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PREFACE

Europe is an old continent that is changing in new ways. Settlement systems that grew in, and remain connected by, the great river valleys that traverse the continent, have undergone transformations before. Industrialisation created new heartlands of production around the coalfields; shifting national boundaries and the “iron curtain” sundered places that historically had traded together. Now economic and monetary union and the growth of the EU to embrace the accession countries are creating a new map. There are opportunities and challenges to increase global competitiveness while also enhancing the cohesion and integration of the different parts of the new Europe.

Spatial planning is a consciously European attempt to bring together different national traditions in the planning and management of regional development. In the pursuit of the global goal of sustainable development, spatial planning means asking “where?” Where is there untapped potential? Where are new connections needed? Which places can work together in innovative ways, learning how to shape a joint future in a shared Europe?

The idea of polycentric urban development is central to this type of thinking. The underlying concept is more simple than the pronunciation! A polycentric settlement pattern is one with many centres or nodes, not just one large metropolis dominating everywhere else. It means connecting different villages, towns and cities into networks, so that rather like a phone network, everyone on it can access the same facilities and reach everyone else. For example, changes in rural areas make it important that they can forge new and complementary relationships with towns and cities. Similarly, at the pan-European scale, there will be new gateways of entry to different points of the continent and new hinterlands, and scope to grow groupings of settlements across borders towards the economic critical mass that they could never achieve in isolation.

Polycentricity also implies a need to re-think European regional policy and the allocation of structural funds. The dynamic is away from blanket coverage of whole regions based on some average figure for GDP, and towards a more targeted intervention to foster and spread networks with the capacity to enhance competitiveness and cohesion.

The Interreg programme is a means of putting these ideas into practice. Interreg IIC projects have explored and applied the concepts of polycentric development and new urban-rural relations. Now Interreg IIIB gives the chance to work with partners from other countries in a shared programme of local action. Such experiences can be a catalyst for wider changes both on the ground and amongst the teams involved, a way to revitalise routines through engagement with others in the delivery of new projects. The Urban Task Force commended the benefits that we in Britain could gain by seeing at first hand what is happening elsewhere in Europe. New types of plans and new ideas are being developed in England and in the devolved administrations in the rest of the UK. Work on polycentric development and engagement in Interreg can drive these changes forwards. This scoping study seeks to be a primer about polycentricity. It aims to inform readers about emergent European regional development concepts, but also to enthuse them to take an active part in the making of Europe’s new maps.
LIST OF ABBREVIATIONS

CIP – Community Initiative Programme
CPMR - Conference of Peripheral Maritime Regions of Europe
CSD – Committee on Spatial Development
DATAR – Delegation a l’aménagement du territoire et a l’action regionale
DGXVI / DG Regio – Directorate General (of the European Commission) Regional Policy and Cohesion
ESDP – European Spatial Development Perspective
ESPON – The European Spatial Planning Observatory Network
ESPRID - European Spatial Planning Research and Information Database
ESRC – Economic and Social Research Council
EU – European Union
EFUR - European Functional Urban Region
ESPRID – European Spatial Planning Research and Information Database
ESPRIN – European Spatial Planning Research and Information Network (based at the Centre for Research in European Urban Environments, University of Newcastle).
EURBANET – Urban Networks in the North West Metropolitan Area study
GDP – Gross Domestic product
METREX – The Network of European Metropolitan Regions and Areas
NSR – North Sea Region
NUTS - Nomenclature of Territorial Units for Statistics (from the French Nomenclature des Unités Territorials Statistiques)
NWMA – North Western Metropolitan Area
OECD – Organisation for Economic Co-operation and Development
PUR – Polycentric Urban Region
SPESP – Study Programme on European Spatial Planning
TIA – Territorial Impact Assessment
TEN – Trans-European Network
GLOSSARY

**Agglomeration economies** – the spatial version of economies of scale. Large cities or agglomerations can offer a large labour force with a range of skills, access to other firms, suppliers and services, including the kind of specialists unlikely to be found in smaller settlements. (See “industrial clusters” and “urban networks”).

**Atlantic Area** – one of the Euro-regions that form the base for co-operation by national, regional or local authorities through Interreg II and Interreg III. It includes the western parts of England and Scotland, all of Ireland and Portugal, most of Spain (in Interreg IIC – mainly the north of Spain for Interreg IIIB) and Western France.

**Cohesion** – progress towards economic and social cohesion underlies most EU spatial policy initiatives. The aim is to reduce disparities between levels of development of various regions and particularly to tackle the problems of the least favoured regions. (See also “territorial cohesion”).

**Cohesion Fund** – provides financial help from the European Union for environmental and transport infrastructure projects. Set up in 1993, the fund is restricted to Greece, Ireland, Portugal and Spain.

**Committee on Spatial Development** – an inter-governmental committee set up in 1992, and composed of the Regional/Spatial Planning Ministers of EU member states and their senior officials, it was a key means of linking governments of member states and the Commission over matters of development of the European territory. Crucial in providing political backing for the European Spatial Development Perspective and the establishment of the European Spatial Planning Observatory Network.

**Community Initiatives** – aid or action programmes set up to complement Structural Fund operations. Interreg is a Community Initiative.

**Compact city** - reassertion of the classical form of European cities as a policy for withstanding pressures for suburbanisation. The Green Paper on the Urban Environment, which was produced by DGXI (Environment) in 1990, endorsed the compact city and associated urban planning policies such as brownfield development, conservation of the urban cultural heritage and green spaces, and traffic calming.

**Complementarity** – the important idea in the European Spatial Development Perspective that different settlements or regions can fulfil different and mutually beneficial roles, through simultaneously embracing the advantages of competition but also overcoming the associated disadvantages. Complementarity can be about the whole range of urban functions, not just business and economic development. It is built upon the voluntary cooperation of partners who have equal rights, and thus is the antithesis of domination (see “core-periphery”).

**Core-periphery model** – a pattern of development characterised by a dominant central city or region and a much less developed set of places surrounding the core, with development levels declining as distance from the core increases. This “concentric circles” model underpinned European Union
policy for economic and social cohesion in the 1990s, including the Structural and Cohesion Funds.

**Dorsale** – the economic and political core of Europe running from Milan, through Zurich, Frankfurt, Bonn, Brussels and Amsterdam to London, as identified by the French agency DATAR. Often referred to through the metaphor of “the Blue Banana”. (See also “the Pentagon” and “core-periphery”).

**European Functional Urban Region** - a territorial frame for analysis and implementation of development policies, usually defined on the basis of commuting or travel-to-work areas. European Functional Urban Regions were the focus for a major study by the OECD.

**European Spatial Development Perspective** – key spatial planning statement adopted by the regional planning ministers of each of the 15 EU member states in 1999. Strongly advocates polycentric development. The ESDP is formally endorsed as a key focus for the spatial development aspects of Interreg projects.

**European Spatial Planning Observatory Network** – trans-national collaborative research network that is exploring spatial trends (including polycentric development and urban-rural relations) and the spatial impacts of sectoral policies such as the Common Agricultural Policy, pre-accession funds etc. Research findings will feed into the third Cohesion Report. ESPON runs until 2006

**Gateway cities** – key entry points to Europe, typically based on major ports and/or airports, but also trade fair and exhibition cities and cultural centres likely to be the first point of call of international tourists. Removal of national boundaries within the Single Market, and the prospect of EU enlargement when the accession countries join, have created new possibilities. Cities and metropolitan regions that were once on national peripheries or mainly connected to non-EU countries can grow a new role as gateway cities in polycentric networks. To achieve this potential they must be connected to Trans-European Networks.

**Industrial clusters** - geographic concentrations of inter-connected companies, specialised suppliers, service providers, firms in related industries and associated institutions, in particular, that compete but also co-operate. Industrial clusters are thought by some to have advantages in generating innovations. (See “agglomeration economies”, “place competitiveness” and “urban networks”)

**Interreg** – A Community Initiative funded by Structural Funds and matching finance (including staff time) from participating partners such as local authorities. Interreg began in 1990 to assist border areas to prepare for the removal of frontiers in the Single Economic Market after 1992.

**Interreg II** - 1994-1999, sought to develop cross-border co-operation. Interreg IIIC supported such co-operation in respect of spatial development in seven trans-national Euro-regions (including the Atlantic Area, the North Sea Region and the North-Western Metropolitan Area). Other Interreg II emphases were flood protection and drought damage.
Interreg III - runs 2000-2006 and aims to stimulate inter-regional co-operation within the EU. It is designed to strengthen economic and social cohesion by fostering the balanced development of Europe through cross-border and inter-regional co-operation. Interreg IIIA is about cross-border co-operation between adjoining regions. Interreg IIIB supports trans-national co-operation between national, regional and local authorities. Interreg IIIC is concerned with inter-regional co-operation to improve effectiveness of regional development policies through large scale information exchange and sharing of networks.

New urban-rural relations – urban and rural areas have often been divided by administrative boundaries and consequently policies have been developed separately rather than in an integrated manner. Instead the European Spatial Development Perspective proposes urban-rural partnerships – in essence a regional approach. With long term job loss in traditional rural-based primary industries, towns in rural regions are seen to have important functions as drivers of regional economic development (see also “territory”).

Nomenclature of Territorial Units for Statistics – a system created by the European Office for Statistics to provide a common classification of spatial units for data, to overcome problems created by varying terminology amongst different European countries. There are 78 NUTS-1 units (federal regions, Scotland, Wales etc, plus the whole of smaller states like Luxembourg, Ireland or Denmark) in the 15 member states. NUTS-2 are provinces and smaller regions and number 210 in all (some NUTS-1s are also NUTS-2s). NUTS-3 includes English counties, and at this level Luxembourg is the only undivided country. There are 1093 NUTS-3 units. NUTS-4 equates with Districts and NUTS-5 with neighbourhoods. NUTS do not necessarily align with functional urban regions.

