

TranSMEC Transnational Support Method for European Cooperation

Targeted Analysis 2013/2/7

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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.

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A Executive summary

1 TranSMEC executive summary

1.1 **General positioning of TranSMEC**

With the project "TranSMEC – Transnational Support Method for European Cooperation", the ESPON Programme has established a constructive connection between the transnational cooperation programmes and the territorial evidence available through the accumulated research carried out by ESPON projects. The main purpose of the TranSMEC exercise is to assess, realise and improve the use of evidence base from ESPON for disseminating, capitalising, monitoring and steering the performance of the transnational cooperation programme INTERREG B North West Europe (NWE). The NWE Programme, as one of the 13 transnational programmes within the European Territorial Cooperation (ETC), offers opportunities for transnational cooperation within the defined territory of North West Europe (ANNEX 2). The framework for activities is currently set by the themes defined for the ERDF funding period 2007-2013.

According to the Lead Stakeholder of the project, the Managing Authority of the INTERREG IVB Programme North West Europe represented by the NWE Joint Technical Secretariat (JTS), TranSMEC targets the transnational cooperation programmes NWE IIIB 2000-2006 as well as, where applicable, the NWE IVB 2007-2013 as subject of the analysis.

The main aim of TranSMEC lies in the delivery of methodological options – so-called "tools" – for achieving visible and evidence-based results within the performance of these territorial cooperation programmes. This main objective is formulated in the context of the following programme challenges defined in the TranSMEC project specifications:

- The INTERREG B NWE Programme is lacking means to aggregate territorial outputs delivered in a systematic way so as to make them more visible to the outside world.
- The INTERREG B NWE Programme is lacking means to identify key territorial potentials, themes and regional stakeholders to respond to more strategic issues and have a greater impact on the whole programme area.

TranSMEC is the first project under ESPON that tackles the topic of transnational territorial cooperation in the framework of a targeted analysis, thus representing the needs of the stakeholders for evidence base. This unique character leads to the following conclusions:

- TranSMEC has a door-opening function and its results can in principal be applied to all transnational territorial cooperation programmes. Also, macro-regional strategies could use the elaborated tools for their strategy implementation, their project planning and dissemination activities. Furthermore, other EU funding programmes could use the elaborated tools for defined purposes like partner selection or project and programme performance assessment.
- TranSMEC has a *highly explorative character* and had to make choices in order to achieve concrete results considering its time and staff limitations. The TranSMEC project team choose to focus on visualisation-oriented tools that can be easily implemented and at the same time allow a rather simple methodology to retrieve ESPON evidence base by having its main focus on the maps that result from ESPON research projects. As a consequence, the general methodological focus lies in the construction of *overlay maps that combine ESPON maps with data from the territorial cooperation programme*

INTERREG B North West Europe. Consequently, the use of ESPON evidence base for transnational cooperation programmes could not be fully explored in the framework of TranSMEC.

INTERREG B programmes *need tools for on-going and highly dynamic processes*. TranSMEC therefore delivers visualisation tools that are workable and that can be easily implemented during an on-going process. Furthermore, the tools need to be workable considering the capacities, the technological possibilities of a Joint Technical Programme Secretariat. In line with the wishes of both the EU Commission as well as the current Polish EU presidency formulated in Gödöllö on June 21st 2011, the delivery of fast results is considered crucial for the use of ESPON research data for further stakeholders.

Having considered these aspects the project group was able to formulate the following questions concerning dissemination, capitalisation, monitoring and steering of the INTERREG B NWE programme performance where the tools should give an answer to:

- How can ESPON evidence base help to visualise the achievements of the programme with "easy-to-read" maps for dissemination purposes at any time of the programme implementation?
- How can ESPON evidence base help to capitalise on the achievements of the INTERREG B NWE Programme by providing a visual basis for future pathways for more targeted investments?
- How can ESPON evidence base help to better monitor the on-going and dynamic programme performance through visualising the on-going programme implementation at any time needed?
- How can ESPON evidence base help a more territorial evidence based programme steering through opening up of new, visual decision-making basis?

1.2 Tools in support of transnational cooperation

Based on a general methodology to screen all ESPON projects (of the timeframe 1995-2011) for maps that correspond to the programme priorities and – in a second step – process these maps and superposition them with data from the former and the ongoing programming periods of the INTERREG B NWE Programme, the following tools have been produced. The tools result in activities that can be applied to the different programme requirements (dissemination, capitalisation, monitoring, steering). The structure of the tools comprises the production and the application of meaningful overlay maps.

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No. Description of tools

(different approaches for visualising combined data from ESPON and NWE)

Short description and brief conclusions about the usability of the specific tools

1 Visualising the NWE programme area in a wider European context

ESPON maps normally comprise the complete European Union territory. These maps deliver interesting results without being processed at all and can be used especially for dissemination purposes as well a capitalisation of the overall programme achievements against a territorial background. As an example, the ESPON maps can clearly demonstrate that the NWE area ranges among the regions in Europe with the highest vulnerability of urbanised areas to floods. Of course, also maps that combine ESPON and NWE data can show the NWE area in a wider European context. Here, a further example shows that transnational cooperation in the field of flood risk management focus on river catchment areas that are completely covered by the NWE territory while catchment areas that are only partly covered by the NWE territory do not seem to be as attractive for developing transnational project consortia.

Variation between the number of participating partners OR the ERDF budget spent and comparing both maps

Based on an ESPON map that thematically matches an NWE programme priority, NWE can choose whether the overlay should include either "number of partners" or "ERDF budget spent". Especially the comparison of both maps delivers interesting cornerstones for the evaluation of the programme performance in a specific subpriority¹. This tool can be applied to all programme requirements.

3 Variation of scale (NUTS 2 or NUTS 3)

Overlay maps can be presented in NUTS 2 or NUTS 3. Overlay maps presenting NWE data at NUTS 2 level result in a cleaner visualisation that is easier to read. On the other hand they lack precision in pointing out the location of partners and investments that can be obtained by working at NUTS 3 level. Consequently, the use of NUTS 2 overlay maps is rather recommended for dissemination while detailed assessments for capitalisation, monitoring and programme steering should be based on NUTS 3 maps. Like Tool 2, this tool is also a more general tool that can be applied to all programme requirements.

4 Zooming into parts of the NWE territory

For specific purposes, a more detailed assessment of a part of the NWE territory requires a visual "zooming-in". This tool can be used to present a sub-area with distinct territorial features (like e.g. a river catchment area) in detail in combination with the precise location and volume of NWE interventions in the related field which is

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¹ Sub-priority: Under the INTERREG IIIB NWE Programme (2000-2006) the strategic themes were set up in five priorities and two sub-themes for each priority, called "measures".. Under INTERREG IVB NWE (2007-2013) the sub-priorities are called "objectives". In order to avoid misunderstandings TranSMEC uses the term "sub-priorities".

especially relevant for capitalisation and steering purposes. This tool could e.g. demonstrate that the NWE project partners in the field of flood risk management are mainly concentrated in the Rhine catchment area.

5 Revisiting ESPON maps used in the INTERREG Operational Programme

The tool demonstrates the possibilities for using ESPON evidence as a 'territorial baseline' of the situation of a programme area. These maps can provide a strong visualisation tool to communicate the programmes' success in targeting those parts of their area that correspond with a certain thematic priority and is therefore especially interesting for steering and monitoring purposes, but also relevant for dissemination and capitalisation of the overall programme achievements. It could for example be demonstrated that the programme succeeded in the Spatial Vision² objective to "strengthen the metropolitan areas", but "showed weak performance in the objective "maximising the competitiveness of weak MEGAs³". It is strongly recommended to plan the use of these "baseline scenarios" from the programme development phase right from the start.

6 Filtering complex data sets for improved visualisation

ESPON maps often represent complex and multi-layered visual results of territorial research. Therefore, some maps need to be stripped from an information overload in order to be suitable for the use as overlay map. For this, entirely new maps need to be created by only using selected ESPON data sets. This improved "readability" of the overlay map is especially relevant for dissemination and capitalisation and helped e.g. to better interpret a map that combined NWE programme data with ESPON data that showed overall involvement in cooperation programmes. It could be demonstrated that NUTS 2 regions that are totally not involved in NWE projects tend to also be reluctant with regards to participation in other INTERREG programmes.

7 Annual programme performance update

This tool is a strong monitoring and steering tool. Due to improved IT capacities both within the ESPON CU as well as the INTERREG JTS, new options emerge to use ESPON maps not only for the static territorial diagnosis, but also for on-going monitoring purpose. This tool demonstrates how a map used for the SWOT analysis in the NWE Operational Programme could serve as a "territorial evidence background" to be connected to the NWE project database. With this tool it could be demonstrated how the NWE Programme managed to attracted an increasing amount of partners under the new Priority 1 "Knowledge based economy and innovation" in the subsequent years of the current programming period.

8 Checking thematically concentrated vs. broad use of NWE funds
Emerging project ideas and therewith approved projects are, to a large extent, the
result of a random "bottom-up" process. For example, the beneficiaries of a specific

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² The Spatial Vision comprised three thematic studies. The themes of the studies mentioned are: 'Polycentric territorial development in NWE', 'Parity of access to infrastructure and knowledge' and 'Sustainable management of the cultural and natural heritage'.

of the cultural and natural heritage'.

The ESPON Project 1.1.1 "Urban areas as nodes in a polycentric development" explored the functionalities and potentials of the European urban system. It introduces the concept of Metropolitan European Growth Areas (MEGA's). MEGA's are the 75 European urban areas that are strongest in terms of economic and population mass, competitiveness, connectivity and knowledge base

region may either concentrate on a specific sub-priority due to specific territorial patterns or may address topics in a broader way covering more sub-priorities. This is especially important for specific cases of programme steering. Corresponding typologies could be identified and some lessons can be drawn from their territorial features. For instance, the resulting demonstration overlay map could be of used for assisting the programme steering/monitoring in order to develop targeted actions (in terms of communication or even specific project development assistance provided by the JTS and Contact Points) towards territories too much or not at all specialised. It could for example be demonstrated that – generally spoken – regions with stronger involvement in financial terms tend to participate in a broader range of sub-priorities⁴.

9 Comparing/ Aggregating the programme performance from two different programming periods

The tool assesses current against former programme performance and can be used for all programme requirements. An either comparative or cumulative overlay map between both periods allows showing which of them better match ESPON territorial evidence. Also aggregated data on a longer period – 2000-2010 for the moment – give a clearer view of the orientations that should be supported in view of preparing the next programming period. The demonstration examples e.g. revealed that – concerning the prevention of flood risks, the majority of the ERDF in the IIIB programming period went to the Netherlands and had from 2007 on a strong focus on Belgian territories while both territories showed only a moderate to low flood risk. This example also showed some limits as to the availability of accurately fitting ESPON data (see demonstration examples), but also allowed interpretations such as an increased awareness for the need of preventive measures.

10 Assisting the demarcation of thematically targeted calls through identification of territorial challenges

This tool can be especially used for programme steering and allows the use of ESPON data for identifying differences in programme coverage concerning specific territorial features. Mixing the NWE programme participation with thematically corresponding territorial evidence base might allow the identification of territorial "gaps". These "gaps" are represented through an "inverted" overlay map that highlights the territorial patterns of regions that have not participated in the programme. In the demonstration, the tool shows that the majority of non-involved territories are mainly located in the periphery of the NWE area.

Assisting project development respectively project actors to select partners in highly profiled territories

In current INTERREG IV programmes, projects promoters are required to meet a demand in thematic terms, based on the programme content. Although there are clear requirements for building up a transnational partnership corresponding to a project aim with territorial relevance, the programme requirements regarding the consistency of

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⁴ Due to the fact that TranSMEC studied both the IIIB NWE as well as the IVB NWE Programme, a more general term had to be found for the thematic fields given under the main programme priorities, "measures" (IIIB) or "objectives" (IVB). Here, the term "sub-priority" appeared to be the most self-explaining.

the territorial dimension of the project is not fully exhausted. This tool can assist especially steering purposes, but also monitoring and capitalisation requirements. ESPON territorial evidence could provide an additional guidance from a comprehensive territorial viewpoint. It could be developed as a "self-assessment tool" for project promoters in order to orientate the partnership building depending on the selected territorial logic. Using this tool, TranSMEC demonstrates for example that it would be easily workable for transport-oriented projects to select project partners based on a custom-fit ESPON map.

Working with ESPON typologies for new, emerging themes

Transnational programmes need to pick up and appropriately address new emerging topics like e.g. innovation. The topic of innovation received specific attention in TranSMEC due to the current need to better manage the programme concerning this theme. The tool can be used for all programme requirements and allows creating overlay maps that use new typologies in order to better understand how project actors use the offers of a transnational cooperation programme for a specific topic. Based on the new typologies, tendencies in programme performance can be identified against new evidence base. For example, TranSMEC could demonstrate for the thematic field of innovation and knowledge management, high performing regions show a more active participation in the programme. Apparently, high performing knowledge regions create an environment which is favourable for transnational cooperation projects.

Differentiating NWE participant groups and cross-reference with ESPON evidence

The tool is a strong steering tool, but can also be used very well for monitoring and capitalisation. NWE programme monitoring registers partners as institutions in certain categories. In order to better understand how the representatives of these sub-groups react to the offers of transnational cooperation options, ESPON evidence base can show whether certain groups show specific territorial features. For example, the participants of Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation" of the IVB NWE Programme have been split up into the sub-groups representing the different triple helix partners of the innovation process and presented against the same background map "knowledge economy in Europe". When elaborating the programme involvement of these subgroups it e.g. becomes obvious that "private sector partners" that participate in INTERREG come from regions that show a more widespread pattern regarding the typologies whereas "knowledge institutes" and "public sector partners" show a more characteristic territorial pattern.

Assessing the performance of sub-groups in the programme against new typologies: Combining Tool 12 and Tool 13

The combination of Tool 12 and Tool 13 allows an even more in-depth answer to the question: "Which territorial features have the regions where project participants for new themes emerge from" and is thus a strong steering tool. The participation of a selected and defined sub-group of project participants is visualised against new typologies. With this tool, TranSMEC was able to e.g. demonstrate that public partners that participate in IVB NWE under Priority 1 emerge from regions that are labelled "networking regions", which represent regions with a comparatively high ability to

tackle regional challenges through cooperative approaches.

"Changing the perspective" – Assessing territorial needs and choices of project actors at regional level

The tool can especially assist programme steering and prepares ESPON evidence base for a defined region that correspond to the main columns of an INTERREG A, B or C programme. By confronting project partners from this region with this evidence base and interviewing them following a defined questionnaire, it is possible to use ESPON territorial evidence base for assessing both the territorial awareness of partners and their interest in using territorial evidence for partnership composition or problem definition for their project development. TranSMEC could demonstrate in the case study of the Dutch province of Zeeland that programme participants are very well aware of the territorial features of their region and that they would be highly interested in using ESPON evidence base for project development.

Table 1: Description of tools

1.3 Conclusions on limitations and potentials

During the TranSMEC project implementation, the project team had to deal with specific framework conditions and limitations that are important in order to better understand the potential and the limits of the use of ESPON evidence base for assisting transnational cooperation programmes. These can be summarised as follows:

- It is important to consider a fundamental difference between ESPON and INTERREG: While ESPON "observes and measures" territorial patterns, INTERREG is focusing on "implementing and steering/coordinating" territorial cooperation processes. Being thus responsive to local and regional needs of one defined territorial cooperation area, INTERREG B offers aggregated thematic pillars under which the projects can formulate their specific topic. Consequently, INTERRREG B can be described as a "catchbasin" for specific transnational cooperation topics. According to this, it becomes obvious that ESPON - considering the programmes capacities - is *not ready to deliver* evidence base that corresponds accurately to the different priorities or subpriorities of the NWE Programme and that a "thematic match" on project level would represent a random success. An increased alignment with the programme's thematic needs would be desirable. As a first step, INTERREG B NWE calls for a multitude of easy accessible background visualisations in order to be able to communicate and steer programme performance. The recommended alignment between ESPON and INTERREG does also comprise concrete issues like the flexible availability of ESPON maps at different NUTS levels or sub-regional levels in order to increase the options for further use by the stakeholders.
- The potential for structured *collaboration between ESPON and INTERREG is far from being fully exhausted*. Following the complete cycle of programme and project development, TranSMEC was able to define a vast potential for more interlinked approaches. So far, the project could only draw from the existing collaboration in the INTERREG programming phase where ESPON maps assist the set-up of the IVB Operational Programme in order to define workable tools. A more intensive collaboration would allow ESPON support through all phases of the programme and project cycle.
- The success of territorial cooperation programmes is often discussed using indicators that measure regional structural improvements made. Here, it is difficult to differentiate

between the structural effects generated by the territorial cooperation programme and other development schemes, like Objective 2, national and regional structural support programmes as well as purely private investments made. In the light of the *increasing relevance of Objective 3 as mainstream objective as well as the Territorial Agenda 2020, the impetus of cooperation seems to need clearer definitions*. Here, the ESPON Programme has the potential to provide *valuable assistance in collecting success factors that make transnational cooperation a distinct success factor for regional structural developments*.

- Taking into account the available data from NWE, TranSMEC is limited to use NWE programme monitoring data on the actual number of partners, their nature (authorities, universities etc.) and amounts of ERDF budget spent on different priorities connected to their location under NUTS 2 or 3. It is thus a more behavioural analysis of performance of the project actors that can be in compliance or contradictory to the territorial trends assumed in the programming phase. It would be desirable that INTERREG programmes become more territorially aware especially during the on-going monitoring and steering phase. The use of these main data sources includes certain limitations to this approach that should be reflected in the interpretations of findings. For example, when looking at points of intervention, the budget allocation per partner does not necessarily reflect where investments took place.
- The use of ESPON evidence base is currently rather static and limited to the programming period of INTERREG. In order to use territorial aspects better in steering and monitoring processes, *INTERREG B calls for more dynamic interaction between the programmes*. In the future, the ICT capacities allow a closer linkage between e.g. the registration of projects and the assessment of territorial effect in very short feedback loops.

1.4 Main conclusions in the policy context – Territorial Agenda 2020

In the light of the current policy framework, the Territorial Agenda 2020 (TA2020⁵) represents – due to the fact that it already considers relevant policies like the 5th Cohesion report and the EU2020 strategy or macro-regional strategies – the most important current policy context for the TranSMEC operation. TranSMEC was able to draw relevant conclusions regarding the correspondence between the project results and the strategic objectives of the TA2020. The most important ones are:

- Article 11⁶ highlights that the place-based approach to policy making contributes to territorial cohesion. TranSMEC could demonstrate that project actors call for increased support through territorial evidence base to deliver more focused and better applicable results. Furthermore, the article calls for an increased integration of territorial aspects into all phases of the programme and project development cycle. The developed TranSMEC tools offer interesting work-able options how visual ESPON data could be used as territorial evidence base in order to support relevant programme tasks in the fields of programme monitoring and steering as well as capitalisation and dissemination.
- Article 19⁷ emphasises that the exclusion for the socio-economic circuit definitely has a strong territorial character. With its transnational approach, INTERREG B has the

⁵ Territorial Agenda of the European Union 2020 "Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions": http://www.eu2011.hu/files/bveu/documents/TA2020.pdf

⁶ http://www.eu2011.hu/files/bveu/documents/TA2020.pdf, p. 5

⁷ http://www.eu2011.hu/files/bveu/documents/TA2020.pdf, p. 6

potential to include weaker partners and to ensure influx of knowledge and problem solutions into these regions. However, TranSMEC clearly demonstrates that in many different thematic examples, participants that enter a transnational cooperation in a specific field tend to come from strong-performing regions. INTERREG would probably need to lower its barriers in order to allow weaker regions to participate more easily in transnational cooperation projects.

- Article 418 recognises that most policies at each territorial level can be made significantly more efficient and can achieve synergies with other policies if they take the territorial dimension and territorial impacts into account. TranSMEC indicates that a better territorial coordination of especially the INTERREG strands A and B could have a vast synergetic potential. Furthermore, a better understanding of the different INTERREG programme options for local actors would lead to a more distinct evaluation result of a respective INTERREG programme.
- Article 52⁹ recognises that actions at cross-border, transnational and interregional level have a pivotal role to play in the implementation of territorial priorities of the TA2020. Here, INTERREG B calls for territorial typologies and indicators in order to better steer and understand the impetus of transnational cooperation. For example, it seems that regions showing a strong Lisbon Performance¹⁰ are better absorbing the benefits of transnational cooperation and therefore addressing the programme. It would be desirable to better understand the underlying mechanisms.

⁸ http://www.eu2011.hu/files/bveu/documents/TA2020.pdf, p. 10

⁹ http://www.eu2011.hu/files/bveu/documents/TA2020.pdf, p. 10

¹⁰ Please note the glossary: Lisbon Performance

B Main report

2 Context and methodological approach of TranSMEC

2.1 Introduction

With the project "TranSMEC – Transnational Support Method for European Cooperation", the ESPON Programme has established a constructive connection between the transnational cooperation programmes and the territorial evidence available through the accumulated research carried out by ESPON projects. The main purpose of the TranSMEC exercise is to assess, realise and improve the use of evidence base from ESPON for disseminating, capitalising, monitoring and steering the performance of the transnational cooperation programme INTERREG B North West Europe (NWE).

According to the Lead Stakeholder of the project, the Managing Authority of the INTERREG IVB Programme North West Europe represented by the NWE Joint Technical Secretariat (JTS), TranSMEC targets the transnational cooperation programmes NWE IIIB 2000-2006 as well as, where applicable, the NWE IVB 2007-2013 as subject of the analysis. Programmes in the INTERREG B strand offer opportunities for transnational cooperation within a defined territory. For this specific family of programmes, the framework for activities is currently set by the themes defined for the ERDF funding period 2007-2013 (see ANNEX 2).

The main aim of TranSMEC lies in the delivery of methodological options – so-called "tools" – for achieving visible and evidence-based results within the performance of these territorial cooperation programmes.

2.2 Policy context of the TranSMEC exercise

TranSMEC targets a specific programme of strand B of the INTERREG programmes as subject of the analysis. This programme strand offers opportunities for transnational cooperation within a defined cooperation area. For this specific family of programmes, the framework for activities is set by the following objectives defined for the ERDF funding period 2007-2013, which is a more defined interpretation of the more general cohesion goals for transnational cooperation¹¹:

- **Innovation**: the creation and development of scientific and technological networks and the enhancement of regional RTD and innovation capacities, where these make a direct contribution to the balanced economic development of transnational areas.
- **Environment**: water management, energy efficiency, risk prevention and environmental protection activities with a clear transnational dimension.
- **Accessibility**: activities to improve access to and quality of transport and ICT services where they have a clear transnational dimension.
- **Sustainable urban and regional development**: strengthening polycentric development at transnational, national and regional level, with a clear transnational impact.

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¹¹ Structural Funds Regulations 2007-2013 - http://eurlex.europa.eu/JOHtml.do?uri=OJ:L:2006:210:SOM:EN:HTML

Under INTERREG strand B, 13 transnational cooperation areas have been defined and activities are respectively financed under 13 different programmes. For the current project, the programme "INTERREG B North West Europe (NWE)" has been chosen and analyses were carried out covering the funding period 2000-2006 as well as the current funding period 2007-2013. Furthermore, the funding period 2007-2013 has been strongly shaped by the Gothenburg Agenda¹² and the Lisbon Agenda¹³. The latter led to a much stronger focus on innovation within the programme strategies and priorities.

It is important to highlight that all INTERREG programmes are shaping territorial developments through their project activities. Within the European context, this link is defined through the European Spatial Development Perspective (ESDP) of 1999¹⁴. The ESDP can be seen a suitable policy framework for the sector policies of the Community and the Member States that have spatial impacts, as well as for regional and local authorities, aimed at achieving a balanced and sustainable development of the European territory. The ESDP has thus established an important link by acknowledging and defining how community policies and their funding programmes shape the development of the European territory.

The Territorial Agenda¹⁵ was approved in 2007 and has been revised under the Hungarian EU presidency in 2011 (as an example, a stronger link between economic activities and territorial impacts has been defined). The current policy document, that sets the central features for the TranSMEC policy context, is the Territorial Agenda 2020 (TA2020).

The TA2020 has already considered relevant policies like the 5th Cohesion report and the EU2020 strategy, or macro-regional strategies by highlighting their territorial needs. It therefore represents the most comprehensible policy context for the TranSMEC operation. As an example, the following Articles represent strong links to the project activities:

- Article 11¹⁶ highlights that the place-based approach to policy making contributes to territorial cohesion.
- Article 19¹⁷ emphasises that the exclusion for the socio-economic circuit definitely has a strong territorial character.
- Article 41¹⁸ recognises that most policies at each territorial level can be made significantly more efficient and can achieve synergies with other policies if they take the territorial dimension and territorial impacts into account.
- Article 52¹⁹ recognises that actions at cross-border, transnational and interregional level have a pivotal role to play in the implementation of territorial priorities of the TA2020.

¹² http://www.europarl.europa.eu/summits/

http://www.europarl.europa.eu/summits/lis1_en.htm

http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/som_en.htm

¹⁵ http://www.eu-territorial-agenda.eu/Reference%20Documents/Territorial-Agenda-of-the-European-Union-

Agreed-on-25-May-2007.pdf

16 http://www.eu2011.hu/files/bveu/documents/TA2020.pdf, p. 5

17 http://www.eu2011.hu/files/bveu/documents/TA2020.pdf, p. 6

http://www.eu2011.hu/files/bveu/documents/TA2020.pdf, p. 10

¹⁹ http://www.eu2011.hu/files/bveu/documents/TA2020.pdf, p. 10

The TA2020 considers the following relevant EU policies:

- The Lisbon Agenda which is putting high emphasis on the development of the EU towards a knowledge society which led to a much stronger inclusion of the factor "innovation and knowledge management" into regional policies.
- The inclusion of territorial cohesion in the Lisbon Treaty which is nourishing a debate that might reinforce the importance of transnational cooperation in the future.
- The EU2020²⁰ strategy which highlights the strategic importance of a development towards "smart, sustainable and inclusive growth", which has already deeply entered the shape of current and future structural funds programmes. Consequently, this is also true for both the ESPON as well as the INTERREG NWE Programme.

2.3 General methodological approach

2.3.1 Technical process from ESPON maps to overlay maps

The main challenge for the TranSMEC methodological approach lies in the high amount of diverse information from a large variety of projects as well as the different structures of working approaches and available information under the ESPON and the NWE Programme.

Taking into account the limited resources of TranSMEC, it was important to control the workload in order to produce solid, understandable and "easy-to-use" results. In compliance with the stakeholder requirements, priority had been given to results that can be easily visualised. Consequently, the TranSMEC project is not in the position to focus on the high potential of cross-references with written ESPON analyses with the in-depth analyses of programme performances under INTERREG programmes, which would be part of a possible separate study.

In order to visualise programme performance in a territorial context, a general methodology was used consisting of the following subsequence of working steps. These steps were used as a basis in the following chapters, where the respective tools will be described in more detail:

- a) Define and collect the NWE programme information to be used for cross-reference: Number and ERDF expenditure of project participants and nature of project participants assigned to a NUTS 2 or NUTS 3 region.
- b) Define the different stages of the NWE Programme to be taken into account for cross-referencing: programme development phase, programme implementation phase and programme evaluation phase.
- c) Define the NWE programme topics to be assessed for possible cross-reference with ESPON evidence: All priorities and sub-priorities (measures).
- d) Screen all completed and running ESPON projects and publications (e.g. Synthesis report²¹) in a combined data analysis, resulting in the selection of those reports of which the topic corresponds to one of the NWE programme priorities.
- e) Intensive screening of the final and interim reports of the selected projects and extraction of crucial explanatory text parts and above all visualisations (i.e. maps) that

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²⁰ http://ec.europa.eu/europe2020/index en.htm

²¹ "Towards a strategic framework for action" (2005).

- correspond to the priorities and sub-priorities of the NWE Programmes IIIB and IVB (see screening master file in the ANNEX 1).
- f) Assessment of the technical usability of these maps for cross-referencing with the NWE programme information in order to create overlay maps in an easy and reproducible way.
- g) Assignment of usable ESPON maps to the different programme priorities and subpriorities of NWE IIIB and IVB.
- h) Creation of overlay maps (see preparatory tables for overlay maps in ANNEX 1) through:
 - a. If needed, zooming in from the EU wide ESPON map to the NWE area;
 - b. If needed, selection of data to be presented in the overlay map;
 - c. Superposition of selected NWE data with the ESPON map;
 - d. Description and interpretation of the overlay map.

Especially the screening phase (step e) presented a crucial and complex stage of the project implementation, because not only the correspondence of ESPON information with the priorities was required, but also an anticipation of outcomes of a possible visualisation given different visualisation methodologies that are able to illustrate certain territorial particularities of the programme performance. Furthermore, this step had to anticipate the programme performance in the light of different EU policies in order to demonstrate impact effects.

Besides the general methodology, also more general considerations have been integrated into the report such as methodological recommendations for further collaboration between ESPON and INTERREG.

2.3.2 Development of tools for programme requirements in the fields of dissemination, capitalisation, steering and monitoring

Chapter 2.3.1 describes the establishment of a general mechanism to develop overlay maps. In order to develop operational tools that support programme activities in the fields of dissemination, capitalisation, steering and monitoring, specific "programme needs" of INTERREG B regarding the potentials of using visual data have been identified.

The following requirements should be emphasised:

Need for improved dissemination: Dissemination in the context of INTERREG B comprises the distribution of information about the programme implementation in order to highlight programme impacts and successes as well as to demonstrate the functionality of the programme. Visual tools need to transfer easy-to-read information to the general public and the stakeholders e.g. policy makers of the Member States. A visual dissemination tool should ensure that the information is at the same time easily understandable and able to highlight either overall programme achievements or interesting particularities.

Need for improved capitalisation: Capitalisation in the context of INTERREG B represents the facilitation of the use of results obtained through successful INTERREG IIIB NWE projects for future strategic planning and follow-up activities. Visual tools need to be able to pave the way for concrete further planning of activities by the "Project Development Unit" of the Joint Technical Secretariat (JTS) as well as territorial evidence for concrete future (investment) activities from actors. A visual capitalisation tool should thus be as concrete as possible and able to highlight the territorial patterns of future options.

Need for improved monitoring: Monitoring in the context of INTERREG B comprises the overseeing of on-going programme implementation based on project data with a variety of means to observe tendencies, territorial and thematic coverage and crucial decision-making aspects with regard to activation and involvement of project actors. A visual tool should be

designed in a way that allows dynamic and swift feedback loops between the current state of approved projects and the general objectives of the programme.

Need for improved steering: Steering in the context of INTERREG B is the development of proactive responses by the NWE programme committees and the programme bodies at operational level (JTS and Contact Points) to on-going challenges with regards to programme implementation such as thematic and territorial coverage and involvement of specific groups of project actors. Visual tools for this function should represent robust decision-making bases that can be referred to for the justification of steering decisions. Furthermore, they should be able to facilitate the decision-making process through a sufficient level of detail.

The requirements presented here were reflected while developing the operational tools to support the NWE programme implementation.

It has to be pointed out that within TranSMEC, the programme needs for the support options in the different fields of monitoring, steering, capitalisation and dissemination have not been further specified or focussed for specific strategic purposes. Therefore, the development of tools followed a rather elaborative approach, based on the availability and potential cross-reference of data from ESPON and NWE.

Concequently, TranSMEC operates within the framework of the explained more general requirements and programme needs in the fields of dissemination, capitalisation, monitoring and steering. The usability and the limits of the tools for different requirements and application purposes are explained within the presentation of each tool.

Not at least due to the given emphasis on easy-to-use visualisation instruments, the opportunities of methodological options for the use of evidence base (e.g. considering ESPON typologies or assessment tools) can not be seen as exhaustively elaborated within TranSMEC.

3 Presentation of operational tools

3.1 <u>Tool structure: From ESPON project screening towards the use of relevant overlay maps for INTERREG B NWE</u>

Tools 1-14 are based on the use of overlay maps and therefore always reflect territorial perspectives at transnational level. Tool 15 represents a different approach, it stands for a "change of perspective" as it asses the needs and choices of project actors at regional level. The Tools 1-14 result in activities that can be applied to different programme requirements (dissemination, capitalisation, monitoring, steering). The structure of the tools comprises the production and the application of meaningful overlay maps. In order to base them on significant and powerful visualisations, the following working steps had to be considered:

- The screening of all suitable ESPON projects for visualisations that could serve as effective background maps for presenting specific features of the NWE Programme. Furthermore, the quality of the map had to be assessed in order to create overlay maps in an easy and reproducible way.
- Based on a specific map selected, the requirements of the NWE Programme for this specific theme had to be considered.
- The specific programme requirements for dissemination, capitalisation, monitoring and steering had to be considered.

- Furthermore, the technical visual options with regards to a further "easy-to-use" priority for tool implementation at the level of the JTS had to be considered.

The consideration of these aspects, based on the outline of the general technical process in Chapter 2.3.1 led to a complex process that resulted in the development of 15 operational tools that could be directly implemented by the INTERREG IVB NWE Programme which will be presented in the next chapters.

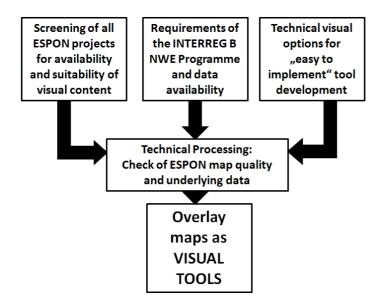


Figure 1: Scheme of the tool development process

3.2 Which tools serve which requirements?

Priority was also given to the fact that the different programme requirements of dissemination, capitalisation, monitoring and steering are strongly interlinked at an operational level. It was thus important to develop visual instruments that

- can serve many requirements at the same time,
- can be used for a wide range of different target groups,
- are able to provide fast responses to upcoming requirements,
- can be combined amongst each other
- need to work for both at level of the overall NWE Programme as well as on specific themes of the programme.

The set of tools to be presented in this chapter can thus be used for all different requirements of the programme and can also be combined among each other. However, the tools have central requirements where they work best. Most of the tools have been elaborated with a main focus on one or two requirements while their usability for other requirements remains subject to specific cases. The following table gives guidance on the usability of the tools for the different programme requirements.

		Use of tools for the following programme requirements: XXX Very useful XX Useful X Useful in specific cases			
No.	Tool	Dissemi -nation	Capitali- sation	Moni- toring	Stee- ring
1	Visualising the NWE programme area in a wider European context	XXX	XX	Х	Х
2	Variation between the number of participating partners OR the ERDF budget spent and comparing both maps	XXX	XX	XX	XX
3	Variation of scale (NUTS 2 or NUTS 3)	XXX	X	XX	XX
4	Zooming into parts of the NWE territory	X	XX	X	XXX
5	Revisiting ESPON maps used in the INTERREG Operational Programme	XXX	XX	XX X	XXX
6	Filtering complex data sets for improved visualisation	XXX	XXX	XX	XX
7	Annual programme performance update	XX	X	XX X	XXX
8	Thematically concentrated vs. broad use of NWE funds	X	X	XX	XXX
9	Comparing/Aggregating the programme performance from two programming periods	XXX	XX	XX	XXX
10	Assisting thematically targeted calls through identification of territorial challenges	X	X	XX	XXX
11	Assisting PDU or project actors to select partners in highly profiled territories	X	XX	XX	XXX
12	Working with ESPON typologies for new, emerging themes	XX	XXX	XX	XXX
13	Differentiating NWE participant groups	Χ	XX	XX	XXX
14	Combining Tool 12 and Tool 13	Х	Х	XX	XXX
15	"Changing the perspective" – Assessing territorial needs and choices of project actors at regional level	Х	Х	X	XXX

Table 2: Possible use of tools

3.3 Tool 1-14: Presentation and assessment

The following chapter presents the tools in detail. The table presented in chapter 3.2 gives and overview on the complete scope of possible use for the tool. However, the conclusions at the end of each presentation focus on the central option for use that are seen as "very useful" (marked with a "XXX").

3.3.1 Tool 1 – Visualising the NWE programme area in a wider European context

3.3.1.1 Description of Tool 1

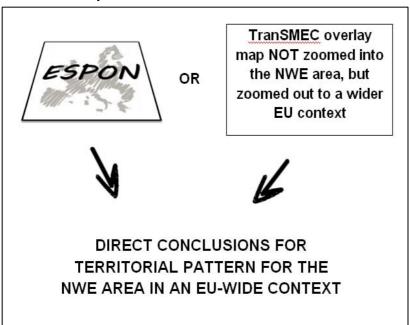


Figure 2: Structure of Tool 1 (NWE programme area in a wider European context)

A better understanding of the thematic positioning of the NWE area in a wider European facilitates the setting of appropriate thematic priorities. If this is done with the use of ESPON evidence base, the NWE Programme can be assisted to sharpen its thematic focus and to also better understand:

- the relevance of the theme (e.g. is NWE a "leading" area with regards to the promotion of this theme) and
- the nature of this theme (e.g. how diverse is the NWE area in comparison or is this diversity the same in the whole EU).

ESPON data are generally collected and mapped for the all EU countries, enabling comparison of the situation in the NWE area with territorial trends at European level. By this 'Zooming Out' of the NWE territory the programmes objectives and achievements can be placed in a wider territorial perspective.

The way to use ESPON evidence base for displaying the positioning of the NWE area in a territorial context can be twofold:

- ESPON maps normally comprise the complete European Union territory. These maps deliver interesting results without being processed at all. The tool is just the simple

interpretation of the available maps and the word to be done is the basic filtering process of the complete project database of ESPON for suitable maps.

Of course, also maps that combine ESPON and NWE data can show the NWE area in a wider European context. In all the other tools to be presented, the original ESPON map has been subject to a cut-out of the NWE area in order to improve clarity. However, in specific cases, a "zooming out" to wider areas seems to be helpful in order add additional information to the display the programme intervention in the NWE area.

3.3.1.2 Conclusions about the possible use and limits of Tool 1

So far, ESPON evidence base showing NWE in a wider European context is mainly limited to the development process of the Operational Programme. However, a more extensive use of the ESPON maps that cover Europe as a whole is especially interesting when used not only on the level of priorities, but also sub-priorities.

The tool to put the situation in northwest European in a wider EU perspective can be used effectively to demonstrate the specific nature of the NWE territory regarding a certain territorial indicator. For instance in cases where the NWE area is dominated by one extreme of an indicator, where certain 'scores' are not represented in the NWE territory, or where NWE has a certain mix of territorial values that differs from the wider EU context.

This information can be used to better communicate the territorial challenges of NWE and position the achievements of the programme in this context. It can also provide territorial evidence to explain and justify certain geographical concentrations or patterns of partners and ERDF allocations within the NWE programme area.

The tool can be applied in two ways, as described above. It is possible to present ESPON maps of the whole EU territory to show how territorial patterns look across the EU. In this case NWE programme data should be presented on a separate overlay map showing only the NWE territory, to provide sufficient geographical detail.

It is also possible to overlay a map of the NWE territory with a layer indicating the direction in which certain territorial continuities stretch out beyond the programme zone (e.g. the watershed demarcations). In this case, programme participation can be assessed in the context of territorial features that cannot be displayed by the cut-out of the NWE area only.

The functionality of Tool 1 is demonstrated in the following chapters referring to a series of different thematic contexts, in detail:

- Chapter 4.3.1 NWE in the context of ESPON new typologies on the European knowledge economy
- Chapter 4.3.2 NWE in the context of the ESPON map on the Information Society Index
- Chapter 4.3.3 NWE in the context of the ESPON map on floods in urban areas
- Chapter 4.3.4 NWE in the context of the ESPON map on Composite Lisbon Performance
- Chapter 4.3.5 NWE in the context of the ESPON map potential multimodal accessibility
- Chapter 4.3.6 NWE in the context of the ESPON map on regional classification of Europe in the field of naturalness
- Chapter 4.3.7 NWE in the context of the ESPON map on flood recurrence in Europe
- Chapter 4.3.8 NWE in the context of the ESPON map on classification of MEGAs (Metropolitan Growth Areas)

- Chapter 4.3.9 NWE in the context of the ESPON map on cooperation intensity
- Chapter 4.5.9 NWE programme performance vs. flood risks in EU regions considering the different territories of the European watersheds.
- Chapter 4.7.1 NWE programme performance vs. potential multimodal accessibility update in comparison to the wider European context

3.3.2 Tool 2 – Variation between the number of participating partners OR the ERDF budget spent and comparing both maps

3.3.2.1 Description of Tool 2

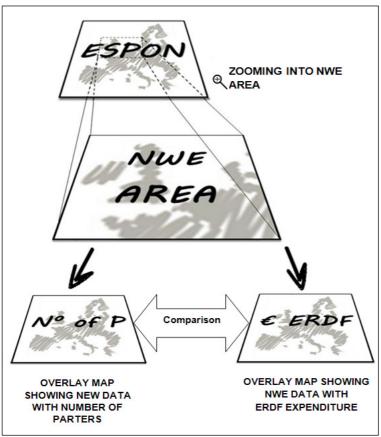


Figure 3: Structure of Tool 2 (Variation between the number of participants OR the ERDF budget spent and comparing both maps)

INTERREG IIIB NWE programme data is available about the location of partners and about the amount of ERDF funding allocated to these partners. For mapping the NWE data, there is the option to present the location and numbers of partners per NUTS region and to present the location and volume of ERDF funding per NUTS region.

While the overall geographical pattern presented in both types of maps (i.e. the NUTS regions where INTERREG NWE activities took place) is identical, they emphasise different aspects of programme performance. The first type map is helpful in displaying territorial distribution of INTERREG beneficiaries. The second type points out territorial investment

patterns of the INTERREG NWE Programme. And an interesting third layer can be created by comparing the patterns in both maps.

By placing this information on a relevant ESPON base map, it can be analysed how the geographical distribution of beneficiaries and funds corresponds to the territorial evidence available.

3.3.2.2 Conclusions about the possible use and limits of Tool 2

For the purpose of presenting the general geographical distribution and patterns (concentration, spread) of the INTERREG B interventions, both approaches are equally useful, since both present the same NUTS level location of the selected indicator.

