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Interim Report

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Table of contents

1. Introd	duction	8			
2. Theor	etical background	14			
3. Typology of Territorial Diversity situations in European regions					
3.1. The physical characteristics of TeDi regions					
	an overall typology of TeDi regions	43			
4. Statistical characterisation of the TeDi case study regions					
	1. Demographic structures and trends				
	2. Economic structures and trends				
5. Guide	elines for interviews and qualitative approaches	61			
6. Concl	usion	70			
Referen	ces	71			
Annex	Guidelines for policy document reviews and interviews	73			
Figure	e				
Figure 1	European and local/regional challenges	67			
Maps					
Map 1	Degree of mountainousness of NUTS 3 regions,				
- 1	including areas assimilated to mountain				
	on the basis of climatic criteria	20			
Map 2	Degree of mountainousness of NUTS 3 regions,				
•	excluding areas assimilated to mountain				
	on the basis of climatic criteria	21			
Map 3	Delimitation of mountain areas in the case study areas	22			
Map 4	Delimitation of insular NUTS 3 regions in the Annex				
•	to the Green Paper on Territorial Cohesion	25			
Мар 5	Islands in the North Calotte				
Map 6	Land use in ESPON TeDi case study areas	28			
Map 7	Delimitation of sparsely populated NUTS 3 regions in the				
•	Annex to the Green Paper on Territorial Cohesion	31			
Map 8	Municipal population densities in TeDi case study areas				
-	compared to European NUTS 3 values	32			
Мар 9	Estimated grid population: Disaggregation of NUTS 5				
-	municipal population according to land use zones	33			
Map 10	Register-based grid population	34			

Map 11	Municipal population populations within 50 km	35
Map 12	Access to urban nodes	37
Map 13	Airport traffic and endowment compared to European	
•	measures of air accessibility	38
Map 14	Airport traffic and endowment compared to European	
•	measures of air accessibility	39
Map 15	Multimodal accessibility maps from the point of view of	
-	individual ESPON TeDi regions	42
Map 16	Demographic change between 1981 and 2007 at municipal	
	level	50
Map 17	Average annual net migration rates 2003-2007	51
Map 18	Proportions of 20 to 24 year-olds,	
	compared to national average	52
Map 19	Change in working age population	53
Map 20	Labour market participation (female population)	55
Map 21	Labour market participation (male population)	56
Map 22	Labour market participation	57
Map 23	Unemployment rates relative to national average	58
Map 24	Ratio of new company creations to the working age	
	population	60
Table		
Table	S	
Table 1	Proportions of persons living in mountain areas	23
Table 2	Draft synthetic multi-scalar classification	
	of the ESPON TeDi case study areas	44

Executive summary

The present interim report of the ESPON TeDi project further specifies some of the research questions elaborated in the Inception report, specifies a regional typology based on factors of geographic specificity, proposes some first quantitative results of the data gathering and presents the final version of the guidelines for interviews and qualitative approaches.

Based on the research questions presented in the interim report, the Stakeholder group suggested to focus on the notions of "small scale economy" and "hotpots". The former leads to reflection both on the specific advantages of the relatively smaller and more isolated functional areas in islands, mountainous and sparsely populated areas. One must however also question the degree to which these functional areas should be described as an "economy". A distinguishing characteristic of local communities that manage to successful draw benefits from resources at hand can precisely be their high degree of integration in an external, e.g. metropolitan or multinational, economic production system.

Concerning hotspots, it is concluded that this notion is quite different from that of "poles" around which the regions would organise their growth dynamics. A "hotspot" more generally describes a local urban or rural area in which growth dynamics or trends towards a socially, economically and ecologically more sustainable development are observed. Rather than being approached as "motors" in the overall development of TeDi regions, they are therefore rather to be considered as examples of good practice overcoming the challenges and exploiting the potentials in a specific type of locality.

The theoretical foundation for this line of argument can be found through a critical review of innovation theories. This makes it possible to highlight the need to challenge the deterministic constraints generated by increasing returns (agglomeration effects) and path dependency that the so called "new economic geography" have focused on. One needs to identify the wiggle room available to TeDi areas to design development strategies that are not dependent on agglomeration economies. In some respects, this may imply that these areas need to free themselves from norms, regulations and standards imposed by core regions.

The regional typology systematically reviews notions of mountainousness, insularity, sparsity and accessibility. This exercise shows the diversity of

situations in the ESPON TeDi case study areas, and therefore confirms the potential of this selection of areas as a basis for a more general assessment of geographic specificities in Europe. The diversity of scales at which these phenomena occur however makes it challenging to analyse them within a single analytical framework, especially at the European level. Some suggestions on how to construct regional (NUTS 3) indicators that would reflect geographic specificities of relevance for social and economic development even if they are not predominant within the region are described.

The importance of considering the geographic configuration of settlements as well as local/regional accessibility (e.g. to urban nodes) is emphasized when it comes to understanding the diverse economic and social impacts of geographic specificities. Different types of measures are proposed to incorporate these measures in the analysis, but data are lacking in some respects and qualitative enquiries are needed to develop an in-depth understanding of the spatial configurations in each area.

The statistical review of demographic and economic structures and trends in the case study areas provide a first basis for a comparative assessment of their respective situation. The data collection exercise has however not been advancing according to the initially foreseen schedule, especially in the cases of Romania and Cyprus. It has also in some respects been difficult to obtain data below national level for Malta. Efforts will be made to fill the resulting gaps in the coming months.

