## **ESPON 1.1.1**

1st Interim Report

Nordregio 31<sup>st</sup> Oct 02

## Content

Content	2
About this interim report	3
Practical information on the contract situation between the Lead Partner and	other partners3
General background	4
WP 1 Concepts	6
WP 2 Application of the concept of polycentricity	7
Key objectives	7
Methodology	7
WP3 Indicators	9
Defining functional urban areas in each country	10
Mapping national urban systems	11
Mapping European and global urban systems	11
Accessibility analysis	13
WP 4 Typologies	15
1. National level urban typologies	15
2. European urban typologies	15
Functional European urban networking	16
WP 5 Governance relationships	17
Key objectives	17
Methodology	18
WP 6 Policy conclusions	19

## **About this interim report**

According to the contract addendum this interim report should report

- a) Consensus on indicators and data needed, after precise analysis of the availability and comparability of data at the Community level, to develop a new database, including territorial indicators and the facilities needed for mapmaking. As for the analysis itself, the results of the study programme and those of other ESPON projects currently underway, in particular as regards priority 3.1, should be taken into account. This task should also define the appropriate geographical level and technology required for data collection, taking into account the availability of relevant data.
- b) A first detailed and comprehensive list of the main statistical and geographical data will be collected from Eurostat, the EEA, National Statistical Institutes and the National Mapping Agencies.

Data needed in 1.1.1 is described in grey boxes in the document

In addition, this interim report furnishes a more precise description of the work packages.

In this interim report there are no references to management issues or to the exploration of data due to the fact that there will eventually be organised tools and methods for collecting, managing and exploring data across the whole ESPON programme. Furthermore, detailed analyses of data availability and comparability remain to be done. This will take place however only after the data navigator project is completed.

# Practical information on the contract situation between the Lead Partner and other partners

At the current time of writing (31<sup>st</sup> October 2001) Nordregio has not as yet received signed contracts from Politecnico e Università di Torino, CNRS-UMR Géographie-cités or The National Technical University of Athens. The contracts between Nordregio and the other six partners are however settled.

In order to give the ESPON Coordination Unit an accurate estimate of what categories, and in which periods, the 1.1.1-budget will be spent, Nordregio has asked all project partners in this regard to undertake such estimates for their own project related budgets. Receipt of such estimates is however still pending as regards the Politecnico e Università di Torino, CNRS-UMR Géographie-cités, The National Technical University of Athens and the OTB Research Institute. However, Nordregio confidently expects that the missing contracts and budgetary estimates will arrive in due course.

## General background

European policy-makers acknowledge the development potential of peripheral areas as well as the danger of hyper-concentration in the core, as reflected in the European Spatial Development Perspective (ESDP). The key-concept here is polycentricity, as it bridges the different interests of the Member States and encapsulates the three underlying objectives of the ESDP which are: economic and social cohesion, conservation of natural resources and cultural heritage, and more balanced competitiveness of the European territory.

Polycentricity emerged as a central concept in the Leipzig Principles of 1994, which concluded the first phase of the ESDP-process. Polycentricity is seen as the strategic answer to the current undesirable division of the European space into core and periphery:

"...the concept of polycentric development has to be pursued, to ensure regionally balanced development, because the EU is becoming fully integrated in the global economy. Pursuit of this concept will help to avoid further excessive economic and demographic concentration in the core area of the EU. The economic potential of all regions of the EU can only be utilised through the further development of a more polycentric European settlement structure. The greater competitiveness of the EU on a global scale demands a stronger integration of the European regions into the global economy" (CEC, 1999, p 20)

Two policy options put the concept of polycentric development into operation (CEC, 1999, p21):

- Strengthening of several larger zones of global economic integration in the EU, equipped with high-quality, global functions and services, including the peripheral areas, through trans-national spatial development strategies.
- Strengthening a polycentric and more balanced system of metropolitan regions, city clusters and city networks, through closer co-operation between structural policy and the policy on the Trans-European Networks (TEN's) and improvement of the links between international/national and regional/local transport networks.