The different angles on the NWE performance, taken in the two types of maps, result in a different emphasis regarding the territorial peaks of INTERREG impact. However, at least in the examples developed in Chapter 4, the resulting territorial variations are only modest. These subtle differences in territorial distribution can only be picked up if both maps are presented together. The use of two maps in combination provides relevant information for use in more detailed analysis and evaluation of programme performance in a particular (sub-) priority. The comparison is thus most interesting for monitoring and steering.

For dissemination and capitalisation purposes it is more relevant to use only one map, to present a straight forward message. The 'Number of partners' approach will mostly be relevant for presenting the territorial patterns and performance of priorities or measures where the ERDF support is geared to facilitating networking, cooperation knowledge exchange. It is also useful for presenting information at programme level, which implies covering different priorities and fields of intervention. The 'ERDF spent' approach is particularly suitable for mapping the programme performance in measures and priorities that concentrate in delivering where considerable material investments.

The functionality of Tool 2 is demonstrated in the following chapters and in the following contexts:

- Chapter 4.5.8 NWE programme performance vs. flood vulnerability in urban areas and varying between visualisation of "number of partners" and "ERDF spent
- Chapter 4.8.1 NWE programme performance vs. Information Society Index and comparing the visualisation in NUTS 2 and NUTS 3

3.3.3 Tool 3 – Variation of scale (NUTS 2 or NUTS 3)

3.3.3.1 Description of Tool 3

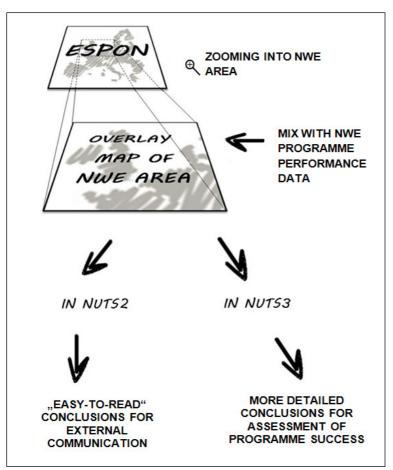


Figure 4: Structure of Tool 3 (Variation of scale NUTS 2 or NUTS 3)

For visualising territorial information at the regional level, maps can be created either at NUTS 2 or NUTS 3 level. From INTERREG B NWE all data are available at both levels. And the same is the case for many ESPON data.

This tool explores the possibilities and limitations of using either the NUTS 2 or NUTS 3 level for visualising INTERREG B NWE performance in relation to territorial evidence offered by ESPON.

3.3.3.2 Conclusions about the possible use and limits of Tool 3

Representation of NWE programme data against ESPON territorial evidence on NUTS 2 level and NUTS 3 level are equally possible.

Overlay maps, presenting data on NUTS 3, give much more precise information regarding the location of INTERREG B NWE actors or investments. On the other hand they tend to be much more difficult to 'read'. In particularly when large sets of data are presented, the visualisation can become cluttered and less clear.

Mapping at NUTS 3 level is therefore useful in particular to communicate very precise information about INTERREG NWE programme achievements in specific thematic fields, for instance at the measure or sub-priority level.

Overlay maps presenting NWE data at NUTS 2 level result in a cleaner visualisation that is easier to read. On the other hand they lack precision in pointing out the location of partners and investments that can be obtained by working at NUTS 3 level. The NUTS 2 level presentation is therefore most effective for dissemination of achievements general programme level, where it is important to present general geographical coverage in relation to certain territorial trends. For capitalisation, monitoring and steering purposes, the use of NUTS 3 level is recommended.

The functionality of Tool 3 is demonstrated in the following chapters and in the following contexts:

- 4.4.1 Overall NWE programme performance vs. Lisbon Performance update 2007 with a focus on comparison between visualisation in NUTS 2 and NUTS 3
- 4.6.1 NWE programme performance vs. Regional classification of Europe in the field of "Naturalness"

3.3.4 Tool 4 – Zooming into parts of the NWE territory

3.3.4.1 Description of Tool 4

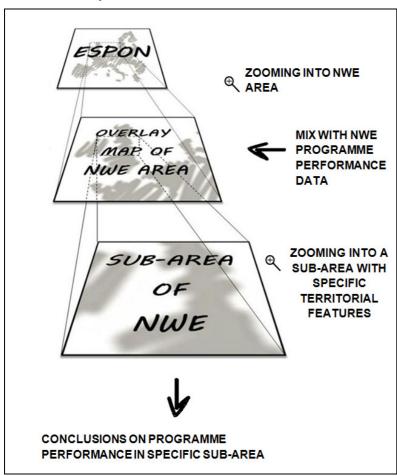


Figure 5: Structure of Tool 4 (Zooming into parts of the NWE territory)

This tool explores the possibilities for presenting NWE programme data against ESPON territorial information in maps with more detailed geographical perspectives. For specific purposes, a more detailed assessment of a part of the NWE territory requires a visual "zooming-in". This tool can be used to present a sub-area with distinct territorial features (like e.g. a river catchment area) in detail in combination with the precise location and volume of NWE interventions in the related field.

3.3.4.2 Conclusions about the possible use and limits of Tool 4

These overlay maps can be used to better communicate the territorial challenges of NWE and position the achievements of the programme using an additional territorial context. It can also provide territorial evidence to explain and justify certain geographical concentrations or patterns of partners and ERDF allocations within the NWE programme area.

As to the applicability, it is possible to present ESPON maps of the whole EU territory to show how territorial patterns look across the EU. In this case NWE programme data should be presented on a separate overlay map showing only the NWE territory, to provide sufficient geographical detail. It is also possible to overlay a map of the NWE territory with a layer indicating the direction in which certain territorial continuities stretch out beyond the programme zone (e.g. the watershed demarcations).

The 'Zoom in' tool can be used to present the territorial evidence of a specific section of the NWE area in detail in combination with the precise location and volume of NWE interventions in the related field. For this tool basically any sub-section of the NWE area can be selected. This could either be based on particular territorial features revealed in the bigger ESPON picture or to zoom in on specific patterns emerging from the NWE layer of information.

Alternatively 'Zoom in' areas could also be demarcated based on other considerations. They could for instance be used to produce country maps, or to zoom in on the areas of the NWE Programme that overlap with neighbouring transnational programmes.

The functionality of Tool 4 is demonstrated in the following chapter and in the following context:

- Chapter 4.5.10 NWE programme performance vs. flood risks in EU regions zoomed into the Rhine river basin

3.3.5 Tool 5 - Revisiting ESPON maps used in the INTERREG Operational Programme

3.3.5.1 Description of Tool 5

The tool described here demonstrates the possibilities for using ESPON evidence as a 'territorial baseline' of the situation of a programme area. When ESPON evidence is used to define a programme strategy and priorities, the accompanying maps offer a strong visual point of reference for presenting the geographical distribution of programme activities. These maps can provide a strong visualisation tool to communicate the programmes' success in targeting those parts of their area that correspond with a certain thematic priority.

Ideally, this 'territorial baseline' should be presented in the initial programme documents (Community Initiative Programme, Operational Programme), at the very start of the programming period. In the IIIB NWE programme documents, no (ESPON) maps were used yet.

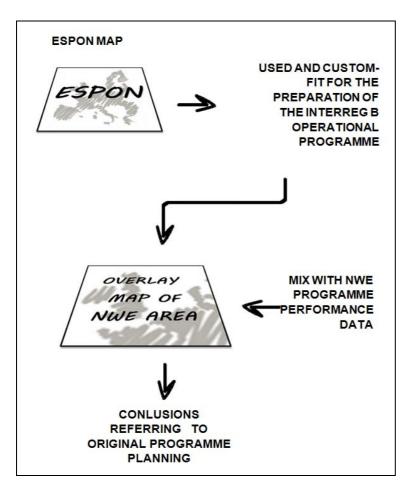


Figure 6: Structure of Tool 5 (Revisiting ESPON maps used in the INTERREG Operational Programme)

The INTERREG IIIB NWE Programme for example was based, among other sources, on the Spatial Vision of the North West Europe Programme area²². During the programming period, in 2004 and 2005, the original Spatial Vision was updated, to analyse changes and developments in spatial trends that might affect the NWE Programme. Based on several thematic studies²³, a synthesis report was issued called "Towards a strategic framework for action" (2005). This document listed key transnational issues and presented a set of contemporary priority themes that should be the focus of future transnational action (i.e. primarily the post-2006 territorial cooperation). These Spatial Vision reports worked with various ESPON maps to identify spatial trends in NWE. It provides therefore interesting material to demonstrate the use of ESPON evidence for capitalisation and communication of NWE IIIB achievements.

In the following programming period, the Operational Programme was developed using territorial evidence base from ESPON. However, no "revisitation" procedure took place.

²² Spatial Vision Study No. 1, Polycentric Territorial Development (including urban-rural relationships) in NWE

^{(2005):} Final Report.

23 The themes of the three studies mentioned are: 'Polycentric territorial development in NWE', 'Parity of access to infrastructure and knowledge' and 'Sustainable management of the cultural and natural heritage'.

3.3.5.2 Conclusions about the possible use and limits of Tool 5

TranSMEC is able to demonstrate that ESPON evidence combined with NWE programme data can create a powerful visualisation tool for demonstrating the programmes delivery against its initial strategic considerations, priority actions and cross-cutting ambitions. The tool can be used for almost all programme requirements in nearly the same relevance.

It has to be considered that this tool can be used for the programme requirements to its full effect only when the use of the ESPON maps as a baseline for benchmarking the achievements of an INTERREG programme is planned from the start. This requires first of all that a programme uses ESPON evidence to inform its socio-economic analysis, programme strategy and priority objectives. On top of this a framework should be defined at the start for 'revisiting' these maps several years later.

Such a framework could consist of concrete territorial indicators and targets that can be presented on a (ESPON) map in a meaningful way. For instance an indicator could be: "Number of MEGAs involved in projects in Priority X", with the target value "All". Or an objective like "Accessibility projects should only engage regions with above average scores in the accessibility index".

Using such a framework enables the programme to demonstrate, communicate and monitor its on-going and future achievements. In addition to this it will provide a possible instrument for programme steering, should performance not meet the agreed targets.

One restriction of this tool lies in the fact that the maps used are static. The same map is revisited after some years to see what patterns emerge compared to the baseline situation. In reality this situation may have changed already due to a variety of factors, but an updated map will not always be (immediately) available from ESPON.

And if an updated version of an original map is available, this will have to be used with considerable caution. If an updated map some years after the original shows a shift in territorial patterns, this change can never be attributed with any certainty to the interventions of an INTERREG programme. There are most likely too many other factors that also had an impact on these developments.

The functionality of Tool 5 is demonstrated in the following chapters and in the following contexts:

- Chapter 4.7.2 NWE programme performance vs. potential multimodal accessibility from the preparatory document²⁴ for the Operational Programme 2000-2006
- Chapter 4.9.1 NWE programme performance vs. typologies of Metropolitan Growth Areas used in the development of the INTERREG IIIB programme

3.3.6 Tool 6 – Filtering complex data sets for improved visualisation

3.3.6.1 Description of Tool 6

Not all ESPON maps are suitable for use as a base map for comparing INTERREG NWE data with relevant territorial evidence. In some cases the original data sets from the ESPON study need to be processed before an overlay map can be produced. Generally spoken, ESPON maps mostly represent complex visualisation of a complex research process and combine aggregated information.

²⁴ Spatial Vision

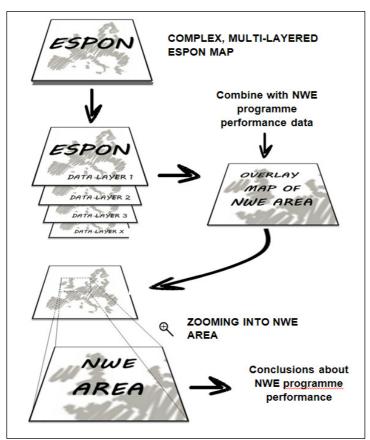


Figure 7: Structure of Tool 6 (Filtering complex data sets for improved visualisations)

This can be the case with ESPON maps that present certain territorial characteristics by using an aggregated indicator that combines multiple variables into one single value²⁵. Such indicators provide robust information about a regions' status on a certain issue and they can be easily visualised in a map. However, it may be that only some of the variables used to compose the aggregate indicator are relevant for the purpose of comparison with INTERREG programme data.

There are also many ESPON maps available that present two (or more) layers of information in one map, to visualise interrelations between different territorial parameters (similar to the overlay maps developed in TranSMEC). Such maps are already so 'full' of visual information, that inserting an additional layer, in an overlay map, would lead to an incomprehensible result.

The tool explored here is the creation of entirely new maps by filtering the datasets from existing ESPON maps, to keep only data that is directly relevant and useful. This filtered dataset can be used to create a new base map with territorial evidence from the original ESPON study that can then be overlaid with INTERREG NWE data.

²⁵ As example an aggregate indicator is the Information Society Index that combines 20 variables related to ICT skills, availability and economic implications. http://csi.civicus.org/

3.3.6.2 Conclusions about the possible use and limits of Tool 6

The tool of filtering relevant data from the original dataset of ESPON studies generally proves to be effective in delivering better visualisation and comparison of INTERREG programme data with available territorial evidence. Furthermore, the use for monitoring and steering is also recommended.

When reduced to a minimum of information, this tool can in particular be useful for communication and dissemination as it can contribute significantly to simple, easy to understand visualisations that can be easily explained to a specific target audience.

The main requirement for applying this approach is the availability of the raw dataset of the original ESPON study.

The functionality of Tool No. 6 is demonstrated in the following chapters and in the following contexts:

- Chapter 4.4.2: Overall NWE programme performance vs. classification for intensity of cooperation activities
- Chapter 4.10.1: NWE programme performance vs. classification for intensity of cooperation activities

3.3.7 Tool 7 – Annual programme performance update

3.3.7.1 Description of Tool 7

Due to improved IT capacities both within the ESPON CU as well as the INTERREG JTS, new options emerge not only for using ESPON maps for the territorial diagnosis, but also for monitoring purpose. This tool demonstrates how a map from the SWOT analysis could serve as a "territorial evidence background" to be connected to a NWE project database (or the nowadays sophisticated Programme Monitoring System). Incoming data of newly approved consortia could fill up this map and give dynamic and immediate feedback circle on territorial evidence to the JTS.

Unlike other INTERREG IV programmes, NWE programme bodies decided to launch two calls per year on average. The number of approved projects per call appears too limited for a valuable illustration of this approach. Consequently, it is proposed to adopt a yearly basis for the visualisation of approved projects.

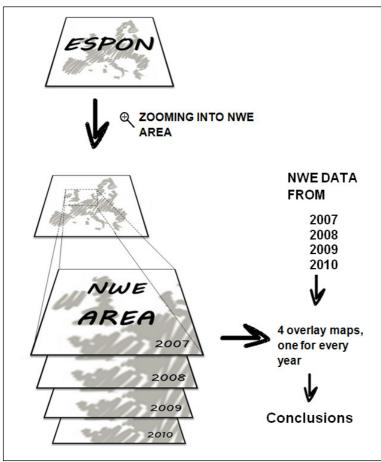


Figure 8: Structure of Tool 7 (Annual programme performance update)

It results in a series of maps which allow showing the progressive involvement of NUTS 2 territories in approved projects and how the somewhat random bottom-up process lead. Do approved projects tend to follow a specific pattern? Is this consistent with ESPON territorial evidence? Which potential corrective measures could be envisaged for subsequent years?

The final product should be one single map with the possibility to visualise the on-going call results. However, it is not possible as part of this report to demonstrate a completed technical solution in detail.

3.3.7.2 Conclusions about the possible use and limits of Tool 7

Such maps could be used for assisting the programme steering/monitoring in order to have a clear picture at any moment of the programming situation and to orientate if needed the geographical preferences for future projects (notably within the more top-down tools). It could also help to identify territorial gaps more precisely.

An alternative tool could have been a cumulative series of maps as follows: 1^{st} map: 2007, 2^{nd} map: 2007+2008, 3^{rd} map: 2007+2008+2009, 4^{th} map: 2007+2008+2009+2010.

Whatever the tool, it would be desirable in technical terms to combine them in a unique map as part of a dynamic tool. By clicking on the different programming periods appearing in the legend, it would be possible to figure out the way partners location develop within the NWE area and to visualise its intensity.

The development of maps per year instead of per call for proposal is mainly justified by the fact that approved projects appear numerous enough for a sound territorial representation.

Two main factors to effectively decide on the usability of the tool:

- The available ESPON evidence base can be considered at priority level while other themes do only match sub-priority level,
- The total number of approved projects still is significant enough for a territorial interpretation.

As limits or restrictions, the following aspects are relevant:

- In some cases, the thematic scope of the priority addressed does not exactly match the representation of the ESPON map.
- It can be doubted whether this monitoring tool should already start within the first year, as the limited number of approved projects might not allow for substantial territorial analysis.

The functionality of Tool 7 is demonstrated in the following chapter and in the following context:

- Chapter 4.5.2 NWE programme performance vs. Lisbon Performance update 2006 for the available years of the programming period 2007- 2013.

3.3.8 Tool 8 – Checking thematically concentrated vs. broad use of NWE funds

3.3.8.1 Description of Tool 8

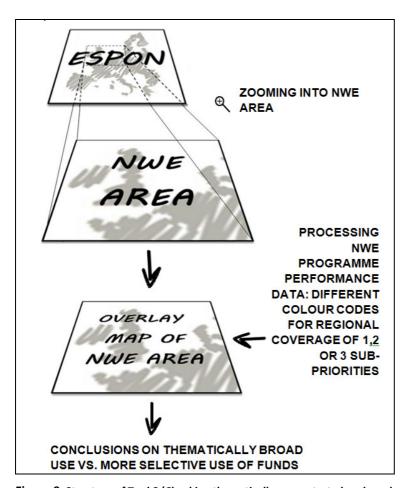


Figure 9: Structure of Tool 8 (Checking thematically concentrated vs. broad use of NWE funds)

Emerging project ideas and therefore approved projects are the result of a random "bottom-up" process to a large extent. Consequently, projects promoters and their partners may be concentrated on specific territories, and not including other ones. Similarly, the beneficiaries might address or not topics included in the same sub-priority. In the end, different typologies of territories can be defined and some lessons can be drawn from their territorial features whether they follow the same pattern.

The resulting overlay map could be of great interest for assisting the programme steering/monitoring in order to develop targeted actions (in terms of communication or even specific project development assistance provided by the programme bodies), for instance, towards territories too much specialised.

3.3.8.2 Conclusions about the possible use and limits of Tool 8

Such maps can be used for assisting the programme steering/monitoring in order to develop targeted actions (in terms of communication or even specific project development assistance) towards territories too much specialised.

Such an approach can be properly used for some other NWE priorities or even at the objective level. Due attention should be paid to the territorial features of a topic addressed as well as features of the beneficiaries before making use of this approach. Furthermore, it could be a further option to consider both approved and non-approved projects could have been considered.

The functionality of Tool 8 is demonstrated in the following chapter and in the following context:

- Chapter 4.5.3. NWE programme performance vs. Lisbon Performance update 2006 displaying thematic specialisation of programme participants.

3.3.9 Tool 9 – Comparing/ aggregating the programme performance from two different programming periods

3.3.9.1 Description of Tool 9

Programme steering might include the need to assess current programme performance against former programme performance. A cumulative overlay map between both periods allows showing which of them better match ESPON territorial evidence. Aggregated data on a longer period – 2000-2010 for the moment – gives a clearer view of the orientations that should be supported in view of preparing the next programming period, at least from a territorial point of view.

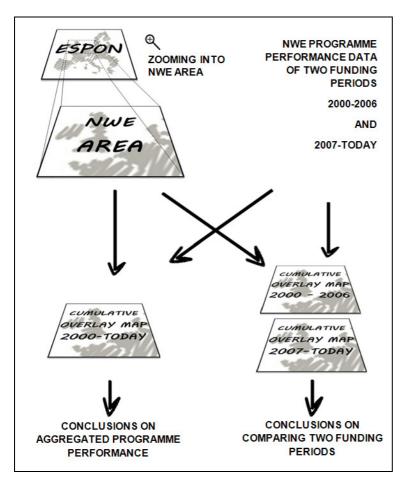


Figure 10: Structure of Tool 9 (Comparing/aggregating the programme performance from two different programming periods)

3.3.9.2 Conclusions about the possible use and limits of Tool 9

Globally, the cumulative map combining data from both programming periods gives a more robust picture of the degree of matching between INTERREG projects allocation and ESPON territorial evidence.

The lessons drawn from a cumulative map could be used for preparing the next programming period 2014-2020. For the current programming period, it may suggest specific actions such as the organisation of project promoters meetings bringing together territories presenting (very) high risk but with no participation so far, or even to facilitate networking between project results in a specific sub-area that hugely benefited from ERDF.

It appears possible to generalise this method to all themes addressed under INTERREG OPs. However, their classification under the different priorities and sub-priorities over the two programming periods might complicate to some extent this comparison. A priori in-depth analysis could be necessary to make sure that the projects considered in this comparative approach do address similar issues.

The functionality of Tool 9 is demonstrated in the following chapter and in the following context:

- Chapter 4.5.11 NWE programme performance comparison 2000-2006 and 2007-2013 vs. flood risks in EU regions.

3.3.10 Tool 10 – Assisting the demarcation of thematically targeted calls through identification of territorial challenges

3.3.10.1 Description of Tool 10

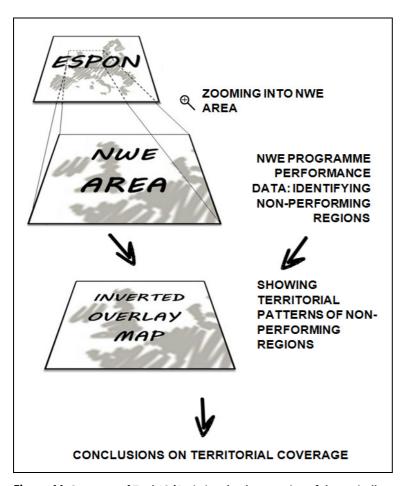


Figure 11: Structure of Tool 10 (Assisting the demarcation of thematically targeted calls through identification ofterritorial challenges)

After the first calls for proposals, thematic gaps are very frequently observed. The same applies with the occurrence of territorial gaps. This does of course not mean that the compensation of gaps through further programme interventions should be "territorially blind", but based on existing territorial needs that are anchored in the territorial nature of the theme. Some territories are well represented within the beneficiary partnerships while others are not. The purpose of maps produced in this context is to show underrepresented territories in approved projects. They could be used for targeted calls from a territorial viewpoint, especially once there are a significant number of approved projects in order to define clear demarcation lines.

On this basis, programme bodies could set a ratio for the participation of underrepresented territories in subsequent calls, or even adopt a more proactive approach by favouring a specific strategy in the project development process.

ESPON 2013

3.3.10.2 Conclusions about the possible use and limits of Tool 10

Such maps could be used for targeted calls from a territorial viewpoint. They could be used at any time during the programming process, but ideally, it would make more sense to resort to them once there are already a significant number of approved projects in order to fix clear demarcation lines.

Several options could be envisaged for their use under targeted calls. Two of them are described below:

- OPTION 1: to invite organisations only from the non-involved territories to submit an application form, in order to make the whole area very active. Specific assistance (such as territorial facilitators) may be needed in order to stimulate project generation.
- OPTION 2: to fix a ratio (at least 50% for instance) for the involvement of partners from such territories (without any restriction concerning the territories already involved in approved projects).

Additionally, and depending on political decision, the choice could be made either to strengthen well performing regions in an "excellence logic" or to favour territories with lower performance in a "catch up logic".

Not all priorities or themes are fully relevant for such an approach. The themes with low territorial basis are more appropriate. For instance, Priority 1 and its three sub-priorities seem adapted to such an approach. On the other hand, it seems more difficult to develop a map emphasising the need for the participation of partners in specific territories which are not really concerned by the issue (for instance river management or floods).

The functionality of Tool 10 is demonstrated in the following chapter and in the following context:

- Chapter 4.5.4 inverted map: Non-participating regions in NWE vs. Lisbon Performance update 2006

3.3.11 Tool 11 – Assisting project development unit or project actors to select partners in highly profiled territories

3.3.11.1 Description of Tool 11

In current INTERREG IV programmes, projects promoters are required to meet a demand in thematic terms, based on the programme's objectives. Except for projects addressing territorial continuity (as transport corridors or river catchments), the potential of benefiting from "territorial logic" is not fully exhausted. This can partly be explained with the discrepancy between the programme actors that do mostly not represent experts on territorial development and the challenges of the INTERREG programme as laid down in the respective application form.

ESPON territorial evidence could provide as such an additional guidance from a territorial viewpoint. It could be developed as a "self-assessment tool" for project promoters in order to orientate the partnership depending on the selected "territorial logic".

Although territorial relevance is already considered in the selection criteria of the NWE programme²⁶, further elaborations along the "territorial relevance" could be carry out (for different priorities or themes) in order to give programme bodies the opportunity to further consider territorial aspects.

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²⁶ Cp. Selection criterion 6 and 8, NWE Guidance Notes, p.23, p. 33

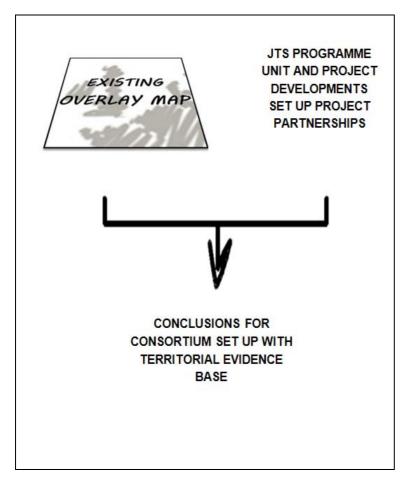


Figure 12: Structure of Tool 11 (Assisting project development unit or project actors to select partners in highly profiled territories)

3.3.11.2 Conclusions about the possible use and limits of Tool 11

Based on the approach, an additional guidance from a territorial viewpoint could be given to project promoters. It could be developed as a "self-assessment tool" in order to orientate the partnership building. The mapping simulation could show the relevant territories a project promoter has to take on board depending notably on the underlying logic of the project. This could be added to the partner search database as a service for applicants.

Another possible use concerns the project selection process. The selction criterion of "territorial relevance" could be further specified and/or supported. Thus, the programme bodies would be enabled to assess the territorial relevance of the partnership considering its location against ESPON evidence and the underlying "territorial logic" as part of a cross-analysis.

The mapping exercise can result rather complex for some priorities/objectives, especially for those with a limited territorial basis.

The functionality of Tool 11 is demonstrated in the following chapter and in the following context:

- Chapter 4.7.3 NWE programme performance vs. potential multimodal accessibility with specific attention to highly profiled territories

3.3.12 Tool 12 - Working with ESPON typologies for new, emerging themes

3.3.12.1 Description of Tool 12

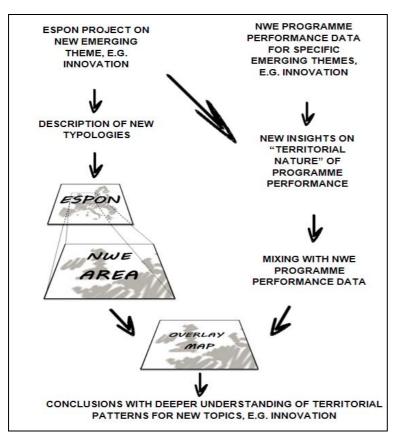


Figure 13: Structure of Tool 12 (Working with ESPON typologies for new, emerging themes)

Existing ESPON evidence base does also comprise the development of new typologies. In some cases, these typologies match the concrete needs of INTERREG to better understand new themes like e.g. innovation. TranSMEC has put strong emphasis on this topic. Therefore, the innovation theme does also serve as a basis for presenting this tool in a concrete way (see Chapter 4.5.5). For Tool 12, generally the following ESPON activities were relevant:

- ESPON can deliver new typologies identifying and grouping regions in terms of their territorial characteristics influencing innovation. This allows establishing a connection between the actors that participate in the NWE Programme and the regional settings represented in these typologies.
- Using these typologies, it is possible to reflect different patterns of the innovation process and show how differentiated innovation has to be understood. This can be crossreferenced with the different approaches how four selected INTERREG IVB programmes access the topic.

Regarding the visual basis, ESPON presents up-to-date maps displaying and interpreting various innovation related indicators. This will result in identifying territorial patterns of innovation and the knowledge economy. New overlay maps are thus possible that show how the funds from INTERREG IVB Priority 1 are distributed against the different patterns of the knowledge economy. This adds more targeted and specific evidence to the existing ESPON material available on innovation, which is generally embedded in a more sectoral or general context.

3.3.12.2 Conclusions about the possible use and limits Tool 12

Given that the ESPON and INTERREG B topics show an appropriate match, this tool is highly recommended in order to better understand the territorial nature of emerging topics. It can also be used to better understand and follow new territoriality of existing themes that are undergoing dynamic developments such as transport and ICT.

Especially in themes where the "territorial dimension" has not yet been explored intensively, a territorial cooperation programme is highly depending on evidence base to better understand mechanisms that are in favour of entering a territorial cooperation process of transnational dimension. In fact, the identification of "driving forces" for transnationality are not only interesting for new themes, but also for existing ones. Especially in cases where the attractiveness of a transnational programme does not seem to match the relevance of a theme at regional and local level, this tool would be highly recommendable.

The tool allows visualising tendencies rooted in the territorial pattern of regions that might lead to interpretations about the relevance of transnational cooperation for a specific topic.

The functionality of Tool 12 is demonstrated in the following chapter and in the following context:

- Chapter 4.5.5 NWE programme performance vs. new ESPON typologies on the European knowledge economy.

3.3.13 Tool 13 – Differentiating NWE participant groups and cross-reference with ESPON evidence

3.3.13.1 Description of Tool 13

Basically, the most important territorial data about the programme performance of the NWE Programme are the number of partners and the ERDF expenditure on NUTS 2 or NUTS 3 level. Furthermore, NWE programme monitoring registers partners as institutions in certain categories. The present tool uses this differentiation in order to understand how the representatives of these sub-groups react to the offers of transnational cooperation options. The different sub-categories of partners are presented separately on the background of the same ESPON map. ESPON evidence base can show whether certain groups show specific territorial features

The tools thus represents a series of maps where the underlying map from ESPON remain constant and allow the assessment of the participation of different sub-group of participants against the chosen typology. The combined map has been chosen in order to present aggregated results. This allows also a more detailed analysis of the different classifications that form the different typologies which can only be displayed if only one typology is presented.

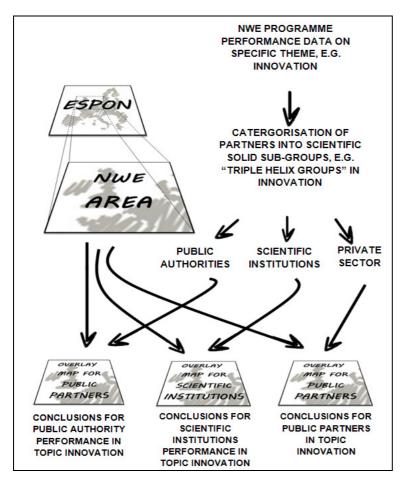


Figure 14: Structure of Tool 13 (Differentiating NWE participant groups and cross reference with ESPON evidence)

3.3.13.2 Conclusions about the possible use and limits of Tool 13

The differentiation into different groups of partners together with the presentation against a continuous ESPON typology allows a sort of "behavioural" analysis of the respective subgroups. It can be demonstrated that certain sub-groups (that are e.g. very important for a successful INTERREG B project such as public institutions in the topic of innovation) show tendencies to be more attached to defined territorial features. These new insights can help programme monitoring and steering a lot when it comes to the intelligent composition of project partnerships for promising projects.

The functionality of Tool 13 is demonstrated in the following chapter and in the following context:

- Chapter 4.5.6 Differentiated sub-groups of the NWE programme participants vs. selected new ESPON typologies on the European knowledge economy.

3.3.14 Tool 14 – Assessing the performance of differentiated NWE participant groups against new typologies: Combining Tool 12 and Tool 13

3.3.14.1 Description of Tool 14

The combination of Tool 12 and Tool 13 allows an even more in-depth answer to the question: "Which territorial features have the regions where project participants for new themes emerge from?" The participation of a selected and defined sub-group of project participants is visualised against new typologies.

Within this approach, the series of maps focuses on the same triple helix group on the background of a variation of knowledge region typologies. The background maps show the different typologies with their classifications as well as the combined map with the typologies aggregated. Furthermore, a selected sub-group – e.g. the "public sector partners" – have been selected from all the partners participating in Priority 1 of the INTERREG IVB NWE Programme.

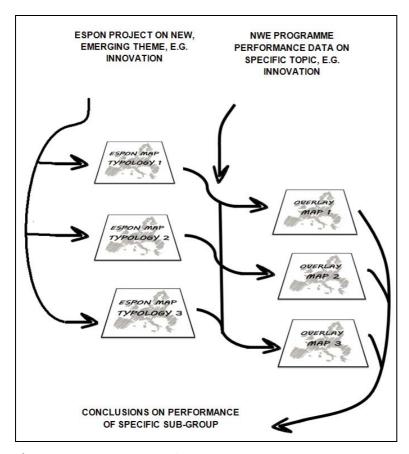


Figure 15: Structure of Tool 14 (Assessing the performance of differentiated NWE – participant groups against new typologies: Combining Tool 12 and Tool 13)

3.3.14.2 Conclusions about the possible use and limits Tool 14

The tool allows a very detailed study about a defined sub-group. It is recommended in cases where new participant groups, e.g. in the context of innovation, appear in the programme. Furthermore, it can be applied in cases where partnerships do not show a desired output in order to reflect whether the programme addresses the right target groups.

The tool is not useful for general assessment or dissemination purposes but as a response for rather specific questions that arise on the basis of monitoring.

The functionality of Tool 14 is demonstrated in the following chapter and in the following context:

- Chapter 4.5.7 Public sector partners of the NWE programme participants vs. new ESPON typologies on the European knowledge economy

3.3.15 Tool 15 – Assessing territorial needs and choices of project actors at regional level ("Changing the perspective")

3.3.15.1 Description of Tool 15

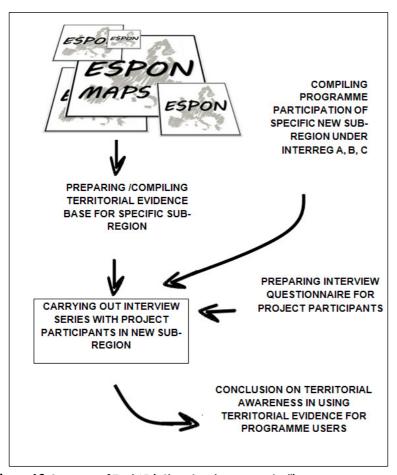


Figure 16: Structure of Tool 15 ("Changing the perspective")

The previous chapter has outlined tools that apply ESPON territorial evidence at the overall programme level of INTERREG B North West Europe. ESPON territorial evidence can also be used to look at territorial aspects at the sub-programme level. Tool 15 represents this "change of perspective" as it explores how ESPON territorial evidence regarding a specific region can be linked to INTERREG projects developed in this region, and to the actors involved in these projects. The aim is to identify how ESPON evidence can be used to asses territorial awareness and the interest in using territorial evidence base for partner and programme selection by programme participants. The main questions addressed are:

- To what extent are regional project actors aware of the territorial characteristics of their area and how do they value the ESPON perspective on their region?
- In what way ESPON evidence can be used to help programme level actors and project participants to distinguish between INTERREG A, B and C projects?
- If and how ESPON evidence can be used to improve participation in territorial cooperation projects?

As to the methodological approach, the focus is laid on a well prepared, direct contact to the project actors themselves (expert interviews). Following steps are necessary:

- Compilation of interesting territorial issues of the selected region
- Identification of key people, preferably initiators/drivers of EU funded project executions in the selected region
- Phase 1 of the interview: After explaining the general context of TranSMEC, the interview partners will be confronted with the main territorial settings of their region
- Checking of the general territorial awareness of the actors
- Phase 2 of the interview: Checking of reasons for initiating or participating the projects that were filtered out under the available cross-border and NWE programmes
- Phase 3 of the interview: Discussing the territoriality of selected project topics by using if available existing ESPON evidence base
- Phase 4 of the interview: Discussing possible territorial aspects that could have steered the development toward either a cross-border or a transnational programme
- Checking whether this has played any role in the decision-making process or whether might be useful in the future.

A relevant key factor for success is a very concrete and specific tackling of the rather abstract concept of territoriality.

3.3.15.2 Conclusions about the possible use and limits of Tool 15

The limits of the tool are clearly set by the high input of resources for its application. It should thus be used for regions where specific information from the actors is needed.

Taking into account the place based approach outlined in the 5th Cohesion report²⁷, this tool represents a powerful instrument to assess regional motivations and driving forces in the context of transnational cooperation as well as to derive conclusions on the necessity of providing territorial evidence to project promoters.

As the application of the tool represents a more comprehensive approach, it is demonstrated in a separate chapter (Chapter 5)

3.4 General conclusions as to usability of tools

The process of the demonstration and elaboration of the tools led to several conclusions as to their usability, which can be summarised as follows:

- The tools elaborated are all suitable for flexible use in all programme requirements, as dissemination, capitalisation, monitoring and steering are sometimes highly interconnected. It is recommended to immediately implement the tools that are rated "XXX" in a routine working procedure and to consider the regular use of tools rated "XX" (cp. Table 2, page 22/23). This implies new working procedures at the level of the Joint Technical Secretariat. These new procedures could serve the task to continuously update and inform internal and external stakeholders already involved about the status quo of the programme. Within strategic discussions, ongoing monitoring as well as

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²⁷ http://www.dfpni.gov.uk/content_-_european_funding-fifth-cohesion-report

evaluation activities the tools can provide further links with territorial data of ESPON. Furthermore – regarding the remaining funds²⁸ new strategic steering instruments (e.g. thematic targeted calls) could be applied based on territorial evidence found through data cross-reference.

- As a closer alignment between the two programmes ESPON and INTERREG is recommended, this should follow the complete programme programming, implementation and evaluation cycle. The tools prepared can be used to provide evidence base for all phases concerned. For the concrete alignment of coordinated working routines, Chapter 6 provides concrete proposals for cooperation.
- The tools also refer to requirements that are rated with only "X" concerning their suitability. However, this is not meant as being less important, but rather to the applicability to specific cases. Here, the new paradigm of a "place-based approach" calls for closer analysis of specific sub-regions and can very well replace strategies that call for the ideal of a complete geographical and thematic coverage of the NWE territory. The tools developed are suitable for achieving those objectives, as they allow appropriate, fast and on-going analysis for place-based approaches.
- The production of tools starts with the retrieving of appropriate ESPON information. Here, it is highly recommended to consider an additional unit to the ESPON Coordination Unit that directly processes research results into easily obtainable data sets and maps.
- TranSMEC is all about combining information from two different programmes. In this context, it is also recommended to consider new ways of mixing data. Given the priority of "easy readability" for dissemination maps, it is for example not fundamentally inappropriate to superposition NUTS 3 NWE data about the programme participation with NUTS 2 background maps that represent the relative performance of a region. Of course, these options are not suitable for closer and precise analysis that should preferable take place on NUTS 3 level. In this context, TranSMEC calls for more flexibility in combining data from both programmes for meeting specific needs and purposes.
- Last but not least, it should be pointed out that the tools presented here cannot be used in a "mechanical way". In order to serve as evidence base for action good knowledge about the territories and the ability to interpret the findings accordingly is essential for their use.

<u>4</u> Demonstration of the application of the TranSMEC tools (no. 1-14): Territorial perspectives on the programme performance of INTERREG IIIB and IVB North West Europe

While Chapter 3 presented and assessed the tools developed, the following chapter is dedicated to demonstrating their functionality. The present chapter is not designed as a "tool testing chapter", but rather focuses on the demonstration of the functionality of the tools along the thematic spectrum of the NWE programme.

Through the process of screening all ESPON projects appropriate visual data could be identified which was used to:

- visualise the NWE area in a wider context regarding specific territorial aspects
- show territorial perspectives on the programme performance at priority level
- show territorial perspectives on the programme performance at sub-priority level

 $^{^{28}}$ About 25 % of the total ERDF budget of NWE IVB (after the 8. Call, 2011) can still be committed to projects. ESPON 2013

4.1 <u>Overview on available and suitable ESPON evidence base for different programme priorities – overview selected tool application</u>

According to the emphasis of TranSMEC on providing preferably visualisation tools, the screening of the ESPON data sources could by far not consider all relevant links (e.g. at indicator level, typologies etc), but all ESPON projects have been checked for their potential to deliver suitable material (maps) which match with the thematic scope of NWE.

Besides overall important aspects (linked to the policy background of NWE), the priorities and sub-priorities of NWE (IIIB and IVB) served as cross-reference for the identification of suitable ESPON data. As set by the different "nature" of the programmes (ESPON and NWE) and different requirements of data storing and processing, it was not expected to find a "exact thematic match" for all priorities and sub-priorities. The following table gives and overview on the overall availability of appropriate visual ESPON material.

Furthermore, the table gives guidance on the demonstrative use of the different tools within this chapter.

In order to improve the overall readability of Chapter 4, the assessment of the usability of each tool has been done in Chapter 3. The present chapter focuses on the achievement of concrete insights to the NWE area and territorial perspectives on the programme performance. Only a short reference is made which tool has been used for the production of which overlay map.

