

## ESPON

### Terms of Reference Project 1.4.4

#### Preparatory Study on Feasibility on Flows Analysis

##### *(o) Political challenges for the ESPON Programme*

In the Second and Third Reports on Economic and Social Cohesion (published 2001 respectively 2004) the Commission addresses an approach on territorial cohesion within the European Union. Beside economic and social cohesion, territorial cohesion is essential for better co-ordination and policy-making in the relationship to a more balanced and sustainable development of the European Union.

In this context the Reports on Cohesion follow up the European Spatial Development Perspective (ESDP), adopted in May 1999. Territorial development within the above mentioned framework seizes an integrated approach in the way that it concentrates on the balance of areas and regions of the European territory considering all spatial applicable factors. From this outlook, territorial development covering a variety of factors stretching from economic to cultural, from natural to social. However, territorial development is a multifarious process and it should be emphasized that it can not be simplified and it is a subject for continuous exploring.

The projects proceeded within the ESPON 2006 Programme shall follow the integrated approach as above mentioned as well as to cover a wide range of additional concerns, mentioned in the Interreg III Community Initiative- Art.53. Supplementary to this, the ESPON 2006 projects shall cover a wide range of issues on spatial development acknowledged in the ESPON 2006 Programme:

- Identifying the **decisive factors relevant for a more polycentric European territory**; accessibility of a wide range of services in the context of enlargement; integration of wider transnational spaces; promotion of dynamic urban growth centres; linking peripheral and disadvantaged areas with those centres; etc.
- Developing **territorial indicators and typologies** capable of identifying and measuring development trends as well as monitoring the political aim of a better balanced and polycentric EU territory.
- Developing **tools supporting diagnoses of principal structural difficulties as well as potentialities**, such as disparities within cities and regenerating deprived urban areas; structural adjustment and diversification of rural areas; strategic alliances between neighbouring cities at transnational, national and regional scale; new partnerships

between rural and urban areas; potential support from infrastructure networks in the field of transport, telecommunication, energy; etc.

- Investigating **territorial impacts of sectoral and structural policies** in order to enhance synergy and well-co-ordinated decisions relevant for territorial development within policy fields such as Structural Funds, agriculture, transport, environment, research and development; developing methods for measuring the territorial impact of sectoral and structural policies; etc.

- Developing **integrated tools in support of a balanced and polycentric territorial development**; approaches to enhance the potential of cities as drivers of regional development, new tools for integrated urban-rural development and planning, etc.

With the results of all the ESPON projects, the Commission and the Member States expect in particular to have at their disposal: **a diagnosis of the principal territorial trends** at EU scale as well as the difficulties and potentialities within the European territory as a whole; **a cartographic picture of the major territorial disparities** and of their respective intensity; a number of **territorial indicators and typologies assisting a setting of European priorities** for a balanced and polycentric enlarged European territory; some **integrated tools and appropriate instruments** (databases, indicators, methodologies for territorial impact analysis and systematic spatial analyses) to improve the spatial co-ordination of sector policies.

In this respect, the ESPON projects are intended to serve as an evidence and knowledge base for further policy development, in particular at European level, in relation to the Structural Funds 2007-2013 and in relation to the ongoing inter-governmental process on the state and perspectives for territory of the European Union.

### ***i) Relation to the ESPON 2006 Programme***

The priorities for the ESPON 2006 Programme are as following (The ESPON work-program p.13f):

1. **Thematic projects** on major spatial developments on the background of typologies of regions and the situation of cities.

2. **Policy impact projects** on the spatial impact of Community sector policies and Member States' spatial development policy on types of regions with a focus on the institutional inter-linkages between the governmental levels and instrumental dimension of policies.

3. **Co-ordinating and territorial cross-thematic projects** represent a key component of the programme. These projects evaluate the results of the other projects towards integrated results such as indicators system and data, typologies of territories, spatial development scenarios, etc. The cross sections projects help to thematically co-ordinate the whole programme and add value to the results and to fill gaps which are unavoidable when different themes are dealt with in different projects.

4. **Scientific briefing and networking** in order to explore the synergies between the national and EU sources for research and research capacities.

The first strand also includes deepening projects, and studies on new thematic projects.

