ESPON

# DeTeC
# Detecting Territorial Potentials and Challenges

Scientific Platform and Tools Project 2013/3/6

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This report presents the draft final results of a “Scientific Platform and Tools” Project conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

The partnership behind the ESPON Programme consists of the EU Commission and the Member States of the EU27, plus Iceland, Liechtenstein, Norway and Switzerland. Each partner is represented in the ESPON Monitoring Committee.

This report does not necessarily reflect the opinion of the members of the Monitoring Committee.

Information on the ESPON Programme and projects can be found on www.espon.eu

The web site provides the possibility to download and examine the most recent documents produced by finalised and ongoing ESPON projects.

This basic report exists only in an electronic version.

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# A Executive summary

To understand the position of one's region or city in a larger territorial context opens up new possibilities for capitalising on territorial potentials. These larger contexts include relations with neighbouring regions, macro-regional contexts, a European perspective and the regional impacts of global issues. As a result, developing knowledge on these wider perspectives for strategy building and policy making is of major importance for European regional policy development.

The ESPON 2013 Programme, the European Observation Network for Territorial Development and Cohesion, shall inspire policy making by providing territorial evidence. This evidence is developed through three strongly interrelated operations: Priority 1 projects focus on applied research projects on different themes of European territorial dynamics; Priority 2 projects concentrate on targeted analyses together with stakeholders to make use of ESPON results in practice; and Priority 3 projects involve development of the ESPON scientific platform, which includes the ESPON Database project as well as tools related to territorial analyses, typologies, modelling and updates of statistics.

As a Priority 3 project, Detecting Territorial Potentials and Challenges (DeTeC) offers support to strategic policy making in European cities and regions. It does so by synthesising ESPON knowledge to provide local and regional practitioners and policy makers with hands-on guidance and inspiration. With this target audience in mind, DeTeC's main focus has been on synthesising knowledge from Priority 2 targeted analysis projects, as each of these involve close cooperation with practitioners working at the regional/local scale. The rationale is that through the cooperation with practitioners, the outputs of these projects offer accessible concepts, territorial approaches and analytical methods that other practitioners and policy makers can apply for detecting territorial potentials and challenges in their regions and cities.

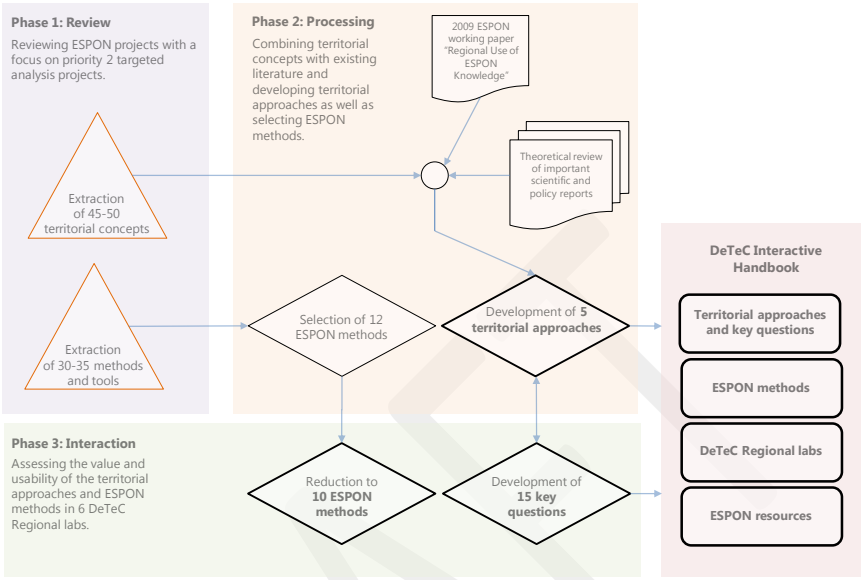
In order to use ESPON knowledge to inspire practitioners and policy makers working with regional issues the main output of the DeTec project is a handbook providing interactive, hands-on guidance to knowledge emanating from ESPON projects. This includes DeTeC's identification of "territorial approaches" and "ESPON methods". These are the result of DeTec's review, synthesis and structuring of ESPON knowledge – a process that has had a constant focus providing this knowledge to practitioners in an accessible, logical and therefore insightful way.

## 1.3 The DeTec Conceptual Framework

DeTeC has strived to meet an increasing demand for delivering innovative and more relevant knowledge to practitioners and policy makers for detecting territorial potentials and for ultising regions' larger territorial context to turn challenges into opportunities. To do so, DeTec has undertaken an intensive review of ESPON knowledge and deduced five novel territorial approaches and ten innovative ESPON methods. These represented the essence of the project's conceptual framework and together with a presentation of DeTec's six regional labs, they formed the basis of our interactive handbook for detecting territorial potentials and challenges using ESPON knowledge.

The DeTeC conceptual framework presented below consists of three phases: review, processing and interaction. Taking place first, the thorough review of ESPON projects identified 45-50 different territorial concepts and analytical approaches, as well as 30-35 methods, tools and indicators that have been applied or generated within ESPON projects. The main focus has been on priority 2 targeted analysis

projects, since they have been developed in close collaboration with stakeholders, but we have also reviewed Priority 1 and Priority 3 projects as well.




Based on the review, the second phase was a systematic, step-wise process of formulating the two main components of the conceptual framework: the territorial approaches and the ESPON methods. First, the methods, indicators and tools were grouped based on the territorial concept(s) they can be used to explore. In parallel, researchers completed a theoretical review of important scientific and policy reports on regional studies and policy; particularly the 2009 ESPON Working Paper "Regional Use of ESPON Knowledge". The theoretical review combined with the knowledge building that took place during our internal review of ESPON projects led to the synthesis of the 40-45 individual concepts/analytical approaches into the five territorial approaches presented by DeTeC. These approaches characterise how current ESPON knowledge can be used to understand territorial challenges, potentials and key policy questions of regions:

1. Global challenges and future potentials of a region
2. Comparing territorial performance of a region
3. Functional areas and internal coherence of a region
4. Current and potential external linkages of a region
5. Opportunities for territorial governance of a region

While the territorial approaches were being developed the 30-35 methods, indicators and tools were also being filtered based on three criteria: having been developed or significantly enhanced by ESPON work (i.e. being innovative); having the most analytical power for the identified territorial approaches; and being transferrable for application and use by practitioners. This resulted in a selection of 12 ESPON methods; and since they were attributed to the territorial concepts they help explore (which remember were narrowed into the "territorial approaches") this means that a

robust connection between territorial approaches and ESPON methods was maintained.

> ***Territorial approaches provide entry points into policy relevant methods, tools and maps, while ESPON methods can be applied to analyse territorial approaches and answer their key questions.-***

The third phase of the conceptual framework was an innovative feature of DeTeC. Six regional laboratories (labs) were carried out to assess the regional applicability of the five territorial approaches and 12 ESPON methods. The labs were conducted in six carefully selected regions across Europe to reflect that different types of regions will very different challenges and potentials, which is the essence of a territorial, place-based approach to policy making. The regions were:

- The city region of Edinburgh South East Scotland (United Kingdom)
- Skåne (Sweden)
- Podlasie (Poland)
- Danube - Kris -Mures - Tisa (DKMT) Euroregion (Hungary, Romania, Serbia)
- Styria (Austria)
- Malta

The regional labs provided three important benefits ensuring that DeTeC's results are oriented towards practitioners and policy makers:

1. They helped identify three "key questions" for each of the five territorial approaches. These 15 questions will assist practitioners in identifying their own regional contexts when considering the territorial approaches.
2. They reflected on the practical applicability of the 12 methods. As a result, they were reduced to the final ten ESPON methods presented in the handbook.
3. Selected labs were also presented with a draft of the handbook and contributed significantly to its refinement.

The completion of the regional labs marked the final step of the conceptual framework and the remaining work has been directed towards reporting project results, not least through the interactive handbook. But on a more general level, the labs revealed that the outcomes of ESPON projects are not well-known among local and regional practitioners. As a result, the labs were valuable for providing participating practitioners with information that simultaneously acknowledges their local needs and displays ESPON knowledge. Through the labs, it was also clear that the experiences and skill-sets of regional practitioners throughout Europe varies greatly. As a result, the competencies of practitioners who participated in ESPON priority 2 projects should not considered as a baseline for assuming what types of knowledge all practitioners have. In contrast, most practitioners to not have the in-depth knowledge to understand the intricacies of detailed analytical approaches, nor do they have the time to invest in discovering them through lengthy reports and other documentation typically provided by ESPON. The labs therefore highlighted the importance of not only "making ESPON knowledge more accessible" (to practitioners), but also making "more accessible ESPON knowledge". The DeTeC Handbooks prescribes to the former, while upcoming ESPON work should focus on the latter.

## 1.2 Interactive Handbook

The interactive handbook for detecting territorial challenges and potentials is the main tangible outcome of the project. With the five territorial approaches, ten ESPON methods and 15 key questions as the basis of its content, it is clear how the DeTeC conceptual framework, described above, directly translates into the handbook's structure. The guideline underpinning its development has been to present information in a way that allows practitioners and policy makers to quickly get additional insight to help them in their daily work. Therefore, the focus was on 'approachability and accessibility' with plenty of visuals, brief but concrete text explanations and an interactive user interface. All this allows for effective and time-saving use.

The main objective of the handbook is to provide guidance on how local and regional practitioners and policy makers can use ESPON knowledge. Also, it is based on the idea that understanding a regions' position in a larger territorial context is a cornerstone of the ESPON 2013 Programme. The handbook provides:

- Practical guidance for strategic local and regional policy making through the five territorial approaches. These approaches are designed to focus attention towards important issues and to open up new perspectives in local and regional development processes;
- Concrete examples of good practices derived from the regional laboratories and a collection of ESPON methods. Local and regional practitioners can use these as inspiration to detect the specific territorial potentials and challenges of their region.
- A concise and easy to use ESPON reference.

The handbook was designed to engage local and regional stakeholders, practitioners and policy makers in the fields of regional development and spatial planning. These actors are responsible for making strategic decisions and will influence the medium and long-term development of their regions and cities. While engaging stakeholders, the handbook was not designed to take over the decision-making process. This means that the structure and content of the handbook does not (and cannot) provide answers to specific questions. Rather, it provides different possibilities and alternative perspectives to tackle a problem or question.

The definition and identification of the requirements of the handbook's target audience was necessary in order to develop a conceptual framework that combines all methodological approaches with the needs of practitioners and policymakers. By direct engagement with them in the regional labs, these needs were identified and policy makers and practitioners were actively involved in the co-fabrication, production and further development of the conceptual framework.

Also, the production of an e-handbook provides new possibilities regarding navigation in a non-linear and interactive fashion. By showing inter-linkages between territorial approaches, ESPON methods, key questions and additional ESPON resources the handbook can also contribute to the structuring of the set of decision problems. For instance, practitioners and policy makers may be debating in what ways problems should be formulated, and how far one decision should be seen as linked to another. They may be considering whether their current focus should be enlarged or, conversely, whether a complex of related problems should be broken down into more manageable parts. The interactive and non-linear aspect of the handbook addresses this issue.

The final interactive handbook in the form of an e-book includes five chapters:

- Chapter 1. Introduction
- Chapter 2. Territorial Approaches
- Chapter 3. ESPON Methods
- Chapter 4. Regional Laboratories
- Chapter 5. ESPON Resources

## 1.3 Need for further analysis/research

Through the various activities performed within the DeTeC project we can conclude that methods and approaches developed within ESPON are of relevance for regional and local stakeholders but also that there are significant challenges applying and using ESPON approaches, methods, tools and indicators at regional and local level. The discussions within regional laboratories have provided valuable knowledge on their needs related to regional development. The gathered information about the necessity for further analysis and research are mainly related to communication, scale and scope of indicators, as well as their up-datedness of data.

The ESPON Programme is known by many regional and local stakeholders as a European programme which analyses territorial trends at a macro level. There is a perceived lack of communication of results and outputs to practitioners and policy makers at lower spatial levels and it is often felt among practitioners at regional and local level ESPON projects are not useful for regional planning and development purposes at this level.

In the future, the ESPON Programme needs to intensify the dissemination activities at the regional and local level, in order to make project results more known (through for example regional laboratories). Secondly, the added value of a European overview for regional development needs to be emphasized and good practice examples need to be provided, as it is not common sense with practitioners and policy makers at the regional and local level that this overview supports the daily work in regional development. More interaction with users through for example targeted analysis project could help in solving these issues.

In technical terms projects under the ESPON program should take into account the problem of scale concerning analysis and maps. An underlying problem is that analyses are mainly conducted at NUTS2 level and regional and local actors generally possess much more detailed data of their sphere. According to the opinion of the regional representatives, data at a much lower scale than NUTS-2 is needed to analyze regional challenges and potentials. Data comparability between regions (e.g. different definitions of indicators), the problem of scale of data and maps concerning intra-regional disparities and the problem of up-to-date data are main issues. For instance, an example of one of the regional laboratories - Malta shows that analyses at NUTS 2 level are not satisfactory for local and regional practitioners. In addition, the state Malta is not clearly visible on the maps showing the entire European Union and thus they lose their applicability in small countries.

Put together, there is a need to promote and intensify data collection and harmonization at lower geographical levels. This is no doubt a reflection shared by everyone who has ever participated in an ESPON project – the inevitable catch-22 between providing pan-European coverage and providing robust research findings at an appropriate territorial scale. Evidently this issue remains and is perhaps more pressing than ever.

# B. Report

## B 1 Introduction

How can the European Observation Network for Territorial Development and Cohesion (ESPON) contribute to local and regional development? How can approaches and methods developed and used within different applied research projects and targeted analyses in the ESPON programme contribute to detecting territorial potentials and challenges at local and regional level? These have been two of the overarching questions explored within this ESPON scientific platform project: Detecting Territorial Potentials and Challenges (DeTeC).

The specific objective of the ESPON DeTeC project has been to develop practical guidance on how local and regional stakeholders, practitioners and policy makers, can use ESPON knowledge for detecting territorial potentials and challenges. A number of territorial approaches and a European perspective are expected to help to turn challenges into potentials. This shall be achieved by providing examples of good practices on how to link ESPON results with local and regional issues, and by providing illustrative examples of how different territorial approaches and ESPON methods can be used. The main output of the project is an interactive handbook providing practical guidance and concrete examples to practitioners and policy makers in an easy and understandable way (see appendix II for a draft version).

The project has consisted of three main phases; a systematization and review of ESPON approaches and methods, processing and development of a framework for using ESPON knowledge, interaction with regional stakeholders through regional laboratories in six different regions throughout Europe. In the end the project has focused on synthesis, transferability, and dissemination including the production of an interactive handbook. This report (B) focuses on results and contexts of the project while the attached Scientific Report (C) provides information on the processes, i.e. methods and research activities.

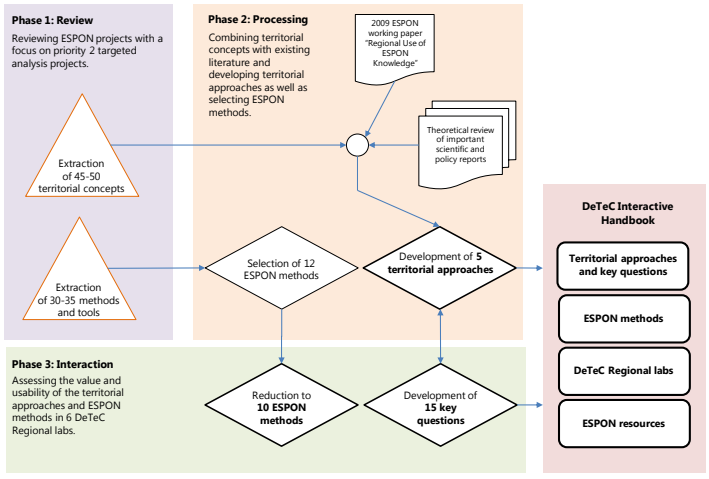



***Figure 1. An overview of the DeTeC project***

## 1.1 Overview of the DeTeC project

The first phase of the project reviewed and analysed different ESPON projects with a particular focus on Targeted Analysis projects. The projects were systematized and analysed by focusing on key concepts, themes of indicators, methods of analysis and their representations. Based on this, relevant individual methods refined and/or developed within ESPON were identified and analysed, with focus on illustrative examples of how these methods were applied and used in different projects and in different geographical contexts. The so called ESPON methods are one of the key components of the conceptual framework that was developed in phase two of the project as a basis for the handbook.

Territorial approaches are the second key component of the framework for using ESPON knowledge within a local and regional context, developed and processed during the second phase. A territorial approach is essentially a geographical perspective on local and regional development, and a help to structure policies, practices and processes in territorial terms. In total five different territorial approaches were developed based on previous ESPON knowledge and experiences. Here the report *Regional Use of ESPON Knowledge: Inspiration for Researchers and Practitioners involved in Regional Territorial Analysis and Policy Development* (2010) from the Seminar "The ESPON Knowledge Base as Potential for Territorial Analysis and Policymaking at Regional Level", 2009 in Malmö, Sweden was a crucial starting point. The territorial approaches were also developed in relation to recent and ongoing debates within the European policy discourse, and in context of research within the fields of regional studies and human geography.