The main elements of the strategy are the global integration zones (of which the Pentagon is Europe's sole example) and the polycentric metropolitan regions. The idea is that by linking towns, cities, metropolitan regions and their hinterlands with each other via infrastructure and strategic cooperation and by forming polycentric urban regions, the competitive potential of these regions will improve and dynamic global integration zones can be formed beyond the Pentagon. In so doing, the aim is to spread the benefits of good social and economic performance across the continent, while at the same time, strengthening Europe's global competitive position as a whole. In this way the polycentricity strategy it is hoped will achieve balanced competitiveness across the European territory.

Strategic cooperation between urban regions can take place by means of the development of synergies between similar specialisation centres, by means of complementary specialisations of work allocations or by co-operating and creating shared advanced infrastructures and access to the provision of services. Complementarity should not however be focused solely on economic competition but should also be expanded to all urban functions such as culture, education and knowledge, and social infrastructure. Stronger functional/ economical relationships between these different urban areas will be the result. The analysis of concrete local and regional development strategies in Europe shows that besides competition among firms embedded or simply located in some territories the concept of territorial competition must also be considered. The strategies aimed at improving territorial competition hardly use co-operation as an input with which to consolidate the feasibility of the strategies under way. A significant level of misunderstanding can thus arise as regards the nature of the rival factors between territories and the nonrival ones susceptible to resolution via a more co-operative approached. As such, the key question determined by the polycentric approach is thus to demonstrate under what conditions competitiveness can be improved, thus integrating these territories within large-scale and co-operative spatial strategies.

Polycentricity as a concept, like the concept of core-periphery, can be applied to different spatial scales. We can talk about polycentricity at the local level (intra urban; within FUR), and at a regional level (inter-urban), as with Randstad and Rhine-Ruhr. But, polycentricity can also however be applied to the national, meso-regional, trans-national and continental levels. At the national level Germany (with national centres such as Rhine-Ruhr, Rhine-Main, Berlin-Brandenburg) is one of the best examples of a state with a polycentric spatial organization, compared to more mono-centrically-organised states such France, the UK or Nordic the countries. At the trans-national level, smaller-sized urban areas have recently been designated for further cooperation and also as nodes for European integration. At the highest, that is to say, the continental level, until now only one major European centre in the global economy has emerged (the Pentagon), whereas in the USA several centres have been identified (Southern California, Midwest, Texas-Gulf-area, East Coast) (CEC, 1999, p20).

Previously, many small and medium sized cities were oriented more towards local production and to assuming their allocated responsibilities within hierarchical urban systems. Within the context of the perspective used here however small and medium sized cities are no longer seen to be competing as regards ranking in local urban systems as they are now increasingly dependent on the ability of their own intrinsic industries to compete on world markets. In this regard therefore they are not seen to be competing with neighbouring cities. They are in the same boat and have much to gain by co-operating with neighbouring cities on issues such as labour-market services, business services and other urban functions.

## WP 1 Concepts

Polycentrism as a concept refers to differentiated mechanisms and strategies of development in accordance with territorial scales. Although the concept is not new, it has never been adequately defined. As such it remains confused and ambiguous. To define this concept is one of the major challenges of the ESPON programme. From a methodological and empirical point of view, it allows for a better identification of territorial indicators and tools, both essential elements for an evaluation of the current and future trends with regard to the organisation of the future European space. From an operational point of view it is the best way to ensure the better determination of spatial planning strategies and development policies targeted at spatial cohesion.

The project will carry out

- a comprehensive definition of polycentrism and of the major concepts, notions and expressions linked to it
- a critical analysis of these concepts and their current usages

The main result here will be the production of a *critical dictionary of polycentrism* and related notions and the elaboration of a general framework that could be useful for future similar work. The aim is moreover to undertake construction of two different mediums for this dictionary: paper and electronic.

This work package does not require any indicators

## WP 2 Application of the concept of polycentricity

The polycentricity concept marks a paradigmatic shift in thinking on Europe's spatial and economic structure. It replaces the core-periphery model often put forward in the first years (roughly 1989-1991) of co-operation between the EC Member States and the Commission. Now, the ESDP advocates the creation of several "dynamic zones of global economic integration, well distributed throughout the EU territory and comprising a network of internationally accessible metropolitan regions and their hinterland (towns, cities and rural areas of varying sizes)" and continues by saying that this polycentric development should not remain restricted to Europe's larger metropolitan areas because this would not be "... in line with the tradition of maintaining the urban and rural diversity of the EU." (European Commission 1999: par. 70, 71). The polycentricity concept of the ESDP is thus in fact a nested concept. The ESDP foresees a polycentric settlement structure cutting across the whole of the EU territory. At the same time every centre – the ESDP does not give an indication of the size of a 'centre' – is in itself seen as a polycentric system on a smaller scale.

