition, various follow-up activities have been carried out in order to progress towards actually realising the cross-border metropolitan area. These activities focus on three strategic themes (transport, industrial/urban re-conversion and environment) and can be allocated to two wider categories: Firstly, various initiatives covering the entire area of the future Eurocity were realised that aim at establishing cross-cutting guidelines for supporting a better structuring of the cross-border territory. Secondly, follow-up actions in the context of sector-specific policies were accomplished. They aim at illustrating the concept of a 'functional urban zone', which the initiative wishes to develop for applying the ESDP and for putting into place a multi-sectoral policy in the context of a process of co-ordinated decision-making between all territorial levels of government involved.
- In the case of the 'Spatial Planning Scheme for the PAMINA-region' (PAMINA), the newly established public-law based cross-border association REGIO-PAMINA decided in 2002 to take on the results and recommendations of the concept in its future working programme. It was also decided to derive from it a comprehensive orientation framework for the future development of the PAMINA area, the 'Guideline Objectives for the PAMINA-area'. This orientation framework has an informal character for cities and municipalities in the area and therefore only creates a kind of 'self-binding effect' for the public law based cross-border body, its members and its partners. A related document was presented in early 2005 and enumerates the six 'Guideline Objectives', together with a number of related potential measures that aim at their implementation.

6.4 Interregional strategic territorial development planning

The very broad range of topics for which interregional cooperation has been possible under INTERREG IIC has certainly favoured the emergence of a number of projects that address aspects more or less directly related to strategic territorial development planning.

Altogether 23 INTERREG IIC projects focusing on aspects related to strategic territorial development and planning have been identified. In total more than 300 different organisations are involved as partners in these 23 projects. They come from almost all countries of the European Union (except Luxembourg) and many non-EU-countries (Albania, Croatia, Belarus, Norway, Switzerland, Russia, Yugoslavia).

Compared to the transnational and cross-border spatial development planning processes examined, most of these 23 INTERREG IIC projects do not realise cooperative planning over a contiguous territory. As a consequence, the following sections will mainly focus on screening the main issues addressed and the nature of content-related project activities realised, but also on exploring further cross-fertilisation potentials in relation to other types of cooperative territorial development planning processes.

6.4.1 Main issues addressed

The 23 INTERREG IIC projects quite evenly address three main issues that are more or less directly related to strategic territorial development planning:

- Eight INTERREG IIC projects focus on a particular policy and the themes addressed are mostly related to transport policy, environmental policy (in a wider sense) and to land-use/re-conversion policy.
- Nine INTERREG IIC projects focus on specific territorial/geographical characteristics and the themes are mainly related to the particular situation of coastal zones/islands, metropolitan and urban areas, mountainous areas and coal mining areas.

- Six INTERREG IIC projects are dealing with strategic territorial development planning in general. They are focusing on planning at the level of NUTS II or NUTS III regions and sometimes also aim at promoting new approaches for delivering planning in practice (participatory planning).

The following paragraphs briefly describe a number of projects for each of the above-mentioned main issues, mainly for highlighting that interregional cooperation projects are also able to adequately address themes related to strategic territorial development planning.

Figure 26: Main issues addressed by the 23 INTERREG IIC projects

Main issues	INTERREG IIC programme zone		
	East	West	South
Projects strongly focussing on a particular policy	EARD (airport regions)	AWARE (risk management) ENLoCC (transport & logistic) FLAPP (water & flood management) PIMMS (transport) EWM (waste management) SULFANET (landfills management)	MARE (transport)
Projects strongly focussing on specific territorial characteristics or geographical situations	AAP 2020 (Adriatic region)	CoPraNet (coastal areas) ESIN-IIEP (small islands) InterMETREX (metropolitan areas) RECORE (coal mining areas)	Polymetrex (metropolitan areas) Coronas Metropolitanas (metropolitan areas), Riverlinks (metropolitan/urban areas) Euromountains (mountain areas) PROGRESDEC
Projects strongly focussing on strategic territorial development planning in general	INCORD (planning in smaller regions)	FARLAND (land development) GRIDS (regional planning) PSPE (participatory spatial planning)	DEDEL SDEC (balanced local development & application of the ESDP)

Source: ESPON-INTERACT study on spatial visions and scenarios (2006), page 86

Projects focussing on a particular policy

The INTERREG IIC network *FLAPP* (Flood Awareness and Prevention Policy in border areas) deals with the increased risk of water-related catastrophes (flooding, extreme droughts) as a consequence of global climate change. This risk is especially worrying for Europe, where growing population density is making complex societies and economies increasingly vulnerable to such natural disasters. By involving those actors responsible for European river systems and their feeders, *FLAPP* aims at new strategies for flood management in border areas where flood-related issues are likely to arise and seeks to contribute to common European strategies for flood risk management in relation to the new EU flood water directive.

The INTERREG IIC network *PIMMS* (Partner Initiatives for the development of mobility management services) aims at creating more effective 'mobility management policies' that can be included into comprehensive regional transportation strategies taking into account environmental and social concerns. Due to the fact that the EU places increasing importance on sustainable transportation in urban areas (i.e. to reduce pollution, to cut road deaths, to increase mobility access for non-car users, to improve air quality), information on mobility management is exchanged among the partners and experiences from successful initiatives are transferred to other regions.

The INTERREG IIC network *SUFALNET* (Sustainable Use of Former or Abandoned Landfills Network) focuses on former landfills, which are mostly located near the edge of cities and villages. As these sites take up a considerable amount of space in many EU Member States, they can potentially provide alternative locations for companies, offices, golf courses or ski runs as well as for greenhouse farming and for the cultivation of forests. However, many former landfills tend to pose a risk to the environment and might require a special treatment before they can be reused (e.g. digging out landfills, hydraulic engineering). Against this background, *SULFANET* aims at exchanging information, knowledge and best practice experiences among the different partners with respect to a redevelopment and aftercare of former landfill sites. The project shall also enable the partners to deal more effectively with the environmental risks posed by these former landfills and to help finding new uses for these sites, thus increasing the efficient use of building space.

Projects focusing on specific territorial/geographical characteristics

The individual INTERREG IIC project *AAP 2020* (Adriatic Action Plan 2020) explores how (economic) development can be reconciled with sustainability and how sustainability policies can be integrated into the political and administrative management practices of regions and cities along the Adriatic coast. At date, these actors are faced with conflicting trends: on the one hand, there is wide recognition of the importance of environmental action; and on the other hand, sustainability policies are often implemented at random, without co-ordination, limited in time and space and frequently confined to conservation actions. *AAP 2020* is based on an existing network, the Forum of Adriatic and Ionian Cities & Towns, and identified the following overall objectives: to exchange experiences on policies, instruments or administrative procedures, to identify and disseminate best practices and to jointly implement improved policies for local sustainable development. The final results will be formalised in an Adriatic Action Plan that contains common strategies, objectives, actions and commitments with respect to implementation. The action plan will be promoted widely across Adriatic and Ionian cities.

