#### **ESPON 2006 PROGRAMME**

# RESTRICTED TENDER ESPON PROJECT 3.4.2

"TERRITORIAL IMPACTS OF EU ECONOMIC POLICIES AND LOCATION OF ECONOMIC ACTIVITIES"

PART I

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#### I Introduction

This project tries to apprehend a very complex question of European territorial development: Where and why do certain regions 'succeed' economically and why do certain activities locate in some areas and not in others? As always in the context of ESPON this then leads to the second question: What can policy do about this? As a consequence this project has to cover both an analysis of trends and an analysis of impacts of public policy at different scales. It, therefore, combines the traditional separate approaches of strands 1 and 2 in the ESPON programme.

As is the case with most ESPON projects, the terms of reference are very ambitious compared to the resources and the time offered. Many previous ESPON projects have suffered from this dilemma and results have often been criticized, not because the scientific abilities of the teams were put into question, but because the very diverse demands put upon them made it difficult to define the priorities. Many projects have, therefore, narrowed down their focus in order to ensure sound scientific methodologies in spite of the resource constraints. Discussions at ESPON seminars and during MC meetings, as well as the experience in project 3.2 in its attempt to use the information of all other projects for policy scenario building, showed that this made many of the results difficult to use outside the specific project, and specifically for policy making.

If we want to avoid the same traps, the team has to find the most cost-efficient way to come to results which are both scientifically sound, and politically useful. This means that instead of engaging with complex quantitative modelling methods or trying to amass large amounts of data whose comparability will often be doubtable, we will try to focus on the essentials, collecting, analysing and synthesising the most important information necessary for answering above questions. This does not mean that we will not collect new data, nor attempt to develop innovative methodologies. But this will be done in a very targeted and selective way.

This is particularly the case for the question of policy impact analysis. Here the lack of data is most obvious in the light of the very complexity of the issue. As the reader will see in the section III.3 of this document, we, therefore, propose to focus on a synthesis of the vast amount of existing knowledge, accompanied by evaluations of impact analysis methodologies and necessary data, and supported by the case studies. We feel that this approach is the most efficient, and the most honest scientifically as any model we could propose for such analysis would, almost by definition, be insufficient to capture all the questions at hand and, thus, unusable for concrete policy making.

We, therefore, see this project as not only a specific research question to which we will obviously bring the best answers possible, but also as an opportunity to explore possible future research paths within ESPON, including the analysis of the necessary preconditions for such research to succeed.

Concretely, this part is divided into 3 main sections: the first offers our interpretation of the general research objectives and the overarching research hypothesis we propose to use. This

seems necessary in order to give the research its coherence and consistency and to give the framework within which all the more specific research questions are dealt with. These specific questions are then introduced in part III in the form of individual work packages. The main body of research will be divided into two parts, one (III.2) dealing with the analysis of the localisation of activities and enterprises across Europe's regions, the other (III.3) covering the impacts of different policies, both at macro and at meso/micro scale.

Finally section IV deals with the more administrative and networking issues.

## **II General objectives**

The terms of reference define the general objectives of the project as follows:

- a) To refer to the three fundamental objectives within the ESDP with regard to balanced and sustainable spatial development: the economic and social cohesion, the conservation of natural resources and cultural heritage and more balanced competitiveness of the European territory;
- b) To contribute to the identification and comparison of regions and larger territories of Europe, in particular to the degree and diversity of polycentrism and to gain concrete and applicable information on EU wide effects of spatially relevant development trends within the economic sector.
- c) To contribute to the knowledge on the European spatial structure as well as impact of economic policies and factors, which affect the distribution of activities and the diversity of the European territory. This will include analysis of the territorial trends, potentials and problems deriving from the policy, at different scales, and in different parts of an enlarged European territory.
- d) To delineate the influence of economic sector policies on spatial development at relevant scales sustained by empirical, statistical and/or data analysis, the response provided by companies (SME and larger enterprises) and the support given by the public sector in terms of framework conditions for economic activities.
- To develop appropriate indicators and typologies for measuring the territorial impact of policy and changes in location behaviour providing an input to the ESPON database and map collection.
- f) To develop possible orientations for policy responses and strategic projects from a territorial perspective with the aim of supporting a territorial cohesion, and in doing so, considering institutional, instrumental and procedural aspects.
- g) To consider the analytical provisions and results made by other ESPON projects and to provide input for the achievement of other horizontal projects under priority 3 of the ESPON programme, in particular for project 3.2, such as diagnosis and observation that can contribute to the forthcoming long term spatial scenarios.

In the efforts to meet these objectives the project shall make best use of existing research and relevant studies inside the ESPON programme as well as external relevant existing research on general economic and economic geographical issues.

These general objectives can be translated into the following main research question:

What are the trends concerning spatial distribution of economic activity and performance in Europe and what influence does public policy at different scales have on these trends?

This can be decomposed into several sub-questions:

- How to measure economic activity and performance at a regional level?
- What are the dynamics of the distribution of activity and performance?
- What are the key driving forces behind these dynamics?
- What types of policies exist for the stimulation of economic activity at regional level?
- Which level of governance can provide which type of policy?
- What difference does public intervention really make?

These questions do not make much sense if they are not put into a larger context of general trends in spatio-economic structures and policies. Thus we will embed them in a general working hypothesis which we will test through the research. This hypothesis is based on the following preliminary observations:

- 1. Several factors push towards a new economic paradigm:
  - The (fordist) social protection of the workforce has pushed enterprises to compete on other grounds than the unique cost of labour, including "novelty" and "just-in-time" flows. This has also lead to an increased need for higher qualification of the work force in order to face the growing demands for "flexibility" in a more knowledge and innovation oriented economic playing field.
  - A shift in the power balance from industrial capital to financial capital has favoured a logic of short-term profitability and reduced the possibilities of long-term investments for the former (who are now forced to take quite a large part of their investment capital on their own cash-flows).

Both of these phenomena have increased the tendency towards the use of externalities (already trained work force, outsourcing, existing infrastructures, etc) because, confronted with the lack of investment funds and with the need to innovate constantly, enterprises have to save costs by pooling their resources, either directly in specific enterprise clusters or indirectly in metropolitan areas offering a more anonymous system of agglomeration economies.

- 2. The 'new economy' has provoked a break in the spatio-economic organisation observed during the high growth years after World War II, notably through two tendencies:
  - mean growth rates that are now higher in the central regions
  - a diversification of the peripheral regions with one part showing growth rates below the european average and another part continuing its sometimes very rapid catching-up process (e.g. Ireland)

At the same time, public policy is becoming more restricted, both for budgetary, but also for ideological reasons as the state is more and more presented in its function as "night-watchman", without active and directive intervention into economic activities. This can be seen through the growing tendencies towards privatisation of formerly public services (transport, electricity, telecommunications, etc) and through the restriction of state intervention (State Aid rules at European and WTO rules at global level). Combined with the above shift in economic paradigm this leads towards a new role for public policy, now catering to this demand for externalities by supporting the "business environment" and by

fostering clustering and networking. The State is seen, therefore, as the provider of the necessary framework for the "free" play of market forces.

From these different observations, we can derive the following main hypothesis for this research:

In a knowledge and innovation based economy, economic activity is becoming more spatially localised, i.e. more linked to specific environments which offer the necessary context to enterprises in need for cost-saving externalities. In this situation, combined with fiscal and ideological restrictions, public policy is oriented towards an indirect intervention through the creation of these specific environments. This leads to a rising importance of the existing resources of regions and thus to the remetropolisation and reconcentration of economic activities.

## **III Specific research questions**

The specific research questions defined in the terms of reference can be subdivided, in response to our working hypothesis, into different parts giving rise to the following preliminary work packages:

- 1 Theoretical overview of concepts and possible measures of regional development
- 2 Theoretical and empirical analysis of the localisation of enterprises, economic activities, and production
  - 2.1 Theoretical analysis
  - 2.2 Statistical analysis
  - 2.3 Meta-analysis of enquiries
- 3 Impact of macro economic policies
  - 3.1 Theoretical analysis of regional/local economic policies and their impacts
  - 3.2 Analysis of regional impacts of EU-level macro-economic policies
  - 3.3 Case studies
  - 3.4 Analysis of case study reports and conclusions
- 4 Integration of results
- 5 Policy recommendations

## 1 Theoretical overview of concepts and possible measures of regional development

Measuring regional economic development as an aggregate

- Economic potentials, what are the main indicators which display economic strength in a territorial view (indicators may range from aggregates such as GDP to the location of particular types of firms and investments)?
- Regional competitiveness, what does it mean and how can it be measured?
- Territorial capital, how could it be defined in detail? How can it be measured and how does it influence the economic development of a region?
- Services of General Interest, how do they influence investments and location decisions as well as economic development in general? And how could these services be measured?
- Trade flows, how could such flows support the description of territorial development potentials? To what extend are they important in understanding regional economic potentials? And how could they be measured?

