SPECIFICATION

ESPON Applied Research Project 2013/1/1

Cities and urban agglomerations:
Their functionality and development opportunities
for European competitiveness and cohesion
(2008-2010)

(o) Territorial challenges relevant for ESPON 2013 projects

The development of the European territory is facing several ongoing mega trends and impacts of policies:

- The integration of the EU in global economic competition is accelerating, offering regions and larger territories more options to decide their development path, as development is no longer a zero sum game for Europe.

- Interaction is growing within the EU territory and between the surrounding neighbour countries and other parts of the world. This is apparent through e.g. migration pressure on more developed countries, which are themselves confronted with population decline, and by access to and investment in new markets.

- Market forces and the evolution of society in general support a geographical concentration of activities.

- The ongoing demographic changes with an ageing European population, in addition to migration, affect regions differently and increase the competition for skilled labour.

- The occurrence of hazards due to climate change is increasing and different parts of Europe experience different types of hazards.

- Increasing energy prices and the emergence of a new energy paradigm have significant territorial impacts, some regions being more affected than others. This presents particular development opportunities for the production of renewable energy sources.

- The enlargement of the EU to 27 Member States, and potentially more, presents an unprecedented challenge for the competitiveness and internal cohesion of the Union.
ESPON results have revealed that territorial capital and opportunities for development are inherent in the regional diversity that is a characteristic of Europe. Consequently, different types of territories are endowed with diverse combinations of resources, putting them in different positions for contributing to the achievement of the Lisbon and Gothenburg Agendas, as well as to Cohesion Policy. Territorial diversity, especially in the economic base, implies that strategies other than opting for a knowledge-based economy might be more appropriate and viable for some regions.

The ESPON 2006 Programme provided integrated analysis and long-term spatial scenarios which enriched the European policy debate and knowledge base. The results and observations on territorial structures, trends, perspectives and assessment of EU policy impacts had not been fully evident before and supported a better understanding of the European dimension of territorial dynamics. This has prompted interest among policy makers and practitioners for even more information, knowledge and understanding that ESPON can offer.

The ESPON 2013 Programme shall bring this knowledge base one step further through applied research and targeted analysis, indicator development and data collection, capitalisation events presenting results, etc. All these actions will be related to an improved understanding of territorial structures, development trends, perspectives and policy impacts.

The European-wide evidence provided by the ESPON 2013 Programme will potentially benefit stakeholders at all levels throughout Europe. Policy makers dealing with territorial development require sound evidence and comparable regionalised information in addition to medium and long-term development perspectives, in order to create sustainable and efficient integrated policy responses for their territories.

Given that the European Union is moving towards a more integrated policy approach, the territorial dimension is particularly important for policy makers. The aim of territorial cohesion proposed by the Commission supports this approach by taking the territory as an element within the framework of policy making. Due to the provision of evidence based on analyses of territorial units, the ESPON 2013 Programme is of strategic importance for European policy development and cooperation.

By further developing and expanding the existing knowledge and indicators, the ESPON 2013 Programme will play a strategic role in supporting the policy process of the 2007-2013 period, and contribute to the development of Cohesion Policy.

(i) General objectives of applied research projects under Priority 1

The general objectives of applied research projects within the ESPON 2013 Programme are the following:
- Building new evidence based on comparable information about European regions and cities, including information on dynamics and flows, and covering the entire territory of EU 27, Iceland, Liechtenstein, Norway and Switzerland.
- Addressing major territorial challenges and political priorities providing comparable information covering the entire European territory, its regions and cities.
- Providing comparable regionalised information and possible policy options for making use of opportunities inherent in territorial structures; anticipating and counter balancing negative trends and structures, taking into account the diversity of the ESPON territory and considering institutional, instrumental and procedural aspects.
- Identifying types of territories, regions and cities that share common development challenges and are affected most (positively or negatively) by the identified structures, trends, perspectives and/or policy impacts.
- Contributing to the further identification of structures within the EU territory that represent options for exploring comparative advantages and provide synergy through territorial cooperation arrangements, involving regions and/or cities.
- Contributing to the improvement of the scientific platform for European applied territorial research by refining existing concepts, methodologies, indicators, typologies, European maps and models and by defining new ones.
- Providing the knowledge and competence capabilities needed to ensure scientifically validated results of the applied territorial research with the support of Sounding Boards1.
- Supporting the use and dissemination of results to an audience of policy makers, practitioners, scientist and experts.