Since its introduction the concept of polycentrism has been used in strategic (spatial) planning at various levels and/or scales. This application will be investigated by 1) compiling the various planning strategies and documents; 2) analysing the types of polycentrism pursued; 3) analysing the instruments and other means (such as efforts towards capacity building) used to implement the concept of polycentrism.

## Key objectives

This work package aims to determine if, and how, the ESDP concept of polycentricity is applied and whether policy strategies are put in place that support the polycentric functioning of the European spatial system. The various appropriate levels or scales will be addressed:

- National and (if relevant) the sub-national level
- Cross-border level
- Trans-national level

The question to be answered here is whether territorial diversity within Europe is reflected in the (likely) diversity of the application of the ESDP-concept of polycentricity. The hypothesis here is that the polycentricity concept cannot, and should not, be elaborated in a uniform way, but will (have to) differ according to territorial circumstances (such as geographical location, the characteristics of the urban system etc) and policy goals.

## Methodology

The method of research will consist of an analysis of strategic planning documents and of the secondary literature. Research will be carried out in two steps:

- 1. a comprehensive investigation into the present state of the art of strategic spatial planning;
- 2. a more in depth analysis of examples evenly distributed across Europe according to territorial criteria such as a) location in the European 'pentagon'; b) peripheral

location; c) location in the CEE-countries; d) location in structurally weak (macro-) regions.

In the first phase of the research, the consortium partners will be asked to identify and collect all the relevant policy documents or policy oriented discussion documents on the national level. The same will be asked in relation to important polycentricity policy trajectories at the cross-border level (such as Saar-Lor-Lux). The accession countries will be approached through the trans-national vision and research documents written and compiled under the INTERREG II-programme (VASAB; CADSES; ISTIA). The identification and collection of policy documents will be guided by a questionnaire. The analysis of the documents will be guided by a clear research format.

In the second phase research will be carried out in conjunction with work package 4. A number of examples of a more elaborated polycentricity policy trajectory will also be studied here in more detail.

#### **Key outputs**

Work package 2 will contribute to the completion of the other work packages in various ways:

- The numerous ways in which the concept of polycentricity is applied will be used to develop policy relevant indicators and typologies (work packages 3 and 4 respectively).
- Work package 2 will also serve as a filter for selecting important cases that will be further elaborated upon in work package 5, where concrete governance 'on the ground' will be investigated.
- This work package will also directly feed into proposals for new policy orientations and will help in particular in contributing to the further operationalisation and territorial diversification of the policy aims and options adopted in the ESDP, including their adaptation to the reality of territorial diversity within Europe (work package 5).
- Finally this work package will lead to conference presentations and papers and to journal articles.

This work package does not require any indicators

### **WP3 Indicators**

As a part of the Espon 1.1.1 project the current patterns of polycentrism in EU27+neighbouring countries (Norway and Switzerland) will be mapped out. Furthermore, the potential for urban regions as nodes in a polycentric European urban system will be analysed. Analysis will be carried out on four different levels: 1) defining functional areas at the regional and local level; 2) analysing national urban systems and their polycentrism; 3) analysing polycentrism at the European level, mapping the global and European functions of cities; and in addition 4) identifying and analysing trans-national/meso-regional urban systems and their nodes.

Polycentrism also concerns the act of balancing between cohesion and competitiveness. For example, raising the competitiveness of functional urban areas (polycentrism) within a country raises cohesion at the national level. Moreover, raising the competitiveness of a strong capital region (mono-centrism) raises the potential that it may become a node in the wider network of trans-national urban systems, the development of which, in turn, leads to greater cohesion at the European level (polycentrism). Thus, it is important that all of the various levels are mapped and analysed.