Northern Periphery - a trans-national Euro-region within which co-operation by national, regional or local authorities from the different countries is fostered by Interreg IIIB. Scotland’s Highlands and Islands and similar areas in Finland, Norway, Sweden, plus Greenland and the Faeroes constitute the Northern Periphery.

North Sea Region – one of the trans-national Euro-regions within which co-operation by national, regional or local authorities from the different countries is fostered by Interreg IIIB. Included within it are the eastern parts of England and Scotland, southern Norway, south-western Sweden, Denmark, and the coastal regions of north-west Germany, the Netherlands and Flemish Region in Belgium. The boundary for the North Sea Region in Interreg II was more restrictive (excluding Belgium and most of the Netherlands).

North Western Metropolitan Area - one of the trans-national Euro-regions for Interreg IIC. It included all of the UK and Ireland, together with Belgium, Luxembourg, most of the Netherlands, north-eastern France and Germany’s Rhine–Rhur area. Replaced in Interreg III by North West Europe.

North West Europe – one of the trans-national Euro-regions for Interreg IIIB. It is extended from the North Western Metropolitan Area of Interreg IIC, to include all the north of France and the areas of France and Germany that extend south to Switzerland.
Parity of access to infrastructure and knowledge – a key aim of the European Spatial Development Perspective. To this end the polycentric development model is seen to be a basis for better accessibility, and it is argued that the future development of the Trans-European Networks should follow the polycentric model, and that there is a need to strengthen secondary transport networks, including regional public transport systems.

Pentagon – the zone defined by the metropolises of London, Paris, Milan, Munich and Hamburg that is the core area of the EU, and Europe’s only large zone of global economic integration. (See also “Dorsale”).

Place competition – competition between places to attract and retain investment, businesses, and attractive events.

Place competitiveness – the extent to which the economies of places are reflected through factors such as value added, employment or the incomes of the population. Place competitiveness is likely to be influenced by the inputs to the production and marketing processes that are availed by virtue of the place as a business location. The most competitive location is not necessarily the one with the lowest costs. Rather, place competitiveness implies a capacity to be the locus for the production of goods and services that can be traded competitively in open markets, while also maintaining and expanding the incomes of residents over a long period.

Polycentricism – a belief that there are benefits to be gained from polycentric development. Such benefits are thought to include increased competitiveness, cohesion and regional balance, parity of access to infrastructure and knowledge, and sustainable development.

Polycentricity / Polycentric development – a spatial and functional form of development in which there are many centres not just one large city/region that is dominating all the others. The centres are linked in networks and complement each other functionally, and co-operate together. Through this process they are likely to generate a greater “critical mass” than by operating in isolation, and so increase their overall competitiveness. (See also “core-periphery”, “urban networks”, “place competitiveness”, and “agglomeration economies”).

Polycentric Urban Region – a region having two or more separate cities, with no one centre dominant. The various cities that constitute the polycentric urban region must be in reasonable proximity and well-connected to each other as an urban network.

Sectoral planning – a form of planning that is carried out within a single sector such as transport or water management or housing, etc. The priorities are likely to be quantitative (increase output) or qualitative (improve the service) with less regard to issues of location and territorial impacts, though investment decisions within the sector will impact differentially on different places.

Spatial planning – a form of planning which seeks to influence the future distribution and pattern of activities in terms of their locations. It is concerned with territory and place. It emphasises land uses and physical development and the connections between places. Spatial planning addresses conflicts about development and seeks to promote conditions conducive to economic...
development and cohesion while also conserving the environment. Spatial planning operates on the presumption that the conscious integration of (particularly public) investment in sectors such as transport, housing, water management etc. is likely to be more efficient and effective than uncoordinated programmes in the different sectors. Spatial planning can make an important contribution towards sustainable development.

**Spatial vision** – a strategic territorial overview and framework of aims to steer more detailed policies and investment decisions. Spatial visions are tools used in spatial planning, and thus exhibit many of the features of spatial planning. However, they are likely to be indicative and consensus-building, rather than spatially prescriptive, and to deal with broad trends and types of development, rather than specific sites or precise transport routes. Spatial visions are means of encapsulating and communicating (often through diagrammatic representations) key spatial challenges and desired responses.

**Study Programme on European Spatial Planning** – a trans-national research programme undertaken in 1998-1999 to improve the scientific base for further development of the European Spatial Development Perspective. It was funded through the European Regional Development Fund and explored three key themes. These were new urban-rural partnership; analysis of the components of the European territory (collecting data and indicators for economic strength, land use pressure, cultural assets etc); and methods of mapping trans-national spatial policies. This research led into the establishment of the European Spatial Planning Observatory Network.

**Sustainable development** – a term subject to contested interpretations, but in practice in European policy-making it means creating the conditions for long-term economic development while having regard to, and managing, the environmental consequences. The Treaty of Amsterdam wrote explicit reference to sustainable development into the EU Treaty, and sustainable development is a key goal of spatial planning, as is evident in the European Spatial Development Perspective.

**Territorial Impact Assessment** – a developing tool within spatial planning. There is no single agreed methodology for assessing how plans or investment decisions impact on places or territories. Methods such as Strategic Environmental Assessment are relevant in so far as most environmental impacts have an important spatial dimension (e.g. where is there a flood risk?). However territorial impact assessment attempts to identify and evaluate impacts that are not environmental – e.g. impacts on cohesion.

**Trans-European Network** – The EU Treaty obliges the Community to contribute to the development of Trans-European Networks in transport, telecommunications and energy supply infrastructure. This is seen as assisting the functioning of the single market but also strengthening economic and social cohesion. Development of major roads and of high-speed railway lines accounts for much of the TENs investment, but the territorial impacts of such sectoral investments have not been fully assessed (though ESPON is doing research on this issue).

**Territorial cohesion** – a term introduced in the Third Cohesion Report published in 2001. Previously the talk had been only of economic and social cohesion. The notion of territorial cohesion is likely to be further developed in the next Cohesion Report as more data becomes available and Territorial
Impact Assessment methodologies are developed. Territorial cohesion, like other spatial concepts, can be applied at different spatial scales. At pan-European scale there are significant disparities between the existing 15 members and the accession countries; at intra-urban level there are typically serious inequalities in quality of life and environment between affluent suburbs and poor inner-city neighbourhoods.

**Territory** – the space in which governance operates. Traditionally the nation state was the key territorial unit, so much so that there was really no separate concept of territory. However, with the emergence of trans-national governance (as in Europe) and the advent of globalisation and associated global-local linkages, governance has been “re-scaled”, with regional units in particular being actively created in several countries. Thus a “territory” is often interpreted to mean a region or sub-region in which there are identifiable labour markets, product markets, infrastructure networks, service industries and cultural linkages. However, “territory” is not necessarily definitive about a particular spatial scale, but rather implies fluidity, ambiguity and dynamism and the significance of space and place in the process of governance.

**Urban network** – a set of urban centres that are functionally connected in significant ways so that they become interdependent. Connections are likely to include transport infrastructure such as roads, railways and airports, but also “softer” connections such as in business linkages, connections and collaborations between educational institutions, and the existence of partnerships that seek to promote the network as a whole.

**Zone of global economic integration** – a globally significant region, possibly trans-national in scale, where headquarters of global economic functions and services are located. Such zones are inter-connected with each other globally through hub airports, 24 hour-trading etc. They have the best infrastructure connections and also are a locus for high incomes. There is currently only one such zone in Europe, “the Pentagon”, whereas in the USA there are four – California, East Coast, Texas and the Mid-West. The European Spatial Development Perspective seeks to grow more such zones in Europe through spatial planning aiming for polycentric development through urban networks.
EXECUTIVE SUMMARY

This study is targeted at practising planners and related officials and politicians who are interested in bidding for European funds through the Interreg programme and who want to find out more about “polycentricism”. (Introduction).

Polycentric development is an important concept in spatial planning. It means connecting a number of places so that they form a network. By operating together they achieve a new critical mass that can sustain and grow businesses, services and facilities. Polycentric development offers an alternative to monocentric development in which one city or metropolitan region dominates all the others. (Part 1).

Polycentricity is a not just a descriptive term, but also a policy stance prescribing a means to promote and equalise economic growth across Europe. (Part 1),

Polycentricity is an alternative to the traditional core/periphery development model. This implies a new base for European regional policy. (Part 1).

Polycentricity is expected to increase the competitive critical mass of the EU while also delivering regional balance and a new urban-rural relationship (Part 1).

Equating polycentricity with social, economic or territorial cohesion begs many questions, both in respect to spatial scale and to different types of region. (Part 2).

Sustainable development is an ESDP goal, but the connections to polycentricity are not explicit. There are potential tensions between improving mobility and environmental sustainability. (Part 2).

There needs to be common understanding and methodologies to interpret and apply the concept of polycentric development (Part 3).

Labour markets and travel-to-work areas have been the main basis for defining Polycentric Urban Regions, though arguably the concept requires more focus on measures of accessibility and complementarity. (Part 3).

There is a need to integrate methods of mapping polycentric development into a form of Territorial Impact Analysis. Interreg is an opportunity to explore these possibilities (Part 3).

Interreg IIC projects have explored and applied the concepts of polycentric development and new urban-rural relations, though there have been some significant differences in interpreting and applying the idea polycentric development (Part 4).

Ideas of polycentric urban development are beginning to have impacts in practice. In situations of slow growth or even decline they are likely to be the rationale for attempts to renew and retain existing urban centres, especially as the focus of nodes in public transport networks. In growth situations polycentricity offers the chance to plan new, sustainable nodes in networks. (Part 4).

Interreg IIIB provides funding to support practical projects about polycentric development. Web sites for the Interreg secretariats are essential starting points for those wanting to get involved (Part 5).
Introduction

"Polycentric spatial development strategies", "urban complementarity" and "new urban-rural relations" are key themes in the Interreg IIIB programme. This scoping study aims to de-mystify these terms; to explore how they can be applied in practice, and to stimulate ideas for Interreg projects. Research is being done in the European Spatial Planning Observatory Network on polycentric development and new urban-rural relations. Our study complements that research, but it is targeted at practising planners and related officials and politicians who are interested in bidding for European funds through the Interreg programme and who want to find out more about "polycentricism".