This project shall contribute to these general objectives during its implementation, and in doing so make best use of existing ESPON results, new results in other ESPON projects as well as other research results and relevant studies.

**ii) Relation of this project to the ESPON 2013 Programme**

The priorities describing the work-programme of the ESPON 2013 Programme are structured in four strands:

1. **Applied research on territorial development, competitiveness and cohesion: Evidence on European territorial trends, perspectives and policy impacts**

The applied research projects will create information and evidence on territorial challenges and opportunities for success in the development of regions. Cross thematic applied research will be a major activity integrating existing thematic

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1 For each applied research project a Sounding Board will be set up, accompanying the project throughout its life cycle and giving advice to the TPG on both, scientific issues as well as relevance for policy makers. Sounding Boards will normally be made up of one scientist and one practitioner. Their tasks will consist of assessing project proposals, giving continuous feedback to TPGs and commenting on their reports.
analysis and adding future analysis of new themes. Territorial impact studies of EU policies will be another focus under this priority.

2. **Targeted analysis based on user demand: European perspective on development of different types of territories**
   
   This priority responds to a clear demand of practitioners for user and demand driven actions within the ESPON 2013 Programme. By convening an analytical process where ESPON findings are integrated with more detailed information and practical know-how, new understanding of future development opportunities and challenges may arise, which could be transformed into projects and actions.

3. **Scientific platform and tools: Territorial indicators and data, analytical tools and scientific support**

   The scientific platform and analytical tools built up within the ESPON 2006 Programme will be maintained and further expanded. New actions shall be undertaken to develop current achievements and make use of existing indicators, data and tools.

4. **Capitalisation, ownership and participation: Capacity building, dialogue and networking**

   Under this priority, actions are foreseen that will make the evidence and knowledge already developed operational through raising awareness and involving stakeholders in the results and practical application of them.

A strong coordination and interlinkage with other ongoing ESPON projects is crucial for achieving comprehensive results. A close cooperation with the appointed Sounding Board and the Coordination Unit must also be established as part of the project implementation.

This project belongs to the first priority. It holds a key position in developing a common understanding of European urban structures, urban development opportunities and challenges of the diverse types of cities and urban agglomerations in Europe. Knowledge on these issues is vital for targeted policy development in the light of Cohesion Policy seeing cities and urban areas as main drivers of development.

**iii) Thematic scope and policy context**

Cities have recently risen to the top of the European political agenda. In spite of the fact that there is not one single model of a European city, there is now a wide recognition of the importance of cities in contributing to a thriving Europe, economically, environmentally and socially. Dynamic cities and urban agglomerations are conceived as vital assets for regional development. They can enable regions to make better use of their territorial development opportunities, thereby achieving additional growth and job creation. In this respect, they are seen as the “engines of growth” across Europe.

During the past decade many cities have emerged from a period of transition to develop new economic, social, political and cultural roles. Some are centres of strategic decision-making, exchange and communication. Many have concentrations of intellectual
resources in universities and research institutions, which encourage high levels of innovation. Many cities have achieved considerable physical regeneration especially of their centres, which offer substantially improved commercial, residential and retail facilities. Many possess cultural resources, which are increasingly becoming a source of economic growth and job creation. However, due to the varying local development opportunities and different combinations of drivers of development, cities across Europe find themselves in diverse positions to conceive strategies of sustainable development improving their competitiveness. Despite existing development opportunities, many communities and individuals within many cities remain excluded from the economic and social mainstream. Developing economically competitive, socially cohesive and sustainable cities therefore remains a challenge for the years to come.

In relation to Cohesion Policy 2007-2013, a balanced territorial development requires urban drivers, be it metropolitan regions, large European cities or small and medium sized cities. Urban drivers are also seen as a means for supporting a more polycentric development of the European territory.