By launching the INTERREG IIC projects *InterMETREX* and *PolyMETREXplus*, the Network of European Metropolitan Regions and Areas (METREX) generally aims at practically addressing strategic ESDP-objectives and policy options that make reference to metropolitan areas. In order to support the achievement of harmonious, balanced and sustainable development in Europe, the network project *InterMETREX* aims at improving metropolitan spatial planning and development practice. By improving the competence and processes of existing spatial planning, one means is created for more effective metropolitan governance that is capable of addressing long-term challenges such as urban sprawl, economic development, social cohesion, integrated land use and transportation. The network project *PolyMETREXplus* aims at giving territorially representative metropolitan response to the ESDP policy options relating to 'Global Integration Zones' (GIZs), polycentricity and complementarity. The overall objectives are to contribute to effective polycentric metropolitan relationships based on complementarity and cooperation as well as to highlight the metropolitan dimension in European-level spatial development planning (i.e. by producing a 'Framework for a Polycentric Metropolitan Europe', a related Action Plan and a Polycentric Practice Benchmark).

The INTERREG IIC network *ESIN-IIEP* (European Small Islands' Network Inter-Island Exchange Project) was initiated by the European Small Islands Network, which is an umbrella organisation established by island representatives from six European countries.¹⁶⁹ Small islands share a pressing concern to retain a minimum year round resident population so as to sustain even existing levels of economic, social and cultural development. The overall goal of *ESIN-IIEP* is to promote sustainable economic, social and cultural development of small islands. By promoting the transfer of information, ideas and experience among islanders, professionals and policy-makers, the project aims to devise models of sustainable development for small islands throughout Europe and to identify specific policy measures that could be taken into account at national and EU-level.

Projects dealing with strategic territorial development planning in general

The individual INTERREG IIC project *INCORD* (Integrated Concepts for Regional Development) focuses on the promotion of bottom-up oriented and integrated regional development concepts to address structural problems related to the transition process in Eastern Germany and the new EU-Member States (e.g. co-ordinated and targeted planning processes for the construction of essential basic infrastructure, the redevelopment of old industrial and military areas or for tourist development projects). The overall objective of *INCORD* is the establishment of a targeted interregional transfer of know-how and exchange of experience with respect to integrated regional development concepts in border regions and to improve their application through the development of transferable guidelines, good practice examples and recommendations. Sub-objectives include the optimisation of institutional structures for regional development and an improvement of the efficiency of EU Structural Fund support.

The INTERREG IIC network *GRIDS* (Best practice guidelines for instruments of regional development and spatial planning in an enlarged EU) has the overall objective to examine good practice in relation to regional development strategies and spatial planning documents in an enlarged EU. Guiding investments and achieving balanced growth in a sustainable manner is an important and on-going issue across the whole of the EU so the preparation of regional development strategies and spatial plans for EU regions

has attracted increasing interest in recent years. Based upon previous EU-initiatives on spatial development planning (ESDP, INTERREG IIC projects), which identified principles of good practice in preparing regional development strategies, the *GRIDS* project involves a sharing of good (and bad) practice and a production of best practice guidelines for the preparation of such documents.

The individual INTERREG IIC project *PSPE* (Participatory Spatial Planning in Europe) believes that change in both public spaces and in the area of sustainable regional development is only possible through the involvement and responsibility of citizens, social organisations and private enterprises from within that region. Given the complexity of spatial themes and the need for citizen empowerment, communication represents one of the most crucial elements of participatory planning. However, the knowledge and ability needed to communicate effectively and to develop realistic scenarios with an understanding of their impact on landscapes and citizens is currently insufficient and underused. Against this wider background, *PSPE* aims at improving spatial information exchanges in participatory regional planning through a renewal and accelerated transfer of interactive approaches that make use of geo-visualisation. By practically linking innovations relating to regional planning, e-government and ICT, the added-value of this operation is to make communication/geo-visualisation approaches feasible and accessible in diverse regional and cultural settings.

6.4.2 Achievements

The main issues addressed by the 23 INTERREG IIC projects examined are all of relevance for strategic territorial development planning.

- The themes referring to specific policies and to particular territorial characteristics/geographical situations are generally mentioned in the ESDP, but in most cases the interregional projects deal with them based on a more needs-oriented approach (i.e. transport related themes, environment, metropolitan areas, coastal zones & islands, mountainous areas).
- Also the interregional projects focussing on strategic territorial development planning in general demonstrate quite well how territorial planning contributes to improve policy-making at various levels and how innovative approaches can be developed to further

elaborate this particular approach for managing socio-economic and environmental change.

The content-related activities realised by these INTERREG IIC projects are generally quite diverse. Various types of activities are used in combination in order to achieve the overall goal of the respective project.

- Interregional exchanges of experience and a dissemination of good practice are very frequently used for improving local/regional planning methods and for jointly elaborating model strategies or new tools supporting planning and decision making.
- Several projects also involve the transfer of planning knowledge and good practice techniques or a realisation of pilot projects, mostly for improving planning procedures/policy instruments and for upgrading planning capacities/skills in the participating areas.

Seen as a whole, these interregional activities do not fundamentally differ from those that are already used in the context of transnational or cross-border cooperation projects. Therefore, interregional cooperation only represents an additional means for illustrating how aspects related to strategic territorial development planning can be addressed in a cooperative manner.

6.5 Conclusion and ideas for the future

INTERREG activities related to spatial visions and development strategies are going on under all three strands of INTERREG. Despite the difference in focus and concrete work between the strands as well as between the various activities in the same strands, the activities are important means for the application of the ESDP.

Transnational spatial development visions and cross-border spatial development concepts should at least fulfil three important functions:

- (1) The function of 'bringing together spatially relevant data and knowledge' for a set of territorial entities belonging to different countries that make up the cooperation area as a whole.
- (2) The function of presenting a 'spatial policy programme' serving the long term good.

- (3) The function of providing an 'application framework' for actually translating spatial development goals and policy aims into concrete action.

The initial transnational and cross-border spatial planning documents address a wide range of themes for which issues and/or trends related to spatial development are discussed. This helped to significantly improve the understanding of the respective cooperation area's overall spatial situation and to highlight common issues for spatial planning and policy. Territorial impacts of different EU policies are important factors influencing the spatial development of individual regions, cross-border regions and transnational areas. However, one can observe especially in the case of many cross-border spatial development concepts that a sufficiently comprehensive assessment of such effects was not realised.

The transnational spatial development visions and cross-border development concepts examined all contain well elaborated 'spatial policy programmes' with meaningful normative long-term provisions. Their structural features are however quite different. Some of them only define a series of development goals and related policy aims, while others elaborate in addition an overall development vision statement that briefly highlights the desired future situation to be reached in the long-term.