Work will be carried out as follows

- Phase 1. Defining functional urban areas in each country
- Phase 2. Mapping national urban systems -> defining and delimiting those functional urban areas that are functionally significant in each of the respective countries, and identifying those functional urban areas that are selected as case studies in phase 5 below
- Phase 3. Mapping European and global urban systems -> defining and delimitating those meso-regional urban systems that are included as case studies in phase 4
- Phase 4. Studying meso-regional urban networks (case studies)
- Phase 5. Studying polycentric functional urban areas (governance case studies, see WP 5)
- Phase 6. Analysing a number of expressions with regard to specialised urban networks on the Europe-wide scale

## Defining functional urban areas in each country

Throughout the study, the analysis will be conducted at the level of functional urban areas. The definition of European Functional Urban Areas was presented in SPESP. The European Functional Urban Area (EFUA) is defined in a stepwise fashion, using NUT5 units as the fundamental units that are to be combined. Step 1 defines a contiguous core comprehending the NUTS5 units that are categorized as, or include, parts of the urban area of the city in question (NUTS5 units categorized as the builtup urban area in the United Nations definition). Step 2 adds NUTS5 units from which commuting to work within the core exceeds a certain percentage (threshold still to be discussed) of the active labour force of each unit. The EFUA has to be contiguous. A NUTS5 unit can only be a part of one EFUA (the one with the highest percentage of incoming labour force commuting). Step 3 adds NUTS5 units to which commuting from the area defined in step 1 and step 2 exceeds a certain percentage of the number of jobs within the unit in question (this could for example be the case of a large outlying airport). Again a NUTS5 unit can only be a part of one EFUA (the one with the highest percentage of incoming labour force commuting to the unit). The units defined in steps 1, 2 and 3 then constitute the EFUA.

The definition of EFUAs should be undertaken in ESPON as a common task (Defining EFUAs is apparently a key issue to a number of ESPON projects, especially 1.1.1. and 1.1.2.). If EFUAs are not defined, analysis will be carried out at the level defined by each national authority (NUTS 4, travel-to-work-area or equivalent, see also OECD report Redefining Territories).

Required indicators (from statistical institutions):

- population (NUTS 5 level)
- commuting data (NUTS 5 level)

#### Mapping national urban systems

National urban network studies will be carried out in each of the EU27 countries + neighbouring countries. Analysis should be done at the functional urban area level (proxy is local labour market area or NUTS 4 in many countries). However, in numerous countries there are major restrictions as regards data availability at this level. Thus, it may be inevitable that analysis has to be undertaken on the NUTS 3 level.

Defining the strength of functional urban areas within a country by measuring the following variables (\* = Required from national statistical institutes):

- Population (EFUA level/proxy)\*
- R & D expenditure per capita (EFUA level/proxy)\*
- production value of industries (EFUA level/proxy)\*
- turnover of tourism (EFUA level/proxy)\*
- turnover of transport (EFUA level/proxy)\*
- turnover of trade (EFUA level/proxy)\*
- share of export of total turnover (EFUA level/proxy)\*
- headquarters of the TOP 500 companies (EFUA level/proxy)\*
- number of university students (EFUA level/proxy)\*
- Daily and/or potential accessibility

## Mapping European and global urban systems

In order to map the global and European functions of cities and their position in the European urban system, 1.1.1 will continue with the method developed in the CPMR-study. The difference however here is in the level of analysis (in the CPMR-study the level of analysis was NUTS 3, or agglomeration of several NUTS 3s) and in the territorial coverage of the study. Territorial level of analysis should be the same as in mapping national urban systems (proxy is local labour market area or NUTS 4 in many countries). However, in numerous countries there are major restrictions with regard to data availability on this level. Thus, it may be inevitable that analysis has to be undertaken on the NUTS 3 level.

The quantitative criteria used to assess the urban systems utilised the following categories (cf. CPMR-study):

- Mass
- Competitiveness
- Connectivity
- Development trends

The mass criterion takes into consideration the population of each urban system, its density and the GDP in millions of euro. This criterion plays an important role on account of the close link between the mass and the density of flows that it generates, although this criterion is not sufficient on its own. Moreover, all things being equal, the greater the mass, the greater the chances of benefiting from a wide

range of services, development factors, labour (job market), economies of scale or conurbations.

The competitiveness criterion takes into consideration the level of GDP *per capita* in purchasing power parity compared to the European average, productivity, economic decision-making centres, research and development activity and also human capital measured by the presence of a highly educated population. This is the key criterion in respect of the capacity of urban systems to be, or to become, focal points in the European polycentric system.