The significance of cities in contributing to the achievement of the Lisbon goals was acknowledged in EU Cohesion Policy documents for 2007-2013, including the Community Strategic Guidelines, as well as the Territorial Agenda, agreed upon by Ministers in the framework of their informal meeting in Leipzig in May 2007. On that occasion, the “Leipzig Charter on Sustainable European Cities” was endorsed, too, raising integrated urban development policy as a task with a European dimension, thereby complementing the Territorial Agenda by focusing on sustainable cities. The consideration of social and urban environment indicators will be relevant for assessing the attractiveness of the city and subsequently its competitiveness.

In this policy context, proposals for the applied research project on the functionality and development opportunities of cities and urban agglomerations for European competitiveness and cohesion shall focus on two main policy orientations on which the project should strive to produce supporting information and evidence in support of a better understanding by policy makers:

- Development opportunities of the largest cities in the European urban system, addressing functional urban areas, i.e. the urban core and the corresponding hinterland, analysing the link between the functions of cities and their competitiveness and socio-economic situation.
- Possibilities for increasing development opportunities through territorial cooperation, establishing polycentric urban clusters at different scales and in different parts of the European territory that can support a better territorial balance and cohesion.

The applied research project shall identify the current state, trends and development perspectives for the largest cities and urban agglomerations within the European territory, including the 27 EU Member States, Iceland, Liechtenstein, Norway and Switzerland. It does not, however, aim at including all small and medium sized cities and towns (SMESTOs) of Europe.
**iv) Analytical framework and deliveries expected**

The project shall take its starting point from existing ESPON projects and the results achieved as well as the development in progress following the Urban Audit.

The functional specialisation of the largest European cities and the relation between the functions of cities, their competitiveness, and their socio-economic as well as their environmental situation and urban quality is the main research issue of the project. This implies the necessity for an integrated approach towards the research within this project. The functionality of urban regions was addressed within the ESPON 2006 Programme providing the first indicators with a European wide coverage. This project shall in particular be informed and make use of relevant results from the following projects:

- ESPON project 1.1.1 on urban areas as nodes in a polycentric development explored the specific functionality of European cities and came up with a functional classification of three groups of FUAs (functional urban areas). As part of this classification the largest metropolitan urban areas (MEGAS) with high levels of integration in the global economy were studied in particular.
- ESPON study 1.4.3 provided a critical review of project 1.1.1 and proposed ways of adding morphological factors in the delineation of functional urban areas as well as some considerations on the delineation of polycentric functional urban areas at European level.
- Other ESPON projects and studies delivered results on topics that are crucial for cohesion and competitiveness oriented urban development (e.g. demographic trends, accessibility trends, scenarios). Nevertheless, social and environmental issues were in comparative terms not as present in the analysis as economic issues, which in the future should be better balanced. In particular, ESPON Study 1.4.1 on the role of small and medium-sized towns (SMESTO), which clarified the different roles of smaller cities in the local context, might be helpful in the situation of countries and regions with no or only a few larger cities.

The ESPON 2006 projects provided comprehensive data, indicators, typologies and maps for approximately 1600 Functional Urban Areas and established a classification of the European urban system, including MEGAs, etc. that shall be taken into account by this project.

The Urban Audit provides a regular (i.e. every three years) comprehensive data collection of over 300 variables on e.g. social aspects, demography, environment, economy, organised by DG Regio and Eurostat.

The first round of the Urban Audit covered 258 cities across the 27 EU Member States. The second round of the Urban Audit, for which most work is foreseen to be finished by the start of this project, will cover more than 650 cities in the EU27 and another 47 in Croatia, Turkey, Norway, Switzerland and Iceland. As a result, all cities of more than 100,000 inhabitants within the EU are included. In addition, the Urban Audit covers a
significant number of cities with a population between 50,000 and 100,000 inhabitants, especially in the Member States with very few larger cities. The Urban Audit cities are defined in an administrative manner, i.e. based on political boundaries. For a small number of cities a second boundary was created to adequately capture the densely built-up urban area (called Kernel). Furthermore, all these cities are part of urban agglomerations (larger urban zones). Both the city and the agglomeration boundaries are available as GIS layers. Great care has been taken to ensure a comparable definition of the urban agglomerations in all EU Member States and other participating countries.