In the third phase of the project the local and regional applicability of the conceptual framework and the interactive handbook has been tested through regional laboratories in six different locations across Europe. At a first target group meeting the ESPON programme and the territorial approaches developed within the DeTeC project were presented and discussed. Before the second engagement with local and regional stakeholders, practitioners and policy makers, the conceptual framework with territorial approaches and ESPON methods were applied to the local and regional issues. During stakeholder workshops, organised in collaboration with local and regional stakeholders, the applicability of the conceptual framework (with territorial approaches and ESPON methods), and the usefulness, form and content of the interactive handbook on detecting territorial challenges and potentials was discussed and assessed.

The conceptual framework linking different territorial approaches and ESPON methods, and good practices of how ESPON knowledge can be used in different local and regional contexts derived from the regional laboratories, are integral parts of the interactive handbook produced in the final part of the project. The interactive handbook has been produced as an e-book providing multi-directional usage with key questions providing navigation between territorial approaches and ESPON, and with direct linkages through various ESPON resources and regional examples. It also offers general guidance to the ESPON Programme, and in particular includes information on ESPON tools and maps. The experience of the regional laboratories was synthesized in a concise report (see appendix I) and the knowledge generated through the project has also been disseminated through a policy seminar and policy brief as well as through different reports.

## 1.2 Background: the ESPON programmes

There are great potentials in the ESPON knowledge base for dealing with various regional challenges (and potentials) and there is a demand for new and more knowledge from local and regional practitioners and policy makers. Various ESPON projects have revealed that territorial capital and opportunities for development are inherent in Europe's regional diversity. Consequently, different types of territories have different combinations of resources and capacities for contributing to the achievement of the Europe 2020 Strategy as well as to EU Cohesion Policy. Territorial diversity, particularly in the economic base, implies the need for tailor-made regional strategies building on endogenous potentials and synergies through cooperation in order for regions, cities and larger territories to achieve smart, sustainable and inclusive growth.

ESPON has since its beginning in 2002 produced an extensive evidence base in form of scientific reports, targeted analyses, thematic maps, and spatial indicators. A general ambition of the programme has been to, as far as possible, use and produce, European-wide harmonised data to assess various territorial dynamics in cities and regions. The programme has strived to cover the entire "ESPON space", including the whole European Union (EU-15 or more recently EU-27 or even EU-28) plus Switzerland, Norway, Iceland and Liechtenstein in the territorial analysis. In some projects even candidate countries or neighbouring regions of the European Union have been analysed. ESPON has been set up to bridge knowledge gaps on European territorial development by bringing together researchers and the policy community, to: "Inspire policy making by territorial evidence" (see www.espon.eu).

The need for a European wide network on territorial knowledge was acknowledged already in the 1990s during the preparation of the European Spatial Development Perspective (ESDP) (1999). The first ESPON 2006 Programme was carefully prepared through a Study Programme on European Spatial Planning (SPESP) (2000) between 1998 and 1999 by identifying key knowledge gaps and new ways of forming collaborative networks in view of doing policy-relevant research on spatial planning at the transnational scale. The first period of ESPON from 2002 to 2006 involved more than 600 researchers and 130 institutions focusing on various ways to analyse spatial dimensions across Europe. The programme included 35 major studies using in particular quantitative methods and GIS platforms to illustrate their results. The content of the projects were very much aligned to the thematic scope outlined in in the ESDP, such as the role of cities in regional development, urban-rural relations, polycentricity and accessibility.

The ESPON 2013 programme has been divided into four priority areas, which in various ways have contributed to a European knowledge base on territorial development and cohesion, including data sets, themes of indicators, regional typologies, thematic maps, and not the least territorial approaches and methods. The mission of the ESPON 2013 Programme has been defined as follows:

> Support policy development in relation to the aim of territorial cohesion and a harmonious development of the European territory by (1) providing comparable information, evidence, analyses and scenarios on territorial dynamics and (2) revealing territorial capital and potentials for development of regions and larger territories contributing to European competitiveness, territorial cooperation and a sustainable and balanced development. (www.espon.eu)

The ESPON 2013 Programme has included more than 65 different projects within the different priority areas; 25 Priority 1 Applied Research projects, 23 Priority 2 Targeted Analysis projects, ten Priority 3 Scientific Platform and Tools projects, and seven Priority 4 Transnational Networking Activities.

Each of the different priority areas has contributed with different types of knowledge. Applied Research projects have focused on a variety of issues in regards to territorial development in a pan-European perspective responding to a number of pre-defined policy and research questions on issues such as "Attractiveness of European Regions and Cities for Residents and Visitors" (ATTREG), "Future Orientation for Cities" (FOCI), "Knowledge, Innovation, Territory" (KIT), "European Land Use Patterns" (EU-LUPA), "Geographic Specificities and Development Potentials in Europe" (GEOSPECS), and "Territorial Impact Package for Transport and Agricultural Policies" (TIPTAP). These thematic types of projects focusing on specific sectors and or regions have been complemented with cross-cutting perspectives and methodological and conceptual projects such as "Assessment of Regional and Territorial Sensitivity" (ARTS), and "Territorial Approaches to New Governance" (TANGO), which in particular has analysed how projects, policies and programmes related to territorial development issues at various scales unfold. The Applied Research projects have thus analysed drivers, impacts and potentials of territorial development from different perspectives, often with help of quantifiable data and a range of different indicators, commonly visualised in a number of advanced thematic maps.

The Applied Research projects mentioned above have provided valuable input for this project, especially for the development of territorial approaches. However, the Targeted Analysis projects have been of particular importance for the DeTeC project since it has had a clear focus on the local and regional use, applicability and transferability, of ESPON knowledge. Targeted Analysis projects are demand driven projects, i.e. projects that use ESPON evidence in analysis demanded by local, regional and national stakeholders. In contrast to the former priority area, in which the applied research is conducted solely by transnational groups of researchers and experts, this priority area seeks to integrate different kinds of stakeholders (policy makers and practitioners working at the local, regional and national scale) in the project, who propose and define the thematic scope and monitor (interim) findings in particular in view of their usefulness and applicability. The so called ESPON methods have been rendered from different Targeted Analysis projects. But also other Scientific Platform and Tools projects have been crucial for the DeTeC project in general and in the development of the interactive handbook in particular.

As a Scientific Platform and Tools project the DeTeC project contributes to systemisation, accessibility and utilization of ESPON knowledge by providing new tools and evidence for other Programmes on European Territorial Cooperation as well as national, regional and local stakeholders, practitioners and policy makers. The ESPON Database project is an example of one of the ten larger Scientific Platform and Tools projects. In the open database different territorial indicators from the various ESPON projects has been collected and organised. The ESPON Database currently includes over 700 indicators categorized into 12 different themes:

1. Economy, finance and trade
2. Population and living conditions
3. Labour market
4. Education
5. Health and safety
6. Information society

7. Agriculture and fisheries
8. Transport and accessibility
9. Environment and energy
10. Science and technology
11. Governance
12. Territorial structure

ESPON has developed a large number of indicators which might be used for analysing and detecting territorial potentials and challenges. Many different ESPON projects have also focused on structuring and prioritizing different indicators for different thematic and geographical areas. For example, the KITCASP project identified, through stakeholder workshops, four key themes and 20 key indicators for territorial cohesion and spatial planning. Another ESPON project striving to bridge the gap between research and policy making and to promote territorial cohesion in the Baltic Sea Region has been the BSR-TeMo project. It has developed an indicator based tool for monitoring the territorial development in the Baltic Sea Region which allows for a comparison and benchmarking with other European regions.

The focus of the ESPON DeTeC project has been on approaches and methods used and developed within ESPON. As such it complements other Scientific Platform and Tools as well as Applied Research projects that have focused on indicators.

Another ESPON publication that has been vital for this project is, as mentioned above, the so called Malmö-report *Regional Use of ESPON Knowledge* (ESPON 2010), which outlined the concept of territorial approaches. The rationale behind the territorial approaches came from a perceived demand for integrating a territorial perspective in European policy making and EU's cohesion policy, and for connecting policy demand and targeted analysis.

> Policymakers at regional level are more and more aware that their region is becoming part of a wider European territory /…/ Regional policymakers demonstrate a clear demand to integrate the European perspective in their regional development strategies and policy actions. They wish to have a better understanding of the interaction between European developments and the territorial trends they in their region in order to make better use of territorial potentials and to better adapt to certain challenges. (ESPON, 2010, p. 8)

## 1.3 Territorial cohesion and place-based policy

The importance of territorial (or place-based) approaches for regional development within Europe is a key element in the territorial agenda and for territorial cohesion polices. Territorial cohesion was introduced as third dimension in the EU's cohesion policy, alongside economic and social cohesion, with the Lisbon Treaty. It is now an integral part of the EU's overarching Europe 2020 strategy. However, the topic has been discussed since the early 1990s (e.g. in the *European Spatial Development Perspective* (ESDP, 1999)), but has become more pronounced with the expansion of the European territory and the inclusion of new member states in the 2000s.

Territorial cohesion was explicitly addressed first in the *Territorial Agenda: Towards a more competitive and sustainable Europe of diverse regions* (TA, 2007). In this policy document the normative notion of territorial cohesion was declared as the most important task of territorial policies in Europe, whilst simultaneously exploiting the existing territorial diversity within the EU. This was further pronounced in the *Green Paper on Territorial Cohesion* issued by the European Commission in 2008 (CEC,

2008). A central objective has since been to develop a common mind-set on what territorial cohesion is and what it means in terms of policy coordination. Here in particular the ESPON Programme has become a nucleus of developing scientifically robust knowledge in terms of territorial analysis, but also regarding the applicability and identification of policy options that can help and support addressing the territorial dimension in general and the political objective of territorial cohesion in particular.

Territorial cohesion is a vague concept, perhaps intentionally and necessarily so, since a robust definition would render it politically unusable (Davoudi, 2005; Vanolo, 2010). A short encyclopaedic definition is "a principle of promoting economic prosperity and social justice within the European Union (EU) in order to avoid socioeconomic fragmentation and greater regional disparities" (Scott, 2009). Territorial cohesion and competitiveness have, according to some researchers, become depoliticized high-politics and the internal contradictions have been naturalized through the harmonization of contradictions (Vanolo, 2010). Territorial cohesion can be understood in different ways for example as socio-economic convergence, as economic competitiveness, as spatial planning, or as policy coordination (Evers, 2012). In the territorial cohesion concept there is, thus, a tension between on the one hand socio-economic balance between regions and territorial competitiveness, which becomes an issue for spatial planning and policy coordination.

The most recent *Territorial Agenda: Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions* (TA 2020, 2011), has been adapted to the Europe 2020 strategy, the general road map of EU policy targets in regards to central policy fields (employment, energy, education and innovation). The TA 2020 takes up the "policy triad" proposed by the Europe 2020 strategy - namely, smart, sustainable and inclusive growth (and it is thus related to concepts such sustainable development and smart specialization). In doing so, the document underlines the importance of a territorial and/or place-based approach in order to reflect the territorial diversity and challenges in Europe's cities and regions.

The TA 2020 also asserts that the diversity of territories is a potential for development. For this a place-based approach to policy making, as elucidated in the 'Barca-Report' (2009), is central, which requires evidence-informed policy making and integrated functional area development. A place-based policy is in the Barca report defined as:

> A *place-based policy* is a long-term strategy aimed at tackling persistent underutilisation of potential and reducing persistent social exclusion in specific places through external interventions and multilevel governance. It promotes the supply of integrated goods and services tailored to contexts, and it triggers institutional changes. In a place-based policy, public interventions rely on local knowledge and are verifiable and submitted to scrutiny, while linkages among places are taken into account. (Barca, 2009, p. vii)

In a report, *Place-based Territorially Sensitive and Integrated Approach*, developed during the Polish Presidency of the EU during the second half of 2011, the benefits and methodology of a place-based approaches has been further developed. (Territorial approach and place-based approach are in the report used interchangeably.) It is concluded that the most important general elements of a place-based approach are:

1. Recognition of territorial diversity in pursing overall developmental goals, i.e. different ways of addressing developmental goals and priorities for different parts of a given territory.
2. Institutions:
    - having mandate or capacity to harmonize/coordinate, guide in harmony the development of different “places” (supra-place actors and institution;
    - having mandate or capacity to guide, influence and foster development of a “given place” (place specific actors and institutions);
    - capable to assess the impact of their own actions on the actions of other actors. (Zaucha et al 2013, p. 11)

In line with the outlined place-based approach (and the practice oriented research perspective) a potential cannot be defined a priori, but place-based policies need to be derived from within a given place, i.e. from within the region, but simultaneously harmonized across space. A key question is thus what inherent capacities and potentials a region has to acquire, develop or regain other capacities to confront and adapt to new challenges. In order to detect territorial potentials external challenges and exogenous factors imposing themselves on the region as well as internal capacities and endogenous potentials needs to be considered. It is also to crucial to recognise both the internal coherence of the region and its functional area as well as recognizing that no region is an island but that all regions are part of a larger territory through various linkages and flows. Finally it is essential to also identify territorial governance opportunities and capacities a region has to confront these challenges and turn them into potentials.

## B 2 Conceptual and interactive framework

A region's territorial challenges and potentials can be approached in different ways both in terms of policy-making and research analysis. A territorial approach can be used as a way to reveal and detect challenges and potentials of a region within their wider territorial context from a European perspective. A territorial approach is essentially a geographical perspective on local and regional development, and a help to structure policies, practices and processes in territorial terms. The territorial dimension further more implies a cross-sectorial perspective, and the integration of social and economic policies. A place-based approach, furthermore directly policy relevant, since:

1. It covers important elements and mechanisms for smart, inclusive and sustainable growth.
2. It increased policy performance. (Zuacha, et al 2013; p. 10)

In the DeTeC project we developed five territorial approaches that can contribute to and help regional stakeholders, practitioners and policymakers, in their strategic regional development to detect territorial potentials and challenges. The territorial approaches also contribute to the structuring of the set of decision problems which decision makers face. Policy makers and practitioners may be debating in what ways problems should be formulated, and how far one decision should be seen as linked to another. They may be considering whether their current focus should be enlarged or, conversely, whether a complex of related problems should be broken down into more manageable parts.

Developing a conceptual framework has been a cornerstone of the DeTeC project since it provides the backbone of the interactive handbook. The conceptual framework provides a structure of how to link European experiences from ESPON with municipal and regional potentials and challenges. The conceptual framework consists of two key elements the territorial approaches and innovative ESPON methods:

Five **territorial approaches** developed within the DeTeC project (see next section):

1. Detecting global and future challenges and potentials of a region
2. Detecting and comparing territorial performance of a region
3. Detecting the functional areas and internal coherence of a region
4. Detecting current and potential external linkages of a region
5. Detecting opportunities for territorial governance of a region

And 10 innovative **ESPON methods** that are of particular relevance for detecting territorial potentials and challenges of a region (see Scientific Report C):

1. Cross-border institutional mapping
2. Multilevel governance analysis
3. Assessing functional integration
4. Assessing polycentric development
5. Multi-thematic territorial analysis
6. Understanding differential growth
7. Urban growth modelling
8. Spatial scenarios
9. Territorial impact assessment
10. Territorial performance monitoring

## 2.1 Territorial approaches in context

The five territorial approaches have been developed based on previous ESPON knowledge and experiences. Here the report *Regional Use of ESPON Knowledge: Inspiration for Researchers and Practitioners involved in Regional Territorial Analysis and Policy Development* (2010) from the Seminar "The ESPON Knowledge Base as Potential for Territorial Analysis and Policymaking at Regional Level", 2009 in Malmö, Sweden was a starting point. But the they have also been developed in the context of key research debates within broad field of human geography and regional studies, around for example new economic geographies, new regionalism and territorial governance, relational and territorial approaches to regions, spaces of places and spaces of flows. And they are directly related to various key geographical concepts such as space, place, and scales as well as to geographical processes such as globalization, and regionalisation and localisation (cf. Kitchin & Thrift, 2009).

The process of globalization and regionalisation offers both challenges but also possibilities for regions to develop new paths. The developments, potentials and challenges are however geographically uneven. There is an increased concentration of activities to certain areas meaning that the regional context and local resources becomes increasingly important. The enlargement of the EU-territory offers also great potentials of new markets and resources but also unprecedented challenges for attaining smart sustainable and inclusive growth.Demographic changes with increased migration to developed countries, an ageing European population, declining populations and accelerating competition for skilled labour offers new challenges for both growing and stagnating regions. Alongside these socioeconomic trends are environmental and climate changes, with increased threats of different types of hazards. A new energy paradigm with increasing energy prices and development of new sustainable and renewable energy sources offers significant technical and social challenges but also economic and political potentials.

