

ESPON

TERMS OF REFERENCE PROJECT 2.4.1/Environment

Territorial trends and policy impacts in the field of EU Environment Policy

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 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, 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.

i) Relation to the ESPON 2006 Programme

The priorities describing the work-programme of the ESPON 2006 Programme are structured in four strands:

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.

This project belongs to the second strand of projects and holds an important position in the definition and elaboration of a common ground for investigating territorial impacts of European sector policies on the spatial structure in Europe.

A number of other projects of the ESPON programme are ongoing and a strong co-ordination will be required with these projects in order to reach consistent projects

results within the ESPON programme. The cooperation would in particular involve the other project under strand 2 on methodological aspects of the territorial impact analysis and with the relevant thematic projects on territorial trends under the first strand. In addition, close links will be required with the coordinating and cross-thematic projects under priority three building on a scientific coherence in the ESPON programme as well as with the Co-ordination Unit.

ii) General objectives for ESPON projects

The general objectives of ESPON projects are as follows:

- a) To show the influence of sector policies on spatial development at relevant scales;
- b) To develop methods for the territorial policy impact assessment of EU sectoral policies;
- c) To contribute to the identification of the existing spatial structure of the EU territory, in particular the degree and diversity of physical and functional polycentrism at different geographical scales, and to gain concrete and applicable information on the EU wide effects of spatially relevant development trends and their underlying determinants. Therefore, the project should be sustained by empirical, statistical and/or data analysis;
- d) To define concepts and to find appropriate territorial indicators, typologies and instruments as well as new methodologies to consider territorial information linked to polycentrism, to detect territories (preferably below NUTS 2) most negatively and positively affected by trends and/or policy impacts. Particular attention shall be paid to areas with high densities as well as to areas exposed to extreme geographical positions and natural handicaps such as mountain areas, islands, ultra-peripheral regions;
- e) To show the interplay between the EU and sub-EU spatial policies and best examples for implementation;
- e) To find appropriate instruments to improve the spatial co-ordination of EU sector policies and the ESDP;
- f) To develop possible orientations for policy responses, taking the diversity of the European territory into account, and considering institutional, instrumental and procedural aspects;
- g) To consider the provisions made and to provide input for the achievement of the horizontal projects under priority 3, such as tools for diagnosis and observation and long term scenarios, as well as evaluation and assessment procedures.

All ESPON projects shall make efforts to meet these general objectives; however, some objectives will be more relevant for some projects than for others. In the efforts carrying through ESPON projects best use of existing research and relevant studies shall be ensured.

The policy orientations given at European level concerning territorial cohesion, balance and polycentrism should be guiding the project development. Policy recommendation, understood as policy options based on the findings of the applied research, should follow the policy thinking of territorial cohesion and the policy orientations from the ESDP (calling for better territorial balance and polycentrism). Recommendations should in particular, contribute to a deeper understanding of options at European level

and of feasible benefits of differentiating European priorities to different territories at meso and micro scale.

iii) Thematic scope and context of project 2.4.1/Environment

The aim of this ESPON project is to prepare for the improvement of knowledge on environmental issues and trends as well as impacts EU Environmental Policy related to the development of the European territory.

The project shall prepare for a better understanding and integration of the environmental dimension as part of a sustainable territorial development. In this respect, the project shall deepen the understanding of the potential contribution of environmental factors to the competitiveness of territories and to the territorial capital of individual regions.

Future applied research has to build on existing research and sources of information. The project shall therefore include reviews on scientific progress made on relevant findings and methodologies as well as on existing data.

The project is supposed to take a broad perspective to environmental elements and the policy areas being processed as part of EU Environmental Policy. Based on this approach creating a broad overview the project is supposed to narrow in on the most relevant issues and policy areas relevant for territorial development. In doing so, the project should be able to contribute to a targeting of future applied research projects crossing territorial and environmental concerns and potentials.