The connectivity criterion concerns the capacity of the urban systems to be linked with the main European and world development poles. This criterion takes into consideration the different modes of transport – notably air, rail and shipping. Connectivity is the other key criterion for building European polycentrism, insofar as it concerns the core factor of polycentrism, i.e. the flows between urban systems. It helps to identify those systems that act as "hubs", not only in helping to link the territories with outside areas, but also with regard to their internal linkages.

Finally, the motors of change criterion highlights the most dynamic urban systems between 1985 and 1999, by taking into account the indicators of population growth, growth in GDP/capita in ppp and productivity growth in relation to the EU average.

Measured variables are (\* = Required from national statistical institutes):

- Population density 2000 (EFUA level/proxy)\*
- Population 1985 and 2000 (EFUA level/proxy)\*
- Productivity 1995 (EFUA level/proxy)\*
- Unemployment rates 1999 (EFUA level/proxy)\*
- ➢ % of employment in services 1996 (EFUA level/proxy)\*
- Activity rates 1998 (EFUA level/proxy)\*
- GDP/capita in purchasing power parity, % growth (1985-2000) (EFUA level/proxy)\*
- ➤ GDP/capita in ppp EU = 100 (2000) (EFUA level/proxy)\*
- ➤ Total GDP in Euros 2000 (EFUA level/proxy)\*
- Educational level of population (EFUA level/proxy)\*
- % of top 500 European companies (industry) (2000)
- > % of top 100 European companies (advertising) (2000)
- % of top 100 European companies (transport) (2000)
- % of top 100 European companies (banks) (2000)
- % of top 500 European companies (trading) (2000)
- > % of top 100 European companies (hotels & restaurants) (2000)
- ➤ % of top 100 European companies (other services) (2000)
- > Total turnover from the top 500 European companies (industry) 2000
- > Total turnover from the top 100 European companies (advertising) 2000
- > Total turnover from the top 100 European companies (transports) 2000
- > Total turnover from the top 100 European companies (banks) 2000
- ➤ Total turnover from the top 500 European companies (trading) 2000

- ➤ Total turnover from the top 100 European companies (hotels & restaurants) 2000
- Total turnover from the top 100 European companies (other services) 2000
- ➤ Total references from the top 1500 companies (2000)
- Nights spent by non-residents in hotels and similar establishments (1998) (EFUA level/proxy)\*
- ➤ International airports; take offs and landings; numbers of passengers; cargo; (2000) (EFUA level/proxy)\*
- container traffic in seaports (1999) (EFUA level/proxy)\*
- Presence of inter-modal transport facilities (airport links by high speed or long-distance trains)
- No. of flights and international destinations from each urban system
- ➤ No. of intercontinental flights from each urban system
- ➤ No. of flights to Eastern Europe and Russia from each urban system
- ➤ No. of trains between the urban systems (time distance < 3 ½ hrs at an average speed > 90km/h)
- ➤ High-speed railway lines under construction
- % growth in GDP in millions Euro between 1985 and 2000 (EFUA level/proxy)\*
- % population growth between 1985 and 2000 (EFUA level/proxy)\*
- % growth in productivity (1985-2000) (EFUA level/proxy)\*
- Daily and/or potential accessibility

Further elaboration on the indicators on functional and economic specialisation (e.g. using aggregations of SIC codes, location quotients, qualitative analysis) will be done during the following months. Idea is to map different functions of functional urban areas (services, financial sector etc.). In addition, further elaboration on the indicators on different flows will also be done during the following months. Idea is to map different functional links between functional urban areas. Data Navigator and other ESPON projects might be inspirational to both of these issues.

#### Accessibility analysis

Accessibility analysis will produce:

- an assessment of European polycentrism / urban hierarchy and the position of individual cities/urban regions within that by using accessibility indicators (NUTS 3 level of analysis)
- an internal differentiation of selected urban systems (NUTS 5) with respect to accessibility and, depending on data availability, commuting indicators.