In the context of the general research hypothesis, notions such as regional competitiveness, territorial capital and access to services of general interest can be seen as representing the shift of paradigm described in the previous section. It will be an essential aim of the research to explore these notions in a way to lay open the underlying assumptions in order to clarify the policy options.

In parallel, the question of how to measure regional economic potential and performance also has to be seen in a wider policy context concerning the actual objectives of territorial development, including compensation for the apparently inevitable polarisation of activities. If social and environmental aims are taken into account (i.e. if all the elements of the Lisbon and Gothenburg agenda are to be taken seriously), measures other than the GDP have to be found to analyse whether economic performance also has wider positive impacts (raise in quality of life creation of employment, reduction of poverty, reduction in pollution, etc.).

In Europe, just as in the United States, numerous analyses have been proposed concerning the spatial aspects of the new economic trends. Next to studies on the evolution of old industrial regions or regions highly stigmatised by the weight of their "fordist" production structures, a rich literature deals with, for example, industrial and technological districts as well as with remetropolisation and re-agglomeration trends in economic activities.

The empirical measurement of these phenomena has, however, often remained limited to monographic studies and thus continues to raise certain questions concerning their scale and their level of generality.

On a strictly economic level a large part of the analyses converge on the growing importance of the role of positive externalities in the recent regional economic developments as can be seen in the growing insistence on concepts such as territorial production systems or *territorial capital*. One often encounters the idea that economic policies today should focus exclusively

on the reinforcement of the latter. However, notable divergences continue to exist concerning the precise definition of the notion, and more generally concerning the relative importance of different types of externalities. Thus, the principal focus is sometimes put on characteristics of the labour market, such as education levels, mobility, the cost and the diversity of the labour force, but others emphasise the characteristics of the entrepreneurial fabric itself, such as the potentials for outsourcing (notably in high-level services), the connectivity of enterprises or the relative importance of specific growth-enhancing technological sectors. Accent can also be put on the quality of the material infrastructure (transport, communication, etc.), on the existence of a favourable environment for R&D activities, on the institutional context or on local governance and fiscal policies. Often defined to touch a part of the same characteristics, but sometimes limited to the only dimension of regional sectoral structures, the concept of regional economic potential suffers more or less from the same lack of precision.

The empirical usage of these concepts, notably through indicators allowing comparative studies, therefore appears quite difficult, especially since several components of the territorial capital cannot be measured quantitatively. In addition, within these concepts it is often difficult to distinguish the objective analysis of regional development conditions from normative *a priori* discourse. Thus, one can often propose a general list of favourable characteristics in terms of territorial capital without taking into account the specific characteristics of different types of regional economic fabrics. On the other hand, territorial capital can also be described as resulting from the specific and unique combination of productive structures, labour market characteristics, inter-firm relationships, institutional characteristics, etc., often on the base of monographic studies. Such a usage of the notion obviously does not easily allow comparative evaluations.

During the last years, the notions of *territorial capital* and of *regional economic potential* have more and more been linked to that of *regional competitiveness*, although neither the relevance, nor the measurement, and not even the precise definition of the latter is systematically discussed. This implicit definition of regional economies as corresponding to competing firms has been generally accepted without any empirical definition, while they convey the idea that strictly local economic activities have a very low impact on regional economic development and thus on the well-being of the local population. Thus endogenous development potentials are taken into account in only limited manner. In general, the potentials for regional development are seen as almost exclusively determined by the capacity to attract and fix, within the regional territory, very mobile production factors which are largely oriented to the outside of the region, be it firms competing on large markets, strategic or innovating activities or a highly qualified work force (but also, in more peripheral areas, labour-intensive activities), notably through a competitive offer of externalities and of targeted services of general interest.

From an economic point of view, therefore, different types of growth will have to be distinguished according to their sectoral characteristics and according to whether they are accompanied by and increase of the degree of openness of the regional economy. Since there is no satisfying regional equivalent to national external trade statistics, this could be measured for example through the presence of multinational headquarters, the importances of incoming FDI or by the level of external air connections to and from the region. As ESPON project 3.4.1 works in the same direction, this will be done in collaboration with their TPG.

On the other hand, another hypothesis claims that the generalisation of the above-mentioned public efforts and investments could actually, through their mutual devalorisation (if everyone offers the same, the offer does not have a specific value any more), have only a very limited effect on the real attractiveness of regions, while reinforcing the spatial volatility of factors of production.

In addition, the possible environmental and, even more so, social implications of the new economic trends should be examined systematically, even in those regions that are going through positive dynamics. The spiral of inter-regional competition for attractiveness might reduce the possibilities of social support and the capacity to build up those economic activities that offer the most jobs to the less qualified. For example, the potentially excluding character of regional development based on sectors demanding a highly qualified work force needs to be evaluated at different spatial scales and, particularly in regions where a structural unemployment of less qualified people subsists. Indeed, one cannot easily reject the hypothesis that continued regional growth, measured in terms of GDP per capita, can coexist with the stagnation, or even deterioration of living conditions of parts of the population, for example through a rise in prices, notably in housing.

These reflections, which obviously have to be deepened and confronted to a thorough review of the literature lead to the conclusion that the regional socio-economic development cannot certainly not be described in a satisfactory manner by measures of economic growth such as the GPD per capita or investments. From a social point of view, different types of growth have to be distinguished according to their effects on job creation and reduction of regional unemployment and, if possible, even according to the characteristics of the jobs created. In the absence of satisfactory measures of the dynamics of social inequalities, particular attention should be paid to the evolution of spatial inequalities at micro-scale, especially in metropolitan regions.

### Proposed methodology:

A first round of discussion will take place at the kick-off meeting allowing to refocus the approach proposed in this tender according to reactions by the ESPON MC and CU. On the basis of this discussion (and on the contents of this chapter of the tender) the lead partner will elaborate a first draft of a general theoretical framework and will submit this to the project partners in order to integrate their reactions and suggestions based on their specificities and respective competencies. This will ensure a multidisciplinary character of the analysis which clearly constitutes an added value.

A brief second round of feedback will ensure acceptance of the final version by all TPG members.

## **Summary of contents of WP1:**

- literature review concerning concepts and measurements
- development of a coherent framework for the further research within the project
- first proposals for methods of measurements and indicators for the empirical work in WP2.2

#### **Deliverables:**

 Report defining the general conceptual framework for the study including a critical glossary of concepts (FIR)

## 2 Theoretical and empirical analysis of the localisation of enterprises, economic activities, and production

#### Location of companies and investments

- Where are the strongest economic potentials located? Are location patterns visible of enterprises and investments with reference to company profiles? Is there a difference of location patterns depending of the activities character of being global, national or regional?
- The relation between economic performance of companies and the types of jobs created, are there spatial patterns occurring?
- What are the main characteristics of attractiveness for companies? What are the main factors for location decisions of enterprises? How do modern multinational firms think on location factors?
- How do these factors influence location decisions and how do existing structures and endowment influence location patterns? What frame conditions are influential dependent of sector, size and technology intensity? What role does parameters such as accessibility, qualifications of work force, environmental qualities, support in innovation play for making regions attractive for FDI (foreign direct investments)?
- Do patterns exist of location choice of companies/investments resulting in a typology of regions? What kind of role is due to the settlement structure and polycentric development playing for the economic dimension of development?
- What is the relationship between concrete investment strategies and the functional potential of different nodes in the European urban system and different types of regions?
- What is the ratio of relocation of companies and what patterns can be distinguished? Is the location behaviour different in situations of relocation compared to setting up new companies? Or is it more a matter of differences between branches of the economy?

#### Economic potentials of different types of regions and FUA's

- What would be the results of cross analyses of impacts and location patterns provide a typology of regions with positive/negative prospects of economic investment/dynamics in relation to cohesion objectives?
- Which new knowledge could be achieved by crossing the above typology with ESPON typologies like FUA/Mega, rural/urban, accessibility to road, rail, air and telecom as well as R&D capacity and environmental risks?

This part of the research will allow answering the questions concerning the dynamics of the distribution of economic activities across Europe and, therefore, test the hypothesis concerning specific types of environments.