Regional policy must consequently in light of these glocalisation processes be context sensitive and place-based, but also oriented and adapted to larger territories. However, regions do not develop in isolation but are increasingly dependent and integrated with the surrounding world. An important starting point of this project has been the relational geographical conceptualisation of regions and scales. Both regions and scales are social constructs “structured and institutionalized in complex ways in de/reterritorializing practices and discourses that may be partly concrete, powerful and bounded, but also partly unbounded, vague or invisible” (Paasi, 2004, p. 542). A region is thus not only a larger (scale) place, but a region is (just a as place both global and local (cf. Massey, 2004)) open and fluid and not a fixed territorial entity in between national scale and the local scale. This also reflect the resurgent interest in different forms of urban mega-regions (Florida et al, , 2008; Hall & Pain, 2006; Hoyler et al, 2008; Jones & Paasi, 2013).

The territorial approaches have consequently been firstly rooted in the tension between exogenous forces and endogenous growth potentials, which has been directly reflected in the first two territorial approaches. The first territorial approach (see box 1) has been based on the idea that the territorial development of a region is increasingly influenced by processes and macro challenges such as globalization. It is therefore important to identify, monitor and analyse macro-challenges and global changes that directly or indirectly influence and effect the territorial development of a region. It has a focus on the different external forces that impose themselves of the region and is concerned with mega-trends related to various overarching themes effecting the regions such as the environment (climate change) demography and technology, and of globalization and regionalization processes.

***Box 1. TA 1. Detecting global challenges and future potentials of a region***
*Detecting global challenges and future potentials of a region is a territorial approach focused on external trends and processes of globalisation and regionalisation. It is about detecting current and future trends affecting the region, such as environmental changes, shifting demographic structures and technological developments. It also focuses on the potentials and challenges of cultural and economic globalisation processes as well as how politics and polices at different scales are imposed on a region.*

However, it is also important to recognise the internal potentials of a region, i.e. endogenous potentials and territorial capital (Davoudi et al, 2008). The second territorial approach (see box 2) has been based on the idea that every region is unique and strives to improve its performance. To detect and expose the territorial characteristics and compare the region's performance it is essential to contextualise the region in relation to other spatial entities. The performance of a region relates to its comparative advantage for agglomeration economies and endogenous growth. Key concepts related to the detection of the territorial performance of a region include: comparative advantage, agglomeration economies, endogenous growth, and attractiveness, and in particular territorial capital. OECD defines territorial capital as "stock of assets which form the basis for endogenous development in each city and region, as well as to the institutions, modes of decision-making and professional skills to make best use of those assets" (OECD, 2001).

***Box 2. TA 2. Detecting and comparing the territorial performance of a region***
*Detecting and comparing the territorial performance of a region is a territorial approach emphasising European regional competitiveness. This approach accentuates that every region in Europe has different regional assets and advantages which can be detected by comparing regional performances. The performance of a region is to a large degree dependent on its attractiveness, comparative advantage, potential for agglomeration economies and endogenous growth.*

Cities and towns, regions and places are part of various networks that extend far beyond traditional territorial boarders. They are 'spaces of flows' and 'spaces of places' (Castells, 1996), and sites in 'distanciated economic networks' and 'nexuses or systems of discplines' (Amin & Thrift, 2002, pp. 76, 130). A region is not only effected by it immediate surrounding areas but increasingly by other places around the world. This of course has crucial implications for both regional analysis and regional policies. There is a tension between policy making and research, and between bounded regional territories and relational flows and regional formations. This is recognised in the third and the fourth territorial approach.

The third territorial approach (see box 3) has been based on the idea that every region is internally diverse and that each administrative region is part of multiple functional areas. There is a plethora of different regions and new regional formations are emerging based on different forms of criteria at different scales: economical regions, cultural regions, political regions, historical regions, natural regions, international regions, national regions, sub national regions, and so forth And during recent years much emphasis has been placed on concepts such mega-regions or global city regions to describe metropolitanisation processes and the new regional formations of globalization. Metropolitanisation is a process about "increasing concentration of economic development potentials of the research-intensive

industries and knowledge-intensive services on metropolitan regions and urban agglomerations" (Krätke, 2007; Bourdeau-Lepage & Huriot, 2002).

***Box 3. TA 3. Detecting the functional areas and internal coherence of a region***
Detecting the functional areas and internal coherence of a region is a territorial approach focusing on the spatial form and structure of the region. Every European region is internally diverse and each administrative region can be part of multiple functional areas. A functional area can extend beyond the administrative territory of a region, and a region can be part of multiple functional areas. Furthermore, the functional area (and administrative area) can be more or less coherent depending on what issues are considered.

Although regions are most often conceived of in terms of core and periphery the spatial structure of many regions is more complex, and can often more accurately be be described in terms of morphological and relational polycentricity. Especially since polycentrism has become one of the most important spatial strategies to achieve territorial cohesion in a Europe. Polycentricity refers to an empirical pattern and can be analysed and detected at different (European) scales from the intra-urban (i.e. London and Paris) and inter-urban (Randstadt-region) (Kloosterman & Musterd, 2001), while polycentrism is a normative and prescriptive political concept (Vandermotten et al, 2008).

Polycentricity should not be confused with territorial networking with multiple scales, and the fourth territorial approach (see box 4) has been based on the idea that external flows and relational networks that are for instance expressed through international relations and cross-border interactions increasingly influence regions. The connectivity and accessibility of a region is dependent on various networks and flows; transport linkages, ICT, business networks but also on the spatial position of the region at hand in the European urban and regional system. The concept of spatial integration is essential in relation to this.

In the Study Programme on European Spatial Planning (the predecessor of the ESPON programme), which followed the European Spatial Development Plan (ESDP), spatial integration was defined as "a system of links (flux, similarities, proximity, territoriality, connectivity, ...) between territories which is the emerging result of concrete social, economic, and cultural relationships, but this system is also a structure which influences and sometimes determines the further development of social, economic and cultural links" (de Boe et al, 1999, p. 30). The concept of spatial integration includes functional integration and cross-border integration, but also relates to issues of polycentricity and urban systems (Vasanen, 2013, p. 411).

***Box 4: TA 4. Detecting current and potential external linkages of a region***
Detecting current and potential external linkages of a region is a territorial approach focusing on the cross-border relations and external networks of a region. Regions are 'glocal' places, increasingly influenced by global flows and multi-scalar relational networks. Current and future linkages can span across regional, national and international borders - expressed for instance through international relations and cross-border interactions. The connectivity and accessibility of a region is dependent on various networks and flows: transport linkages, ICT, business networks and so on; but also on the spatial position of a region in relation to the European urban and regional system.

An overarching challenge is of course how to govern open and fluid regions and scales. The fifth and final territorial approach (see box 5) has been based on the idea that the territorial organisation, institutional arrangements and practices are crucial for regional development. Detecting opportunities for territorial governance is about exploring different forms of institutional arrangements and organizational practices that can help turning regional challenges into regional potentials. Territorial governance is about the conceptualisation and the spatial representation of the region as a material object, but also how to govern the spatial practices through which the region becomes meaningful (Ellingsen & Leknes, 2012). A territorial perspective on governance implies in contrast to other forms: governance of a territory and could be defined as "the formulation and implementation of public policies, programmes and projects for the development of a place/territory by 1) co-ordinating actions of actors and institutions, 2) integrating policy sectors, 3) mobilising stakeholder participation, 4) being adaptive to changing contexts, 5) realising place-based/territorial specificities and impacts" (ESPON TANGO, 2012).

***TA 5 Detecting opportunities for territorial governance of a region***
Detecting opportunities for territorial governance of a region is a territorial approach emphasising the territorial organisation, institutional arrangements and practices that are crucial for regional development. Governance is neither the same nor the opposite to government, but refers to involvement of multiple actors in policy making.

## 2.2 Content and form of the handbook

The five territorial approaches plus the ESPON methods are the key components in the conceptual framework (content) provides the structure of the interactive handbook (form) that has been developed within the DeTeC project. A handbook is a small book providing guidance to a particular subject. It is usually an authoritative reference work within the field or a manual with instructions. A handbook differs from other forms of written communication such as newspaper articles, books, and reports in that it is not meant to be read from beginning to end. In contrast, is should act as a quick reference with specific information so that it can be frequently used by its target audience. A first crucial step in producing any handbook is to define the main target group and usage of the handbook.

The main target for the DeTeC handbook on detecting territorial potentials and challenges has been defined as policy makers and practitioners (i.e. stakholders) in the field of regional development or spatial planning, who are in an executive, leading position, making strategic decisions at local and regional level. The handbook is to be used in long-term strategic development, e.g. to support the design or evaluation of regional development plans and programmes.

As a guide supporting strategic decisions the handbook should engage its users without taking over the decision-making process, meaning that the structure and content provides different possibilities and alternative perspectives to tackle problem or question rather than simply providing an answer to specific questions. The ESPON handbook thus provides, through its conceptual framework (content) and interactive structure (form):

- practical guidance for strategic local and regional policy making through the five territorial approaches both by focusing the attention towards important issues and by opening-up new perspective in the local and regional development processes

- concrete examples of good practices derived from the regional laboratories and a collection of ESPON methods that local and regional practitioners can use to detect the specific territorial potentials and challenges of their region.

The conceptual framework structures the five territorial approaches and the ten ESPON methods outlined above (and in the Scientific Report C1) in a way that make the large amounts of information and knowledge provided by ESPON available and usable for practitioners. Following the notion that a handbook should provide support for problem analysis, policy development as well as decision making, the conceptual framework, i.e. content of the handbook was inspired by the structure of a decision tree (cf. Greenberg & Baron, 2000, p. 472). However, producing the handbook in form of an e-book has provided new possibilities regarding navigation in a non-linear and interactive fashion (in contrast a simple hierarchical step-by-step processes). By focusing on multi-directionally inter-linkages (between approaches and methods), the conceptual framework of the handbook can be used in different ways, for different problems, within different contexts, and by different actors.

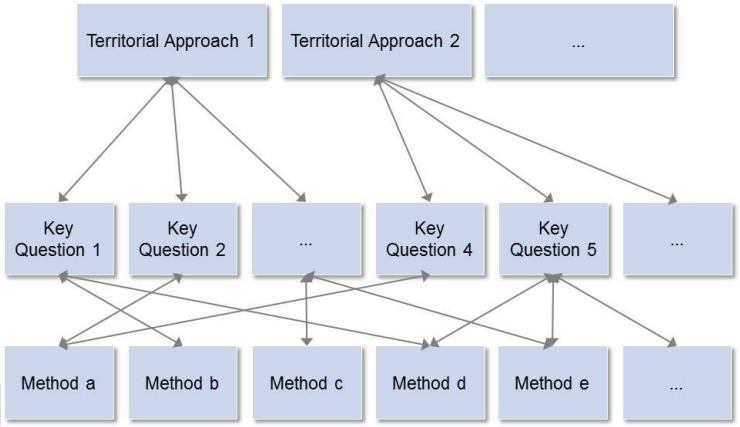



***Figure 2. The structure of the conceptual framework***

The structure of the conceptual framework inter-links approaches and methods with knowledge demand of the stakeholders and their different angles to approach certain regional issues into account through key questions. The key questions have been developed in collaboration in with stakeholders, practitioners and policymakers during the regional laboratories, to facilitate the navigation between territorial approaches and methods (see next section and Scientific Report C3). One method may apply to several territorial approaches or key questions and therefore territorial approaches and key questions may be interlinked in various aspects:

- Key questions for detecting the **global challenges and future potentials** of a region from a European perspective are:
    - What are the main external macro-challenges for the region?
    - What are potential trends and scenarios for the development of the region?
    - How will national and international directives and policies influence the region?

- Key questions for detecting and **comparing the territorial performance** of a region from a European perspective are:

    - What are the characteristics and the comparative advantages (and disadvantages) of the region?
    - How is the region performing in certain fields compared with other regions in Europe?
    - What are the potentials for endogenous growth and agglomeration economies?

- The key questions to detecting the **functional areas and internal coherence** of a region from a European perspective are:

    - What are the functional areas and wider territory of the region?
    - How is the region structured in terms polycentric development?
    - What are the potentials for internal territorial coherence of the region?

- The key questions for detecting **current and potential external linkages** of a region from a European perspective are:

    - What are the external linkages of the region in terms of relational networks and flows?
    - How is the region positioned within the wider European spatial and socio-economic system?
    - What are the potentials for spatial integration and crossborder development?

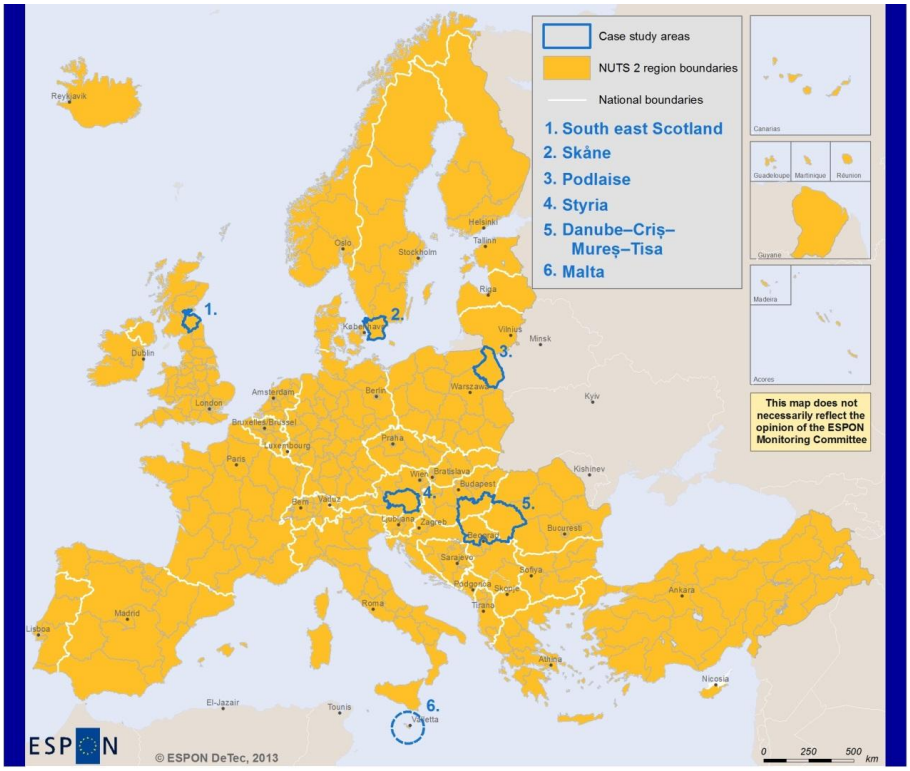
- Key questions for detecting **opportunities for territorial governance** of a region from a European perspective are:

    - What are the institutional arrangements and practices of the region?
    - How are governance practices spatially coordinated and integrated?
    - What are the potentials for collaborations and institutional capacities?

The conceptual framework structures and combines territorial approaches and ESPON methods (content) through key questions, multi-directionally. The interactive handbook (form) thus allows different pathways to access and explore ESPON knowledge on territorial potentials and challenges of a region.

## B 3 Regional laboratories and practices

Regional laboratories have been an important innovative feature within the DeTeC project. The principal purpose of conducting regional laboratories was to assess the relevance and applicability of the conceptual framework with territorial approaches and ESPON methods, and the interactive handbook. The regional laboratories provided opportunities to in collaboration with local and regional stakeholders explore how European experiences and ESPON knowledge can be used to confront with practical regional challenges, and turn them into potentials (see also Scientific Report C3 for more on regional laboratories as a method). The regional laboratories were conducted in six locations around Europe (see map 1).



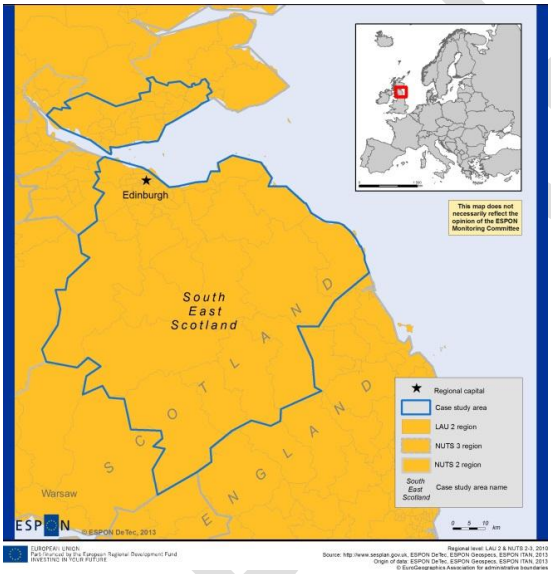

***Map 1. The regional laboratories in the ESPON DeTeC project***

Direct interaction and close collaboration with and input from local and regional stakeholders, practitioners and policy makers, has thus been vital for assessing the regional applicability of the conceptual framework and usability of the interactive handbook. Through regional laboratories we have been able to discuss its content and form in relation to the specific questions, issues and problems of the stakeholders taking part in the regional laboratories. In a first target group meeting with key stakeholders of regions the conceptual framework was presented with focus on the territorial approaches and ESPON knowledge in general. During the meeting this was related to the ongoing work in the regions with strategies, plans and programmes, and in collaboration regional specific questions and issues (i.e. challenges), was identified and formulated. On the basis of these questions and

issues, the fitting ESPON method was elaborated and presented at the second stakeholder workshop an interactive way, reflecting on the structure and content of the conceptual framework, and form of the handbook. Following this methodology, the practical regional challenges (and potentials) and knowledge demand of the stakeholders taking part in the regional laboratories was combined with European experiences and ESPON knowledge supply (see table 1). The feedback of the participants on the applicability of the guidance document helped to further elaborate the structure of the conceptual framework and the interactive handbook.

