

ESPON

TERMS OF REFERENCE SCIENTIFIC SUPPORT ACTION 4.1.3

Feasibility study on monitoring territorial development based on ESPON key indicators (2006)

o) Political challenges for the ESPON projects

The Second and Third Report on Economic and Social Cohesion, published in January 2001 and February 2004 respectively, presented for the first time a third territorial dimension of cohesion (beside the economic and social cohesion), which calls for a better co-ordination of territorially relevant decisions. Stressing the persistence of territorial disparities within the Union, the report stated the need for a cohesion policy not limited to the less developed areas as well as the need to promote a more balanced and more sustainable development of the European territory.

The Cohesion Reports represent in that respect a follow up of the European Spatial Development Perspective (ESDP), adopted at ministerial level in May 1999, calling for a better balance and polycentric development of the European territory. The projects launched under the ESPON programme shall follow an integrated approach and, seen together, cover a wide range of issues, such as:

- 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 spaces¹; 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.

¹ Please be aware that the term “transnational” in this Terms of Reference should not be interpreted as Interreg III B transnational spaces. In this Terms of Reference the word “transnational” indicates contiguous spatial patterns or territories across national borders, which the analysis at transnational scale will display, and which might be different for different indicators and analytical contexts.

- 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, fisheries, environment, research and development as well as impacts to be taken into account in Integrated Coastal Zone Management activities; 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.

The Third Report on Economic and Social Cohesion included new scientific knowledge and information from a series of ESPON projects. As such the ESPON programme has met one of its objectives by delivering new scientific knowledge and information on European spatial issues as basis for future policy development at EU-level and within Member States.

With the results of all 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 and of 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 will serve as a strong scientific basis for the propositions of the Commission in view of the reform of post-2006 Structural Funds.

Further information on the ESPON programme and single ESPON projects is available at www.espon.lu.

i) Relation to the ESPON 2006 Programme

The priorities describing the work-programme of the ESPON 2006 Programme are structured in four strands plus minor ESPON studies and support projects:

1. **Thematic projects** on the 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 indicator systems and data, typologies of territories, spatial development scenarios. The cross section 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 source for research and research capacities.

5. **ESPON studies** in order to deepen results already achieved and/or explore ESPON results and issues in a targeted way in response to demands from policy development.

6. **Scientific support** projects address issues of a technical and/or scientific nature that should be developed into “state of the art” documents, and as well serve as preparatory work for a continuation of ESPON activities after 2006.

This specific scientific support project belongs to the “ESPON Research briefing and scientific networking” Priority and in particular to Measure 4.1 “Datanavigator: preparatory surveys on data access and scientific support actions”.

Policy makers have expressed at several occasions the need for user friendly tools that should support them in the monitoring and assessing the evolutions of the European territory, in particular in relation to the long term territorial policy options and aims stated in relevant policy documents on territorial cooperation and cohesion from the European Commission and intergovernmental cooperation of EU Member States.

The aim of this project is to contribute to the development of a European Spatial Monitoring System for the continuous assessment of territorial development trends in relation to set territorial policy objectives. A spatial monitoring system shall provide an adequate basis for a sequential reporting based on ESPON key indicators. This study shall test the capability of the current indicators and tools of supporting a sequential reporting by elaborating a tentative spatial monitoring report.

In this process, the study shall support the identification of the most appropriate indicators allowing for a periodic assessment/evaluation of the evolution of the European territory towards the acknowledged territorial policy options and aims as stated in the most relevant European Commission and intergovernmental policy documents and reflecting territorial balance and cohesion.

The study shall as well define a set of indicators suited for providing information on economic, social and environmental issues that can (in an easy understandable manner) inform about the main changes in territorial structures, trends, imbalances, etc.

The current components of a spatial monitoring system stands on a common base constituted by the ESPON core indicators, the ex-ante Territorial Assessment tools (TIA) and results of the research progresses and results achieved so far by the applied research projects financed in the framework of the ESPON Programme, some of them still ongoing.

Core indicators

With the different rounds of ESPON projects, thematic studies and policy impact studies as well the integrative and scenario oriented projects, the ESPON programme has laid the ground for comparative information and for analysis of spatial structures and development of the European territory. It is worthwhile to say that the ESPON territorial coverage include not only the EU 25 Member States, but also the Candidate countries Bulgaria and Romania as well as the neighbouring countries Switzerland and Norway.