Project 1.4.4 fits in under the first strand and particularly under studies on new thematic projects.

The preparatory study must comply with the aim of setting out the means of expression for the coming study and it is therefore of high importance that this study from the beginning undertakes the right integrated perspective and objectives of the ESPON Programme. Consequently, a strong co-ordination is needed with projects under the same strand as well as with coordinating project 3.2, and the ESPON Co-ordination Unit.

## *ii) Thematic scope and context*

The aim of the project is to assess the feasibility to continue and deepen some elements of the analysis of existing ESPON projects. The focus is mainly on flows (e.g. transport, migration, investments, capital) which have not been considered so far. The study is a feasibility study which shall assess which types of flows are possible to integrate into future applied research. The focus is on four distinct aspects:

1. Discussion of different types of flows and the feasibility of their analysis
2. Test of flow analysis in selected areas
3. Considerations on the findings deriving from flows
4. Recommendations for the future

### Discussion of different types of flows and the feasibility of their analysis

Both in terms of methodology and data accessibility the integration of flow analysis into ESPON research is challenging. Therefore, this study shall investigate what kind of flows can possibly be integrated into ESPON research and how. The projects on transport and demography contain first considerations on flows which can be further developed and the project is certainly encouraged to also take other types of flows into consideration. The aim is to provide an overview on which types of flows can be investigated.

### Test of flows analysis in selected areas

Once a feasibility check of the integration of flows has been made, selected types of flow analysis shall be analysed in selected geographical areas. The aim of this is to provide insights on how the flow analysis can work in practice.

### Considerations on the findings deriving from flows

Taking into account that flows between areas are only a small section of flows and activities, a careful consideration of the findings from flow analysis is necessary. How does flow data enrich the territorial analysis carried out by ESPON in particular in relation to the analysis of places and the fact that a lot of flows and interaction happen within these places which might be of higher importance than the flows between places. The aim is to provide insights on the actual usefulness and value added of possible flow analysis.

### Recommendations for the future

Based on the previous aspects, the project will draw up recommendations for possible projects taking into account flows under ESPON 2.

### **Indicative content and key scientific questions**

The key questions to be considered for this are:

1. Which flows can how be integrated into future ESPON analysis?  
The project needs to review the discussion on flows between territories and the actual state of the art of data availability and methodologies for flow analysis. This involves also an overview on which types of flows can possibility be taken into consideration.
2. What are the implications of the integration of flow data?  
The project needs also to provide insights on the actual meaning of findings deriving from the possible flow analysis and what they add to current ESPON research.

### **Expected results and policy relevance**

The results are expected to further deepen ESPON research and approach a field which has not been systematically covered by ESPON research so far, namely flows. The project will provide input needed for the development of future projects taking into account flow analysis.

### ***iii) General objectives***

This study is meant to be a preparatory study which should explore main elements related to aspects of territorial flows and dynamics, and prepare for an ESPON applied research project to be financed in the next programming period.

The study should therefore unite to the following general objectives:

- The study should be built and expound upon the existing ESPON research framework and policy objectives within ESDP and other recent and related documents with regard to balanced, sustainable development and territorial cohesion. Of particular interest are here the projects on transportation (1.2.1 and 2.1.1), demography (1.1.4), rural-urban relations (1.1.2), polycentric development (1.1.1), economy (3.4.2), integrated tool (3.1) spatial scenarios (3.2) and Europe in the world (3.4.1).
- The study should lay down a scientific research basis, i.e. overview on existing research works and policies in the field, definition of appropriate concepts, proposals for indicators, datasets which are relevant in the scope of a future applied research project, to measure and display trends and disparities within and between EU 25+2+2 regions. It is envisaged that the work provides an overview on policies, existing research works, and indicators in the field including information on data availability and comparability. The list of indicators proposed should be territorial indicators, covering the EU 25+2+2 territory, preferably at NUTS 3, or at another appropriate territorial scale (lower than national) to be defined by the study.

- The main final aim should be the elaboration of a proposal for a future applied territorial research covering the theme.