It will be approached from two angles, a theoretical one and an empirical one. The latter poses the problem of scale: it is difficult to define factors of location decisions at the regional level as the (limited) statistical data available at regional level only provides *a posteriori* information concerning locations that have taken place, not necessarily the driving forces

behind the decisions. These driving forces have to be inferred through other describing the relevant territories. For example, if we see that regions with high-tech sectors generally have a work force with higher levels of education than those regions without high-tech sectors, we can make suppositions about the fact that high-tech companies look for locations which offer a qualified work force. However, data is not available at sufficient resolution in order to determine whether the highly qualified actually work in the high-tech sectors...

At the other end of the scale, the enterprise, several methodological problems arise when trying to determine location factors. The only possible way is through enquiries conducted amongst enterprises. However, such enquiries are always very biased by the fact that the respondents respond a long time after the decision was made, often justifying it *a posteriori* with very different reasons than those that determined the actual decision. Another question concerns the scale of the enterprise's activities. A multinational, or even global, firm will make locational decisions on the basis of factors that play at a very different scale from those that drive the decisions of a national or even regional level enterprise. In addition, since the decisions are often made at headquarters located elsewhere, it is difficult to identify the actual persons having made those decisions.

In light of these difficulties, the team will, therefore, attempt to combine both approaches in order to mutually validate the results of each. It will do so through the lense of the general hypothesis which in this part of the research translates into concrete questions, such as:

- 1. Is the localisation trend identified in the research hypothesis empirically verifiable?
- 2. Can the above-mentioned centralising tendencies be emprically verified? Within the center, at which scale (all of the center? Mostly the MEGAs? Mostly the MEGA's suburbs? etc.)? Within the periphery, can one find characteristics that are common respectively to all the winning or all the losing regions?
- 3. Can one observe comparable tendencies in other 'developed' countries (notably in the USA)? This should allow identification of global economic trends as distinct from inner-European specificities, and (probably) independent from political interventions.
- 4. What are the factors explaining the differences in growth rates amongst the central regions? This might include:
  - sectoral specificity in high-growth sectors
  - agglomeration effects / critical mass / diversity (notably diversified labour markets, high local outsourcing potential, etc)
  - institutional thickness
- presence of high-level services (for example based on the research Globalization and World Cities (GaWC) Study Group 1)
  - international openness (at which scale ?)
  - path dependency
  - etc

but also, barriers to growth such as:

- congestion
- not enough qualified labour
- administrative barriers
- etc

<sup>1</sup>http://www.lboro.ac.uk/gawc/

For each factor, the research should explore the growth of characteristic regions. A general study of which sectors contribute most to employment growth should also be elaborated.

5. Which types of firms (size, scale of activity) locate in which types of locations?

However, as the theoretical work in WP 1 will show, the notion of economic "development" is highly contested and any analysis of the "performance" of regions will also have to include issues that go beyond the mere growth of GDP. Questions of social equity and of sustainable development in a large sense lead to questions such as:

- 6. What are the social impacts of growth based on certain types of jobs, notably knowledge- based jobs? At which scale do these impacts take effect? (e.g. in the case of central metropolitan growth: does growth increase social polarisation?)
- 7. What types of growth engender what types of environmental impacts, notably through transport ?

## 2.1 Theoretical analysis

This WP will review the literature on territorial development, industrial (re-) organisation and issues related to regional and economic competitiveness, such as innovation and technological development. Special emphasis will be granted to the various strands of orthodox and heterodox theoretical perspectives (Storper, 1997) on the (re-)location of economic activities. Relating this to the three ESPON scales the major factors determining enterprise location as it has been put forward in the literature will be reviewed by the use of this analytical scheme:

	Micro-level	Meso-level	Macro-level
Orthodox			
perspectives			
Heterodox			
perspectives			

At this stage it can be observed that the orthodox perspectives often confine themselves to one of the scales, whereas the heterodox perspectives are much more open to applying a 'multi-scalar' approach that enables them to analyse the interrelated processes, e.g. how is globalization processes influencing and influenced by processes, including relocation of businesses, even at the local/regional level. This development towards more 'relational' perspectives has also had an impact on the (empirical) studies of locational behaviour at a local/regional scale, which tends to move away from – or supplement – studies of for an example Christallian spaces (studies of the city and its hinterland) and behavioural studies with an analysis of the complex relationship with wider socio-economic processes outside the firm's immediate business environment.

In the more orthodox perspectives, e.g. Weberian location theory, firms seek locations that minimize distance-transactions and production costs. Corporate locational behaviour might also be affected by resource dependencies.

In heterodox perspectives, firms are regarded as bundles of resources, competencies or capabilities that are strategically deployed to realise corporate strategies. Resource or capability developments are tied to territories and networks, and the locational behaviours of embedded firms are constrained by these networks or territories (Maskell and Malmberg, 1999). The heterodox perspectives are spanning from theories that are accompanied by advanced econometric analyses and multi-variable, statistical analyses to theories that are pointing to the importance of 'softer' factors, such as human and social capital, industrial milieux, institutional set-ups and 'cultural' aspects of competitiveness (Lundvall (ed.) 1992, Braczyk et al, 1998, Dunning (ed.), 2000). The latter is often based on qualitative research methods, but in the recent years numerous research teams have made comparative studies at the meso- and macro-level by the use of quantitative research techniques in order to rank the importance of various 'softer' development factors, including analyses that are comparing the importance of 'softer' factors to economic parameters of performance.

More concretely, the following five categories of special components of attractiveness for enterprises and activities at regional and local level are often identified, each with a series of subcomponents (see also the First Interim Report of ESPON project 3.3 which offers a similar type of analysis):

- economic activity
  - tangible and investment and incentives
  - international integration
  - structure of economic activities
  - productivity
  - competitive factors
  - intangible support to the creation and attraction of new enterprises
- innovation potential
  - business R&D activities and public support
  - public R&D infrastructure (scientific parks and bridging institutions...)
  - scientific environment
  - technological revealed advantages
  - propensity to patent
  - participation to European R&D networks (CORDIS, EURECA)
- social structure
  - demographic structure and evolution
  - education level of the working age population and on the job training
  - employment and activity ratios
  - social capital
  - indicators of social friction
- infrastructure
  - physical infrastructure (transport)
  - accessibility to and utilisation of information and communication technologies
  - integration to trans-European transport networks
  - multimodal platforms
  - endowment of activity areas (incubators, nurseries, ...)
- state of environment
  - land use
  - air, water and soil degree of pollution
  - industrial brown fields
  - attractiveness criteria
  - life quality

Amongst the theoretical perspectives both economic geography and geographical economy (the so-called "new economic geography" represented by Paul Krugman, and Michael Porter's "new economy") will be discussed at some length, as they have had tremendous impact on the thinking of regional performance. Furthermore, they have inspired decision makers at the national and regional scale throughout Europe.

More specifically, and related to the exercise in WP 3.3, these perspectives will be illustrated by surveying the more empirically oriented literature that explains the different ways in which regional development is organised throughout Europe. Particularly, some European national/regional case will be investigated for understanding:

- The dominant models:
- The relationships between economic growth and the regional organisation of economic activities;
- If and how this growth has external effects (positive or negative) on other European regions.

At the same time, this survey of empirical studies serves as the first step in the preparation of the meta-analysis of existing studies of the location of European businesses, for an example studies such as Midelfart-Knarvik et al. (2000 and 2001). See later in the description of WP 2.3 for the way these studies will be used.

Furthermore, the theoretical and empirical literature on economic and regional development will be explored more in depth concerning three elements that are of importance to the evaluation of regional economic policies (WP3.1-4) and considerations leading to policy recommendations (WP5):

- 1. localisation at the scale of the enterprise in order to deduce the most important factors, both enhancing and reducing the attractiveness of regions for investment and localisation. It will allow to complement the empirical analyses (which will obviously be incomplete given the resources and time frame available for the project) by profiting from existing research. At the same time, the empirical analysis should allow to test some of the information coming out of the literature, although this will be made difficult by the lack of data and by the question of scale.
- 2. regional "performance" in order to deduce the most important factors contributing to stronger regional economic development. A substantial input here is the study that was recently conducted for DG Regio on the "Factors of regional competitiveness" (Cambridge Econometrics et al., 2004<sup>2</sup>). This section will have to take into account the developments of the notions in WP 1 and will have to work in close collaboration with ESPON project 3.3 working on notions of "regional competitiveness".
- 3. social and environmental impacts of economic development. The economic geography located theoretically on the borderland between geography, economics, cultural studies and various kinds of sociology can provide insights on the impacts of social and environmental policies on regional economic development. Mobility, transport and traffic are essential factors in explaining economic restructuring at the territorial level.