One of the aspects within the tasks of the transnational project groups was the provision of thematic related data and indicators based on them. The data collected and the indicators developed by the ESPON Projects, covering for the first time the wider European territory and its regions, provided the basis for the development of a spatially oriented information system. The data collected so far, includes a wide range of indicators for different spatial contexts, allowing for spatial monitoring, analyses of situations and trends as well as spatial policy advice including the assessment of the achievement of political goals.

The ESPON projects have produced a great number of indicators covering their specific thematic aspect. A process including Project 3.1/Tools and the succeeding Project 3.2/Scenarios has suggested a list of around 100 “core-indicators” (which forms the ESPON Database) of potentially high importance within a spatial information system and for the measurement of living conditions in the regions of Europe.

Efforts on the consolidation of the ESPON core indicators are still ongoing within Project 3.2, but the final list is expected to be completed by June 2006 with the inclusion of the final results of the ESPON Projects finalising by end May 2006. For more information on the ESPON Core indicators, please refer to the relevant chapters of the Final report of project 3.1 and to the Third Interim Report of project 3.2.

Particular relevant ESPON results to consult

In order to ensure the coherence of this project with the other relevant ESPON research efforts, close coordination will be required in particular, but not exclusively, with Project 3.2/Scenarios on the following components:

- the database and the consolidation of the list of ESPON Core indicators included in the ESPON database, a consolidation which should be finalised by May/June 2006
- a methodology for ex-ante territorial impact assessment of EU policies which should allow the evaluation of policies with regard to their impacts on territorial development, thus complementing the already existing sectoral approaches concerning economic, social and environmental impacts; the ex-ante TIA methodology, which is starting from the “minimum requirements” set within the framework of project 3.1, is developing a multicriteria model able to provide a general assessment of EU policies on the overall European territory. The model will be also built for assessing the impact on single regions (in principle at NUTS 3 level).
- the proactive, roll-back scenario which would allow to test the policy implications of the values and long-term goals expressed in EU-level policy documents. These elements will then allow the construction of the image of Europe in 2030 which will be the starting point of the proactive scenario and also serve for the evaluation of the

prospective policy scenarios.

ESPON project 3.1/Tools and in particular the upcoming ESPON Atlas, designed to provide thematic and project related information in the form of maps. Selected thematic relevant project results will be combined in single synoptic maps and representations and completing them with diagrams and selected figures and tables.

ESPON project 3.4.3/MAUP (Modifiable Areas Unit Problem) which aims at exploring possibilities of improved spatial analysis related to the modifiable areas unit problem within the ESPON space (EU 25 plus Bulgaria, Romania, Norway and Switzerland), opening doors for future projects analysing European spatial development and checking possible solutions regarding their use and acceptance by the main policy actors in the field.

Finally a step by step coordination with the ESPON CU will be required.

The project shall be conducted as part of the ESPON network by a transnational team representing at least three Member States. The participation of an ESPON Contact Points as partner(s) in the project is recommended (a list of ECP's can be found on www.espon.lu). Due to the particular aims of this project the participation of lead and project partners involved in coordinating and cross-thematic ESPON projects in the Transnational Project Group is encouraged.

ii) General objectives of this project

1) What has happened to date?

As already indicated, several parallel and interlinked efforts have been initiated within the ESPON Programme to summarise the research efforts and to develop methodologies and tools for the monitoring and assessment of the evolutions of the European territory toward the long term territorial policy options and aims.

Within the project 3.2 and the development of the different scenarios, first steps have been made in order to, on the basis of the knowledge developed by the ESPON applied research, identify the potential drivers (and their trends) affecting the development of the European territory. In addition, a proactive roll-back scenario is being developed within this same project, scenario which should test the policy implications of the values and long-term goals expressed in EU-level policy documents.

The first step for the development of the proactive scenario was the identification of the values and long terms policy spatial goals. It was agreed with the ESPON stakeholders that the project should use as main sources the following policy documents:

- ESDP
- Lisbon/Gothenburg Strategy:
 - Extracts from Presidency Conclusions on the Lisbon Strategy European Councils: Lisbon (March 2000) to Brussels (June 2004)
 - Communication from the Commission to the Council and the European Parliament: Common Actions for Growth and Employment: The Community Lisbon Programme (2005)