Priorities in general / Sub-priorities	Suitable ESPON evidence base available?		Tool No.
INTERREG IIIB	yes	no	
Background maps for cross-cutting issues for the programme as a whole: Lisbon Performance, Overall cooperation intensity	Х		1,3,6,10
Priority 1 in general: An attractive and coherent system of Cities, Towns and Regions	X		5
1.1 More attractive metropolitan areas in the global and European	Х		1
1.2 Coherent and poly-centric pattern of complementary cities, towns, rural areas, coastal and peripheral regions		Х	
Priority 2 in general: External and Internal Accessibility		Х	
2.1 Sustainable mobility management	Х		1,5
2.2 Improved access to the Information Society	Х		2
Priority 3 in general: Water resources and the prevention of flood damage	Х		9
3.1 Land use and water systems	Х		2
3.2 The prevention of flood damage	Х		1,4
Priority 4 in general: Other natural resources and cultural heritage			
4.1 Stronger ecological infrastructure, reduced ecological footprint	Х		1,3
4.2 Protection and creative enhancement of the cultural heritage	Х		6
Priority 5 in general: Enhancing the maritime functions and promoting territorial integration across seas		х	

ESPON 2013

5.1 Promoting cooperation between sea and inland ports		Х	
5.2 Facilitating cooperation across and between maritime		Х	
and inland regions			
INTERREG IVB			
Priority 1 in general:	Х		1,7,8,12,
Knowledge based economy and innovation			13,14
1.1: Entrepreneurship and innovation		Х	
1.2: Growth clusters & SME networks		Х	
1.3: Framework for innovation		Х	
Priority 2 in general:			
Natural resources and risk management			
2.1: Natural resource management		Х	
2.2: Risk management and prevention	Х		9
2.3: Improving quality of soil, water & air		Х	
Priority 3 in general:			
Sustainable transport and ICT solutions			
3.1: Manage transport growth through capacity optimisation	Х		11
3.2 Multimodal interoperability on land, water & air	Х		11
3.3: Information & Communication Technology		Х	
Priority 4 in general:		Х	
Strong and prosperous communities			
4.1: Economic and social performance		Х	
4.2: Environmental quality and attraction		Х	
4.3: Demographic change and migration		Х	
T.I. 2			

Table 3: Availability of appropriate visual ESPON material

4.2 Aggregation of programme themes for tool demonstration

The table shown in 4.1 reveals a series of gaps as to the availability of visual ESPON evidence base (directly approachable). A closer consideration of the different programme priorities through coordinated working routines between ESPON and INTERREG could buffer this gap. However, it is important to state that the following chapter does not address the complete list of challenging topics, but was limited to the availability of suitable ESPON information. For more targeted requests for ESPON evidence base, the new programming period of INTERREG should give close feedback to ESPON in order to enable the production of appropriate evidence base for the different themes addressed. Furthermore, a critical mass of programme participants under INTERREG B NWE was a significant criterion for preparing meaningful overlay maps. For this purpose, sub-categories sometimes had to be re-aggregated to the priorities.

In the following chapter, priority is given to more fundamental statements about the general themes addressed by INTERREG B in North West Europe. This is relevant for more strategic and future-oriented statements. Consequently, the structuring is done through aggregation of themes from both INTERREG NWE IIIB and IVB, as the separate tackling of topics under the respective sub-priorities harmed the readability and led to diffuse and redundant finding.

In each chapter, short introductory statements are made which tools had been used to achieve the results. Priority is given to the focus on themes and concrete conclusions for the status of the NWE Programme, that also takes into account the present phase in the forefront of the next programming period.

4.3 Seeing NWE in a wider context

In this chapter, the functionality of Tool 1 (Visualising the NWE programme area in a wider European context) is demonstrated.

The processing of ESPON maps into overlay maps did always start with the analysis of ESPON EU wide maps. The first analysis of the EU wide map led to some interesting observation with regards to the positioning of the NWE area in a wider context. The following texts summarise these observations and makes the reference to the respective ESPON project. In order to avoid a redundant presentation of maps from other projects, these references are made in text only. However, all maps are easily obtainable at the ESPON website **www.espon.eu**.

4.3.1 NWE in the context of ESPON new typologies on the European knowledge economy

ESPON map concerned

Although the ESPON project KIT "Knowledge-Innovation-Territory"²⁹ is still in the phase of its interim report, the typologies presented are very significant for further use in tackling the innovation topic under INTERREG B NWE. Although not all European regions could be covered yet, the Maps 11-13 present an aggregated visualisation of all typologies developed. Please find a more detailed explanation of the KIT project in ANNEX 4.5.

Observations

The overall picture shows that the statement of NWE being the "innovation powerhouse of Europe" can be supported, although a high diversity is predominant between high scoring and low scoring regions. NWE accumulates a lot of regions that do not only match one, but rather two or three typologies at the same time, thus integrating different success factors of the knowledge economy in one region. In the EU wide context, the number of regions that do not match a single typology of the knowledge economy is relatively small. The only country which seems to be lagging behind is Ireland, where no match with any of the typologies could be observed.

Furthermore, the map reveals a comparably high degree of regions that meet the typology "networking region". This is especially interesting as this typology seems to be of high significance when it comes to the openness of a region to the offers of a transnational cooperation programme. As this typology represents regions with a high capability of acquiring knowledge through networking, a closer analysis of the underlying mechanisms is highly recommended.

4.3.2 NWE in the context of the ESPON map on the Information Society Index

ESPON map concerned

The ESPON Project 1.2.3 "Identification of Spatially Relevant Aspect of the Information Society" (2006)³⁰ has developed typologies for identification of the Information Society performance. Map 7 of the final report presents a differentiation into six different scores ranging from very low to very high based on an aggregated Information Society typology.

ESPON 2013

²⁹ http://www.espon.eu/main/Menu_Projects/Menu_AppliedResearch/kit.html

³⁰http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_ThematicProjects/informationsociety.html

Observations

The NWE area are clearly range among the most powerful areas with no "very low"- scoring and only three "low"- scoring regions in France and southern Belgium. In comparison, these scores can only be matched by INTERREG B North Sea region, the Scandinavian/German part of the INTERREG B Baltic Sea Region countries and the INTERREG B Alpine Space Region. All other regions show lower scores ranging from very low to moderate-high.

4.3.3 NWE in the context of the ESPON map on floods in urban areas

ESPON map concerned

ESPON project 4.1.3 (2006)³¹ has - amongst others - developed typologies for assessing the vulnerability of European urban areas for floods by focusing on the flood events that have taken place in combination with the territorial features of urban areas.

Map 24 of the final report shows a European map with floods in urban areas from 2006. The map presents five scores ranging from very low to very high.

Observations

The EU wide comparison shows that the NWE area ranges among the European areas with the highest amount of floods in urban areas. The combination of a high degree of urbanisation together with a high amount of river basins with a considerable flood history leads to the fact that NWE is the region where the urban vulnerability to flood events is the highest in Europe.

4.3.4 NWE in the context of the ESPON map on Composite Lisbon Performance

ESPON map concerned

As part of the ESPON Map Updates exercise several maps from the ESPON Project 3.3 "Territorial Dimension of Lisbon/Gothenburg Process" (2007) were updated in 2009.

The map presents the 'Composite Lisbon Performance' of EU regions by ranking their average score one a total of seven indicators related to issues of employment, GDP and R&D expenditure.

Observations

The map shows a rather polarised pattern of Lisbon Performance over Europe, both among and within countries. The new Member States and Mediterranean regions of Europe are in the low range of the index. France, Germany, Spain and Italy show strong internal regional differences. The countries of north and west Europe are in the high end of the range. The NWE area also shows a mixed picture, however no "low performance" regions are found in this area.

In average, the NWE area can be positioned – together with Scandinavia and the wider Alpine space among the highest scoring regions. Here, the NWE region has to bridge intraregional disparities on a relatively high level, while INTERREG B areas in the south or bridging the former iron curtain are confronted with disparities either at a lower level or between very high and very low scoring regions.

Furthermore, it would be highly interesting to update this Lisbon Performance Index to achieve a better "post economic crisis" update.

³¹ http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_ScientificBriefingNetworking/ ESPON 2013

4.3.5 NWE in the context of the ESPON map on regional classification of Europe in the field of naturalness

ESPON map concerned

The ESPON Project 2.4.2 "ZOOM IN - Integrated Analysis of Transnational and National Territories Based on ESPON" has been finalised in 2006. It analyses the specific weaknesses and opportunities of different territorial contexts of Europe, using ESPON data. It developed a regional classification of Europe. One of the indicators developed for classifying European regions is their degree of naturalness and led to the development of the Maps 25 and 26 Based on the shares of artificial and natural land surfaces and the intensity of the agriculture, regions are scored in comparison to the average of all regions in their country. Five possible scores are presented ranging from "below average" until "above average".

Observations

It can be observed that the NWE area – in an EU wide comparison – ranges among the most diverse regions in Europe comprising very high scoring areas with a high degree of naturalness (e.g. Northern UK, Germany, Switzerland) with very low scoring regions in the centre region of NWE in West Germany, the Netherlands and northern Belgium. This high diversity can be correlated with the degree of urbanisation.

4.3.6 NWE in the context of the ESPON map potential multimodal accessibility

ESPON map concerned

The ESPON Project concerned is 1.2.1 "Transport Services and Networks: Territorial Trends and Supply"³³. This ESPON study mapped the accessibility of all parts the EU territory for different modes of transport. This included a map named 'potential accessibility, multimodal, 2001' of the regions of Europe, comparing the accessibility of a region by road, rail and air to the EU average.

Observations

The map sustains clearly that the NWE area includes the best-connected places in Europe, which is not only true on regional or national level, but also with regards to the transnational accessibility. However, low accessibility scores are predominant at the northern and western periphery of the NWE area.

Map 27 shows a strong core-periphery pattern for the whole EU territory. The core regions of Europe and some of the larger urban agglomerations outside of the centre have above average accessibility. Countries and regions in the periphery of Europe score (well) below average.

In fact nearly all of the EU regions with very high levels of accessibility (scoring over 140 on the Accessibility Index) are located in the North West Europe Programme zone, concentrated in a corridor from northwest England, via Flanders, southern Netherlands, western Germany to Switzerland. This corridor continues outside the NWE area southward into northern Italy and to Munich in the southeast.

ESPON 2013

³²http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_PolicyImpactProjects/zoomin.html ³³http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_ThematicProjects/transporttrends. html

4.3.7 NWE in the context of the ESPON map on flood recurrence in Europe

ESPON map concerned

ESPON project 1.3.1 focused on "The spatial effects and management of natural and technological hazards in Europe" (2004)³⁴. Map 5 visualised the typologies development for the assessment of floods in this context. The map displays the hazard recurrence based on average number of large flood events. Five scores have been developed ranging from "very low" to "very high" hazard intensity of flood recurrence.

Observations

Although the map did not cover floods events later than 2002, it becomes obvious that the NWE area comprises some of the biggest areas with strong flood recurrence in Europe. Only floods caused by the rivers Elbe, Danube and Rhone cover comparable regions. Considering the high degree of urbanisation in the NWE area especially in the river basin areas, the topic represents a specific challenge to NWE. Furthermore, the NWE area does also range among the most diverse regions with regions especially in the west of the area showing no flood recurrence at all.

4.3.8 NWE in the context of the ESPON map on classification of MEGAs (Metropolitan Growth Areas)

ESPON map concerned

The ESPON Project 1.1.1 "Urban areas as nodes in a polycentric development" explored the functionalities and potentials of the European Urban system. It introduces the concept of Metropolitan European Growth Areas (MEGA's). MEGA's are the 75 European urban areas that are strongest in terms of economic and population mass, competitiveness, connectivity and knowledge base. Among MEGA's a further classification is made in five categories and visualised in Map 32 of the project.

Observations

The project did not only produce maps that allow a further interpretation, but included the analysis of spatial patterns of different parts of Europe, also for the NWE. The comparison of this text in an EU wide context can be summarized as follows:

- NWE covering a significant part of the Pentagon, it can be stated that NWE does also cover most of the strongest MEGAs in Europe.
- All different types of MEGAs are present which shows that NWE again shows a lot of diversity.

4.3.9 NWE in the context of the ESPON map on cooperation intensity

ESPON map concerned

The ESPON Project 2.4.2 "ZOOM IN - Integrated Analysis of Transnational and National Territories Based on ESPON" $(2006)^{36}$ analyses the specific weaknesses and opportunities of different territorial contexts of Europe, using ESPON data.

³⁴http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_ThematicProjects/naturalhazards. html

³⁵http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_ThematicProjects/polycentricity.ht ml

³⁶http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_PolicyImpactProjects/zoomin.html

One of the maps (Map 7) produced by this project is called "Overall intensity of cooperation" It presents the level of involvement of European regions in the various Transnational Cooperation programmes covering their territory by means of two indicators: the absolute numbers of projects (red dots) and the number of projects weighed by their population (blue shades). The map presents the involvement of EU regions in all INTERREG IIIB programmes, including the INTERREG IIIB North West Europe Programme.

Observations

The map shows a very diverse picture of cooperation with a lot of discontinuity at national borders. This leads to the need for analysing possible underlying factors (legal and financial framework conditions) that are favourable/non-favourable for entering transnational cooperation. The overall cooperation intensity weighted by population shows the NWE area as a moderate performer.

4.4 <u>Territorial perspectives on the programme performance at overall programme level</u>

4.4.1 Overall NWE programme performance vs. Lisbon Performance update 2007 with a focus on comparison between visualisation in NUTS 2 and NUTS 3

In this chapter, the functionality of Tool 3 (Variation of scale NUTS 2 or NUTS 3) is demonstrated.

4.4.1.1 INTERREG and ESPON data sources used

The NWE data related to the location of the 940 partners in all 99 projects of the IIIB NWE Programme.

As part of the ESPON map updates exercise several maps from the ESPON Project 3.3 "Territorial Dimension of Lisbon/Gothenburg Process" (2007)³⁷ were updated in 2009. The map used presents the 'Composite Lisbon Performance' of EU regions by ranking their average score one a total of seven indicators related to issues of employment, GDP and R&D expenditure. The map shows a rather polarised pattern of Lisbon Performance over Europe, both among and within countries. The new Member States and Mediterranean regions of Europe are in the low range of the index. France, Germany, Spain and Italy show strong internal regional differences. The countries of north and west Europe are in the high end of the range. The NWE area also shows a mixed picture, however no "low performance" regions are found in this area.

The following overlay maps compare the 'Lisbon Performance' of regions in the North West Europe area, with the level of involvement of actors from these regions in INTERREG IIIB NWE projects at both NUTS 3 (Map 1) and NUTS 2 level (Map 2).

The colour of a region on the base maps corresponds to its ranking on the composite Lisbon Performance Indicators (2006, NUTS 2 level). This ranking is an average of scores on seven indicators related to issues of employment, GDP and R&D expenditure. The size of the circles on the maps respectively corresponds to the number of partners from a NUTS 3

ESPON 2013

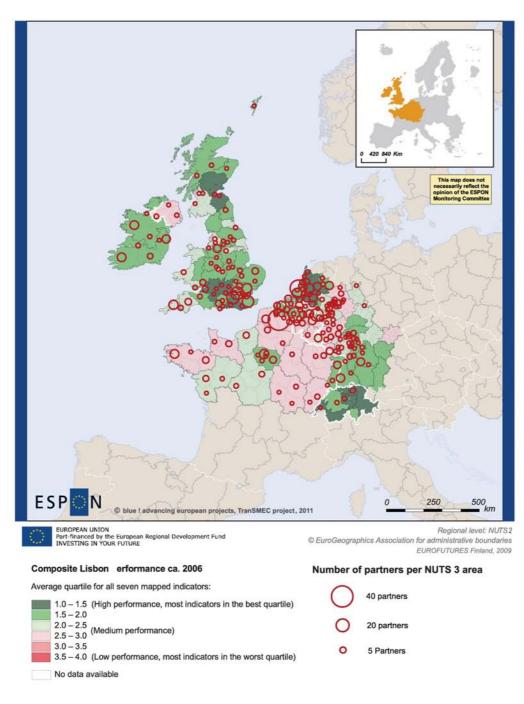
54

³⁷http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_CoordinatingCrossThematicProjects/lisbonstrategy.html

region or a NUTS 2 region that were involved in INTERREG IIIB NWE projects between 2000-2006.

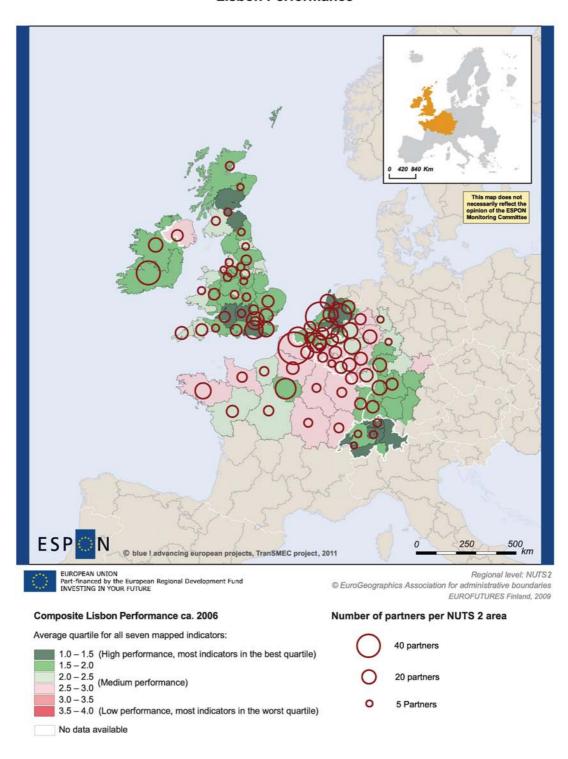
4.4.1.2 Overlay map(s) and description

Location of NWE project partners (INTERREG III 2000-2006) VS Lisbon Performance



Map 1: Location of NWE project partners (IIIB) vs. Lisbon Performance - 1

Location of NWE project partners (INTERREG III 2000-2006) VS Lisbon Performance



Map 2: Location of NWE project partners (IIIB) vs. Lisbon Performance – 2

4.4.1.3 Observations

Large parts of the North West Europe INTERREG IIIB programme area can be qualified as having high "Lisbon Performance", in particular in Ireland, the UK, Netherlands, Flanders, Switzerland, southwest Germany and the Ile de France area. Regions with a medium level performance are mainly found in France, Wallonia, western sections of Germany and scattered across the UK.

The overlay maps show that participation in INTERREG IIIB projects is widespread among the regions of North West Europe. Levels of involvement in terms of numbers of INTERREG IIIB NWE partners tend to be slightly higher in regions with a high ranking on Lisbon Performance, with some concentrations of very active regions in southeast England, Netherlands, Flanders, Germany and Ireland.

However, also several medium performance regions also had intensive participation, for instance in Germany and Wallonia. And among the regions not involved in INTERREG IIIB NWE at all are both medium and high performers.

In sum, no direct connection can be demonstrated between the level of Lisbon Performance of a region and the level of involvement in NWE projects.

Apart from presenting different levels of detail regarding partners' regional origins, the overall territorial patterns visualised by Map 1 and Map 1 are generally identical. Both maps lead to the same conclusions.

4.4.2 Overall NWE programme performance vs. ESPON classification for intensity of cooperation activities

In this chapter, the functionality of Tool 6 (Filtering complex data sets for improved visualisation) is demonstrated.

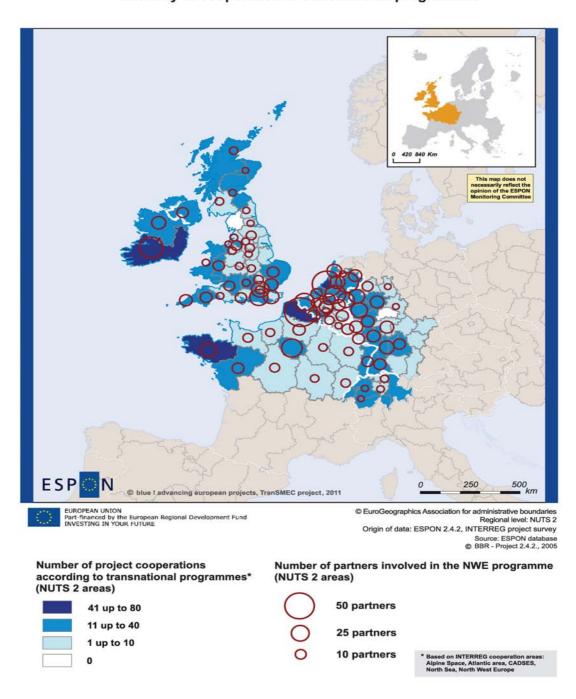
4.4.2.1 INTERREG and ESPON data sources used

The INTERREG IIIB data used for this overlay map covers the NWE Programme as a whole. The data present the location of partners from all 99 projects in the five thematic priorities of the programme.

The ESPON Project 2.4.2 "ZOOM IN - Integrated Analysis of Transnational and National Territories Based on ESPON" was the source for this overlay exercise. This ESPON project (2006) analyses the specific weaknesses and opportunities of different territorial contexts of Europe, using ESPON data. One of the maps produced by this project presents the level of involvement of European regions in the various Transnational Cooperation programmes covering their territory by means of two indicators: the absolute numbers of projects (red dots) and the number of projects weighed by their population (blue shades). The map presents the involvement of EU regions in all INTERREG IIIB programmes, including the INTERREG IIIB North West Europe Programme.

4.4.2.2 Overlay map(s) and description

Location of NWE project partners (INTERREG III 2000-2006) VS Intensity of cooperation in transnational programmes*



Map 3: Location of NWE project partners (IIIB) vs. intensity of cooperation in transnational programmes

Overlay Map 3 is based on an ESPON map on the level of involvement in transnational Cooperation projects (ESPON Project 2.4.2). The original map presents two indicators, absolute numbers of projects and number of projects weighed by population. Due to this density of information it is not possible to add a layer of INTERREG NWE information in an understandable way. Moreover, the indicator "number of projects weighed by regional population" is of limited relevance for use in the context of this project, because there is no comparable INTERREG NWE dataset available.

Overlay Map 3 is created by filtering from the dataset of the original ESPON project only the information about absolute numbers of projects. The colours in the overlay map present the total number of projects in a region (NUTS 2 level) in all INTERREG IIIB programmes covering its territory (data 2000-2004). The size of the circles corresponds to the number of partners from a NUTS 2 region in IIIB NWE projects (all priorities). By comparing these parameters, the overlay map gives an indication of how "anchored" a region is in the NWE programme area compared to the other transnational areas it operates in.

4.4.2.3 Observations

The IIIB NWE territory partially overlapped with five other INTERREG IIIB programme areas: Alpine Space, Atlantic Area, CADSES, Northern Periphery and North Sea Region. Most of the regions in the NWE area were covered by at least one other programme.

Areas covered only by NWE are the central and northern part of France (Bourgogne, Ile de France, Picardie, Champagne-Ardenne, Lorraine), southeast England, Wallonia, eastern Flanders, the southeast Netherlands and North Rhine-Westphalia, Hesse, Rhineland-Palatinate and Saarland in Germany. The southern parts of Baden-Wuerttemberg and Bavaria and the northern part of Scotland were involved in two other B programmes.

The map shows that all of the NUTS 2 regions that are totally not involved in NWE projects (located in Germany and the UK) are also not very active in INTERREG IIIB in general. This suggests that their absence from the NWE arena is part of a more general lack of involvement in INTERREG IIIB. However, they apparently favour the overlapping CADSES (Germany), North Sea Region or Atlantic Area (UK) when they do get involved in INTERREG.

Regions with access to multiple programmes show different levels of involvement in NWE. Most of these regions participate in different programmes on a more or less equal basis - the numbers of partner in NWE projects being roughly half of the total number of projects within a region.

However, mainly at the perimeter of the NWE zone, there are several regions with rather strong involvement in INTERREG in general that have limited participation in NWE. These regions with a tendency to favour the 'other' programme include Bretagne and Pays de Loire, Scotland and Wales (Atlantic Area), the Swiss regions (Alpine Space) and Zeeland (North Sea Region).

The opposite also occurs, for instance in Zuid-Holland (Netherlands), that has most of its partners in NWE, rather than the overlapping North Sea Programme.

This tool demonstration does also show that the evidence base gap identified in screening the ESPON information does not only result in the matching of the themes, but can sometimes be much more differentiated. For example, it would be beneficial if the indications on the map (and legend) show more clearly that the information represented refers only to transnational programmes (currently it appears a bit "hidden"). Furthermore the project to which the background data belongs is from 2005, whereas the relevant NWE data covers a period until 2006 which could result potentially in a distorted map. Again, if no corresponding data can be found, this should be highlighted. It seems also more appropriate if corresponding data sets would have been compared, i.e. absolute numbers of transnational project cooperation against absolute number of NWE project cooperation: the number of

partners seems here less relevant and could again result in a distorted picture. Moreover, this should represent an easy retrievable data set. It should also be made clear on what the total number of project cooperation on the ESPON maps refers to: location of the lead partner, partners (if several partners from one region are participating in one project, is only the project counted or the number of partners) only then the overlay map can be interpreted appropriately.

4.5 <u>Territorial perspectives on the programme performance within different thematic fields</u>

4.5.1 Innovation

4.5.1.1 Specific relevance of the topic of innovation in the funding period 2007-2013

Innovation is considered a crucial tool to boost regional development processes. The theme of innovation has been anchored in Article 6 of the current ERDF regulation from 2006³⁸. Consequently, it has also shaped the design of the new INTERREG IVB programmes. Each of the 13 INTERREG IVB programmes was thus confronted with the challenge to address the transnational aspects of innovation, to attract new project actors, but – at the same time – maintain the philosophy of cross-cutting innovative approaches as addressed in the former funding periods. Being a territorially driven funding programme, the theme of innovation also needed to be addressed concerning the territorial patterns of innovation. Here, solid evidence was still missing until ESPON addressed the issue through the project "KIT - Knowledge-Innovation-Territory" of which the relevance for INTERREG is addressed in ANNEX 4.

Innovation is addressed in Priority 1 of the current INTERREG IVB NWE Programme. Here, the overall budget allocated to the projects shows an unsteady, but clear increase:

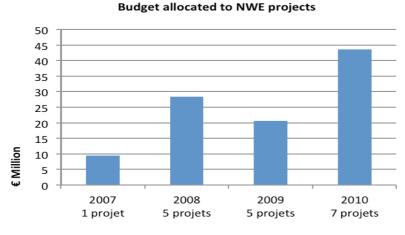


Figure 17: Increase of spending for the Priority 1 (own source)

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³⁸ Regulation (EC) No 1080/2006, page L210/5: "(a) innovation: the creation and development of scientific and technological networks, and the enhancement of regional R&TD and innovation capacities, where these make a direct contribution to the balanced economic development of transnational areas. Actions may include: the establishment of networks between appropriate tertiary education and research institutions and SMEs; links to improve access to scientific knowledge and technology transfer between R&TD facilities and international centres of RTD excellence: twinning of technology transfer institutions; and development of joint financial engineering instruments directed at supporting R&TD in SMEs."

In order to address the significance of the theme appropriately, the following additional studies were carried out that can be found in the following ANNEXES:

- ANNEX 4 summarises a comparative report carried out which describes how the ERDF innovation theme is reflected in five selected INTERREG IVB programmes.
- ANNEX 5 describes the relevance of the KIT project with cross references to the requirements of the INTERREG B NWE Programme.
- ANNEX 6 reflects the EU policy environment on Innovation.

Conclusions drawn from the work presented in the ANNEXES are outlined in Chapter 4.6 and Chapter 5.

4.5.1.2 NWE programme performance vs. ESPON Lisbon Performance update 2006 for the available years of the programming period 2007- 2013

In this chapter, the functionality of Tool 7 (Annual programme performance update) is demonstrated.

4.5.1.2.1 INTERREG and ESPON data sources used

Priority 1 of the INTERREG IVB NWE Programme "Knowledge based economy and innovation" as a whole was considered. Under this priority, a total of 18 projects were approved by the end of 2010 under seven calls for proposals, with the following breakdown:

- ▶ 2007: 1 project involving 6 partners (under 1st call for proposals)
- ► 2008: 5 projects involving 39 partners (under 2nd and 3rd calls)
- ► 2009: 5 projects involving 41 partners (under 4th and 5th calls)
- ▶ 2010: 7 projects involving 75 partners (under 6th and 7th calls)

As to the ESPON evidence, the ESPON Project 2.4.2 was considered. Here, the map "Regional classification of Europe: Lisbon Performance (2006)" was chosen. The map, included in page 9 of the NWE OP 2007-2013, shows the degree of Lisbon Performance as an aggregate of five indicators: 1) Productivity; 2) Employment rate; 3) Expenditure on R&D; 4) R&D Business Enterprise Sector; 5) High educated population.

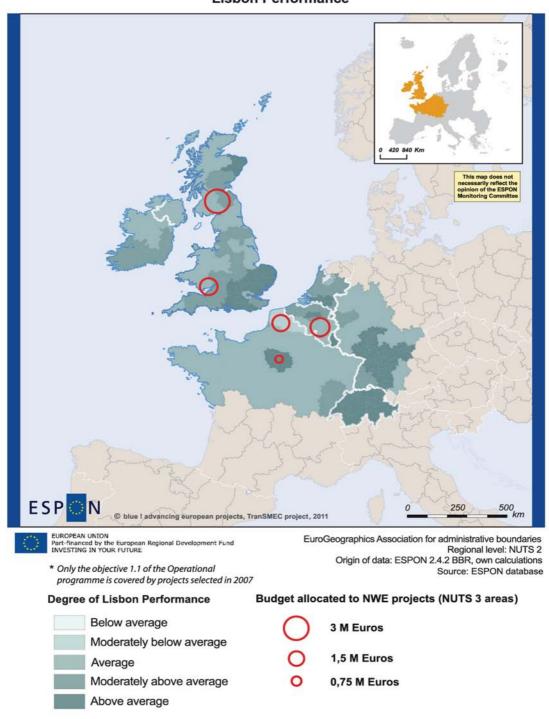
4.5.1.2.2 Overlay map(s) and description

The maps relate the geographical distribution and volume of ERDF allocated per NUTS 3 territories on the topic of Lisbon Performance. The bigger the circles, the higher the ERDF allocated. One map was developed per programming year, representing the distribution of ERDF for the approved projects as indicated above.

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Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation" *

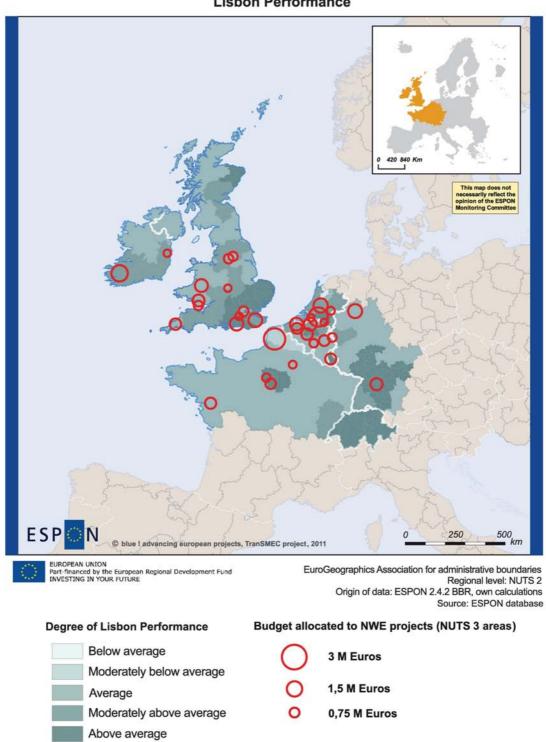
VS Lisbon Performance



Map 4: Budget allocated to NWE projects in 2007 vs. Lisbon Performance

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation"

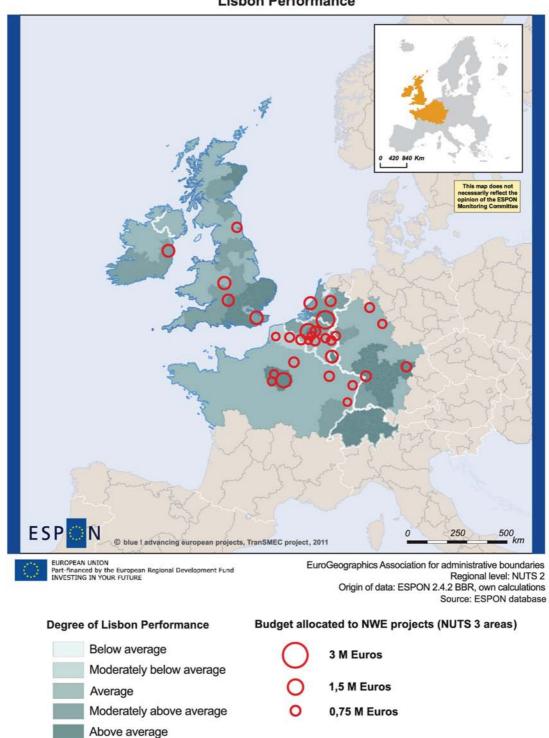
VS Lisbon Performance



Map 5: Budget allocated to NWE projects in 2008 vs. Lisbon Performance

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation"

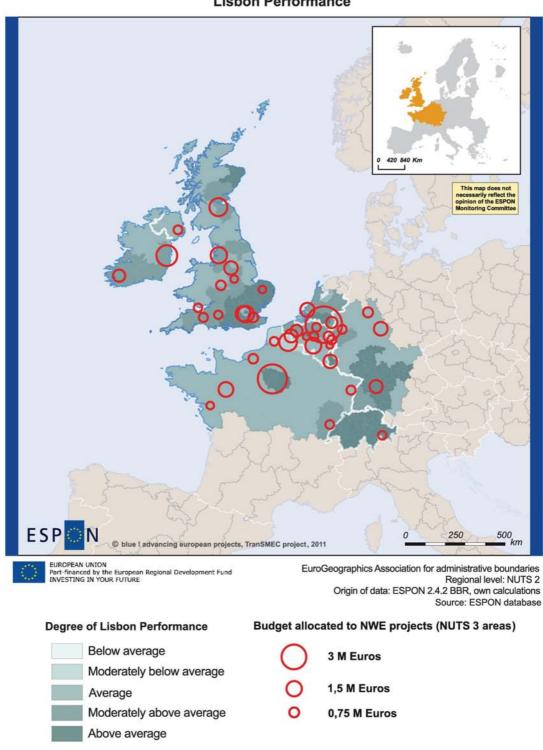
VS Lisbon Performance



Map 6: Budget allocated to NWE projects in 2009 vs. Lisbon Performance

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation"

VS Lisbon Performance



Map 7: Budget allocated to NWE projects in 2010 vs. Lisbon Performance

4.5.1.2.3 Observations

Globally there is a strong involvement of partners from the Benelux, while most parts of France, Ireland, Germany, UK (Scotland) are poorly involved. In these latter countries, the pattern is rather a geographical concentration, mainly in the territories performing above average, except for a couple of them (such as Nord-Pas de Calais for instance).

Some of the most performing territories from a Lisbon viewpoint are very active (i.e. NUTS 3 territories within lie de France in FR, many territories in Benelux) while others are rarely or not at all involved (i.e. in most South-East England and South Germany).

A stronger involvement of organisations from territories below average should be clearly encouraged via the identification of potential project promoters/ partners and targeted information/communication sessions

4.5.1.3 NWE programme performance vs. ESPON Lisbon Performance update 2006 displaying thematic specialisation of programme participants

In this chapter, the functionality of Tool 8 (Checking thematically concentrated vs. broad use of NWE funds) is demonstrated.

4.5.1.3.1 INTERREG and ESPON data sources used

Priority 1 "Knowledge based economy and innovation" as a whole was considered. Under this priority, a total of 18 projects were approved by the end of 2010, with the following breakdown of projects per objective (corresponding to the sub-priority level):

- 11 projects under Objective 1.1 "entrepreneurship and innovation"
- 4 projects under Objective 1.2 "growth clusters & SMEs networks"
- 3 projects under Objective 1.3 "framework for innovation"

The ESPON Project 2.4.2 was considered, here the map "Regional classification of Europe: Lisbon Performance (2006)" was used. The map, included in page 9 of the NWE OP 2007-2013, shows the degree of Lisbon Performance as an aggregate of five indicators: 1) Productivity; 2) Employment rate; 3) Expenditure on R&D; 4) R&D Business Enterprise Sector; 5) High educated population.

4.5.1.3.1 Overlay map(s) and description

The map displays the global geographical distribution and volume of ERDF allocated per NUTS 2 territories on the topic of Lisbon Performance as well as the degree of specialisation versus diversification of NUTS 3 territories concerning the approved projects under Priority 1. Territories are classified under three categories:

- <u>1st category: specialisation</u> → territories appearing with orange circles are rather specialised since all beneficiaries are involved in projects related to only one objective;
- 2nd category: intermediate profile → territories appearing with red circles are in between since beneficiaries are involved in projects related to two different objectives;
- <u>3rd category: diversification</u> → territories appearing with black circles are rather diversified since beneficiaries are involved in projects related to all three objectives.

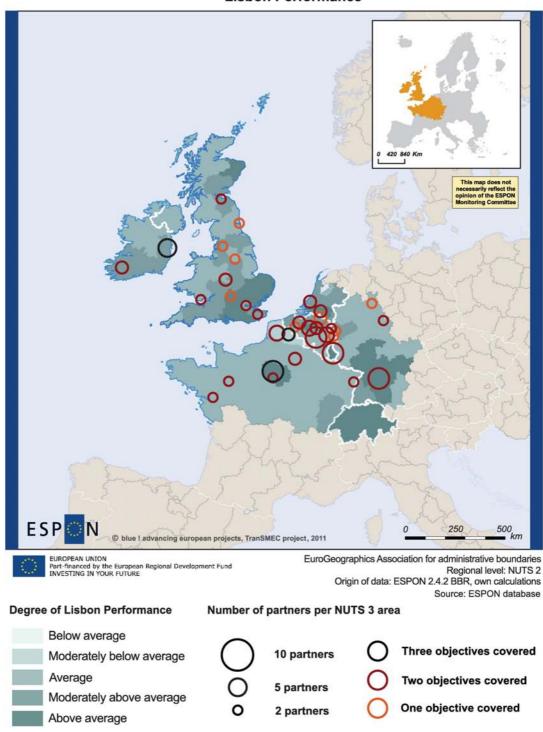
For the 2nd and 3rd categories, it cannot be clearly specified whether the same types of organisations are involved in projects addressing topics related to several objectives or if a wider range of organisations take part in projects covering several objectives.

ESPON 2013

Number of partners involved in NWE projects (INTERREG IV 2007-2013)

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation"

VS Lisbon Performance

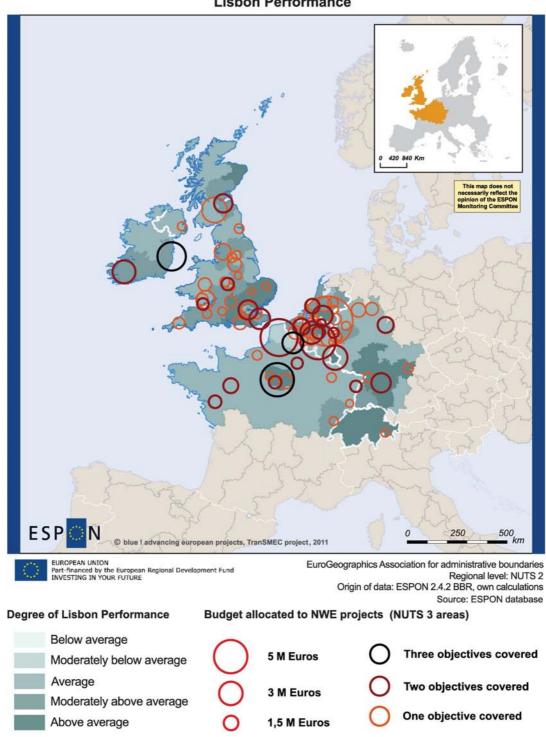


Map 8: Number of partners involved in NWE projects (IVB)

Budget allocated to NWE projects (INTERREG IV 2007-2013)

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation"

VS Lisbon Performance



Map 9: Budget allocated to NWE projects (IVB)

4.5.1.3.2 Observations

Except for some Dutch NUTS 3 territories, the stronger the involvement in financial terms is, the more diversified the territories are.

At this stage, only 3 NUT3 territories (within Ile de France and Nord-Pas de Calais in FR and Dublin region in IE) are classified as rather diversified since the beneficiaries located in them are involved in projects approved in all three objectives.

A majority of territories classified under the 2nd category "intermediate profile" present "moderately above average" or "above average" features. A potential explanation is that NUTS 3 territories with such Lisbon Performance profiles are more urban ones, with a larger concentration of potential partners (such as research institutes, technological parks, development or innovation agencies, Chambers of Commerce, etc.). However, the general pattern cannot be clearly established at this stage.

The following diagram shows the distribution of areas covering one, two or three priorities:

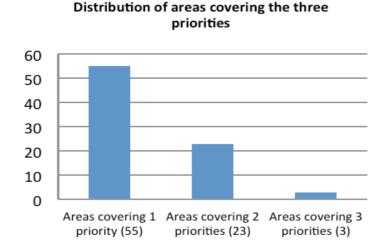


Figure 18: Demonstration of geographic concentration of cooperation: a large amount of areas with limited activity and a limited number with higher concentration of partners and priorities covered (own source)

4.5.1.3 Inverted map: Non-participating regions in NWE vs. ESPON Lisbon Performance update 2006

In this chapter, the functionality of Tool 10 (Assisting the demarcation of thematically targeted calls through identification of territorial challenge) is demonstrated.

4.5.1.3.1 INTERREG and ESPON data sources used

Priority 1 "Knowledge based economy and innovation" as a whole was considered. Under this priority a total of 18 projects were approved by the end of 2010. Here, the budget allocated to NWE projects over 2007-2010 for Priority 1 was used.

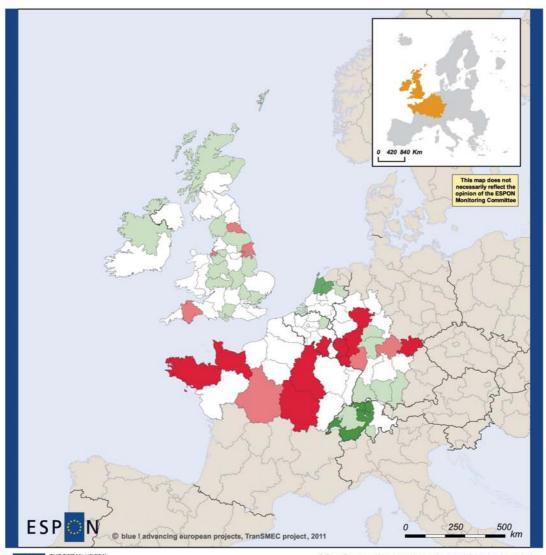
4.5.1.3.2 Overlay map(s) and description

The map is based on a "regular" overlay map that shows the distribution and intensity of ERDF in NUTS 2 territories. The present map is obtained by only colouring those territories not involved so far in approved projects under Priority 1. The colours of these regions correspond to their score on the Lisbon performance index.