For both spatial levels we wanted to generate typologies based on the indicators above in the form of

- maps / visualisation and verbal descriptions
- rankings
- indicators for the degree of polycentrism (coefficient of variation, GINI coefficient)

The following data is required for transport analysis (\* = Required from national statistical institutes):

- ➤ European road, rail, air networks, 2001 with link travel time (data already gathered)
- ➤ Local/regional road and rail networks, 1981, 1991, 2001, with link travel time, for selected urban regions
- NUTS 3: Population and GDP, 2001 (NUTS 3)
- NUTS 5: Population, 1981, 1991, 2001 (NUTS 3)
- > NUTS 5: employment, commuter flows, 1981, 1991, 2001, for selected urban regions
- > NUTS 3 boundaries and NUTS 5 boundaries

## **WP 4 Typologies**

The creation of typologies is undertaken in two steps, first on the national level and then on European level.

## 1. National level urban typologies

National urban typologies are carried out after phase 2 in WP 3. That is to say, after national urban systems are mapped out. Classifications to 5-7 different categories will be carried out in each country. The same categories are to be applied in each country.

The urban regions are classified according to the volume and versatility of size as well as with regard to functional specialisation. The purpose of this classification is not to model a hierarchical system, but rather to describe the unique characteristics of urban regions and, thus, to provide options for mapping a prospective European urban typology.

#### 2. European urban typologies

The creation of this typology is undertaken after phase 3 of WP 3, and after the national level urban typologies are complete.

The indicators designed to establish a typology of cities at the European level are listed below:

- The competitiveness of the urban systems, evaluated by the indicator showing GDP per capita in ppp in relation to the European average. This is an indicator, which is universally recognised as providing the means by which to comparatively measure the competitiveness of the territories. Analysing productivity levels further refines the analysis delivered by use this indicator. (Further elaboration will be done on the possibility to build up indexes describing various forms of competitiveness cultural, knowledge and industrial competitiveness).
- Economic decision-making centres, evaluated by the number of headquarters of the top 1500 European firms located in the urban systems. This indicator provides data on the extent to which the urban systems are involved in the economic decision-making mechanisms within the business sector.
- Human capital, evaluated by an index calculated by cross-referencing the
  indicators of employment in research and development as a percentage of the
  total employment figure, and the percentage of the population between 25
  and 59 years of age with a high level of educational attainment. The greater
  the human capital of an urban system, the more it is able to create the right
  conditions for its development.
- Connectivity, evaluated by the number of international flights from the urban systems, completed with information on the number of international destinations. This indicator provides details of the flows of relations between the systems, helping to assess to what extent they are open to the outside and the extent to which they are integrated into international networks.

Additional data is also provided by the indicator illustrating the connectivity of the urban systems with other areas outside the European Union, which provides information on the role that these systems play as "gateways" from the EU to the rest of the world. (see also accessibility analysis described above)

 Motors of change, evaluated by the indicator of growth in GDP per capita in ppp in relation to the EU average, which provides details on the capacity of the urban systems to identify potentials for increased competitiveness in the world market. This indicator is complemented by an analysis of the growth in productivity.

## Functional European urban networking

In order to avoid analysing polycentrism solely in terms of its morphological aspects the functional dimension of polycentrism is here taken into account, based on the networks and flows developed between the urban areas at the European, national or regional scales.

Until now, analysis of the links and flows that occur between the European urban areas has only been carried out on a haphazard basis, and is thus largely incomplete. In order therefore to better identify and analyse the processes that are shaping European urban networking, the work here will focus, as proposed in the Terms of references of the ESPON 1.1.1 project, on a few expressions of networking that act in favour of the emergence of a polycentric integration of urban areas in Europe. The specialised or thematic urban networks are the most capable vectors to diversify the forms of urban networking and to help in the achievement of a spatial organisation of cities towards a less polarised and less hierarchical articulation i.e. a more polycentric structure.

The DATA that support this analysis is based on a small number of expressions of cooperation and network relations:

#### Air flows:

Number of passengers, and tons of freight between European airports, and between them and the other world airports for the 20 last years (each 10 years).

## University networking:

- Universities co-operation: in the context of ERASMUS thematic networks
- Exchanges of students in the context of ERASMUS programmes

#### Scientific networks:

In the context of the 5th Framework Programme

#### INTERREG cooperation:

Urban co-operation in the context of INTERREG IIIA and IIIB. A number of cases studies will be taken into account here.