The project is envisaged to include 3 main elements:

- (1) Presentation of territorial trends, situations and structures at European scale in relation to the main environmental issues of relevance for the development of regions and larger territories. The presentation should rely on a review of existing literature related to environmental trends and policies at EU level and be based on existing sources and geo-referenced data, indicators and information systems. It should display the state of existing environmental knowledge relevant for territorial analysis, as far as possible presented on European maps.
- (2) Proposals on feasible Territorial Impact Assessments (TIA) of EU Environmental Policy based on a test (case studies) related to 3 major elements of European environmental policy, such as habitats, biodiversity, air quality and water management. The model for TIA conceived for the 3 cases should take into account relevant policy assessment tools at European level as well as the experiences gained carrying through territorial assessments of EU sectoral policies by other ESPON projects.
- (3) Recommendations and proposals on future applied research projects linked to environmental trends and EU Environmental Policy that can foster the integration of environmental concerns into territorial development strategies at different scales (European, transnational/national, regional/local scale). Improvement of knowledge on regional diversities of the European territory shall therefore be reflected in the proposals.

The geography to be covered by the project includes EU 25 plus Bulgaria, Romania, Norway and Switzerland.

iv) Primary issues envisaged in the applied research

The reference points for the development of a tender for project 2.4.1 on the territorial dimension of environment can be found below. The text has the role of guiding the invited potential Lead Partner and the team of partners envisaged carrying through the project as a Transnational Project Group. The text is not meant to be exhaustive, but reflects the orientations given by the ESPON Monitoring Committee.

Presentation of territorial trends, situations and structures

- Review of literature on related to environmental trends and policy impacts shall display the state of the art in territorial analysis of environmental issues or policy areas/sectors of EU Environment Policy. Focus should be on regionalised and/or geo-referenced scientific findings and information. In this respect questions linked to terminology should be addressed in order to avoid basic misunderstandings in the further work.
- Identification and listing of existing environmental indicators and data set that are optional for territorial analysis in order to measure and display the state, trends and impacts of the developments referred to above.
- Production of a series of relevant maps of the environmental diversity facing European regions and larger territories, which, based on the review above, can be considered the most important for territorial cohesion policy.
- In presenting European maps (covering EU 25, Romania, Bulgaria, Norway and Switzerland) efforts combining findings related to environmental trends and policy impacts with results of other ESPON projects should be considered. This would support territorial analysis crossing environmental and socio-economic issues and data. As well, a crossing with key ESPON typologies, such as for the European urban system and urban-rural relations, would be able displaying environmental issues in the context of major spatial structures. This can be done by simple overlay techniques or imply a crossing of indicators and typologies into new typologies.
- Limits and possible ways of combining environmental data and socio-economic data should be explored and reported.

Proposals for Territorial Impact Assessments

- The proposals for Territorial Impact Assessments of selected elements of European Environmental Policy should seek inspiration in work done by other ESPON projects in developing tailor-made methods for such assessments. Territorial Impact Assessment basically addresses the impact of different sectors of society within a given territory and should in principle lead to integrated conclusions on impact on economic, social, cultural and environmental issues related the policy objectives of territorial cohesion and territorial balance of regions and larger territories within the EU.
- The ESPON programme (communicated in ESPON Guidance Papers) has developed a set of minimum requirements for territorial impact assessment of EU sectoral policies that should be respected in the project. In addition, methodological aspects stemming from the EU Directive on Strategic Environmental Assessment as well as the impact assessment of EU policies conducted at EU Commission should

be taken into account.

- Territorial Impact Assessment should be applied as a test on three different elements of European environmental policy considered important for territorial development. The focus has so far been on habitats, biodiversity, air quality, and water management. However, the project might argue for another selection. The project is supposed to compile a prioritised list of elements of EU Environmental Policy that could be considered for the three test cases. In this context the stage of implementation of the policy issue should be considered. The test cases are not envisaged to provide in depth assessments, but to give direction for recommendations on the choice of areas and methodology to be considered for future applied research.
- The methodology considerations should also allow indicating different geographical levels (European, transnational/national, regional/local) in order to identify the relevant actions for better territorially coordinated policies. It should be kept in mind that the users of these tools are decision makers.