## 3.1 Edinburgh and South East Scotland

*Edinburgh and South East Scotland is a city region in Scotland with a population of around 1.2 million. In its current form it is young region established in 2006 and it consists of six council areas: City of Edinburgh, East Lothian, Fife (mid and west), Midlothian, Scottish Borders and West Lothian Councils. In 2008, the Scottish Ministers established the Strategic Development Planning Authority (SDPA) for Edinburgh and South East Scotland. The authority (SESPlan) is financed by the six authorities (councils) and by involving stakeholders and the general public, the SDPA is facilitating the process of creating the Strategic Development Plan (SDP) for the city region.*




***Map 2. Edinburgh and South East Scotland***

At the time of the regional laboratory the city-region of Edinburgh and South East Scotland was about to start the process towards the Strategic Development Plan II (SDP II). The region has faced specific challenges within the housing and transport sector that further on required the integration of transport and land use planning, which was specifically challenging in terms of costs, funding and governance according to the key actors. A missing common identity and vision for the city-region as well as city-regional perspective was perceived as an overarching challenge for region development

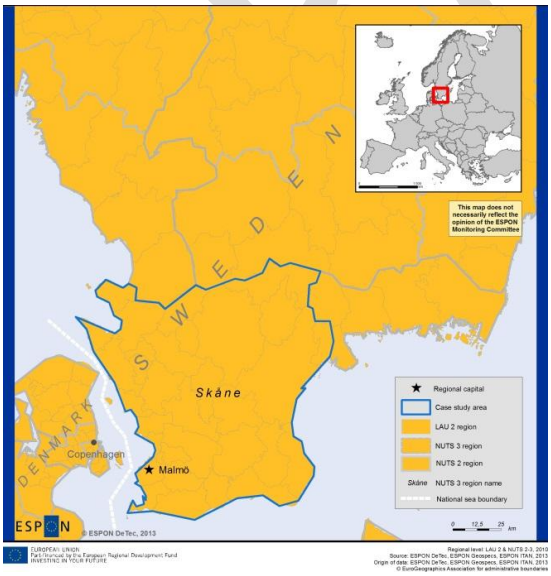
A European perspective in general was seen as helpful, and the territorial approaches were seen as relevant for the city-region profiling the city-region towards

Europe. But two territorial approaches were found directly relevant for addressing these challenges facing the city-region: detecting global challenges and future potentials, and detecting opportunities for territorial governance in order to promote internal coherence and territorial governance. Following the logic of the conceptual framework two related methods were identified as of particular interest if applied to the region; territorial performance monitoring and multilevel governance analysis. Territorial performance monitoring could help the city-region in translating macro-challenges (and their possibilities) to the city-regional level and provide insights how to deal with these challenges effectively.

The establishment of an authority (SESPlan) that represents all six councils is an advantage in confronting the future challenges of the region. However, there is a significant challenge in finding the "right governance" for the city region, including leadership and distribution of power. A concrete suggestion from the regional laboratory was that the city region should conduct a mind mapping exercise as outlined in tterritorial performance monitoring as part of the process towards the SDP II, in order to detecting challenges (and possible solutions) on city-regional level. This could potentially contribute to building up a governance setting that reflects the diversity of the city region, and also help fostering a regional identity.

## 3.2 Skåne

*Skåne is the most southern region in Sweden. The region is, according to the ESPON regional typology a second tier metro region and an intermediate urban rural region. It is also a border region and a coastal region with a very high share of coastal population. Today there are over 1.2 million people living in Skåne and the population is growing across the 10 939 km2 large territory. The population is however unevenly distributed with over 80% living in urban areas and 70 % in the western part. Region Skåne is the authority responsible for regional development and growth in Skåne, including its Regional Development Programme and the spatial development programme "Strukturbild för Skåne".*




***Map 3. Skåne***

The concept of polycentricity has been an integral part in the spatial development programmes “Strukturbild för Skåne”. It was interesting that pre-study for the leitbild used ESPON methods to analyse the polycentric development of the region. The regional stakeholders at the regional laboratory had otherwise only had in direct experience of ESPON, primarily through the thematic maps. However a key observation from a regional point of view was that a European perspective is difficult to integrate into regional development strategies that focus on local and regional matters and politics since it is often rather broad and general, which means that it is difficult to integrate a European perspective. Despite this there is an interest in ESPON knowledge especially regarding the development of indicators and methods.

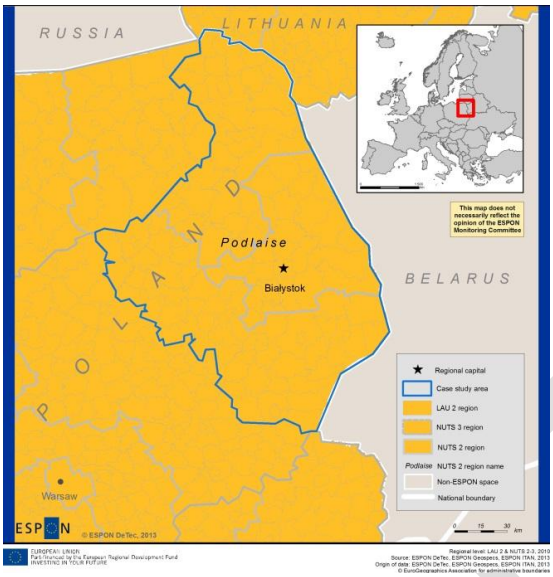
During the regional laboratory it was underlined that expanding the territorial perspective beyond the region of Skåne, and exploring new larger geographies could be of added value in future strategic regional development projects and programmes. Links and cooperation with neighboring regions was highlighted as an important future and potential challenge, and in relation to this ESPON knowledge and territorial approaches could be of useful. In particular the territorial approaches and methods related to defining and assessing functional areas of a region, and linkages and collaborations with neighbour regions was seen as interesting. Detecting the functional areas and internal cohesion of the region and detecting current and potential external linkages were thus seen as approaches of direct relevance but also detecting opportunities for territorial governance was seen as relevant.

The regional laboratory discussed the polycentric development of Skåne but also how to approach the larger territory of Skåne, initially with a specific focus on tools and data and methods regarding the morphological urban areas (MUA) and functional urban areas (FUA) of the region. Delimitation of European regions raised a particularly interesting discussion on territorial scale of analysis and how different ESPON delimitations relate to national administrative boundaries and functional cities and regions. Another discussion concerned the results from the METROBORDER project indicated for example that Copenhagen-Malmö region has strong interaction through cross-border collaboration and strong convergence through similarity of GDP per capita, but on the other that the interaction between the regions was weak when it came to interaction through cross-border commuters and in convergence of foreign citizenship of residents. Based on this is was concluded that there are potentials for further cross-border interaction .

## 3.3 Podlasie

*Podlasie is the outermost region from the Polish perspective and at the same time the European Union border region - located between the countries and the European Union with a total population of 1 200 980 inhabitants. For this reason Podlasie is a significant transit area connecting western and eastern parts of the continent. At the trans-regional level in Poland there are three main socioeconomic strategies. Podlasie is included in the Strategy for the Development of Eastern Poland by 2020.*

Podlasie region is a border region and its peripheral location was also defined as one of the main challenges during the regional laboratory. Another more general key challenge is to strength its territorial performance, and there is also a potential need to detect new functional areas that could diversify the market and direct investments appropriately in order to enhance the internal coherence and achieve efficient self-organization in the region. Developing a properly functioning region in terms of governance was stressed as essentially important for policy making and strategic planning as well as territorial organization and institutional arrangements as crucial for regional development of Podlasie.



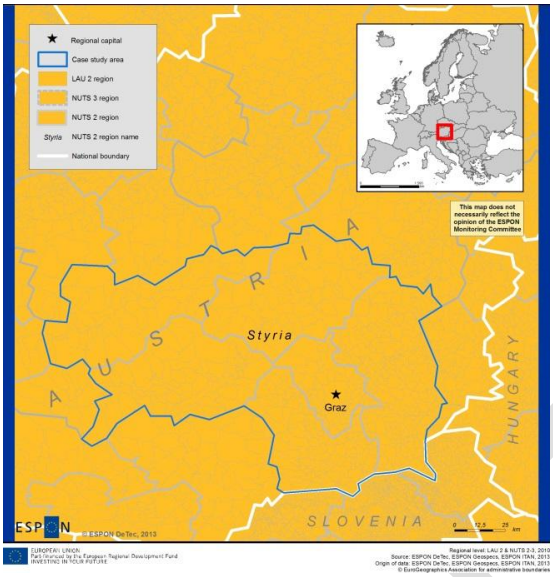

***Map 4. Podlasie***

Consequently particular attention was paid to detecting and comparing the performance of a region. But also the territorial approach regarding detecting current and potential linkages to other regions was as perceived as interesting and potentially important for the future development of Podlasie. Although the territorial approaches was initially perceived as rather vague and unclear the related methods was seen as applicable in practice. For instance the method understanding differential growth could help Podlasie region to detect its economic drivers including accessibility, human capital and quality of life, and thus be of relevance and potentially applied in the process of regional planning and integrated in the Strategy for the Development of Podlaskie Voivodship by 2020.

Another challenge relates to detecting the functional areas and internal coherence of the region and a potential need to detect other functional areas, for instance for the purpose of the updated version of the Podlaskie Voivodship Spatial Development Plan. In relation to this the method of assessing functional integration was discussed as an interesting example, and the potentiality of a map of spatial integration, which allowed for detecting functional areas.

## 3.4 Styria

*Styria is one of nine Austrian federal states (Länder) and is in the centre of Austria. According to the ESPON regional typology the region is an urban-rural as well as a mountainous region. Styria is also a border region, sharing the external border with Slovenia and Hungary and internal borders with the federal states of Upper Austria, Lower Austria, Burgenland, Carinthia and Salzburg. The Austrian Conference on Spatial Planning (OEROK) is the coordinative body of planning at national level in Austria. The conference is founded by the federal government, the federal states and the municipalities. Additionally, the OEROK drafts the Austrian Spatial Development Concept, the current edition of which was published in 2011.*




***Map 5. Styria***

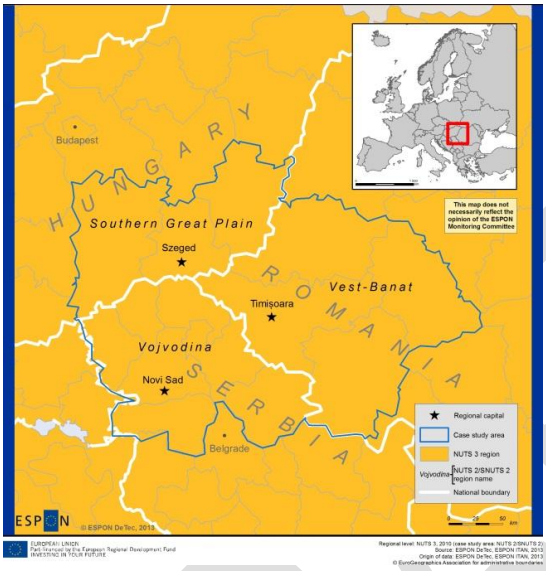
In 2013, the so-called *Landesentwicklungsleitbild - Räumliche Strategie zur Landesentwickling*, a sustainable spatial strategy for the development of Styria, was updated. The functions of the strategy include positioning the Styria towards other regions and in a relation to the federal government and the European Union. In relation to this the territorial approaches; detecting global challenges and future potentials, and detecting and comparing the territorial performance of a region seemed appropriate for the needs of the Styria.

In the regional laboratory comparisons of regional performance within the European context as well as the embeddedness of Styria in the wider European context were identified as interesting topics. However, an overarching concern was that ESPON knowledge is not taken up by local and regional stakeholders due to lacking communication of results and outputs. It was emphasised that ESPON approaches, methods and analyses are mainly conducted at NUTS-2 level and thus not particularly useful for regional planning purposes, for which data at a much lower scale than NUTS-2 is needed to fully analyse regional challenges and potentials.

However a presentation of maps from the ESPON-Atlas publication initiated an interesting discussion on the challenges and potentials of Styria in the European context as well as on the possible added value of European-scale data and maps for regional development in Styria. The discussion focused on indicators of the Europe-2020-Strategy, because this strategy has a major impact on current and future EU-policies and the upcoming funding period and regional strategies will have to be linked to the strategy goals. Thus, the discussion concerned detecting global and future challenges and potentials as well as detecting and comparing the territorial performance. In light of this, the method of territorial impact assessment was relevant and applicable as it represents a user-friendly tool which can be adapted to the regional level, but also the method multi-thematic territorial analysis, was perceived as interesting

## 3.5 Danube-Kris-Mures-Tisa

*The Danube-Kris-Mures-Tisa Regional Cooperation was established in 1997, in Szeged (Hungary). Its commonly known name is the DKMT Euroregion. This trans-national region consists of the following administrative units: Bács-Kiskun, and Csongrád County (Hungary); Arad, Hunedoara, Caras-Severin and Timis County (Romania); and Autonomous Province of the Vojvodina (Serbia).*



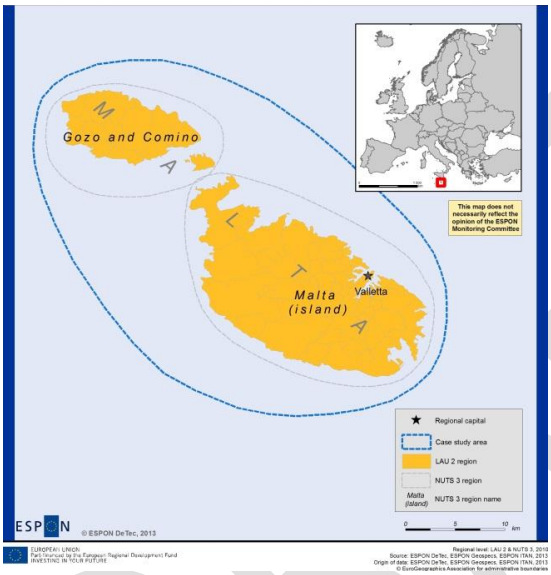

***Map 6. Danube - Kris -Mures - Tisa (DKMT) Euroregion***

The DKMT Euroregion is a transnational region with parts of the territory located outside of the European Union, and the key actors represented different institutions and perceived regional challenges and potentials differently, often contradictorily. However, it was agreed that the DKMT Euroregion is in need of an efficient cross-border administrative system and regulations. In this respect the territorial approaches detecting current and potential external linkages and detecting opportunities for territorial governance were found interesting. The visualization and categorization techniques in the cross-border institutional mapping method were appreciated. And multilevel governance analysis was considered as relevant method to analyze transnational cooperation and detect relations between municipal, regional and national institutions.

Another challenges of the region is the transnational networks of the region and the challenges and potentials related to the current and potential external linkages. It was discussed if the method of assessing polycentric development could not only detect polycentricity but also contribute in supporting sustainable development of region. It was concluded that it could be possible to identify the type of polycentricity that has developed within the region (morphological, relational, polycentricity in governance) and so the regional development could be targeted more efficiently.

## 3.6 Malta

*Malta is the most southern Member State of the European Union. It is a centralised and unitary state, which has a dominant central state. According to the ESPON regional typology, Malta is an island and both a coastal as well as an outermost region with 410.000 inhabitants living in Malta and the population continues to increase. The MEPA – the Malta Environment and Planning Authority – is responsible for the preparation of the Strategic Plan for Environment and Development (SPED), which shall regulate the sustainable management of land and sea resources and will provide a strategic spatial policy framework for environment and development up to 2020.*




***Map 7. Malta***

The regional laboratory in Malta was conducted in relation to the preparation of Strategic Plan for the Environment and Development (SPED). A draft version of the plan has outlined the important future issues, challenges and potentials, foreseen by the Maltese government including innovation and research, climate change, environment and cultural heritage as well as social issues such as poverty. The document, which is well founded on in-depth background research, should ensure sustainable management of resources and the protection of the environment and should additionally guide future developments in Malta.

In light of the many issues included in the document a need for a generic approach was expressed. A key question during the regional laboratory was thus how ESPON could contribute to this and how to apply a European perspective in the context of the development process of the Strategic Plan for the Environment and Development (SPED). An in relation to this the methods related to detecting how exogenous factors impose them on Malta, i.e. detecting global and future challenges and potentials of a region, was found most promising, and more specifically the two methods of spatial scenarios and territorial impact assessment

How Malta is performing in certain fields compared to other spatial entities in Europe was also of interest. The multi-thematic territorial analysis as well as maps from the

ESPON Atlas, a territorial profile of Malta in European perspective was shown and its performance according to Europe-2020-strategy targets was analyzed and discussed. Furthermore, the key questions connecting ESPON knowledge, and especially the territorial approaches, to regional issues, were found especially useful in the discussions.