For the agglomerations, an approximation with NUTS3 regions will be created by the end of 2007. This will allow an analysis of these agglomerations with the use of NUTS3 data series. To limit the data collection requirements of this massive exercise, around 200 out of the 650 plus cities will be covered by a reduced set of 60 core indicators and no agglomeration data will be collected for these cities.

This applied research project shall cover all cities of the Urban Audit as the use of existing data shall facilitate robust comparative analyses of European cities.

As the ESPON Programme generally aims at covering the full European territory, cities not participating in the Urban Audit should nevertheless be considered by this project. This requires the inclusion of a selection of additional medium sized and smaller cities to complement the Urban Audit sample in such a way, that the respective national urban systems are well represented. In the selection it shall be taken into account that in many Member States the size of a city does not necessarily correlate to its function.

The project shall make use of the concept of delineating cities/urban agglomerations developed by Eurostat in relation to Larger Urban Zones (LUZ) within the framework of the Urban Audit. Nuts 3 approximations of data to LUZ are/will be available by the time of the start of the project. Therefore, the delimitation of cities developed in the framework of the Urban Audit shall be the basis of research within this project.

The TPG should strive for a comprehensive and integrated research approach, taking into account social, cultural, environmental, and economic aspects. In addition, a 3-level-approach (European, transnational/national, regional/local) to the analysis, commonly used by all ESPON applied research projects, should be applied in order to support a clear presentation of results, which might vary depending on the geographical scale.

In the concrete design of the applied research project and its work packages, the project is expected to answer the following key research questions:

- What is the present state of cities’/urban agglomerations’ developments, their functional strengths and weaknesses based on the most appropriate economic, social, cultural and environmental indicators that can be collected European wide? (In this respect, the accessibility of cities/urban agglomerations should be included in the analysis.) How does the functionality of cities influence their competitiveness, their socio-economic and environmental situation, including their welfare?
• What does the relationship between cities and their hinterland look like and how do they influence one another? Which cities/types of cities are pulling their region, their country, and/or Europe forward? Which cities/types of cities are holding back development?

• What endogenous strengths of cities/urban agglomerations could be better exploited, thereby achieving improved competitiveness? What additional functionality could be considered in individual cities in order to improve their competitiveness?

• Where do particular development opportunities for cooperation exist between cities in polycentric structures and what do they look like in the different parts of Europe? In the case of absence of one/several larger city/cities within a country/cross-border territory, this question should also be analysed in view of medium sized towns/cities and their opportunities for synergies by cooperation. Which links between cities are already there? Which functionalities of these cities represent comparative advantages to explore? Which complementarities are to be developed in order to reinforce competitiveness and cohesion, and with which territorial entities?

• Are there options for supporting balance and polycentric development at European scale? Where would a joint performance of selected polycentric urban agglomerations (e.g. Randstad, Ørestadssregionen, the Rhein-Ruhr agglomeration, the Baltic Pallette, and other polycentric urban cooperation areas) be able to increase the combined competitiveness by performing together? Could such cooperation arrangements also contribute to more European cohesion and to better European competitiveness in the world? How would such polycentric urban agglomerations influence national territories and other cities?

• Would it be possible to suggest further polycentric urban agglomerations/zones including large cities in Europe that could improve the development and service provision for their respective regions and hinterlands?

• What are simple scenarios for the development of cities and urban agglomerations in the future? How will European metropolises be positioned in the accelerating globalisation and competition with other metropolitan regions?

The deliveries of the project should make use of and complement the existing scientific platform and tools of ESPON, which are accessible on the ESPON website, as well as the Urban Audit findings on LUZ. Furthermore, as DG Regio is planning to launch a one year study to update the “State of the European Cities Report” the TPG should take account of the results and ensure complementarities between the two projects.

In order to further explore the opportunities for cooperation between cities/urban agglomerations, case studies shall be included in the applied research.