<sup>&</sup>lt;sup>2</sup>available at http://europa.eu.int/comm/regional\_policy/sources/docgener/studies/study\_en.htm

#### Summary of contents of WP 2.1:

- Summary of theories of localization of economic activities, e.g. territory, economic development and competitiveness
- summary of theories concerning factors of regional performance
- summary of major issues concerning the relationships between economic development, social cohesion and environmental sustainability
- input to meta-analyses of existing studies of location of European businesses
- input to case study guidelines elaborated in WP 3.3

#### **Deliverables:**

- Draft report containing summary of current state of knowledge concerning localization of economic activities, including evaluation of potentials of different types of regions and identification of potential elements for the meta-analysis of WP 2.3 (FIR)
- Final report, including input into case study guidelines in collaboration with WP 2.3 (SIR)

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#### 2.2 Statistical analysis

The empirical analysis has two main objectives: paint the picture of European regions' state and dynamics of economic development and analyse location patterns of types of enterprises and economic sectors.

One of the most important questions concerning this empirical part, is the one concerning scale. The State and Regional Aid measures apply (mainly) at NUTS 2 level, but local policies will often be oriented towards much smaller spatial units. Equally, the question of localisation factors can obviously also be approached at different scales and the results will heavily depend on this decision.

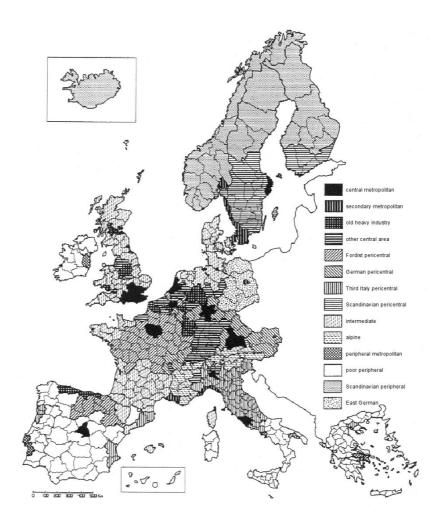
At the same time, it would go far beyond the scope of this project to try to collect relevant data at lower levels for the entire ESPON space. We propose, therefore, to focus the analysis at NUTS 1/2 level (for some new members states this might even be NUTS 0), with complements at NUTS3 level wherever possible.

Data availability is obviously another serious issues concerning the empirical analysis. Especially for the new member states and the accession countries it will be difficult to obtain comparable data from before 1989. This means that long-term path analysis will not be possible for these countries, its meaning being very questionable anyhow because of the fundamental change of economic and political regime. However, at the same time, particular attention will have to be paid to the special characteristics of this area since 1989. See below for a preliminary listing of data to be used in the below analyses.

#### 1. Empirical analysis of the distribution of activities

The distribution of activities will be empirically analysed on the basis of a fine-grained sectoral ventilation of regional value added. If necessary, this ventilation will be based on a homogenisation of regional data available from national sources. A synthesis of the main regional oppositions will be achieved through a principal component analysis and a typology of regional sectoral structures will be proposed. As an illustration of the possible outcomes, the figure on the next page shows such a typology, produced at regular intervals by a member of the TPG. This specific typology is based on the data of 1980 and is only meant as an illustration of the potential contents of such typologies and the possible form of a map illustrating such a typology. Obviously, it will be accompanied with the necessary explanations and meta-data in order to understand the contents of the types.

In terms of the dynamics, the real growth rates of the last years will be compared to the rates expected according to sectoral structures. The differences between real and expected growth rates will be analysed through different criteria such as the level of R&D, the level of education of the labour force, the regional openness, the distance to metropolitan areas, etc. If available, indicators from ESPON project 3.3 will be used so as to avoid overlap, e.g. "knowledge and information society" indicators, "human



resources" indicators and "economic" indicators<sup>3</sup>. They will also be put into relationship with the types identified in the above-mentioned typologies of regional structures. Another typology will identify types of regional evolutions of sectoral structures. The resulting types will also be put into relationship with ESPON typologies like FUA/Mega, rural/urban, accessibility to road, rail, air and telecom as well as R&D capacity and environmental risks in order to evaluate the relevance of these particular approaches and the regional characteristics they identify for economic development.

<sup>&</sup>lt;sup>3</sup> ESPON 3.3 SIR, pp39-46.

A synthesis will be made of the different analyses, presenting the principal oppositions between the current regional evolutions and those before the major break-point end of the 1970's / beginning of the 1980's. Particular attention will be brought to those regions who were structurally close in the 1980's, but have then gone through very different evolutions<sup>4</sup>. Some of these regions could then be studied more deeply in the case studies of WP 3.3.

#### 2. Empirical analysis of the distribution of enterprises

The preceding analyses will be completed by a typology of regions based on the types of firms present on their territory, both in terms of size and in terms of sector of activity, but also in terms of the presence of multinational headquarters and possibly of high-end service sector companies whose. The resulting types will then be compared to data concerning growth of GDP, of number of jobs, etc. By comparing the types to other data, this analysis will also give some very preliminary indications concerning location factors.

Size of enterprise can also be seen as a (very approximate) proxy of the more or less endogenous nature of a region's development. However, this will have to dealt with mostly on a qualitative basis in the case studies of WP 3.3.

#### 3. Empirical analysis of the distribution of actif population

This section will look at the distribution of the resident population according to criteria which are relevant for enterprises, such as qualification, age structure, etc. It will also look into issues such as the activity rate, both global and female.

#### 4. Empirical analysis of the distribution of economic performance / "competitiveness"

A hierarchical analysis of regional territories will be provided, based on a synthesis of several variables reflecting the *capacity* of regions to attract and fix the most mobile economic activities. Amongst these variables, there are notably R&D intensity, the proportion of sectors demanding high qualifications, the importance of incoming FDI flows, productivity, the number of patents presented per employed person, the level of education of the population, the presence of large enterprises' headquarters, the intensity of external air flows, especially towards large decision centers, etc. Here again indicators from ESPON project 3.3 will be used, if available at the regional scale.

This analysis will be carried out for two different dates and a classification of regions will be proposed according to their hierarchical level and its evolution. This classification can then be compared to the actual evolutions of the GDP per capita.

<sup>&</sup>lt;sup>4</sup>This will obviously not be possible for the new member states and the accession countries.

#### 5. Empirical analysis of the social impacts of economic development

Finally, the team proposes an empirical analysis concerning the social impacts of economic developments, the latter being measured both in terms of the evolution of the GDP per capita and in terms of the evolution within the classification of regions. As much as possible, the social trends will be approached through the evolution of a synthetic variable summarising different measures going from unemployment to health and which should each reflect a part of the social well-being of the regions. Results of projects 2.4.2 (in form of the RCE indicators), project 3.2 (health indicators and others developed for the ETCI), as well as indicators produced or synthesised by ESPON project 3.3 on social aspects (e.g. social variables, human capital or welfare indicators) will be included in this search for a synthetic social indicator.

These analyses should also be carried out at a scale allowing to take into account the evolution of intra-regional disparities. Particular attention could then be paid to the analysis of regional subspaces where the overall economic growth does not translate into a parallel evolution of the social indicators. However, data is not available at this scale (NUTS 4/5) for the entire ESPON space, so if this type of analysis is judged interesting by the Monitoring Committee it will have to be carried out for selected spaces where data is available and/or be integrated into the case studies in WP 3.3.

The different analyses and typologies will then be submitted to the ESPON database as ESPON indicators on economic structures and evolutions. In the same line, all the data and analysis results will obviously be at either NUTS 2 or NUTS2/3 level and will be submitted to the ESPON map collection.

#### Data

The most important data to be used in the above analyses concerns the sectoral structures of European regions. The Lead Partner has a long experience of working with this data and has constructed matrices of value added divided into 21 sectors (not completely compatible with the new NACE classification) for all of Western Europe (including Switzerland and Norway) for 1980, 1990, and 1995 in a mixture of NUTS 2 and 3 (see ESPON project 1.1.4 for an example of such a mixture and project 3.4.3 for further analysis of such mixtures). For Eastern Europe it is not possible to create such matrices for data before 1995.