NUTS 2 areas not covered by NWE projects (INTERREG IV 2007-2013)*

Priority 1 "Developping the NWE knowledge-based economy by capitalising on our capacity for innovation"

VS **Lisbon Performance**



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NUTS 2 areas not covered by NWE projects **VS Lisbon Performance**

2.5 - 3.0 Medium / low Lisbon performance

2.0 - 2.5 Medium Lisbon performance

1.5 - 2.0 Medium / high Lisbon performance 1.0 - 1.5 High Lisbon performance

NUTS II areas covered by NWE projects

Composite performance based on following seven regionalised Lisbon short list indicators:

- 1. Gross Domestic Product in PPS per capita (ca. 2006)
- Gross Domestic Product in PPS per capita (
 Gross Domestic Product in PPS per person employed (ca. 2005)
 Employment rate, total (ca. 2006)
 Employment rate, 55-64 years (ca. 2006)

- Total intramural R&D expenditure (GERD) as a percentage of GDP (ca. 2006)
- 6. Dispersion of regional unemployment rates (ca. 2006)
- 7. Long-term unemployment rate (ca. 2006)

For each of the seven variables, all regions are ranked from 1 through 287 and then divided into quartiles (1 through 4). Composite performance calculated as the average of these seven quartile rankings.

Map 10: NUTS 2 areas not covered by NWE projects (IVB)

^{*} The map does only take into account projects launched between 2007 and 2010

4.5.1.3.3 Observations

Globally, there are so far as many involved territories involved in approved projects as non-participating ones. The majority of non-involved territories are mainly located in the periphery of NWE area. However, this does not necessarily mean that they are not active at all, because due to the overlapping of transnational areas, they might be more attracted by the development of partnerships within the North Sea area or the Atlantic Space.

There is no clear pattern regarding the Lisbon Performance features of the non-involved territories, since as many well performing territories as medium performing ones appear on the map. Note that there are no NWE regions ranking as low performers on the Lisbon Performance index.

4.5.1.4 NWE programme performance vs. new ESPON typologies on the European knowledge economy

In this chapter, the functionality of Tool 12 (Working with ESPON typologies for new, emerging themes) is demonstrated.

4.5.1.4.1 INTERREG and ESPON data sources used

Priority 1 "Knowledge based economy and innovation" as a whole was considered. Under this priority a total of 18 projects were approved by the end of 2010.

The ESPON project KIT – Knowledge-Innovation-Territory explores the territorial dimension of the innovation and knowledge economy. An overall concept is used including product innovation, process innovation and organisational innovation. This project will take into account the current state, patterns and potentials of regions with respect to the knowledge and innovation economy. A much more detailed presentation of the KIT project can be found in ANNEX 5. The project is on-going and runs since February 2010 until December 2012. It has delivered its Interim Report already in March 2011.

In the course of the first research months, KIT has already elaborated three typologies for territorial observation of the Knowledge Economy in Europe. These typologies are

- **Technologically advanced regions**: Regions that host a comparatively high amount of technologically advanced manufacturing and service institutions
- Scientific regions: Regions that host large and well-known scientific institutions.
- **Knowledge networking regions**: Regions that show the ability to manage information in order to identify and solve problems, or, innovation and productivity increases, through co-operative or market interaction

4.5.1.4.2 Overlay map(s) and description

The first two KIT background maps present two different typologies for knowledge regions: "Technologically advanced regions" and "Knowledge networking regions" Unfortunately, the map for the "Scientific regions" typology was not available in sufficient quality for an overlay exercise. The base map presents an integrated map that combines all three typologies, demonstrating which regions qualify in none, one, two or all the three typologies. The original maps showed the complete European territory and they needed to be zoomed in to the programme area.

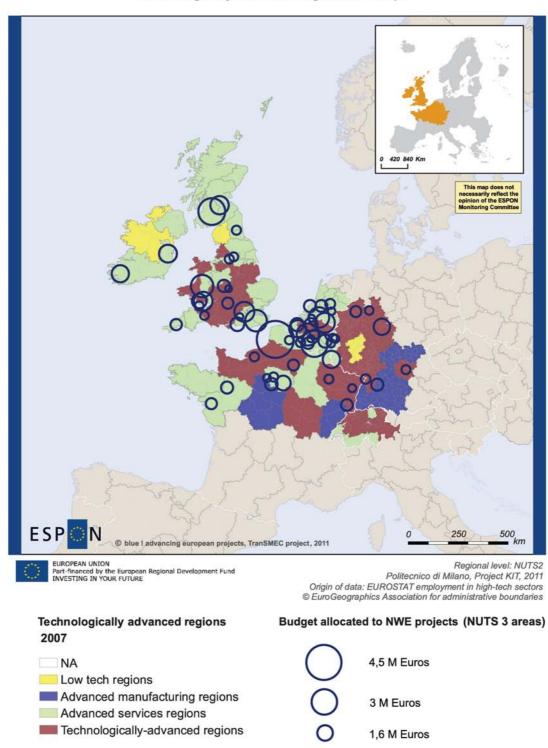
71

³⁹ See Chapter 3 of the KIT IR ESPON 2013

Budget allocated to NWE projects (INTERREG IV 2007-2013)

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation" VS

Technologically advanced regions in Europe



Map 11: Budget allocated to NWE projects (IVB) vs. technologically advanced regions in Europe

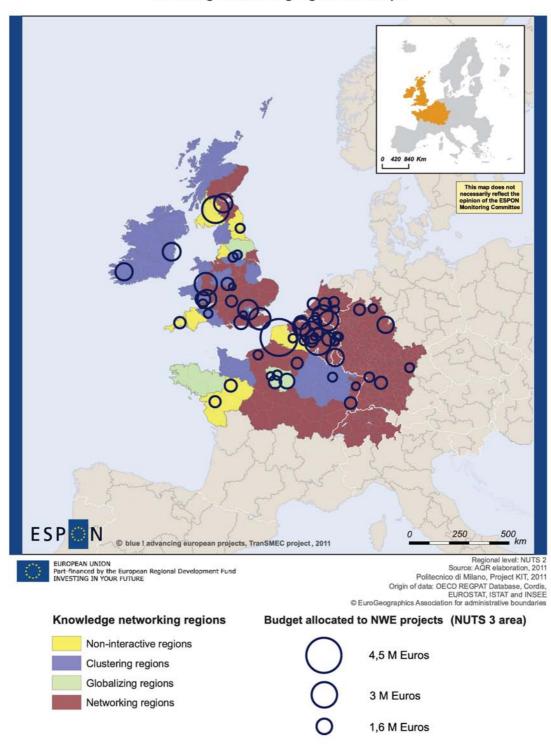
ESPON 2013 72

Budget allocated to NWE projects (INTERREG IV 2007-2013)

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation"

VS

Knowledge networking regions in Europe

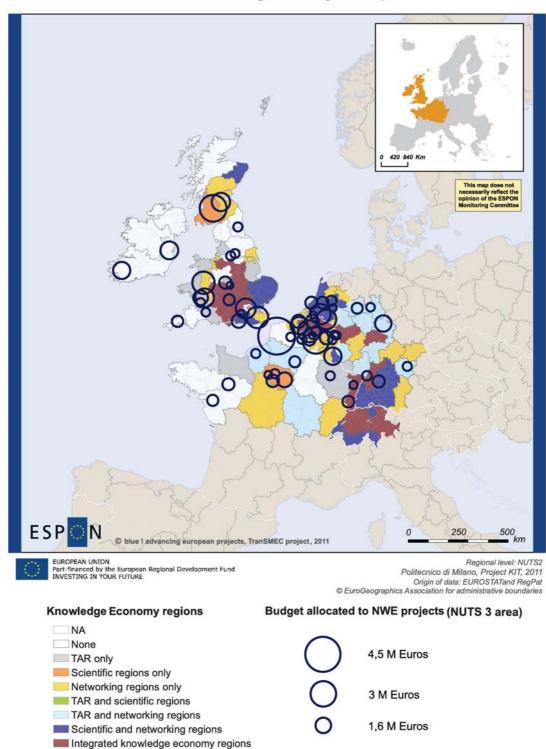


Map 12: Budget allocated to NWE projects (IVB) vs. knowledge networking regions in Europe

Budget allocated to NWE projects (INTERREG IV 2007-2013)

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation"

VS The Knowledge Economy in Europe



Map 13: Budget allocated to NWE projects (IVB) vs. knowledge Economy in Europe

The two maps showing selected typologies allow also checking the territorial distribution of the underlying classifications and thus getting a more in-depth view on regions that only qualified in one of the classifications. The maps where overlaid with information about the ERDF expenditure within Priority 1 of the INTERREG IVB NWE Programme. In order to reach an optimised visibility of the underlying background map, different sizes of circles where chosen to represent the amount of ERDF spent.

4.5.1.4.3 Observations

The overlay map with the combination of typologies shows that, besides some exceptions, programme interventions are mainly concentrated in regions that qualify as at least one of the classifications and are in an overall perspective, rather the high performing regions. This can be understood in a twofold way: First of all, the information is provided "where the money went to", but secondly, and maybe more connected to the regional activities, tendencies can be detected on "who (what regions) participated in the programme".

The two maps with the typologies also reflect a clear tendency. First of all, it is highlighted that the programme area as a whole represents a high-scoring area across the three typologies and only a few regions do not qualify in any of the classifications. Furthermore, not a lot of programme activities could be identified in the classification "Advanced manufacturing" region only under the typology "Technologically advanced regions".

4.5.1.5 Differentiated sub-groups of the NWE programme participants vs. selected new ESPON typologies on the European knowledge economy

In this chapter, the functionality of Tool 13 (Differentiating NWE participant groups and cross referencing with ESPON evidence base) is demonstrated.

4.5.1.5.1 INTERREG and ESPON data sources used

Priority 1 "Knowledge based economy and innovation" as a whole was considered. Under this priority a total of 18 projects were approved by the end of 2010. Furthermore, the partners where subject to a categorisation into different sub-groups representing the members of the "triple helix model of the innovation process" in which the public sector, the private sector as well as scientific institutions need to work hand in hand in order to make the innovation process a durable success.

The splitting up of partners does also lead to the following diagrams that give an overview on the distribution of partners and funds within the different sub-groups:

Types of partners involved

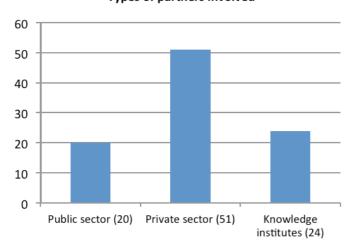


Figure 19: Types of partners involved in Priority 1 of the current the INTERREG IVB NWE Programme (own source)

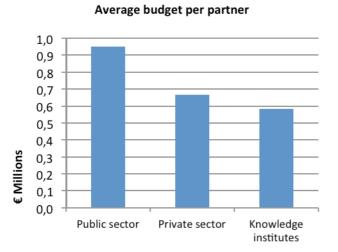


Figure 20: Budget share of sub-categories of partners involved in Priority 1 of the current the INTERREG IVB NEW Programme (own source)

4.5.1.5.2 Overlay map(s) and description

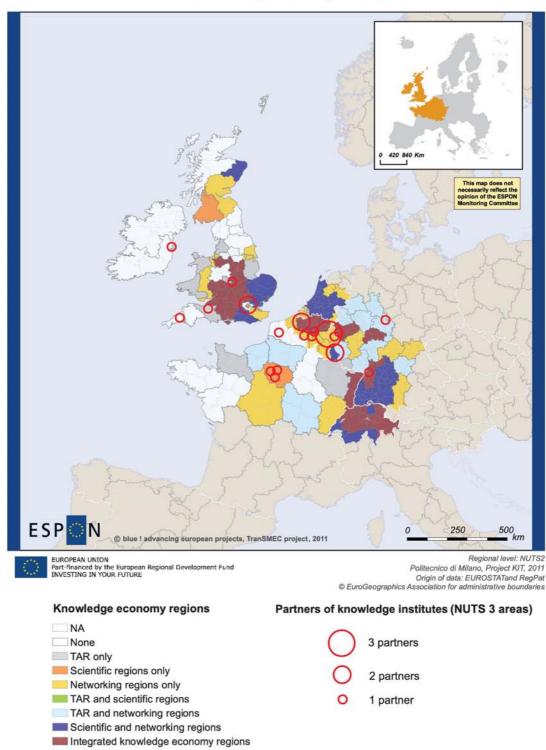
In comparison to (e.g.) 4.5.1.6 here, the underlying maps remain constant and allow the assessment of the participation of different triple helix groups against the chosen typology. The combined map has been chosen in order to present aggregated results. Of course, a more detailed analysis of the different classifications that form the different typologies would be possible if not the combined background map would be chosen, but one of the typologies. It would also be possible to present a large matrix with all typologies in nine maps in order to be able to detect tendencies both through the variation of the triple helix groups as well as the variation of the typologies at the same time. The maps where overlaid with information about number of partners within the different groups of the "triple helix model of innovation: knowledge institutes, private sector and public sector" within Priority 1 of the INTERREG IVB NWE Programme. In order to reach an optimised visibility of the underlying background map, different sizes of circles where chosen to represent the number of partners.

Partners of knowledge institutes involved in NWE projects (INTERREG IV 2007-2013)

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation"

VS

The Knowledge Economy in Europe



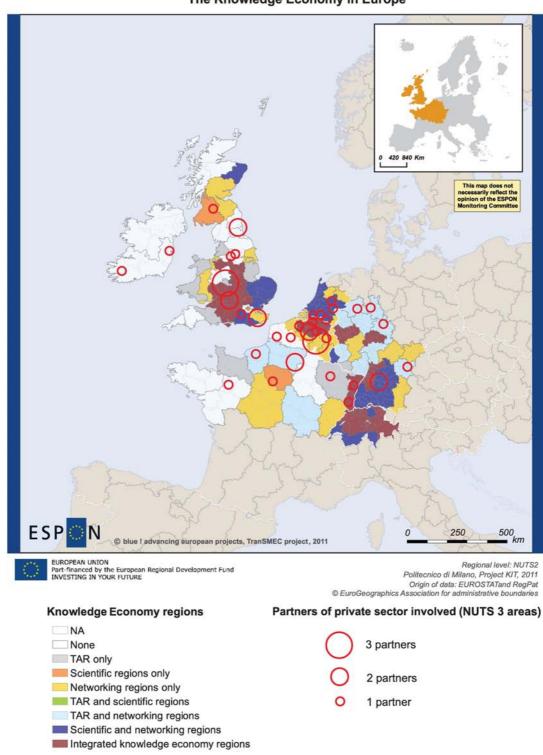
Map 14: Partners of knowledge institutes involved in NWE projects (IVB) vs. knowledge economy in Europe

Partners of private sector involved in NWE projects (INTERREG IV 2007-2013)

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation"

VS

The Knowledge Economy in Europe

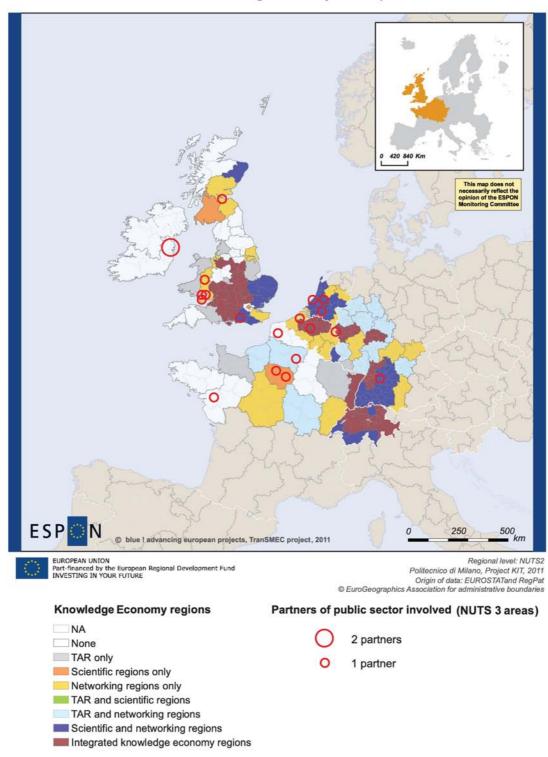


Map 15: Partners of private sector involved in NWE projects (IVB) vs. knowledge economy in Europe

Partners of public sector involved in NWE projects (INTERREG IV 2007-2013)

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation"

VS The Knowledge Economy in Europe



Map 16: Partners of public sector involved in NWE projects (IVB) vs. knowledge economy in Europe

4.5.1.5.3 Observations

The motivation for this map production was based on the thought that innovation is a very complex issue in which many factors are important to make the overall process successful. A simple model that comprises this complexity is the triple helix model. This model concerns the notion that in an effective innovation system three categories of actors need to work together: knowledge institutes, business actors and the public sector. The model is especially appropriate for a use in INTERREG programmes, because they address all triple helix groups as possible beneficiaries. The interesting question to be solved by the map production could be for example:

- Do different "triple helix members" cluster in the same area or do they also co-operate in a transnational way? Here, further investigations could reveal how much the programme requirement to combine a minimum number of partners from different countries pushes different triple helix members from the same theme to co-operate. Furthermore, project partners could be studied on project level in order to give answers to this issue.
- Are there observable tendencies that reveal that a certain type of knowledge networking region seem to be apply to different triple helix members in different ways. This could, for example, in a more in-depth study, reveal that public sector partners are much more dependent on a strong scoring knowledge region for entering transnational cooperation than knowledge institutes or private partners.

The background maps show that all combinations of regional knowledge patterns are present in NWE except for the pattern "Technologically advanced region" combined with "Scientific region". The map series shows that – generally spoken - most of the triple helix partners are located in integrated knowledge economy and/or knowledge networking regions. When comparing the three maps, it becomes obvious that especially the private sector partners show a more wide-spread pattern. While there is almost no presence of "knowledge institute partners" and "public sector partners" in regions that are labelled "Technologically advanced only", the private sector map shows a fair amount of partners spread in these regions. Furthermore, a comparison between "knowledge institute partners" and "public sector partners" shows that "knowledge institute partners" have a greater participation in the networking regions, while "public sector partners" also emerge from "Scientific and networking regions".

4.5.1.6 Public sector partners of the NWE programme participants vs. new ESPON typologies on the European knowledge economy

In this chapter, the functionality of Tool 14 (Assessing the performance of sub-groups in the programme against new typologies: Combining Tool 12 and Tool 13) is demonstrated.

4.5.1.6.1 INTERREG and ESPON data sources used

Priority 1 "Knowledge based economy and innovation" as a whole was considered. Under this priority a total of 18 projects were approved by the end of 2010. Furthermore, a selected triple helix group – in this case the "public sector partners" – has been selected from all the partners participating in Priority 1 of the INTERREG IVB NWE Programme.

4.5.1.6.2 Overlay map(s) and description

Within this tool, the series of maps focuses on the same triple helix group on the background of a variation of knowledge region typologies. The background maps show the different

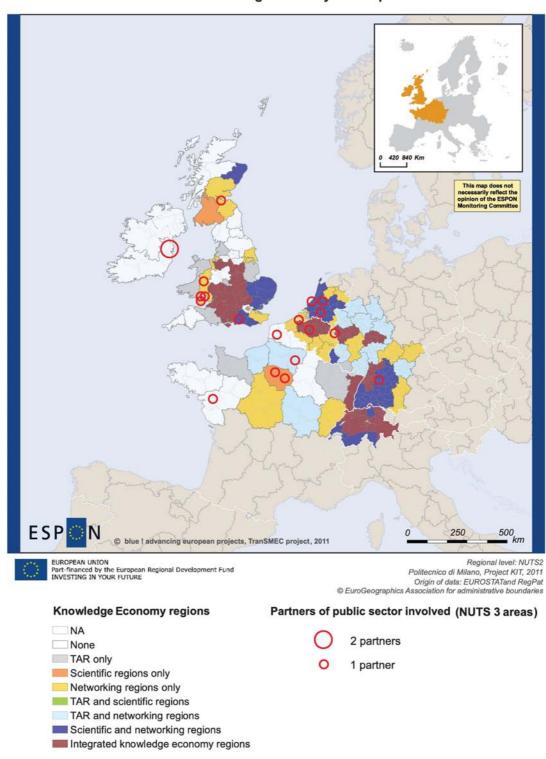
typologies with their classifications as well as the combined map with the typologies aggregated.

Partners of public sector involved in NWE projects (INTERREG IV 2007-2013)

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation"

VS

The Knowledge Economy in Europe

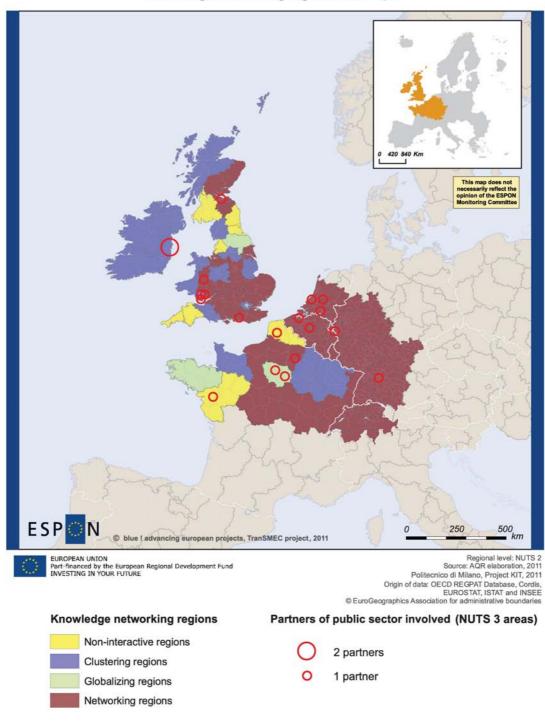


Map 17: Partners of public sector involved in NWE projects (IVB) vs. knowledge economy in Europe

Partners of public sector involved in NWE projects (INTERREG IV 2007-2013)

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation"

Knowledge networking regions in Europe



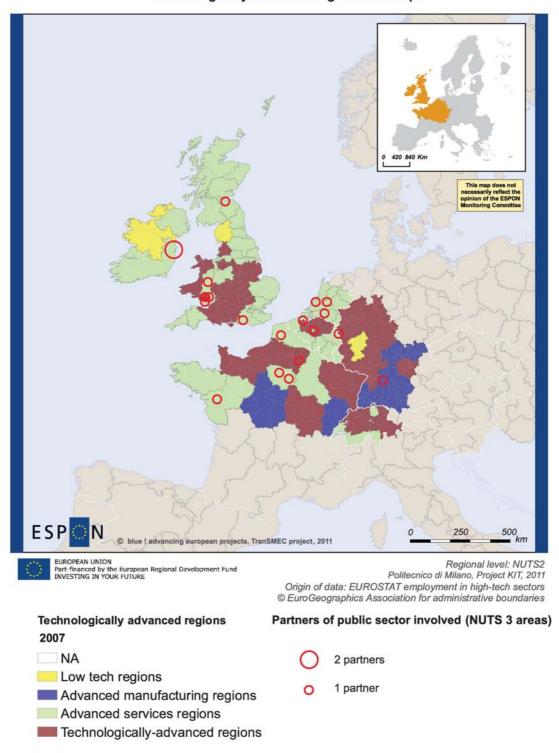
Map 18: Partners of public sector involved in NWE projects (IVB) vs. knowledge networking regions in Europe

Partners of public sector involved in NWE projects (INTERREG IV 2007-2013)

Priority 1 "Developing the NWE knowledge-based economy by capitalising on our capacity for innovation"

VS

Technologically advanced regions in Europe



Map 19: Partners of public sector involved in NWE projects (IVB) vs. technologically advanced regions in Europe

4.5.1.6.3 Observations

The map series allows assessing the performance of a defined group in a way that allows to study not only the typologies and their combinations, but to also look into the more detailed classifications behind the typologies. On the basis of this background map, the performance of one defined triple helix group can be studied in a more detailed way than in the other approaches. In this map series, the level of the classifications can be more clearly assigned to a defined group.

The pictures show that except for two partners in France, public partners are located in regions that can be described as follows:

- The vast majority of the partners come from networking regions It has to be mentioned that most of the regions in NWE are classified at networking, clustering or globalising. Only eight regions are classified as "non-interactive" in the typology "Knowledge networking regions". Most of the partners emerge from the regions that have a high score in both classifications.
- Taking into consideration the typology "technologically advanced regions", it can be found that the background map shows a more diverse picture on the level of the classifications. Many regions are either complying with the classification "advanced service regions" or score high in both classifications and are thus labelled "Technologically advanced region". Interestingly, the majority of the public partners come from regions that belong to the classification "Advanced service region", while only one partner emerged from an "Advanced manufacturing region".

4.5.1.7 NWE programme performance vs. flood vulnerability in urban areas and varying between visualisation of "number of partners" and "ERDF spent"

In this chapter, the functionality of Tool 2 (Variation between the number of participating partners OR the ERDF budget spent and comparing both maps) is demonstrated.

4.5.1.7.1 INTERREG and ESPON data sources used

The INTERREG IIIB Measure (sub-priority) 3.1 "Land use and water systems" was considered. This measure concerns the management of water resources in the NWE area through the integration of land use and water management. It targeted (i.a.) issues related to the quality of transnational water systems. And in light of the highly urbanised nature of the NWE area, it also supported the integration of water storage, habitat creation and natural water treatment in new urban developments. There were eight NWE IIIB projects in this field, assembling some 70 partners from 47 NUTS 3 regions, with a total ERDF allocation of € 28,5 million.

The ESPON Project 4.1.3 "Feasibility study on monitoring territorial development based on ESPON indicators" was considered. This ESPON project (2006) explored the possibilities to use ESPON data for systematic monitoring of spatial trends in Europe. For this purpose the project defined a set of ESPON core indicators.

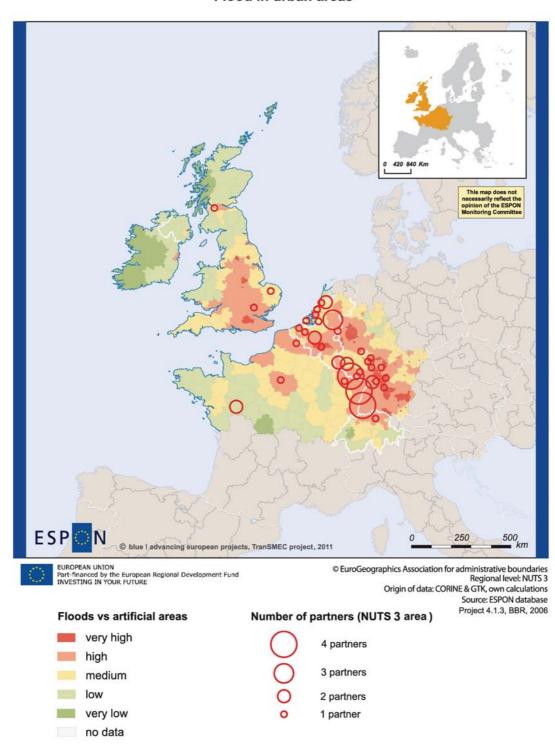
One of these indicators is "Floods in urban areas", identifying where cities and built up areas are at risk of flooding. Regions are ranked regarding their vulnerability to flooding of areas where large populations and important economic assets are concentrated. Rankings are obtained by combining data about the recurrence of flooding events (1987-2002) with data about the share of artificial surface (i.e. built-up area) of total surface area of the NUTS 3 region. Regions with low urbanisation and/or low flood risk score low on this ranking.

4.5.1.7.2 Overlay map(s) and description

Location of NWE project partners (INTERREG III 2000-2006)

Measure 3.1. "Land use and water systems"

VS Flood in urban areas

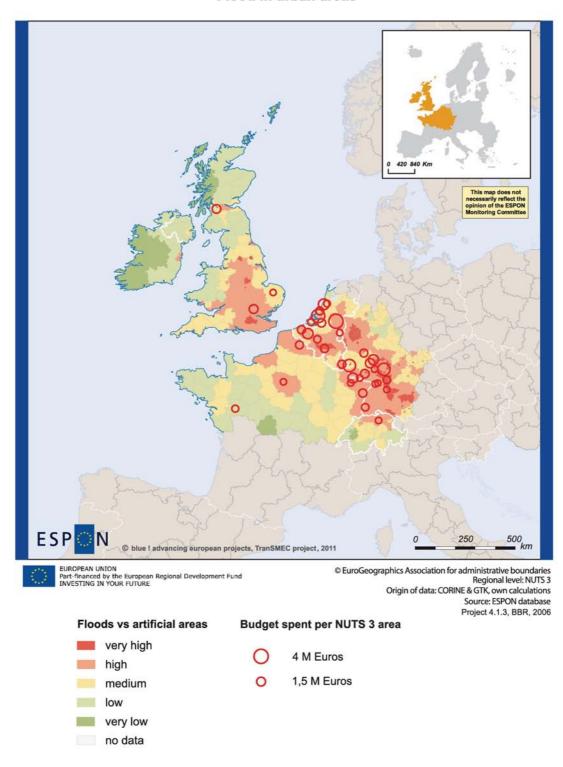


Map 20: Location of NWE project partners (IIIB) vs. flood in urban areas

Budget spent by NWE projects (INTERREG III 2000-2006)

Measure 3.1. "Land use and water systems"

Flood in urban areas



Map 21: Budget spent by NWE project partner (IIIB) vs. flood in urban areas

The shown overlay maps compare the vulnerability of regions in the North West Europe area to flooding of urban areas with the location of NWE project partners (Map 20) and of the financial allocations (Map 21) by INTERREG IIIB NWE projects related to the Land Use and Water Systems at NUTS 3 level.

The colour of a region on the maps corresponds to its vulnerability to flooding of urban and built-up areas on a scale from ranging from very low – very high (from ESPON Study 4.1.3). The size of the circles on Map 20 represents the number of partners from a NUTS 3 region, which was involved in IIIB NWE projects in Land Use and Water Systems (IIIB NWE Measure 3.1). The size of the circles on Map 21 displays the total financial volume (ERDF budget) invested per NUTS 3 region by the INTERREG IIIB NWE Programme in this field.

4.5.1.7.3 Observations

In North West Europe a band of areas with a (very) high flood risk in urban areas stretches from Yorkshire and Humber and the North-West across England, the north-eastern part of France, Belgium, the southern Netherlands, Luxembourg, the German Ruhr-Rhine-Main area, Baden-Wuerttemberg to the eastern parts of Bavaria and northern Switzerland. Isolated areas of high risk are located around Edinburgh and Belfast, Dublin and Paris/Ile de France.

The regions involved in IIIB NWE projects in Land Use and Water Management are concentrated in the band of high urban flood risk identified in the ESPON map.

The territorial evidence therefore demonstrates that the INTERREG IIIB activities target those regions that have the highest risk of flooding in urban areas, in line with the programmes objective to target urban water issues in Measure 3.1. However participation is almost completely limited to areas from the European mainland side of this band with almost no involvement from UK partners. Also some of the high-risk areas in Germany are not covered.

Comparison of the two overlay maps shows that the numbers of partners involved (Map 20) is particularly high in regions in the French-German border area along the Rhine. However, the financial ERDF allocation in this concentration of partners comparatively modest (Map 21). In general Map 21 show a very even spread of the ERDF allocations across the regions involved, with no remarkable peaks.

4.5.1.8 NWE programme performance vs. flood risks in EU regions considering the different territories of the European Watersheds.

In this chapter, the functionality of Tool 1 (Visualising the NWE programme area in a wider European context) is demonstrated.

4.5.1.8.1 INTERREG and ESPON data sources used

The INTERREG IIIB Measure 3.2 "Prevention of flood damage" was considered. This part of the NWE Programme aims at minimisation of flood damage in river basins and maritime areas through identification of sensitive areas, actions to enhance water retention and overflow areas in transnational river basins and integrated management of entire transnational river catchments. IIIB NWE supported ten projects with around 80 partners, and a joint ERDF budget of € 64 million.

The ESPON Project 1.3.1 "The spatial effects and management of natural and technological hazards in Europe" was considered. This ESPON project (2006) shows the spatial patterns

of natural and technological hazards in Europe and identifies possible impacts of climate change on selected natural hazards. One of the maps produced presents the distribution of flood risks in EU regions, based on the recurrence of significant flooding events in the period 1987-2002.

4.5.1.8.2 Overlay map(s) and description

The following overlay Map 22 shows that several areas in NWE are especially prone to flooding, based on a high recurrence of floods between 1987 and 2002. These are situated along the Rhine and in the upstream sections of the Danube in Germany, in northern Switzerland, Vosges in France, parts of Wallonia and of England.

North West Europe's territory is covered by numerous river catchment areas. Some of those are within NWE in their entirety, notably the ones on the British Isles, and the Rhine, Meuse, Seine and Escaut/Scheldt on 'mainland' Europe.

4.5.1.8.3 Observations

The regions involved in NWE projects on flood management are strongly concentrated within the Rhine basin. Participation outside this catchment is limited to a few other regions scattered over the programme area, representing a relatively small share of the ERDF allocation.

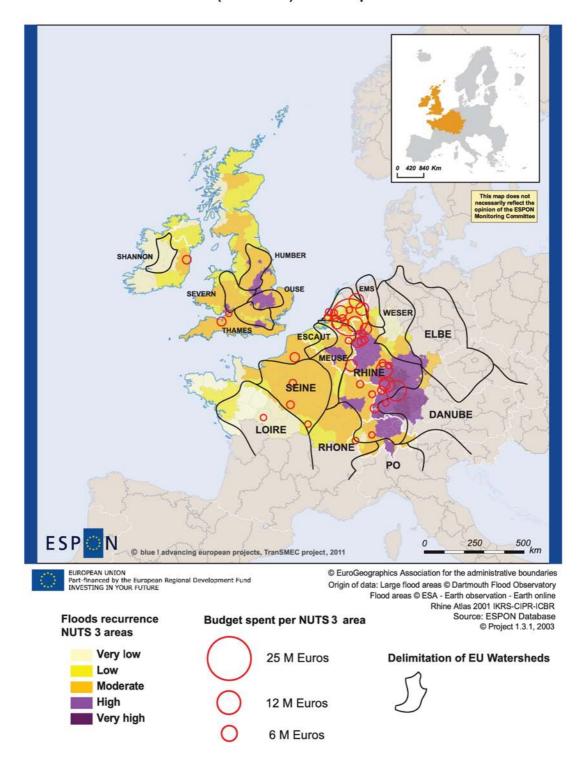
Participation in INTERREG IIIB NWE in this field is clearly not limited to regions with high flood recurrence. In fact, most regions involved in projects have low to moderate levels of flood recurrence. Many of the regions with high levels of flooding were not active at all.

For regions in catchment areas that extend beyond the NWE territory, INTERREG IIIB NWE is not the right instrument to work on integrated management of transnational river basins. This can, at least in part, explain their absence in NWE projects.

Budget spent by NWE projects (INTERREG III 2000-2006)

Measure 3.2. "The prevention of flood damage"

Flood events (1987-2002) and European Watersheds



Map 22: Budget spent by NWE projects (IIIB) vs. flood events (1987-2002) and European watersheds

4.5.1.9 NWE programme performance vs. flood risks in EU regions zoomed into the Rhine river basin

In this chapter, the functionality of Tool 4 (Zooming into parts of the NWE territory) is demonstrated.

4.5.1.9.1 INTERREG and ESPON data sources used

The INTERREG IIIB Measure 3.2 "Prevention of flood damage" was considered. This part of the NWE Programme aims at minimisation of flood damage in river basins and maritime areas through identification of sensitive areas, actions to enhance water retention and overflow areas in transnational river basins and integrated management of entire transnational river catchments. IIIB NWE supported ten projects with around 80 partners, and a joint ERDF budget of € 64 million.

The ESPON Project 1.3.1 "The spatial effects and management of natural and technological hazards in Europe" was considered. This ESPON project (2006) shows the spatial patterns of natural and technological hazards in Europe and identifies possible impacts of climate change on selected natural hazards. One of the maps produced presents the distribution of flood risks in EU regions, based on the recurrence of significant flooding events in the period 1987-2002.

4.5.1.9.2 Overlay map(s) and description

The following map combines the territorial patterns of flood hazards in northwest European regions with the geographical distribution of regions involved in INTERREG IIIB NWE projects on the prevention of flood damage.

The colours on the map identify flood risks at NUTS 3 regional level based on the recurrence of flooding in the 1987-2002 period (ESPON Project 1.3.1). The circles on both maps correspond to the location (NUTS 3 level) and financial allocations to partners in NWE IIIB projects in Measure 3.2. The map is a 'Zoom In' on one specific sub-section of the NWE programme area: the catchment area of the Rhine. This area is both the largest catchment that is completely situated within the NWE territory and the main concentration of INTERREG IIIB NWE project partners in flood risk management.

4.5.1.9.3 Observations

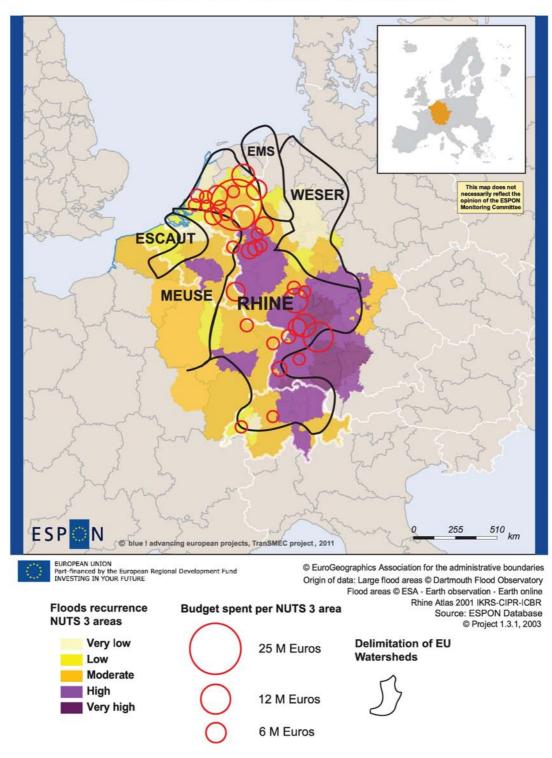
The zoom on the Rhine basin gives a more detailed picture of the main concentration of NWE project partners. Clearly the majority of ERDF is invested in The Netherlands, with a peak in the eastern region of Gelderland. Remarkably, this territory is characterised by moderate and low flood recurrence in the 1987-2002 period. Another cluster of ERDF investments is located upstream in Germany, in an area with high flood recurrence.

The territorial evidence suggests there is a certain logic to this geographical concentration in the Rhine basin due to the fact that it is the largest catchment that is fully part of NWE. It is also the one with the largest geographical concentration of regions with high flood recurrence.

Budget allocated to NWE projects (INTERREG III 2000-2006)

Measure 3.2. "The prevention of flood damage"

VS Flood events (1987-2002) and European Watersheds



Map 23: Budget allocated to NWE projects (IIIB) vs. flood events (1987-2002) and European watersheds

4.5.1.10 NWE programme performance comparison 2000-2006 and 2007-2013 vs. flood risks in EU regions

In this chapter, the functionality of Tool 9 (Comparing/Aggregating the programme performance from two different programming periods) is demonstrated.

4.5.1.10.1 INTERREG and ESPON data sources used

Both INTERREG IIIB and INTERREG IVB programmes were considered in this method:

- For 2000-2006, it relates to Priority 3 "water management" including 16 projects (127 partners)
- For 2007-2013, it relates to Priority 2 "natural resources and risk management", subpriority 2.2 "risk management and prevention" with only four approved projects by the end of 2010 (40 partners with 24,4 M€ ERDF allocated)

The ESPON Project 1.3.1⁴⁰ was considered. Here, the map displays the hazard recurrence based on average number of large flood events on NUTS 3 regions 1987-2002.

However, a more general map addressing natural hazards was included.

4.5.1.10.2 Overlay map(s) and description

The map relates the geographical distribution and volume of ERDF allocated per NUTS 2 territories for both periods against the ESPON territorial evidence. It allows having a comparative approach regarding the programme performance thanks to the data representation under two colours: circles in red for the 2000-2006 period and circles in blue for the beginning of the 2007-2013 period.

The size of the circles indicates the volume of ERDF either spent over 2000-2006 or allocated over 2007-2010.

4.5.1.10.3 Observations

Globally, the vast majority of ERDF went to the Netherlands over 2000-2006 and has been very much focused since 2007 on Belgian territories while both countries are classified as low or moderate in terms of flood risk based on flood recurrence over 1987-2002; conversely, the UK territories are weakly involved whereas some parts of central England are classified in high risk.

NUTS 2 territories presenting a higher risk have received comparatively less funds, except in some parts of Germany. On the other hand, the majority of ERDF benefit to territories having a moderate risk of flood.

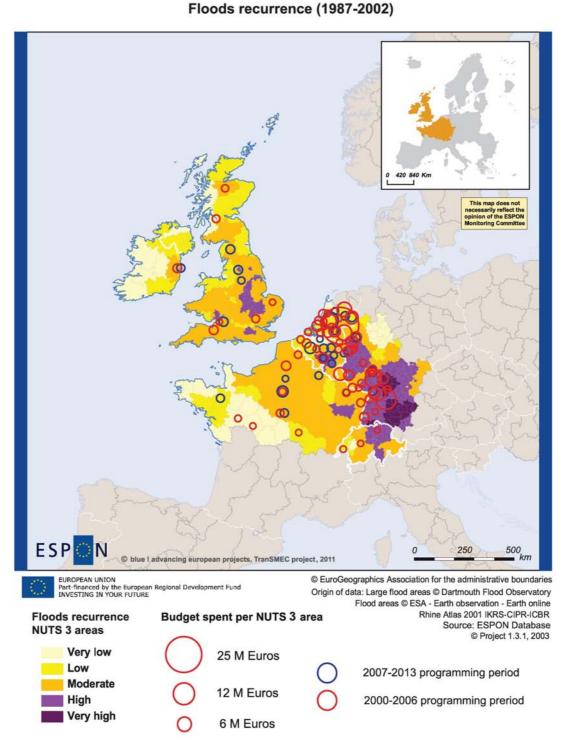
Except for some Dutch territories, the geography of beneficiaries differs greatly between both periods.