And, the regional laboratory provided interesting insights into the relationship between a small Member State as Malta and the ESPON Programme, the regional applicability of data and methods used in ESPON projects as well as current national/regional policy development in Malta. The question of scale is an essential issue for the successful application of ESPON knowledge in practice; both on the local and regional level. Concerns regarding the level of analysis were expressed, due to the fact that ESPON reports provide a lot of information at the national or NUTS-2 level, but only limited information when it comes to regional analysis.

***Table 1. Linking territorial approach with methods and key questions***

| | Method | Territorial approach | Key questions in methods | Main project-source |
|---|---|---|---|---|
| 1 | **Assessing Functional Integration** | TA3, TA4 | **3.1** What are the functional areas of the region?<br>**3.1** How is the region structured in terms polycentric development?<br>**4.1** What are the external linkages of the region in terms of relational networks and flows?<br>**4.2** How is the region positioned within the wider European spatial and socio-economic system? | METROBORDER |
| 2 | **Assessing polycentric development** | TA4, TA3 | **3.1** What are the functional areas of the region?<br>**4.2** How is the region positioned within the wider European spatial and socio-economic system? | POLYCE |
| 3 | **Cross-border Institutional Mapping** | TA4, TA5 | **4.1** What are the potentials for spatial integration and cross-border development?<br>**5.2** How are governance practices spatially coordinated and integrated?<br>**5.3** What are the potentials for collaborations and institutional capacities? | METROBORDER |
| 4 | **Multilevel governance analysis** | TA5 | **5.1** What are the institutional arrangements and practices of the region?<br>**5.2** How are governance practices spatially coordinated and integrated? | CAEE |
| 5 | **Multi-thematic territorial analysis** | TA2, TA3 | **2.1** What are the characteristics and the comparative advantages (and disadvantages) of the region?<br>**2.2** How is the region performing in certain fields compared with other regions in Europe?<br>**3.1** What are the functional areas of the region?<br>**3.2** How is the region structured in terms polycentric development? | ULYSSES |
| 6 | **Spatial Scenarios** | TA1 | **1.1** What are the main external macro-challenges for the region?<br>**1.2** What are potential trends and scenarios for the development of the region? | ESPON SS-LR |
| 7 | **Territorial impact assessment** | TA1 | **1.3** How will national and international directives and policies influence the region? | ESPON EATIA, |
| 8 | **Territorial performance monitoring** | TA1 | **1.1** What are the main external macro-challenges for the region? | ESPON TPM |
| 9 | **Understanding differential growth** | TA2 | **2.1** What are the characteristics and the comparative advantages (and disadvantages) of the region?<br>**2.2** How is the region performing in certain fields compared with other regions in Europe? | SURE |
| 10 | **Urban growth modelling** | TA2, TA3 | **2.3** What are the potentials for endogenous growth and agglomeration economies?<br>**3.1** What are the functional areas of the region?<br>**3.3** What are the potentials for internal territorial coherence of the region? | POLYCE |

## B 4 Conclusions

There are two main types of conclusions that can be drawn from this Scientific platforms and Tools project which also direct relates to issues for future research and policy challenges (and potentials). In the project two types of challenges (and potentials) have been identified regarding the production of ESPON knowledge and in regarding the application of ESPON knowledge. The first challenges have mainly been deducted from the reviews, analysis and systematisation of ESPON, while the second derives from the regional laboratories and the engagement with local and regional stakeholders.

It can first of all be concluded that there is a local and regional interest in ESPON. But also that the overall knowledge concerning ESPON and findings of its projects is generally not widespread and that project Scientific Platform and Tools project like the DeTeC project are important. From a local and regional perspective ESPON knowledge could become more accessible through more user-friendly publications, tools and websites, but at the same time there is a demand for “read more” options and more in-depth analysis at a more detailed scale. Alongside and related to these communication the lesson learnt (and challenges) from the regional laboratories and the DeTeC project can relate to on the one hand representations, scale and time aspects, on the other to the intersections between research, policy and practice. There is, however a considerable tension both between and within these side.

### 4.1. Representations, scale and time

Regions across Europe are interested in the ESPON programme and the extensive knowledge base it has produced. Through the various activities performed within the DeTeC project we can conclude that methods and approaches developed within ESPON are of relevance for regional and local stakeholders but also that there are significant challenges applying and using ESPON approaches, methods, tools and indicators at regional and local level. The discussions within regional laboratories have provided valuable knowledge on their needs related to regional development. The gathered information about the necessity for further analysis and research are mainly related to communication, scale and scope of indicators, as well as their up-datedness of data.

The ESPON Programme is known by many regional and local stakeholders as a European programme which analyses territorial trends at a macro level. There is a perceived lack of communication of results and outputs to practitioners and policy makers at lower spatial levels and it is often felt among practitioners at regional and local level ESPON projects are not useful for regional planning and development purposes at this level. In the future the ESPON Programme needs to intensify the dissemination activities at the regional and local level, in order to make project results more known (through for example regional laboratories, see below). Secondly, the added value of a European overview for regional development needs to be emphasized and good practice examples need to be provided, as it is not common sense with practitioners and policy makers at the regional and local level that this overview supports the daily work in regional development. More interaction with users through for example targeted analysis project could help in solving these issues.

In technical terms projects under the ESPON program should take into account the problem of scale concerning analysis and maps. An underlying problem is that analyses are mainly conducted at NUTS2 level and that regional and local actors

generally possess much more detailed data of their sphere, adds to this perception. According to the opinion of the regional representatives, data at a much lower scale than NUTS-2 is needed to analyze regional challenges and potentials. Data comparability between regions (e.g. different definitions of indicators), the problem of scale of data and maps concerning intra-regional disparities and the problem of up-to-date data are main issues. An example of one of the regional laboratories - Malta shows that analyses at NUTS 2 level are not satisfactory for local and regional practitioners In addition, the state Malta is not clearly visible on the maps showing the entire European Union and thus they lose their applicability in small countries. Analyses at the national level, even in small countries are not sufficient. An additional obstacle in the use of ESPON research results is data irrelevance and their rare up-date. There is a need to promote and intensify data collection and harmonization at lower geographical levels.

An added-value of ESPON is the interpretation and the supply of data and indicators, however this data has to be up-to-date and produced in interaction with regional users, since the incentive of using ESPON data in the regions is low. The supply of user-friendly and ready-to-use tools (e.g. ESPON ARTS TIA Quick check tool) has been received positively. Regional and local stakeholders expressed a need to sharpen ESPON content-wise, to reduce the complexity of ESPON knowledge and to provide illustrative examples in order to provide an incentive to a more detailed consideration of ESPON results. The screening of ESPON (scientific) reports for usable information is a task which local and regional practitioners rarely consider, because it is very time consuming. A handbook that takes over that task and provides a concise overview of approaches and methods and additionally points to final and scientific reports for further information provides added value in the daily work of policy makers and practitioners at local and regional level.

A general concern is that ESPON knowledge is not adjusted to the issues of local level. Practitioners and policymakers rarely implement ESPON results due to the fact that they are not adapted to local challenges and generally do not meet their expectations. Data aggregated at the NUTS2 level does not allow for the correct assessment of the situation across Europe. For example, data on this level does not bring any significant input or important to the analysis of Malta. The practitioners who have taken part in the regional laboratories identified the necessity of collecting data at the lower administrative levels, which could be more applicable in comparison of regions among themselves, as well as for detecting of challenges and potentials originating from the regions, not only affecting the region (up-down process). The statistical data available is often obsolete in the eye of the practitioner, for example, statistical data of 2010 does not show the most recent and actual trends and practices; moreover do not seem to provide practitioners with assistance at daily work. If ESPON can continue to provide up-dated and harmonized data it would however be very beneficial since incompatibility of data from various countries is an obstacle in comparing interregional relations.

## 4.2 Research, policy and practice

Research concepts and policy concepts used within ESPON are difficult to translate into local and regional practices. The approaches, methods, analysis, typologies, classifications first of all often refer to large spatial units, hence the general nature of outcomes scale, rarely considering intraregional diversity. Moreover, an important matter is the terminology and methods of determining indicators that do not always correspond to national and local contexts. A complex terminology and sometimes fuzzy definitions are problematic, but also necessary. If a concept is defined to rigidly

it might become politically unusable, but at the same time of it is to fuzzy it is not usable within applied research and/or comparable targeted analysis. It should however be noted that the terminology and usage of concept within different research and analysis projects is fuzzy. From the view of local and regional stakeholders the linguistic questions is even more mundane, however, no less important. Officials at the local level are often not familiar with the specific EU terminology but more importantly the Euro-English language is a significant barrier. Finally to have an understanding of the target group is essential, both in order to adapt and adjust approaches, methods and analysis accordingly and also because there is no one size fits all approach.

A crucial issue in the future is to continue to conduct sound research **and** provide policy makers with targeted analysis. It is a difficult balance on the tight rope between applied research and policy consultancy, but this is also the strength of ESPON: to bring together policy making and research, and in collaboration create new knowledge.

The co-production of knowledge, primarily exemplified through the targeted analysis projects, within ESPON could, however, be further strengthened by applying some of the findings and suggestions from the various projects within the programme per se. Many of the ESPON projects have emphasized notions such as cross-border collaboration and policy integration across sectors, different forms of multi-level and multi-scalar governance. Integration and collaboration in theory is one thing but to put it into practice something else. In order to collaborate across sectors and scales it is first important to have a common language for communication but also to know and understand the rationales and conditions of all sides, for researchers as well as policymakers; for local and regional stakeholders as well as for member of the Commission of European Communities, for both them and us.

There is a general critique voiced by the ESPON community is that advanced territorial and comparable analysis of European space is for the most part limited, since a large number of valid data is only available for relatively large territorial units. The claim for harmonised data to analyse and compare in particular small territorial units (e.g. at the neighbourhood level) has been put forward at various opportunities. This claim is, however, contested in particular since empirical evidence stemming from social science work (as it inevitably does within ESPON) normally allow various interpretations and policy options and, due to this, cannot be considered as an unambiguous guide to policy-making. ESPON results (including approaches, methods etc.) can only inspire stakeholders (in case they match at certain place and time the current needs), but do not guarantee any universal appreciation or relevance.

# C Scientific report

As a Scientific Platform and Tools project the focus of the ESPON DeTeC project has been on developing analytical tools that can be used in considerations on territorial policies. Following the 'ESPON' approach to research, the project has been grounded in evidence informed analysis with the aim of providing policy-relevant implications and considerations to support the further competitiveness and cohesion of the ESPON territory. In order to develop a handbook on detecting territorial potentials and challenges the project included three research activities; systematization of approaches and methods, the development of a framework to utilize ESPON knowledge, and assessing its regional applicability through conduction regional.

In addition to these research activities a key task of the project has been to disseminate ESPON knowledge, i.e. to synthesise and transfer knowledge. The project has had a strategic scientific approach characterised by an integrated, multidisciplinary, and cross-thematic focus. A combination of applied methods has been used combining extensive, intensive and synthetic research (see figure 3).

In order to show how ESPON knowledge can be used to detect territorial potentials and challenges it has been crucial to link and thus contextualise concepts and methods developed within ESPON projects to regions and their territorial development and specific issues. In this respect and for the purpose of the DeTeC project it has been necessary to develop territorial approaches and identify ESPON methods. The territorial approaches help regions to integrate a European perspective and provide guidance on both focusing and widening the strategic work with regional development. The ESPON methods show how this can be done and also work as inspirational and illustrative examples of how to detect territorial potentials and challenges. The following chapter describes the analytical process from a vast amount of ESPON knowledge towards territorial approaches and ESPON methods.

The systematic review of ESPON projects and the construction of a conceptual framework including territorial approaches and methods can be described as extensive research. Extensive research activities are often abstract and theoretical and extensive techniques are required for generalisations. Intensive research is empirical and concrete and associated with qualitative analysis and case study based research. The regional laboratories, with target group meetings and stakeholder workshops, can be described as intensive research activities with in-depth analysis but also with direct engagement with stakeholders, who will be actively involved in the co-fabrication and production of knowledge.

Synthetic research is the combination, connection and analysis of quantitative data and qualitative material derived from extensive and intensive research. Both the systematization of approaches and methods, and the development of the framework to utilize ESPON knowledge has been key activities in the synthesizing of knowledge. The regional laboratories has also been crucial for assessing vertical knowledge transfer from pan-European and national levels to local and regional level, as well as horizontal knowledge transfer across different regions in Europe. The project have had a multi-scalar but also context sensitive approach, i.e. recognising the importance of different levels (European macro level, the transnational/national meso level, and the regional/local level) for different actors and practices.

The project has been practice oriented and has taken inspiration from the 'practice turn' in social sciences. The practice turn is not a single set of theories but rather a family of theories – 'theories of practices' that generally offer inspiring approaches of

going beyond dichotomies such as theory/practice, science/politics, discourse/action, global/local (e.g. Cetina, Schatzki, & Von Savigny, 2000). It emerged from dissatisfaction with both structuralist and post-structuralist theories to engage with and grasp the complexities of contemporary society and phenomena such as 'third spaces' including international and regional organisations such as EU and new forms of multilevel and multiscalar governance. Theories of practices has in this project especially relevant and interesting since it engage with the relations between academia and politics, and instead of instructing practitioners, the research activities departs from the problems of the practitioners.

Thus, the ESPON DeTeC project has had an integrative structure with a clear focus on practices, utilization of knowledge and on synthetic research. The project departed from an extensive review and systematisation of approaches and methods. This inventory has been used as the foundation for the construction of a conceptual framework including territorial approaches and ESPON methods. The framework has been assessed and evaluated through regional laboratories involving local and regional practitioners and policy makers. After the regional laboratories the framework has been revised and translated into an interactive handbook on detecting and utilising territorial potential.

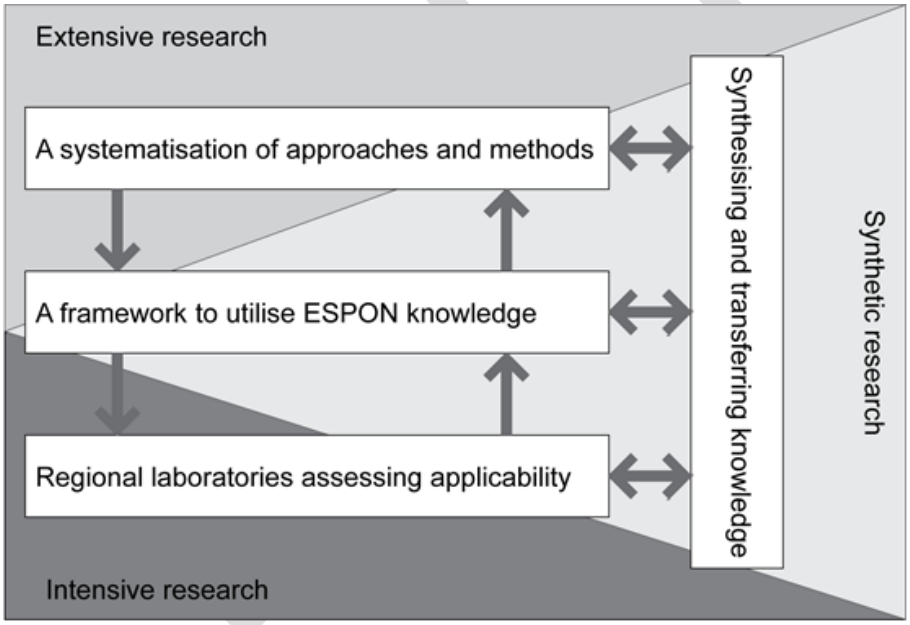



***Figure 3. The scientific and methodological approach of ESPON DeTeC***

Aristotle's separation between potentiality and actuality is useful at a general level to understand what a potential might be. Potentiality refers to initial conditions of a matter (or region), is thus not the same thing as possibility: "to say that x is potentially F is to say that x already has actual features in virtue of which it might be made to be F by the imposition of a F form upon it" (Shields, 2013). In conclusion the potentials of a region refers to the latent abilities of the region, what is a potential need to be defined based on inherent features of the region. However, a region is not a fixed material entity, not a bronze metal, but a social construction continuously changing and evolving (cf. Paasi, 2004).

## C.1 Systematisation of approaches and methods

The DeTeC project has systematically reviewed ESPON projects, in order to identify useable and innovative ways for detecting territorial potentials and challenges and to create an inventory of ESPON knowledge and European experiences. The systematic review has been done in two parallel processes with two different focuses: 1) to develop territorial approaches and 2) to identify ESPON methods.

### 1.1 Developing territorial approaches

A territorial approach is, as described in the main report, essentially a geographical perspective on local and regional development, and a help to structure policies and processes in territorial terms. The territorial dimension further more implies a cross-sectorial perspective, and the integration of social and economic policies. A territorial approach also contributes to structuring of the set of decision problems which decision makers face. Policy makers and practitioners may be debating in what ways problems should be formulated, and how far one decision should be seen as linked to another. They may consider whether their current focus should be enlarged or, conversely, whether a complex of related problems should be broken down into more manageable parts.