The study is organised into five Parts. The first explains how polycentricity has emerged as a key idea in spatial planning. Debates about the meaning and benefits of polycentric development are summarised in Part 2. Then Part 3 looks at methodologies - how do we know how polycentric an area is? Part 4 provides examples of how polycentricity has been put into practice, including discussion of relevant Interreg projects. This leads into discussion in Part 5 about the possibility of applying and exploring the concept further through new Interreg projects.

We have provided links to relevant reading and websites, to make it easier for you to follow up topics where you want more information. We have also included a couple of activities, to help you explore ideas and to work towards possible projects. Interreg IIIB will help to shape the map of Europe and its regions over the next generation. This study is an invitation to readers to make an active contribution to achieving competitiveness, cohesion and sustainable development in Europe.

PART 1: CONCEPTS AND BACKGROUND

What is polycentric development?

Spatial planning is fundamentally concerned with where development happens - it seeks to integrate investment in sectors such as transport, agriculture, research and development or environmental protection so as to achieve sustainable development. Polycentric development is an important concept in spatial planning. It means connecting a number of places so that they form a network. By operating together they achieve a new critical mass that can sustain and grow businesses, services and facilities. Polycentric development means forging new connections by overcoming historical barriers, such as those caused by national boundaries, local rivalries or distance / poor communications. The links in the network may be improved transport channels, but this is not the only possibility. Links may be virtual connections using information technology, or joint working or simply a newly focused and active co-operation.

Polycentric development offers an alternative to monocentric development in which one city or metropolitan region dominates all the others. Diagram 1 illustrates an imaginary situation where a big settlement dominates, and is the sole focus for new activity and investment. The coal pit has closed and the settlement there is in decline. The village has become a dormitory for the big settlement and is losing its identity. The small town has a town centre with vacant shops and needs a face-lift. The connections are limited and one-way. The other town, separated from the big
settlement by an administrative boundary, looks elsewhere for its main links and services.

Diagram 1: Monocentric development

Diagram 2 shows the same imaginary area as a polycentric network - the parts are connected to each other and their roles are now complementary. The main settlement is still important but there are beneficial linkages between all the parts. For example, a business park has been developed in the Small Town where a large, high amenity site could be assembled, a new facility that was not possible in the congested Big Settlement. The firms in the park trade with companies in the Big Settlement to mutual benefit. The shopping centre has been redesigned and made more attractive, and is the venue for a weekly farmers' market, where people from the other towns come to buy local produce. A demonstration farm has been created in the Village, and is enjoyed by children from all the places in the network; while a new multiplex cinema and skating arena on the site of the former coal pit has created an entertainment node and provides much needed local employment. A cable
network connects all the places and is used to get information on job vacancies and training opportunities to unemployed persons. The settlements work together in a partnership to promote the area as a whole. The administrative boundary is no longer a barrier.

This imaginary example illustrates polycentric development at an intra-regional scale, but the same principles can be applied inter-regionally or trans-nationally. Thus a network of provincial cities may be able to enhance their competitiveness by cooperation and improved linkages. Crucially, polycentric development at a European scale implies a dynamic 21st century geography in which, for example, cities and regions that were marginalised on national peripheries are now united across fading boundaries to forge new development trajectories. Old ports gain new hinterlands and become Euro-gateways. The gaze shifts from parochial rivalry to regional integration into a networked Europe. The map of this new Europe will show a polycentric pattern of spatial development, with several inter-connected zones of major growth, each carving its own niche in the European and global space economies. In summary, the idea of polycentric development is rather like a Russian doll, in that it can be unpacked and replicated at different scales from the continental to the local.

The ESDP and the Policy Context for Polycentricity

What are the trends in urban and regional development within the European Union? What patterns do we want to foster for the future? These questions underpin the idea of polycentric development. The geography of the Union is characterised by long distances, major physical barriers to surface movement, and huge disparities in population densities. A number of studies from the early 1990s onwards (particularly CEC 1991, 1994) recognised that the Single Market and EU policies for sectors such as agriculture, transport, technology and environment were likely to have significant impacts on the location of development.

A report commissioned by DG XVI (Kunzmann and Wegener, 1991) countered the dorsale with the metaphor of a “European Bunch of Grapes”, “to represent the polycentric structure of the urban system in Europe and the fundamental similarity in diversity of the interests and concerns of its member cities”. Thus polycentricity is a not just a descriptive term, but also a policy stance prescribing a means to promote and equalise economic growth across Europe. It counters the core-periphery view that underpins traditional European regional policy.

The European Spatial Development Perspective (ESDP) was a landmark document. Its sub-title is "Towards balanced and sustainable development of the European territory". It was adopted in 1999 by the Committee on Spatial Development, (i.e. by the Ministers responsible for spatial planning in each of the member states). It is not a binding document - the European Commission has no legal powers to undertake spatial planning. Therefore the ESDP seeks to influence planning practice in and between member states.
Polycentric spatial development is central to the ESDP: "a polycentric settlement structure across the whole territory of the EU with a graduated city-ranking must be the goal. This is an essential pre-requisite for the balanced and sustainable development of local entities and regions and for developing the real locational advantage of the EU vis-à-vis other large economic regions in the world" (pp.20-21). Thus polycentricity is expected to increase the competitive critical mass of the EU while also delivering regional balance and a new urban-rural relationship. How?

- **Enhancing competitiveness** - The EU has only one "zone of global economic integration", the "Pentagon" defined by London, Paris, Milan, Munich and Hamburg. The USA has four high income/good infrastructure global economic zones. Polycentricity is a means of "growing" more such zones in Europe.

- **Regional balance** - The traditional response to problems of disadvantaged and peripheral regions has been to connect them to the core. Polycentricity offers a new model - internal connections within peripheral regions, with high quality links between several regions "well distributed throughout the EU territory" to create "a network of internationally accessible metropolitan regions and their linked hinterland (towns, cities and rural areas of varying sizes)" (p.20).

- **Urban-rural relations** - increased functional linkages between cities and their surrounding countryside require co-operation between them to manage land use and transport. In weaker regions co-operation amongst smaller towns can achieve functional complementarity to build markets and sustain services.

Ambiguity about polycentricity reflects the extent to which the relationships between competitiveness and cohesion are both complex and contested. There is no glossary in the ESDP - a measure of confusion over meanings arguably helped secure political consensus. Nevertheless, the notions of "balanced competitiveness" / "polycentric urban system and new urban-rural relationship" do signify a shift in EU regional policy, and hence are extremely important.

European Structural Funds have traditionally been targeted at areas with the most severe problems. Polycentric development is a different strategy, capitalising on latent potentials and linkages, especially those previously restricted by national boundaries. Polycentric development implies a need to target growth potential, and suggests that cities are the economic drivers, the keys to endogenous regional development. The Treaty agreed in Amsterdam in 1999 introduced the term "territorial cohesion", and the Second Report on Economic and Social Cohesion makes clear that that there will be a major change in EU regional policy after 2006.

It can be argued that Europe already has a polycentric urban system. It is a densely populated continent, and even sparsely settled regions generally have some network of settlements. However national and local authority boundaries and inter-city rivalries have fragmented the systems and blocked the realisation of the potential. In some senses then, the differences between what exists and what is proposed are in the mind - the ESDP stands for a conscious way of looking at regions which highlights and operationalises networks and joint actions. This is why the Interreg
programme is important - it is a means of raising awareness, promoting the polycentric vision and forging new networks and institutions in practice.

**Box 1: Key concepts**

**Territorial differentiation and cohesion** - A "territory" is interpreted to mean a region or sub-region in which there are identifiable labour markets, product markets, infrastructure networks, service industries and cultural linkages. Territories are often a focus for emergent political/administrative initiatives which in turn help define them (c.f. the Regional Assemblies in England). A territory can be a metropolitan region (e.g. South-East England) or a sparsely populated region based on primary production (e.g. northern parts of Scandinavia). The diversity of territories will be increased with the accession of new EU members in 2004. Cohesion implies physical connections, economic integration and virtual connections between territories with similar concerns, but also that there will not be gross disparities in living standards and opportunities between different territories.

**Polycentric development** - A strategy to counter the problems created by mono-centric development. Traditional regional policy approaches direct assistance at whole regions in blanket fashion. In polycentric development, the centres are the nodes in networks - and it is the nodes and connections between them that matter most - not the spaces in between them. The ESDP aspires for a Europe where the existing "Pentagon" is connected to several other "dynamic global integration zones" forming a network of "internationally accessible global regions". Each of these zones would be polycentric, with strong connections and complementarity between the main settlements and linked hinterlands. Such new economic regions would not be hampered and fragmented by national boundaries.

**New urban-rural relationships** - Local government boundaries and politics, and national ministries and their policies have typically divided rather than united urban and rural areas and their administration. Land use disputes are a typical outcome. Restructuring of agriculture, and likely change in the Common Agricultural Policy mean that the towns and cities will sustain rural areas economically. However, conservation of the natural environment and the cultural heritage remain important goals in the ESDP. The challenge is to diversify rural economies and enhance connections to and between settlements in a way that sustains rather than obliterates cultural landscapes and other rural resources.

Connections and networks are a recurrent theme. The polycentric concept both prescribes, and offers, improved accessibility for those outside the core, while seeking for improved efficiency of movement within the congested Pentagon. The development of trans-European and inter-continental **transport infrastructure** is needed to create "internationally accessible global regions". Peripheral locations can become new gateways to Europe. Intra-regional transport infrastructure is also vital for polycentric development and new urban-rural relationships. However, modern **telecommunications** open new possibilities for linkages that transcend physical space. The ESDP aims for "parity of access to infrastructure and knowledge", and asserts that "Policy must ensure that all regions, even islands and peripheral regions, have adequate access to infrastructure" (p.26). It recognises the risks of the "pump effect" (new transport links move people and firms from weaker peripheral regions to locate in the core and exacerbate congestion costs there), and the "tunnel effect" (areas crossed by a road/rail line but not connected to it). Thus strengthening the secondary networks has to be part of a polycentricity strategy.