From 1995 onwards a new NACE classification was introduced and data from this moment onwards includes Eastern Europe. One of the tasks of the project will, therefore, be to collect the necessary data for 1995 and the most recent date possible in order to construct new matrices on the basis of the one-letter, or ideally two-letter NACE classification. Much of this data is available from Eurostat but for some countries employment data from national sources will be needed to split the available data into more economic sectors and into a finer NUTS resolution. The Lead Partner has already recently constructed a matrix for Eastern Europe based on 1995 data.

In parallel, sectoral employment data will be collected in the same way to complement the value-added data.

In order to confront this structural data to other indicators of regional "competitiveness", the labour market and social status the following data will be used, all available from Eurostat (and mostly already integrated into the ESPON database) for EU 25, but in some cases completion through national sources might be necessary, to cover the entire ESPON space and for the construction of time series:

- total GDP (NUTS 2 and 3)
- GDP growth (NUTS 2 and 3)
- R&D expenditures (NUTS 2)
- Patents (NUTS 2)
- Size of enterprises (NUTS 2)
- Employment in high-tech sectors (NUTS 2)
- Population by age (NUTS 2)
- Total and female activity rates (NUTS 2)
- Unemployment (NUTS 2)
- Level of qualification (NUTS 2)
- Health (cause of death, health personnel, etc NUTS 2)
- Migratory balance per age group (NUTS 2 from ESPON project 1.1.4)

#### Data from other sources include:

- Headquarters of large companies (FUA Fortune)
- Air flows (FUA OAG data)

In addition, contacts will have to be taken to discuss the data issues thoroughly with project 3.3, in order to learn from their ongoing evaluation of the existing data, but also to avoid overlaps in efforts of data collection and analysis. The same holds true to a lesser degree concerning ESPON projects 3.2 and 3.4.1. The presence of a member of each of these TPG in the present team will obviously make this much easier.

For all the data collected, special care will be taken to also collect the necessary meta-data. In line with the guidelines for the long-term database of project 3.2, any collected data will be stored in its raw form and all transformations documented, thus making future uses easier and more flexible.

#### **Summary of contents of WP 2.2:**

- precise identification of available data, including possible data needs addressed to project
   3.2
- data collection from national sources when necessary, with particular attention to Eastern Europe
- empirical analyses using different statistical methods, including multivariate analysis, based on the theoretical framework and methodological propositions of WP1
- mapping of the results of empirical analyses, including maps of discontinuities
- crossing of the different empirical analyses to analyse possible interactions and dependencies

#### **Deliverables:**

- Report on data situation and data needs, including proposals for data collection from national (and international) sources (FIR)
- Report on first preliminary results of empirical analysis on available data for measuring economic development as an aggregate and for evaluating regional potentials, including maps and results of statistical analyses in the form of new ESPON indicators (FIR)
- Report on draft final results of empirical analysis and crossing of different elements, including maps and propositions of regions for case studies (SIR)
- Report on final results, including maps and the description of the data collected and the indicators created (FR)

## 2.3 Empirical analysis at the scale of the enterprise: Metaanalysis of enquiries

As mentioned in the introduction to this chapter, only through analysis of the factors of localisation at the enterprise level can certain localisation factors be identified. Since the perspective of ESPON in general and of this project in particular is Europe-wide, the optimal empirical analysis of the (re-)location of European economic activities should ideally be based on a stratified survey encompassing samples of firms representing the variety of firms (according to sectors, size, productivity, innovative practices, locational behaviour and so on). However, such a separate enquiry is totally infeasible within the time limits and budgetary constraints of this project.

Instead a meta-analysis of existing enquiries is considered to be the most efficient way to get an overview over contemporary locational trends. This study will demonstrate the benefits of using meta-analysis in applied regional economic policy analysis.

This would mean scanning for the information about available enquiries in Europe (which is partly done within WP 2.1), selecting the enquiries that meets the requirements of the meta-analysis, contacting the authors to see if they are willing to provide their source data (if the underlying database is not already made available), establishing some basic harmonisation criteria between the different studies and then use the entire data collection as a basis for a statistical analysis.

Reviewing and comparing results of different empirical analysis, to see what can learned from juxtaposing the information ('meta-analysing'), is used within many fields of applied research. Due to the possible pitfalls a careful meta-analysis should be based on a critical review of the research method of meta-analysis. Given the wide range of theories about what drives regional economic growth it is to be expected that each of the existing enquiries and the underlying databases will measure different things in different ways. Even if two databases do measure similar factors in similar ways, they will almost certainly come from different regional environments and different points in time. When possible the meta-analysis should control for the effect of discrepancies and variations in the data material. Properly conducted, however, meta-analysis is a crucial way of providing a systematic, and statistically rigorous, overview of the plethora of studies usually available to researchers, and it can therefore help in providing future primary research and identifying policy recommendations.

#### Summary of contents of WP 2.3

The meta-analysis of existing enquiries of localization of economic activities will consist of the following steps:

- reviewing the literature on the methodological problems of meta-analysis, especially the literature on statistical methods for meta-analysis in order to elaborate the methods, selection criteria and statistical tools to be used while conducting the meta-analysis of empirical studies of locational behaviour of European economic activities.
- completing the identification of relevant empirical enquiries (commenced in WP 2.1). Based upon a systematic review and a precise quantitative assessment of key parameters, a selection of studies will be identified for more detailed analysis
- compiling and processing relevant and well-documented data from previous studies
- applying the chosen statistical tools for the meta-analysis
- identifying major trends in the recent location pattern of economic activities in Europe,
- comparing the findings with the knowledge acquired in the case studies in WP 3.3
- considering policy implications and recommendations

#### **Deliverables:**

- Report on methodologies for meta-analysis and proposition for next steps (FIR)
- Report on draft results of meta-analysis, in relation with the findings of WP 2.1, including input to guidelines for case studies (SIR)
- Report on localisation patterns of enterprises based on results of the literature review of WP 2.1, final results of the meta-analysis, case-study findings (FR)

## 3 Impact of economic policies

The second part of the project deals with the impact of economic policies at different scales. To keep in line with our hypothesis from section 1, the following questions should guide us in the analysis:

- 1 How have the European, national, regional and local authorities encouraged the tendencies towards more agglomeration economies and short-term profits (financial deregulation, monetary rigor, competition policy, including territorial competition concerning the offer of externalities which often ends up in a zero sum game)
  - 1.1 On European and partially national level this will be quite difficult to address as we lack a "control group".
  - 1.2 On regional level: are those regions that put their bets on competition registering higher growth rates than those that did not? Has social polarisation increased in the former? (NB: we will have to take into account that those that go for competition might be those that are the most competitive to start with...)
- 2 Can we create a sensible typology of regional policies?
  - 2.1 What are the growth rates of the different types ? (testing the residues that cannot be explained by structural differences)
  - 2.2 What are the social implications of the different types?
- 3 What are the interlinkages between EU policy and regional/local policy? Are there any?
  - 3.1 Can we create a sensible typology of regional impacts of EU policies ? (which data ?)
  - 3.2 Does EU policy restrain regional policy making, i.e. limit its choices?
- 4 How does public policy impact on the volatility of enterprises?

## 3.1 Analysis of regional/local economic policies and their impacts

This section will explore the literature (including grey literature) concerning different economic policies and the existing experience concerning policy impacts. It will also summarise existing methodologies of regional impact analysis.

- 1. First identification of relevant literature regarding regional scale policies:
  - Literature dealing with relevant case studies including contribution to conferences and books;
  - Relevant papers published in international journals (Regional studies, European planning studies, Revue d'Economie Régionale et Urbaine, Papers in regional science, etc.);
  - (Ex post) Evaluations of European co-financed actions and implemented measures (for example Structural Funds);
  - etc.
- 2. First identification of relevant policies:
  - policies aiming at improving the attractiveness of a location through the implementation of "hard" infrastructure;
  - policies aiming at upgrading the "intangible" or "soft" infrastructure such as human capital, network building of institutional sectors and actors;
  - policies implemented in order to strengthen human and social capital;
  - fiscal and financial policies;
  - policies focusing on capacity building (absorption, diffusion and creation capacities).
- 3. First discussion of the limits of influence of public policy:
  - a) The implementation of different kinds of policies, each aiming at achieving a given goal, is likely to induce "perverse" effects due to a lack of horizontal integration resulting from a dichotomous and non-interactive approach.
    - For example, among other things, the realisation of the European Research Area, while necessary to avoid further falling behind of European's innovation performance and dynamics with respect to the US and Japan, embodies a real danger to accentuate regional disparities within the European landscape.
  - b) Even if best practices can be identified, their territorial "transplantation" does not necessarily induce the expected results.