It results that the IIIB programme performance slightly better fitted the territorial evidence, mainly due to strong investments in high risk South Germany area.

However, the comparative basis is unequal with only four approved projects under IVB. This statement could be invalidated if future approved projects would take on board German territories in high and very high flood risk situation.

⁴⁰http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_ThematicProjects/naturalhazards. html

Budget spent by NWE projects (INTERREG III and IV 2000-2013) Prevention of flood damage VS



Map 24: Budget spent by NWE projects (IIIB and IVB) Prevention of flood damage vs. flood recurrence (1987-2002)

4.5.2 Naturalness

4.5.2.1 NWE programme performance vs. regional classification of Europe in the field of "Naturalness"

In this chapter, the functionality of Tool 3 (Choosing between NUTS 2 and NUTS 3) is demonstrated.

4.5.2.1.1 INTERREG and ESPON data sources used

The INTERREG IIIB Measure 4.1 "Stronger ecological infrastructure, reduced ecological footprint" was considered. Measure 4.1 aimed to support the development of protected areas of regional and national importance, including the NATURA2000 network, and supported initiatives in the field of sustainable energy and waste recycling. Nine projects in Measure 4.1 involved around 90 partners and an ERDF budget of approximately € 9.4 million.

The ESPON Project 2.4.2 "ZOOM IN - Integrated Analysis of Transnational and National Territories Based on ESPON" was considered. This ESPON project (2006) analyses the specific weaknesses and opportunities of different territorial contexts of Europe, using ESPON data. It developed a regional classification of Europe. One of the indicators developed for classifying European regions is their degree of naturalness. Based on the shares of artificial and natural land surfaces and the intensity of the agriculture, regions are scored in comparison to the average of all regions in their country.

4.5.2.1.2 Overlay map(s) and description

This overlay map compares the location and volume of investments by the INTERREG IIIB NWE Programme related to nature and ecology at NUTS 3 level (Map 25) and NUTS 2 level (Map 26) to the territorial evidence base about the degree of naturalness of regions (ESPON Project 2.4.2)⁴¹.

The colour of a region in both maps corresponds to their degree of naturalness compared to the national average in their country according to a scale of three indicators: Share of artificial surface, share of natural surface and intensity of agriculture.

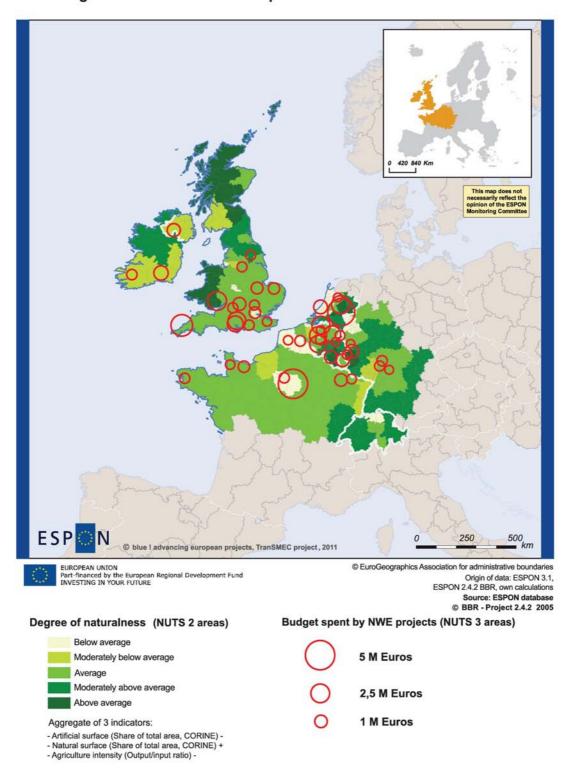
The circles relate to the number of partners from a region that participated in projects of INTERREG IIIB NWE Measure 4.1 "Stronger ecological infrastructure, reduced ecological footprint".

⁴¹http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_PolicyImpactProjects/zoomin.html ESPON 2013

Budget spent by NWE projects (INTERREG III 2000-2006)

Measure 4.1. "Stronger ecological infrastructure, reduced ecological footprint"

Regional classification of Europe - National Breakdown: Naturalness

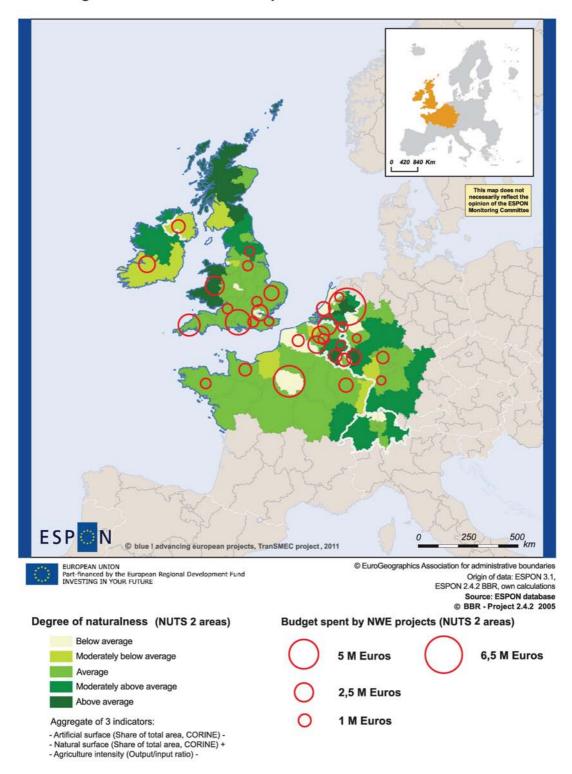


Map 25: Budget spent by NWE projects (IIIB) vs. regional classification of Europe – National Breakdown: Naturalness (1)

Budget spent by NWE projects (INTERREG III 2000-2006)

Measure 4.1. "Stronger ecological infrastructure, reduced ecological footprint"

Regional classification of Europe - National Breakdown: Naturalness



Map 26: Budget spent by NWE projects (IIIB) vs. regional classification of Europe - National Breakdown: Naturalness (2)

4.5.2.1.3 Observations

The geographical pattern of naturalness in the North West Europe programme area is diffuse. Not surprisingly, the main urbanised areas of Greater London, Greater Manchester, Midlands (UK), Randstad (NL), Ruhr area (DE) and IIe de France and Nord Pas de Calais (F) rank below average. In all NWE countries, both ends of the naturalness scale are represented: both those above and (moderately) below average.

The geographical distribution of the regions, involved in Measure 4.1 projects does not show a specific correlation with any of the categories on the 'Naturalness range'. At the overall level of the programme area as well as in the individual countries, regions are involved that score below, above or on average degrees of naturalness.

Among the regions involved those from Germany are underrepresented, while Swiss regions are absent altogether. The size of the financial allocations to the regions that participated was generally quite similar. The most notable outliers are Gelderland (NL) and Ile de France where considerably larger allocations were made.

A comparison of the maps at NUTS 3 and NUTS 2 level reveals no remarkable differences in geographical spread of regions involved or in regional concentrations of ERDF allocations. The presentation of INTERREG IIIB NWE information at NUTS 3 level (Map 25) is more accurate regarding the location of NWE activity and the distribution of ERDF funds over EU regions.

4.5.3 Connectivity and accessibility

4.5.3.1 NWE programme performance vs. potential multimodal accessibility update in comparison to the wider European context

In this chapter, the functionality of Tool 1 (Visualising the NWE programme area in a wider European context) is demonstrated.

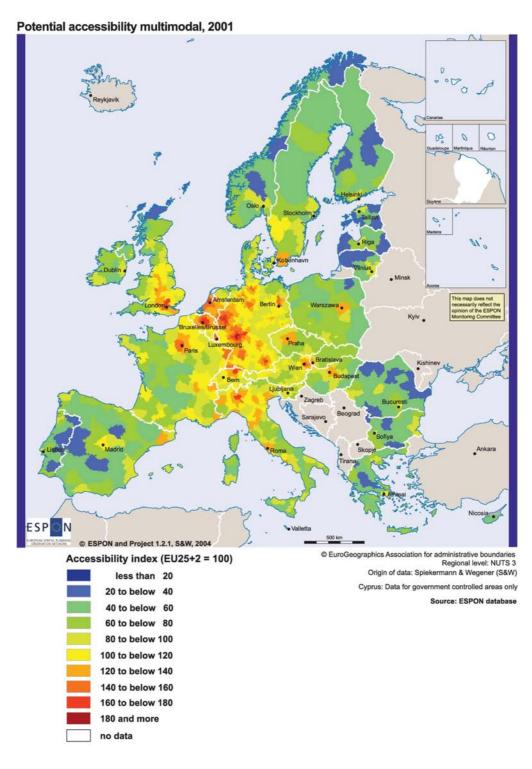
4.5.3.1.1 INTERREG and ESPON data sources used

The INTERREG IIIB NWE Measure 2.1 "Sustainable mobility management" is considered. Measure 2.1 aims at the promotion of external and internal accessibility of NWE through sustainable mobility. This includes integrating transport with other land use planning activities to support development of corridors, supporting modal shift towards environmentally-friendly transport modes and promoting accessibility, including of peripheral regions.

The ESPON Project 1.2.1 "Transport Services and Networks: Territorial Trends and Supply" was considered. This ESPON study mapped the accessibility of all parts the EU territory for different modes of transport. This included a map of 'potential multimodal accessibility' of the regions of Europe, comparing the accessibility of a region by road, rail and air to the EU average.

The map shows a strong core-periphery distinction in Europe. The core regions of Europe and the main urban agglomerations outside of the centre have above average accessibility. Peripheral zones of Europe in the new Member States, the Mediterranean and Nordic countries and on the Atlantic side score (well) below average.

4.5.3.1.2 Overlay map(s) and description

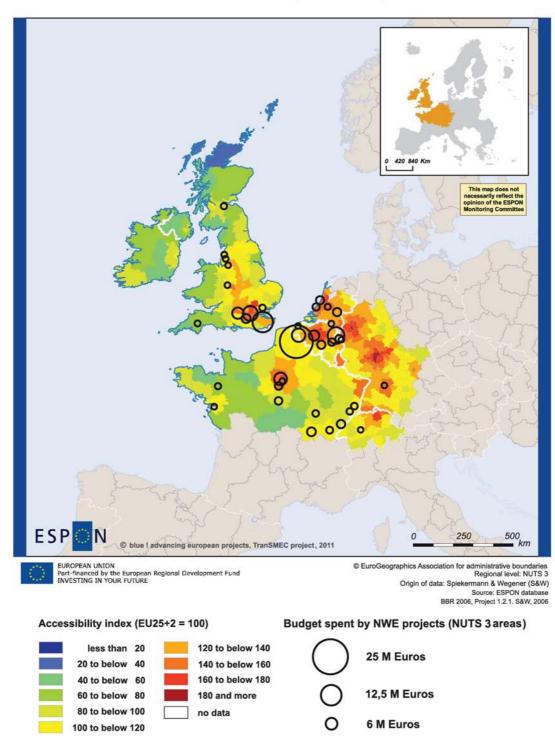


Map 27: Potential accessibility multimodal, 2001

Budget spent by NWE projects (INTERREG III 2000-2006)

Measure 2.1. "Sustainable Mobility Management"

VS Potential accessibility multimodal, 2001



Map 28: Budget spent by NWE projects (IIIB) vs. potential accessibility multimodal, 2001

This map presents an example of the 'Zooming Out' approach. It presents the potential multimodal accessibility of EU regions in comparison with the INTERREG IIIB NWE projects in sustainable mobility.

Map 27 presents the original ESPON map "Potential Accessibility Multimodal" (project 1.2.1). This map scores accessibility of NUTS 3 regions by road, rail and air relative to the European average in an Accessibility Index. By 'zooming out' of NWE to the whole EU territory, the accessibility situation in the programme area is put in a wider European perspective.

Map 28 presents an overlay map of the NWE programme area, where multimodal accessibility at NUTS 3 level is overlaid with information of location and financial allocations at NUTS level related to IIIB NWE projects in Measure 2.1 "Sustainable Mobility Management".

4.5.3.1.3 Observations

Map 27 shows a strong core-periphery pattern for the whole EU territory. The core regions of Europe and some of the larger urban agglomerations outside of the centre have above average accessibility. Countries and regions in the periphery of Europe score (well) below average.

In fact nearly all of the EU regions with very high levels of accessibility (scoring over 140 on the Accessibility Index) are located in the North West Europe Programme zone, concentrated in a corridor from northwest England, via Flanders, southern Netherlands and western Germany to Switzerland. This corridor continues outside the NWE area southward into northern Italy and to Munich in the southeast.

Overall, most parts of the NWE territory have above average accessibility (scores 100 and up). However, some parts of the NWE area, in central and western France and the peripheral parts of the British Isles, score (well) below average.

The patterns of location and spending of NWE projects in Sustainable Mobility Management reveal a strong dominance of highly accessible regions. This concentration is even stronger in financial terms: the few low-accessibility regions involved (i.e. in central France, Devon and Eastern Scotland) represent only modest ERDF allocations.

These patterns underline that NWE projects did not contribute to relieving poor accessibility of peripheral regions. Rather they dealt with issues of places with high density mobility like urban (public) transport, congestion and high speed rail systems.

By 'zooming out' of the North West Europe territory, the accessibility situation in this area is put in perspective. NWE has a very distinct bi-polar accessibility situation, covering both the main European concentration of highly accessible regions, and some areas in the lowest ranges of accessibility. The area is faced with a diversity of accessibility related challenges not likely to be found in other transnational cooperation areas.

The absence of poorly accessible regions in NWE projects suggests that these areas may not have been able to identify suitable cooperation partners within the programme area.

Map 27 shows that suitable cooperation partner regions with similar accessibility problems are found outside of NWE. This suggests that, on the issue of accessibility, their involvement in other transnational cooperation zones may have been more relevant.

4.5.3.2 NWE programme performance vs. potential multimodal accessibility from the preparatory document⁴² for the Operational Programme 2000- 2006

In	this	chapter,	the	functionality	of	Tool 5	(Revisiting	ESPON	maps	used	in t	the	INTERE	ΞG
Operational Programme) is demonstrated.														

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⁴² Spatial Vision ESPON 2013

4.5.3.2.1 INTERREG and ESPON data sources used

The INTERREG IIIB NWE Measure 2.1 "Sustainable mobility management" was considered. Measure 2.1 aims at the promotion of external and internal accessibility of NWE through sustainable mobility. This includes integrating transport with other land use planning activities to support development of corridors, supporting modal shift towards environmentally-friendly transport modes and promoting accessibility, including of peripheral regions. A total of nine projects were implemented through INTERREG IIIB NWE with around 90 partners and a total ERDF volume of € 48 million.

The ESPON Project 1.2.1 "Transport Services and Networks: Territorial Trends and Supply" was considered. This ESPON study mapped the accessibility of all parts the EU territory for different modes of transport. This included a map of 'potential multimodal accessibility' of the regions of Europe, comparing the accessibility of a region by road, rail and air to the EU average.

The map shows a strong core-periphery distinction in Europe. The core regions of Europe and the main urban agglomerations outside of the centre have above average accessibility. Peripheral zones of Europe in the new Member States, the Mediterranean and Nordic countries and on the Atlantic side score (well) below average.

4.5.3.2.2 Overlay map(s) and description

Map 29 presents the potential multimodal accessibility of EU regions in comparison with the INTERREG IIIB NWE projects in sustainable mobility. This map was also used for Overlay Map 28.

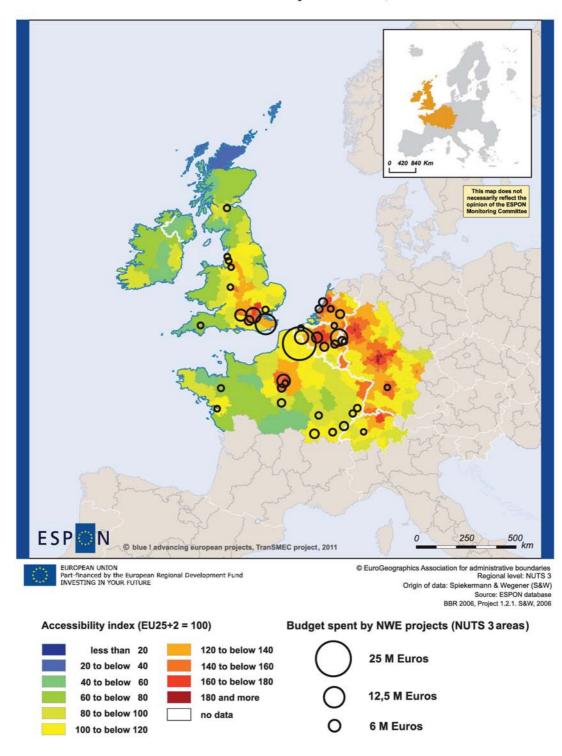
The base map is derived from the original ESPON map "Potential Accessibility Multimodal" (Project 1.2.1). This map scores accessibility of NUTS 3 regions in NWE by road, rail and air relative to the European average in an Accessibility Index. The colour of a region represents its ranking on this index.

The circles on the map present the location and volume of financial allocations at NUTS level related to IIIB NWE projects in Measure 2.1 "Sustainable Mobility Management".

Budget spent by NWE projects (INTERREG III 2000-2006)

Measure 2.1. "Sustainable Mobility Management"

VS Potential accessibility multimodal, 2001



Map 29: Budget spent by NWE projects (IIIB) vs. potential accessibility multimodal 2001

4.5.3.2.3 Observations

The NWE Spatial Vision (2005) includes an analysis of the ESPON map displaying Potential Accessibility (Multimodal)⁴³. The Spatial Vision report acknowledges the strong coreperiphery pattern for the whole EU territory, and it points out that the majority of NWE has high accessibility. However, the more peripheral parts of NWE have poor accessibility. It continues by analysing that in areas with high density of transport links, problems associated with overloading of the transport system are increasing.

Based on this analysis several points are included as "contemporary priority themes for transnational cooperation" in the Spatial Vision report:

- Achieving sustainable mobility in NWE in a perspective of long-term traffic growth;
- Improving accessibility by increasing efficiency of land-based, maritime and air transport corridors;
- Encouraging modal shift towards more sustainable transport systems, particularly rail, waterway and maritime transport;
- Encouraging intermodal freight transport systems within NWE;
- Developing high speed freight services;
- Promoting use of Intelligent Transport Systems (ITS) to improve inter-modal services.

These points reconfirm several priority areas of intervention identified in the IIIB NWE programme documents. However they put a stronger focus on issues of mobility in high-accessibility areas with dense transport systems, shifting away from improving accessibility in remote regions.

The patterns of location and spending of NWE projects in Sustainable Mobility Management reveal a strong dominance of highly accessible regions. This concentration is even stronger in financial terms: the few low-accessibility regions involved (i.e. in central France, Devon and Eastern Scotland) represent only modest ERDF allocations. These patterns underline that NWE projects mainly dealt with issues of places with high density mobility like urban (public) transport, congestion and high speed rail systems. They did not address the issue of relieving poor accessibility of peripheral regions. This pattern of NWE activities visualised in the overlay map is therefore in line with the more specific focus that emerged from the update of the spatial vision process.

4.5.3.3 NWE programme performance vs. potential multimodal accessibility with specific attention to highly profiled territories

In this chapter, the functionality of Tool 11 (Assisting project development unit or project actors to select partners in highly profiled territories) is demonstrated.

4.5.3.3.1 INTERREG and ESPON data sources used

In the current OP, the relevant objectives are 3.1 "manage transport growth through capacity optimisation" and 3.2 "multimodal interoperability on land, water and air". Potential project developments are to be considered under this approach.

The ESPON Project 1.2.1 – Spiekermann & Wegener - Urban and Regional Research - (S&W), 2004 was considered. The map chosen shows the accessibility index based on the combination of different means of transport.

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 $^{^{43}}$ "Towards a strategic framework for action" (2005), p. 37 ESPON 2013

4.5.3.3.2 Overlay map(s) and description

For the purpose of this approach, there is no specific need to develop an overlay map.

However, the lessons learnt from the previous period on the basis of the overlay map opposite are a good basis for illustrating the usefulness of such an approach.

The overlay map for IIIB shows that the majority of funds benefited the NUTS 3 territories already well accessible, especially on the issue of High Speed Trains.

On the contrary, large parts of NWE area were not involved in approved projects

4.5.3.3.3 Observations

This tool is based on the fact that different logics usually apply for project development. They can be divided into 3 main categories:

1st logic: territorial excellence

2nd logic: territorial catch-up

3rd logic proximity / territorial continuity

Under 1st and 2nd logics: projects promoters are supposed to look for partners located in relevant territories <u>with similar features</u>, whichever they are (e.g. territories highly prone to flooding, territories in preserved natural areas, in strong economic areas, territories with low broadband access).

Under 2nd and 3rd logics: projects promoters may have to pool more advanced and lagging behind territories. They may to take on board partners having <u>different territorial features</u> (either because they are neighbours, or because the joint implementation will be fruitful for the less developed partners).

Depending on the core objective of the project and its underlying logic, projects promoters should build a partnership in agreement with ESPON territorial evidence. They may also have to paid due attention to specific objectives assigned by the programme bodies as well as specific territorial needs or challenges.

4.5.4 Information Society

4.5.4.1 NWE programme performance vs. ESPON Information Society index and comparing the visualisation in NUTS 2 and NUTS 3

In this chapter, the functionality of Tool 2 (Variation between the number of participating partners OR the ERDF budget spent and comparing both maps) is demonstrated.

4.5.4.1.1 INTERREG and ESPON data sources used

The INTERREG IIIB NWE Measure 2.2 "Improved Access to Information Society" was considered. Measure 2.2 supported the use and awareness of Information and Communication Technologies in NWE, to make peripheral regions more accessible, enable ICT based services and business opportunities and improve communication between NWE regions. The programme supported eight projects in this field, representing 60 partners from 37 regions, with a total ERDF budget spent of \pm € 11 million.

The ESPON Project 1.2.3 "Spatially Relevant Aspects of the Information Society" was considered. This ESPON study from 2006 analysed from a territorial perspective the state and trends of the Information Society. The study developed an Information Society Index to present the level of development of the Information Society in European regions. The index is based on a range of variables related to resources and skills for ICT use, availability and use of ICT and economic implications of ICT. The data used for composing the index covers the years 2000-2004.

Based on this index a clear core-periphery pattern is visible in Europe, both among and within countries. The New Member States and peripheral regions of Europe lagging behind and the core areas of western and northern Europe are in the lead. The NWE area clearly falls in the latter category although, interestingly, there are still considerable differences in IS index scores within NWE and its composing countries.

4.5.4.1.2.Overlay map(s) and description

The following overlay maps compare the level of development of the Information Society of regions in the North West Europe area with the location of project partners (Map 30) and of the financial allocations (Map 31) by INTERREG IIIB NWE projects related to the Information Society at NUTS 3 level.

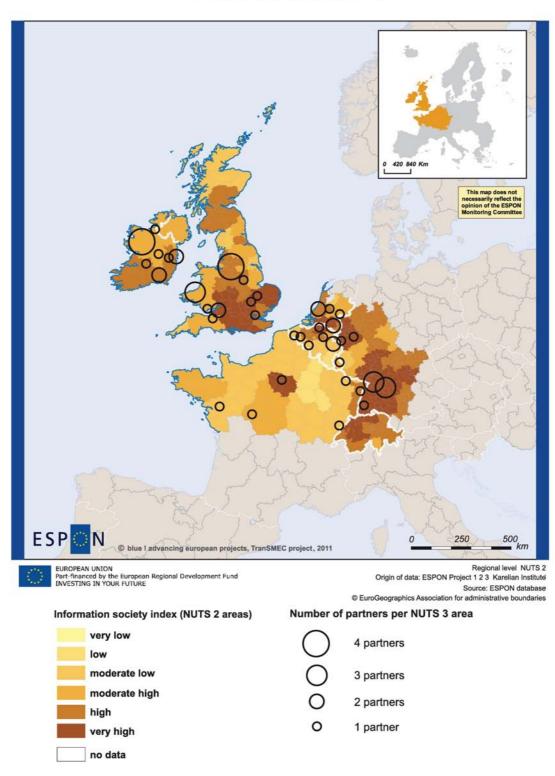
The colour of a region on both maps corresponds to its ranking on the Information Society Index (from ESPON Study 1.2.3). The size of the circles on Map 30 represents the number of partners from a NUTS 3 region, which was involved. The size of the circles on Map 31 displays the total financial volume (ERDF budget) invested per NUTS 3 region by the INTERREG IIIB NWE Programme in Information Society projects (IIIB Measure 2.2).

⁴⁴http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_ThematicProjects/informationsociety.html

Location of NWE project partners (INTERREG III 2000-2006)

Measure 2.2. "Improved access to the information society"

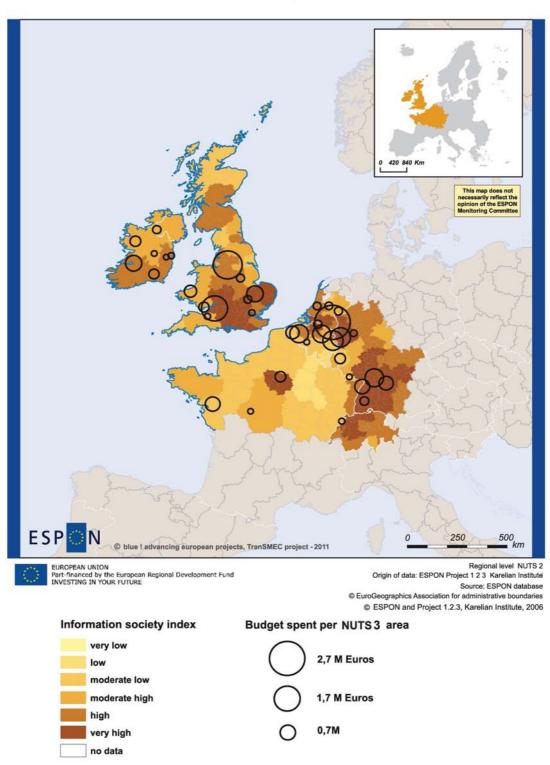
VS Information society performance



Map 30: Number of NWE project partner (IIIB) vs. Information Society performance

Budget spent by NWE projects (INTERREG III 2000-2006) Measure 2.2. "Improved access to the information society"

VS Information society performance



Map 31: Budget allocated to NWE projects (IIIB) vs. Information Society performance

4.5.4.1.3 Observations

North West Europe as a whole performs well against the Information Society Index (ISI), compared to other parts of Europe. Among NWE regions however, considerable differences are observed. Regions in Ireland, the southern parts of the UK and The Netherlands, Flanders, Switzerland and Germany, are generally in the top end of the ranking (scoring 'moderate high' or above). Several regions in the northern parts of UK have a 'moderate low' ranking, as do most regions in Wallonia and France, where even some score 'low'. In France the Paris/Ile de France region stands out as the only one scoring 'very high'.

The overlay maps reveal a distinct geographical concentration of the partners involved in IIIB NWE Information Society projects in a 'corridor' arching from Ireland, the central and southern parts of the UK, Belgium, the southern sections of the Netherlands, Luxemburg in to the south western German regions. This 'corridor' overlaps with the main concentration of NWE regions with an above average performance on the Information Society Index. Only very few NWE regions with a below average performance were involved.

Map 30 shows that some of the most active NUTS 3 regions (present with three or four partners) are in Ireland and the UK, and in general many regions in these countries were involved. In Germany two very active regions are found, while most of the others did not participate at all. Most regions in France were not active.

Map 31 shows that the regions with most active participation in terms of numbers of partners, are not necessarily the ones where most ERDF funds are allocated. The financial allocations in Ireland for instance, are modest compared to the number of active partners. On the other side, the largest concentration of ERDF expenditure, in the border area of Netherlands, Germany and Belgium (the Eindhoven-Leuven-Aachen triangle), is delivered by only a few partners.

The nearly complete absence of partners from peripheral parts of NWE and from NUTS 3 regions with a (moderate) low ranking on the ISI suggests that NWE was not successful in achieving its objective to improve accessibility of peripheral and poorly accessible regions. Rather the programmes' support concentrated on the development of ICT-based services and business opportunities in regions with a good starting position.

4.5.5 Metropolitan areas

4.5.5.1 NWE programme performance vs. ESPON typologies of Metropolitan Growth Areas used in the development of the INTERREG IIIB programme

In this chapter, the functionality of Tool 5 (Revisiting ESPON maps used in the INTERREG Operational Programme) is demonstrated.

4.5.5.1.1 INTERREG and ESPON data sources used

The INTERREG IIIB NWE Programme was based, among other sources, on a Spatial Vision of the North West Europe Programme area. During the programming period, in 2004 and 2005, the original Spatial Vision was updated, to analyse changes and developments in spatial trends that might affect the NWE Programme. Based on several thematic studies⁴⁵, a synthesis report was issued called "Towards a strategic framework for action" (2005). This document listed key transnational issues and presented a set of contemporary priority

⁴⁵ The themes of the three studies are: 'Polycentric territorial development in NWE', 'Parity of access to infrastructure and knowledge' and 'Sustainable management of the cultural and natural heritage'.

themes that should be the focus of future transnational action (i.e. primarily the post-2006 territorial cooperation). These Spatial Vision reports worked with various ESPON maps to identify spatial trends in NWE. It provides therefore interesting material to demonstrate the use of ESPON evidence for capitalisation and communication of NWE IIIB achievements.

The INTERREG IIIB NWE Measure 1.1 "More attractive metropolitan areas" was considered. Measure 1.1 concentrated on creating more attractive metropolitan areas, improving relations between urban and rural areas and managing issues related to urban growth. It also looked at the position and role of NWE metropolitan areas in their European and global contexts, to enhance the significant global functions and services that NWE provides, whilst avoiding unnecessary competition. Measure 1.1 supported 14 projects, with over 100 partners, amounting to approximately € 51 million ERDF.

The ESPON Project 1.1.1 "Urban areas as nodes in a polycentric development" was considered. This project explores the functionalities and potentials of the European Urban system. It introduces the concept of Metropolitan European Growth Areas (MEGA's). MEGA's are the 75 European urban areas that are strongest in terms of economic and population mass, competitiveness, connectivity and knowledge base. Among MEGA's a further classification is made in 5 categories

4.5.5.1.2 Overlay map(s) and description

Overlay Map 32 presents the location and classification of the Metropolitan European Growth Areas (MEGAs) in North West Europe in combination with the geographical distribution of partners in INTERREG IIIB NWE projects related to metropolitan areas.

The MEGAs are presented with symbols on the map corresponding to their classification (from ESPON Project 1.1.1). This classification is based on an aggregate of four indicators: economic and population mass, competitiveness, connectivity and knowledge base. Global Nodes are the largest and most competitive metropolises. European Engines score good on all indicators. Strong MEGAs score relatively good on most indicators. Potential MEGAs have average scores on all indicators, with one strong point. Weak MEGAs score in the low ranges on all indicators.

The demarcation of the 'Pentagon', i.e. the European economic core area, is inserted for reference.

The colour of a region represents the number of project partners involved in INTERREG IIIB NWE projects in Measure 1.1 "More attractive metropolitan areas". The NUTS 2 regional level is used as many of the MEGAs extend beyond the limits of one (smaller) NUTS 3 region.

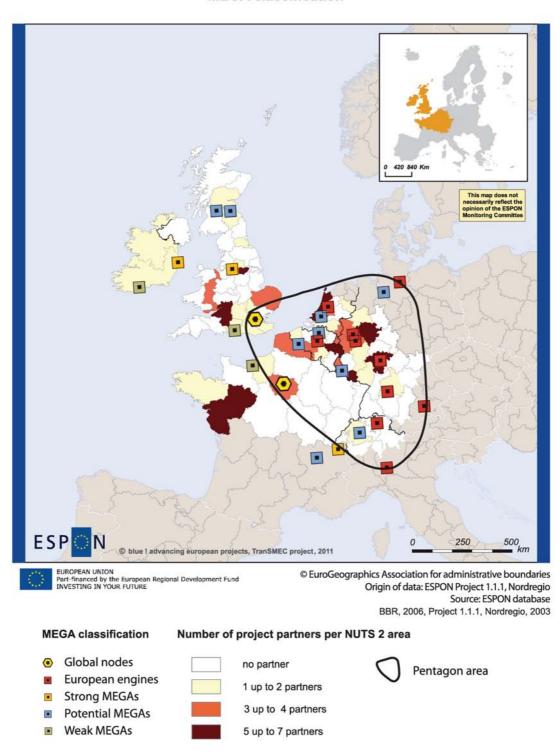
109

 $^{^{\}rm 46}$ http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_ThematicProjects/ ESPON 2013

Concentration of NWE project partners (INTERREG III 2000-2006)

Measure 1.1. "More attractive Metropolitan Areas"

VS MEGA classification



Map 32: Concentration of NWE project partner (IIIB) vs. MEGA classification

4.5.5.1.3 Observations

The concept of the MEGAs, including the map with the MEGA classification, is used in the NWE Spatial Vision update in 2005⁴⁷, to demonstrate metropolitan patterns in the area. The report cited that NWE is home to a large section of the 'Pentagon' (area delineated by London, Paris, Frankfurt, Milan and Hamburg), where 46% of EU GDP and 32% of EU population are is concentrated on 14% on the EU territory. It refers to the MEGA typology that identifies the most powerful functional urban areas capable of generating alternative economic growth next to the Pentagon area, thus presenting an opportunity for polycentric development. It also recognises that most of the MEGAs in NWE are inside the 'Pentagon', with the exceptions being relatively low in the MEGA classification.

The list of 'contemporary priority themes for transnational cooperation' presented in the Spatial Vision report reflects this analysis by including the following points:

- Strengthening the metropolitan regions;
- Maximising the competitiveness of weak MEGAs / potential of mid-sized cities.

These points reconfirm priority areas of intervention that were listed in the IIIB NWE programme documents.

The map demonstrates that the NWE Programme has successfully targeted its MEGAs. Of the 22 MEGAs in NWE, 21 were represented in projects in Measure 1.1. Only Cork (Ireland) was not involved⁴⁸.

Regarding the specific reference to weak MEGAs that is found in the Spatial Vision, there are three such cities in NWE: Southampton (UK), Le Havre (F) and Cork (IRL). These have not been involved in a particularly active way, with only the first two being represented with one partner each.

In addition to the MEGAs involvement also quite a few other cities and urban areas were involved in the projects. These represent roughly half of the partners that were involved. The level of involvement in NWE projects (i.e. higher numbers of partners) does not differ considerably between MEGAs and non-MEGAs. In both categories regions with high involvement are found alongside regions with limited participation.

The geographical distribution of partners over NWE is well spread over all Member States, and with good coverage of regions within and outside the 'Pentagon' demarcation. This suggests that the programme has been able to support polycentric development of the NWE area at least from the perspective of the territory and types of metropolitan areas covered.

4.5.6 Cultural Heritage

4.5.6.1 NWE programme performance vs. ESPON classification for intensity of cooperation activities

In this chapter, the functionality of Tool 6 (Filtering complex data sets for improved visualisation) is demonstrated.

⁴⁷ "Towards a strategic framework for action" (2005), p. 31, 42, 80

⁴⁸ The two partners from Southern and Eastern Ireland indicated on the map are in Limerick and Dublin.

4.5.6.1.1 INTERREG and ESPON data sources used

The INTERREG IIIB Measure 4.2 "Protection and enhancement of cultural heritage" was considered. Measure 4.2 supported the identification, preservation and development of Cultural heritage; including the development its potential for culture based economic development, tourism and cultural activities. NWE funded eight projects with around 90 partners from 56 regions, for a total amount of € 9,3 million ERDF.

The ESPON Project 2.4.2 "Integrated Analysis of Transnational and National Territories Based on ESPON" was considered. In addition to the general map related to the involvement in INTERREG IIIB projects, this ESPON project also delivered maps presenting the involvement of regions in INTERREG IIIB projects in various thematic fields. The map used here shows the involvement of EU regions in projects related to Cultural Heritage and Tourism in all INTERREG IIIB programmes, including INTERREG IIIB North West Europe. The original map is set up along the same lines as the previous map, presenting both absolute and weighed numbers of projects.

4.5.6.1.2 Overlay map(s) and description

Overlay Map 33 is created by filtering the original data set from ESPON project 2.4.2 in the same way as Map 31. This overlay map presents the involvement of regions in Cultural Heritage projects in all transnational programmes covering their area compared with their participation in NWE IIIB projects in this field.

The blue colour shades in the overlay map present the total number of projects in the field of Cultural Heritage, Cultural Landscapes and Tourism in a region (NUTS 2) in all INTERREG IIIB programmes covering its territory (data 2000-2004). On top of this the size of the circles corresponds to the number of partners from a NUTS 2 region in IIIB NWE projects in Measure 4.2 Protection and Enhancement of Cultural Heritage.

4.5.6.1.3 Observations

This map shows a mixed pattern regarding the involvement of regions in northwest Europe in Cultural Heritage related INTERREG projects. Most regions had a limited participation in such projects. However many regions, spread over nearly all NWE countries did not develop any INTERREG activity in this field. On the other hand a few regions were very active on the topic, specifically Southern and Eastern Ireland, Scotland's Highlands and Islands, Pays de Loire, Nord-Pas de Calais and Zuid-Holland.

Looking at the INTERREG IIIB NWE data, it appears that regions involved in projects in this field are rather scattered over the NWE zone, with many regions not participating. Numbers of partners from a region are generally low. Three regions demonstrate relatively high involvement: Utrecht (NL), Nord-Pas de Calais (FR) and Leuven (BE).

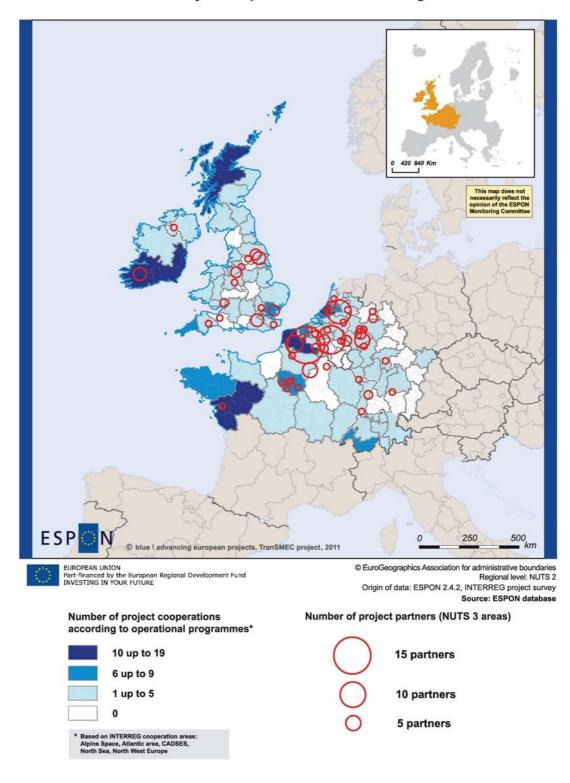
Note that the regions identified above as being generally very active in Cultural Heritage related INTERREG projects are not, or barely, involved in NWE projects on this issue. With the exception of Nord-Pas de Calais (no alternative INTERREG B programme) they tended to favour the other IIIB programmes covering their territory for this issue.

The fact that some NWE partners are located in 'white' regions can be explained from the ESPON 2.4.2 data (base map) relating to the 2000-2004 period, while the INTERREG IIIB data covers 2002-2006.

Location of NWE project partners (INTERREG III 2000-2006)

Measure 4.2. "Protection and enhancement of Cultural Heritage"

VS Intensity of cooperation - Cultural Heritage



Map 33: Location of NWE project partners (IIIB) vs. intensity of cooperation – Cultural Heritage

ESPON 2013

4.6 Main thematic conclusions

Based on the observations made during the demonstration of the tools, the following thematic conclusion can be drawn.

- There is an observable tendency that higher performance levels, (shown with the examples for Information Society and Lisbon performance) show more active participation in INTERREG B NWE. For example, the nearly complete absence of partners from peripheral parts of NWE and from NUTS 3 regions with a (moderate) low ranking on the Information Society Index suggests that NWE was not successful in achieving its objective to improve accessibility of peripheral and poorly accessible regions. This leads to the reflection that benefits of transnational approaches might be better be exploitable through actors that could obviously mobilise more resources with led to a more detailed needs assessment. Furthermore, many observations show that the inclusion of lower-performing regions has not been fully successful and that peripheral regions have in average a lower involvement. This conclusion has to be seen especially in the light of the cohesion and TA2020⁴⁹ objectives for better inclusion of actors that are threatened of being excluded from the socio-economic circuit. Here, transnational cooperation is an important link to promote transfer of know-how through set-up of partnerships that bridge disparities.
- The use of the new typologies on innovation sustained this observation. It seems that high-performing knowledge regions create an environment which is favourable for transnational cooperation projects and/or that actors in such regions are better aware of the potential benefits of transnational cooperation in relation to innovation. Based on the observations it can be speculated that partners emerging from rather "high scoring" knowledge regions in the typologies are more active in transnational programmes. It is interesting to think in this context about the possible role of INTERREG programmes to sustain transnational innovation processes. It seems that innovations might be a different issue compared to the other cohesion topics. A reason might be that innovation is a very complex process where a lot of factors have to be fulfilled in order to make the process successful. A possible reflection might be that it is not within the abilities of an INTERREG programme to convert a low scoring into a high scoring region. Due to the fact that a "knowledge-environment" is probably composed of this wide set of factors (intelligent and sufficient investment, incentives, local policy environment, local support instruments etc), INTERREG programmes could offer a crucial EU added value through enabling "knowledge cohesion" between the regions. In fact, this "knowledge cohesion" has to be built on a more elaborate knowledge development of the region in order to allow transnationality. It seems that transnational cooperation in the topic of innovation does not develop out of a local structural need, but more out of a solid knowledge basis of the region.
- Also with regards to the patterns of location and spending of NWE projects in "Sustainable Mobility Management" reveal a strong dominance of highly accessible regions. This concentration is even stronger in financial terms: the few low-accessibility regions involved (i.e. in central France, Devon and Eastern Scotland) represent only modest ERDF allocations. These patterns underline that NWE projects did not contribute to relieving poor accessibility of peripheral regions. Rather they dealt with issues of places with high density mobility like urban (public) transport, congestion and high speed rail systems. The absence of poorly accessible regions in NWE projects suggests that these areas may not have been able to identify suitable cooperation partners within the programme area. It is recommendable to re-assess the options for steering the development of partnerships that could meet an improved integration of partners with a

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⁴⁹ http://www.eu2011.hu/files/bveu/documents/TA2020.pdf

weaker performance. In this context, the visualisation of the wider EU area shows that suitable cooperation partner regions with similar accessibility problems are found outside of NWE. This could also suggest that, on the issue of accessibility, their involvement in other transnational cooperation zones might have been more relevant. The territorial patterns underline that NWE projects mainly dealt with issues of places with high density mobility like urban (public) transport, congestion and high speed rail systems. They did not address the issue of relieving poor accessibility of peripheral regions. This pattern of NWE activities visualised is therefore in line with the more specific focus that emerged from the update of the spatial vision process.