**Summary**

**Polycentric development is sought at a continental level and within regions. However it is a contested concept and so ambiguous and susceptible to conflicting interpretations. There are tensions between competitiveness and cohesion, which are embedded in the idea of "polycentric development". Urban areas and the connections between them are likely to be given increasing priority, in comparison with the traditional direction of structural funds towards agriculture and entire regions.**

**Questions**

- Can networks of medium sized cities become globally competitive “zones of economic integration”?
- Does polycentric development increase cohesion?
- Is a polycentric development pattern intrinsically more sustainable than a monocentric pattern?

**Web sites to visit:**

- [www.odpm.gov.uk](http://www.odpm.gov.uk)
- [http://inforegio.cec.eu.int](http://inforegio.cec.eu.int)
- [www.esprin.org.uk](http://www.esprin.org.uk) and [www.nordregio.se](http://www.nordregio.se)
PART 2: DEBATES

Key Debate 1 - Urban Networks and Place Competitiveness

Global competitiveness is central to the European project. The creation of a larger internal market and monetary union are macro-economic steps in this direction. However, the global economic challenges are considerable, and new international “economic zones” have emerged, e.g. through linkages between Indonesia, Malaysia and Thailand across the Straits of Malacca. In the end, it is firms that compete with one another, but place and spatial planning matter. While supra-national groupings like the EU, nation states, regions or cities are not directly producing, marketing and selling goods, they compete to create the conditions in which firms will form, prosper, remain or locate.

This idea of place competition has spawned a considerable debate. Traditionally economists have not attached much importance to place. However, Porter (1990, p.158) argued that place-related factors influence the competitiveness of firms: “Internationally successful industries and industrial clusters frequently concentrate in a city or region, and the bases for advantage are often intensely local”. Porter and other authors have put particular emphasis on the competitive capacity of clusters of firms that are linked at a local level.

Advantages that a firm can obtain from a cluster or agglomeration include access to a large pool of labour, links with suppliers and perhaps specialist firms, a large local market and so favourable transport costs, and access to know-how. Locations able to offer this mix will gain competitive advantages over others. Aggregate size - or a critical mass of firms - and strong local connections (physical and between persons/firms/agencies) seem to be key to such advantages. Over time these advantages can become self-reinforcing. Therefore, there is an economic case for trying to optimise the linkages between cities – a polycentric network - so as to maximise the potential for competitive advantages through economies of scale and agglomeration.

Innovation is the major driving force behind competitive economic growth. There is evidence that innovation is more concentrated in some cities than others, and that agglomeration economies also facilitate innovations. The Delors White Paper for the EU (Commission of the European Communities, 1992b) backed this approach. From the late 1990s the idea of promoting industry clusters and networks has figured in UK government policy (Department of Trade and Industry, 1998). Lack of awareness of the economic importance of clusters amongst planning authorities might have restricted their development (Department of Environment, Transport and the Regions, 2000a).

Not everyone agrees about industrial clusters. Key new knowledge is likely to be sourced internationally rather than locally. The big multinational companies, located in the main urban cores, lead and reproduce business innovation. Thus Simmie...
(2001) stresses the primacy of the metropolitan centres and is sceptical of the scope for generating new high technology agglomerations in peripheral locations.

**Box 2: Polycentricity and Innovation Clusters: A practical example**

Stuttgart is the core of a region of 2.6M population at the forefront of industrial and commercial innovation within Europe (Hilpert, 1992). It lacks a huge metropolitan city - rather it is polycentric, composed of a number of medium-sized cities around Stuttgart itself. It is internationally accessible by road, rail and air.

Two industrial clusters are vitally important to the regional economy. One is based on the car industry and the other on mechanical engineering. Together they account for more than half the industrial employment. There are something like 20 universities and technical universities in the region, together with a number of technological institutes. This science base specialises in sectors that are relevant to the industrial sectors of the region, and in turn the large firms in the region buy research from their local universities.

The Verband Region Stuttgart (Stuttgart Region Association) has been created as a devolved parliament with legislative powers so as to overcome the problems that could arise through a system of five administrative districts and 179 independent municipalities. The aim was to undertake effective strategic land use and transport planning, particularly in respect of the location of residential development and landscape conservation.

**Summary**

Polycentric development is seen as enhancing European and regional competitiveness. This aspiration is underpinned by some theory and empirical evidence, which suggests that a critical mass of firms and strong local/regional linkages can confer cumulative advantages and stimulate innovation. However others argue that global firms are not dependent on local links and so metropolitan centres will dominate in place competition.

**Questions**

- Is a polycentric pattern of urban clusters and city networks likely to generate and sustain industrial clusters and innovation networks?
- What advantages might firms gain from polycentric urban systems?

**Further reading**


**Key Debate 2 - Does polycentricity aid cohesion?**

The ESDP seeks to realise "economic and social cohesion" as one of the "fundamental goals of European policy". However, it says little directly about social exclusion. The focus of ESDP - perhaps even of spatial planning as a whole - is on territories not people, and on environment, mobility and competitiveness rather than social relations. Thus there is scope for further work, e.g. through Interreg, to explore the social dimension of polycentricity.

Can polycentricity and new urban-rural relationships foster territorial cohesion? There has been on-going debate about the regional impacts of the single market. While Delors (1989) asserted that integration could lead to regional convergence through investment flows and falling transport costs, most academic analyses come to the opposite view: “the best protection for a backward region is a bad road”. There is evidence that positive impact of European integration has moved "outwards" from the core over time, benefiting intermediate peripheral regions, e.g. Bavaria, Emilia-Romagna, and Schleswig-Holstein (see Steinle, 1992, and Cheshire and Carbonaro, 1996), though local agencies and economic development policies have
been crucial to these regional successes (Cheshire, 1999). This suggests that a polycentric strategy, provided it is embedded in proactive intra-regional development measures, could contribute towards territorial cohesion.

While international financial industries and producer services tend to be very tied to the agglomeration economies of big cities in the core zone (e.g. London or Paris), this may not be so true of other activities. The high costs of metropolitan land, property and labour and the diseconomies of congestion, can give advantages to polynucleated regions based on smaller cities. For example, there are signs of a shift in manufacturing and service employment away from the Randstad (Amsterdam, Rotterdam, The Hague and Utrecht) to the eastern and southern Dutch city regions based on Arnhem/Nijmegan, Eindhoven, ’S Hertogenbosch, Tilburg and Breda (Lambooy, 1998).

Polycentric development to achieve territorial cohesion at the pan-European scale requires excellent communication links between the various potential zones of economic integration. However, Graham and Marvin (2001) argue that developments like the high-speed rail network involve massive public subsidies that overwhelmingly benefit "the affluent, white, male users of the network. They underpin a polarisation of the space economy within and between cities because intervening spaces remain unconnected and can actually experience worsening accessibility (because local and regional trains are reduced to allow the fast ones to operate)".

Types of region:
- Regions dominated by a large metropolis;
- Polycentric regions with high urban and rural densities;
- Polycentric regions with high urban densities in a less dense rural area;
- Rural areas under metropolitan influence;
- Rural areas with networks of medium and small sized towns;
- Remote rural areas


Can polycentric development contribute to territorial cohesion by improving conditions in rural areas, many of which are suffering because of the decline of traditional primary industries? There are different types of rural region. Remote rural areas are likely to operate endogenous growth strategies based on local resources and diversification of activity, rather than look to urban connections. For these places polycentric collaboration might be through links to similar regions elsewhere in Europe. The urban-rural relationship in areas with high urban densities is often one of conflict not co-operation, e.g. over issues such as housing land or waste disposal. It is perhaps in areas based around medium and small towns that the polycentric model is most persuasive, and the prospects are strongest for complementarity and a new urban-rural relationship that can sustain rural services through a polycentric network of small and medium-sized settlements.

Summary
Polycentricity may contribute to cohesion in situations where there is a decentralisation dynamic driven by the diseconomies of agglomeration. Such dynamics are in part a function of types of industry and the division of labour. However the equation of polycentricity with social, economic and territorial cohesion begs many questions, both in respect to different types of regions and also in terms of socially excluded groups within them.

Questions
- Is European, inter-regional and inter-urban competition widening intra-regional and intra-urban disparities?
- Are transport and telecommunications investments increasing territorial cohesion?
- What new bases for co-operation exist between urban and rural areas that could increase cohesion?
Key Debate 3 - Polycentricity and Sustainable Development

The ESDP identifies five key requirements for "the sustainable development of towns and cities" (p.34). These are:

- Control of the physical expansion of towns and cities;
- Mixture of functions and social groups (especially in large cities where there is the threat of social exclusion);
- Wise and resource-saving management of the urban ecosystem (particularly water, energy and waste);
- Better accessibility by different types of transport that are both effective and environmentally friendly;
- Conservation and development of the natural and cultural heritage.

It endorses the "compact city" as a means to control urban expansion, and supports brownfield development and a balanced supply of housing. The ESDP advocates more efficient use of existing infrastructure through "strengthening environmentally friendly transport systems and promoting intermodal transport chains. However, this objective must be achieved without negative effects on the competitiveness of both the EU as a whole and its regions" (p.28).

For a critical review of ESDP as favouring competitiveness over environment see T. Richardson & O. Jensen, 2000, 'Discourses of Mobility and Polycentric Development: A Contested View of European Spatial Planning' European Planning Studies, 8(4), 503-520.