The 'application strategies' in all of the transnational and cross-border spatial planning documents examined aim at translating spatial development goals/policy aims into concrete action. There are however marked differences in their effective capability of directing/inspiring spatial planning or policy processes and of assisting the formulation of programmes and projects. Well-differentiated application strategies showing a strong stakeholder-orientation can be found in all cross-border development concepts, but also in some of the already elaborated transnational spatial development visions (CADSES, Atlantic Area, North Sea). In several cases, one can observe a sometimes considerable take-up of their operational provisions by stakeholders located in the respective transnational co-operation areas (Baltic Sea Region, North Sea) and cross-border regions (PAMINA, France-Spain).

The overall geographical focus adopted by already elaborated transnational spatial development visions and cross-

border spatial development concepts is predominantly 'inward-looking'. This means that the assessment of territorial challenges/trends, the objective-system and the application strategy are highly centred on the respective cooperation area. Due to increasing Europe-wide and global interdependencies that also concern many issues relevant for spatial development, a need to more systematically adopt an 'outward-looking' perspective exists.

7. The territorial dimension of cross-border cooperation

Cross-border cooperation has a long history in Europe and for some time, European integration along national borders has been an important objective. Together with a wide range of other initiatives, 64 INTERREG IIIA programmes contribute to strengthening cross-border cooperation and development in cross-border regions.

These INTERREG IIIA programmes fund over 6 000 projects. The focus of the concrete project work depends on the economic, social, environmental, political and territorial context in the respective programme area. Thus the projects carried out present different approaches to increasing the territorial competitiveness and cohesion of cross-border regions in Europe.

This chapter presents an overview of the INTERREG activities carried out in cross-border regions. The types of actions carried out will be discussed as well as the geographical dimension of these activities taking into account the latest ESPON findings. Based on this, some overall conclusions and considerations for future discussions will be drawn up.

7.1 Understanding cross-border regions and cooperation

Border regions are understood in this report as being the NUTS3 regions of a country that form that country's external land border with one or several other countries, or a water border if delineated by the INTERREG IIIA programme.

Cross-border regions (CBR) are defined geographically as regions with a national border separating their territory into spheres of different national administrative governance. The first cross-border regions in Europe were mostly based on agreements and "good will" from local, regional or municipal participants which allowed them access into a field generally reserved only to central state actors. The first official cross-border region was a Euregio, created in 1958 along the Dutch-German border. Since then a multitude of bilateral and multilateral agreements for cross-border cooperation have been signed especially in the Scandinavian and central European countries.

The focus of this chapter is on cross-border regions delineated by INTERREG IIIA programmes, although it certainly has to be recognised that important achievements in cross-border regions are made outside the framework of INTERREG. At the same time INTERREG IIIA programmes are an important source of funding of cross-border initiatives.

Cross-border cooperation (CBC) in general refers to "a more or less institutionalized collaboration between contiguous subnational authorities across national borders" Cross-border cooperation is a crucial element for overcoming the barriers of national borders and achieving economic, social and territorial cohesion in Europe. The study also largely focuses on a specific subset of cross-border cooperation, that which is entailed in INTERREG IIIA programmes.

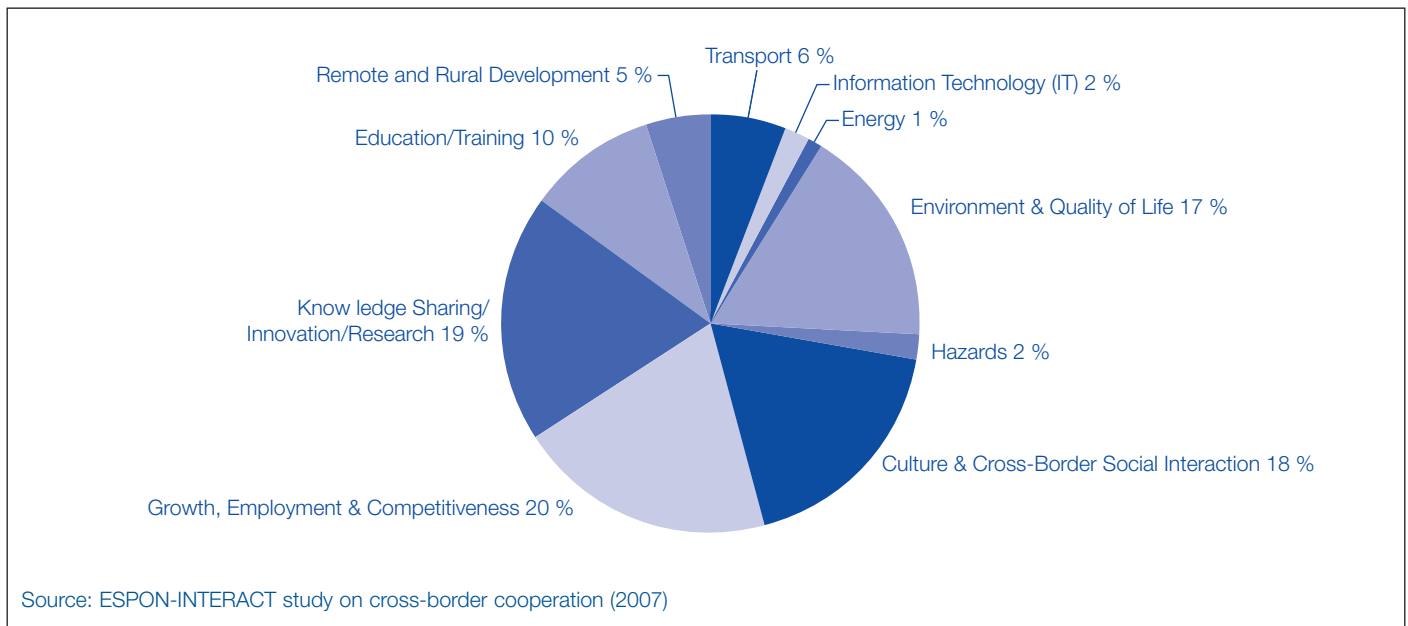
Taking into account these definitions an assessment of programme documents was carried out, illustrating the overall scope of INTERREG cross-border activities. Thereafter projects were reviewed regarding their thematic scope and geographical location. In addition to a general approach attempting to get an overview of all INTERREG projects, a number of case studies were also conducted.

7.2 Thematic and territorial hotspots

A first overview of which thematic topics are addressed by the 5 939 identified INTERREG IIIA projects shows that Growth, Employment and Competitiveness (20%), Knowledge Sharing/Innovation/Research (19%), Culture and Cross-border Social Interaction (18%) and Environment/Quality of Life (17%) belong to the most popular themes.

On the other hand themes with very little representation in INTERREG IIIA are energy (1%), information technology (2%), hazards (2%) and remote and rural development (5%). Even the theme of transport has been addressed by a rather small number of projects (6%).