#### *iv) Primary research issues envisaged*

The preparatory study should provide information and guidance covering the following:

##### **Which flows can be integrated into the ESPON analysis?**

Europe is an integrated territory with considerable interactions and flows between different areas and places. This interaction between regions is likely to offer a strong measure of spatial integration and to provide current ESPON findings with a more dynamic complement.

So far only a very few ESPON projects have touched upon the analysis of flows. The reasons are partly that it has not been part of their primary research issues but also because of considerable challenges with regard to conceptual and methodological aspects as well as data availability.

##### *Which types of flows are of interest for ESPON?*

Therefore, the project is asked to look into different types of flows and discuss whether it is possible to integrate a flow analysis into the ESPON research. This should consider flows both at European/transnational level, i.e. between regions or functional urban areas, and at regional level, i.e. between neighbouring areas, within larger functional urban areas and between rural and urban areas.

The project is asked to discuss a possible wide range of different types of flows, including issues such as transport (both of goods and passengers by different modes, cf. ESPON 1.2.1 and 2.1.1), intra- and inter-regional migration (cf. ESPON 1.1.4) (possibly also including trans-national patterns of student migration for study purposes, cf. ESPON 1.1.1), trade flows and financial flows (e.g. foreign direct investments).

Existing ESPON projects provided already some insights on which type of flow analysis should be further considered. This may serve as point of departure for a discussion. The following presents some examples:

- Transport (project 1.2.1)  
Future research should include a matrix of good exchanges inter and intra NUTS, as well as a flow matrix of person transfers and trips inter and intra NUTS. Further more it needs to be considered that the flows of travellers and goods are assigned on the network (at the first iteration) from the present time. The modal assignments are not homogenous between various origins-destinations (existence or not of specific networks, interoperability).
- Demography (project 1.4.1)  
The data available for domestic/national migration, where the regions of origin and destination are known, is on the NUTS2 level. The project is however convinced that most migratory flows actually exist within NUTS2 regions. To be able to analyse these migratory flows data on NUTS3 level is necessary. Regarding the international migration two urgent research efforts have been identified; (a) the

region of origin and the region of destination need to be identified for the international migrants, and (b) in the case of extra-European immigration or emigration, the country of origin or destination must be identified. These two research efforts are needed to distinguish an intra EU29 labour migration from the refugee immigrants and return migration of refugees. When it is possible to distinguish the different types of migrants, it is also possible to analyse e.g. the integration of the common labour market and the intra-EU29 migrations caused by the common labour market.

As also other ESPON projects have indicated further research related to flow issues in their reports, the discussion on which flows might be relevant to study should certainly start with an assessment of already carried out ESPON research and the indicated need for future research (each ESPON report has a special section on this).

*Which concepts and methods need to be considered for the analysis?*

The assessment of which of type of flows can be discussed at what level, needs certainly also to touch upon conceptual and methodological issues. This may involve different models for assessing inter-regional interaction (e.g. capacity interaction models, spatial interaction model, geographical interaction models or regression models similar to gravity models), as well as considerations on barrier effects etc.

*Is the data needed for the analysis available?*

Last but not least, the issue of data availability needs to be assessed. All ESPON projects are required to work at the suitable/lowest possible geographical level (within ESPON mainly NUTS III or Functional Urban Area level) and cover all 29 countries of the ESPON space. This poses frequently challenges to the data collection and data harmonisation. Therefore it is necessary to provide an appreciation of the data availability or the possibilities to fill gaps with through modelling exercises or proxies. The ESPON Data Navigator can be a point of departure for this, but more detailed investigations on data availability will be necessary.

**What are the implications of the integration of flow analysis?**

*How can a flow analysis work in practice?*

The overview of interesting flows and the feasibility of their analysis within the framework of ESPON shall be taken one step further. In order to illustrate how such a flow analysis can look like - considering issues such as suitable/lowest possible geographical level - a feasibility check of the integration of flows is necessary.

For this purpose selected types of flows shall be analysed within selected geographical areas. The aim of this is to provide insights on how a flow analysis can work in practice. An important element in the working step is the relation of the flow analysis to other ESPON findings.

The precise selection of which flows shall be analysed in which areas needs to be discussed with the ESPON CU on beforehand.