Proposals for future applied territorial research

- Proposals for future applied research should take into account the most recent European policy documents related to territorial cohesion, such as the documents tabled under the Dutch and Luxembourg EU Presidencies and by the Commission. The basic thinking should follow the ESDP policy orientations and try to further differentiate options to the diversity of the European territory. The project shall as well take into account the EU Strategy for Sustainable Development (and its 2005 revision). The aim of a sustainable development path shall guide the proposals made including the economic, social and environmental dimensions of development.
- The project should in particular look for potentials for high level of return following territorial cooperation. In addition, ideas for strategic projects etc. could be important for further policy development.
- The proposals are expected to a large extent to promote the crossing of findings on environmental elements with more socio-economic factors of the development of regions and larger territories. This should as well include feasible innovative cross-thematic scientific work taking into account existing ESPON findings, in particular the core indicators and core typologies developed within the ESPON programme, such as the Functional Urban Areas (FUA) and urban-rural typologies. This crossing should make it feasible to give policy advice that reflects the regional diversity of Europe, the territorial capital of different regions and larger territories in terms of environmental issues and development assets.

Indicators and data collection

- The project should be based on existing environmental data, indicators and results, already developed in the EEA, OECD and other sources, but also from current ESPON projects. Quantitative analyses should be associated to more qualitative approaches, mainly policy and scientific literature reviews in the research field.
- The key question for environmental issues having an impact on territorial development, will regard the question of data availability and transformation of data to match in particular statistical levels below NUTS 0. A list of relevant and

available indicators that can be used in integrated analysis at NUTS 2/3 will have to be developed, taking into consideration and identifying:

- existing indicators and data, combining ESPON and other sources.
 - existing indicators and data developed and gathered by other European structures such as EEA or the INSPIRE initiative should be used in favour of developing new indicators,
 - gaps regarding either data or indicators, and proposal on how eventually to complete the datasets.
- The list of indicators established in the EEA Core set of indicators should in particular be taken into consideration. Data should be collected to match the lowest possible geographic level (ideally NUTS 3 and below).
 - The project should contribute to the ESPON database with new data sets (in line with the INSPIRE Directive) as well as with statistical methods that will make it easy to merge, cross and/or combine environmental and socio-economic datasets, compiled by Corine and Eurostat respectively. In this process the core indicators for territorial analysis selected within ESPON and the core indicators used by the European Environmental Agency should be carefully assessed in order to propose additional and/or joint indicators for future applied research. Furthermore, the existing mapping tools, such as the ESPON Hyperatlas and WEB/GIS, could be considered in relation to mapping of environmental elements.

Maps

- Thematic maps should be elaborated by the project to illustrate the spatial articulation of analytical results. All maps shall comply with the ESPON map design.
- Maps should be structured in order to ease the superposition of different layers (e.g. sectors, geographical division, national borders, etc.) in order to visually represent main project conclusions and stimulate political debate.

Relations to other ESPON projects

- ESPON project 1.3.2 on “Natural Heritage” has made an attempt to explore possibilities of assessing the contribution of environmental assets to regional development. Current policy debates emphasize the use of the environment as comparative development advantage and accordingly the question emerges whether it is possible to measure and map the state of the environment in a region as potential for economic development. Any overlapping with the findings of project 1.3.2 on natural heritage has to be avoided.
- In general, the results of existing ESPON projects in particular the 1.3.2 and 1.3.1, on natural heritage and hazards, but also project 2.1.3 on CAP and rural development policies impacts, and project 2.1.4 on Energy should be taken into account. The latter project found that renewable energy sources provide a strong potential for development and job creation in certain areas.
- Particular attention should be given to the finalised projects on transport trends and impacts of the TEN (project 1.2.1 and 2.1.1) and to a thorough coordination with the

ongoing project 3.2 on spatial scenarios in order to support the inclusion of environmental concerns and assets in this project.

v) Expected results and timetable

One of the main objectives of the ESPON 2006 Programme is to focus on applied research with policy relevance and to contribute to the development of relevant policies. Therefore, the deliverables of the research project should be highly operational.