The geographical coverage of the project should encompass all the countries participating in the ESPON 2013 Programme. Furthermore, the TPG should assess the data situation for their field of research in the EU candidate countries, the Western Balkans and Turkey, and report on their findings in the inception report. Depending on the respective data situation these countries would then be included in the analysis.
In order to create coherence with project findings of other ESPON applied research projects, the project should present the main final results in relation to different types of regions and cities, using existing typologies for the urban system, rural areas, mountain areas, islands, coastal areas and outermost regions. The final results should also be presented for transnational cooperation areas under Structural Funds, and - where appropriate and possible - also for cross-border cooperation area and inter-regional cooperation areas.

The project is expected to enhance the scientific platform of ESPON with at least the following deliveries:

- Data input to the development, update and extension of the ESPON database by (1) the expected data improvement by Eurostat and (2) additional data on Partner States’ cities, as well as on selected medium-sized and smaller cities in a number of EU Member States. Indicators need to offer compatibility with a map-making facility, to provide a consistent, homogenous, reliable, and up-datable database.
- Indicators offering additional information on the functional specialisation of FUA/LUZ and their specific endogenous assets, and new complex indicators, revealing cities’ development opportunities, their competitiveness and socio-economic as well as environmental situation.
- Typologies of the urban system of Europe classifying (1) the diversity of functional specialisation present in the larger cities and their level of competitiveness, (2) the development opportunities for enhancing competitiveness through cooperation (also among medium-sized cities) and (3) the competitiveness and impact of cities in relation to different types of territories/regions.
- Case studies of cooperation opportunities of cities/urban agglomerations to improve competitiveness and cohesion.
- Maps of the European urban system, revealing (1) functional strengths and weaknesses, (2) territorial classification and variations of urban functionality in Europe, (3) opportunities for competitiveness and cohesion of cities/urban agglomerations and (4) possibilities for cooperation of cities/urban agglomeration in polycentric zones/clusters.

Regarding the development of new data and maps and/or the use of existing data, the TPG is expected to cooperate closely with the TPG being in charge of the development of the ESPON 2013 Database.

The results and conclusions of the applied research within the project should be formulated in relation to policy orientations present at European level and make use of the new typologies – if applicable – and maps resulting from the project.

Following the logic of the Territorial Agenda of the EU, orientations for policy makers should refer to the respective territorial development opportunities and the available options to mobilise these for the benefit of the cities, urban agglomerations and surrounding regions in question. In this respect, references to future policy options should take account of European Cohesion Policy orientations, in particular expressed in the

Project findings should make clear which impact the exploitation of development opportunities of cities’ and urban agglomerations could have for their competitiveness and socio-economic as well as environmental situation as for the realisation of economic, social and territorial cohesion in Europe.

Finally, the project should consider avenues for further applied research on the theme.

(v) Outputs and timetable

One of the main objectives of the ESPON 2013 Programme is to focus on research with policy relevance and to contribute to the development of relevant policies. Therefore, the outputs of the research project should be highly operational and coordinated in time, as far as possible, to fit into the relevant political agenda.

The proposal for the project is expected to reveal individual work packages on project coordination, research activities, and dissemination, as well as a schedule for project implementation based on the following timetable and specification of outputs:

August 2008 (Inception report):

Twelve weeks after the award of contract, a more in-depth concept should be submitted by the TPG allowing for a detailed overview on the research approach to be applied, the methodology and hypothesis for further investigation, as well as a review of the main literature, data sources, etc. In particular, the intention concerning the delineation of FUA/LUZ for the entire European territory shall be explained as well as the approach taken to include medium-sized and smaller cities in the analysis. It shall as well include an overview of more detailed deliveries and outputs envisaged by the project as well as an indication of likely barriers that the project implementation might face. The report shall give clear orientation for the applied research previewed towards the Interim report. The research team should also report on the findings regarding the assessment of the data situation in EU candidate countries, the Western Balkans and Turkey and, on that basis, determine the geographical coverage of their research. Finally, the TPG should outline how it envisages making use of existing ESPON results that are relevant for this project.

February 2009 (Interim report):

The content of the Interim Report shall reflect the orientations given in the Inception Report as well as the results of the discussions having taken place with the Sounding Board. The report is envisaged to include elements such as:

a) Preliminary results on the basis of available data, developed indicators, typologies, and European maps, including
First assessment of how cities’ competitiveness is affected – both, positively and negatively – by exploiting the identified development opportunities of cities and urban agglomerations.