- Cohesion Policy:
 - Commission of the EC Brussels, 05.07.2005 COM(2005) 0299 Communication from the Commission: Cohesion Policy in Support of Growth and Jobs: Community Strategic Guidelines, 2007-2013
 - Third progress report on cohesion: Towards a new partnership for growth, jobs and cohesion
- Scoping document and summary of political messages for an assessment of the territorial state and perspectives of the EU towards a stronger European territorial cohesion in the light of the Lisbon and Gothenburg ambitions (May 2005)
- Commission of the EC, Brussels, 05.07.2005 COM(2005) 304 final: Proposal for a Council Decision on Community strategic guidelines for Rural Development (Programming period 2007-2013)
- Environment Action Programme:
 - Commission of the EC Brussels, 24.1.2001 COM (2001) 31 final 2001/0029 (cod) Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions on the Sixth Environment Action Programme of the European Community 'Environment 2010: our future, our choice' - proposal for a decision of the European Parliament and of the Council laying down the community environment action programme 2001-2010
 - Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the sixth community environment action programme
- CEMAT (2000), Guiding Principles for Sustainable Spatial Development of the European Continent

The analysis of the documents resulted in the selection of the following main long term territorial goals²:

- Balanced distribution of population, wealth, cities, etc.
- Assets for global competitiveness
- Innovative knowledge society
- Diversified regional economies
- Sustainable transport and energy
- Sustainable settlement structures
- Socially inclusive society and space
- Healthy environment and hazard prevention
- Diversified cultural heritage and identities
- Territorially oriented governance

The identification of main long term territorial policy objectives was a first step to support the monitoring and assessment of the evolutions of the European territory. The

² For more detailed information, please refer to project 3.2 interim reports.

main challenge was then to identify which indicators should be used to measure the territorial development towards the identified objectives.

Efforts in this direction started with the development of a methodology for the identification of a limited set of suitable (key)-indicators which would be used for the continuous spatial monitoring of the ESPON territory resulting in periodic territorial development reports.

The starting point was the existing list of 104 ESPON Core indicators, which in the initial intentions should have been slimmed and complemented. A preliminary list of selected existing ESPON Core indicators list classified according to nine thematic fields and their policy relevance had been defined. This list was then complemented by several additional indicators to cover aspects not yet dealt with in the ESPON Programme (e.g. the social dimension).

This preliminary list included both existing and not existing data and was intended to be a dynamic list subject to revisions and improvement whenever new knowledge is produced and/or clarification / modification of the political objectives in relation to territorial cohesion decided and/or implemented.

Further discussions underlined that the best way to test and improve this preliminary list and to define the indicators needed for the spatial monitoring of the European territory was to cross the ESPON policy priority themes (based on ESPON Projects) with spatial policy options and aims as defined in the scenario building process.

The more sector oriented themes (still with a policy priority) considered included socio-economic, environment and culture related fields, based on ESPON projects:

- Urban development & hierarchy
- Urban-rural relationships
- Demography
- Innovation
- ICT
- Hazards
- Culture
- Transport
- Agriculture, Fisheries and Rural Development
- Energy
- Governance
- Environment
- Social issues
- Economy

The matrix that was obtained by crossing themes and policy objectives was intended to define and limit the general framework for the identification of the (key)-indicators.

A first set of 28 (key)-indicators to match as best as possible the general framework defined by the matrix was identified and discussed with the ESPON Monitoring Committee and at the ESPON seminar in Manchester³. This first set of (key)-indicators was based on already existing ESPON data, included indicators which had not yet been calculated as such within the ESPON Programme and indicators from external (non ESPON) sources on themes and policy orientation not covered by the current ESPON Programme.

2) What is required by the project?

The project should improve, further develop and integrate the current component of a monitoring system within the ESPON programme and gain a first experience from testing in practice the monitoring of the territorial development of Europe.

As one result of this first test phase, the project should propose measures for a further calibration and improvement of the system.

The test phase shall also provide a concretely result in terms of a tentative spatial monitoring report based on (key)-indicators and structured as follow:

- Executive summary
- Introduction: describing the aims and objectives of the report and augmenting the choice of the indicators that have been used to produce the maps
- Part I: A limited number of main socio-economic indices and commented maps showing the current structures and situation of the European territory and, whenever possible, their evolution within a reference period. This part should provide basic information on territorial dynamics within Europe and its regions, which could serve as an introduction and support the understanding of Part II
- Part II: A series of indicators and corresponding, interpreted and commented maps (at least one for each relevant indicator proposed) presented in separate sections focusing on a particular policy option or group of options
- Annex: Detailed information on each indicator (source, years, calculation, etc. etc.)

The tentative monitoring report will be used for further deliberation on a model for sequential monitoring reports that could be published with certain intervals.

Considering that the current work on indicators has shown severe gaps in European-wide data at regional scale, as final element, the project is also required to provide recommendation concerning future data collection.