The efficiency of a given policy heavily depends on the region's characteristics and specificities as well as the degree of pro-activity and adherence of addressed actors. While "policy ingredients" can be "transplanted", socio-economic characteristics can not.

#### **Summary of contents of WP 3.1:**

- Synthesis of the literature concerning regional and local economic policies and their impacts
- Elaboration of guidelines for the case studies in WP 3.3

#### **Deliverables:**

- First draft report identifying relevant regional and local economic policies and identifying the relevant literature concerning the impacts (FIR)
- Second draft report summarising policy impacts and including guidelines and questions for case studies (SIR)
- Final report on impacts of regional and local economic policies, integrating results of case studies (FR)

## 3.2 Analysis of regional impacts of EU-level macroeconomic policies

#### (a) EU economic policies

The common market was created in order to increase competition in the EU, which should raise efficiency in the economic production and as a result create consumer's and worker's benefits by lower market prices and higher demands for production/services. The common market rules defined at the EU level (such as free movement of goods, capital and persons, breaking of national monopolies (such as energy, water, postal services and opening of public tendering to the whole EU a.s.o.) may have resulted in territorially diverse effects.

- What are the territorially most influential elements/measures of the common market introduced since the Maastricht Treaty?
- Which regions/types of regions can be expected to benefit most from positive impacts of EU economic policies and attract investments of companies and foreign investors above average? And which regions/types of regions are likely to benefit less?
- Which kind of economic effects could be identified and related to specific territories and/or types of regions? Are spatial patterns resulting from specific measures apparent?
- Can any patterns of core-periphery be revealed at European scale or are the territorial impacts supporting a balanced territorial development? Is it a correct hypothesis to assume that the EU economic policies contribute to territorial cohesion?
- Do EU economic policies have significant spatial effects on the regional balance within national territories?

This work package aims at addressing the issue of evaluating the impact of EU-level economic policies, such as free movement of goods, capital and persons, liberalisation of formerly nationalised sectors, anti-trust, EU-wide public tendering, common currency, etc. Particular attention should be paid to the EU State and Regional Aid mechanisms which provide a more geographically localised intervention.

All these policies impact regions in quite diverse manners from quite obvious issues such as business localisation based on State Aid and loss of regional monopoly power in energy, water and electricity supply to more complex impacts such as migrations of factors of production, less protection and support to local economic actors within the regional economy, loss of exchange rate flexibility which concerns mostly exporting regions, etc.

One classical approach to such impact analysis would be a quantitative, econometric modelling approach. This could take several forms:

- create a new model from scratch including the most important EU-level policies
- use an existing impact assessment model (such as the QUEST model<sup>5</sup>) and regionalise it
- use an existing regional econometric model (such as the MASST model from project 3.2) and integrate policies as determinants

<sup>&</sup>lt;sup>5</sup>http://europa.eu.int/comm/economy\_finance/publications/economic\_papers/economicpapers123\_en.htm

However, each of these solutions suffers from the same inherent problems: complexity of the matter and lack of quantitative data at regional level. The problem of complexity results from the interaction of a whole series of driving forces (such as global economic developments, inflation, exchange rates, demography, etc) from which the model would have to isolate the one policy that is assessed. This means that in order to be able to attribute any "unexpected" developments to policy, the model actually has to be able to estimate all the other driving forces well enough to exclude their influence on the residuals. In addition, policies interact with each other, and it is thus very difficult to isolate the effects of one single policy from all the others.

But even if these methodological problems could be solved, any analysis of regional impacts will be seriously hampered by the lack of data at that scale. Either the data just simple does not exist, or it is not precise enough, or, the data that does exist is a simple regionalisation of national data and thus void of interest for exact impact assessment in which it is precisely the intra-national differences which we are looking for.

Several ESPON projects have experiences the above-mentioned dilemmas (e.g. 2.1.2, 2.2.1, 2.2.2, 2.2.3), all being confronted with both a severe lack of data and of the necessary resources to perform any substantial and deep quantitative analyses.

In any case, such a task of quantitative regional impact assessment of EU-level economic policies would be worth a project of its own, instead of just part of a larger project whose resources are already quite limited.

The team, therefore, proposes to address this issue in two ways which should provide the most value added to ESPON with the given time and resource constraints:

1) A literature review summarising the current state of knowledge concerning regional impacts of EU-level policies

This literature review will include both scientific literature (journals such as, notably, *Regional Studies*) and grey literature, mostly from within the Commission<sup>6</sup>. Both theoretical and empirical works will help identify the main cause-and-effect relationships between macro-economic policies and regional economic development. As such, this synthesis of the current state of knowledge will already be quite useful, both politically and scientifically.

It will, however, also allow to select some of these relationships and perhaps test them empirically. To this aim, the team will develop logical models of the flow from policy objectives and implementation to outcomes and impacts<sup>7</sup>. Not all the pieces of this chain of causes and effects are measurable, but some can be approached by proxies, and other can be evaluated on a case study basis in order to at least validate the basic hypothesis behind them. Thus, this work package will provide inputs into the guidelines for the case studies in WP 3.3

<sup>&</sup>lt;sup>6</sup>Good starting points could be for example <a href="http://www.evalsed.info/">http://www.evalsed.info/</a> and <a href="http://europa.eu.int/comm/secretariat\_general/impact/index\_en.htm">http://europa.eu.int/comm/secretariat\_general/impact/index\_en.htm</a>

<sup>&</sup>lt;sup>7</sup>See http://www.evalsed.info/frame\_techniques\_part1\_4.asp

In case the analysis shows that some of the identified relationships can easily and reliably be tested with existing quantitative data, this will be done in parallel to the case studies.

2) A feasibility study concerning a quantitative assessment of regional impacts of EU-level policies

In the perspective of future ESPON research the above literature review, in addition with an exhaustive survey of necessary and available data, will flow into a feasibility study concerning possible approaches to a quantitative assessment process. This will include both a critical analysis of existing methodologies with the aim of identifying those that seem the most promising for future research, but also those that could be used within a policy process. Depending on the identified methodologies, the data situation will be assessed and unfulfilled data needs listed.

The combination of both a synthesis on the current state of knowledge concerning regional impacts of macro-economic policies and a feasibility study for future quantitative assessments seem to the team the most cost-efficient and the scientifically most sound way of answering the demands of the terms of reference.

#### Summary of contents of WP 3.2:

- literature review and synthesis of current state of knowledge on regional impacts of macroeconomic policies, notably EU-wide policies
- identification of most important policies and most probable cause-and-effect relationships in the form of logical models
- elaboration of guidelines for the evaluation of the identified relationships within the case studies in WP 3.3
- identification of the most promising methodologies for quantitative impact assessments, both on a scientific level and on a policy level
- analysis of data availability and data needs according to the identified methodologies

#### **Deliverables:**

- Draft report summarising current state of knowledge concerning regional impacts of macro-economic policies, notably EU-wide policies, including identification of most important relevant EU policies (FIR)
- Draft report concerning first evaluation of existing methodologies for impact assessment and data situation (FIR)
- Second draft report on regional impacts of macro-economic policies and logical models on cause-and-effect relationships and questions and guidelines for case studies (SIR)
- Second draft report concerning methodologies and data needs (SIR)
- Final report concerning regional impacts of macro-economic policies, integrating case study results (FR)
- Final draft report concerning methodologies, integrating case study experiences (FR)

#### 3.3 Case studies

#### (b) National, regional and local economic policies

National, regional and local authorities make efforts to attract the location of companies and activities by a range of measures. On the national level measures such as taxation policy, monetary policy implying regional and sectoral incentives, public investment in R&D, transport infrastructures, and other framework conditions relevant for the choice of the location of companies/activities.

In addition, member states provide economic support to certain parts of their national territory through the EU State and Regional Aid mechanism. As well the impacts of the current general reform of State Aid policies – which calls both for a reduction in overall aid levels and a better targeting of aid measures, towards measures which support the realisation of the objectives and targets set as part of the implementation of the Lisbon Agenda – should be envisaged.

• How in particular do the State and Regional Aid mechanisms influence investments and location parameters?

The regional and local levels are more committed to the conditions on the spot in cities as well as the countryside, such instalment of industrial and commercial districts, services of general interest, improvement of environmental qualities and living conditions.