The ESDP has a strong environmental emphasis, but this is not integrated into the discussion on polycentric development. Subsequent writing and research on polycentricity also seems to have focused on competitiveness and cohesion rather than on sustainable development. For example, the ESPRIN UK Team (2000) study of urban-rural relationships in the UK examined almost 40 issues over five case studies, but "sustainable development" does not figure in the list (Figure 9, p.44).

Is polycentricity compatible with the compact city? The compact city implies densification and concentration of activities, whereas polycentric development prescribes dispersal and connections between centres. If such connections include roads, then the roads are likely to be used for car-based trips to access facilities. However, not everyone agrees that the compact city is necessarily the most sustainable urban form (see Hague and Storey, 2001), and public transport is effective at connecting settlement nodes.

Summary

Sustainable development is an ESDP goal, but the connections to polycentricity are not explicit. There are potential tensions between improving mobility and environmental sustainability.

Questions

- Is a compact city the most sustainable urban form, and is it compatible with a polycentric development strategy?
- Does complementarity reduce or increase the need to travel?
PART 3 - METHODOLOGIES

1. Spatial Scale

The ESDP proposes a polycentric Europe. The aspiration is to avoid a situation where the development gap between the London-Paris-Milan-Munich-Hamburg ‘Pentagon’ and the rest of Europe widens. A European network of strong economic zones would boost Europe’s global competitiveness.


The aim is to create “several dynamic zones of global economic integration”. These will be “well distributed throughout the European territory” and they will be linked together in networks (ESDP p.20). Thus polycentricity is sought at the Pan-European scale, though there is no map identifying the latent zones that might complement and balance the ‘Pentagon’

The ESDP is a consensus document, so imprecision is not surprising. Implicitly the criteria to identify regions with major growth potential might be:

- A core set of existing metropolitan centres with potential for improving the (cross-national) physical and functional links between them;
- Good connections (or the potential to develop them) to the ‘Pentagon’ and to other global regions (e.g. fast train links, hub airports, major ports/‘gateway cities’).
- Potential clusters of firms with a capacity for innovation.

Box 3: Speculative identification of potential new "global zones of economic integration" to create pan-European polycentricity.

Hamburg - Oresund - Gothenburg - Stockholm-Oslo: The zone has contiguity with the ‘Pentagon’, and gains some benefits from existing TENs. However total population is relatively low and the Oresund is the only bridge connection at present.
Lisbon - Madrid - Barcelona - Montpellier: TGV connections and strong growth around Barcelona, but relatively high unemployment in Spain and Portugal suggests economic weaknesses. Possible linkage outside EU into North Africa?
Vienna - Bratislava - Prague - Dresden - Berlin: The (Austro-Hungarian) Empire Strikes Back! Historical connections severed by the Cold War have been reformed - accession could complete a new eastern gateway.

Seeking polycentricity at European scale implies building on the strengths of the capital cities in countries outside the “Pentagon”, as Box 3 implies. However, such a strategy is at odds with endeavours to achieve polycentric development at a national scale, where the need is often to counter the dominance of the capital. Polycentricity is also sought within regions. Thus the ‘Pentagon’ is itself polycentric, comprising a number of interconnected metropolitan regions, e.g. those focused around London, Brussels, Frankfurt/Main, Milan, Hamburg. It also contains urban nodes that are themselves polycentric urban regions - the Randstad being perhaps the best example - or continuous urban agglomerations with multiple centres, such as the Rhur. The polycentric model is also prescribed for rural regions where a network of smaller settlements could anchor the population, employment and service base in the face of restructuring in primary industries.
Polycentricity implies a focus on the nodes and their networks, whereas zones and regions (the more traditional “building blocks” used by spatial planners) assume some homogeneity and functional integration of all the space within the boundaries. The point is not merely semantic. Kratke (2001) argues that there are huge differences in level of global integration even between the many different cities within the “Pentagon”. Such heterogeneity does not necessarily equate with complementarity. The literature on competitive place emphasises the prime importance of the metropolitan centres and their global connections with each other, rather than the connectivity of those nodes with their physically contiguous areas and edges. It is connectivity that makes a network, not mere physical proximity: being adjacent to communications infrastructure or to the facilities of a place does not ensure access, though the network will transcend space, linking distant people, firms and places. Networks operate at but also across conventional spatial scales.

**Summary**

Polycentricity is an abstract idea, a way of looking at reality and seeing what Europe’s spatial planning policy makers want to see. It can be applied at all scales from the pan-European to the intra-regional. Such big ideas are symbolic means to communicate the essence of complex situations and so focus practical endeavours. However, there needs to be common understanding and methodologies to interpret and apply the concept.

**Questions**

- What new “zones of global economic integration” might be created?
- Can there be polycentric urban development within a monocentric metropolitan region?
- Is a polycentric development at a European scale compatible with polycentric development within a nation state?

### 2 - Data Collection and Analysis

How can a polycentric urban region (often labelled “PUR”) be identified and demarcated? Davoudi (2002, p.115) defines a PUR as “a region having two or more separate cities, with no one centre dominant, in reasonable proximity and well-connected”. It is easy to look at a map and count the cities in a region, but that tells us little about their relationship to one another. Interaction, complementarity and some institutional action “for the region” underpin the use of the PUR concept as a policy, and so should figure in definitions and measurements.

- What is the maximum distance apart that places can be and still be considered part of a PUR? Current definitions tend to be based on travel to work time rather than absolute distance. However, there is no agreed threshold travel time.

- What minimum thresholds of interaction between the various centres should signify that functional integration exists and the PUR is a reality? Labour markets and travel to work are the easiest measures, though no yardsticks have yet been agreed.

The OECD’s study asked each country about use of functional regions as a territorial frame for analysis and implementation of development policies. The responses may provide ideas on possible new Interreg projects. See OECD, 2002, Redefining Territories - The Functional Regions.

A major comparative study (OECD, 2002) found that most member countries define functional urban regions by commuting patterns or travel-to-work areas, though there are some slight differences in definitions between different countries. The OECD found that most of the relevant statistics and indicators used for territorial analysis are available at the level of functional regions. ESPON’s Data Navigator is a compendium of key spatial planning data sources (see www.espon.lu) and ESPON will seek to define PURs.
It can be argued that accessibility, not distance or even transport routes, is the essence of functional urban networks. Travel-to-work is only one aspect of accessibility. Other possible measures might be shopping or leisure-related trips, or flows of information. The quality of broadband ICT infrastructure is increasingly determined by market demand and hence likely to vary between urban centres and rural areas. Champion (2001, p.666) suggests that a PUR will have "no single overarching 'cone' of land prices but instead a set of peaks, each with their own separate cones extending outwards until intersecting with those of other centres". Local business networks are integral to the idea of polycentricity since they offer what are termed "traded and untraded interdependencies" (such as customers, suppliers, collaborators, shared research and training, etc.) but assembling data about such networks will require special surveys. The regional connection between research, education and businesses is another dimension worthy of exploration (c.f. Box 2 above); some information can be gained from research councils / academies of science or enterprise agencies, but measures of quality of connections rather than quantity are likely to require original data collection.

Measures of complementarity do not appear to have been developed, though it is, of course, possible to analyse and compare the economic and employment structures of individual settlements within a PUR. Is there industrial specialisation and a division of labour between the cities in the region? Similarly the structure of retailing may indicate complementary roles, though the competitive nature of retailing at city/region level is more likely to produce duplication and competition. There may also be a number of spatially distinct housing sub-markets, suggesting that different areas / settlements play complementary rather than competing residential roles.

If polycentricity and new urban-rural relations are to contribute to competitiveness, cohesion and sustainable development, then indicators are needed that command some consensus and are robust in relation to data available in the different European countries.

**Box 4: Potential spatial integration indicators identified in the Study Programme on European Spatial Planning (Strubelt, Gatzweiler and Kaltenbrunner (eds.) 2001, p.77)**

<table>
<thead>
<tr>
<th>Main aspects</th>
<th>Potential indicators</th>
</tr>
</thead>
</table>
| Spatial interaction measured as flows and barriers | • Goods transport flows  
• Inter-regional migration  
• Barriers to trade and migration  
• Wealth differences between neighbouring regions  
• Multi-scalar profiling and dynamics of regions |
| Spatial homogeneity and discontinuities   | • National funding of Interreg IIA programmes  
• Town and city twinning activities.                                               |
| Spatial co-operation                      |                                                                                      |

**Summary**

Labour markets and travel-to-work areas have been the main basis for defining PURs, though arguably the concept requires more focus on measures of accessibility and complementarity. In the longer term there is a need for indicators, which can monitor polycentricity and explore its impacts.

**Further reading on definitions and measures:**

**Questions**

• How might the SPESP work on mapping EFURs be developed and applied?  
• Can data be gathered on "traded and untraded complementarities" between firms in a PUR?  
• How are new patterns of leisure and retailing altering relationships between places in a PUR, and especially between the urban and rural areas?
3 - Data Handling and Presentation

Accessibility is at the heart of the endeavours of the ESDP to achieve competitiveness, cohesion and sustainable development through polycentric development. Indicators and maps of accessibility are therefore important. So far most of the mapping work that has been done has defined places by their fixed geographical position. Because networks exclude as well as include, we need maps where the relation between places is based on factors other than geographical proximity or remoteness.

Map 1: Mapping the potential of a polycentric Europe.
Source: Conference of Peripheral Maritime Regions of Europe (2001)

While it is possible to analyse and map variables one at a time, the key criteria that underpin the ESDP are a shorthand for a whole range of factors that influence each other and act simultaneously to influence outcomes. Map 1, taken from the CPMR study, combines measures to give a broad, qualitative assessment of the potential for polycentric networks to develop. At the intra-regional level the West Midlands used a technique of overlaying a range of variables to highlight the polycentric character of the region (see Map 2).