At first glance it appears that "hard" infrastructure issues seem to be less addressed than "soft" priorities such as cultural interaction or knowledge sharing. However when look-

Figure 27: Distribution of themes addressed by INTERREG IIIA projects

ing at the financial dimension the balance between the themes looks different. This is mainly caused by the fact that average budget of a project focussing on transport, ICT and hazards issues tends to be 2 to 3 times higher than the average budget of projects on any of the other themes.

In the following some of the themes will be discussed in further detail to give a better impression on their focus. Topics discussed in the previous chapters will not be repeated here.

7.2.1 Energy

INTERREG IIIA projects addressing energy issues deal with a variety of energy sources: gas, wind, solar, and biomass to name a few. Furthermore, projects are also focussed on building energy networks, technology transfer, creating energy sufficiency/efficiency and integrated energy management. Overall, there is a great focus within INTERREG IIIA on renewable forms of energy.

Despite the fact that only about 1% of INTERREG IIIA projects address energy projects – which might be related to the high average costs of energy projects – there are interesting approaches taken e.g. in Italy-Albania and some of the programmes with Austrian involvement which turn this country into the most prolific in developing renewable energy projects with its cross-border neighbours. The Austria-Slovenia programming area exhibits a relatively high degree

(5%) of projects addressing energy as a theme as does the Austria-Czech Republic programme. Also the Austria-Hungary programme has four projects dealing specifically with renewable energy.

Energy-efficiency projects are generally seen in those cross-border programme areas of high or very high economic disparities, where at least one partner has a high degree of economic strength.

7.2.2 Transport

Transport as a theme in INTERREG IIIA projects is a rather wide category including all aspects of multi-modal transport, road, rail, air and sea travel, as well as bicycling, and the necessary infrastructure such as ports, ferry terminals, border crossing stations or bridges. With the obstacles created by borders, a useful starting point for cross-border functional integration is the improvement of existing transport infrastructure and the development of new links. These are the pre-condition for establishing or developing cross-border contacts.

The importance of good cross-border transport links is underlined by the fact that 23% of all functional urban areas in Europe are so close to a national border that they could extend their catchment areas for daily commuting and service provision across the border.

6% of INTERREG IIIA projects address accessibility and transport issues. An average cross-border project in the field of transportation has approx 2 million Euro in funding.

INTERREG IIIA programme areas with an average or above average focus are concentrated along frontiers with countries that joined the EU in 2004 or 2007.

The Czech Republic-Poland programme is an interesting example of a cross-border area where urban areas can stretch their sphere of influence and potential catchment areas into three countries. In this area, about 20% of the projects deal with transport issues and activities contribute to strengthening preconditions for cross-border functional integration e.g. through terminals and transport centres aimed at cross-border public transport which can facilitate cross-border commuting.

Whereas land transportation is a rather frequently approached by transport related INTERREG IIA projects, transcending water borders is a rarer topic. The programmes Skårgården and Italy-France (Islands) include projects on this theme.

The transport projects in the Brandenburg-Lubuska programme are mainly small to medium cost projects and e.g. focussing on the connection of medium-sized cities across the border. The project *Construction of the bypass road at Lubsko* e.g. focuses on the improvement of the states of the transborder transport route connecting the southern part of the Lubuskie voivodship (PL) with the town of Cottbus (DE) through the border crossing of Zasięki/Forst.

7.2.3 ICT

2% of the INTERREG IIIA projects address information technology issues. Many of these projects address ICT in relation to growth, employment or territorial competitiveness.

Like transport, ICT projects within INTERREG IIIA have comparably high average budgets (approx. 1.4 million Euro), which is a result of some of the projects dealing with ICT infrastructure whereas others focusing on e.g. distance learning or e-business tend to have smaller budgets.

E-Trainer (Finland-Estonia) for instance promotes e-learning as a powerful tool for stimulating cross-border interaction. E-learning courses proved to be an opportunity to

create genuinely diversified virtual classes with students from different countries, which may eventually evolve into interesting milieus for cross-border integration. Therefore, the project focuses on (a) enhancing the willingness to develop e-learning in the educational institutes and teacher education institutes in the target area, and (b) creating common e-learning study modules to be used in the organisations taking part in the project.

Geographically, ICT related projects tend to be more dispersed throughout the European territory than transport projects. Generally, there is a predominance of ICT projects in regions that already experience a high performance in the aspects of information society, particularly in the INTERREG IIIA programmes in which Finland and Denmark are involved, as well as the southern regions of Germany.

There is also a high share of ICT related projects located in some regions which are not so advanced in the Information Society. For instance in Greece-Italy, Greece-Cyprus, Greece-Albania, Austria-Slovenia, Hungary-Romania-Serbia-Montenegro, Hungary-Slovakia-Ukraine, Saxony-Poland or Estonia-Latvia-Russia.

7.2.4 Environment / quality of life

About 17% of INTERREG IIIA projects address the issue of environment and quality of life. Generally, projects addressing the environment and quality of life are most prominent in the programmes Gibraltar-Morocco, Greece-FYROM, Greece-Albania, Fyn-KERN, Skårgården, Greece-Bulgaria, Italy-Switzerland, Grensregio Vlaanderen-Niederland, Spain-Portugal, Latvia-Lithuania-Belarus, Italy-Albania.

The precise focus and activities differ however between these programmes. The Greece-FYROM programme e.g. focuses on conservation and management of various mountain biotopes as well as eco-tourism in its environmental projects. Whereas in the programme Spain-Morocco, several environmental projects help diminish the negative effects of high urban growth on the coast of Spain and its cross-border effects on Morocco. Here the projects *CRBT* (Creation of the Andalusia-Morocco Transcontinental Biosphere Reserve) and *RENAILT* (Preservation of Natural resource of the Coastline and Sea Environment) aim at the preservation of natural resources and their sustainable use to the benefit of the local population. The *CRBT* project attempts to support the creation of a Transcontinental

Biosphere Reserve which will help to develop both countries' networks of natural areas. The *RENAILT* project deploys equipment and immaterial actions in order to preserve and foster the sustainable use of natural resources and the improvement of environmental quality in the Alb Oran Sea.

The *Elk in Mitt Skandia* project in Kvarken-Mittskandia aims to create active cross-border cooperation regarding maintenance of elk populations, including equipping 75 elk with GPS trackers. Another project addressing the environment and quality of life involves an information campaign to young people regarding the prevention of addiction to alcohol and tobacco (Greece-Cyprus). Other projects in the area address various types of environmental protection in concrete ways for each geographic type of region, such as water quality in the Skärgården programme or preservation of bats in the Austria-Slovenia programme.