Based on findings from a representative number of case studies covering both the national, regional and local perspective the following questions should be addressed:

- To what extent do economic measures at national, regional and local level to influence the territorial patterns of national territories? What are the most crucial fields of lack of coordination between measures taken at national, regional and/or local level?
- What seems to be the concrete economic policy measures mostly used and most influential on territorial development at the three levels? Are there any general approaches or patterns in dealing with these issues?
- Relevant for attractive location conditions could also be how coordinated and integrated regional development programmes meet the demands of companies and investments. Do examples on the implementation of integrated development programmes reveal a positive correlation?

As the project has to cover the entire ESPON space, it will be impossible to develop quantitative analyses at the local level. Case studies will, therefore, be used to explore the interplay and the impacts of policies coming from different levels of political action, but all addressed to regional and local development.

The case study areas will be chosen on the basis of the empirical results of WP 2.2, grounded in the general framework and working hypotheses developed in WP1, as well as on the basis of the results of WP 3.1 and WP3.2. The idea is not to cover the entire ESPON space, but to identify types of regions which should be studied more deeply in order to identify mechanisms of policy impacts.

#### 1. Preliminary ideas concerning possible types of regions to study:

Given the limited time and means available to carry out the analysis, we suggest concentrating the case studies on a preliminary selection of regions (one or two regions per category cold be analysed) out of the following types:

- less favoured region(s) (for example "representative" objective 1 region(s));
- industrial region(s) (for example Third Italy);
- metropolitan region(s) (for example Île de France, Greater London)
- agricultural and rural region(s) (for example "representative" objective 2 region(s));
- innovative region(s) (for example Baden Württemberg, Oberbayern, Stockholm, Uusimaa)
- if the evaluation foreseen in WP 2.2 of the relevance of the ESPON typologies for territorial economic development is positive: regions corresponding to particular types identified in these ESPON typologies

#### 2. First ideas on contents and methodology of case studies:

- a) identification for each type of region covered by the case studies of policies implemented by
  - European,
  - national,
  - regional,
  - local

authorities in order to improve the "local" attractiveness with respect to the location choice of companies and FDI;

- b) evaluation of the degree of coordination of policies identified at point a);
- c) appreciation regarding the coherence of the different levels of intervention and governance (according to the subsidiary principle) and identification of possibly "perverse" effects;
- d) evaluation of results and impacts of implemented policies;
- e) analysis of relations and proportions of endogenous development compared to FDI and evaluation of impact of policies on endogenous development;
- f) identification of best practices and policy recommendations.

As much as possible and obviously depending on availability, quantitative data will be collected for each case study, concerning economic and population structures, policy implementations, and other relevant indicators, identified in the preceding WP.

## Summary of contents of WP 3.3:

- Selection of case study areas
- Case studies on the basis of the guidelines developed in WP 3.1 and 3.2

#### **Deliverables:**

- Selection of case study areas and draft case study guidelines integrating propositions from preceding WP (SIR)
- Report on individual case study results (FR)

### 3.4 Analysis of case study reports and conclusions

This WP will synthesise the results of the individual case studies according to the questions and guidelines proposed by preceding WP. The main aim will be to evaluate which elements observed in the case studies can be generalised into a typology of regions, policies and impacts, in order to be put into relationship with the hypothesis formulated on the basis of the results of the other WP under sections 2 and 3.

The regional cases will be positioned both in terms of their economic activities, their endowments in different components of attractiveness and the policies implemented on their territories. Other more "exogenous" factors such as the demographic structure will also be taken into account in the classification of the cases. This classification will then guide the interpretation which is expected to highlight the different territorial patterns of development and to identify mechanisms of success and failure of policies, as well as possible missmatches in the coordination of instruments developed at the four levels (European, national, regional and local). This implies that the above mentioned components and indicators will be declined according to this same hierarchy. Depending on data availability, this analysis will integrate both, qualitative and the quantitative dimensions.

The outcome of this WP should "pre-digest" the individual case study reports to allow the other WP to quickly extract the necessary information for their individual analyses. The aim is , therefore, to harmonise the case study results according to the analysis criteria defined by the other WP, so that they can then easily access whatever they need.

#### Summary of contents of WP 3.4:

- Synthesis of case study results

#### **Deliverables:**

- Synthetic report on case study results (FR)

## 4 Integration of results

All these parts will then have to be combined to elaborate a 'map' of Europe integrating economic trends and economic policies:

It is requested that the project integrate the findings in trying to characterise the territorial diversity and dynamics within Europe. In doing so the project should apply the three level approach used within the ESPON programme displaying spatial patterns at European scale as well as at national and regional/local scale (as far as possible based on cases).

Questions to address include the following:

- Are the winning regions dominantly regions part of MEGA's and the core area of the EU? Or are the prospects of a beneficial influence equally distributed to regions characterised by small and medium sized cities (second tier of the urban system) and rural areas, and/or specific areas such as peripheral, mountain areas and islands?
- Can any spatial patterns be detected in relation to access, innovative capacity and tacit knowledge, governance and environmental qualities (in a broad sense)?
- What is the territorial capital (the territorially bound key assets) most relevant for economic development, which might be supported by policy measures?

Part of the above questions will be answered through WP 2.2 and WP 2.3. The aim of this WP is to "digest" the results of all work packages in order to extract the most important overall trends from a policy perspective. In order to make the results as policy-relevant as possible and to provide the necessary input for the elaboration of policy recommendations, the information obtained in the preceding WP's has to be integrated and synthesised to analyse the possible interactions between economic trends and public policy and the potential levers according to the types of regions and the levels (and types) of political action.

It is in this work package that we will examine whether the results of parts 2 and 3 of the research confirm the overall research hypothesis presented in section II, i.e.: has the regional environment become the main locational factor (and if yes, which specific characteristics of it) and has this led to a re-metropolisation of economic activities? And which policies have what type of impact on this process of re-metropolisation?

In order to answer these questions, the different types of regions, growth paths, enterprise localisation choices and policies will be overlayed in order to identify links and contradictions. This could theoretically be done through quantitative methods – and will be wherever possible - crossing different indicators in order to build typologies of regions. The results of this exercise would then constitute new indicators for the ESPON indicator collection.

However, we will probably not dispose of a complete database showing all possible policy interventions at NUTS 2 level (see caveats listed in the introduction to this part). It will, therefore, not be possible to create a map of the entire ESPON space at this spatial scale,

summarising the information concerning policy interventions and impacts in relation to localisation trends. Or at least not a scientifically sound map.

In view of the complex nature of the subject, a qualitative evaluation seems more realistic. This will lead to the identification of qualitative types of regions, integrating, in their definition, types of economic development and types of policy interventions. These types can then be (qualitatively) evaluated through the lens of the ESPON core typologies, in order to evaluate whether any links can be identified.

Obviously, any typology developed in this WP will have to differentiate between the three ESPON scales in order to clarify its relevance to a specific level of analysis and decision-making.

Attention will also be paid to social impacts of specific types of growth and specific types of policies, in order to provide possible inputs into the debate concerning the territorialisation of the Lisbon and Gothenburg strategy.

We will also integrate results of other ESPON projects in this WP, such as 3.3, 3.4.1, 2.2.1, 2.2.2, but also 2.3.1 and 2.3.2. All these projects cover elements of economic trends, policy impacts and policy implementation and are, therefore, relevant to the analysis of economic policies at regional level.

As an end-result, this WP should paint a general picture of European regional economic trends and identify different policy-relevant types of regions and the levers that do exist for policy makers within these types of regions, thus feeding into the policy recommendations of WP5.

#### Summary of contents of WP 4:

- Summary and integration of the results of WP 1, 2 and 3
- Elaboration of typologies of regions according to their development paths and their probable response to public intervention
- Presentation of the results in form of qualitative typologies (and maps if possible)
- Provide input into other ESPON projects, notably 3.2 on "Spatial Scenarios"

#### **Deliverables:**

Report synthesising the general trends of localisation of economic activities, both at the regional
and at the enterprise level, crossing the identified regional types with types of regions according to
policy implementations and impacts, in order to identify particular development paths inviting
particular policy responses (FR)

## 5 Policy recommendations

Finally, from the synthetic vision developed in WP4 and the general findings, policy recommendations are to be deduced:

Policy recommendations in the form of option for policy decision should be made considering a range of relevant issues covering questions such as:

- Which kind of territorial endowment (polycentricity, rural areas, urban areas) and functionality (access, services of general interest, environmental qualities, etc.) offers the best conditions for which kind of companies and investments? What lessons could be learned for spatial strategies and policy in general?
- What role could the understanding of territorial capital play in a supporting a successful economic development?
- What conclusion can be drawn on the impact of EU economic policies for the EU cohesion policy?
- In which policy fields could an enhanced coordination of EU sectoral policies benefit spatial economic development and vice versa?
- On the national level, how could the research results contribute to considerations on introducing elements of cohesion in economic policies? Could such efforts bring added value in fully exploring the competitiveness in different regions/territories?