The Study Programme on European Spatial Planning explored mapping and indicators. One working group analysed and mapped NUTS3 regions (i.e. something like counties) in relation to Europe’s centre of gravity in terms of population (which lies around Rheims, near the point where Luxembourg France, and Germany join). This approach painted the traditional picture of a core-periphery Europe - at its crudest Europe is a series of concentric rings of increasing peripherality, the picture that has underpinned the allocation of funds for regional development. A second group adopted a nodal approach - i.e. focussing on towns and cities, transport networks, and barriers to movement. This revealed the corridors created by road and rail, which paint tentacles of accessibility on the map, while the air travel map is notably polycentric in pattern.

Map 2: The Polycentric Structure of the West Midlands.
Source: Ecotec, 2000
The important point is that **methods matter**. Different methods of handling and mapping spatial relationships at different scales reveal rather different pictures. More work is needed on the data and on methods of mapping. Important questions about the extent to which a vigorous pro-polycentricity policy could make a real and positive difference remain to be answered. Practising spatial planners need techniques and methodologies that will allow them to predict and evaluate the impacts of policies.

One emergent technique endorsed by the ESDP is **Territorial Impact Assessment** (TIA). The ESDP advocates it as a procedure for assessing the impacts of policies and proposed developments against spatial policy objectives. TIA is proposed for large infrastructure projects (Option 29), water management projects (Option 52) or in trans-border situations (recommendation after paragraph 178). TIA is also endorsed in the NorVision report (Vision Working Group 2000).

Despite this enthusiasm, the ESDP gives little or no guidance on how a TIA might be done, and frequently links TIA with environmental assessment, though not all territorial impacts are environmental, and not all environmental impacts are territorially distinctive. If spatial planning is to develop from rhetoric to effective management then methodologies for assessing the intended and unintended territorial impacts of policies and developments will have to be found. Interreg offers an opportunity to explore, apply and develop such methods.

ESPON is another means to advance techniques for spatial planning, and will be looking at innovative means of mapping so as to enhance the communication of spatial concepts. For more information visit [www.espon.org.uk](http://www.espon.org.uk) or [www.espon.lu](http://www.espon.lu).

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**Summary**

Techniques for mapping competitiveness, accessibility and spatial integration and for communicating spatial development concepts are under development. Indicators and statistical analysis can add rigour. There is a need to integrate methods into a form of Territorial Impact Analysis. Interreg is an opportunity to explore some of these possibilities.

**Questions**

- Can mapping methods be applied at different spatial scales to test and compare whether the pattern is one of core-periphery or polycentricity?
- What indicators might be developed to explore the connections between polycentricity and sustainable development?
- How can the idea of TIA be made operational?

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**PART 4 - POLYCENTRICITY AND PLANNING PRACTICE**

1. **What's new about polycentricity?**

If Europe in general, and the UK in particular, already demonstrate many of the features of a polycentric urban system, then perhaps practising planners have been following policies of polycentric development for a long time. The classic strategy of urban containment and planned dispersal, sometimes known as “concentrated deconcentration” is intended to produce a kind of polycentric intra-regional structure,
albeit one in which there is a main city rather than a network with a number of settlements of a similar size but different functions, arguably the 'purest' version of polycentricity.

So what is new about polycentricity and urban-rural relationships in terms of planning practice? Perhaps the most important thing is not polycentricity as such, but rather the sense of a shared, European-wide endeavour to respond to the new dynamic in urban development created by forces of globalisation. Strategic spatial planning at cross-national and inter-regional levels, as well as intra-regional level, emerged in the 1990s. It created new possibilities that a purely local and regulatory form of planning could not address. Spatial planning is a call to make the connections - between sectors and between places. In the UK the devolved administrations in Belfast, Cardiff and Edinburgh have begun to develop national-scale (NUTS-1) spatial frameworks. London's new spatial plan has attracted more media attention than any statutory development plan for more than a generation, and the government in England is proposing to replace the old system of regional planning guidance with new arrangements to produce regional spatial strategies. In all of this the Interreg programmes have been and continue to be important avenues to advance practice.

2. Polycentricity and Interreg IIC

The Interreg IIC Community Initiative Programme sought to advance co-operation in spatial planning. It produced a number of outputs that applied and developed concepts from the ESDP. These set an important backdrop for those interested in developing projects under Interreg III. The studies that have been published also advance understanding of the scope, interpretation, relevance and application of the ESDP ideas about polycentricity and new urban-rural relations.

Spatial Visions were prepared for the North West Metropolitan Area (NWMA) and for the North Sea Region (NSR). While they both start from and endorse the ESDP principles there are significant differences between them that derive from the nature of their existing urban systems. The Spatial Vision for the NWMA is set out in a schematic map, whereas NorVision, rather like the ESDP, relies on listing desirable strategies without prioritising them or exploring possible tensions.

Box 5: Summary of A Spatial Vision for North-West Europe.

A Spatial Vision for North-West Europe: Building Co-operation involved partners from seven countries in the North-West Metropolitan Area. The area is characterised by strong metropolitan centres based on services operating in global markets. The Vision argues that cities like London, Frankfurt, Paris and Amsterdam need to co-operate to promote their financial functions as "an integrated entity". The four busiest international airports in the world are here, and regional airports are growing fast. These and the ports are key gateways and there are major nodes on the high speed rail network. Demands on the natural environment and on energy supply are unsustainable, and areas of high quality countryside and tranquil retreats are under intense pressure. There is rural decline in the periphery.

The Vision is expressed in schematic maps. The hubs with global economic functions and super-connectivity are in the highly congested and pressured Central Zone. The Vision sees these areas maintaining global competitiveness and internal and external accessibility, while achieving urban containment and reducing pressures on the environment. Polycentricity is invoked to this end, as a way of fostering clusters of cities in, or connected to, the global zone. Eastern Ireland, Wales, Central Scotland and much of England is in the Island Zone, where the major problem to be overcome is the weak transport linkages to the global cities and gateways. Further north and west is the Open Zone of quality environments but out-migration. Here the development strategy advocated is to consolidate regional towns and base development on indigenous resources. The final zone - south and east from the Saarland - is the "green heart", where agricultural change can be balanced by recreation and tourism opportunities.
The NWMA is the core of the Pentagon, and its wealth is built on the global role of its strong metropolitan centres. While there are areas of rural decline, and significant differences within the NWMA are recognised, in the main the urban-rural relationship is defined by urban growth pressures. In this context polycentricity is mainly interpreted as co-operation and integration of the big cities, to enhance their global role. The report recognises that "The effect of market forces in concentrating international economic and communications functions in only a few centres is very strong" (p.35). Transnational transport corridors and the fostering of "counterweight global gateways and economic centres" are sought.

**NorVision** for the NSR has to address a different set of circumstances. Concerns with peripheral rural areas are given notably more weight, and while the language is much the same as in the spatial vision for the NWMA, sustainable development and environmental conservation feature more strongly. Crucially the NSR as constituted under Interreg II did not contain real metropolitan centres other than Hamburg and Oslo, neither of which is the kind of world city that London or Paris is. The formidable barrier of the North Sea and the lack of hub airports mean that transnational networks have not been so developed as in the NWMA. Not surprisingly, **NorVision** stresses inter-regional connections and secondary networks, and hopes that national and regional infrastructure providers will be responsive to such needs.

**Box 6: Summary of NorVision.**

**NorVision: A Spatial Perspective for the North Sea Region** was prepared by local and national government officials from the participating countries, aided by a consultant. It is intended to set the context for spatial planning, and particularly Interreg III projects in the NSR. Sustainable development is at the centre of the approach. Overall the approach is process-driven, with an audit of basic values and trends leading to ten "vision statements" (4 for the whole NSR, 4 for urban regions and 2 for rural areas), aims, strategies and recommended actions.

It recognises that the NSR is polycentric but not a functional network, since the numerous regional centres tend to connect more intensively with their national capitals (all of which, with the exception of Oslo) are outside the NSR) than with each other. Similarly the ports in the NSR tend to rely on transhipment via intercontinental ports outside the NSR. The NSR, as defined for Interreg II, contains one major national agglomeration - that based on Hamburg - and some half dozen urban agglomerations of regional importance. Parts of the NSR, e.g. Denmark, have a dense network of small and medium sized towns, which have been an important focus for local trade and services. The extent of sparsely settled rural areas is an important feature. The Vision notes that balance is often equated with "a polycentric system of metropolitan regions, of city clusters and city networks." However, it stresses that in peripheral regions that do not have such polycentric systems, rural urban centres have a key role to play in providing access to jobs and services. The task then is to ensure that sector policies contribute to spatial balance. To this end there is emphasis on the need to improve internal transport links, not least on the importance of ferries and bus services in rural areas, matters that are largely determined by regional or national agencies and companies, and not at an international level.

Two other Interreg IIC projects in the NSR confirm the strong focus on concerns about sustainability, rural services and urban-rural accessibility. **NoordXXI** stressed the rural nature and environmental assets of the partner authorities. Physical barriers to movement across the North Sea and between key cities mean that polycentric development at the transnational scale is likely to be mainly about building knowledge networks and forms of co-operation. In contrast, intra-regional planning was seen as increasingly important, with a range of innovatory approaches being taken to sustain services and reduce the need to travel.
Sustaining rural services centres was the central theme of another NSR Interreg IIC project, involving partners from the East of England, Denmark, Norway, Sweden and the Netherlands. There are some overlaps with NoordXXI themes (Vasta Gotaland Region was involved in both projects). The partners developed a "general model" for promoting the vitality and self-sufficiency of rural services centres.

Box 7: Interreg IIC - The NoordXXI Project and Sustaining Rural Service Centres

The NoordXXI project involved local authorities from the North of the Netherlands, Sweden, Norway and the east of Scotland. The common thread that drew them together was the pressure on areas in the commuting hinterlands of cities - all the partners were part of larger labour markets. They were areas where people live "in a well known and safe environment" but pay for it by commuting. The theme of the Project was "Quality by Identity: Beyond Traditional Spatial and Economic Development ". Thus NoordXXI sought to explore more sustainable and participatory alternatives to the continued monocentric urban dominance of the spatial planning of adjacent rural areas.