7.2.5 Cultural and cross-border social integration

Culture and cross-border social interaction appears to be quite important within cross-border regions. Possibly this theme more than any other plays an important role in prompting regions to gain greater understanding of one another through fairly low-cost projects, which could spawn further cooperation opportunities in other areas. About one fifth of the INTERREG IIIA projects address culture and social interaction. The attraction of cultural and cross-border social interaction projects doesn't seem to be dependent on factors such as population. Even areas with lower population focus on culture and cross-border social interaction.

Programmes with a strong focus on culture and cross-border social interaction are primarily located in the eastern half of the EU, either on the "old" external border between the EU15 and EU10 or on the new frontiers of the European Union and in the extreme northern and southern peripheries. For instance, a majority of Finnish-Russian projects, as in the *EuRegio Karelia*, strive to overcome social, cultural and economic barriers for cross-border interaction and to alleviate negative consequences of peripherality. Many projects in the Lithuania-Poland-Russia programme aim to reinforce the cultural identity of the cross-border region.

For instance *Reinforcement of Cultural Identity in Frontier Regions of Tczew and Klaipeda* (Lithuania-Poland-Russia) works to increase awareness of cultural variety along the borders in the region of Tczew and Klaipeda. In order to achieve the aims the following activities will be undertaken:

- Participation of regional groups in events in partner towns
- Conference on best practice in promoting the values of regional culture
- Outdoor event highlighting the cultural diversity in the region
- Training in cultural activities for the preparation of cultural projects

7.2.6 Growth, employment and competitiveness

Following the political focus of the Lisbon Strategy, the theme of growth, employment and competitiveness commands the greatest amount of attention as a theme in INTERREG IIIA projects. About one fifth of all INTERREG IIIA projects address this issue.

INTERREG IIIA projects that concentrate on growth issues to the greatest extent are clustered into two main groups. One group is concentrated in the core of the European territory corresponding to Germany-Luxembourg-Germanophone Belgium, Saarland-Mosel (Lorraine) - Western Palatinate, and the Ems Dollart Region. The other main clusters are focused in the eastern and northern peripheries: the Finnish cooperation with Russia and Estonia, and the Central European area of Austria-Hungary, Czech Republic-Poland and Slovenia-Hungary-Croatia and Italy-Slovenia.

Furthermore, it can be noted that many of the programmes which have a strong focus on growth objectives are found in cross-border regions exhibiting high economic disparities, e.g. Spain-Morocco, Germany-Luxembourg-Germanophone Belgium, Slovenia-Hungary-Croatia or Finland-Russia.

Projects in this field can directly address trade, business and investment issues. For instance the project *Barents business, trade and investment development (Nord)* focuses on the challenges faced by Finnish enterprises doing business in the Russian part of the Barents region. Thus the project aims to improve contact to the necessary authorities, bring together Finnish and Russian chambers of commerce and try to convince the relevant actors and

governments to lessen the existing challenges and hindrances to cross-border business.

7.2.7 Knowledge sharing, innovation and research

Knowledge sharing, innovation and research is addressed by almost one fifth of all INTERREG IIIA projects. The theme has implicit properties of exchanging and building capacity in regions. The emphasis is put on networking, research, innovation and institutional learning as a way of developing social and human capital through cross-border cooperation, and to encourage regions to try to position themselves in the global information society.

The geographical distribution of INTERREG IIIA areas with this focus shows an “Arc of Knowledge” or a “C” formed shaped from Denmark, via the Benelux countries and around the western and eastern borders of Germany, curving up to Vienna.

Interestingly the areas where the focus on knowledge is strong in both INTERREG IIA and IIIB, e.g. the Öresund region and Austria-Slovakia programming area, are areas that also show high participation in Euroregions.

7.2.8 Education and training

About 10% of all INTERREG IIIA projects address issues of education and training. Projects addressing these themes tend to deal with various types of education and training ranging from instigating university level courses to vocational training to training for public administrators. This theme is particularly important as training can be an important means of strengthening cross-border integration and cross-border labour markets.

INTERREG IIIA programmes with a high percentage of projects addressing this field are Sønderjylland-Schleswig, Finland-Estonia, Wallonia-Lorraine-Luxembourg, Oberrhein Mitte Süd, Italy-Slovenia, Öresund region, Storstrøm-Ostholstein-Lübeck, PAMINA, and France-Switzerland, Slovenia-Hungary-Croatia, Ireland-Wales and Euregio Maas-Rhein. Interestingly all of these programme areas, with the exception of Slovenia-Hungary-Croatia are composed of at least one region or several with very high economic strength and at least one or several other regions that show lower economic power: that is, there are economic disparities between most of the regions with a project focus on education and training.

It may be tempting to allege that in this case it is the region with the greatest economic strength that is transferring knowledge and capacity to the regions that are lagging, but the study has not looked for evidence of this. However in the Finnish-Estonian case cross-border cooperation has aimed at promoting “cognitive integration” of participating regions. The emphasis was put on networking, research, innovation, knowledge-sharing, institutional learning, education and training. Thus, by developing their social and human capital through cross-border cooperation, the regions try to occupy a leading place in the global information society. Estonia’s accession to the EU was also a major factor affecting cross-border cooperation. A major part of Finnish-Estonian projects had a knowledge-transfer component facilitating the adjustment of Estonian institutions to the requirements of the EU.

7.2.9 Remote and rural development

Remote and rural development priorities have a much lower frequency in INTERREG IIIA projects than could be expected given the priority in the INTERREG Community initiative to the most rural areas, particularly on the external borders with the new member states. Only 5% of all projects address this theme. Not surprisingly cross-border regions that engage in projects with this theme are in areas with low population density and low urban influence.

Those programme areas with the highest percentage of this theme (over 15%) are in low urban influence and low human footprint parts of Bavaria-Austria and Italy-Austria, which happen to be mountain regions. Other programmes with a high percentage of remote and rural attention (10-15% as a theme) are in low-density agricultural areas with low urban influence and medium human footprint, such as the Austria-Czech Republic, Saxony-Poland and Latvia-Lithuania-Belarus programmes.

The Skärgården programme is also included in this category, although it has a high urban influence because of the influence of Stockholm and Helsinki stretching into the Swedish-Finnish archipelago. Other areas of medium rural and remote thematic focus (in 5-6% of all projects) are the low urban influence, low human footprint areas of Spain-Portugal and Southeast Finland-Russia.