Finally, the selection of (key)-indicators for the continuous spatial monitoring of the European territory has to be a process, subject to revision and adaptation every time main policy aims are revised and/or new knowledge on specific issues is produced.

³ See annex 1 to the ToR, matrix of core indicators.

iii) Primary Research Issues envisaged

1) Further improvement and consolidation of the general framework (Matrix)

The method developed to define the general framework needed for the selection of the indicators has been the definition of a matrix obtained crossing themes and policy objectives. The ESPON Monitoring Committee has already supported this approach and approved the final version of the matrix. However, the project should assess the existing proposal and consider the appropriateness of the choice of themes and policy orientations defining the matrix, should this be necessary.

Concrete improvement proposal should be made, justified and documented. The reorganised matrix should then provide the final general framework for the identification and selection of the set of indicators.

2) Identification and selection of the set of (key)-indicators

Once the general framework consolidated, the project should proceed with the selection of the (key)-indicators that best match the consolidated matrix.

For the identification of the (key)-indicators, the project will have to consider the following element:

- the appropriate spatial scale (e.g. GDP/cap at NUTS 3 and not only at NUTS 0/1 level)
- their specificity to territorial issues
- their relevance according to the policy options and aims
- their degree of complexity
- their potential for being easily understood by policy makers

Considerations should also be provided in relations to the advantages and disadvantages for the use of a) more complex combined indicators and b) more subjective/qualitative indicators.

The project is required firstly to identify the “ideal” list of (key)-indicators regardless considerations about their current availability (referring to both relevant scale and geographical coverage) and only in a second phase propose second and third best available alternatives. Even though the project should be mainly inspired by the ESPON Core indicators, the selection should not be limited to indicators included in this list.

All steps and choices should be clearly augmented and documented in particular using test-maps (eventually limited to one or a selection of countries for which data is available) which would allow for a better appreciation, also of the policy makers, of the above listed elements.

Finally, clear indications on data update needs and minimum periodicity of the monitoring reports should also be included.

3) Additional elements to consider

a) It has often been recalled that an extraordinary effort is needed to collect and maintain territorialized data at NUTS 3 (or NUTS 2) level. Currently, these attempts to fill in the existing gap in territorial knowledge have hardly succeeded.

As the proposed selection of indicators should not be limited by the availability of data at the most appropriate geographical level for the entire ESPON territory but should include a proposal of best possible viable alternatives should the ideal (key)-indicator not be available, the project should also provide information on:

- proposals for alternative calculations methods
- potential alternative data sources

b) In view of a possible future enlargement of the ESPON space the project should also provide information on data preparatory measures needed to extend the proposed monitoring tool to new Member and Partners States.

iv) Expected results and timetable

The study is expected to provide a tentative spatial monitoring report giving easy communicative information on structures and trends within the territory of the ESPON space and information to policy makers on the development in relation to current policy objectives. The tentative report shall include commented maps elaborated on the basis of the proposed lists of ideal (key)-indicators (or their viable alternatives).

July 2006: Interim Report

- (a) first draft commented table of content (synopsis) of the monitoring report including all the available elements and following the structure provided in section ii-2)
- (b) a draft scientific working paper documenting:
 - the progress towards the assessment and final definition of the general framework for the selection of the indicators;
 - the preliminary choice of indicators suitable to match the final proposed general framework identifying, for each of them: the most appropriate geographical level and measurement unit, a clear description and the way of calculation and the information provided; their availability and data sources (if different from the ESPON database)
 - the possible existing alternatives and the elements that have determined the selection of the best suitable indicator, also illustrating their different potential in clearly illustrating specific territorial divides (this can be done also limiting the maps to individual countries rather than the entire ESPON space)
 - advantages and disadvantages for using more complex indicators versus more simple indicators and more subjective/qualitative indicators
 - in case of unavailability of data for the best available indicator, alternative proposals should be made (indicating availability and source of data, justifying the selection as second or third best choice, etc.)
 - frequency for the updates and therefore the best suitable periodicity of the monitoring reports

October 2006: Final Report

- (c) A final version of a tentative spatial monitoring report
- (d) A final version of the scientific working paper, including recommendations on future data collection.

ix) Estimated budget

The budget for this study should not exceed €90.000.

The budget shall include sufficient resources for travel costs for the participation at the ESPON seminar in Espoo, Finland on the 14-15 November 2006 and, if necessary, a maximum of 4 coordination meetings with the ESPON Coordination Unit.