In developing policy recommendations a particular close coordination will be needed to project 3.3/Lisbon and to project 2.3.1/ESDP application in dealing with issues related to questions such as:

- How do the findings relate to the Lisbon/Gothenburg agenda, does it mean that increased competition in the EU has an effect on the territorial development, which are the regions most benefiting and most suffering from this approach?
- How is the ESDP addressing the important aspects relevant for the regional economic development check of policy option, definition of improvements?

Decision-makers dealing with territorial/regional development can find supporting information on SWOT for their region/territory. Information on the parameters illustrating private sector decisions for locating new activity (or relocating existing) would contribute to improving territorial development strategies as well as to finding comparative advantages for territorial cooperation.

For further development of EU cohesion policy, and in particular an application of territorial cohesion and cooperation, the research results are envisaged to contribute to the understanding of the diversity of Europe and indirectly to targeted priorities towards specific regions/territories.

ESPON is a policy-oriented applied research program. The main aim of this project is, therefore, to develop results that are understandable, usable and relevant for policy makers. This means that it is important for the project to stay informed about the current debates concerning the reform of State and Regional Aid. It also means that preliminary results will have to be validated by policy makers (in the ESPON Monitoring Committee) in order to readjust the research if necessary.

As the terms of reference state, the final objective is not to develop normative policy recommendations, but to describe policy options in a way allowing policy makers to make informed choices. The integrated analyses developed in WP 4 will constitute the main basis for the description of such policy options which cannot be universal, but will depend on the specific context, both structural / economic and political.

An important issue concerns the question of integration of policies. There the case studies will be a main source of information and will, therefore, have to be chosen carefully in order to reflect the main types of regions that European policy makers might encounter. But the logical models of impact developed in WP 3.2 will also help put a little light into what now seems to be a black box, i.e. the regional impacts of macro-economic policies. This will be an interesting example of the necessity of multi-level thinking, where the overall EU economic policy, as expressed in the Lisbon and Gothenburg strategy and, more recently, in the plans for its implementation presented by the Barroso Commission have to take into account the possible impacts on regional level.

At the same time, the research results and particularly the links between types of development paths and types of policy interventions will also give regional policy makers the tools to position their regions in the context of the overall economic trends and policies, and thereby evaluate the particular potentials and threats their regions are exposed to.

One of the challenges will be to make the link between economic trends and policies and the general ESDP objectives, most specifically policy options 1-18 and and 35-39. The project will have to rely on existing ESPON results in order to operationalise some of these objectives, notably project 2.3.1 in order to see how the ESDP has actually been implemented in different European regions. It is obvious that notions such as territorial cohesion and polycentrism contain a great amount of economic elements, especially where they are linked to social well-being. The answers the preceding research will bring to the overall research hypothesis presented in section I, notably the question concerning a possible remetropolisation and re-concentration of activities, will, therefore, be of prime importance in the understanding of how territorial structures are influenced by the current trends.

Another important aspect will be the elaboration of a typology of types of growth according to their social impacts, measured through employment evolutions for example. This also directly leads to the Lisbon/Gothenburg strategy and its ambitions to combine strong economic growth with both social cohesion and sustainable development. Project 3.3 will provide the necessary framework to allow a critical analysis of the possible impacts of the Lisbon/Gothenburg strategy and the combination of results from both projects should allow the identification of "winning" and "losing" types of regions and the factors determining the reasons for these evolutions, including in a wider sense than the unique GDP per capita. Thus,

propositions can be made concerning a more territorial orientation of the Lisbon/Gothenburg strategy.

In conclusion, the aim of this project cannot and should not be to bring definite answers to policy makers at all scales and in all individual regions of Europe. On the contrary, the project will provide tools for decision-making, and will uncover, on the one hand the possible contradictions between global policy goals at macro-level and the needs of regional territorial development, and on the other the "costs of non-coordination" between different scales of policy making.

### Summary of contents of WP 5:

- Translate the results of the other WP, and especially of WP 4 into policy-relevant information
- Integrate results from other ESPON projects, notably the operationalisation of policy concepts
- Feedback round with the MC concerning policy recommendations
- Final policy recommendations
- Ideas concerning possible future research, indicators and data needs

#### **Deliverables:**

- Report on most important policy-relevant results (FR)
- Report on ideas for future policy-relevant research, notably concerning regional impact assessment, including data needs and ideas for indicators (FR)

<sup>&</sup>lt;sup>8</sup>See Robert J. (co-ordinator) -Stumm T. - De Vet J.M. -Reincke C.J. - Hollanders M. Figueiredo M.A., Spatial impacts of Community Policies and costs of non-co-ordination, DG Regional Policy EC, 2001

## **IV Project management**

In addition to the work packages concerning the specific research questions, the two packages of this section deal with the more global tasks of networking and team management.

## 6 Networking with other ESPON projects

As already said above, our project will investigate the hypothesis that economic performances are more and more linked to specific 'environment'. In this respect, the project will obviously use the results of other ESPON projects so as to analyse the spatial diversity of regional 'environments' in relation to economic activities.

Regarding already finished ESPON projects, our TPG will investigate the possibility to use existing typologies from projects:

- 111, e.g. FUA/MEGA and PUSH/PIA typologies
- 112, e.g. urban/rural and land-use typologies
- 121 & 211, e.g. transport infrastructures endowment, accessibility, traffic volumes
- 114, e.g. population structure
- 122, e.g. telecom supply
- 212, e.g. R&D expenditures
- 1.3.2, e.g. influence of high-valued natural environment on the attractive character of regions for specific economic activities.

Regarding on-going ESPON projects, networking will be developed with projects:

- 3.3: concerning the specific issues around the Lisbon/Gothenburg strategy, the notion of regional competitiveness and the indicators proposed by this project;
- 3.2: concerning trends and driving forces of distribution of economic activities, especially the result of the MASST model;
- 3.4.1: concerning the impact of globalisation on different types of territories;
- 2.4.2: concerning the linkage between economic activities and other, possibly synthetic territorial indicators such as RCE
- 1.1.3: concerning the specific questions of the impact of enlargement on the European economic geography;
- 2.3.2: concerning the types of territorial governance and their possible link (cause & consequence) with economic performances;
- 2.3.1: concerning the link between on the one hand, economic trends and policies and on the other hand, general ESDP objectives and the way they are applied by Member States
- 1.3.3: concerning the possible impact of the presence of high-valued cultural heritage on the regional attraction of specific economic activities.

At least one of our TPG members participates in each of these projects and can, therefore, ensure the necessary information flows and the avoidance of potential overlaps. In particular, as many of the above projects conduct case-studies, it might be interesting to pool the results of the different studies in order to profit from a greater number and a greater variety of approaches.

Regarding future ESPON projects, and although it is difficult foresee at present time, some interactions could be searched with projects:

• 1.4.2 on social trends, especially concerning the link between regional economic performance and social welfare;

- 1.2.3 on information society, concerning the spatial trends of ICTs and their link to economic performance;
- 2.4.1 on environment, concerning the contribution of environmental factors to the competitiveness of territories.

## 7 Team management

This work package concerns the general organisation of the team's work flow, including the following elements:

#### 1. General management:

This includes the management of contracts, financial management and general coordination and internal TPG networking in order to ensure an efficient organization of the work (including, amongst others, a mailing list and web page)

#### 2. Meetings:

3 meetings of 2 days of the entire team (experts included), plus participation at the ESPON seminars.

These meetings will probably take place in June, November and March.

#### 3. Reports:

The ToR foresees 2 interim reports and 1 final report.

Reports and meetings will be the occasion to raise eventual problems and to re-orientate the work in progress. Thus every 2 or 3 month this will give us the occasion to have a deep look in the work in progress.

#### 4. Centralising Work Packages:

The Lead Partner is responsible for WP 1, 4, 5 and 6. All these packages strongly ask for synthesizing work. Thus, it is natural that the LP is in charge for those packages as this will ensure that the overall orientation of the project remains coherent. Small internal reports and draft reports, email and phone will be used to communicate between the LP and the partners responsible for the different parts of WP2 and WP3.

#### 5. Validation:

It will also be very important to keep a constant contact with the ESPON CU and MC in order to ensure that the methodologies and orientations elaborated during the project correspond to the demand.