

SPECIFICATION

ESPON Applied Research Project 2013/1/10

Transport accessibility at regional/local scale and patterns in Europe (2010-2012)

(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 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

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.

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 accessibility and accessibility patterns at regional/local scale in Europe. Knowledge on these issues is vital for targeted policy development in the light of Cohesion Policy aiming, inter alia, at job creation and tackling social changes.

(iii) Thematic scope and policy context

A dynamic territorial development depends on an optimal combination of access to available services. The possibility of making use of the resources available in a city or a larger territory depends on the ability to communicate and exchange services with other locations. The range of services that link cities and the European continent to the world market comprises services related to transport, energy and telecommunications. For a city, region or larger territory the provision of these services has a major impact on the attractiveness for new investments and constitutes an important location parameter. A survey conducted by the European Commission among EU Member States showed a strong consensus on the importance of accessibility (through infrastructure and to public services)² for territorial cohesion policy.

The ESDP (1999) stated that “*Good accessibility of European regions improve their competitive position but also the competitiveness of Europe as a whole.*” It highlighted the close relation between the aim of a balanced territory and polycentric development and the policy orientations taken for developing the infrastructure networks. In this respect the ESDP also highlighted the special role, which could be taken by Euro-

² See the Green Paper on Territorial Cohesion (2008)

corridors, global integration zones, gateway cities and urban poles, well distributed across the European territory, as nodes in the infrastructure networks.

At the heart of “Keeping Europe Moving”, the mid-term review of the 2001 White Paper on EU transport policy is the statement that transport connects countries and their people, but it also facilitates their economic growth. Effective transportation systems are essential for Europe’s prosperity, having significant impacts on economic growth, social development and the environment. The Territorial Agenda of the European Union (2007) also claimed that *“Mobility and accessibility are key prerequisites for economic development of all regions of the EU.”*

The Green Paper on Urban Mobility (2007)³ opens a debate on the key issues of urban mobility: free-flowing and greener towns and cities, smarter urban mobility and an urban transport which is accessible, safe and secure for all European citizens. It mentions that good inter-connections between transport modes and good links between urban and suburban transport are needed to make (urban) transport more efficient.

The Green Paper on Territorial Cohesion (2008)⁴ indicated that the road and rail links in the new EU Member States are clearly less developed than in the EU15. Furthermore, airports are more difficult to reach due to the uneven quality of secondary road networks and public transport. Finally, the paper indicates that transport by sea remains under-developed as a result of which it does not take sufficient pressure off congested roads and reduce CO2 emissions.

The functioning of networks very much depends on access points. A co-ordinated access is of particular importance where the access is related to very large investments. Most prominent in that respect are ports and airports, which need to be efficiently linked to land transport modes in line with an organisational network approach. Furthermore, communication and exchange between networks takes place in multi modal nodes. Multi-modal points are becoming increasingly important for sustainable transport in order to be able to use the least environmentally unsustainable transport mode possible.

The Territorial Cohesion Green Paper revealed a need for better analysis, inter alia of transport policy: *“Transport has obvious implications for territorial cohesion through its effect on the location of economic activity and the pattern of settlements. It plays a particularly important role in improving connections to and within less developed regions.”*

Previous ESPON research showed that a weak point of the European territory related to accessibility is that it is favouring some regions: *“Good accessibility is one of the major preconditions for economic development, which shows clear territorial imbalance with peripheral and rural areas often markedly worse in accessibility than urban areas (particularly in the core area of Europe).”* Another weak point of the European territory

³ See: http://ec.europa.eu/transport/clean/green_paper_urban_transport/index_en.htm

⁴ See: http://ec.europa.eu/regional_policy/consultation/terco/index_en.htm

are secondary networks: *“In many countries, secondary road and rail networks are not well developed to provide the services needed for areas to develop as they are poorly connected to the major transportation networks.”*

Against this backdrop, the project should strive to achieve a better understanding of a number of key policy questions, for which it should produce supporting information and evidence. These key policy questions are divided into questions for the regional/local perspective and questions for the European perspective.

Regional/local policy questions:

- What does regional accessibility/connectivity look like at the regional level? For example, how many jobs/people can be reached in 45 minutes travel time (by road or by train), how many city centres can be reached by flying out in the morning and returning in the evening?
- In which type of regions is the level of European accessibility very different from their regional accessibility?
- How can key infrastructural bottlenecks be identified at regional level?

European policy questions:

- What are the differences between accessibility at three different levels (regional, European and global) considering the four modes (road, rail, air and water)?
- What is the link between accessibility (at the different levels and for different modes) of European regions and their economic development? How has this link changed over time? Does the strength of this link differ across the EU?
- What could be the territorial impact of rising energy prices on future developments of water, air, railway and road transport? What could be the impact of various transport scenarios on climate change, access patterns and economic development?