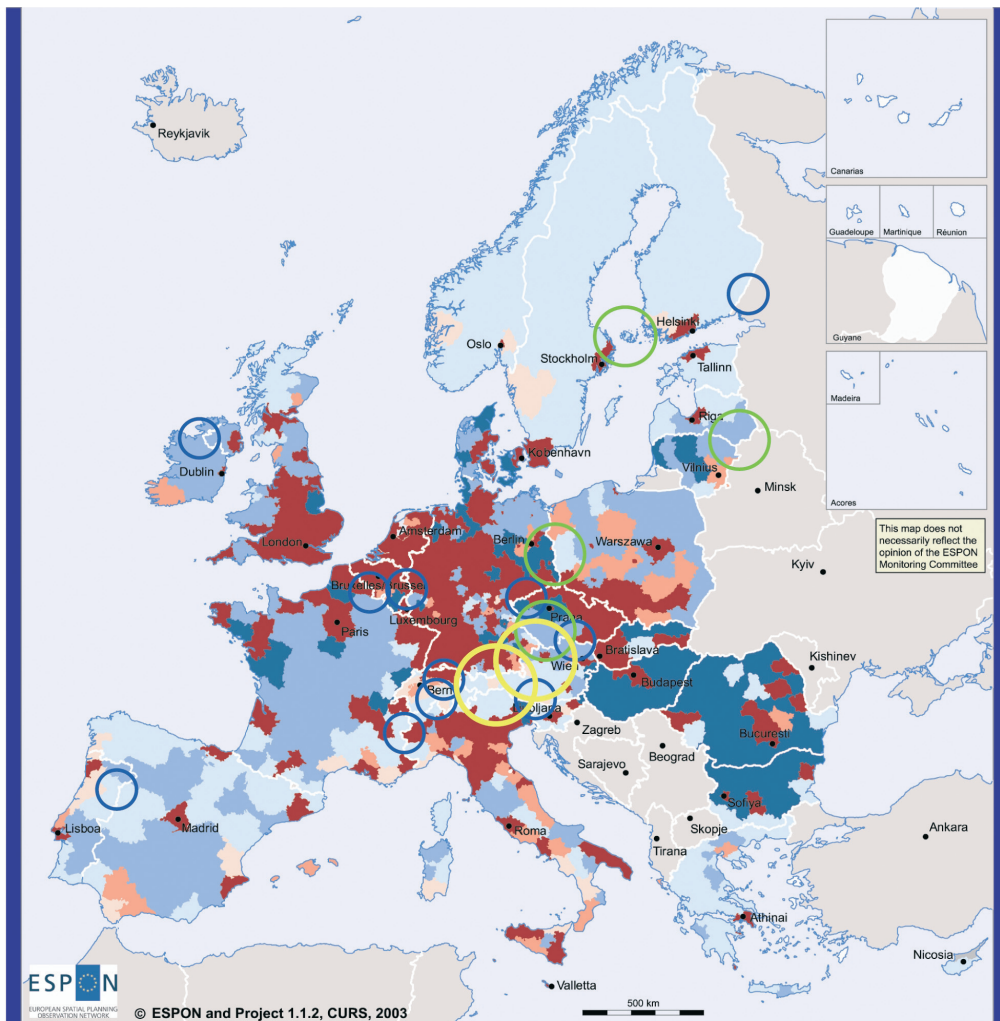
Also many programmes with medium coverage of this theme can be found in the centre of Europe, but these presumably address isolated pockets of rurality within a greater urban fabric.

7.3 Conclusions

The main findings deriving from the analysis of the potentials in cross-border regions and the strategic themes that projects address are:

- INTERREG IIIA projects with “hard” infrastructure or tangible themes such as Transport, ICT or Energy have received less attention as a theme than “softer” or intangible projects dealing with Growth, Knowledge or Culture. But the much higher average project cost of “hard” projects presumably partly explains their small absolute number.
- INTERREG IIIA programming areas with an above average focus on Transport are almost exclusively located at the frontier between the EU15 and EU10, or within the new member states or accession countries with border (potential) commuter areas going across national borders.
- Energy and ICT addressed as themes tend to congregate in cross-border areas with high or very high economic disparities.
- There appears to be very little overlap between INTERREG IIIA and INTERREG IIIB programme areas that focus on Culture and Cross-border Social Interaction. In fact it seems that these two INTERREG III strands complement each other nicely in this area, with IIIA, not surprisingly, taking the lead on this issue.
- INTERREG IIIA projects addressing Growth, Competitiveness and Employment as a main theme tend to be clustered in areas of high economic disparities, as well as areas displaying mixed indicators for economic Lisbon performance.
- An “Arc of Cross-border Knowledge” around the northern, western and southern peripheries of Germany is apparent in INTERREG IIIA programmes dealing with Knowledge Sharing/Innovation and Research. Except for the very top and bottom of this “arc” there is little overlap with INTERREG IIIB projects that deal with Knowledge.
- Cross-border regions that engage in projects with rural and remote areas as a theme are very few and tend to be located in areas with low population density and low urban influence, particularly in mountain regions.

Figure 28: Urban-rural relations and hotspots of INTERREG IIIA projects dealing with urban-rural issues



Urban-rural typology, based on population density, ranking of Functional Urban Areas and land cover

- High urban influence, high human intervention
- High urban influence, medium human intervention
- High urban influence, low human intervention
- Low urban influence, high human intervention
- Low urban influence, medium human intervention
- Low urban influence, low human intervention
- no data

© EuroGeographics Association for administrative boundaries
 Regional level: NUTS 3
 Origin of data: ESPON Project 1.1.2, CURS;
 CH and NO: classification on basis
 of calculations of ESPON Project 3.3
 Ranking of Functional Urban Areas (FUAs):
 ESPON Project 1.1.1, Nordregio
 Cyprus: Data for government controlled areas only
Source: ESPON database

This map has been modified by ESPON-INTERACT CBC Project and shows the analysis for Remote rural areas development in the EU 27 based on INTERREG III A Programmes - Source: ESPON-INTERACT INTERREG III A Projects, 2006

- Very High % of Remote rural areas development priority Projects:**
Bavaria-Austria; Italy -Austria
- High % of Remote rural areas development priority Projects:**
Austria-Czech Republic; Latvia-Lithuania-Belarus; Skårgården; Saxony -Poland
- Medium % of Remote rural areas development priority Projects:**
Germany -Luxembourg-Germanophone Belgium; Alcotra; Italy -Switzerland; Ireland-Northern Ireland; Austria- Slovenia; Austria-Slovakia; France-Wallonia/Flanders; Alperhein-Bodensee-Hochrein; Spain-Portugal; South East Finland-Russia; Sachsen-Czech Republic

Source: ESPON-INTERACT study on cross-border cooperation (2007)

8. Conclusions: As for the future ...

European applied territorial research and European territorial cooperation can mutually benefit from each other. The cooperation between ESPON and INTERACT, including the thematic studies and related events conducted as well as other discussions and activities, have shown this clearly.

These mutual benefits have not been fully exploited so far. The most important reasons for this are (a) the timing, i.e. as things progressed in parallel the applied research findings became available when the cooperation activities were already pretty advanced and partly reaching their final phase, and (b) the different terminologies used, which made it often challenging to easily transmit knowledge and experience at hand.

The discussion revealed a number of possibilities to further and better facilitate the dialogue between European applied territorial research and European territorial cooperation.