The project was wide ranging (e.g. a substantial strand of activity was about youth involvement. It developed a typology of regions based on analyses of the partner areas with particular emphasis on urban-rural relations and new institutions and innovations in approaches to planning. NoordXXI also did work on comparing and evaluating spatial planning policies for urban fringe areas, contrasting green belt/urban containment approaches to corridor growth. Findings challenged the idea that containment /compact city policies are necessarily the best approach to achieving sustainable development.

Sustaining Rural Service Centres (RSCs) recognised the existence of small towns, which have traditionally been the focus for local trade and services across a wide rural area or 'hinterland'. The project set out to examine the threats and opportunities facing these centres and explored ways in which RSCs can adapt and prosper. It identified examples of good practice covering five key factors crucial to promoting the vitality and sustainable development of RSCs: subsidiarity, participation, co-operation, investment and integration across different sectors.


The EURBANET project, another Interreg IIC study, looked at urban networks in the NWMA. The partners were all academic institutions, though workshops were held involving practitioners. Traffic congestion and declining accessibility were highlighted as a common issue, though, as noted in the Spatial Vision for the NWMA, there is some differentiation between the core PURs and the more peripheral situation in Central Scotland.

Box 8: Summary of the EURBANET Project

The EURBANET project explored the practical value of the Polynuclear Urban Region (PUR) as a planning concept. The report draws upon interviews with stakeholders and experts in 4 PURS (Randstad, Rhine/Ruhr Area, Flemish Diamond and the Glasgow/Edinburgh Region. The PUR concept was explored in terms of spatial form, identity and culture, the functioning of the economy and governance/planning arrangements.

The research revealed widespread support for applying broader regional frameworks or visions to guide the future development of regions. Such frameworks could address imbalances in economic and demographic trends/complementary problems, could promote closer collaboration and provide a basis for strategic infrastructure decisions. The key to developing these frameworks lay in strengthening several dimensions of regional integration, including functional integration, the politico-institutional context and regional identity. On PURs, the findings were less decisive: the PUR is not the only spatial development concept and it may not be appropriate for actual situations.
Summary
Interreg IIC projects have explored and applied the concepts of polycentric development and new urban-rural relations. They are important links between the ESDP and Interreg III. There are important contrasts between the NWMA and the NSR in interpreting the PUR concept. The NWMA stresses metropolitan growth centres and connections to them, whereas the NSR has prioritised networks of rural service centres and secondary transport linkages at an intra-regional scale.

Questions
- Can the vision for the NSR be mapped?
- Can we develop a better appreciation of the situations where the polycentricity is helpful and those where it is not?
- Is an aspiration to move to PURs compatible with the realities of global competition that the metropolitan cities face?

3. Examples of practical application

There have been some attempts to apply the key concepts in practical situations. The Conference of Peripheral and Maritime Regions (CPMR, 2001) study covers the Mediterranean, the Atlantic and Northern Europe including the North Sea and Baltic Sea regions. Its key objective is “to build a vision shared between the States, Regions and European Commission of the polycentric development model for the European territory, based on the point of view of Europe’s maritime peripheries and to define the policy guidelines and conditions required for its implementation” (p7). The study aims to contribute to debate on the following questions:

- Around what towns and cities and what networks can polycentric scenarios be constructed?
- How can the surrounding regions be included in these networks and patterns?
- How can these systems be expressed in territorial terms in each of the different peripheral areas?
- Around what structuring elements can polycentrism be organised?
- What policies should be put forward and what are the correct levels of consultation and co-ordination for each of these policies?
- What are the areas and relevant themes to be developed with regard to interregional and transnational co-operation?

The aspect of polycentricity that the CPMR group chose to emphasise was the scope for specialisation and complementarity in polycentric regions to challenge the traditional “hierarchy of different sized centres” based on population density. Rather like the NSR work reviewed above, it seeks to stress the importance of natural and cultural assets. It proposes key indicators - population and population change; central place functions (location of political/administrative centres and company headquarters); know how; position in the transport network (port capacity and overall accessibility) and attractiveness.

One of the first attempts to develop the principles of the ESDP within a practical intra-regional planning framework was in the West Midlands, a metropolitan region centred on Birmingham. It explored the potential to develop polycentric frameworks at a regional level and was intended to contribute to the development of Regional Planning Guidance for the West Midlands. The study (Ecotec, 2000) developed a framework for baseline information for strategic land use, transport and other public policy decisions with spatial implications. It examined the settlement hierarchy to identify existing, emerging and potential roles and functions for each part of the region; and explored inter-relationships and interactions between different functions and strengths and weaknesses.
Box 9: Functional indicators of polycentricity in the West Midlands

A six-stage methodology was adopted (agreeing the role and content of the framework; assessing the availability of and assembling data sets; production of a baseline analysis; developing a functional analysis; synthesising the analysis and examining the settlement hierarchy). A key aim of the study was to “develop a representational tool, which could be used to generate discussion on options for regional development”. The functional analysis covered 22 functions (representing key social, economic and environmental building blocks related to defining the settlement, economic, open space and infrastructural structure of the region), each of which was subdivided. The analysis was driven by functions and their location and so does not fit political administrative boundaries. Each of the sub-functions was mapped. For each map, threshold values were set to highlight significant disjunctures. The data was then mapped onto a standard template of the region (see Map 2).

The Glasgow and Clyde Valley Joint Structure Plan (2000) is an example of a statutory development plan that has tried to build around the ESDP principles. The Plan was agreed by a Joint Committee of the eight unitary local authorities in the region. It has an early section on the European Planning Policy Context, which makes explicit reference to “the development of more balanced metropolitan areas based upon a ‘polycentric region’ formed by a strong network of urban centres and the close integration of town and country” (p.5).

The Glasgow and Clyde Valley area does not face the intense growth pressures of metropolitan Europe. Government statistics predict an annual loss of population, though the plan aims for zero net migration by 2020. Key tensions are between market interest in greenfield development and the realisation that such decentralisation may weaken nodes in the existing polycentric structure.

The main aims of the plan are closely tied to the ESDP. The spatial strategy that results is based on a corridor of growth linking the major centres of employment and services. Within this corridor that runs east-west down the River Clyde, with Glasgow as its pivot, policies seek to enhance infrastructure and key centres of business, education and commerce, and promote urban renewal, while also safeguarding and improving the environment. Thus the plan identifies a polycentric pattern of action to sustain and enhance the numerous existing settlements that have retained their identities within the wider agglomeration. It also proposes a “green network” as a focus for environmental action.

The Glasgow and Clyde Valley Structure Plan is an interesting example of inter-authority collaboration in preparing and agreeing a plan for an urban agglomeration and its fringe areas in rural land uses. It has drawn inspiration from the concepts of the ESDP and has led the way in developing a spatial planning approach within Scotland. Compared with previous structure plans the approach is more streamlined and focused on networks and nodes, and there is a stronger emphasis on competitiveness and connecting with other policy areas. However, the actual spatial strategy shows strong continuity with earlier policies - notably in its stress on the green belt and on brownfield development.

The nature of the agglomeration makes some embedding of polycentric policies almost inevitable. Glasgow and the Clyde Valley is defined by the topography of the river valley, the transport links that follow it, and the historic development of multiple urban nuclei that merged together (or, in the case of the New Towns, were contained by planning policies). These secondary towns cannot be ignored in favour of a narrow boosterism of Glasgow as the main settlement - politically the rest are in the majority on the Joint Committee, and economically they offer opportunities. Thus a growth corridor based on the transport network and the sustaining of existing urban nodes has a strong appeal.
Summary
Ideas of polycentric urban development to achieve competitiveness, cohesion and sustainable development are beginning to have impacts in practice. In situations of slow growth or even decline they are likely to be the rationale for attempts to renew and retain existing urban centres, especially as the focus of nodes in public transport networks. In such situations it is crucial to ensure co-ordinated investment by public or quasi-public bodies in these locations if the market is to be convinced about the strategy. In growth situations polycentricity offers the chance to plan new, sustainable nodes in networks.

Questions
- Around what towns and cities and what networks can polycentric scenarios be constructed?
- How can the surrounding regions be included in these networks and patterns?
- Is polycentric development accepted by key public and private investors in urban infrastructure and development?

PART 5 - ESPON, INTERREG IIIB AND BEYOND

1. ESPON

This study has sought to question, rather than uncritically endorse, the concept of polycentric development. It has shown that meanings are uncertain, even contested, applications are still in the early stages, tools remain rudimentary and results have yet to be logged and evaluated. If spatial planning is to be advanced within Europe then it is important that we have the equivalent of laboratories, scientists and technicians able to experiment, subject concepts to rigorous scrutiny and test prototypes. In comparison with the development of commercial products and services the investment in research and development within the field of spatial planning has been minimal. This is unlikely to change radically. It makes it vital that all existing resources are effectively mobilised and that planners and related public officials and representatives operate within a learning culture, where experience is shared, sifted and used as a basis to improve the delivery and effectiveness of spatial planning to achieve sustainable development. There are real opportunities to do this at a European level.

For details of the ESPON programme go to www.espon.org.uk. The ESPON research on polycentric development is being led by Nordregio - see www.nordregio.se. Facing ESPON by C.Bengts (2002) can be downloaded from this site, and summarises key issues. The work on urban-rural relations is led by the Centre for Urban & Regional Studies at the Helsinki University of Technology – www.hut.fi/units/separate/

The European Spatial Planning Observatory Network (ESPON) has been established to create a network of researchers who can develop the implications of the ESDP and provide new knowledge to inform understanding of the spatial dimension of the Structural Funds, Cohesion Policy and other Community and national government policies. It undertaking a range of spatial planning research in the period up to 2006, building on the work already done in the Study Programmes on European Spatial Planning. The first projects were commissioned in mid-2002. ESPON is collecting data for the member states, accession countries and Norway and Switzerland. The emphasis is on indicators and typologies.