*Which findings derive from the analysis of flows?*

As an applied research programme, the type and practical relevance of research findings are of utmost importance for ESPON. Therefore, the project shall provide an assessment of the findings to be expected from different types of flow analysis.

This exercise needs to take into account a number of starting points:

- **3-Level-Approach**  
All ESPON projects are asked to apply the 3-Level-Approach meaning that research results and their implications need to be discussed at macro (European), meso (transnational/national) and micro (regional/local) level. This needs also be considered when assessing flow findings, e.g. in terms of inter-regional European and domestic flows and intra regional flows.
- **Relation to existing ESPON findings**  
ESPON works towards a better integration of results deriving from different studies. Therefore it is necessary to assess how flow analysis can link to existing studies and contribute to increasing the understanding of territorial development trends in various fields already assessed by ESPON.
- **Relation to policy relevance**  
The main aim of ESPON is to provide new insights for evidence-based policy making. Therefore it is necessary to assess how the flow analysis can link to current policy debates as document in relevant documents such as, the Community Strategic Guidelines, the draft Structural Funds Regulations or the scoping document on the Territorial State and Perspectives of the European Union.

#### **What should ESPON focus on in future?**

Finally, the results on the feasibility of different flow analysis and their assessment as regards the practical implications and relevance within the ESPON context, need to result in proposals for future policy-relevant research regarding flows in territorial analysis. The study should be regarded as a pilot project aiming at giving deeper understanding of the complexity of the scientific questions related to the theme. It would be considered as a positive result if an outcome of the pilot project could be a draft of a set of Terms of Reference for much more detailed research projects, which may be carried out within the realm of ESPON II.

#### ***v) Expected results and timetable***

The deliverables of this study should be as far as possible highly operational and coordinated in time and fit into the relevant political agenda. The following time table for deliveries is supposed to reflect these priorities:

#### **Interim Report, 31 May 2006**

The interim report will mainly concentrate on delivering an in-depth examination of policy documents and already existing research works in the field, and a list of relevant data, existing at European level and/or from National statistical offices. The interim report will therefore include the following:

- a) Overview of flows which might be of interest to be studied by ESPON, taking into account results from existing ESPON projects and the current policy debate.

- b) First assessment of feasibility to analyse these flows at an appropriate geographical scale for EU29. This should include reflections on conceptual and methodological issues as well as considerations on the availability of data.
- c) Proposal for a selection of flows and areas to be used for a feasibility check.

### **Final Report, 31 October 2006**

The final results should incorporate:

- d) Final overview on which flows will be sensible to address in future ESPON research incl. an assessment of their feasibility.
- e) Feasibility-check or model analysis of selected flows in selected areas.
- f) Overview of which additional findings can be expected from the various discussed/feasible flow analysis.
- g) Recommendations for future research and focus of future ESPON projects in the field flows.

### ***vii) Existing access points***

The access points listed below will serve and provide the tender with constructive information in the process of preparing a proposal for this study. It is not meant to be exhaustive information; however it can serve as a guide in tracing additional existing information in this field. This list is presenting a majority of social studies and should be extended and complemented with more “territorially” oriented documents.

- **The ESPON website** ([www.espon.lu](http://www.espon.lu)) can serve as a helpful starting access point. All needed documents on how research studies within the ESPON 2006 programme are conducted, and previous research projects which can be helpful are especially those on transportation (1.2.1 and 2.1.1), demography (1.1.4), rural-urban relations (1.1.2), polycentric development (1.1.1), economy (3.4.2), integrated tool (3.1) spatial scenarios (3.2) and Europe in the world (3.4.1). As well, available at the ESPON website, the ESPON Data Navigator should serve as tool for a first EU data and indicators review.
- **The SPESP – Study Programme on European Spatial Planning** (<http://www.nordregio.se/spespn/welcome.htm>) can also serve as a helpful starting point as the ground for a number issues has been laid there. With regard to flows, in particular work on spatial integration (sub-report 1.4) can be of interest (<http://www.nordregio.se/spespn/Files/1.4.final.pdf>).
- **Other sources** as regards scientific literature and relevant policy documents need certainly also to be consulted. First access points can be provided by the references used by relevant ESPON projects.

### ***viii) Budget***

Amount allocated to this preparatory study: 75.000 €max.