8.1 The need for dialogue

Only a few INTERREG projects have actually made use of the territorial information provided by ESPON in many cases participants in INTERREG projects did not even know about ESPON. The main reasons for this have been approached by the cooperation between ESPON and INTERACT:

- The first final results of ESPON projects were available only in late 2004. Most INTERREG activities were already ongoing and some were well advanced at this stage, whereas ESPON results would mainly have been of value in the beginning of these activities.
- Although ESPON results have always been freely available on the ESPON website, their presence was mainly known to people in the field of applied territorial research and territorial policies at European level. Dissemination of ESPON results towards other user groups has started rather late. In particular the ESPON-INTERACT events have been an important possibility for establishing a dialogue between ESPON and INTERREG projects, with considerable potentials for further development and intensification.

- The terminology used by ESPON reflects the language of European and national policy making which differs from the terminology used by regional and local actors. A terminology which is more action oriented and focused on concrete development tasks and challenges at local and regional level might help to increase the mutual understanding. This was shown also by the way the issue of rural-urban relationship has been approached in order to see match it with INTERREG activities. In addition there is certainly also the challenge of language as not all INTERREG cooperations work in English.
- At the INTERREG programme level there is a general movement away from territorial research activities towards projects that attempt to tackle some of the challenges previously identified. The links between these two types of activities need to be consistently redefined and demonstrated to encourage further project and programme take-up of research findings.

First steps to improving the situation have been undertaken by the INTERACT-ESPON cooperation, e.g. in form of events offering a platform for dialogue between people coming from ESPON and various INTERREG projects, programme areas and strands.

In the ESPON 2013 Programme, more emphasis is put on dissemination and contact with potential users of ESPON results others than EU administration and national ministries. Furthermore, a strand on targeted analysis is included which offers the possibility for territorial stakeholders to get involved in ESPON activities and see how ESPON results can be applied to their territory. Thus there are good preconditions to improve the dialogue with regional and local stakeholders e.g. via INTERREG projects or programmes and also to deepen the cooperation with INTERACT and URBACT.

In addition to the dialogue between European applied territorial research and European territorial cooperation, there is also a need for an improved dialogue between territorial cooperation activities. There are a number of projects working with similar and partly even geographically connecting aspects in different programming areas. For improving the possibility to cooperate, mutual learning and

coordination, a database with territorial cooperation projects and their findings and experience might be useful, as well as platform for exchange between projects. INTERACT has put considerable efforts in collecting information on INTERREG projects and providing thematic discussion platforms. In addition there have been a number of umbrella projects which bring together projects with similar topics running in different INTERREG programmes, as e.g. the Maritime Safety Umbrella Operation. The level of awareness and mutual benefit across territorial cooperation projects and programmes can be further increased by continuous efforts in this.

The dialogues which are already taking underline that neither applied territorial research nor territorial cooperation is an end in itself. In both cases the aim is to contribute to the development of policy strategies through new evidence on the territorial development or experience with new approaches to territorial development and governance. Therefore a continuation and deepening of the dialogues and mutual learning are needed.

8.2 The territory matters

Territory matters for cohesion and competitiveness. This is the clear message deriving from applied ESPON research as well as from many INTERREG projects.

Indeed, the territorial specificities of an area are decisive for defining appropriate actions to further stimulate its competitiveness and territorial cohesion in Europe.

The analysis of INTERREG projects dealing with territorial structures has made it evident that many of them deal with the territorial structures in order to better exploit their territorial capital or overcome territorial challenges. The topics relate e.g. to stimulating transport links and accessibility, local economic development, economic diversification, improving of business environment, risk mitigation, demographic challenges etc.

These territorial features have also been of importance for the shaping of territorial cooperation partnerships. Indeed, depending on the level of similarities, exchange of experience and the carrying out of common activities have been facilitated. In the wider sense territorial features also provide input for territorial cooperation (i.e. selection of

cooperation partners and themes) focusing either on complementarities or competition between areas.

Proximity is certainly an important feature in this discussion. This is also reflected in the question of whether to focus on the big European picture or the small local/regional picture. Both are relevant and the review of INTERREG activities has shown that both are addressed within INTERREG, albeit generally by different projects.

Furthermore, the review has shown that there are some topics which might deserve more attention by European applied territorial research or European territorial cooperation. Among the important territorial features which have not been addressed as frequently as expected are:

- **Demographic** developments and its territorial disparities, incl. strategies of how to deal with decreasing population and the necessary provision of services
- **Flows**, in terms of material and immaterial exchanges, between different territories is ever more important for regional development
- **Water** flows both as regards fresh water provision and sewage are hardly addressed in territorial research and cooperation so far
- **Energy**, in particular renewable energy, and its role in local job creation in addition to striving for more energy self-sufficiency
- **Ties between rural and urban areas** might deserve further strengthening despite all challenges to translate this into concrete action
- **Hazard** mitigation and vulnerability reduction taking into account hazard interactions
- **Climate change** and its results and the territorial implications of the latest climate change models
- **Institutional capacity** building in relation to regional development and territorial cooperation

Territorial relevance is certainly also a question of the geographical level in question. Territory matters at all levels but some territorial aspects might be more important at local and others more important at European level. Thus the question of which topic to address where can only be answered by bringing the big and general (European) and the small and detailed (local/regional) pictures together.

The issue of territorial scales and the importance of the territory for competitiveness and cohesion will be further investigated in the ESPON 2013 Programme. This will imply both a deepening and widening of the topics addressed by ESPON so far. Furthermore, issues related to the territorial governance and more detailed territorial analysis for selected areas will also be addressed in various territorial cooperation programmes and projects.

8.3 The big picture and the comparative dimension

The big comparative European picture has so far been mainly addressed by European applied territorial research within ESPON and selected INTERREG projects focusing on spatial development strategies and/or urban patterns in transnational areas.

The efforts undertaken here provide valuable insights into overall territorial development in European. These insights can be considered alongside the development potential and challenges on the ground, i.e. the more detailed tacit knowledge and territorial preconditions in specific areas. They will thus help to reveal the framework conditions for development and the comparative advantages and disadvantages of an area, which provides important inputs for future development strategies.