## WP 5 Governance relationships

Urban governance frameworks are changing as a result of globalisation and socioeconomic restructuring across Europe. To promote the economic competitiveness of the European polycentric urban regions there is thus a need for the creation and maintenance of both 'hard' (including for example an efficient transport and telecommunication network between and within the regions) and 'soft' infrastructure (including in particular an effective institutional network). The existence of effective governance relationships is an important prerequisite for developing and sustaining economically, socially and environmentally balanced regions across Europe. The institutional structure and the nature of decision-making mechanisms, co-operation and power partitioning can significantly influence the direction taken and the ability to successfully implement policy options. The ESDP emphasises the need for the building up of co-operation and partnerships between towns and cities and their surrounding rural areas to enable the development of sustainable polycentric territories. While industry, businesses and households operate on the basis of functionally defined areas particularly in polycentric urban areas, governance institutions are often organised and operate on the basis of administratively defined areas such as communes, municipalities, boroughs or Kreise.

This work package will build upon and complement the work of WP2 by focusing on the empirical and practice-based aspects of governance at various scales of polycentrism. There is a need for effective harmonisation and co-ordination of the operation of these institutions in order to develop their capacity for capturing the opportunities that are embedded in, and that arise from, the polycentric development of the European regions.

## Key objectives

- Map the existing institutional arrangements for a sample of polycentric urban regions in each typology, as defined by the project
- Identify barriers and opportunities for building effective partnerships in the abovementioned case studies
  - Identify and analyse existing innovative inter-urban institutional and partnership arrangements which have been set up to promote polycentric spatial development
  - Develop models of partnerships for different territorial scales
  - Build upon and complement WP2 and provide input into the drawing up of policy recommendations (WP6) concerning the influence of governance relationships under different types of polycentrism.

#### Methodology

A combination of the following methodologies will be adopted:

1. Review of the relevant academic and policy literature.

Two interrelated categories of literature will be reviewed: governance and partnership, with a view to:

- Providing an overview of key concepts and definitions (such as governance v. government, institutional capacity building, social capital, multi-level governance, networks, tri-partite contracts, open co-ordination, etc)
- Develop indicators of effective governance
- Develop models of partnerships working for different typologies of polycentrism
- 2. Review of existing partnership arrangements as recorded in published (paper or electronic) examples or provided by the partners, in order to:
- Provide an assessment of existing practices based on criteria and indicators developed in stage 1 above.
- Develop a compendium of innovative institutional arrangements and partnership working for polycentric urban development
- 3. Roundtable/interview with key actors at the EU and national levels to ascertain the professional and practitioners' views on the key indicators and models of partnerships

## **Key Outputs**

- Contribution to interim reports October 2002 and March 2003
- Contribution to the final report August 2004
- Contribution to research briefings
- A statement on the identified indicators of effective territorial governance
- Models of partnership relations for different territorial scales
- A compendium of 'good practice' in territorial decision-making
- Conference presentations and journal articles

Qualitative indicators remain to be elaborated

## **WP 6 Policy conclusions**

It is in this work package that the policy conclusions are drawn. It is of course at present too early to draw any final conclusions, there are however a number of assumptions that can already be drawn.

One such idea is best illustrated in the form of an example. In the table below, we have shown two regions each with two cities. In region 1, the cities are of the same urban functionality. They are not complementary. Hence, if city 1 and city 2 start to co-operate (city 1+2) they form a city of more volume, however with no added value. In region 2 however City A and City B are complementary. Thus, City A+B is a city with more volume as with city 1+2 but also, crucially, it is a city of higher functional ranking, i.e. a city with added value. Thus we can quite clearly see that the potential for polycentrism is larger in region 2 than it is in region 1.

Urban	Region 1			Region 2		
Functions						
	City 1	City 2	City 1+2	City A	City B	City A+B
function 1	Χ	Χ	Х	Х	Χ	Χ
function 2	Χ	Χ	Х		Х	Х
function 3	Χ	Χ	Х	Χ		Χ
function 4					Χ	Χ
function 5				Х		Х
Functional rank	3	3	3	3	3	5

Producing these tables in the form of maps is one of the goals of 1.1.1 Thus the analysis of functions and of the economic specialisation of urban areas are key tasks.