First assessment of the development opportunities of cities and urban agglomerations to participate in urban cooperation and likely effects of these on their competitiveness.

First indicative identification of types of cities/urban agglomerations that are pulling a region and/or their country forward and those holding it back.

Data collection achieved, including an overview on statistical and geographical data collected by EUROSTAT, the Urban Audit and national Statistical Institutes etc.

The application of a European standard delineation of FUAs/LUZ, in particular in countries not included in the Urban Audit or in countries with very few large cities.

Draft typologies and European maps.

First indications on the conclusions and policy relevant options that could be the outcome of the project.

b) Plan for the applied research towards the draft Final Report as well as the Table of Content envisaged.

February 2010 (draft Final report):

The draft Final report will take into account the feedback on the Interim report from an ESPON seminar and by the Sounding Board. The report is supposed to include elements such as:

c) Report (max. 50 pages) on the main results, trends, impacts, and options for policy development, including key analysis/diagnosis/findings and the most relevant indicators and maps (any additional information should be included in a scientific report). Particularly important are options for policy makers, which could provide the basis for interventions related to development opportunities for improving European competitiveness and cohesion.

d) An executive summary (max. 10 pages) summarising the main results of the applied research that can be communicated to a wider audience of stakeholders. This summary should be based on the Report mentioned above.

e) Scientific report documenting the scientific work undertaken in the applied research including elements such as:
   - Literature and methodology/theory used.
   - Delineation of FUAs/LUZ used for the entire European territory.
   - Typologies and concepts developed and used, including on urban functionality revealing specific impacts on their competitiveness and cohesion due to better exploitation of urban development opportunities and on possibilities for increased competitiveness through territorial cooperation arrangements/clusters.
   - Data collected and indicators used, including tables with the exact values of indicators.
Maps produced in support of the results, all including territory of EU 27, Iceland, Liechtenstein, Norway and Switzerland.

Tools and models used or developed.

Future research avenues to consider, including further data requirements and ideas of territorial indicators, concepts and typologies as well as on further developments linked to the database and mapping facilities.

The MC and the Sounding Board will address the draft Final report and eventually ask for clarifications.

**June 2010 (Final report):**

f) Revision of the draft Final report on the basis of comments received.

**June 2010 – January 2011 (dissemination):**

g) Dissemination of project results by the TPG in the framework of international conferences and seminars, e.g. transnational activities of the ECP Network, events organised by the CU. These activities need to be reflected in the budget proposed by the TPG for the implementation of the project.

In order to justify expenses claimed for refunding by the TPG, a short progress report (max. 10 pages) has to be submitted to the CU every six months during the project’s period of implementation. This should consist of an account of progress in the individual work packages according to the schedule in the proposal. The report also should allow an overview on the development of the project regarding development and use of methodology, results at different steps and next steps to be taken within the following six months.

Irrespective of the above mentioned reports to be submitted at certain stages in the project life cycle, the TPG is expected to give presentations on the state of their research or/and the results in the framework of internal and external ESPON seminars. Therefore, when setting up the project proposal, the TPG should also allow for travel expenses for the attendance of ESPON seminars.

**(vi) Existing access points**

Synergies and use of results from outside the ESPON and Urban Audit regime shall be sought. In particular, activities under the URBACT II Programme might be valuable for this project.

The other access points listed below can serve the purpose of providing the TPG useful information for preparing a proposal. It is by no means meant to be exhaustive, but should be considered as information that can be helpful in tracing additional useful background information.
- ESPON projects results, data and maps: [www.espon.eu](http://www.espon.eu)
- Call for tender by DG Regio to update the “State of European Cities Report”
- Urban Audit data and indicators:
- Urban Audit Methodological Handbook:
- INTERREG IIIB-Project "SEBco" - City-hinterland cooperation as motor for regional development in the South Eastern Baltic: [www.sebco.eu](http://www.sebco.eu)
- INTERREG Project Database, offering a selection of projects completed within the INTERREG III Programmes throughout Europe, that can be searched for by theme: [http://www.interact-eu.net/604900/604903/0/0](http://www.interact-eu.net/604900/604903/0/0)