- Regarding the openness of institutions for transnational cooperation and within the typology "technologically advanced regions" the classification of an "advanced service region" seems to stand in connection with active participation of public institutions in transnational programmes. Furthermore, a strong score in the "knowledge networking" typology seems to be significant for active participation. And here again, the idea of a "solid regional knowledge basis" seems to be a factor that favours the participation in transnational programme
- It could be observed that regions that are not involved in NWE tend to also not be involved in other transnational cooperation programmes. However, the paradigm of a place-based approach can also be sustained: focusing on regions that have a high participation in transnational cooperation, it seems that the preferences to a specific programme are a regional issue and not a general principle. This leads to the conclusion that it is recommendable to improve a closer steering of the targeted partners through a strong and distinctive profile of the programme.
- It would be recommendable to have a closer look at the nature of specific partners who participates in order to prepare targeted interventions not only on a thematic, but also on a more "customer-related" viewpoint.
- Transnational cooperation seems to be a cross-cutting pattern of a region which is not focused on a certain topic. It could be shown that with higher financial involvement of a region to transnational cooperation, the range of topics addressed becomes broader rather than more and more specialized.
- With regards to the topic of flood hazards, the territorial evidence therefore demonstrates that the INTERREG IIIB activities target those regions that have the highest risk of flooding in urban areas, in line with the programmes objective to target urban water issues in Measure 3.1. Participation in INTERREG IIIB NWE in this field is clearly not limited to regions with high flood recurrence. In fact, most regions involved in projects have low to moderate levels of flood recurrence. Many of the regions with high levels of flooding were not active at all. However, participation is almost completely limited to areas from the European mainland side of this band with almost no involvement from UK partners. Also some of the high-risk areas in Germany are not covered. In this context, it seems that the programme successfully addressed both prevention and management of flood events.
- For regions in catchment areas that extend beyond the NWE territory, INTERREG IIIB NWE is not the right instrument to work on integrated management of transnational river basins. This can, at least in part, explain their absence in NWE projects.
- The geographical distribution of the regions, involved in Measure 4.1 projects does not show a specific correlation with any of the categories on the 'Naturalness range'. At the overall level of the programme area as well as in the individual countries, regions are involved that score below, above or on average degrees of naturalness. That means that at all degrees of urbanisation and naturalness, projects can focus on the different strategies to preserve naturalness and that INTERREG is recommended to always open up this priority to a wide range of project topics.

- The patterns of location and spending of NWE projects in "Sustainable Mobility Management" reveal a strong dominance of highly accessible regions. This concentration is even stronger in financial terms: the few low-accessibility regions involved (i.e. in central France, Devon and Eastern Scotland) represent only modest ERDF allocations. These patterns underline that NWE projects did not contribute to relieving poor accessibility of peripheral regions. Rather they dealt with issues of places with high density mobility like urban (public) transport, congestion and high speed rail systems. The absence of poorly accessible regions in NWE projects suggests that these areas may not have been able to identify suitable cooperation partners within the programme.
- With regards to the objective of polycentric development, the geographical distribution of partners over NWE is well spread over all Member States, and with good coverage of regions within and outside the 'Pentagon' demarcation. This suggests that the programme has been able to support polycentric development of the NWE area at least from the perspective of the territory and types of metropolitan areas covered.
- Note that the regions identified above as being generally very active in Cultural Heritage related INTERREG projects are not, or barely, involved in NWE projects on this issue.
 With the exception of Nord-Pas de Calais (no alternative INTERREG B programme available) they tended to favour the other IIIB programmes covering their territory for this issue.
- With regards to the thematic gaps within the ESPON visual territorial evidence base available displayed in the gap-list at the beginning of Chapter 4, it is strongly recommended to develop and implement ESPON and INTERREG programmes in a much more coordinated approach as outlined in ANNEX4 of this report.
- It is recommended to display visualisations of INTERREG NWE performance on the background of ESPON maps using circles.
- It is recommended to use the different tools not only in an isolated, but also in a combined way which is technically seen absolutely feasible in every combination.
- It can be stated that all programmes where challenged to define a new, emerging theme innovation in a new priority. All programmes developed this theme using the amongst other territorial information from their SWOT analysis of the area. However, an in-depth reflection of the territorial features of the innovation theme could not be done due to absence of appropriate evidence base at the time of the programme development. This is strongly emphasized for the development of the next funding period. This is also true for the other themes addressed by the programme. For example, it seems to be necessary to base the programme on a clear vision which additional function transnational cooperation represents. This could be formulated differently for the different thematic columns of a programme.
- A strong difference can be observed with regards to the cohesion challenges addressed by programmes that have or have not to bridge the gaps between old and new EU Member States. In this context, different strategic visions might apply to these two sorts of INTERREG IVB programmes.

The analysis of the EU policy environment on innovation revealed significant cooperation potentials between programmes funded by ERDF (DG REGIO) and instruments developed by DG Enterprise and Industry. Especially the "RIM – Regional Innovation Monitor⁵⁰" is a policy learning and benchmarking tool for regional innovation policy makers. It contains regional profiles of 200 regions and a description of their key innovation support measures and related documents. It allows for thematic searches at national and regional level.⁵¹

⁵⁰ http://www.rim-europa.eu/

⁵¹ http://ec.europa.eu/regional_policy/cooperation/interregional/ecochange/index_en.cfm

<u>5</u> Demonstration of functionality of Tool 15: "Changing the perspective": Assessing territorial needs and choices of the project actors for the province of Zeeland, NL

5.1 Introduction

Due to the fact that Tool 15 is fundamentally different and far more comprehensive from the other tools, it is demonstrated in a separate chapter. Tool 15 has been demonstrated in the framework of a case study on a specific region in the NWE area, the province of Zeeland in the Netherlands.

The previous chapter has outlined tools that apply ESPON territorial evidence at the overall programme level of INTERREG B North West Europe. ESPON territorial evidence can also be used to look at territorial aspects at the sub-programme level. This case study explores how ESPON territorial evidence regarding a specific region can be linked to INTERREG projects developed in this region, and to the actors involved in these projects. The aim is to identify how ESPON evidence can be used to asses territorial awareness and the interest in using territorial evidence base for partner and programme selection by programme participants. The main questions addressed in this case study are:

- To what extent are regional project actors aware of the territorial characteristics of their area and how do they value the ESPON perspective on their region?
- In what way ESPON evidence can be used to help programme level actors and project participants to distinguish between INTERREG A, B and C projects?
- If and how ESPON evidence can be used to improve participation in territorial cooperation projects?

5.1.1 Selection of case study region

For the selection of the case study region the following criteria were important:

- Sufficient evidence base from ESPON should be available to describe interesting territorial patterns of the region.
- The region should be part of a cross-border cooperation programme (INTERREG A) in addition to the INTERREG B NWE programme, to allow comparison between the different INTERREG strands.
- The region should have a clear and concise governance structure to be able to clearly identify the main actors involved in EU cooperation activities and their strategies.

Zeeland province was selected since the region has been an active participant in many INTERREG A, B and also C projects, both by the regional provincial authority and other actors within the region. The area can also be characterised very well in territorial terms on the basis of various ESPON studies and reports.

Zeeland is a province (i.e. region of NUTS 2 level) in the south western part of The Netherlands. The province is located on the border with Belgium and is dominated by the estuary of the Scheldt river. The province is divided in two NUTS 3 level areas:

- Zeeuws Vlaanderen, located on the southern bank of the Scheldt river (Westerschelde), borders directly on Belgium.
- Overig Zeeland covers the rest of the province and is composed of a group of islands and peninsulas in the estuary.

5.1.2 Approach

The tool demonstration combines an analysis of ESPON territorial evidence about Zeeland and of the INTERREG programmes covering Zeeland province, with interviews with a limited number of regional actors involved in territorial cooperation.

Four interviews were held: two with representatives of the provincial authority, one with a municipality and one with the University of Applied Sciences in the region. Respondents were selected that have considerable experience in both INTERREG A and B projects. They were interviewed regarding their territorial awareness, reasons for initiating territorial cooperation projects and the territorial aspects of these projects.



Figure 21: Location of the Province of Zeeland

5.2 A territorial profile of Zeeland region⁵²

On the basis of results from various ESPON studies a territorial profile of the province of Zeeland can be constructed. For the purpose of this case study and the exploration of Tool 15 a selection of ESPON studies and maps was made covering different territorial aspects that are particularly representative of Zeeland. The sample of ESPON material used for this regional case study consists of territorial parameters where Zeeland is standing out from the surrounding territories (rather than those where the area blends in a large homogenous territory). Of course this selection is not exhaustive, and much more ESPON material is

 $^{^{52}}$ The original ESPON maps used for assessing the territorial profile of Zeeland can be found in Annex 7 ESPON 2013

available that could be used for composing such a regional territorial profile. A selection of relevant maps corresponding to these ESPON studies is included in Annex 6.

The territorial profile that emerges from ESPON findings is presented below, and compared with the perception of actors from Zeeland.

Zeeland is a predominantly rural region. The ESPON project EDORA⁵³ addresses the present state and development perspectives of different types of rural regions in the EU. It presents a typology of rural regions according to their economic profile (2006 data): dominated by agriculture, Consumption Countryside (i.e. strong tourism based on rural qualities), diversified with focus on manufacturing or diversified with focus on services.

EDORA identifies Zeeland as a 'rural island in an urbanised sea'. It's the only rural region within the continuous predominantly urban zone of Flanders and the southern and western Netherlands. The NUTS 3 area of Overig Zeeland is labelled as Consumption Countryside, implying that here tourism (consumption of the rural landscape) is more important than agriculture (production aspect of the countryside). Zeeuws-Vlaanderen is presented as a diversified rural region with a focus on manufacturing.

Regional actors from Zeeland generally recognised this categorisation of their area as an emerging trend. Tourism is a growing sector presently (2010) offering 9% of regional employment, while the historically important agricultural sector is at 5% of employment and decreasing. Provincial policy for the rural area corresponds to the "Consumption Countryside" concept, aiming at further development of rural tourism and other activities building on 'consumption' of landscape and rural qualities. In practice this ambition faces opposition at local level from the agricultural sector that has a strong political representation. Land ownership and entrepreneurial skills are other challenges in the transformation process towards "consumption countryside". For new touristic activities, a different type of entrepreneur needs to move in, but these actors have no land ownership. For this reason some respondents noted that the "Consumption Countryside" status identified by EDORA is a potential future situation rather than the reality of today.

The label of Zeeuws-Vlaanderen NUTS 3 area as a diversified rural region is also recognised, as this area concentrates a large part of the regions' major industries and is less developed in tourism.

The ESPON project ReRisk⁵⁴ includes an analysis of the vulnerability of EU regions to energy scarcity and rising energy prices. To do so it ranks regions according to the share of regional gross added value (GVA) produced by industries with high energy consumption. This includes the industrial sectors food, chemicals, metal and mineral products.

Zeeland is among the regions with the highest dependency on industries with high energy costs. These account for 15.7% of regional GVA, ranking Zeeland 13th of all EU regions (2005). Other regions in this category are mainly found in Czech Republic, Spain and Mediterranean countries. Within the NWE area only Brabant Wallonia (BE) is in this range, while other regions surrounding Zeeland have considerably lower dependency on these sectors.

This high ranking of a rural region like Zeeland seems surprising. It was recognised however by respondents and can be explained from the presence of manufacturing plants of several multinational industrial companies producing aluminium, phosphates, fertilisers and various chemicals. These companies are based in Zeeland to benefit from direct access to seaports in Terneuzen (Zeeuws-Vlaanderen) and Vlissingen (Overig-Zeeland), as well as a nuclear power plant near Vlissingen.

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⁵³ EDORA - European Development Opportunities in Rural Areas (2010), as cited in ESPON Synthesis Report 'New Evidence on Smart, Sustainable and Inclusive Territories (2010 map 18, p.53).

Francisco on Sindia, Suddamass and Risk of Energy Poverty (2010), as cited in ESPON Scientific Report 'Scientific Dialogue on Cities, Rural Areas and Rising Energy Prices' (2010, pp. 69 – 71, map 4.1).

The ESPON study "The role of small and medium sized towns"55 identifies Zeeland as a region experiencing high urban influence, without having a city of considerable size inside its' territory. The study demonstrates that Zeeland is surrounded by regions with one or more larger cities. It points at the importance of networks of small and medium sized towns (SMESTOs) in providing economic and public functions in areas without major cities. It notes the particular importance of such networks in border areas, as nodes of cross border cooperation.

Respondents confirm that Zeeland is characterised by multiple networks of small and medium sized towns, in the absence of a major city. Networking between towns takes place mainly at the level of the different island/peninsulas within the provincial territory. Several large cities are within one hours reach in both The Netherlands (Rotterdam, Breda) and Belgium (Antwerp, Ghent).

In 2010 a formal network of the four largest towns in Zeeland has been set up. These are the provincial capital Middelburg, Vlissingen (both with around 45.000 inhabitants in 2010), Goes and Terneuzen (approx 25.000 inhabitants each). In this network these cities intensify their cooperation in the field of housing, business parks and other spatial development issues. They also aim to improve their joint positioning towards national and EU level policy makers.

An ESPON analysis of trends in accessibility⁵⁶ identifies the accessibility of the EU territory by air, rail and road, and those transport modalities combined (2006). This report shows that for each of these modalities accessibility of the Zeeland region is around the overall EU average. Zeeland is surrounded by regions in Belgium and southern and western The Netherlands, which have above-average accessibility on each individual modality. In this cross-border territorial context Zeeland is a region of relatively poor accessibility in its' direct territorial context. At the scale of the North West Europe area, Zeeland shares this characteristic with many other regions located in between major (national or cross-border) urban zones.

The accessibility patterns for air, road and rail transport and combined modalities are deemed correct by the respondents. The comparatively lower accessibility of Zeeland in its' wider territorial context (national, cross-border and transnational) is not perceived in the region as a negative thing. The area is perceived as being sufficiently close to major transport corridors and infrastructure links. More intense transport would be damaging to the tranquil, rural character of the area that is a key asset of the area ("Consumption Countryside"). Regional public opinion and provincial policies are aimed at preserving the present situation.

From the perspective of Zeeland, located at a crossroad of major maritime and inland waterways, the absence of accessibility data from ESPON related to water transport was seen as an omission. As explained above the presence of these waterways is a strong location factor, drawing major industry to the Zeeland economy.

ESPON published Territorial Observations on trends in population development⁵⁷. It identifies the regions that experienced population increase or decrease over the period 2001-2005, while distinguishing natural and migratory population balance. Zeeland is identified as a region with an increasing population, having both a positive natural and migratory population balance.

While this overall trend may be correct for the province as a whole, it does not reflect the issues related to population development that regional policies in Zeeland concentrate on. First of all, population growth at the provincial level has been slowing down for several years in a row, and in the near future a population decline is expected. More importantly, several

ESPON project 1.4.1 (2006, pp. 32-40).
 Territorial Observations No. 2 – Trends in Accessibility (2009, pp. 8-19).

⁵⁷ Territorial Observations No. 1 – Trends in Population Development (2008, pp. 6-8).

rural municipalities of Zeeland province are already experiencing considerable population shrinkage caused by ageing and by outmigration of families and young inhabitants. This demographic trend creates a downward spiral, with services, facilities and jobs withdrawing from the local communities, leading to further outmigration and deteriorating quality of life in rural communities.

An overall territorial profile emerges of Zeeland as a rural region that is under a certain influence of surrounding urban areas, located just outside the major transport corridors in north-western Europe, with a regional economy that has strong pillars in both industry and tourism and a population that has demonstrated a steady increase.

The above analysis shows that a realistic and largely accurate territorial profile of a region can be constructed with ESPON evidence. Information is available on a lot of relevant territorial typologies and indicators and regional actors generally recognise the way their area is characterised by these parameters. Respondents reported they were familiar with ESPON in general terms, but not with the concrete territorial evidence it provides. ESPON evidence had not yet been used for policy development at the provincial or local level.

It should be noted that these regional typologies or indicators remain at a rather general level, and are static. They do not always reveal development trends over time. Nor do they show specific regional circumstances like the (political) interpretation and appreciation or challenges in the sub regional sphere (see the example of population development). Moreover, they should be valued within their wider context to avoid misinterpretation (e.g. based on the high share of regional GVA in high energy industries Zeeland might seem an industrial rather than a rural region).

5.3 Territorial aspects of European Territorial Cooperation programmes in Zeeland

The INTERREG IVB North West Europe Programme is part of the EU Cohesion policy objective of European Territorial Cooperation (ETC). This ETC objective promotes different forms of cooperation among regions and Member States in the EU. The ETC objective envelopes three different strands of cooperation programmes, called: INTERREG A, B and C. These strands (that will be described in more detail below) differ in terms of their purpose and geographical scope. For each strand a range of themes is identified in the ERDF Regulation⁵⁸ that correspond to the major EU development strategies (Lisbon, Gothenburg, EU2020). These themes are broadly the same for the three strands of ETC.

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⁵⁸ European Regional Development Fund Regulation: 1080/2006, Article 6

Themes for European Territorial Cooperation Programmes (ERDF Regulation)			
INTERREG A Cross-border Cooperation	INTERREG B Transnational Cooperation	INTERREG C Interregional Cooperation	
 Entrepreneurship, development of SMEs, tourism, culture and cross-border trade; Joint management of natural resources; Links between urban and rural areas; Transport and communication networks; Joint use of infrastructure; Administrative, employment and equal opportunities work. 	 Innovation, especially networks of universities, research, SMEs; Environment, especially water resources, rivers, lakes, sea; Accessibility, incl. telecommunications, in particular completion of networks; Sustainable urban development, especially polycentric development. 	 Innovation and the knowledge economy; Environment and risk prevention. 	

Table 4: Themes for European Territorial Cooperation Programmes

Each strand is implemented through one or more multiannual Operational Programmes that cover different parts of EU territory. A geographical overlap exists between programmes of different strands (INTERREG A, B and C). And even among programmes of the same strand some degree of geographical overlap exists.

Each programme tailors the general thematic scope of the ERDF Regulation to the socioeconomic and territorial characteristics of its programme area. Given the strong similarities in the "thematic umbrella" provided for the three strands by the ERDF Regulation is not surprising that overlapping INTERREG programmes addressing the same territories address identical or similar thematic priorities. After all, they have to respond to the same socioeconomic and territorial situation. This situation is strengthened by two factors.

- INTERREG A, B and C programmes that address parts of the same EU territory are not prepared and written in a co-ordinated, interactive way. Rather they are developed in separate parallel and sometimes sequential processes.
- Most INTERREG programmes tend to cover all thematic areas that are open to them on the basis of the ERDF Regulation.

Against this background programme authorities and project actors may face the question which (overlapping) INTERREG programme is the best platform for a specific project initiative. This question should primarily be answered on the basis of the priorities and specifications defined for each individual INTERREG Programme. However, the stakeholders of the TranSMEC project have expressed interest in the possible use of ESPON evidence for this matter of distinguishing between INTERREG A, B and C projects.

This question is explored in the context of this regional case study. It allows a comparison of different programmes in each strand, covering one region, and reflects on how actors in this region approach their participation in the different programmes.

As a starting point for this exploration the three strands of INTERREG are further described below, focussing on their thematic, territorial characteristics (as possible links with ESPON), in particular of those programmes covering Zeeland. The use of these programmes by actors from Zeeland is then analysed. This leads to observations and conclusions regarding the use of ESPON for distinguishing between INTERREG A, B and C projects.

5.3.1 INTERREG A – Cross-border Cooperation⁵⁹

This strand aims at the socio-economic development of regions on either side of EU internal borders and to remove barriers imposed by these borders. There are 52 INTERREG A programmes that typically cover a relatively small territory of regions directly next to a national border. Most programmes cover parts of two countries, but a few cover three, four and even five Member States.

The national border is the "raison d'être" for each programme and determines the geographical scope of a programme. Most programme areas are relatively small and are rather homogenous in terms of territorial characteristics and socio-economic development. However, differences exist in this respect, depen55ding on the specific territory addressed. For instance programmes addressing borders between 'old' and 'new' EU Member States face considerable territorial disparities on both sides of the border. Also cross-border programmes covering territories from multiple (four or five) countries, or addressing maritime rather than land borders, are more territorially diverse.

Projects supported by INTERREG A programmes typically focus on concrete activities or investments in one clearly delimited, continuous territory on both sides of the border. Their project approach tries to bridge cross-border challenges within one similar territorial pattern.

Zeeland is part of two partly overlapping INTERREG A programmes that differ considerably: Flanders – Netherlands and '2 Seas'.



Figure 22: Eligeable area INTERREG IVA Flanders - Netherlands (http://www.interact-eu.net)

INTERREG IVA Flanders - Netherlands covers the NUTS 3 areas along the Dutch-Flemish border. The programme aims to develop a strong and sustainable region by cross-border cooperation on the following thematic priorities:

⁵⁹ The programme area maps in the following paragraphs are taken from DG Regio: http://ec.europa.eu/regional_policy/atlas2007/index_en.htm

- 1. Economic development: in particular support to entrepreneurship and innovation, linking academic and business world in R&D and supporting cross border business activities;
- 2. Environment: in particular protection of natural resources and risk prevention;
- 3. People: including culture, social integration and social care.

This programme covers a rather homogenous cross-border territory, with favourable economic conditions, a good urban-rural balance and well developed cross-border integration.

INTERREG IVA '2 Seas' addresses the maritime border presented by the North Sea and Channel. It includes coastal regions in the southern and eastern UK, northern France, Flanders and south-west Netherlands. The programme aims to develop the competitiveness and sustainable growth of the area through partnerships for cross-border cooperation. The following priorities are identified:



Figure 23: Eligeable area INTERREG IVA '2 Seas' (http://www.interact-eu.net)

- 1. Economically competitive, attractive and accessible area including the maritime economy, innovation and research infrastructure, entrepreneurship and business development, tourism, accessibility;
- 2. Safe and healthy environment, e.g. combating pollution, waste management, waste water treatment, environmental risk prevention;
- 3. Quality of life, addressing health, security, cultural exchange and equal opportunities;
- 4. Priority for joint activities with adjacent France-England INTERREG programme.

The programme covers a relatively large territory with very diverse regions that are physically far apart (e.g. Cornwall and Zeeland). Having the sea as a common border makes it difficult to define joint actions addressing one continuous cross-border territory. Due to the size, number of countries involved and the specific character of the sea border, this programme differs from the "typical" mainly bilateral cross-border programme and has characteristics that resemble a transnational (INTERREG B) programme.

5.3.2 INTERREG B – Transnational Cooperation

This strand (to which the NWE programme belongs) promotes cooperation and facilitates coordinated strategic responses to joint challenges in larger EU regions. The 13 INTERREG B programmes each cover a large section of EU territory. The geographical delimitation of programmes is based on the presence or dominance of certain territorial characteristics or challenges that are shared across the territories, like sea basins (Baltic Sea), mountain ranges (Alpine Space) or strong urbanisation (North West Europe). INTERREG B programmes typically cover multiple Member States (three up to eight) and include large parts of EU Member States or even whole countries.

The programme areas, even though constructed around shared characteristics, are not homogenous. Due to their geographical size and number countries involved considerable differences in economic, social and territorial characteristics are inevitably found within every programme area.

INTERREG B projects deliver actions and investments related to a shared challenge by actors from different parts of the area. In many cases these actors are spread over the NWE area and do not cover a contiguous territory. However, also projects building on a continuous territorial feature (e.g. a river basin or transport corridor) occur. INTERREG B projects are less likely (compared to INTERREG A projects) to have an impact on the whole programme area. Rather their effects can be observed in sub-regions of the larger programme area, or in specific types of territories (e.g. cities, coastal regions) spread over the programme area.

Zeeland is in two INTERREG B Programmes: North West Europe and North Sea Region.

INTERREG IVB North West Europe covers the entire countries of Ireland, UK, Belgium, and Luxemburg and northern France, the south of The Netherlands and southwest Germany, with the participation of Switzerland. The programme aim is to find innovative ways to make the most of territorial assets and tackle shared problems of Member States, regions and other authorities, through the following priorities.

- Knowledge based economy and innovation: promote entrepreneurship and transfer of innovations, develop growth clusters and SME networks and strengthen the innovation framework;
- Natural resources and risk management: including water, landscapes, biodiversity, energy and waste management, risk management and prevention in the context of climate change, improving soil, water and air quality and reducing greenhouse gas emissions and noise pollution;
- 3. Improving connectivity: optimisation of existing passenger and freight infrastructure, innovative systems on land water and air and innovative ICT use to improve connectivity;
- 4. Strong and prosperous communities: enhance socio-economic performance of cities, towns and rural areas, environmental quality and attraction of towns and cities, responses to demographic change and migration.



Figure 24: Eligeable area INTERREG IVB North West Europe (http://www.interact-eu.net)

In territorial terms the NWE area is mainly characterised by the metropolitan, highly accessible economic core area of Europe (the 'Pentagon') that is largely within this programme. However, in the area are also regions that are rather remote at the EU scale and less strong economically, making NWE quite territorially diverse.

INTERREG IVB North Sea Region covers the North Sea coastal regions of Belgium, Denmark, Germany, UK, Netherlands and Sweden, with participation of Norway. The programme aim is to make the North Sea a better place to live, work and invest in through the following thematic priorities:



Figure 25: Eligeable area INTERREG IVB North Sea Region (http://www.interact-eu.net)

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- 1. Innovation: encourage partnership between business, industry, researchers and universities to promote innovation, strengthening clusters and SME networks and increasing ICT use;
- 2. *Environment*: prevent and counter marine pollution, support integrated coastal zone management and marine ecosystems, addressing the risks of climate change, sustainable energy production and promote a low carbon economy;
- 3. Accessibility: transnational concepts for an efficient transport system, development of multi-modal transport corridors, transport monitoring;
- 4. Sustainable and competitive communities: Strengthen urban and rural areas with particular support for areas suffering from economic and population decline and energy efficiency.

This programme is composed around a very distinct territorial feature: the North Sea. However, the array of coastal regions involved is quite diverse, including both urbanised, rural and rather remote areas.

5.3.4 INTERREG C – Interregional Cooperation

INTERREG C deals with the exchange of experience and best practice between local and regional actors from all parts of the EU. It is implemented through one pan-European programme involving all EU Member States with participation of Norway and Switzerland. The programme is based on the intrinsic diversity of EU regions and territories, and it targets the transfer of knowledge and good practice from more experienced to less experienced regions. In line with these principles, the programme requires a mandatory involvement of partners from the four 'corners' of Europe. The thematic priorities of the programme are:

- 1. Innovation and the knowledge economy;
- 2. Environment and risk prevention.

Projects supported by this programme concentrate on networking, exchange and transfer of knowledge, capacity building etc between relevant partners throughout Europe.

5.3.5 Participation in INTERREG by partners from Zeeland

Actors from the province of Zeeland have been active participants in INTERREG projects for many years. The table below presents an overview of all INTERREG projects that had participation by one or more partners from Zeeland in the period 2000-2010. Projects are listed per programme, and grouped in four thematic categories that cut across the thematic priorities of all three strands of INTERREG programmes⁶⁰. This thematic categorisation allows a comparison between programmes that have each presented their similar thematic priorities in a different way.

Actors from Zeeland participated in a total of 50 projects in the 2000-2010 period. There is a fairly equal balance between INTERREG A and B programmes with 25 and 22 projects respectively.

Projects dealing with issues of environment and climate form the largest category (20 projects). Partners from Zeeland show a preference for the INTERREG B programmes for their cooperation activities on this subject (11 out of 20 projects). This can be related to the fact that climate and environmental issues tend to affect large territories, spanning several countries.

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⁶⁰ These thematic categories are developed by the INTERACT programme for use in the KEEP database of European Territorial Cooperation Projects (www.territorialcooperation.eu).

Pro	Projects with partners from Zeeland region by theme (2000-2010) ⁶¹					
INTERREG Programme		#	Economic development	Environment & Climate	Accessibility	Quality of Life
Α	2 Seas ⁶²	6	2	1	1	2
	Flanders – NL	19	9	5	1	4
В	North Sea Region	13	1	6	2	4
	North West Europe	9	2	5	2	_
С	INTERREG C	3	-	3	-	-
All projects		50	14	20	6	10

Table 5: Projects with partners from Zeeland region by theme (2000-2010)

Projects that relate to economic development are mainly developed in the INTERREG A programmes (11 out of 14 projects). In particular the Flanders-Netherlands programme is used frequently for this topic (nine projects). This suggests that cooperation on the economy tends to focus on practical, operational activities on the ground, within the continuous territory shared with the Flemish neighbours.

Participation in INTERREG C projects has been less frequent and only related to the issue of Environment and Climate. Between the INTERREG B programmes Zeeland actors seem to have a slight preference for North Sea Region over North West Europe (13 vs. nine projects).

5.3.6 Perceptions of INTERREG participants from Zeeland

During the interviews the actors from Zeeland were asked in which way territorial aspects are considered for developing their INTERREG projects, selecting the most appropriate INTERREG programme and identifying suitable regions/partners for territorial cooperation.

Respondents all stated that they do not perceive a fundamental thematic distinction between the programmes in the INTERREG strands A and B. All four programmes available to Zeeland in these strands cover largely the same thematic fields, with only differences in emphasis at the sub-thematic level.

Respondents rather distinguish between programmes at an operational level. INTERREG A projects should tackle more concrete problems, are less strategic, more implementation oriented and lean more heavily on visible local investments. There tends to be a stronger sense of local problem-ownership that is shared by all partners. INTERREG B projects should be the more ambitious in terms of strategic impact and are expected to define an additional strategic input in the framework of a rather general programme strategy. They generally lead to less visible results due to the financing conditions, that are perceived as restrictive for tangible investments.

The INTERREG A programme 2 Seas is perceived by respondents as a "small transnational programme" rather than a "typical cross border programme", given the geographical size of the programme area, the number of countries involved and the topics it addresses. Respondents see the programme as an equal and attractive alternative for the fully overlapping INTERREG NWE Programme. 2 Seas is seen as more easy to access (in particular regarding the requirements to applications), but with similar thematic and partnership possibilities.

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⁶¹ Based on project data from the various INTERREG programmes.

⁶² Data only for the period 2007-2013. This programme did not exist prior to 2007.

The province of Zeeland noted that a phased approach to project development can be applied that builds on the distinctions between INTERREG strands. This implies starting a new initiative in INTERREG A, working in a smaller area with a limited partnership and a reasonable level of ambition. If the initiative is successful, it could be the starting point for a larger INTERREG B project covering a larger area and on a higher level of ambition.

Within the INTERREG B strand, Zeeland province is more active in the North Sea Region (NSR) programme. This appears closer to provincial priorities and Zeeland can relate more closely to potential partners in NSR when topics could be addressed in both B programmes. For instance climate change, sustainable construction, small communities, living on the coast, vital rural areas, coastal protection.

Cooperation within the NWE programme is mainly concentrated on issues relating to the Scheldt river and to logistics. On these issues Zeeland is very much linked to the NWE area by territorial corridors (the Scheldt and the north-south transport corridor Amsterdam-Paris).

The INTERREG C programme is seen as a less interesting possibility by some respondents. This is mainly due to the emphasis in this programme on knowledge exchange and the impossibility to fund investments or material outputs. Other perceived downsides are the low success rate of applications and a lack of same "mentality" in an EU-wide partnership.

In the composition of a partnership thematic and territorial complementarities are key criteria. Respondents identify suitable cooperation partners mainly through existing international networks and dedicated partner search facilities offered by all INTERREG programmes. They consider accessible information on territorial characteristics of regions (i.e. ESPON maps) as an interesting additional instrument for identifying cooperation partners that match the theme of a certain cooperation project.

Respondents also pointed at restrictions of this use of territorial evidence. The analysis of the territorial profile of Zeeland (paragraph 3.2 above) shows that territorial evidence can reveal general territorial characteristics of a region, but does not show specific regional policy responses, appreciations or issues related to a territorial feature. In practice regions with a good territorial match may have little common ground, while partners from 'unexpected' regions could prove valuable cooperation partners.

Respondents underlined that partnership building is a diffuse and individual process that also involves such intangible matters as personal 'chemistry' and political will. Therefore, a good INTERREG project partnership will in reality always be a partnership of those that are 'willing, and most suitable'.

<u>5.4 Conclusions and recommendations about the use of territorial evidence for INTERREG participation</u>

Territorial awareness and use of ESPON evidence for project development

The analysis of the territorial profile of Zeeland shows that an adequate and characteristic picture of the territorial situation in a region can be constructed by combining territorial indicators and typologies from an array of ESPON results. Actors in the Zeeland area that participate in INTERREG show a strong territorial awareness of the situation in their region and could generally confirm the profile of their area that emerges from the ESPON evidence.

ESPON evidence can be an effective source of territorial information to inform or validate general regional policy directions. However, for the definition of concrete regional policy responses and projects, information of a much more specific regionalised nature is essential.

Using territorial evidence for project assessment

The analysis of the case study also reveals some limits of the possible use of ESPON territorial evidence in the context of European Territorial Cooperation projects:

- Territorial evidence at the level of the overall EU territory (as is the case in most ESPON studies) can not reveal specific challenges of a region within a thematic field. For instance land ownership being an obstacle to the development direction of "consumption countryside" in Zeeland.
- Nor does it reveal the actual appreciation given to a certain regional position on a territorial indicator. In Zeeland the relatively modest accessibility situation is seen as a strength, while other regions could see this as a weakness.
- Territorial evidence may be missing on certain territorial parameters that may be relevant in a regional context, like for instance accessibility by water.
- Territorial evidence may not reflect the (perceived) reality in a region. In Zeeland the debate about population development is dominated by population shrinkage at the (sub-) regional level, while ESPON results point at regional population growth. This type of discrepancy can emerge in particular when statistical data used for ESPON research is a few years old and no longer in line with the territorial reality in a region.

It is precisely this more detailed and concrete level of regional challenges, policy responses and political realities that constitute the content of European Territorial Cooperation / INTERREG projects. This implies that, while territorial evidence can provide relevant information about the territorial context of INTERREG projects, it should only be approached carefully (and might need additional validation) in the context of assessing the relevance or quality of a project.

Using territorial evidence to distinguishing between INTERREG A, B and C projects

The analysis of INTERREG programmes in Zeeland shows that there is no clear substantial difference in thematic terms between the programmes in the A and B strands. In particular the three programmes with the largest geographical overlap, NWE, Flanders-Netherlands and 2 Seas, have quite similar priority themes. This can be explained from the fact that these priorities are defined by the territorial and socio-economic challenges of (part of) the same area.

The main factors to distinguish between INTERREG A, B and C projects (objectively, i.e. based on the characteristics of individual strands and programmes) are the geographical area targeted and origin of the partners and the type of activity (investments, knowledge exchange, strategy development) proposed by the project. These factors are not territorial in nature, but rather strategic and operational elements that have been determined by the governing bodies of each INTERREG programme as their core values.

This phenomenon is illustrated by the fact that INTERREG participants approach the INTERREG A 2 Seas programme as a "small transnational programme". This suggests a continuum of different types of INTERREG programmes rather than a very clear distinction between an INTERREG A versus an INTERREG B project. INTERREG C projects are of a clearly different nature given their EU-wide geographic scope and exclusive focus on exchange of knowledge activities.

In this context it is not feasible to apply ESPON territorial evidence as a tool to determine to what (overlapping) INTERREG programme a project fits best.

Using territorial evidence to identify potential project partners

INTERREG participants that are looking for partners for their cooperation projects could benefit from easily accessible information on territorial characteristics of regions in the form of ESPON maps. These could provide an additional instrument for identifying cooperation partners that match certain territorial criteria, outside of their familiar networks and acquaintances.

It should be noted here again, that territorial evidence at the general EU level can not reveal the exact challenges and policy approaches of particular regions. However, the ESPON information could provide an additional and complementary source of information to enrich the partner search process.

6 Reflection and outlook

6.1 Reflection of process and outcomes of the TranSMEC project

TranSMEC "Transnational Support Method for European Cooperation", as an ESPON Targeted Analysis launched and specified by the NWE programme as Lead Stakeholder, elaborated different levels and perspectives on how transnational cooperation can be supported by the further and more specific use of available visual ESPON data. Current policy settings – as the TA2020 by calling for increased integration of territorial aspects into all phases of the programme and project development cycle – as well as the current state of the INTERREG programme cycle and future programming perspectives beyond 2013 give the TranSMEC project a significant actual relevance.

As set up by the stakeholders TranSMEC had a highly explorative character and it represents a pioneer study which could function as a door-opener for establishing new uses of ESPON data within the programme cycle of the NWE or other territorial programmes.

Within the wide scope of the project 15 different operational tools for the "Support of Transnational Cooperation" were developed which pave the way to increase the integration of territorial evidence into activities in the fields of programme dissemination, monitoring, steering and capitalisation.

The project was based on the screening of all finalised and running ESPON projects in order to identify their potentials to provide relevant visual data for further elaborations to support transnational cooperation. Suitable evidence base was identified along a catalogue of topics regarding the policy context of transnational cooperation as well as of the main thematic objectives of the INTERREG B North West Europe Programme (under IIIB and IVB). Through this process, on the one hand, some gaps were identified where visual territorial data is not directly available through ESPON project results in order to cover the full scope of the themes addressed by NWE. On the other hand, the elaboration of ESPON data sources revealed huge potentials to open up new territorial perspectives on the programme performance and implementation of the NWE programme (and potentially other territorial programmes).

Different methodological options – so-called TranSMEC tools – were developed by processing ESPON maps and superposition them with accumulated project data of the databases of NWE IIIB and IVB. According to general requirements and needs of the NWE programme in the fields of dissemination, monitoring, steering and capitalisation, the TranSMEC tools were developed through an iterative process of approaching relevant ESPON and NWE data –always reflecting potential requirements of the NWE programme and possible methodological options.

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As a result of this process a set of interesting operational tools can be presented which help to process territorial data in order to gain new territorial perspectives on the programme performance and which allow making use of territorial evidence within the different phases of the programme cycle.

In line with the foreseen comprehensive approach of TranSMEC and its explorative character, the application of tools was demonstrated along overall-programme as well as specific thematic foci (considering all priorities and sub-priorities⁶³ of the NWE programme). By applying the tools in different contexts – for which matching data was available – some highly interesting findings and new territorial perspectives on the programme performance were revealed and discussed. Interesting overlay maps were produced which could be further processed at programme steering and monitoring level and, practically, be used as "visual communication tools" for highlighting specific territorial evidence.

The "change of perspective" from transnational observations to the elaboration of territorial needs and choices of the project actors at regional level carried out as regional case study of the Zeeland region revealed the potentials and limits of supporting transnational cooperation by ESPON evidence base at regional level.

According to its holistic approach TranSMEC provides conclusions at different levels, on useful data approaches, data availability and suitability between the two ETC programmes as well as valuable insight to new territorial perspectives on the programme performance (without being meant as an evaluation of the NWE programme). Furthermore and according to the comprehensive approach many conclusions could also be derived for the further collaboration of the two programmes. The most important points for the uptake of the TranSMEC tools and further collaboration of ESPON and INTERREG are summarised and further discussed in the following chapter (6.2).

Regarding the methodological opportunities of superposition of ESPON and data available from transnational cooperation programme, it has to be pointed out that during the work on TranSMEC it became very obvious that data processing possibilities could by far not exhaustively elaborated. The TranSMEC exercise has revealed that ESPON – considering the programmes structures and capacities – is not ready to deliver evidence base that corresponds accurately to the different priorities or sub-priorities of the NWE Programme. And as the project themes are devolved bottom-up within INTERREG a "thematic match" at project level can only represent a random success. Further targeted approaches of making use of different types of territories could bring added value to further transnational territorial analysis (for instance by differentiating territorial performances in coastal-inland or urban-rural areas).

However, the set of tools presented by TranSMEC open up very concrete options and future perspectives how territorial evidence base could already be integrated to different programme activities.

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⁶³ Under INTERREG IIIB NWE Programme (2000-2006) the strategic themes were set up in five priorities and two sub-themes, called "measures" for each priority. Under INTERREG IVB NWE Programme (2007-2013) the sub-priorities are called "objectives". In order to avoid misunderstandings TranSMEC uses the term "sub-priorities".

6.2 Recommendations for the uptake of the TranSMEC tools and further collaboration of INTERREG and ESPON

Considering the starting point of TranSMEC, that the project responded to the facts that the NWE programme lacks "means to aggregate territorial outputs delivered to make them more visible to the outside world" as well as "means to identify key territorial potentials, themes and regional stakeholders to respond to more strategic issues" TranSMEC has delivered the requested "means" in shape of the different tools presented which offer broad and new opportunities to process territorial data in support of transnational cooperation. A spectrum of methodological options has been developed and demonstrated in the context of how territorial evidence can be used to support important programme activities and interventions (in the fields of dissemination, capitalisation, monitoring and steering).