The development of territorial approaches within the DeTeC project departed from the approaches outlined after the ESPON seminar in Malmö 2009. In the report 'Regional Use of ESPON Knowledge' (ESPON 2010), a territorial approaches are described as "ways to approach the larger territory and intend to provide corresponding examples of policy and research questions, research methods and research outputs" (ESPON, 2010, p. 11). The report identifies six potentially interesting territorial approaches related to ESPON projects and regional policy challenges (and potentials):

- Exposing characteristics of a region
- Indicating performance of a region
- Detecting network relations of a region
- Detecting the larger functional area a region belongs to
- Detecting influences that impose themselves on a region
- Detecting influences a region imposes on other territories

These six approaches have been critically reviewed in the light of a systematic review of ESPON projects, and related to ongoing policy discussions within EU and in context of current research debates with in regional studies and human geography (see main report B). Through this we developed five refined territorial approaches:

- Detecting global and future challenges and potentials of a region
- Detecting and comparing territorial performance of a region
- Detecting the functional areas and internal coherence of a region
- Detecting current and potential external linkages of a region
- Detecting opportunities for territorial governance of a region

The applicability of the territorial approaches for regional development and the daily work of regional stakeholders was a guiding principle in this process. The applicability of these approaches was assessed and discussed during the regional laboratories (see below). During the development process five general analytical and policy concept frequently used within ESPON were particularly useful; territorial capital, metropolisation, spatial integration, polycentricity, and territorial governance.

1. The first territorial approach **detecting global and future challenges and potentials of a region** has been based on the idea that the territorial development of a region is increasingly influenced by external processes and macro challenges such as globalization, climate change, energy supply and demographic development. It is therefore important to identify, monitor and analyse macro-challenges and global changes that directly or indirectly influence and effect the territorial development of a region, i.e. exogenous forces.

A key issue in detecting global and future challenges and potentials is to analyse the *territorial capital* of a region i.e. 'endogenous potentials' (Davoudi, Evans, Governa, & Santangelo, 2008). Territorial capital is a concept used in several ESPON (cf. ESPON SS-LR) that refers to a region's territorial assets for endogenous development. OECD defines as "stock of assets which form the basis for endogenous development in each city and region, as well as to the institutions, modes of decision-making and professional skills to make best use of those assets" (OECD, 2001). Territorial capital includes different types of capital such as intellectual capital, social capital, political capital, cultural capital, material capital and geographical capital. Territorial governance, with vertical and horizontal coordination between sectors and levels of government is crucial in using territorial capital efficiently for territorial development (ESPON 2.3.2, 2007, p. 18).

2. The second territorial approach **detecting and comparing the territorial performance of a region** has been based on the idea that every region in Europe is unique and strives to improve its territorial performance in a European perspective. To detect, expose and compare the territorial performance of a region, it is important to identify the type of region and other comparable regions, for which the typologies developed within ESPON might be used (ESPON, 2009). The performance of a region relates to its attractiveness and comparative advantage, potential for agglomeration economies and endogenous growth. Agglomeration economics is about how concentration of economic activities leads to positive external effects in terms of for example "technological spillovers, an increasingly skilled labor pool, and firm-supplier networks" both within industries (localization economies) and across industries and sectors (urbanization economies) (ESPON CAEE, 2010, p. 5)

A key ESPON policy and research concept that can be useful in this context is metropolisation**,** which has been the focus of for example the ESPON POLYCE project. In this project the concept was used to indicate a specific form of urban restructuring, urban growth and polycentricism (ESPON POLYCE, 2012). In the project it is emphasized that metropolisation is a process defined by a number of interconnected aspects and processes of spatial concentration of (new knowledge intensive) economic activities, command and control functions and human capital. But also the uneven geographical development of the process:

> … metropolisation is not similar throughout all cities, of course. Economic and demographic growth in the agglomeration, economic restructuring and polycentric features on different scales appear way differently in different cities. Also, the process of metropolisation reaches beyond city borders, producing a specific social, economic and spatial outcome, which depends on local influencing factors. Through these place-related influencing factors, metropolisation leads to specific local metropolitan characteristics. It produces metropolitan profiles, which differ throughout European cities, although metropolisation is a general trend. (ESPON POLYCE, 2012, p. 7)

3. The third territorial approach d**etecting the functional areas and internal coherence of a region** has been based on the idea that every European region is

internally diverse and that each administrative region can be part of multiple functional areas. To detect the challenges and potentials of a region it is important to identify and understand both the internal coherence and functional areas of a region. A functional area can extend beyond the administrative territory of a region, and a region can be part of multiple functional areas. Furthermore the functional area (and administrative territory) can be more or less coherent. It is also possible to distinguish between functional and morphological urban areas. A functional urban area can consequently consist of one or more morphological urban areas but neither is limited to administrative boundaries.

A key policy and research concept for understanding this is spatial integration, since indicated the existence of interactions between areas separated by a boundary. The concept of spatial integration thus includes functional integration and cross-border integration, but also relates to issues of polycentricity and urban system, as well as to territorial governance, since:

> These interactions are not limited to the economic sphere, but concern also other flows or transactions (cultural, political relations, migration, etc.). The existence of interactions does not necessarily mean that the territories converge. Some relationships can be highly asymmetric and be fed by strong differentials. It is therefore necessary to complete the analysis by considering the possible convergence of the territories. (ESPON METROBORDER, 2010, p. 37)

In the Study Programme on European Spatial Planning (the predecessor of the ESPON programme), which followed the European Spatial Development Plan (ESDP), spatial integration was defined as “a system of links (flux, similarities, proximity, territoriality, connexity,...) between territories which is the emerging result of concrete social, economic, and cultural relationships, but this system is also a structure which influences and sometimes determines the further development of social, economic and cultural links” (de Boe, Grasland, Healy, Hanquet, & Robert, 1999, p. 30). In line with this it is possible to systematically approach integration in a dynamic way with regards to different fields: density, transport networks, urban networks, flows, territorial homogeneity, administration and policy grids. The project ESPON METROBORDER analyzed functional cross-border integration in terms of interactions (flow analysis and barrier effects) and convergence (analysis of homogeneity and discontinuities) between territories (2010, p. 37).

4. The fourth territorial approach **detecting current and potential external linkages of a region** has been based on the idea that external flows and relational networks that are for instance expressed through international relations and cross-border interactions increasingly influence regions. It is thus important to analyse the current and future potentials of such linkages spanning across regional, national and international borders. The connectivity and accessibility of a region is dependent on various networks and flows; transport linkages, ICT, business networks and so on, but also on the spatial position of the region at hand in the European urban and regional system.

Polycentricity, which is a key concept within European spatial planning, is potentially useful for detecting current and potential external linkages of a region. Polycentricity is often perceived as “a self-explanatory concept, characterising something that is opposite to monocentric on the one hand and dispersal and sprawl on the other” (ESPON 1.1.1, 2005, p. 51).

A polycentric urban system is a functionally integrated socio-spatial entity that consists of multiple urban nodes that may differ in size yet all play important role in the system, are linked through intensive reciprocal and multidirectional relations with further development influenced by governance strategies that recognize, consider and support future enhancement of mutual interests, complementarities, synergies and potentials for collaboration. (ESPON POLYCE, 2012, p. 21)

In the POLYCE project (2012, p. 21) three different aspects of polycentricity are analyzed:

- *morphological polycentricity*: structure of nodes according to their size and significance (rank and size)
- *relational polycentricity*: reciprocal and multidirectional flows and interactions between nodes
- *relational polycentricity* in governance: mutual interests, considerations, inspiration, collaboration, complementarity in decision making in the nodes and between nodes.

ESPON emphasizes that polycentricity is about different types of urban networks and co-operation beyond traditional municipal and regional borders (ESPON 1.1.1, 2005, p. 54), (see above).

5. The fifth territorial approach **detecting opportunities for territorial governance of a region** has been based on the idea that the territorial organisation, institutional arrangements and practices are crucial for regional development, but also that there has been a general shift from government to governance. To detect territorial challenges and potentials it is therefore imperative to analyse the territorial governance and government structure and practices within a region.

Territorial governance in itself is a useful concept, especially since it includes issues such as policy integration, collaborative planning, cross-border cooperation, and institutional capacity. It is a concept that refers to the formulation and implementation of policy making of territory. Governance is not the same as government and neither the opposite but refers to involvement of multiple actors in policy making (ESPON 2.3.2, 2007). In theoretical terms territorial governance can be defined as "the process of organization and co-ordination of actors to develop territorial capital in a non-destructive way in order to improve territorial cohesion at different levels", and more importantly:

1) territorial governance is different from governance because, its object is the territory, a complex object per se, and its aim is to regulate, to govern, to manage territorial dynamics through the pilotage of a multiplicity of actors;

2) the meaning, approaches and effects of territorial governance are different at different territorial levels, even if there are consistant issues that define territorial governance actions (vertical and horizontal relations, involvement and participation, territorialisation). The importance of these issues differs, depending on the territorial level in which the action is taking place. (Davoudi et al., 2008, p. 50)

In the ESPON TANGO project that focuses on new forms of territorial governance defines it "as the formulation and implementation of public policies, programmes and projects for the development of a territory" (2012) In the ESPON METROBORDER (2010, p. 52) it is distinguished between institutional multi-level governance and geographical multi-scalar governance. Other projects on territorial governance have focused on coordination of activities and police, vertical coordination between

different actors and policies at different hierarchal levels according to principles of subsidiarity on the one the hand, on the other hand horizontal coordination (multi-channel governance) between different actors and policies at the same level, but also on the inclusion of actors from the civil society, and territorial dimension.

## 1.2 Identifying ESPON methods

In order to identify methods for detecting territorial potentials and challenges ESPON projects have been systematically reviewed through a rigorous process; including different steps; selection of relevant projects, review and analysis of projects, identification and specification of methods of analysis, validation and assessment.

Firstly, ESPON Priority 2 Targeted Analyses projects have been the main source for identifying ESPON methods as these projects have been developed together with regional stakeholders and thus already reflect their needs. After an initial scan 15 projects were selected for the in-depth review process. The main criterion in this initial selection was that the projects at hand were not too narrow and/or specific in its aim and scope, i.e. only focusing on a particular theme, (e.g. focusing on airports as ESPON ADES or demography as ESPON SEMIGRA), or too specifically programme oriented (e.g. ESPON TranSMEC).

Review guidelines were developed with a scheme of questions guiding the review process through the vast amount of information. It was based on the rationale that a concept is analysed through indicators using specific (qualitative or quantitative) methods. A hypothetical example was the concept polycentricity that can be conceptually operationalized in terms of functional urban areas which can be measured through train, car and bus commuting with statistics derived from Eurostat. The indicators train, car and bus commuting can be analysed through flow analysis and illustrated in maps. The project reviews thus focused on the analytical and methodological approaches of the projects inquiring the relations between concepts – indicators/sources – analysis/presentation, through a set of critical questions:

- What is the key concept (or concepts) that is being operationalized in the project (e.g. polycentricity, regional integration, territorial capital, territorial cohesion, multi-level governance, institutional capacity)?
- How are the key concepts operationalized (e.g. expressed by a number of related analytical sub-concepts such as functional urban areas, cross boarder integration, territorial assets, regional innovations, network connectivity)?
- What indicators, criteria and/or principles (e.g. GDP, commuting patterns, firm locations, leadership, patents) are being applied to assess/measure the related analytical concepts?
- How are the indicators analysed and used (e.g. benchmarking, SWOT analysis, flow analysis)?
- How are the indicators being informed? What are the empirical sources (e.g. statistics, case studies, surveys)?
- How are the findings presented/illustrated (e.g. maps, flow charts, schemes, models)?

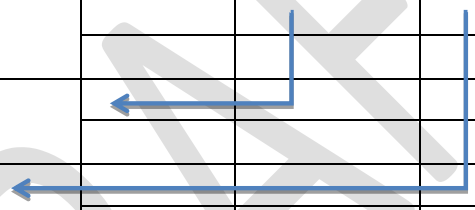
To filter and analyse the key concept(s), to understand the motivation of choosing these concept as well as how these were operationalised in the project was a challenging task. Most ESPON projects have adopted several analytical concepts, different more or less innovative methods and a wide range of indicators. There were a range of different concepts being used within ESPON from mega-concepts such as globalization, urbanization, sustainable development, smart specialisation, as well as

sub-concepts with a high degree of operability such as operationalized concepts. It has occasionally been difficult to distinguish between themes of indicators and concepts as in the case of governance and demography. The definition and usage of concepts were to a large degree dependent on the general character (i.e. micro, meso or macro concepts) and the territorial scale of their applicability (e.g. European, national, regional or local).

There are numerous methodological approaches used within ESPON related to territorial profiling (benchmarking, indexing (quantitative) etc), stakeholder interaction (questionnaires, interviews, workshops, Delphi etc.), statistical analysis (econometrics, regression analysis, etc.), evaluation (impact assessment, SWOT (qualitative) etc.), scenarios as well as a, literature reviews and policy analysis. Various ESPON projects have developed, expanded and enhanced in different directions, with a particularly focus on territorial indicators.

***Table 2. Analytical matrix linking concepts – indicators – methods***

| Method category | Methods of analysis | Themes of indicators | Key concept | | |
|---|---|---|---|---|---|
| | | | Analytical concept | Analytical concept | … |
| Stakeholder interaction | | | | | |
| | | | | | |
| Statistical analysis | | | | | |
| | | | | | |
| …. | | | | | |
| | | | | | |



Finally based on the project reviews and through project matrixes, and in coordination with the development of territorial approaches, innovative ESPON methods of analysis have been identified. A focus in the method reviews was thus the innovative aspect of the projects, and their relevance for detecting territorial potentials and challenges. For example if the ESPON project developed a new and/or revised method (i.e. EATIA, TPM, SS-LR), or the project used or combined existing methods in innovative ways (i.e. METROBORDER, POLYCE).

In a following the methods were connected to concepts such as functional integration, polycentric development and multilevel governance. Each method was described in a fact sheet including indicators supporting the methods and an example illustrating how the method was applied in previous ESPON project(s). The fact sheets were circulated for quality check to respective project leaders in order to assure the accuracy of the reviews and give opportunity for insight. An additional benefit from this exercise was to facilitate interactions within the ESPON community and connect various projects.

In the end 10 ESPON methods of analysis have been included in the handbook:

**1. Assessing functional integration** is a method that has been developed within the ESPON METROBORDER project, which explored European cross-border and metropolitan regions in relation the policy concept of polycentric development. The

project goal was identify criteria, potentials and governance practises for polycentric cross-border metropolitan regions, including recommendations for development strategies in two case regions: the Upper Rhine Region and the Greater Luxembourg Region.

2. **Assessing polycentric development** is a method that has been developed within the ESPON POLYCE project that has analysed five central European capital cities in relation to the concepts of metropolisation and polycentricity. The project emerged from the wish of city-administrations for research on their future competitive and cooperative potentials, both among each other and towards other metropolises. A main goal was to conduct a comparative analysis of Bratislava, Budapest, Ljubljana, Prague, and Vienna, and their related surrounding areas, in order to elaborate indepth results on their specificities and commonalities.

3. **Cross-border institutional mapping** is a method that has also been developed within the ESPON METROBORDER project, see above.

4. **Multi-level governance analysis** is a method that has been developed within the ESPON CAEE project, which has explored the process of agglomeration within cities and regions across Europe. The analysis has contributed to a better knowledge of the optimal scale for urban form and agglomeration, and for deeper understanding of dynamic processes related to urban agglomeration.

5. **Multi-level thematic territorial analysis** is a method developed within the ESPON ULYSSES project which was an experimental and innovative project supported by 18 European border and cross-border areas. It aimed at using applied research results from ESPON as a benchmark for cross-border spatial development planning. The project performed six comprehensive and multi-thematic cross-border territorial analyses in cross-border regions in Europe.

6. **Spatial scenarios** is a method that has been re-fined within ESPON SS-LR, which aimed to update a spatial scenario model develop by ESPON 2006 (project 3.2), to build a new qualitative set of scenario and to further develop a quantitative foresight model called MASST. A particular focus was placed on integrating recent societal trends and challenges, including the economic crisis, globalisation processes, the roles of emerging economies, energy trends and new roles for rural areas. A concrete output of the project was the construction of spatial scenarios for the Spanish province of Barcelona, including a set of policy recommendations for future development.

7. The ESPON EATIA project developed the **territorial impact assessment** method which is a systematic framework for supporting national, regional and local administrations in anticipating the potential positive and negative impacts of EU directives. The aim was to develop models for avoiding potentially costly and negative impacts and to enhance economically, socially and environmentally positive outcomes for as many regions and localities as possible.

8. The ESPON TPM project developed the **territorial performance monitoring** method. The project aimed at providing an assessment and development tool for regional monitoring of four major global challenges – demographic change, climate change, a new energy paradigm and globalisation. The tools within the project were applied in five stakeholder regions - Catalonia, Flanders, Greater Dublin, Navarre and North-Rhine Westfalia - with the aim of providing analytical support for strategy building by looking at how experiences can be shared and used in developing more effective territorial policy actions.