The perspective of applied research under this measure shall be guided by the objective to identify broad development perspectives and trends for the different types of regions and cities, also in the light of the Lisbon/Gothenburg agenda.

Coordination should take place with other relevant ongoing ESPON projects (above all the projects on “Rural Areas’ Development (EDORA)”, “Regions at Risk of Energy Poverty” (ReRisk), “Territorial Impact Assessment (TIA)” and “Climate Change (CC)”. Results deriving from the ongoing targeted analysis “Spatial scenarios: new tools for local-regional scenarios (SS-LR)” (under Priority 2 of the ESPON 2013 Programme) are to be taken into account as well. Some ESPON 2013 projects that start in parallel with this project, in particular the one on “Continental territorial structures and flows (globalisation)” might also generate relevant information.

(iv) Analytical framework and deliveries expected

The project comprises two parts, one on measuring accessibility more accurately incorporating the regional/local level and one on various extensions of accessibility at European level.

The first part concerns the improvement of the methodology to measure accessibility of European regions. The methodology for measuring accessibility developed in the ESPON 2006 project 1.2.1 discards the regional reality and diversity by using only one point of reference for each region. Therefore, this project is asked to develop a complementary approach in understanding better the accessibility of European regions and their components. Within this part the transport modes road, rail, air and waterways should be taken into account.

The first part should start with conducting an analysis of regional maps in order to find characteristic patterns of local/regional accessibility. The analysis should cover different types of regions, such as islands, mountains, highlands, urban and rural. Based on the patterns found a typology should be defined that can be used to characterise the different accessibility patterns in different types of regions.

Per typology a number of study areas (at least four per typology) should be selected in which the accessibility patterns should be determined, based on the regional/local transport network and taking into account existing access points, bottlenecks, and physical barriers. The accessibility patterns found should be compared with the accessibility values of the regions at European level. The differences between these and the causes of these differences should be analysed to find out what type of regions follow the general European accessibility patterns and what type of regions need to be given particular attention due to a mismatch.

The second part of the project concerns the completion of the coverage of transport modes. In the ESPON 2006 project 1.2.1 the transport modes road, rail and air were well covered. This project shall add the coverage of waterways, i.e. inland waterways and maritime highways. Regarding the latter, strong coordination should take place with the project on “European seas in territorial development” running in parallel to this project. Furthermore, the rail network has to be split into high-speed rail and normal rail and a distinction shall be made between transport of people and freight transport, each with their own preferred transport modes probably leading to different accessibility patterns.

The second part shall use a 4-level-approach (global, European, transnational/national, regional/local) to the analysis. It means that additional information has to be gathered in order to better reflect the accessibility in the regional/local dimension and to improve knowledge on global transport networks. The resulting impacts and patterns might vary depending on the geographical scale and therefore the 4-level approach should be applied in order to support a clear presentation of all possible results.

Within different projects attempts have been made to achieve more realistic estimates of travel time through the road network (see: DG REGIO Regional Focus n° 01/2008; the TRANSTOOLS network and its forthcoming enhancements; the EUTRA network used for freight transport flow modelling). This ESPON project should analyse and make use of these adaptations and extend these to the rail network (connections per hour/day) including the high-speed railway network. Furthermore the quality of the secondary network should be analysed and the bottlenecks within a regional/local dimension should be identified. All improvements mentioned here should be incorporated into the methodology to measure accessibilities. With the improved methodology it should be possible to capture changes in the transport networks, due to new highways, TEN-T project (such as the Fehmer Bridge), new connections to a highway, etc.

This part of the project should also include a number (balanced throughout the ESPON space) of targeted study areas in order to receive more focussed and detailed information on intermodal transport opportunities and their impact on accessibility of regions and cities. The study areas shall cover the same regions as the study areas of the first part and embrace the local and regional scales. These studies should show possible added value of the inclusion of intermodal transportation in the methodology to calculate accessibility, show the accessibility pattern of public transport compared to private transport and should as well serve to fine-tune, test and further develop the methodology to measure accessibility through intermodal transport.

The project should consider existing data and indicators for the analysis. The data, indicators and maps of the ESPON 2006 Programme are one important source in this respect. This project shall in particular be informed and make use of relevant results from the following previous and current ESPON projects:

- ESPON project 1.2.1 on “Transport services and networks: territorial trends and supply” mapped accessibility patterns for different modes of transport, road, rail and air transport, as well as multi modal transport. The applied research showed that for accessibility a clear core-periphery pattern exists at European scale, in particular for road and rail access.
- Due to the rapid development of transport infrastructures in large parts of Europe and their relevance to policy discussions the potential accessibility indicators for road, rail, air and multimodal delivered by ESPON project 1.2.1 have been updated to 2006. This not only leads to more recent information, but also to information on trends, changing accessibility between 2001 and 2006.
- ESPON Project 2.1.1 on “Territorial impact of EU transport and TEN policies” developed 10 scenarios on road/rail infrastructures, pricing, and combined. These scenarios have been used to evaluate EU transport policy and investigate its effects in particular on “regional development potential” (using competitiveness, mass, connectivity and development trends as basic indicators) and polycentricism