The ESPON programme is entering the final phase of operation and will report on the findings of all projects by autumn 2006. The following timetable and specification of output should be respected by tenders for project 2.4.1/Environment:

December 2005 (first interim report):

- a) A literature review, including existing scientific achievements in relation to the territorial dimension of environmental development and policy.
- b) A prioritised compilation of elements of EU Environmental Policy which are relevant for territorial impact assessment, including a recommendation to the MC on three policy issues to select for the 3 test cases.
- c) First ideas on methodology questions related to the 3 environmental policy issues selected as well as presentation of concepts and hypothesis involved in further developing the 3 cases on the aspect of territorial impacts. This should include a review of current models for assessment of EU policies, including efforts made by the European Communities and ESPON.
- d) Consensus on indicators and corresponding existing data needed for carrying through the different elements of the project, including an overview of available European wide indicators, dataset and information systems on environmental issues as well as relevant environmental data with a more limited geographical coverage, preferably data linked to urban environmental issues and densely populated areas.
- e) Preliminary list of key maps envisaged related to the territorial situation and trends within the environmental sector.
- f) First preliminary ideas concerning recommendations and proposals for future applied research integrating the environmental dimension in territorial analysis, bearing in mind where and on what policy level, a further integration of the environment may bring added value to territorial cohesion and a better balanced European territory.

May 2006: Final Report

- g) An executive summary of the main results of the applied research undertaken and the conclusions and recommendations to consider at political level.
- h) Presentation of the results of the literature review undertaken.
- i) Comprehensive presentation of key environmental structures and trends on the European territory based on existing data, accompanied by European maps covering the EU 25, Bulgaria, Romania, Norway and Switzerland.

j) Presentation of findings and advice concerning existing models and tools related to territorial impact assessment of EU policy, covering efforts undertaken by the European Communities and ESPON projects.

k) Comprehensive presentation of the 3 test cases on assessing territorial impacts of EU Environmental Policy, including the main findings and methodological questions encountered.

l) Proposals for future applied research themes, in order to integrate the environmental dimension stronger in future integrated territorial analysis, to be considered on the basis of the findings within the project, including the key research questions to be posed.

m) Listing of needs for further data development and ideas of territorial indicators, concept and typologies as well as on further developments linked to the database and mapping facilities.

vi) Existing access points

The access points listed below can serve the purpose of providing the tenders useful information for preparing a proposal. It is by no means meant to be exhaustive, but only as information that can be helpful in tracing additional useful background information.

(1) At www.espon.lu the following documents are available:

- Recent relevant policy papers
- Reports prepared by ESPON projects,
- Guidance papers from ESPON seminars
- ESPON synthesis report on preliminary results by autumn 2003

(2) The EU Commission home page the EU Strategy for Sustainable Development can be found at http://www.europa.eu.int/comm/sustainable/index_en.htm. Information on Impact Assessment in the Commission is available at http://www.europa.eu.int/comm/secretariat_general/impact/index_en.htm.

(3) At the web page of the European Commission, DG Regio, www.europa.eu.int/inforegio you will find a number of supporting documents, in particular:

- The Third Cohesion Report
- European Spatial Development Perspective
- Draft Regulations on Structural Funds after 2006

(4) At the web page of the European Environmental Agency <http://www.eea.eu.int/> you will find number of supporting documents as well as lists of environmental indicators used for monitoring state of Environment and its changes.

(5) Additional information, which might be relevant, could eventually be traced by the tenderer at the homepages of Interreg III B programmes (spatial analyses and visions for different transnational territories) as well as at national level (spatial strategies, spatial development perspectives, etc.) at the ministries responsible for regional policy and/or spatial planning.

(6) Other websites of interest:

DG Environment: http://europa.eu.int/comm/environment/index_en.htm
Natura 2000: <http://europa.eu.int/comm/environment/nature/natura.htm>
Emerald (network of Areas of Special Conservation Interest):
<http://www.nature.coe.int/english/cadres/emerald.htm>

vii) Estimated budget

The project is supposed to reach the results envisaged in an intensive process over approximately 10 months. The upper limit for the budget is 250.000€