9. **Understanding differential growth** is a method developed within the ESPON SURE project which has explored new ways of conceptualising and measuring imbalances within lagging European regions by searching for key indicators for understanding why specific regions lag behind and other accelerate their growth rates. This was achieved through a systematic comparison of factors relevant for economic growth and successful cohesion policy over the last 15 years in convergence regions

10. **Urban growth modelling** is a method developed within the ESPON POLYCE project which analysed five central European capital cities in relation to the concepts of metropolisation and polycentricity. The project emerged from the wish of city-administrations for research on their future competitive and cooperative potentials, both among each other and towards other metropolises. A main goal was to conduct a comparative analysis of Bratislava, Budapest, Ljubljana, Prague, and Vienna, and their related surrounding areas, in order to elaborate in-depth results on their specificities and commonalities.

## C.2 A framework for utilizing ESPON knowledge

In order to provide practical guidance of how practitioners and policy makers can utilize ESPON knowledge for detecting territorial potentials a conceptual framework has been developed, as basis for the interactive handbook This was done based on the systematic review of ESPON knowledge, in relation to the identification of ESPON methods and in conjunction with the development of territorial approaches.

The conceptual framework has been a crucial element for linking the European experiences from ESPON projects to regional potentials and challenges. It provides a structured frame for making the ESPON knowledge supply meet the knowledge demand at regional level. The conceptual framework structures the territorial approaches and ESPOP methods in a way that make ESPON knowledge available and usable for practitioners and policy makers.

Following the context sensitive scientific approach of the DeTeC project, the research-oriented systematisation and synthesis of approaches, methods and other ESPON resources had to be linked with the practices of local and regional stakeholders. In order to determine the applicability of ESPON-knowledge for different stakeholder, practitioners and policy makers in different territorial contexts a key issue was to identify the main target groups and potential usage of the handbook. Based on an internal workshop exercise, the main target groups and usage identified include:

1. Policy makers and practitioners in the field of regional development or spatial planning, who are in an executive, leading position, making strategic decisions at regional and municipal level.
2. The guidance document is to be used in long-term strategic development, e.g. to support the design or evaluation of regional development plans and programmes.

A handbook on territorial approaches and methods should be of added value to practitioners and policymakers when it comes to providing support for problem analysis, policy development as well as decision making. Decision making is in this case defined as *"[…] the process of making choices from among several alternatives*" (Greenberg & Baron, 2000, p. 331). The handbook is expected to be a source of inspiration for both practitioners and policy makers performing their activities at different territorial levels (from the local to European). As a tool for decision aid, the handbook somehow needs to engage its users without taking over the decision-making process (cf. Watson & Dennis Buede, 1987). That means that the structure and content of the handbook cannot provide an answer to specific questions but rather provides different possibilities and alternative perspectives to tackle a problem or question.

> Rather than reporting their perceptions to an aide entrusted with synthesizing them, decision-makers are seen as synthesizing those perceptions from pieces of their experience. In this conception, the aide may prompt them regarding where to look, suggest alternative perspectives (drawn from the aide's own experience), and even force them to work harder. (Watson & Dennis Buede M, 1987)

### 2.1 From a conceptual framework …

ESPON approaches and methods can provide input to improve decision-making; however, synthesising techniques and perspectives has to be done with sensitivity to the peculiarities of individual decision problems and decision makers. The conceptual

framework was set up and tested during the regional laboratories with the mind-set, that decision-makers should also have the right to ignore advice, because a method does not fit their problems. A balance had to be found between the sides that know the method as opposed to the side that knows the problem (Watson & Dennis Buede, 1987). Regional stakeholders are the experts for their respective territories and therefore need to define the problems. They also have the experience of how to tackle certain problems. ESPON knowledge and the European perspective can only be of added-value, if fitted into regional practices.

The structure of the conceptual framework takes the inter-linkages between approaches and methods as well as the knowledge demand of the stakeholders and their different angles to approach certain regional issues into account. The definition and identification of the end users requirements was necessary in order to develop a conceptual framework that combines all methodological approaches with the needs of policy makers and practitioners at the regional and municipal level. By direct engagement with stakeholders in the regional laboratories, these needs were identified and policy makers and practitioners were actively involved in the co-fabrication, production and further development of the conceptual framework.

Following the framework the main pressing issues in each of the six regional laboratories were identified in collaboration with regional stakeholders. This identification process revealed weak spots of the conceptual framework as well as concerning the regional applicability of ESPON knowledge. Some of the issues mentioned during the regional laboratories concerned the structure of the framework, indicating that the entry points into the guidance document needed some further elaboration. The main concern was to align the specific research or policy questions of the regional representatives on the one hand, and the inventory of approaches and methods of ESPON projects on the other hand. The interaction and engagement with regional stakeholders revealed that the definition of a set of key questions to specify the rather general territorial approaches would be of added value to a handbook for detecting territorial approaches and methods which should guide practitioners and policy makers through ESPON knowledge.

Issues of applicability of ESPON analyses or methods in different spatial contexts as well as issues concerning data availability and comparability were also raised during the regional laboratories. These were also taken on board during the further elaboration of the conceptual framework by focusing on clear definitions of requirements concerning data and methodology of described ESPON methods as well as illustrative examples of use cases in the method descriptions. The final handbook itself cannot provide the user with information if up-to-date data is available or if data is comparable across national borders or if the methodology is applicable in a specific case – however, the handbook has to provide guidance and give clear indications on important methodological issues in order for practitioners to make up their mind if the method can be applied in their specific context (i.e. if data is available on the right scale, if data is comparable, if the methodology fits the spatial context etc.).

As an output of the regional laboratories, 15 inherent key questions connected to the territorial approaches and ESPON methods were elaborated, following the research questions of ESPON projects as well as policy questions of regional stakeholders. The key questions facilitate the navigation through territorial approaches and ESPON methods for detecting territorial challenges and potentials. One method may apply to several territorial approaches or key questions and therefore territorial approaches and key questions may be interlinked in various aspects (see figure below).

The conceptual framework combines territorial approaches, key questions and methods multi-directionally, allowing different paths to generate knowledge on territorial potentials and challenges of a region. In order to display the inter-linkages and to enhance usability the handbook has been designed with interactive functionalities. By showing inter-linkages between approaches and methods, the handbook can contribute to the structuring of the set of decision problems which decision makers face. Policy makers and practitioners may be debating in what ways problems should be formulated, and how far one decision should be seen as linked to another. They may be considering whether their current focus should be enlarged or, conversely, whether a complex of related problems should be broken down into more manageable parts (cf. Rosenhead, 1989, p. 127f.).

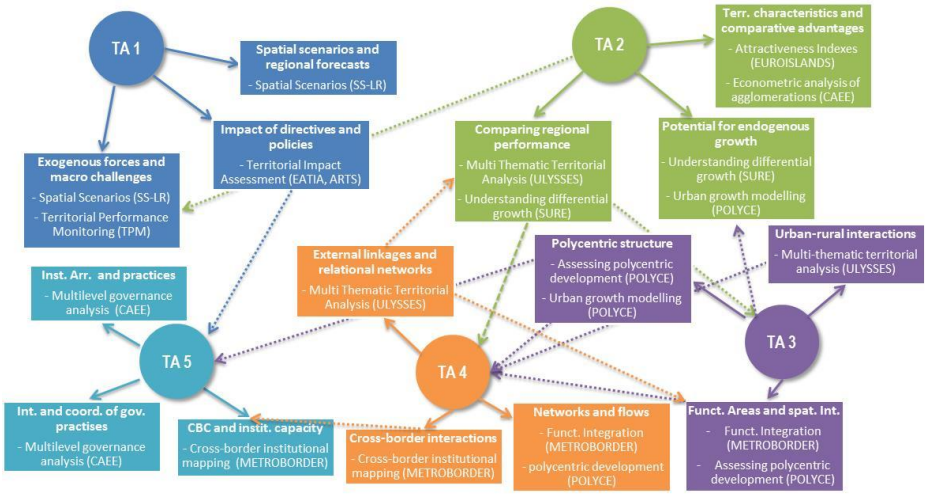



***Figure 4. The inter-linkages of the conceptual framework***

## 2.2 … to an interactive handbook

Following the notion that the handbook should provide support for problem analysis, policy development as well as decision making, the conceptual framework was set up in the structure of a decision tree (cf. Greenberg & Baron, 2000, p. 472). However, due to the interactive functionality of the e-book format of the handbook, different entry points for starting a query are possible. The user of the guidance document is able to access the information from the five territorial approaches or via ESPON methods. The handbook also provides direct access to additional ESPON resources, with information and links to relevant ESPON projects, publication and tools, and information of how the framework can be used through a section on the regional laboratories. For example the method of urban growth modelling, which was applied in the ESPON POLYCE project can be used to identify a region's characteristics and performance as well as to identify functional areas and integration.

In the process of producing the handbook the conceptual framework was presented to stakeholders during the regional laboratories. It was crucial that the conceptual framework was presented to practitioners and stakeholders in an illustrative and accessible format to further improve its applicability. The presentation for detecting territorial potentials and challenges was based on the list of territorial approaches and key questions, including ESPON methods and structured following the logic of the conceptual framework. It was used in the regional laboratories to show practitioners and stakeholders how to utilise ESPON knowledge in the field of

regional development in an efficient way and to give insights in the possibilities of applying ESPON knowledge at different territorial levels. Additionally, the regional laboratories served as testing grounds for the applicability of the conceptual framework and to evaluate the degree of applicability of different components of ESPON knowledge in different territorial contexts.

During the workshops an immense facilitation was to make use of concrete examples – e.g. Malta is currently working on "Strategic Plan for The Environment and Development", whereas in Scotland there is a focus on "Strategic Development Plan for Edinburgh South East Scotland II", which provided a common point for discussions on how to detect potentials and challenges. Apparent differences in the selection of most relevant territorial approaches prove an adequate choice of regional laboratories to conduct in-depth analyzes. The six European regions taken into consideration are diverse in numerous aspects including geographical location, social development, membership in the European Union (regions of old and new EU-member states and those outside of EU). However, most interestingly from the DeTeC point of view is that regions executed are varied in terms of their current needs and problems. Most of the regions are now in the process of developing strategic plans for the future - these are different spatial, economic and social studies. In all cases these documents have become for a solid reference point to territorial approaches and methods of analysis, which has facilitated the discussion and brainstorming with regional practitioners and policymakers.

Handbook's up-to-dateness and subject matter undertaken therein depend on the issues analysed in ESPON projects, which strictly refer to assumptions of the EU regional policy in a particular financial perspective. The handbook is intended to be a source of knowledge and guidance for practitioners in the next seven-year EU budget plan, in which challenges regarding regional policy might be changed. This fact could immensely restrain the applicability of the interactive handbook. Statistical data used in the handbook largely comes from the period of 5-10 years back, which does not allow for a full diagnosis of the current state of analysed phenomena. An essential challenge is to update the handbook, otherwise in a matter of few years it will become obsolete. The results of some ESPON projects used in developing the handbook are already outdated.

The handbook was adapted and produced based on and aligned to feedback and comments received during the regional laboratories. Most comments received during regional laboratories concerned the practical use of the interactive handbook. The conceptual framework, i.e. the approaches and methods, are simultaneously diverse and general, and it is has been stressed that the final handbook should be well-structured and user-friendly, that it uses a vocabulary that is familiar to the potential users and that sophisticated scientific concepts and the key policy terms should be explained explicitly, in for example of a glossary. The amount of text should also be carefully considered since an overloaded and too text intensive handbook hinders its application in everyday work. Its potential users in general do not have enough time to read it carefully, and a more synthetic approach to particular issues (with the possibility of getting acquainted with details on additional pages) would improve the applicability.

The interactive features of the handbook was appreciated and also the idea of publishing it as an e-book. It should, however, be ensured that the e-book can be read on all of the most commonly used operating systems. The handbook should also use other advantages of an e-book such as a multiple entry points and inter-linkages, and for example incorporate a search engine which should notably facilitate seeking for relevant methods of analysis and/or illustrative examples from past

ESPON projects. The handbook should also use the potentials of directly linking to different ESPON resources and provide direct access to various additional resources, illustrative examples and case studies. The interactive multi-touch e-book format also provides numerous possibilities of adding visual elements, symbols and icons as well as of including galleries, video, interactive diagrams, 3D objects etc.

## C.3 Regional laboratories as a method

Regional laboratories have been an important and innovative methodological approach of the DeTeC project. The main idea of the regional laboratories was to include both research and policy activities, and especially to directly involve the policymakers, members of local authorities, non-governmental actors and other practitioners. The regional laboratories facilitated co-production of knowledge through interaction between researchers, practitioners and policy makers, and played an important role in order to validate the conceptual framework and to assess its regional applicability. Through the regional laboratories concrete examples on how the selected regions can identify and use their territorial potential and/or deal with particular challenges including a European outlook and combining ESPON results with local as well as regional knowledge was also provided. In addition, the regional laboratories have been important channels for dissemination of ESPON knowledge.

### 3.1 Selection of case laboratories

As a method the regional laboratory is a case study based research approach, which is directly in-line with the practice-oriented approach adopted within the project. The notion of knowledge co-production has been an essential premise in this. Methodologically it has been structured around a participatory design as a knowledge-generating process (Bergold 2007), and according to Bergold: "*participatory research involves a joint process of knowledge-production that leads to new insights on the part of both scientists and practitioners*" (2012).

The project has partly used a multiple-case design which allows not only testing of theoretical concepts but also comparisons and more nuanced interpretations of empirical phenomenon (Bhattacherjee, 2012). However, case studies can have many forms and can be applied in many contexts, and the regional laboratory can also be characterised as intervention in real-life context and a form of evaluation research (Yin, 2009). In the DeTeC project, the "intervention" is related to the assessment of the conceptual framework (with territorial approaches and ESPON methods) in real-life circumstances. However, the multiple-case study approach also allows for comparisons between different cases and discussion regarding the general applicability of different approaches and methods. Being aware of the drawbacks of the case study approach (e.g. Benbasat et al. 1987), the selection process of the case study regions has been carefully planned in order to provide a set of cases representing various areas, problems and localisations within Europe. Furthermore, the regional laboratories organized in the selected case studies gathered a wide variety of stakeholders, practitioners and policy makers, who enriched the discussion and the assessment of the territorial approaches providing the perspectives of different participants representing different institutions.

In case study based research a key issue is the selection of cases. In this project the tselection of the regional laboratories was embedded in the broader objective of information maximization (Flyvbjerg, 2001) together with the aim of gathering a wide variety of different types of regions across the ESPON territory. The regional laboratories have also been important nexuses in the learning process which enabled moving to upper steps in the learning process, according to Flyvbjerg (2001), context

independent knowledge and rules are crucial but only on the basic levels of the learning process. Thus the additional knowledge gathered through the regional laboratories analyses, hence, through 'gaining the experience', complement the previous, theoretical knowledge. This learning process has been explicitly illustrated in this project with the theoretical constructs elaborated at first then tested through regional laboratories in the selected regions.

In practice the selection procedure consisted of two steps. In the initial phase, the list of potential regional laboratories based on stakeholders already or previously involved in ESPON projects was created. Then, the second step was to address the need for the different types of cities and regions in accordance with the ESPON typology of territories (urban-rural; metropolitan regions; border regions; islands regions; sparsely populated regions; outermost regions; mountainous regions; coastal regions; regions in industrial transition) and with the balanced geographical coverage (Northern and Western Europe, Central and Southern Europe, Eastern Europe) together with special consideration of old as well as new EU-member states.

Adopting the aforementioned criteria, six regions across Europe were selected to play the role of the regional laboratories: Danube-Kris-Mures-Tisa Euroregion, Edinburgh South East Scotland, Malta, Podlasie, Skåne and Styria. It should be noted here that all the regions (or part of the regions), apart from Styria (Steiermark), are or have been involved in ESPON projects previously. The selection of Styria was based on the idea of using an external reference point in order to assure the transferability of the project's outcomes to regions that have not been directly involved in ESPON-projects in the past.

Another important criteria has been the significant differentiation of regions chosen as they indeed represent various size, inner characteristics and administrative structure. The Danube-Kris-Mures-Tisa Euroregion is, for example, a border region of more than 3.4 million inhabitants including two Hungarian counties (Bács-Kiskun County, Csongrád County), three Romanian counties (Arad County, Caras-Severin County, Timis County) and the Autonomous Province of Vojvodina. Skåne is one unitary region with 33 municipalities and population of 1.2 million, Podlasie is of similar population size but consists of 118 municipalities and is located at the border of ESPON territory. The republic of Malta is a densely populated island while Scotland, being a part of the United Kingdom (UK), is a sparsely populated mountainous region, divided into 32 council areas.

The different regions also represent different administrative types with different governance structures. Podlaise, Skåne and Styria are all sub-national administrative regions. Edinburgh and South East Scotland is an emerging sub-national entity but also part of the United Kingdom. Malta is sovereign state while Danube-Kris-Mures-Tisa is a cross-border supra-national Euroregion. This diversity of regions selected has been considered as a key element in the assessment of the conceptual framework and the handbook's applicability in detecting territorial potentials and challenges in different types of regions.