In addition to the valuable information on the framework conditions provided already, there are a number of features which are considered important in order to provide the big comparative picture needed on the ground:

- **Dynamic** information considering better time series and driving forces would be a valuable supplement to the analysis of the territorial state in Europe
- **More detail**, for some topics ESPON research should consider going down to LAU 1 or 2 level in order to better reflect territorial realities
- **Development potentials** might be an important focus for the future characteristics of functional urban areas as well as rural areas
- **Small and medium-sized cities** and the role they play in territorial development might deserve some more attention

- **Complementarities** between nearby cities or regions might be analysed more in-depth and thus also stimulate discussions on territorial cooperation
- **Accessibility of rural areas and secondary networks** and thus not only the European-wide accessibility or hub related accessibility
- **Flows**, in terms of material and immaterial exchanges between different territories is ever more important for regional development
- **Role of cross-border regions** in achieving territorial cohesion and improving territorial competitiveness.
- **Effects** of specific measures, activities or trends on the territorial development in different types of territories
- **Territorial development strategies**, incl. diversification strategies, delivery of services, or most promising strategies for rural-urban partnership

Application strategies and mental ownership are key aspects of each activity related to the provision of new comparative knowledge and development strategies for larger transnational territories. Otherwise the big comparative picture risks not being taken into account by the relevant stakeholders. Indeed, stakeholder related work needs to be considered from the beginning in such activities. Therefore, the ESPON 2013 Programme will on the one hand continue conducting European-wide applied territorial research but will complement this work with additional projects on targeted analysis also involving the cooperation with stakeholders.

The review of INTERREG activities has shown that they are very closely linked to the European policy agendas supporting territorial competitiveness and cohesion. The thematic review suggests that territorial cooperation releases local and regional knowledge and action achieving the European policy agenda. However, a study of the concrete effects of territorial cooperation, e.g. in the fields of transport, ICT, energy and growth-oriented projects, is still needed to verify this assumption.

8.4 The detailed picture and the tacit knowledge

Detailed knowledge on the preconditions for development involves good factual knowledge about an area but also a great deal of tacit knowledge. The tacit knowledge of an area and its territorial potentials is a valuable asset for local

and regional actors. This local knowledge can be complemented by a comparative European picture which provides information on the framework conditions for development. The European picture offers the possibility to consider an area in a larger territorial context and to uncover comparative advantages in relation to other areas. Together with a comparative European wide analysis, this local knowledge provides a good picture of the development potentials and challenges of a specific area.

Territorial cooperation can be a means to approach these development potentials and challenges and thus to make the necessary step from analysis to action.

In that sense territorial cooperation activities might also serve as case studies in European applied territorial research. They can exemplify what certain classifications mean in practice and – much more importantly – which policy strategies and approaches can be taken in these areas to increase competitiveness and cohesion.

The INTERREG activities reviewed in this document already provide considerable input to such discussions. At the same time they also show which issues and collaboration possibilities have not been fully exploited by territorial cooperation:

- **Integration of larger metropolitan areas** in thematic cooperation on urban networking and also in the cooperation between urban and rural areas
- **Hazards, vulnerability and risks** can be approached by strategies reaching towards the root causes of risks and mitigation plans considering hazard interactions - a more detailed proposal for future territorial cooperation activities is provided in chapter 5.5
- **Economically stronger and weaker areas** might benefit from coming together in territorial cooperation projects and not just cooperating with similar areas
- **Global integration zones**, as larger territorial zones being able to compete with the core of Europe, might be a cooperation feature contributing to more territorial competitiveness and cohesion at European level
- **Functional regions** of cross-border and transnational character can be supported by territorial cooperation activities strengthening the integration of such areas into e.g. one labour market or service provision and catchment area

Furthermore, all the topics mentioned under chapter 8.2 are certainly also topics for potential future territorial cooperation projects.

As the precise focus on a suitable territorial cooperation topic is highly dependent on the local preconditions and thus detailed tacit knowledge it is difficult to extract detailed suggestions from a European level analysis. However, the topics mentioned in this chapter are generally important features which might stimulate additional debate on territorial cooperation themes and projects. Furthermore, the themes and examples discussed in this document can certainly serve as a source for inspiration on how to approach a certain topic.

Regardless which topic is addressed in territorial cooperation two aspects are crucial:

- **Partner selection** is the key to the success of the topic – this regards both the territorial features, i.e. that there is a joint or preferably common issue to work on, and the organisational/institutional aspect, i.e. that all relevant partners are involved and that the partners have suitable competences/rights and means to approach the cooperation topic
- **Relevance and integration** of the territorial cooperation issue in the “daily” work of all partner organisations and the incorporation of territorial cooperation tasks in routines are important for the success of the cooperation project and for being able to continue the task after finalisation of the project without additional European funding

8.5 From analysis to action

There is a need for a close interplay between analysis and action. Indeed, many action-oriented territorial cooperation activities ask for more background knowledge and evidence to base their action on. At the same time more analytical activities, be it ESPON or studies carried out by INTERREG projects, are only meaningful when they inform decision making and action taking. This is in particular apparent in the activities related to spatial development strategies, but also in a wide range of other projects.

The interplay between analysis and action needs certainly to be integrated in each single activity but it calls also for a

platform for dialogue, i.e. dissemination and discussion between different communities.

INTERACT has taken a role here by facilitating dialogues across INTERREG strands, programmes and projects. The provision of programme and project information on the INTERACT website, and targeted studies and events where stakeholders could meet, have been important first steps towards the establishment of a communication platform which will be continued.

ESPON has provided considerable amounts of new comparative knowledge on territorial structures, trends, perspectives and policy impacts in Europe. The dissemination of these activities has increasingly also involved a wider audience. For the future ESPON 2013 Programme contains a specific priority for further bridging the gap between analysis and action e.g. through targeted analysis and special dissemination efforts.

The INTERACT-ESPON collaboration activities on which this report is based have been a first step to bring the activities of the two programmes together. As mentioned in the introduction, the collaboration set out to stimulate discussion and information dissemination between the two communities. Thus the collaboration was a first attempt to set up a platform for the dialogue needed acknowledging that territory matters at all geographical scales and highlighting topics which might deserve more attention in territorial

research and cooperation. The discussion on the big European picture provided first insights on which additional European-wide territorial research would be needed to better support territorial cooperation on the ground. The discussion on the detailed picture provided at the same time first insights on European-wide territorial research findings which might deserve more attention by territorial cooperation in practice. Finally, the work showed that when these different dimensions come together in a meaningful dialogue steps from analysis to action can be taken in order to support competitiveness and cohesion in Europe.

The INTERACT-ESPON collaboration has been very useful for creating platforms and build bridges between the different communities. However, it has also revealed considerable communication challenges reported above which require more attention and innovative approaches in future activities.

The missing dialogue mentioned in the beginning has started to appear and will hopefully grow strong over the next years. The European territorial cooperation objective offers the possibility for both analytical and action oriented activities as well as for activities focusing on the big comparative European picture and those focusing on the detailed and concrete picture. Good dialogue processes between the wide ranges of activities can make territorial cooperation a powerful tool to increase competitiveness and cohesion in and of Europe. For this success to happen everybody is invited to join in.



info@espon.eu
www.espon.eu

ESPO Coordination Unit
CRP HT - BP 144
L-4221 Esch-sur-Alzette
Luxembourg

INTERACT Point Qualification & Transfer
Jernbanegade 22
DK-8800 Viborg
Denmark



ip.qt@interact-eu.net
www.interact-eu.net