Although there are some tools which could be considered and implemented directly into ongoing programme routines, it is to be expected that the implementation of the tools (understood as means) could unfold even stronger benefits when their use is embedded in the context of a "refined territorial strategic framework".

Currently the territorial strategic framework of INTERREG B is laid down in the Operational Programme. Successful project applications represent a response to this territorial cooperation framework. There is, of course, already a territorial dimension in the programme implementation e.g. given through the assessment and selection of projects (e.g. "relevance for NWE") or within specific monitoring emphases reflected by programme-internal "gap analyses". TranSMEC has successfully shown how the use of territorial data could be extended in order to integrate ESPON evidence into their activities (e.g. into on-going monitoring and evaluation exercises or by revisiting the OP or communicating aggregated programme data in a territorial context).

Given the complexity of the territorial framework and the pioneer role of TranSMEC, the tools should be maybe, in a first step, be used to give transnational programmes new opportunities to support discussions about "territorial strategic viewpoints" on the programme implementation.

The thematic elaborations of TranSMEC (which were not meant to follow an evaluation scheme) already showed some interesting findings which could be taken up in future strategic discussions at programme steering and monitoring level (cp. Main thematic conclusions 4.6)

For instance, TranSMEC clearly demonstrated that in many different thematic examples participants that successfully enter a transnational cooperation in a specific field tend to come from respectively "strong-performing" regions and that there are many peripheral areas which do not take part in the NWE programme (cp.4.6) Regarding the current policy background, the EU2020 strategy and especially the TA2020 emphasising the territorial dimension of the inclusion objective, it would be recommendable to discuss specific programme monitoring and steering objectives accordingly. It has to be highlighted in this context, that the instruments of transnational cooperation have a huge potential to include "weaker partners" and to ensure influx of knowledge and problem solutions into these regions. But, adequate strategic settings would have to be made at programme steering level.

Since the tools developed by the TranSMEC project have much potential to be taken up in the different fields of programme implementation, in the following, their use should be reflected again briefly regarding different (strategic) purposes. It should be pointed out that the tools presented here cannot be used in a "mechanical way". In order to serve as

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⁶⁴ cp. Project specifications, cp. Chapter 1.1 ESPON 2013

evidence base for action, good knowledge about the territories and the ability to interpret the findings accordingly is essential for their use.

Although the current progress of the INTERREG IVB NWE programme can and has been considered (around 75 % of the ERDF for projects already committed) within the reflection of possible uptake of the tools, the TranSMEC project group — without being part of the programme management circle — can only point at potentially useful "application scenarios". It also has to be stated that only selected examples should be highlighted in this reflection.

Uptake of TranSMEC tools for programme steering

The use of further territorial evidence base could principally be considered for any "proactive" or "strategic" programme intervention. The TranSMEC tools offer various options which can deliver a robust decision-making basis that can be referred to for the justification of steering decisions. Furthermore, the specific overlay maps could be able to facilitate the decision-making process through a sufficient level of detail.

According to the nature of transnational cooperation programmes NWE can be described as a "catch-basin" for transnational project activities. In the framework of the OP and the guidance accordingly, NWE follows a clear bottom-up logic. The programme is therefore responsive to local and regional needs within its defined territorial cooperation area. Therefore, programme steering is, in the first place, expressed through decisions on project approval. Although several options are imaginable, based on experiences from previous and other programmes, it has to be mentioned that, the NWE IVB programme, so far, has never set any "hard" interventions to steer the bottom-up demand. All calls for project proposals have been open to all priorities and sub-priorities (objectives) and eligible project actors so far. "Good quality projects" are overall stimulated by the involved programme bodies; a budget shift between the priorities, to keep all project development options open, is envisaged. "Geographical and thematical gaps" (so far with only limited consideration of territorial background data) are monitored and partly used as background guidance for programme activities (e.g. thematic workshops on priority level, choice of venue for programme info events).

Against this background it is generally difficult to foresee in how far the uptake of the TranSMEC tools, which partly imply more intensions for programme interventions, is requested and feasible. But, it should be stressed again that the TranSMEC tools could add a territorial dimension to the programme implementation strategy or could, in a first step support the facilitation of relevant discussions at programme steering level.

In order to demonstrate the potential of integrating ESPON territorial evidence in crucial programme steering decisions, for instance, TranSMEC Tool 10 was developed to assist thematically targeted calls through identification of territorial challenges along superposition of ESPON and NWE data. Regarding the current state of programme implementation, it could be considered by the programme steering bodies to aim (still) with the remaining funds for new projects at regions whose specific territorial potentials could not have been activated so far. This tool allows the use of ESPON data for identifying differences in programme coverage concerning specific territorial features. Mixing the NWE programme participation with thematically corresponding territorial evidence base might allow the identification of territorial "gaps". These "gaps" are represented through an "inverted" overlay map that highlights the territorial patterns of regions that have not participated in the programme.

On a territorially further elaborated basis, programme bodies could set a ratio for the
participation of underrepresented territories in subsequent calls, or even adopt a more
proactive approach by favouring a specific strategy in the project development process.

⁶⁵ www.nweurope.eu ESPON 2013

- Additionally, and depending on political decision, the choice could be made either to strengthen well performing regions in "excellence logic" or to favour territories with lower performance in a "catch up logic". Not all priorities or themes are fully relevant for such an approach. The themes with low territorial basis are more appropriate. For instance, Priority 1 and its three sub-priorities seem adapted to such an approach.
- Furthermore, Tool 11 Assisting project development unit or project actors to select partners in highly profiled territories offers more options, which could be elaborated in collaboration with ESPON (see following chapter 6.2).

The NWE IVB programme has already elaborated and implemented some top-down programme steering approaches – within the framework of the Strategic Initiatives⁶⁶. Although comprehensive approaches have already been put in place, the TranSMEC results could be used in order to open up again the discussions about potential territorial approaches in the field of Strategic Initiatives (cp. 5, NWE OP p. 87). Or, if requested, thematically driven existing approaches as the thematic clusters of approved projects or the strategic top-down projects could be further elaborated from a territorial view point.

Uptake of TramSMEC tools for programme monitoring

Although the TranSMEC project had to limit its approach to potential cross-references between visual ESPON data and the NWE programme data bases, the project's results are not only of use for dissemination activities, but the developed tools also provide a wide usability spectrum on how programme monitoring activities could be supported with a territorial evidence background.

The programme monitoring of an INTEREG B programme is a very complex case which is, nowadays, carried out by sophisticated IT systems for overseeing the on-going programme implementation based on project data. Without any further insight or elaboration⁶⁷, the Programme Monitoring System (PMS) of NWE already offers a variety of means to observe tendencies, territorial and thematic coverage by new analysis reports installed. TranSMEC, based on the screening of available visual ESPON data, revealed a set of methodological options how the programme performance (aggregated project data) can be displayed in various territorial context – considering important territorial aspects for instance at priority or sub-priority level. NWE could introduce available accessible background visualisations from ESPON as cross-reference. Instead of showing the programme performance on the background of a geographical maps of Google maps (as currently performed in the PMS), it would be promising to elaborate opportunities for embedding relevant ESPON data in these reporting functions.

Regarding the close connection between programme monitoring and steering level, programme monitoring and the analytic processing of data often serves as basis for crucial decision-making at steering level. TranSMEC presented several interesting options how aggregated project data can be presented in the context of territorial evidence provided by ESPON. TranSMEC could demonstrate in different contexts how the NWE programme performance can be displayed against the background of territorial evidence base, also regarding longer timelines. As already explained above (in the context of programme steering) on-going "gap analyses" regarding geographical, stakeholder as well as thematic coverage the TranSMEC tools could offer valuable support for further more integrated territorial analyses.

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⁶⁶ The Strategic Initiative of NWE comprise: top-down strategic projects (thematically specified), bottom-up strategic projects (with a especially good assessment scores) and thematic project clusters www.nweurope.eu ⁶⁷ Potentials for linking and harmonising the data monitoring system of NWE and ESPON have not been subject of this study, but would probably be worth further investigations.

- As an example, Tool 2 (Variation between the number of participating partners OR the ERDF budget spent) as well as Tool 13 (Differentiating NWE participant groups and cross-reference with ESPON evidence) provides new options how to analyse programme performance from a territorial perspective. Due to its conceptual framework, TranSMEC could only apply the tools in an demonstrative way, but by further elaborations adjusted to specific needs (or strategic requests) the NWE programme could take up different options to process ESPON data as shown within TranSMEC.
- Furthermore, TranSMEC elaborated tools, designed in a way that allows dynamic and swift feedback loops between the current state of approved projects and the general objectives of the programme. Due to improved IT capacities both within the ESPON CU as well as the INTERREG JTS, new options emerge for using ESPON maps for monitoring purpose. TranSMEC Tool 7 "Annual Programme update" demonstrated how a map from the SWOT analysis could serve as a "territorial evidence background" to be connected to a NWE project database (PMS). Incoming data of newly approved consortia could fill up this map and give dynamic and immediate feedback circle on territorial evidence. The progressive involvement of NUTS 2 territories can be displayed (approved projects) and tendencies could be analysed ("Do approved projects tend to follow a specific pattern? Is this development consistent with ESPON territorial evidence? Which potential corrective measures could be envisaged for subsequent years?"). The latter questions would then be closely linked to programme steering discussions and activities.

Uptake of TramSMEC tools for dissemination:

- Reflecting the process of TranSMEC, the focus on visual ESPON data and the methodological options to process overlay maps, it can be stated that TranSMEC opened up various new opportunities to highlight programme impacts and successes in the context of territorial evidence. It could be demonstrated in many different contexts how overlay maps can transport easy-to-read information on the "territorial performance" of the programme. Overlay maps can ensure that the information is at the same time easily understandable and able to highlight either overall programme achievements or interesting particularities. Interesting storylines could be built up along chosen (strategically important) dissemination targets and be presented by means of the TranSMEC tools in form of meaningful overlay maps.
- Principally overlay maps can be used to better communicate the territorial challenges of NWE and position the achievements of the programme using an additional territorial context. The dissemination activities of a transnational cooperation comprise various different target groups. Overlay maps can, when reduced to a minimum of information, contribute significantly to simple, easy to understand visualisations that can be easily explained to a specific target audience.
- Especially the following tools offer high potential to be used for dissemination purposes: Tool 1 Visualising the NWE programme area in a wider European context, Tool 4 Zoom into parts of the NWE territory, Tool 5 Revisiting ESPON maps of the OP, Tool 6 Filtering complex data sets for improved visualisation and Tool 9 Comparing/Aggregating the programme performance from two programming periods.
- For instance, Tool 5 offers an interesting view on how ESPON maps used in the INTERREG Operational Programme can be revisited. The tool demonstrates the possibilities for using ESPON evidence as a 'territorial baseline' of the situation of the programme area. Through superposition of aggregated project data (reflecting the programme performance) these maps can provide a strong visualisation tool to communicate the programmes' success in targeting those parts of their area that correspond with a certain thematic priority. In the demonstration of the tool, as an

- example, it was presented that the programme succeeded in the Spatial Vision⁶⁸ objective to "strengthen the metropolitan areas".
- It is recommended to consider the different presented options of processing visual ESPON data in case the communication strategy of the programme is revised or adjusted to the dissemination needs of the advanced programme cycle.
- Planned dissemination tools could benefit from demonstrated options on how to put aspects of the programme performance into the light of territorial evidence. As practical example, measures within the NWE communication plan (e.g. publications as "The story so far..." could elaborate the tools in order to show programme performance in the context of ESPON territorial evidence base.

Potentials for uptake of TranSMEC tools for capitalisation:

- Capitalisation in the context of INTERREG B represents the facilitation of the use of results obtained through successful INTERREG IIIB NWE (and later IVB) projects for future strategic planning and follow-up activities. The tools elaborated by TranSMEC could be used to pave the way for concrete activities at programme steering level aiming at building-up on already existing achievements. The communicative quality and effect of overlay maps could be used to target on specific aspects of the programme performance which should serve further capitalisation activities.
- For capitalisation purposes and related activities especially Tool 6 Filtering complex data sets for improved visualisation and Tool 12 Working with ESPON typologies for new, emerging themes could be of great use (cp.3). Processing and communicating chosen aspects of the programme performance in the territorial context could help to steer activities and investments in targeted directions.

6.3 Perspectives for future collaboration of ESPON and INTERREG

It can be stated that the ESPON territorial evidence base has a vast potential to support and facilitate the full range of procedures in an INTERREG B programme. However, the work on TranSMEC also revealed that a closer coordination of the two programmes is highly recommended through all phases of the complete programme life cycle. TranSMEC would like to highlight the various potentials and some practical ideas of future collaboration of the JTS and the ESPON CU towards a mutual benefit for the two programmes. The broad elaboration of the use of ESPON data (for programme activities in the fields of dissemination, capitalisation, monitoring and steering) leads to the main conclusion that it would principally be possible to make INTERREG more "territorially aware" throughout the complete programme life cycle. The different phases of the programme life cycle of an INTERREG B programme, as the development of the Operational Programme, the project application, selection and implementation phases as well as different evaluation phases, could be supported by further processing and use of territorial data. In the following, some practical proposal should be given which could function as orientation for further collaboration.

⁶⁸ The Spatial Vision comprised three thematic studies. The themes of the studies mentioned are: 'Polycentric territorial development in NWE', 'Parity of access to infrastructure and knowledge' and 'Sustainable management of the cultural and natural heritage'.

⁶⁹ http://www.nweurope.eu/

Preparation of the Operational Programme

Within the preparation of the Operational Programme for the NWE programming phase 2007-2013, ESPON maps and ESPON information was used. Generally spoken, most of the INTERREG B programmes are aiming at incorporating ESPON evidence base, most often by using maps. The way to obtain these maps is not formalised and results in oral agreements about the needs and the availability of information. This process might be streamlined as follows:

→ Co-ordinated meetings to obtain available ESPON information

Within the programme development phase, a SWOT analysis of the programme regions represents the core basis for the definition of the programme priorities. Within this phase, the need for evidence base is very significant and crucial. The developers of the Operational Programme and cooperation between the programmes could be more synergetic when they carry out a structured meeting which could be anchored in the programme development process as a fixed operational step. Due to the fact that also ESPON is an ERDF-financed programme, the thematic columns of ESPON are similar to the ones that are studied in the course of the SWOT analysis of the INTERREG B region. As a consequence, especially the integrated ESPON documents like "Synthesis report" (Territorial observations" or "Scientific report" could be used as the basis for a meeting that focuses on the respective programme area. Due to the fact that most of the information from the integrated reports is derived from project contributions, a closer reflection on the background of specific maps might be interesting as well. Here, the meeting could establish the connection between the project authors and the INTERREG programme developers or reveal valuable background information.

→ "Targeted Analyses light" as preparatory contribution for the programme development

For the preparation of the transnational and interregional INTERREG interventions, a structured and well-defined desk research in the existing ESPON evidence base might not be sufficient. It might be recommendable presenting a sub-format of a targeted analysis. Within such a process, a compact exercise could identify all relevant ESPON information that would assist the development of the programme under the different thematic aspects of the ERDF. Such a desk research would comprise several defined steps and would reveal significant maps and background information which are both up-to-date as well as significant for the topics innovation, accessibility, environment and sustainable urban development, the main thematic columns of the ERDF. The project volume could be quite small, as these projects would follow a defined and straightforward procedure.

→ Facilitated database search

Within the programme development phase, also sub-priorities to the main topics need to be defined in order to provide sufficient thematic orientation for the applicants. For this purpose. a discussion of all the sub-priorities between the programme authorities and the ESPON CU might be too extensive. The current status quo of the ESPON database points towards a research oriented database that allows the accessibility and transformability of data. As the database is presented as a scientific tool, its target group will be mainly researchers. For purposes of programme development, it might be useful to have an easier and more general accessibility tool that provides the maps for different topics. It would not be necessary to access the underlying data sets, but rather receive an overview of the situation in the programme area under a certain topic. This would help to also receive information during the process of formulation and negotiation of the sub-priorities.

http://www.espon.eu/main/Menu_Publications/Menu_SynthesisReports
 http://www.espon.eu/main/Menu_Publications/Menu_TerritorialObservations/

⁷² http://www.espon.eu/main/Menu_Publications/Menu_ScientificReports/

Project application and selection phase

Contribution of ESPON to an assisted partnership compilation

During the project development phase, project applicants have to compile their partnership_in a logical and strategic way. As already described in Chapter 3, the project development unit might help applicants to compose their partnership using more evidence base by providing underlying maps for a partner search tool. Here, an applicant could easily check whether potential partners are located in defined territorial patterns. For example, the partner search function could include an overview where all available partners are displayed on an ESPON background map. For the cooperation between the programmes, this would mean to regularly check for possible updates of these maps within the own project pool.

Contribution of ESPON to a "partnership check" within the project selection phase

After the INTERREG B project proposals have been handed in and the call is closed, the JTS performs the overall project assessment as a basis for decision-making in the transnational steering committee. For this selection phase, all project proposals are being registered. As already described, it might be useful to interlink the registration of the proposals with ESPON maps that were used during the programme development phase. Like in the previous paragraph, that would again mean that a regular check for possible updates could be very constructive.

Provide access to territorial context for project applicants

Within the application phase, project applicants have to prove that they understand the programme objectives and that their proposal is a constructive and individual response to the challenges outlined. However, the territorial context of the proposal could be dealt with in more depth. Without extending the workload for the application phase, it might be helpful if applicants get the chance to have easy access to the database in order to search for territorial evidence base for their topic. Also here, a facilitated database access might help non-researchers to easily identify relevant ESPON information that might be useful for them.

Project implementation phase

Using ESPON information during the project implementation

During the project implementation phase, various needs are imaginable where projects would find the availability of ESPON evidence base helpful, e.g.

- During project meetings or conferences, ESPON maps could be used as both a general introduction to the topic as well as a background for displaying activities in the partner locations.
- Some projects form within their implementation phase platforms for other, similar initiatives and try to integrate or exchange with their activities. For this reason, it might be helpful to always be able to check whether this specific project topic has available evidence base under ESPON.
- Many projects have the objective to formulate policy documents that help to prepare or implement EU policy papers. Also here, the research information not only maps from appropriate ESPON projects could be very helpful.

Generally spoken, it would exceed the capacities of the ESPON CU to answer all upcoming requests from different projects. However, also here, a facilitated access to ESPON project information - by "non-researchers" could help to make the use easier. The TranSMEC group

has tried to enter typical key words of the existing projects into the ESPON search function, but the results were rather diffuse. Consequently, a specific assistance would be needed. It might be constructive to initiate a pilot phase in which an "INTERREG Hotline" could be presented on the ESPON website which would be interlinked to the NWE website.

Programme evaluation

Easier updates to emerging ESPON information

For INTERREG programmes, a mid-term as well as an ex-post evaluation is very significant.

For the ESPON programme, it might be helpful to focus on the following aspects:

- TranSMEC recommends that the evaluation should be more oriented on the evidence base that has already been presented in the Operational Programme. Here, ESPON could help to update this information, if needed.
- Important thematic aspects of the programme might be new or specifically pressing like "innovation" or "flood risk management". Here, it is relevant to have a better overview on emerging projects. In this case it might be useful to better interlink the programme websites.

In this context, the visual tools developed can provide helpful instruments to facilitate an evaluation process which is much more "territorially driven".

6.4 Perspectives for future programming of INTERREG B

Using territorial evidence to develop more complementary INTERREG programmes

If a stronger distinction between INTERREG strands and programmes on the basis of territorial considerations is required in the future, the following points should be considered:

Most INTERREG programmes have been developed in separate, sometimes consecutive processes. In geographically overlapping programmes, this has resulted in strong thematic similarities. To give these programmes a more distinct and complementary character, an interactive, cooperative programming process would be needed.

In this interactive process, a shared analysis of the territorial challenges of the area involved could be the basis for a more focussed and complementary set of thematic priorities for each programme. ESPON territorial evidence can be used as an effective tool to develop such an analysis of territorial challenges.

This mutually agreed complementary thematic focus will then provide a mechanism to enable the INTERREG programmes concerned, as well as project participants, to determine to which project they should direct their project proposals. In particular INTERREG A and B programmes, that cover completely overlapping territories, can benefit from this cooperative programming approach to establish a more distinctive profile for each of them.

A strong difference can be observed with regards to the cohesion challenges addressed by those programmes which have and those which have not to bridge the gaps between old and new EU Member States. In this context, differences in the general strategic visions might apply to these two sorts of INTERREG B programmes in the future. But this would first need further analyses in which ESPON evidence base could play a key role.

Futhermore, it can be stated that all programmes of IVB where challenged to define the new, emerging theme of "innovation" within their programme priorities. All programmes developed

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this objective using the – amongst other – territorial information from their SWOT analysis of the area. However, an in-depth reflection of the territorial features of the innovation theme could at the time of programme development not be done due to absence of appropriate evidence base. This is strongly recommended for the development of the next funding period. This is also true for the other themes addressed by the programme. For example, it seems to be necessary to base the programme on a clear vision which additional benefit transnational cooperation can represent. This could be formulated differently for the different thematic columns of a programme in order to boost territorial awareness in the implementation of the programme.

Last but not least, it should be pointed out here again that the analysis of the EU policy environment on "innovation" revealed significant cooperation potentials between programmes funded by ERDF (DG REGIO) and instruments developed by DG Enterprise and Industry. As an example, the "RIM – Regional Innovation Monitor⁷³" is a policy learning and benchmarking tool for regional innovation policy makers. It contains regional profiles of 200 regions and a description of their key innovation support measures and related documents. It allows for thematic searches at national and regional level. Perspectively, all potential synergies and additional sources of evidence base should be considered in future programming.

Although the use of the INTERACT KEEP database (at its current state) only allows data selection at NUTS 1 level, the prospect of an integrated, visual and easily approachable territorial data base (comprising data layer and additional functions at NUTS 1-3) could open up new opportunities for using and integrating territorial evidence to the implementation of transnational cooperation programmes.

⁷³ http://www.rim-europa.eu/ ESPON 2013

7 ANNEX

7.1 ANNEX 1 Master file: Screening reports of ESPON projects

TRANSMEC - Template for screening ESPON projects and related papers

Project title	Telecommunication services and networks: territorial trends (ESPON project 1.2.2)		
TranSMEC relevance:	high med low		
Document Status	final report/draft final report/interim report/inception report/other		
Document Date			
Summary (very brief)	This project draws together and analyses the data on the supply of and demand for telecommunications. At the macro-level the European 'core-periphery' distinction does not hold for telecommunications.		

Source	Description	Туре	TRANSMEC tasks	NWE priority	Remarks
page(s), paragraph nr.	describe key aspects of building block (content, message, method,)	map, table, chart, analysis, other	corresponding work step(s) [e.g. F.1,]	corresp. priority(s) —see annex [e.g. 1 a)]	

1.

2.

3.

Master file: Preparatory EXCEL file for overlay maps

Table indicating source, methodology, description and interpretation

Original Source of ESPON evidence base	Map and project: Date of map:
Was the map part of the NWE Programme preparation (SWOT analysis, Operational Programme)?	
What does the original source show?	
Corresponding priority of the NWE Programme	
With which map or data sets from the IIIB analysis does this map need to be overlayed?	
How can the map data of the original source be processed	
What technical steps need to be taken	
What is the anticipated text for presenting the overlay map?	
What is the anticipated interpretation of the overlay map?	
Recommendations to provision of ESPON evidence base	
Further methodological options to process the map / Further reflections on input for the final report	

Table 6: Indicating source, methodology, description and interpretation

7.2 ANNEX 2: Factsheet on INTERREG IVB and the North West Europe Programme

7.2.1 INTERREG IVB – Transnational Cooperation

This strand (to which the NWE programme belongs) promotes cooperation and facilitates coordinated strategic responses to joint challenges in larger EU regions. The 13 INTERREG B programmes each cover a large section of EU territory. The geographical delimitation of programmes is based on the presence or dominance of certain territorial characteristics or challenges that are shared across the territories, like sea basins (Baltic Sea), mountain ranges (Alpine Space) or strong urbanisation (North West Europe). INTERREG B programmes typically cover multiple member states (3 up to 8) and include large parts of EU Member States or even whole countries.

The programme areas, even though constructed around shared characteristics, are not homogenous. Due to their geographical size and number countries involved considerable differences in economic, social and territorial characteristics are inevitably found within every programme area.

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INTERREG B projects deliver actions and (partly) investments related to a shared challenge by actors from different parts of the area. In many cases these actors are spread over the NWE area and do not cover a contiguous territory. However, also projects building on a continuous territorial feature (e.g. a river basin or transport corridor) occur. INTERREG B projects are less likely (compared to INTERREG A projects) to have an impact on the whole programme area. Rather their effects can be observed in sub-regions of the larger programme area, or in specific types of territories (e.g. cities, coastal regions) spread over the programme area.

7.2.2 INTERREG IVB North West Europe programme area and priorities

The programme area of INTERREG IVB North West Europe covers the entire countries of Ireland, UK, Belgium, and Luxemburg and northern France, the south of The Netherlands and southwest Germany, with the participation of Switzerland. The programme aim is to find innovative ways to make the most of territorial assets and tackle shared problems of Member States, regions and other authorities, through the following priorities.



Figure 26: Eligible area NWE (http://www.interact-eu.net/)

- 1. Knowledge based economy and innovation: promote entrepreneurship and transfer of innovations, develop growth clusters and SME networks and strengthen the innovation framework:
- 2. Natural resources and risk management: including water, landscapes, biodiversity, energy and waste management, risk management and prevention in the context of climate change, improving soil, water and air quality and reducing greenhouse gas emissions and noise pollution;

- 3. Improving connectivity: optimisation of existing passenger and freight infrastructure, innovative systems on land water and air and innovative ICT use to improve connectivity;
- 4. Strong and prosperous communities: enhance socio-economic performance of cities, towns and rural areas, environmental quality and attraction of towns and cities, responses to demographic change and migration.

In territorial terms the NWE area is mainly characterised by the metropolitan, highly accessible economic core area of Europe (the 'Pentagon') that is largely within this programme. However, in the area are also regions that are rather remote at the EU scale and less strong economically, making NWE quite territorially diverse.

More information can be found in the NWE Operational Programme.

7.3 ANNEX 3: Comparative report: Consideration of the ERDF innovation theme in five selected Operational Programmes of INTERREG IVB programmes and cross-reference to new typologies provided by ESPON

7.3.1 Comparative report

The comparative report considering five INTERREG IVB programmes has been drawn up to give a compact response to the following questions:

- Is "innovation" integrated or considered in and overall programme vision for the area?
- How is the "programmatic set-up" with regards to innovation? How is innovation reflected in the programme's SWOT analysis, the programme's strategy and its priorities?
- How can new emerging typologies be applied to the programme areas?
- Which projects are considered "typical" for demonstrating the programme's strategy on *Innovation*?

Innovation is considered a crucial factor to boost regional development processes. The theme of innovation has been anchored in Article 6 of the current ERDF Regulation from 2006⁷⁴. Consequently, it has also shaped the design of the new INTERREG IVB programmes. Each of the 13 INTERREG IVB programmes was thus confronted with the challenge to address the transnational aspects of innovation, to attract new project actors, but – at the same time – maintain the philosophy of cross-cutting innovative approaches as addressed in the former funding periods. Being a territorially driven funding programme, the theme of innovation also needed to be addressed concerning the territorial patterns of innovation. Here, solid evidence was still missing until ESPON addressed the issue through the project "KIT - Knowledge-Innovation-Territory" of which the relevance for INTERREG is addressed in ANNEX 4. Due to the fact that this ANNEX is part of Chapter 4, general recommendations for the future programming period are summarized at the end of Chapter 4 as well as in Chapter 6.

From the start of the programming period 2007-2013, all 13 INTERREG IVB programmes where challenged to address the theme in a way that corresponds to the SWOT analysis of

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⁷⁴ Regulation (EC) No 1080/2006, page L210/5: "(a) innovation: the creation and development of scientific and technological networks, and the enhancement of regional R&TD and innovation capacities, where these make a direct contribution to the balanced economic development of transnational areas. Actions may include: the establishment of networks between appropriate tertiary education and research institutions and SMEs; links to improve access to scientific knowledge and technology transfer between R&TD facilities and international centres of RTD excellence: twinning of technology transfer institutions; and development of joint financial engineering instruments directed at supporting R&TD in SMEs."

the transnational area, to identify specific innovation challenges and to custom-fit the regulative guidance from the current ERDF Regulation to the requirements or strategies of the respective funding programme. This resulted in different strategies and interpretations of the innovation theme which were partly derived from the SWOT analysis, but did also reflect strategic objectives of the respective programme Member States.

The present comparative assessment takes the example of five INTERREG IVB programmes and benchmarks the NWE Programme against the four other examples in order to give a clearer view on the current positioning of the "NWE approach on innovation" in comparison to other programme approaches. This is done through a thorough scan of the Operational Programmes of the INTERREG IVB programmes Alpine Space (ASP), Atlantic Area (AA), Baltic Sea Region (BSR), North Sea Region (NSR) as well as the North West Europe (NWE) Region.. Furthermore, the comparative assessment tries describing the findings on the background of the new typologies of the ESPON KIT project⁷⁵, which was not ongoing when the programming of INTERREG B took place. Finally, attention has been paid to the question whether the current implementation of the programme matches the innovation objectives of the Operational Programme (OP) in this field. This was done through short interviews with the Joint Technical Secretariats of the respective programmes in order to provide the names of "typical" innovation projects that match these objectives especially well.

7.3.1.1 How is innovation addressed in the Operational Programmes⁷⁶?

Starting out from the content of Article 6 of the ERDF Regulation⁷⁷ addressing innovation, it was interesting to assess how close the overall interpretation of the innovation theme for the respective programmes was linked to this basic article in the regulation. It was expected that the Operational Programmes highlighted this link. Furthermore, it was interesting whether this link was described in a rather general way or connected to a specific emphasis. Here, all OPs closely addressed the article and provided a regional interpretation of the ERDF Regulation to the requirements of the respective transnational area. Two programmes addressed the issue with a comparatively strong focus: While the INTERREG IVB North Sea Region showed a comparatively strong focus on SME development, the Baltic Sea Region highlighted already at this stage of the OP that innovation is a central part of the transnational development vision and that it was considered as an overall and cross-cutting instrument for integration of the regional actors throughout all programme priorities.

Most of the five INTERREG IVB programmes did not reflect innovation in a general strategic outlook or a vision for a further legacy of the programme in innovation - oriented political implementation or multiplier effects. Besides the innovation driven vision of the BSR Programme already mentioned above, only the NWE Programme has a clear emphasis to ensure programme legacy in the field of innovation through strategic initiatives and focus on policy and governance structures.

Looking back on what the programmes are building up upon, most of the selected programmes did not explicitly mention the development step from INTERREG IIIB to IVB. The Alpine Space Programme mentions explicitly the achievements of the IIIB programme in the field of ICT; the North Sea Region mentions the IIIB achievements in a more general way.

The ERDF Regulation had been revised in 2006 and – based on the Lisbon Agenda – incorporated innovation as a fundamental aspect and strong driver of regional development.

⁷⁵ Project's lifetime: February 2010 – December 2012

⁷⁶ Information is based on a detailed screening of all operational programmes of the INTERREG IVB programmes selected ⁷⁷ Regulation (EC) No 1080/2006, p. L210/5

All INTERREG IVB programmes assessed within TranSMEC responded to the revision of the ERDF Regulation through establishment of a new Priority 1. The INTERREG IVB Atlantic Area (AA) Programme addressed this reference clearly in a matrix⁷⁸

The SWOT analysis of the programme area represents the main basis for the development of the programme objectives and the further derivation of the programme priorities. Here, the territorial aspects of the innovation issue in the specific programme region had to be taken into consideration. After 2006, all programmes had to address innovation as part of their SWOT analysis. Here, a strong connection to territorial patterns of the area could be identified:

- The SWOT analysis of the INTERREG IVB Alpine Space Programme did address innovation in a very integrated way together with growth and competitiveness which led to a more cross-cutting basis for defining Priority 1⁷⁹.
- The SWOT analysis of the INTERREG IVB Atlantic Area⁸⁰ addresses a large variety of innovation-related issues (e.g. SME development), but the term "innovation" does not appear in the SWOT analysis itself.
- The SWOT analysis of the INTERREG IVB Baltic Sea Region⁸¹addresses innovation as an instrument for integration of the area, especially with regard to the overcoming of East-West and North-South disparities, as an appropriate basis for clustering as well as in the context of ICT promotion.
- The SWOT analysis of the INTERREG IVB North Sea Region⁸² addresses innovation in the context of a further improvement of well-developed business support structures for SMEs as a major factor with special emphasis on the promotion of improved ICT supply and use.
- The SWOT analysis of the INTERREG IVB North West Europe⁸³ Programme starts from the territorial pattern that the area is considered the economic powerhouse of Europe where despite of the strong overall performance, disparities are significant through strong urban concentration in some area.

Based on the SWOT analysis, the Operational Programmes tackle the development of a programme strategy. Here, the innovation theme needs to be reflected in an integrated way that considers the territoriality of the issue. Within the strategic context of the programme strategy, the programme priorities are defined. The following text considers the strategic approach and the derived priorities and reflects how they correspond with each other:

- INTERREG IVB Alpine Space strongly concentrates on the endogenous potentials of the region: Innovation is addressed under the strategic headline "Enhancing endogenous potentials" Again, the emphasis is laid on being rooted in cultural richness and organic development from traditional industries. Innovation is mainly addressed through SME development in this context. Furthermore, it is remarkable that the innovation-oriented approach one cross-cutting strategic column for the programme as a whole. Consequently, the Priority 1 of the programme calls for improvement of SME innovation capabilities through appropriate environment and innovation especially in traditional sector and Cultural Heritage.

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⁷⁸ Atlantic Area Operational Programme (AA OP), p.36

⁷⁹ Alpine Space Operational Programme (ASP OP), p. 25

⁸⁰ AA OP, pp. 27

⁸¹ SWOT analysis 2 Baltic Sea Region (BSR OP), pp.24

⁸² SWOT analysis North Sea Region Programme (NSRP OP) p. 27

⁸³ SWOT analysis North West Europe Programme (NWE OP), pp. 41

⁸⁴ ASP OP

⁸⁵ ASP OP, p. 35

- INTERREG IVB Atlantic Area focuses on a strategic approach that tackles both the disparities in the area as well as the maritime character⁸⁶. The main strategic focus lies on a cohesive development of the knowledge economy in the area as well as the enhancement of the maritime heritage. To contribute to the overall strategy Priority 1 is addressed to entrepreneurship and innovation networks. Innovation includes scientific and technical innovation (and eco-innovation) as well as "knowledge economy such as new types of business services or innovative marketing techniques, with particular regard to the transnational dimension of these practices."⁸⁷. Like in the Alpine Space Region, a lot of emphasis is laid on the development of specific regional economic potentials here for instance the maritime economy.
- INTERREG IVB Baltic Sea Region: The programme was one of the first with the declared aim to support sustainable development by innovative approaches in a cross-cutting and integrative way. With an above-average existence of SMEs in the programme area there is a strong ambition to enhance especially performance of SMEs. With the strategic challenge of bridging large disparity gaps, BSR promotes its approach as a "European Laboratory for Integration". Consequently, Priority 1⁸⁸ is described as support innovation capacities for SMEs, create transnational structures for innovation. In this context, it is remarkable that BSR mentioning the transnational dimension of how innovation challenges should be addressed. This clear focus on transnationality in this field is not that obvious in other programmes.
- In INTERREG IVB North Sea Region, the strategic priorities regarding innovation are the linking knowledge centers, the improvement of the innovation chain for especially leading edge business areas as well as the improvement of absorption capacity of innovations by SME. This clearly reflects the strong business performance for the North Sea Region. The priorities do also consequently reflect the strong economic performance of many parts of the region by launching the priority under the headline "Building on our capacity for innovation" ⁸⁹.
- INTERREG IVB North West Europe focuses on the innovation strategy to improve policy and governance structures, institutional and financial framework conditions, to strengthen existing competences, clusters, skills, transnational networks of excellence. Furthermore strategic initiatives are emphasized. The programme "promotes an integrated approach to territorial development, both horizontally (among different policy sectors), vertically (among different levels of government) and geographically (across administrative boundaries)" Very appropriately, the Priority 1 of the programme is formulated as "Facilitation of innovation process, clusters and SME development using the endogenous potentials, transnational networking and knowledge transfer. [...]. The overall aim of the priority is to strengthen the innovative capacity and the knowledge-based economy of NWE and to support the mobilization of regional and local potentials through transnational cooperation. "91

In a summary, it can be stated that all programmes where challenged to define a new, emerging theme – innovation – in a new priority. All programmes developed this theme using the – amongst other – territorial information from their SWOT analysis of the area. However, an in-depth reflection of the territorial features of the innovation theme could not be done due to absence of appropriate evidence base at the time of the programme development. This is strongly recommended for the development of the next funding period.

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⁸⁶ Priority/Challenge Matrix Atlantic Area (AA OP, p.36)

⁸⁷ AA OP, p. 52

⁸⁸ Overview of Baltic Sea Region Programme (BSR OP, p. 54)

⁸⁹ Overview of North Sea Region Programme Priorities (NSRP OP, p. 48)

⁹⁰ NWE OP, p.0 - introduction

⁹¹ NWE OP, p.84

Due to the fact that the theme "innovation" has always played a role in INTERREG B and innovative approaches are a challenge for every project development, it is interesting to have a look at the connection between the new Priority 1 and the other priorities from the viewpoint of references to innovation. Here, the AS Programme and the BSR Programme developed the strongest connection: In the ASP, there is a strong reference established to Priority 2 "Accessibility and Connectivity" through the strategic aim of establishing a sound basis for the knowledge driven society. As already outlined, the BSR Programme shows a very strong connection to every priority through the integrated approach to use innovation as an instrument. The NWE Programme as well as the AA Programme developed no strong link, but priority 1 is also clearly connected to the topic of IT accessibility.

In order to summarize the main outcomes of the comparison between the five programmes, the following key words have been excerpted in order to describe the innovation approach of the different programmes:

Programme	Key words describing the innovation approach of the programme	
INTERREG IVB Alpine Space	Innovation using endogenous potentials such as traditional sectors, Cultural Heritage)	
INTERREG IVB Atlantic Area	Innovation in maritime economic niches, SME development, cohesive approach	
INTERREG IVB Baltic Sea Region	Integration through innovation, SME development	
INTERREG IVB North Sea	Further development of a strong innovation basis, SME development	
INTERREG IVB North West Europe	Further development of a strong innovation basis (economic powerhouse of Europe), SME development, bridging of disparities between urban centres and regions	

Table 7: Key words describing the innovation approaches laid down in the Operational Programmes

7.3.1.1 How can the programme areas be described considering new territorial evidence base from ESPON?

The overall Lisbon Performance of the areas shows the following territorial patterns:

Question	Alpine Space	Atlantic Area	Baltic Sea Region	North Sea Region	North West Europe
Overall Lisbon Performance of the area ⁹²	High performance, gap between old and new Member States	Diverse (mainly medium - high, some regions have low performance)	Diverse, large gap between old and new Member States	High performance with some exceptions	Diverse (mainly medium - high, some regions have low performance)

Table 8: Lisbon Performance of the programme regions

 $^{^{92}}$ Map "Composite Lisbon Performance a. 2006, Eurofutures Finland 2009" ESPON 2013

The ESPON project KIT⁹³ differentiates between different sorts of innovation: product innovation, process innovation, marketing and organizational innovation, social innovation. All programmes outline clearly that all sorts of innovation can be addressed by the programme. As an exception, the AA Programme puts a very low emphasis on social innovation. Furthermore, the KIT project introduces three new typologies for describing the European knowledge economy (see Annex 7.4). These typologies are sub-divided into classifications that give clearer descriptions. A thorough scan of the different programme areas on the background of the different typologies shows the following picture:

Question	Alpine Space	Atlantic Area	Baltic Sea Region	North Sea Region	North West Europe
Classification in KIT map "Technologically advanced regions"	Diverse	Diverse	Diverse	High Performance	High with some exceptions
Classification in KIT map "Scientific regions"	Diverse, mainly research intensive and scientific regions, strong difference to NMS ⁹⁴	Diverse (mainly medium—low, some regions have high performance)	Diverse	Diverse	Diverse (mainly medium - high, some regions have low performance)
Classification in KIT map "Knowledge networking regions"	Diverse, mainly networking regions, strong difference to NMS	Diverse (mainly medium— low,some regions have high performance)	Diverse, large gap between old and new Member States	High Performance with some exceptions	High Performance with some exceptions

Table 9: KIT typologies for the different programme areas

It can be stated that the new KIT typologies reveal the following:

- The North Sea Region and the region of North West Europe host in comparison to the other programme areas the highest amount of High Tech manufacturing and service regions.
- Concerning the typology "Scientific regions", all programmes show a diverse pattern.
 Especially the Alpine Space Region shows a strong difference between old and new
 Member States while, in an overall picture, the North West Europe territory shows the
 strongest presence of both research institutions as well as regions with a high score in
 human capital.
- The most significant KIT typology is the one of the "networking regions". Here, the North West Europe territory as well as the North Sea Region shows the highest performance. This means that they score high with regards to clustering and global networking activities. Here, the two programme areas that integrate both old and new European

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⁹³ http://www.espon.eu/main/Menu_Projects/Menu_AppliedResearch/kit.html

⁹⁴ New Member States

Member States show strong differences in performance between these sub-areas of their respective region.