After the selection regional profiles were developed for each region. The concept of regional profiling as an approach of exposing regional characteristics and indicating the performance of a region was used for example in the ESPON RISE project. The regional profiles consisted of two parts. The first one was a rather quantitative and concise presentation of each region whereas the second one, which was of a qualitative nature provided a broader approach, allowing positioning each region to the others and globally within the European space. The characteristics of the regions

were based on secondary materials in the form of statistical data, surveys and policy documents.

Regional profiles were important in order to position the regions in the wider European scene. There was also an underlying idea of presenting the performance of the selected regions on the basis of previous or on-going ESPON project results. However, the regional profiling faced numerous methodological difficulties. As not all European regions were considered in the ESPON projects and the lack of comparable data within certain regions and thematic fields was an obstacle in drawing a comparative picture of the region's performance. For example, data for Danube-Kris-Mures-Tisa Euroregion was difficult to access, which complicated the proper evaluation of its positioning and overall performance. As this Euroregion is spread over two EU countries (Hungary, Romania) and one non-EU country (Serbia), the possibilities of collecting comparable information appeared to be quite limited. Moreover, also in previous comparisons, strong divergences between the Hungarian and Romanian parts of this Euroregion have been observed and the overall assessment of its economic performance was difficult.

## 3.2 Structure of regional laboratories

Regional laboratories have been used to assess the regional applicability of the conceptual framework for detecting territorial potentials and challenges and in order to produce a workable and applicable handbook. According to Flyvbjerg "concrete experiences can be achieved via continued proximity to the studied reality and via feedback from those under study" (2001, p. 72). Hence, the organization of regional laboratories has been carried out in collaboration with the established local and regional contacts. The aim of these laboratories was thus to benefit from double exchange of knowledge: project partners disseminated the ESPON knowledge, presented the conceptual framework and provided examples of good practices while the practitioners and policy makers contributed with their regional knowledge in analysing the potentials and challenges. In such manner, the laboratories were planned as a mode of collecting materials and obtaining practitioners' perspectives and assessment with regard to the content-oriented purpose. The laboratories took place in the specific case study regions.

The regional laboratories aimed at providing in-depth knowledge on how a region can analyse, distil and make use of their territorial potentials. To this end, the synthesis of the ESPON knowledge was crucial. The regional laboratories should be also considered as a way of verifying the level of transferability of various methods and analytical approaches that have been proved to be relevant for detecting territorial potentials and challenges. This role was attributed to the interactive handbook, which content and applicability was evaluated during the regional laboratories. In addition, the laboratories were used to receive feedback on the handbook and assessment of its applicability and the level of its utility in the daily work of stakeholders. It was also an occasion to present the ESPON program. Thus, the regional laboratories tested the possibility of vertical (from pan-European and national to regional and local levels) and horizontal (between different regions) transfer of knowledge in Europe. The regional laboratories have been conducted in two steps; a target group meeting and a stakeholder workshop.

**Target group meeting**

The target group meeting aimed at gathering key stakeholders from the region stakeholders, practitioners and policy makers involved in strategic regional planning and regional development. A common structure for all target group meetings had been established, but which also allowed for adaption to the specific regional setting.

This first part of the target group meeting focused on taking advantage of previously developed materials within ESPON projects. This was especially important in the case when the participants in the meeting were not aware of specific topics undertaken within the ESPON programme. The presentation of regional profiles was rather flexible as the main goal was to adapt the presentation to the specificity of the region where the group meeting was taking place.

In the next step of the target group meeting the ESPON DeTeC project was presented including the explanation of the conceptual framework. This was followed by discussions concerning the territorial approaches. According to the specificity of each region being under investigation in this project, the partner responsible for the laboratory selected a set of three territorial approaches that were most relevant to the needs of the region. This selection had to be justified on the basis of the knowledge about the region gained through the desktop research before the laboratories had started. In that way, the researchers (partner teams) presented solely selected territorial approaches, explaining their basis and their applicability in the region. This applicability was understood in the three time scales: in daily work (addressing the most pressing issues) and on the long-term basis.

The target group meetings were seen to be interactive and to provide the outputs concerning the needs of the participants. For this reason, the invited persons were asked to comment the choice of the priority territorial approaches and their applicability from their perspective as regional key players. The assessment of the territorial approaches was referring to their applicability, completeness and significance. The added-value of these target group meeting laid also on the possibility to broaden the issues that territorial approaches were dealing with by the provision of additional intrinsic questions. The outcome of the target group meeting was a selection of the territorial approaches (perhaps the same as proposed by the partner team) that were then assessed using the application during the stakeholders' workshop.

**Stakeholder workshop**

The regional workshops dedicated to the regional stakeholders were preceded with a brief presentation of the ESPON programme and the DeTeC project. Subsequently, the summary of the previous meeting was presented, including the following issues: questions previously raised and the presentation of selected territorial approaches that would be tested during the on-going workshop. The workshops were designed for an in-depth presentation of the methods within each of the selected approaches, relevant for each region. The modes of evaluation of the approaches have varied across the regions regarding the number and background of stakeholders gathered. In some cases, the workshops gathered similar (at least some of them) participants as the previously carried out target group meetings which is one of the commonly used techniques in focus groups to encourage the conceptualization (see Morgan et al. 2008). Each group of stakeholders assessed the applicability and relevance of methods presented to their region, through the precised rating grid or through brainstorming (in groups in some cases when then number of participants was high), named as "professional discussion forum". These covered also the illustrative examples presented of how regions can make use of their territorial potentials.

In order to build interactions based on sharing and comparing thoughts about the topic, the workshops contained three stages: introduction was designed to mainly summarise the outcomes of the previous target meeting and to emphasize the topics that would be then discussed. The assessment of the methods presented was the second phase, involving the participants and encouraging them to share their

opinions. Finally, the third stage was practical to some extent, as the participants could have tested the preliminary version of the handbook.

In the final part of the workshop, the attention was paid to the handbook. The aim of this part of the workshop was to collect opinions and critical remarks from the stakeholders about this guide. During the stakeholders' workshop, only the draft version of the handbook was presented as the elaboration was still in progress. For this reason, the participants of the workshop were not able to test all the options.

# References

## Research and policy documents


Amin, A., & Thrift, N. (2002). *Cities: Reimagining the Urban*. Cambridge: Polity Press.

Barca, F. (2009). *An Agenda for a Reformed Cohesion Policy: A place-based approach to meeting European Union challenges and expectations* (Independent Report prepared at the request of Danuta Hübner, Commissioner for Regional Policy). Retrieved from http://ec.europa.eu/regional_policy/archive/policy/future/pdf/report_barca_v0306.pdf

Benbasat, I., Goldstein, D. K., and Mead, M. (1987), *The Case Research Strategy in Studies of Information Systems*, MIS Quarterly (11:3), p.369-386.

Bergold, J. (2007=, Participatory strategies in community psychology research—a short survey, In A. Bokszczanin (Ed.), Poland welcomes community psychology: Proceedings from the 6th European Conference on Community Psychology Opole: Opole University Press, (pp.57-66).

Bergold J. & Thomas S. (2012) Participatory Research Methods: A Methodological Approach in Motion, *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 13 (1). Art. 30, http://nbn-resolving.de/urn:nbn:de:0114-fqs1201304.

Bhattacherjee, A. (2012). *Social Science Research: Principles, Methods, and Practices*, USF Tampa Bay OpenAccess Textbooks Collection, Book3.

Bourdeau-Lepage, L., & Huriot, J.-M. (2002). Metropolisation in Warsaw: Economic Change and Urban Growth. *Canadian Journal of Regional Science*, *25*(3), 423–446.

Castells, M. (1996). *The Rise of the Network Society* (Vol. 1). Malden, Mass.: Blackwell.

CEC. (2008). *Green Paper on Territorial Cohesion: Turning territorial diversity into strength*. Brussels: Commission of the European Communities. Retrieved from http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0616:FIN:EN:PDF

Cetina, K. K., Schatzki, T. R., & Von Savigny, E. (2000). *The practice turn in contemporary theory*. Routledge.

Davoudi, S. (2005). Understanding territorial cohesion. *Planning, Practice & Research*, *20*(4), 433–441.

Davoudi, S., Evans, N., Governa, F., & Santangelo, M. (2008). Territorial Governance in the Making: Approaches, Methodologies, Practices. *Boletín de la Asociación de Geógrafos Españoles*, (46), 33–52.

De Boe, P., Grasland, C., Healy, A., Hanquet, T., & Robert, D. (1999). *Spatial Integration* (Final Report). Retrieved from http://www.mcrit.com/spesp/SPESP_REPORT/spatial_integration.pdf

Ellingsen, W., & Leknes, E. (2012). The city region as concept, object, and practice. *Norsk Geografisk Tidsskrift - Norwegian Journal of Geography*, *66*(4), 227–236. doi:10.1080/00291951.2012.708359


Formatted: French (Luxembourg)

ESDP. (1999). *European Spatial Development Perspective: Towards Balanced and Sustainable Development of the Territory of the European Union* (Agreed at the Informal Council of Ministers responsible for Spatial Planning in Potsdam). European Commission. Retrieved from http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/pdf/sum_en.pdf

Evers, D. (2012). A Solution in Search of a Problem: A “Garbage Can” Approach to the Politics of Territorial Cohesion. *European Journal of Spatial Development*, *February*(45). Retrieved from http://www.nordregio.se/Global/EJSD/Refereed%20articles/refereed45.pdf

Florida, R., Gulden, T., & Mellander, C. (2008). The rise of the mega-region. *Cambridge Journal of Regions, Economy and Society*, *1*, 459–476. doi:10.1093/cjres/rsn018

Flyvbjerg, B. (2001). *Making Social Science Matter: Why Social Inquiry Fails and How it Can Succeed Again*. Cambridge: Cambridge University Press.

Gløersen, E., & Dubois, A. (2010). *Handbook of Territorial Diversity: Experiences from the ESPON Territorial Diversity project*. ESPON. Retrieved from http://www.espon.eu/export/sites/default/Documents/Projects/TargetedAnalyses/ESPONTEDI/TEDI_Handbook_Final_25-06-2010.pdf

Greenberg, J., & Baron, R. A. (2000). *Behavior in Organizations: Understanding and Managing the Human Side of Work* (7th ed.). Prentice Hall.

Hall, P. G., & Pain, K. (Eds.). (2006). *The polycentric metropolis: learning from mega-city regions in Europe*. London: Routledge.

Hoyler, M., Kloosterman, R. C., & Sokol, M. (2008). Polycentric Puzzles – Emerging Mega-City Regions Seen through the Lens of Advanced Producer Services. *Regional Studies*, *42*(8), 1055–1064. doi:10.1080/00343400802389377

Jones, M., & Paasi, A. (2013). Guest Editorial: Regional World (s): Advancing the Geography of Regions. *Regional Studies*, *47*(1), 1–5.

Kitchin, R., & Thrift, N. (Eds.). (2009). *International Encyclopedia of Human Geography*. Elsevier Science.

Kloosterman, R. C., & Musterd, S. (2001). The Polycentric Urban Region: Towards a Research Agenda. *Urban Studies*, *38*(4), 623–633. doi:10.1080/00420980120035259

Krätke, S. (2007). Metropolisation of the European economic territory as a consequence of increasing specialisation of urban agglomerations in the knowledge economy. *European Planning Studies*, *15*(1), 1–27.

Massey, D. B. (2004). *For Space*. London: SAGE.

Morgan D.L., Fellows C.E., Guevara H. (2008). Emergent approaches to focus groups research, in S.N. Hesse-Biber, P. Leavy (eds), *Handbook of emergent methods*, New York, NY: Guilford Press, pp. 189-206.

Paasi, A. (2004). Place and region: looking through the prism of scale. *Progress in Human Geography*, *28*(4), 536–546.

OECD. (2001). *OECD Territorial Outlook*. Organisation for Economic Co-operation and Development.

Rosenhead, J. (1989). *Rational analysis for a problematic world: problem structuring methods for complexity, uncertainty and conflict*. Wiley Chichester.

Scott, J. W. (2009). Europe of Regions. In (R. Kitchin & N. Thrift, Eds.)*International Encyclopedia of Human Geography*. Oxford: Elsevier. Retrieved from http://www.sciencedirect.com/science/article/pii/B9780080449104008385

Shields, C. (2013). Aristotle. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Winter 2013 Edition.). Retrieved from http://plato.stanford.edu/archives/win2013/entries/aristotle/

SPESP. (2000). *Study Programme on European Spatial Planning 1998-1999*. Retrieved from http://www.mcrit.com/SPESP/

TA. (2007). *Territorial Agenda of the European Union: Towards a More Competitive and Sustainable Europe of Diverse Regions* (Agreed on the occasion of the Informal Ministerial Meeting on Urban Development and Territorial Cohesion in Leipzig on 24 / 25 May 2007). Retrieved from http://www.eu-territorial-agenda.eu/Reference%20Documents/Territorial-Agenda-of-the-European-Union-Agreed-on-25-May-2007.pdf

TA 2020. (2011). *Territorial Agenda of the European Union 2020: Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions* (agreed at the Informal Ministerial Meeting of Ministers responsible for Spatial Planning and Territorial Development on 19th May 2011 Gödöll ő , Hungary).

Vandermotten, C., Halbert, L., Roelandts, M., & Cornut, P. (2008). European Planning and the Polycentric Consensus: Wishful Thinking? *Regional Studies*, 42(8), 1205–1217. doi:10.1080/00343400701874206

Vanolo, A. (2010). European spatial planning between competitiveness and territorial cohesion: Shadows of neo-liberalism. *European Planning Studies*, *18*(8), 1301–1315.

Vasanen, A. (2013). Spatial Integration and Functional Balance in Polycentric Urban Systems: A Multi-Scalar Approach. *Tijdschrift Voor Economische En Sociale Geografie*, *104*(4), 410–425. doi:10.1111/tesg.12029

Watson, S. R., & Dennis Buede M. (1987). *Decision synthesis: the principles and practice of decision analysis*. Cambridge: Cambridge University Press.

Yin, R.K., 2009, *Case Study Research, design and Methods*, vol. 5, Thousand Oaks, California, SAGE Publications.

Zaucha, J., Świątek, D., & Stanczuk-Oljnik, K. (2013). *Place-based Territorially Sensitive and Integrated Approach* (prepared on the request of the Network of Territorial Cohesion Contact Points (NTCPP)). Warsaw: Ministry of Regional Devlopment and Department of Spatial Development Policy.

## ESPON reports and projects

ESPON CU. (2010). *Regional Use of ESPON Knowledge: Inspiration for Researchers and Practioners involved in Regional Territorial Analysis and Policy Development* (Working Paper from the internal ESPON Seminar on 3-4 December 2009 in Malmö).

ESPON 1.1.1. (2005). *Urban areas as nodes in a polycentric development* (Final Report).

ESPON 2.3.2. (2007). *Governance of Territorial and Urban Policies from EU to Local Level* (Final Report).

ESPON ATTREG (2012). *Attractiveness of European Regions and Cities for Residents and Visitors* (Final report)

ESPON ARTS (2012). *Assessment of Regional and Territorial Sensitivity* (Final Report).

ESPON BSR-TeMo (2013). *Territorial Monitoring for the Baltic Sea Region* (Interim Report)

ESPON CAEE. (2010). *The case for agglomeration economies in Europe* (Final Report).

ESPON EATIA. (2012). *ESPON and Territorial Impact Assessment* (Final Report). Retrieved from

ESPON EUROISLANDS. (2011). *The Development of the Islands: European Islands and Cohesion Policy* (Final Report).

ESPON FOCI (2010) *Future Orientation for Cities*. (Final report)

ESPON GEOSPECS (2012). *Geographic Specificities and Development Potentials in Europe: European Perspective on Specific Types of Territories* (Final Report)

ESPON KIT (2012). *Knowledge, Innovation, Territory* (Final report)

ESPON KITCASP (2013*). Key Indicators for Territorial Cohesion and Spatial Planning* (Draft Final Report).
ESPON EU-LUPA (2012). *European Land Use Pattern* (Draft Final Report)
ESPON METROBORDER. (2010). *Cross-border Polycentric Metropolitan Regions* (Final Report).
ESPON POLYCE. (2012). *Metropolisation and Polycentric Development in Central Europe* (Final Report).
ESPON SS-LR. (2010). *Spatial Perspectives at Nuts-3 Level* (Final Report).
ESPON SURE. (2010). *Structured empirical analysis for convergence regions: identifying success factors for consolidated growth* (Final Report).
ESPON TANGO. (2012). *Territorial Approaches for New Governance* (Interim Report).
ESPON TIPTAP (2010). *Territorial Impact Package for Transport and Agricultural Policies* (Final Report).
ESPON TPM. (2013). *Territorial Performance Monitoring* (Final Report).
ESPON ULYSSES. (2013). *Using applied research results from ESPON as a yardstick for cross-border spatial development planning* (Final Report).

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# Annexes

## I. Concise report from Regional Laboratories

See attachment (file:

## II. Draft content of the interactive handbook

See attachment.

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