Three ESPON projects are particularly relevant to this scoping study. One is on urban areas as nodes of polycentric development; another is concerned with urban-rural relations. The third, called Data Navigator, involves the preparation of a handbook of spatial data sources. This is expected to be a useful working tool for any persons getting involved in transnational projects.
2. Interreg IIIB

While ESPON is research-oriented, Interreg IIIB is a means to put ideas about polycentric development and new urban-rural relations into practice. Interreg is a Community Initiative Programme that is a means of implementing the ESDP through forming transnational partnerships. The programme operates on the basis of broad Euro-regions - the North Sea, the Atlantic Area, North West Europe, the Northern Periphery (Scotland's Highlands and Islands and similar areas in Finland, Norway, Sweden, plus Greenland and the Faeroes) etc.

Interreg IIIB will support actions and strategies on how to achieve:

- Balanced and polycentric spatial development;
- Harmonised spatial planning policies;
- Improved physical environment and the quality of life;
- Networks and capacity building benefiting from transnational co-operation.

For information on Interreg and application forms see the following websites:

http://inforegio.cec.eu.int
www.InterregNorthSea.org
www.nweurope.org
www.interreg-atlantique.org/iib/eng/index.htm
www.northernperiphery.net
www.interregiiib.org.uk
www.go-london.gov.uk/planning/interreg.asp

Interreg IIIB offers local authorities a real chance to access European funds to help them to learn from each other and counterparts in other countries through working together on common issues and the implementation of their programmes. People in the Interreg secretariats will provide help and guidance. Web sites highlighted here provide all relevant information and application forms. The measures covered by Interreg IIIB vary a little between the different Euro-regions, but in all cases there is provision for work related to polycentricity. Box 10 summarises key aspects of Interreg IIIB for the North Sea Region, to give an indication of what is covered there.

**Box 10: Interreg IIIB priorities for the North Sea Region**

Given its location outside the EU core area, there is a need for the NSR as a whole to remain attractive if polycentric, balanced and sustainable development is to be delivered across the European territory as a whole. This requires urban co-operation and networking, but also new urban-rural and rural-rural relationships to be developed. There is a need for improved access to services, training and employment. Measures in the programme to encourage polycentric development include:

1.1 **Elaboration and implementation of transnational polycentric spatial development strategies and polycentrism** through strategic spatial approaches, policies and planning. In particular there is a stress on the development of dynamic zones and also the improved integration of remote areas.

1.2 **Development and implementation of urban complementarity, co-operation and networking** as ways to improve urban quality and competitiveness through spatial planning. Complementarity means building on the advantages and overcoming the disadvantages of economic competition. There is particular emphasis on developing gateway cities and regional centres to combat decline in rural areas.

1.3 **Development and implementation of networking in urban-rural and inter-rural relationships, including maritime areas.** This measure is particularly important for rural areas. It is about developing new economic activities and also sustaining basic services. It encompasses issues of identity and quality of life. At a regional level the call is develop integrated approaches, building on local strengths and identity between towns and their hinterlands.
The web sites for the Interreg secretariats are an essential starting point for those wanting to get involved in projects. For example the site for the North Sea Secretariat (www.InterregNorthSea.org) lists all project ideas that have been submitted to them. One way to develop ideas and make contacts so as to build a strong application for Interreg funding is to participate in thematic seminar. For example the North Sea Secretariat ran a two-day thematic seminar on polycentricity in September 2002. Ideas for projects that were worked on this event included ‘TOWNNET’ (Stimulating complementarity of functions within regions), “URBAL” (strategies for urban-rural co-operation), ‘INSHORE EURONET’ (sustaining coastal communities) and ‘A sustainable urban growth network’. Details of all these and more are on the web site of the North Sea Interreg Secretariat. The German Institute for Town Centres (DSSW) ran a similar partner search forum in Berlin (see www.dssw.de/seiten/projekte/interreg2002/index-e.asp).

Some suggestions for possible Interreg IIIB projects

This list is indicative not prescriptive. Hopefully it might help you to trigger some thoughts.

- **How can the implementation of sustainable development policies and activity under LA21 and complementarity and cohesion through polycentric development?** A network could form to exchange ideas and experiences and to pursue some specific projects - e.g. positively managed green corridors as a means of fashioning a new urban-rural relation and linking the network of settlements within a region.

- **Improving business competitiveness through spatial planning measures.** What kind of connections do local businesses have and how might these be improved? How far do existing policies and practices in spatial planning support place competitiveness?

- **What can be done to sustain services in declining rural areas?** Partner regions could look at the existing patterns of provision of e.g. health, education and retail services and implement policies that seek to ensure cohesion and balance in access to the services.

- **Creating new regional spatial strategies.** What new techniques and information are required to give expression to the idea of polycentric development and to steer policies for new urban/rural relations? Different regions in different countries could undertake practical strategic spatial planning and compare experiences.

- **How to sustain communities on islands that are losing of population, jobs and services?** These problems are shared by many regions. What connections can be strengthened between settlements and the rest of the island, between island communities and larger centres; and through a trans-national network of island communities?

- **Housing - competitiveness and cohesion.** How far can polycentric development and compact cities satisfy the needs for affordable housing in accessible locations? This question could be addressed at different spatial scales from national to intra-urban or intra-rural.

- **Design quality, identity and complementarity.** If polycentricity means different towns having different strengths and roles, then how can urban design be used to give expression to and communicate these through enhancement works in the public realm?

### 3. Polycentricity and planning practice

The new emphasis on polycentricity, competitiveness, cohesion and balance emerging from Europe should encourage planners to rethink the assumptions and culture in which their planning practice has been fashioned. This will mean re-affirming, perhaps re-discovering, some traditional aspects of planning. Planners have long argued that space and place matter, but the plot-by-plot basis of planning control, and the rooting of the system in legal detail mean that the "big picture" can sometimes get lost. The ESDP is about that big picture and challenges planners to plan where we will live, work and travel in the emergent and expanding Europe that will stretch from the Atlantic to the Black Sea.
The challenge is there for practising planners at all scales, and in all types of area. Plans need to be more consciously developed as integrative mechanisms and audited for their impacts on competitiveness, cohesion and sustainability. We need to apply techniques like TIA. However, there remain real limits to what spatial planning can achieve in isolation. The key is the integration of sectoral investment into the strategy, and the capacity of the spatial strategy to work in tandem with flows of private sector investment. To achieve this form of effective strategic planning there needs to be stakeholder involvement, understanding by planners of the spatial structures of other investments, and a lot of networking and negotiation. New institutions may be required to deliver this new planning. So process matters, and will take time and resources. However, there must be some spatial vision that can be easily communicated to the diversity of groups affected and whose actions will influence outcomes on the ground. The new spatial planning demands a new creativity from planners and new skills in communication and management of the plan-making process. Interreg can be a vehicle for developing and honing these skills. Interreg is a way to show the connections between sustainable development, spatial patterns of development and the implementation of actions on the ground.

Using Interreg to Revitalise Planning Practice

Here are some ideas for how the emergence of spatial planning can be used to refocus and revitalise practice. Again they are indicative and aim to stimulate you to develop ideas relevant to your own situation.

- Try a spatial planning workshop - a teamwork, brain-storming session to get a quick idea about how polycentrism and new urban-rural relations might be applied to your area.
- Develop a planned programme of staff development and Continuing Professional Development to enhance knowledge about practices in other places (in your own country or abroad) and to develop skills in key areas linked to the ideas in the ESDP - e.g. TIA, use of indicators, Geographical Information Systems etc.
- Form a small group to meet socially over lunch or after work to read and discuss key publications on spatial planning.
- Twin your organisation with a similar one (in your own country or abroad) and do mutual visits to tech each other about practices.
- Commit yourself to a weekly session on the internet to keep "up to speed" with the various sites relevant to Interreg, ESPON and EU policy, etc.
- Organise training for the planning committee and other related committees to brief them about the ideas behind the new spatial planning.
- Try to involve other professions and agencies in discussion of how polycentric and sustainable their investment and service provision is.
- Convene meetings with business groups to find out more about how their needs can be linked to place competitiveness through planning policies.

4. Building research/practice links and networks

Polycentrism is about creating new, win-win partnerships and networks. It is both a planning strategy and a way of working. We have already seen the emergence of a number of European networks that seek to bring professionals and their politicians
together to share understandings and improve standards and services. Networks have become crucial organisational forms of the knowledge society. Polycentrism can be a catalyst for linkages within and beyond the planning communities in the different member countries. The ESPON project is a conscious attempt to build a network of researchers. Interreg programmes have also helped to build networks across Europe.

Trans-national working is still hampered by different languages, technical concepts and legal systems. Time invested in building good face-to-face relationships is likely to be well spent. One useful way to prepare is by having some understanding of how planning works in a partner country. The EU compendium on European spatial planning systems (CEC, 1997) remains a good starting point, especially when supplemented by the update (PPP Planning / University of the West of England, 2002). The European Spatial Planning Research and Information Database (http://www.esprid.org) is an extremely useful web-based information resource for those wanting to get involved in European spatial planning. It was developed specifically to assist Interreg III participants.

Interreg projects can be a way to bridge the research/practice divide. Academics can bring awareness of concepts, methodologies and how to research a topic; practitioners bring real-world know-how and problems that require action as well as words. Working together can yield more than the sum of the parts.

Seven things to do next...

- Look at the Interreg web sites for your area:
  - www.interregnorthsea.org
  - www.nweurope.org
  - www.interreg-atlantique.org/iib/eng/index.htm
  - www.northernperiphery.net

- Check out the ESPRID website (www.esprid.org)

- Discuss with colleagues and others on your formal or informal networks what aspects of your current practice might be converted into an Interreg-supported action.

- Find out what your local university is doing that is relevant to your work.

- Do a partner search for a possible Interreg project.

- Try to develop ideas for an Interreg project on polycentric development.

- Go for it!
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