The project shall strive for a comprehensive and integrated research approach, taking into account social, cultural, environmental, and economic aspects. In addition, it shall strive

for delivering innovative results which can support the policy development in the field of territorial development, competitiveness and cohesion. It should demonstrate an inventive approach with regard to the scientific answers to the policy questions and should aim at showing new development opportunities for the European territory. There should be a combination and interrelation of various sectors and territorial insights on the development in order to contribute to the creation of new development paths and visions.

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

Current status of accessibility:

- What is the regional (i.e. accessible on a daily basis) accessibility for road, rail and air? And what are characteristic patterns of local/regional accessibility?
- What is the potential accessibility for the four modes (road, rail air and water) and more specifically of high-speed railways at European level? What is the potential accessibility for air and water at the global level?
- What types of regions reveal a mismatch between their potential accessibility at European level and their regional accessibility?
- What are the transport profiles for different types of regions? How does potential accessibility of different types of regions relate to one another? For example, which remote areas are best/least accessible or which urban centres or which island or which high mountain areas?
- How can different commuting patterns be distinguished? What do the various accessibility patterns mean for different groups of people (e.g. 55+ and disabled)?

Improving the way accessibility is measured:

- How can bottlenecks for the four transport modes be identified at the regional and the European scale?
- The methodology to calculate accessibility could be improved by including intermodal transport. How can combining the various ways of transport be incorporated in measuring accessibility at regional and European level?

Freight transport:

- What are feasible and relevant ways to distinguish between the transport of people and goods for air, rail, road or water?
- How can the present and future role of freight transport over rail and inland waterways be defined? How can its significance compared to transport over road, rail and air be calculated? To what extent does enlargement of freight transport over inland waterways change the accessibility patterns for freight?

Cause and effect aspects of accessibility:

- How is accessibility related to regional development, growth, travel costs, carbon levels and employment?
- What could be long term scenario's for the transport sector in the EU? How could the impact of these long term scenarios on climate change, accessibility patterns and economic development be estimated?

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 (i.e. Croatia, the Former Yugoslav Republic of Macedonia and Turkey) and/or the other countries of the Western Balkans (i.e. Bosnia and Herzegovina, Serbia, Montenegro, Albania, Kosovo under UN Security Council Resolution 1244) and report on their findings in the inception report. Depending on the respective data situation these countries would then be included in the analysis.

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.

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 additional data on potential accessibility and various infrastructure networks gathered within the project, particularly in relation to the new Partner States, Iceland and Liechtenstein. 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 different types of transport modes and accessibility, new complex indicators revealing the impacts of new infrastructural networks.
- Amendment of the multimodal accessibility potential typology used for this project by (1) including all ESPON Partner States, (2) including missing transport modes, and (3) ideally by filling the gaps for those regions, for which no data was available.
- Separate studies on different types of regions showing accessibility within the region and different types of accessibility patterns.
- Separate studies on the same regions as above showing the added value of including multimodal transport in the methodology to calculate accessibility.
- Study area maps revealing the accessibility of the various transport modes and types.
- European maps revealing (1) the accessibility patterns of the various transport modes (road, rail, waterways and air) and types (transport of people and freight) on various scales (global, European, regional, local, the study areas), (2) the multimodal accessibility potential typology, covering the full ESPON territory, (3) the present and future role of transport over inland waterways.

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 in charge of the development of the ESPON 2013 Database. The TPG is also expected to cooperate with the ESPON project “Access to services of general interest” in order to determine their need on transport accessibility data and information. In consultation with the ESPON CU the project will try to fulfil their requests.

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 maps resulting from the project.

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.

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 regions in question. In this respect, references to future policy options should take account of European Cohesion Policy orientations, in particular expressed in the Community Strategic Guidelines on Cohesion 2007-2013 and the Fourth Report on Cohesion.

Project findings should make clear which impact the use of the identified development opportunities could have on the competitiveness and socio-economic situation of European regions as well as on 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 indicative⁵ timetable and specification of outputs:

June/July 2010 (Inception Report):

Twelve weeks after the Kick-off Meeting, 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. The Inception report shall also inform about the selection of study areas that will be used in both parts of the research. 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

⁵ The final timetable for the project will depend upon the exact date of the project's Kick-off Meeting. At this meeting, the exact delivery dates for all project reports will be agreed upon with the Lead Partner.

give clear orientation for the applied research previewed towards the Interim report, including the way in which requests of the “Access to services of general interest” project can be fulfilled. The research team should also report on the findings regarding the assessment of the data situation in the EU candidate countries (i.e. Croatia, the former Yugoslav Republic of Macedonia, Turkey) and/or the other countries of the Western Balkans (i.e. Bosnia and Herzegovina, Serbia, Montenegro, Albania, Kosovo under UN Security Council Resolution 1244) 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.