7.3.1.2 Flagship projects of the programme areas

During the ongoing implementation of the programmes, it is interesting to see how the projects relate to the innovation approaches of the regions. For this reason, members of the JTS of the different programmes were asked to mention innovation projects that they consider most appropriate the programme's innovation approach. The following table summarizes and assesses these statements in the context of the project's respective topic and approach:

Question	Alpine Space	Atlantic Area	Baltic Sea Region	North Sea Region	North West Europe
Which are the innovation flagship projects of the programme?	ALIAS, AlpEnergy, AlpHouse,	SHAREBIOTECH, ATLANTOX	BaSIC, StarDust, BSR QUICK, PlasTEP	CCC Creative City Challenge, NMU Northern Maritime University, POWER cluster	FASILIS, ECCE Innovation
Do projects represent innovation infrastructure projects or innovative flagship projects ⁹⁵	Both	Both	Innovation infrastructure	Both	Innovation Infrastruct ure
Do these projects refer to certain topics (e.g. biotech) or to they address cross-cutting innovation issues	Topics	Topics	Mainly cross- cutting	Both	Topics

Table 10: Different aspects of the innovation projects that are considered to reflect best the programme's approaches on innovation.

Furthermore, conclusions drawn from the comparative report can be found in the end of Chapter 4 and Chapter 6.

⁹⁵ While "innovation infrastructure projects" intervene to boost the basis for innovation, "innovation flagship project" rather represent "best practice examples of innovation.

7.3.2 Key-projects that represent the programme's approach on Innovation (named by the respective JTS)

7.3.2.1 INTERREG IVB Alpine Space Programme: ALIAS, AlpEnergy, AlpHouse

ALIAS - Alpine hospitals networking for improved access to telemedicine services

(Public services Networks for innovation Accessibility ICT)

The project **ALIAS** addresses medical services and information inadequacy to ensure Health Care provisions in Alpine Space where telemedicine services are not widely exploited and linguistic barriers represent an obstacle. The Alpine Space's touristic vocation during some periods of the year makes its Health Care structures "periodically" inadequate to face a widened request of services supply. On the other hand, a major receptivity of those structures during the rest of the year is unnecessary due to the low density of Alpine local residents. **ALIAS** addresses the programme objective aimed at securing fair access to Health Care public services and related communication infrastructure within the programming area. The project is aimed at linking together a number of Alpine Space hospitals enabling the creation of a network shaping the **ALIAS** Virtual Hospital for sharing medical information, adopting telemedicine service and exchanging best clinical practices, to improve the efficiency of hospitals.

AlpEnergy - Virtual power systems as an instrument to promote transnational cooperation and sustainable energy supply in the Alpine Space

(Renewable energies Rural development Eco-innovation / green learning ICT)

At present, the Alpine Space is characterised by strong territorial discrepancies with regard to (conventional) energy supply. Rich endogenous renewable energy sources (RES) like hydropower, solar and wind energy, wood and other biomass exist throughout the Alpine Space. But equal access to their use is even more restricted because the use and the need to balance electricity production requires a strong electric grid and its – often unacceptable – extension or strengthening if the rate of RES is to be increased. Virtual Power Systems (VPS) offer an alternative by using ICT technology for intelligent combinations of RES, load management and storage. A prerequisite are innovative ways of cooperation among utilities, independent power producers and consumers. VPS have a high potential to trigger new knowledge-based and competitive economic activities. *AlpEnergy* will explore this potential and sensitise political and business decision makers.

AlpHouse - Alpine building culture and ecology. Competence development of local craft companies in the area of energy-efficient renovation of traditional alpine old buildings and settlements

(SME support and networks Eco-innovation / green learning Cultural landscape Education / institutional learning)

The project *AlpHouse* strives to enhance the competitiveness of regional SMEs by providing them with the knowledge, skills and tools for top-quality renovations of Alpine old buildings. These shall meet the highest standards of energy efficiency and at the same time preserve the regional characteristics and the endogenous wisdom of Alpine architecture. To this end, *AlpHouse* will develop and implement a comprehensive program of qualification modules and a web based information platform, both based on an analysis of the currently available knowledge on energy technology and regional Alpine architecture. The project addresses the target groups craft enterprises, architects/planners and policy makers. There is a special focus on practical instruction (e.g. on pilot construction sites), on tools for decision makers and on high visibility to the public. In result the rate and quality of renovations shall be raised, thereby increasing the attractiveness of the Alpine Space.

7.3.2.2 INTERREG IVB Atlantic Area: SHAREBIOTECH, ATLANTOX

SHAREBIOTECH - Sharing life science infrastructures and skills to benefit the Atlantic area biotechnology sector

ShareBiotech is an INTERREG IVB Atlantic European project which contributes to the 1st priority of the programme aiming to promote transnational entrepreneurial and innovation networks. It aims to develop knowledge transfer between companies and research centres. ShareBiotech's main objective is to strengthen the biotechnology sector within the Atlantic Area. Led by French organisations, the project is implemented by a partnership of ten partners from four Member States (France, Ireland, Portugal and Spain) and seven regions.

ShareBiotech will make the access to technological core facilities easier for researchers and companies – in particular SMEs – working in the fields of human health, nutrition, agriculture/food-processing, cosmetics, marine biology and environment. Thereby, it will contribute to facilitating R&D projects by providing high-standard technological service offers or through collaborative research projects.

ATLANTOX - Advanced tests about new toxins appeared in Atlantic area

The **main objective** of this project is to support and accelerate the development and introduction of a proper and efficient method of fast alternative controlling based on antibodies and functional tests for biotoxins.

The main idea of this project directly responds to the priorities and objectives of the Operational Programme of Atlantic Area. It establishes the need to protect coastal areas and its environmental quality, counteracting those factors that threaten the integrity of this marine environment within the same Operational Programme; in coincidence with the measures of this proposal for developing the following action (collected directly in this project): Design exemplary solutions and test methods among transnational partners to avoid coastline changing

7.3.2.3 INTERREG IVB Baltic Sea Region: BaSIC, StarDust, BSR Quick

BaSIC - Baltic Sea Innovation Network Centres

BaSIC aims to build a "Baltic Sea Archipelago of Innovation" (recommendation of BaltMetInno). The objective is to create a seamless working environment for fast growth innovative SME all over the Baltic Sea Region, embedded in a reliable network of leading Science Parks and clusters. Emphasis is given to identify, select, train and coach SMEgazelles; to provide them harmonized access to markets (establish a tool kit of market access points) and to connect them for access to finance for internationalisation and growth. The project partnership consists of leading Science Parks, incubators and innovation facilitators, having a strong support by the ten Sea Capital Regions (incl. Oslo and St. Petersburg). This will guarantee sustainability of good project results and their implementation into regional innovation strategies. Feedback from project monitoring and SME experiences will be used for identifying and continued improvement of essential infrastructure and management of innovation infrastructure parks/incubators or clusters) in the BSR Capital regions and for establishing partnership agreements between leading Science parks and those under development, to help reducing disparities within regions and to improve competitiveness and dynamics of the Baltic Sea area.

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StarDust - The strategic project on trans-national commercial activities in research & innovation, clusters and in SME-Networks

The critical mass needed to create a strong and attractive global position, and the innovative approaches that are needed to address grand challenges can only be achieved through transnational collaboration. The overall objective of the StarDust project is to address this problem by linking strong research environments, clusters and SME networks – creating a number of globally-leading research and innovation hubs in the BSR in order to achieve stronger critical mass, attractiveness, and a competitive international position. Activities will also foster job and SME growth opportunities, and strengthen social and territorial cohesion for the Baltic Sea Region.

BSR QUICK - Qualification, innovation, cooperation and key business for Small and Medium Enterprises in the Baltic Sea Region

SMEs represent 99% of all enterprises in the BSR and provide up to 70% of all jobs, being an important economic but also socio-cultural factor for sustainable development of the region. SMEs present the biggest potential for the employment and job creation in the BSR also in future. QUICK aims at unleashing this potential to its full extent by addressing the following challenges undermining the competitiveness of the BSR SMEs.

7.3.2.4 INTERREG IVB North Sea: CCC, NMU, PowerCluster

CCC Creative City Challenge

CCC aims to build and implement an integrated evidence-based strategy for cities to strengthen their innovative capacity. This will be done by means of a methodology of joint development and pilot testing of new tools and instruments in the fields of skills development, business cooperation and the development of urban creative clusters. CCC focuses on the catalyst role of creative industries in building and strengthening the innovative capacity of these urban economies through the use of a transnational triple helix of government, education and business.

Project outcomes include instruments for skills development for entrepreneurs, masters' classes and a network for NSR business cooperation. Urban showcases will demonstrate instruments on how to establish creative clusters.

NMU Northern Maritime University

The NMU project is building on the broad range of knowledge and expertise in the North Sea area which is being harnessed within a common and lasting transnational network of universities, The "Northern Maritime University" will directly address the needs of the maritime industry: To better prepare maritime business managers to cope with growing maritime traffic, port development, and rising environmental challenges, by developing multidisciplinary and internationally oriented qualifications at Bachelors and Masters level.

NMU is thereby working towards establishing a Area of Research and Innovation for the maritime industry in the North Sea Region, contributing towards the Lisbon strategy to create a more effective maritime business sector and an enhanced competitiveness of the maritime sector.

POWER cluster - Developing the North Sea Offshore Wind Power Cluster

As a direct successor of NSR INTERREG IIIB's POWER project, POWER cluster is centred on the development of a strong Offshore Wind Industry (OWI) cluster in the NSR. Core activities include a strengthened stakeholder and business-to-business network, energy grid reinforcement across the NSR, developed skills training courses (including higher education and addressing unemployment) and raising acceptance among the wider public as a basis for wider roll-out of wind energy installations.

7.3.2.5 INTERREG IVB North West Europe: FASILIS, ECCE Innovation

FASILIS Facility Sharing in Life Sciences - Promoting innovation in NWE life science SMEs by enabling easy transnational access to research facilities

FASILIS* is a transnational pilot project that aims to give Small and Medium sized Enterprises (SMEs) in the human health sector, such as biotechnology, pharmaceuticals and medical technology, easy access to a wide range of public and private research facilities in six human health clusters. Through FASILIS, SMEs will be able to work with providers of knowledge and equipment beyond those that are currently available at the regional level, broadening their competence networks and stimulating innovation and new business development.

ECCE Innovation developing economic clusters of cultural and creative enterprises in the innovation process

The aim of the Project is to foster the innovation capacity of Creative Industries (CI) in order to access new markets. The creative sector is the most dynamic sector in the economy. It is a key driver of economic and social development and leads to innovation in various other industries and sectors. Turning creative ideas into businesses is the key aim of the project. It will focus on the exchange and transfer of expertise, knowledge and experience related to the cultural and creative industries at a regional level with a view to:

- Helping to develop new markets for creative SMEs and micro enterprises across cities;
- Developing business, academic, artistic, scientific and policy expertise that will support the development of new products, services and processes;
- Supporting participating cities and regions to adapt to the new economic paradigm concerning creativity and innovation;
- Enabling participating cities to remain competitive in attracting talents or retaining them.

7.4 ANNEX 4: Description and relevance of the KIT project with cross-references to the requirements of INTERREG B NWE

7.4.1 Specific relevance of KIT for TranSMEC

ESPON projects have always taken up current research needs and touched the topic of innovation repeatedly. However, ESPON up to now never addressed innovation as a coretopic of research, but rather looking at it in an integrated way. Instead, several projects addressed issues that are associated with innovation such as the Lisbon Performance of European regions or "R&D" policies. Within the present funding period 2007-2013, one project emerged that connected "Innovation and Territory" with a more in-depths approach. The following sub-chapter gives a short overview on this matter.

The ESPON Project 2.4.2 "Zoom in", led by the German Federal Office for Building and Regional Planning was terminated in 2006. It provided "an integrated and structured analysis of the results of the on-going and finalised ESPON project results, 'zooming' in on different territorial contexts and scales, in order to identify existing spatial and territorial specificities and complementarities" Within its final report, the project presents an analysis of the Lisbon situation of European regions in 2005 based on defined indicators. Several maps were produced that indicated e.g. how the regional economic performance and the growth potential, combined with the Lisbon orientation, were spread over the EU⁹⁷ or how the R&D expenditure was spread over Europe.

Also the ESPON Project 2.1.2 "The Territorial Impact of EU Research and Development Policies" rooted in the common insight that background policies can strongly influence innovation processes. However, the project did not focus on innovation directly, but also on the innovation-related context. The project analysed "the distribution of the two principal instruments of EU R&D policy, the Structural Funds and the RTD Framework Programmes" The project showed "that at the EU level the Framework Programmes are having a significant influence on stimulating the development of a European Innovation System through promoting linkages between researchers and companies located across the Union. These networks are actively stimulating knowledge exchange and innovation within their membership, with positive effects reported in home regions." "99"

Due to their duration within the funding period 2000-2006, this project did not have the opportunity to take up the revision of the ERDF and its stronger focus on innovation.

The on-going project KIT runs since February 2010 until December 2012. It has delivered its Interim Report already in March 2011. TranSMEC was able to include valuable research insights and further process KIT-maps into innovation related overlay maps. The thematic scope of KIT is presented as follows:

"New scientific and technological powers outside the European territory are attracting considerable and increasing amounts of R&D investments. Against this background new opportunities arise but also the question of Europe's ability to sustain a competitive edge in knowledge and innovation. The EC recognises the territorial dimension of the innovation and knowledge economy and its role in potential territorial development and cohesion in both, the Green Paper on the European Research Area as well as the Green Paper on Territorial Cohesion. Knowledge has in recent years become a key driver for growth of economic

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 ⁹⁶ http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_PolicyImpactProjects/zoomin.html
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 ESPON project 2.4.2. "Zoom in", map p. 107

⁹⁸http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_PolicyImpactProjects/rdpolicyimpact.html

⁹⁹http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_PolicyImpactProjects/rdpolicyimpact.html

systems, and the access to knowledge is generally considered as a key condition for innovative activities in our modern economy. The project takes this policy context as a starting point to explore the territorial dimension of the innovation and knowledge economy. An overall concept is used including product innovation, process innovation and organisational innovation. This project will take into account the current state, patterns and potentials of regions with respect to the knowledge and innovation economy and identify new development opportunities through innovation for Europe and its territories"¹⁰⁰.

The project has particular relevance for the present study on innovation, because of the following aspects:

- It delivers a typology identifying and grouping regions in terms of their territorial characteristics influencing innovation. This allows establishing a connection between the actors that participate in the NWE Programme and the regional settings represented in these typologies.
- It reflects different patterns of the innovation process (unfortunately, this work will be further implemented after the termination of TranSMEC and shows how differentiated innovation has to be understood. This can be cross-referenced with the different approaches how four selected INTERREG IVB programmes access the topic.
- It presents up-to-date maps displaying and interpreting various innovation related indicators. This will result in identifying territorial patterns of innovation and the knowledge economy. Because KIT is the first ESPON project comprehensively addressing the territorial side of innovation, new overlay maps are possible that show how the funds from INTERREG IVB Priority 1 are distributed against the different patterns of the knowledge economy. This adds more targeted and specific evidence to the existing ESPON material available on innovation, which is generally embedded in a more sectoral or general context.

7.4.2 Presenting KIT in the context of the NWE Programme

In order to approach the KIT report, it was considered useful to directly access the content from the perspective of the NWE Programme. Therefore, the presentation of the KIT interim results will be done under NWE related questions and mixed with insights of the NWE programme know-how.

7.4.2.1 How can innovation related territorial patterns be described in order to be able to relate to the practical, bottom-up approach of an INTERREG IVB programme?

Generally spoken, the KIT report states that "different territorial patterns of innovation exist in Europe, based on different context conditions. The identification of these context conditions is necessary to develop regional innovation policies able to support the most productive use of local research and innovation capabilities". ¹⁰¹

Innovation – following the report – can best be described as what it is not: "Innovation is not considered as a linear process that starts with research, eventually leading to development, translated later into growth in the territories that have more capabilities. Instead, it is the product of a policy mix, including several bodies and stakeholders in which the territories, their specificities and conditions are paramount (Danuta Hübner, 2009)." All in all, the

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¹⁰⁰ http://www.espon.eu/main/Menu Projects/Menu_AppliedResearch/kit.html

 $^{^{101}}$ Interim Report of the ESPON Project "KIT – Knowledge, Innovation, Territory" (KIT IR), p.12

¹⁰² http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/09/78&type=HTML

outcomes of KIT allow formulating the trend towards a more "place based" approach to the funding of innovative projects". There is now clearly identifiable strategy for NWE, but interesting aspects to be considered that could (not within TranSMEC) pave the way to a differentiated delineation of priority descriptions, programme strategies and project selections.

The innovation process and the underlying "knowledge economy" can be described by complex sets of indicators. The KIT project has successfully tried to establish an overview of which the outcomes are translatable into activities and strategies of INTERREG programmes. However, it should be reminded of the initial statements (TranSMEC introduction), where the mix of different schemes of incentives and funding from local/regional, national and EU level show a strong interference and impacts and effects of one funding scheme alone are rather difficult to identify. KIT has produced easy-to-understand criteria for demonstrating territorial patterns of the European knowledge economy. These patterns relate in different ways to the "typical" applicants that are active under INTERREG.

7.4.2.2 How do the spatial trends of the knowledge economy relate to INTERREG IVB NWE?

For INTERREG, it is a significant question which participants are attracted by the programme. In order to have a better view on this matter, it is useful to focus on innovation from the perspective of institutions involved. The KIT project addresses this subject by defining different typologies for the European knowledge economy.

From the perspective of the NWE Programme, two different types of typologies for the "knowledge economy" are presented. First of all, two of the typologies relate to the presence of certain institutions in European regions, while the third typology refers to a more "behavioural" aspect, the ability of regions to acquire knowledge. All the three approaches related as follows to the presence of "typical" INTERREG participants in the NWE area:

Two institutional approaches: "Technologically advanced regions" and "Scientific regions"

- Technologically advanced regions: Regions that host a comparatively high amount of technologically advanced manufacturing and service institutions. While INTERREG from its call structure, its financing conditions as well as the total project volume possible attracts rather public institutions than private companies, it is questionable if this approach shows relations to the territorial distribution of "Priority 1 partners" over the NWE territory. Without foreclosing the interpretation of the overlay maps, it is interesting enough that the respective overlay shows that most of the partners are concentrated in these regions. This leads to the reflection that the underlying regional economic policies play a role for the development of such a region and that these policies can very well be addressed of public participants of INTERREG programmes.
- Scientific regions: Regions that host large and well-known scientific institutions. This approach also included an additional, more functional aspect: The presence of horizontal functions like R&D and high education as functions that are strongly related the presence of these institutions in the area. "Following this approach the definition of scientific regions is based on two fundamental pillars that are human capital and research activities. It is important to remark that these two elements are able to capture both the production of knowledge carried out within the region and the capacity of the local firm to absorb knowledge spilling from the external economies."

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¹⁰³ KIT IR, p. 17

Here, from the perspective of INTERREG, scientific institutions can easily be identified from the list of participants. It is interesting to see whether the scientific institutions in the programme emerge from scientific or "non-scientific" regions and whether the programme – following the cohesion approach of the ERDF - addresses rather the "regions on their way to the knowledge economy" or the "champions".

One behavioural approach "Knowledge networking regions"

- Knowledge networking regions: Regions that show the "ability to manage information in order to identify and solve problems, or, innovation and productivity increases, through co-operative or market interaction". This approach shows of course a strong relation to the transnational approach addressed by an INTERREG programme. The networking approach can relate directly to a project aim to the pooling and acquisition of knowledge for the solving of regional structural problems. This is thus the approach to the knowledge economy where an analysis on the level of the project topic (not done within TranSMEC) can show compliance or non-compliance with the typology proposed. Also here, it is interesting to see whether the participants in the NWE Programme emerge from networking or non-networking regions.

7.4.2.3 Which classifications lead to the different "knowledge economy" typologies and could these classifications be used by NWE?

As already mentioned, KIT produced classifications for each typology for the knowledge economy that were later translated into maps showing the respective territorial patterns. They were formulated as follows and then measured against the EU-average:

Classifications for the knowledge economy following the typology "technologically advanced regions"

- High tech manufacturing
- High tech services

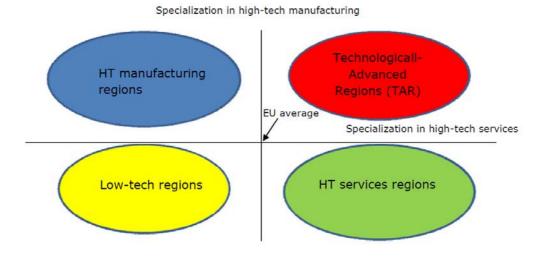


Figure 27: Definition of technologically advanced regions (KIT IR, p.16)

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¹⁰⁴ KIT IR, p.6

Classifications for the knowledge economy following the typology "scientific region"

- Research intensity
- Human capital

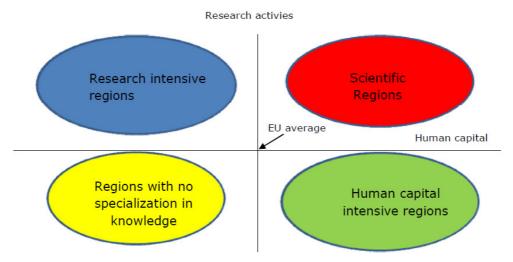


Figure 28: Definition of scientific regions (KIT IR, p.26)

Classifications for the knowledge economy following the typology "scientific region"

- Clustering regions, where "knowledge diffusion can take place through diffuse patterns based on spatial proximity (...spatial linkages)". 105
- Globalising regions, where "knowledge diffusion can take place [...] through intential relations based on a-spatial networks or non-spatially mediated mechanisms ('a-spatial linkages')". 106

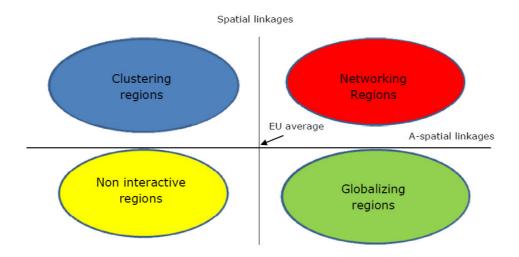


Figure 29: Definition of knowledge networking regions (KIT IR, p.33)

¹⁰⁵ KIT IR, p. 27

¹⁰⁶ ibid.

7.5 ANNEX 5: EU policy environment on innovation

The EU policy environment for innovation is mainly shaped by different policies and instruments of the DG Environment, DG Research and Innovation, DG Regional Policy and DG Enterprise and Industry. However, in the framework of innovation related to structural regional development the main innovation activities proposed by Article 6 of the current ERDF Regulation (EC) No 1080/2006:

- Establishment of networks between appropriate tertiary education and research institutions and SMEs
- Links to improve access to scientific knowledge and technology transfer between RTD facilities and international centres of RTD excellence
- Twinning of technology transfer institutions
- Development of joint financial engineering instruments directed at supporting RTD and SMEs

Of course, the strong relation of these proposed activities to the main aims of the structural fund has to be emphasised in order to not mix up the ERDF policy context with the policy context of the EU research area.

All these activities have also to be seen in the light of the former, rather "traditional" approaches to innovation in the previous funding periods, where innovation was a cross-cutting issue to make sure that projects contained new elements in terms of approach, partnership, content or methodology. Still in this funding period, innovation is often seen in relation to the other key topics of the ERDF: environment, accessibility and sustainable urban development.

In this context, the EU policy context of DG Regional Policy and DG Enterprise and Industry are the most appropriate to be presented as the EU policy context for this case study, because they both touch the area of translation and transfer of research into structural development policies and assign a major role to SME.

The following chapter will highlight policy approaches of these General Directorates:

7.5.1 Policy context of DG Regional Policy

A major platform for the discussion and initiation of innovation policy is the umbrella initiative "Regions for Economic Change". "Regions for Economic Change" is an initiative that aims to highlight good practice in urban and regional development with a particular focus on innovation"¹⁰⁷. The initiative has for example developed an award for innovative projects, the "RegioStars 2011". A close reference is made to the support function for the EU2020 strategy. It is considered a priority to "align the priorities of the cohesion policy with Europe 2020. For DG Regional Policy, specific reference is made to the Communication 'Regional Policy Contribution to smart growth in Europe 2020"¹⁰⁸. In this document, the following aspects are considered especially relevant:

- Under the headline "better governance", it is highlighted that "in particular, managing authorities should take full advantage of the opportunities offered by cross-border,

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¹⁰⁷ http://ec.europa.eu/regional policy/cooperation/interregional/ecochange/index en.cfm

¹⁰⁸ SEC (2011) 92 final from 26th January 2011

interregional and transnational cooperation in line with the new territorial cohesion objective introduced by the Lisbon Treaty^{"109}.

- It refers especially to a major aim of the regional policy contribution to "use the policy to develop a resource efficient, low carbon, climate resilient competitive economy" 10. The main emphasis is laid on promoting topics that "at the start of this programming period [...] were not recognised as the priorities they are today" 111 (energy efficiency and renewable energy). The document is thus a driver for innovation in certain topics through the promotion of more investments in these areas.
- A "two-pillar" approach is proposed which comprises to invest both more and better in sustainable growth. Under pillar one, eco-innovation is particularly presented with its "focus on mobilising innovation partnerships and information technology" 112. Eco-innovation is emphasised as an essential tool and the following aspects are especially highlighted:
 - Managing authorities should give greater support to eco-innovation.
 - Managing authorities should support clusters in the green technology field through partnerships with enterprises.
 - Managing authorities should use regional funding to promote Information Communication and Technology (ICT) for green economy"¹¹³.

7.5.2 Policy context of DG Enterprise and Industry

Besides a study and a tool of key relevance (which will be presented below), the main policy document is the "Europe 2020 Flagship Initiative Innovation Union" 114. The executive summary of the document starts with a rather passionate call for action:

"At a time of public budget constraints, major demographic changes and increasing global competition, Europe's competitiveness, our capacity to create millions of new jobs to replace those lost in the crisis and, overall, our future standard of living depends on our ability to drive innovation in products, services, business and social processes and models. This is why innovation has been placed at the heart of the Europe 2020 strategy. Innovation is also our best means of successfully tackling major societal challenges, such as climate change, energy and resource scarcity, health and ageing, which are becoming more urgent by the day.

Europe has no shortage of potential. We have world leading researchers, entrepreneurs and companies and unique strengths in our values, traditions, creativity and diversity. We have made great strides in creating the largest home market in the world. European enterprises and

civil society are actively engaged in emerging and developing economies around the world. Many world-changing innovations can be traced back to Europe. But we can – and must do – much better. In a rapidly changing global economy, we must build on our strengths and decisively tackle our weaknesses:

¹⁰⁹ Same document, p. 13

¹¹⁰ Same document, p. 2

¹¹¹ Same document, p. 3

¹¹² Same document, p. 9

¹¹³ Same document, p. 9

¹¹⁴ SEC (2010) 1161 from 6th October 2010

- Under-investment in our knowledge foundation. Other countries, like the US and Japan, are out-investing us, and China is rapidly catching up.
- Unsatisfactory framework conditions, ranging from poor access to finance, high costs of IPR to slow standardisation and ineffective use of public procurement. This is a serious handicap when companies can choose to invest and conduct research in many other parts of the world.
- Too much fragmentation and costly duplication. We must spend our resources more efficiently and achieve critical mass.

Perhaps the biggest challenge for the EU and its Member States is to adopt a much more strategic approach to innovation. An approach whereby innovation is the overarching policy objective, where we take a medium- to longer-term perspective, where all policy instruments, measures and funding are designed to contribute to innovation, where EU and national/regional policies are closely aligned and mutually reinforcing, and last but not least, where the highest political level sets a strategic agenda, regularly monitors progress and tackles delays.

Innovation Union sets out such a bold, integrated and strategic approach, exploiting and *leveraging our strengths in new and productive ways – and thereby maintain the economic* foundation that supports our quality of life and our social model as our population ages. Business-as-usual equals gradually losing our competitive advantages, and accepting Europe's steady decline. "

A whole chapter - Chapter 4 - of this document is dedicated to maximising social and territorial cohesion. Here, the cohesion aspect is emphasised as a crucial role for the structural fund interventions in order to prevent an "innovation divide" 115. Especially important for the INTERREG North West Europe territory is the statement that "Regions need to redirect funding based on a smart specialisation approach and focus on relative strengths where they become excellent" 116. Furthermore, the following text combines the need to pool resources and expertise through trans-national projects:

"There are a number of other ways that Structural Funds can be used more effectively." Relatively little is spent in pooling resources and expertise through trans-national projects, for example to support research infrastructures or the emergence of world-class clusters. Greater use can be made of financial instruments to leverage private finance for research and innovation. Public procurements co-financed by the Structural Funds should also be used to increase demand for innovative products and services. The European Social Funds could be deployed more effectively to train and retrain people with the skills needed for the Innovation Union. European level programmes to support trans-regional cooperation (e.g. FP7 Regions of Knowledge, CIP funded cluster initiatives and Enterprise Europe Network, and operations co-financed under the European Territorial Cooperation programmes) should be consolidated to better assist regions and increase impacts on regional development. Moreover, there should be incentives in future programmes for cooperation between leading innovation regions and those in catching-up Member States."117

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¹¹⁵ SEC (2010) 1161, p. 20 ¹¹⁶ Same document, p. 20

¹¹⁷ SEC (2010) 1161, p. 20

For the preparation of post 2013 Structural Fund programmes, it is emphasised that "Memb IIIB er States should initiate [...] programmes with an increased focus on innovation and smart specialisation" and that "Future regulations governing the operation of the European Regional Development Fund should further commit substantial financial resources to support innovation initiatives within the regions of the European Union"118. Due to the fact that the appropriate governance is repeatedly highlighted as crucial factor, the addressees of the INTERREG IVB programmes seem to be chosen rightfully.

DG Enterprise and Industry has furthermore issued two interesting documents that can be seen as usable tools for innovation interventions:

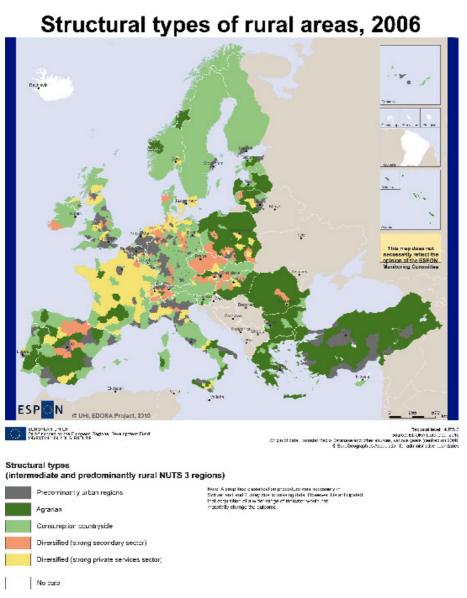
- RIM Regional Innovation Monitor¹¹⁹: RIM is a policy learning and benchmarking tool for regional innovation policy makers. It contains regional profiles of 200 regions and a description of their key innovation support measures and related documents. It allows for thematic searches at national and regional level. 120
- "SMART INNOVATION: A practical guide to Evaluating Programmes"121: It represents an interesting and usable tool that provides approaches, definitions and know-how for all kinds of practitioners and stakeholders in the field of innovation.

TranSMEC emphasises that these documents highlight a significant potential connection between the innovation approaches of DG REGIO and DG Enterprise and Industry that should be further pursued. Please find corresponding conclusions in chapter 4.13.

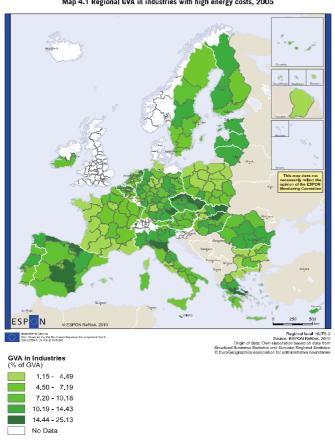
¹¹⁸ Same document, p. 21 http://www.rim-europa.eu/

http://ec.europa.eu/regional policy/cooperation/interregional/ecochange/index_en.cfm

¹²¹ ftp://ftp.cordis.europa.eu/pub/innovation-policy/studies/sar1_smartinnovation_master2.pdf



Map 34: Structural types of rural areas, 2006

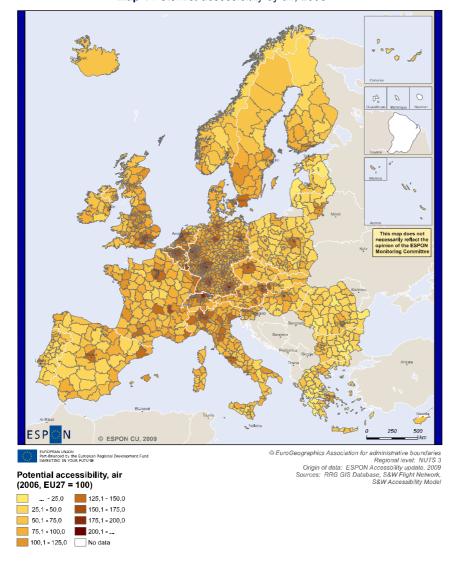


Map 4.1 Regional GVA in industries with high energy costs, 2005



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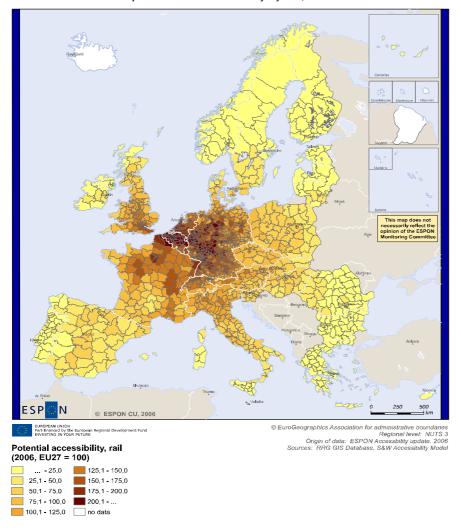
71



Map 1 Potential accessibility by air, 2006

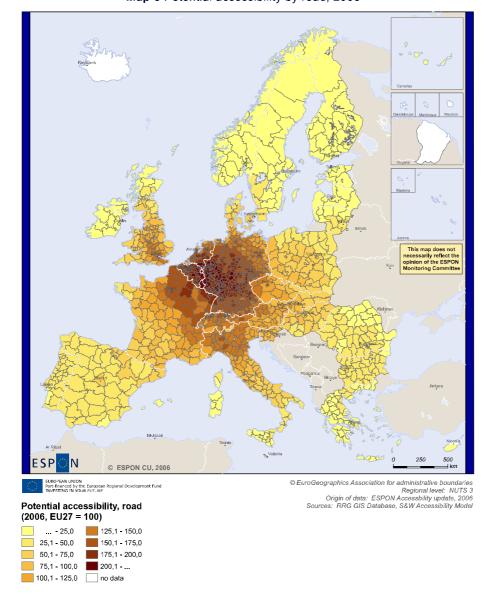
Map 36: Potential accessibility by air, 2006

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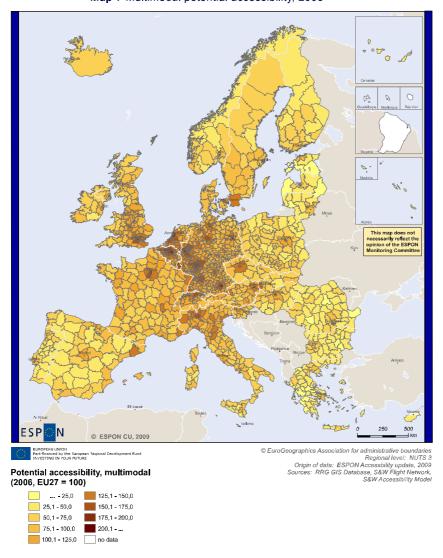
Map 3 Potential accessibility by rail, 2006

Map 37: Potential accessibility by rail, 2006



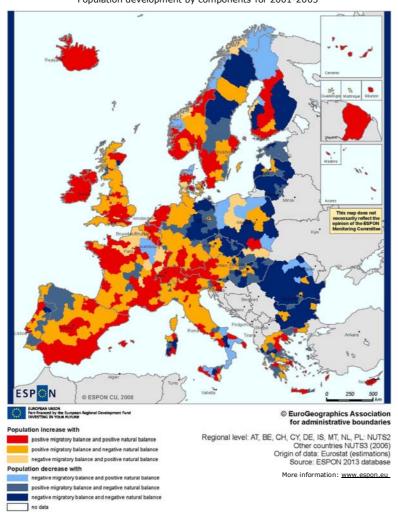
Map 5 Potential accessibility by road, 2006

Map 38: Potential accessibility by road, 2006



Map 7 Multimodal potential accessibility, 2006

Map 39: Multimodal potential accessibility, 2006



ESPON map – "Territorial evidence on population developments"

Population development by components for 2001-2005

Map 40: ESPON map – "Territorial evidence on population developments", 2001-2005

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9 List of abbreviations and acronyms

AA	Atlantic Area
ASDP	Atlantic Spatial Development Perspective
ASP	Alpine Space Programme
BSR	Baltic Sea Region
CSG	Community Strategic Guidelines
CU	(ESPON) Coordination Unit
DG Regio	European Commission's Directorate General for Regional Policy
DGOTDU	Directorate General of Urban Development and Spatial Planning, Lisbon
E-BSR	Eastern Baltic Sea Region - Estonia, Latvia, Lithuania, Poland and areas of Belarus and Russia
EC	European Community
ECP	ESPON Contact Points
EIP	Entrepreneurship and Innovation Programme
EIS	European Innovation Scoreboard
EIT	European Institute of Innovation and Technology
ERDF	European Regional Development Fund
ERIK	European Regions Knowledge based Innovation Network
ESDP	European Spatial Development Perspective
ETC	European Territorial Cooperation
EU	European Union
FP6/7	Sixth/Seventh EU Research Framework Programme
FUA	Functional Urban Area
GDP	Gross Domestic Product
ICT	Information and Communications Technology
IRE Regions	The IRE network currently brings together around 235 regions from the 27 EU Member States, as well as from Iceland, Israel, Norway, Switzerland and Turkey
JTS	Joint Technical Secretariat
KIT	Knowledge-Innovation-Territory
MEGA	Metropolitan European Growth Area
NCP	National Contact Point
NMS	New Member States
NORDREGIO	Nordic Centre for Spatial Development
NSR	North Sea Region
NSRF	National Strategic Reference Framework

NUTS	Nomenclature des Unités Territoriales Statistiques
NWE	North West Europe
OP	Operational Programme
PMS	Programme Monitoring System
R&D	Research and Development
RDI	Relative Development Index
RIS	Regional Innovation Strategy
RITTS	Regional Innovation and Technology Transfer Strategies
RTD	Research, Technology and Development
SF	Structural Fund
SME	Small and medium enterprise
SSII	Service Sector Innovation Index
SWOT	Strengths, Weaknesses, Opportunities, Threats
UK	United Kingdom of Great Britain and Northern Ireland
UNESCO	United Nations Educational, Scientific and Cultural Organization
W-BSR	Baltic Sea Region i.e. Denmark, Finland, Norway, Sweden and parts of Germany
WP	Work Package

10 Glossary

Capitalisation: Capitalisation in the context of INTERREG B represents the facilitation of the use of results obtained through successful INTERREG IIIB NWE projects for future strategic planning and follow-up activities.

Dissemination: Dissemination in the context of INTERREG B comprises the distribution of information about the programme implementation in order to highlight programme impacts and successes as well as to demonstrate the functionality of the programme.

Economic clusters: are geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that foster high levels of productivity and innovation.

EU2020: is the EU's growth strategy setting up five objectives – on employment, innovation, education, social inclusion and climate/energy – to be reached by 2020.

European knowledge economy: is understood as a significant expansion in the knowledge industries and the expansion of knowledge based employment over the past decade in the EU. The KIT projects adopted a multidimensional definition that refers to sector, function and networking activities of a scientific (R&D-based) economy.

European Territorial Cooperation: After the reform of the Structural funds under Agenda 2000 the new Objective 3 covers the interregional cooperation programmes INTERREG (strands A, B and C), Urbact II, Interact II and ESPON.

Impact: Consequences on natural and human systems. Depending on the consideration of adaptation, adaptive and coping capacity one can distinguish between potential and residual impacts.

Innovation: is meant as an approach to regional development that comes from a synergy of efficiency, transnationality and effectiveness on competiveness, cohesion and integration and leads to social and economical benefits.

INTERREG: originated as one of four Community Initiatives, which operated in 2000-2006. It covered three types of cooperation: cross-border (INTERREG IIIA), transnational (INTERREG IIIB) and interregional (INTERREG IIIC). The three strands of INTERREG were and currently still are carried on under the ERDF Objective 3 (European Territorial Cooperation 2007-2013) as cross-border, transnational and inter-regional cooperation programmes. Many programmes still use the name "INTERREG".

Lisbon Performance: In order to evaluate the results of the Lisbon Strategy and of Europe 2020 Strategy, many indicators are yearly collected and published by EUROSTAT. From the analysis of these indicators, it can be analysed how different European countries perform in economic, social and environmental issues.

Monitoring: Monitoring in the context of INTERREG B comprises the overseeing of on-going programme implementation based on project data with a variety of means to observe tendencies, territorial and thematic coverage and crucial decision-making aspects with regard to activation and involvement of project actors.

Overlay map: combine ESPON maps with data from the territorial cooperation programme. They are a superposition of selected NWE data with the ESPON map.

Programme performance: is a summary presenting the objectives, activities and achievements of a programme.

Transnationality: covers the co-operation of different partners in different regions of Europe on similar problems and challenges. Partners do not obligatory have to be located in cross-border regions. The character of transnational cooperation is that partners share common interests and activities.

Tool: are methodological options – so-called "tools" – for achieving visible and evidence-based results within the performance of the territorial cooperation programmes.

Steering: Steering in the context of INTERREG B is the development of proactive responses by the NWE programme committees and the programme bodies at operational level (JTS and Contact Points) to on-going challenges with regards to programme implementation such as thematic and territorial coverage and involvement of specific groups of project actors.

Sub-priority: Under INTERREG IIIB NWE Programme (2000-2006) the strategic themes were set up in five priorities and two sub-themes, called "measures" for each priority. Under INTERREG IVB NWE Programme (2007-2013) the sub-priorities are called "objectives". In order to avoid misunderstandings TranSMEC uses the term "sub-priorities".

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