November/December 2010 (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

- An overview of different regional accessibility patterns and a proposal for a typology on this related to different types of regions.
- First analysis of the regional accessibility patterns within the specific study areas and a first comparison of this with European accessibility of regions.
- First analysis of the current pattern of accessibility and the bottlenecks of the various transport modes on national/transnational and European scale for road, rail, waterways and air and for transport of people and freight transport.
- First analysis of the current pattern of the global transport network, also differentiated between transport of people and freight transport.
- Definition of connectivity of high-speed railways and a first analysis of European connectivity through high-speed railway.
- First analysis of the present and future role of freight transport over inland waterways, a first comparison between freight transport over inland waterways, over air and over territorial transportation network (road and rail) and a first analysis of changes in the accessibility patterns for freight when freight transport over inland waterways is enlarged.
- Overview on urban centres that are difficult to access and not well accessible remote areas, also related to the difference between transport of people and freight transport and a first analysis on the number of people affected and of the impact on competition and territorial cohesion when improving these aspects.
- Overview of information needed to better reflect accessibility and to improve the coverage of transport modes in the regional/local level.
- Proposal on how to improve the methodology to calculate accessibility by including intermodal transport and combining the various ways of transport and on how to define and measure accessibility by public transport (combining train and bus).
- First indications on where the various transport networks could be improved and which improvements could be considered most efficient.
- Proposal on long term scenarios for the transport sector in the EU.

- Draft methodology to estimate the impact of these long term scenarios on climate change, accessibility patterns and economic development.
- Data collection achieved, including an overview on statistical and geographical data collected by EUROSTAT, and national Statistical Institutes etc.
- Draft European maps, draft maps of the study areas.
- 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.

November/December 2011 (Draft Final Report):

The draft Final report will take into account feed-back 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, projections 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 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, definitions and methodology/theory used.
- Methodologies, typologies and concepts developed and used.
- Data collected and indicators used, including calculation algorithms and tables with the exact values of indicators.
- Network geometry (including all relevant attributes) as used in the accessibility analyses.
- Maps produced in support of the results, covering the 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.

April/May 2012 (Final Report):

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

May/June – November/December 2012 (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.

The ESPON 2013 Programme foresees in Priority 4 also capitalisation of project results including events, printed reports, website facility, etc. The Programme includes, in other words, substantial dissemination activities at Programme level which all projects should make use of and support. This means that the project's dissemination activities shall ensure consistency and avoid overlaps with and repetition of respective activities organised at Programme level. The project team shall refer to the objectives of Priority 4 of the ESPON 2013 Programme "Capitalisation, ownership and participation: Capacity building, dialogue and networking" when considering dissemination activities and closely coordinate these with the ESPON CU.

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) Budget for the applied research project

The maximum budget foreseen for this applied research project amounts to € 700.000 including VAT, if applicable. Proposals exceeding this value will not be considered.

All real eligible costs incurred for carrying out the approved project will be refunded 100% by the ESPON 2013 Programme.

(vi) Existing access points

Synergies and use of results from outside the ESPON regime shall be sought. In particular, research activities in DG-TREN and of JRC who has made at least two reviews on sustainability and transport 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
- The Green Paper on Territorial Cohesion (2008)

- The Green Paper on Urban Transport (2007)
- The Commission's White Paper "European transport policy for 2010: time to decide" (2006)
- Mid-term review of the White Paper (2006)
- Review of the mid-term review of the White Paper by the Federal Environment Agency (2006)
- Panorama of Transport, EUROSTAT statistical book (2007)
- Sustainability and transport: a review. JRC Technical Notes, European Commission (2007)
- Indicators to Assess Sustainability of Transport Activities, JRC Study, European Commission (2007)
- Transport, a driving force for regional development. InfoRegio Panorama, No. 18, December 2005. European Commission (2005)
- The Marco Polo programme for projects which shift freight transport from the road to sea, rail and inland waterways (<http://ec.europa.eu/transport/marcopolo/>).
- Intermodal transport (<http://ec.europa.eu/transport/intermodality>)
- (Draft) final report of the TENconnect project (October 2008). Traffic flow: Scenario, traffic forecast and analysis of traffic on the TEN-T, taking into consideration the external dimension of the Union.
- Services of general interest in Europe. European Commission (2000)
- An overview of INTERREG III programmes and results throughout Europe (<http://archive.interact-eu.net/604900/604902/0/0>)
- The Interact programme which provides information on all European Territorial Cooperation Programmes (<http://www.interact-eu.net/>)