The observation of demographic trends between 1981 and 2007 shows polarising trends in most case study areas, except for Malta where all areas outside Valletta are growing and Marathasa in Cyprus where all municipalities have declining population figures. While the polarisation created larger contrasts between urban and rural zones in most case study areas, the Swiss cantons of Valais and Jura rather display oppositions between different parts of each region. These trends however do not necessarily imply that population decreases concern the most mountainous parts.

The relative proportions of young adults in each locality provide a good indication of the capacity of each municipality to prevent out-migration of youth. The lack of higher education opportunities typically leads to structural youth out-migration, which needs to be compensated by return migration or other in-migration to ensure the long term demographic livelihood. Among the case study areas for which data is available, this issue is particularly

important in the North Calotte and North Iceland. This leads to rapid decreases in working age population in the rural parts of these regions, compared to growth or stability in most parts of Valais and Jura.

In terms of economic structures, labour market participation figures show distinct patterns in terms of gender balance. The possible connections of the situations observed in each case study area with geographic specificities however would need to be explored. Both for overall labour market participation and unemployment figures, it also difficult to find a correlation with degrees of "geographic specificity", except in the North Calotte. The first results therefore confirm the initial idea that the political relevance of "geographic specificity" does not in general stem from "laggardness" or from a low degree of economic performance, but should rather be approached in terms of improving the economic returns and creating the basis for a socially and ecologically sustainable development.

The qualitative approaches of ESPON TeDi will focus on understanding the observed territorial patterns in view of collecting elements of good practice promoting sustainable development based on regional comparative advantages, within the framework of each area's regional planning and growth policies. It will be based on the review of key national and regional documents and interviews with the recruited insight providers.

A guideline document (See Annex 1) has been set up to analyse these documents. There are two main themes of enquiry. Considering the contribution of "Territorial Diversity regions" to the objectives of Lisbon and Gothenburg, a first object of enquiry is whether policy instruments are constructed in response to identified territorial characteristics, or if the types of territories are on the contrary constructed in an attempt to compensate for observed territorially differentiated effects of existing policies. The requests for clarifications on these issues are followed by a focus on the causal links leading from territorial specificities, via territorial constraints to socioeconomic challenges, as well as from territorial specificities, via territorial opportunities to improved socio-economic stability and growth, improved living standards and structural strengths.

In the second section of the guidelines, macro processes are investigated in order to identify the implications of global or macro processes on the capacity of the regions to develop sustainable economic activities, through a SWOT type of analysis. Additionally, details are requested on the ways in which the 'global dimension' is perceived in the region.

1. Introduction

The present interim report provides an account of the progress made so far in the project. It needs to be considered in combination with the Inception report delivered May 11th.

The ESPON Territorial Diversity (TeDi) project addresses the issue of economic and social development in regions with geographic specificities, such as mountainousness, insularity, demographic sparsity or high population density in a peripheral location. The initial research questions of the terms of reference are the following:

- How to ensure a sustainable development based on regional comparative advantages?
- How to improve the foundation of development by supporting innovation, entrepreneurship, a creative business environment, small scale economics (small is beautiful), the conservation and management of natural resources, etc.?
- How to develop actions that enable the targeted regions to achieve a continuous long-term improvement of quality of life, inter alia by tapping existing ecological and social innovation potential of the economy?

In our proposal and inception report, we have sought to further specify these questions, and their relation with the issue of territorial diversity. The central point is to clarify how one may better incorporate the physical characteristics of regions in the design and implementation of policies targeting economic and social development.

This first implies that physical specificities need to be differentiated from laggardness. While regions with geographic specificities may be lagging behind in terms of economic and social performance, it is important to distinguish between causal processes based on physical specificities and those that can be traced back to other structural factors, e.g. factors of institutional, cultural or historical nature. Furthermore, the relative disadvantage deriving from a geographic specificity may not lead to a lower level of social and economic performance, as it may be compensated by past or present proactive policies or by a specific strength such as abundant

natural resources, assets for tourism development, closely knit and dynamic local communities or a particularly favourable position for trade and transport flows. One hypothesis to be explored is that there are limiting factors of economic development also in these areas, and that territorial development policies need to focus on identified unrealised potentials as well as on differences in performance levels.

The reasons for advancing such a hypothesis are that territorial diversity regions experience a range of obstacles when seeking to adapt to prevailing models of economic development. Insularity, mountainousness and sparsity in different ways make it difficult to achieve economies of agglomeration, to organise cost efficient and competitive logistics systems (e.g. next day delivery) and to ensure access to knowledge producing institutions facilitating innovation. Furthermore, the production of public and private services may be more costly, not least in the transport sector. This may reduce the range of available services, and indirectly affect the overall levels of welfare and quality of life.

These factors are not necessarily problematic *per se* insofar as they may be compensated by a range of competitive advantages such as those mentioned above. This would then justify the higher "operating costs" of regions with geographic specificities. In a context of European market integration based on principles of trade liberalisation and "fair and unbiased competition", the specific arrangements needed may however be difficult to implement even if they may be rational from a strictly economic point of view. The question of regulatory adaptations needed in Territorial Diversity regions is therefore an important component of our investigations.

Furthermore, there is a risk that a full range of service functions does not emerge naturally as a consequence of economic development in regions with geographic specificities, as settlements may be of limited size, isolated from surrounding regions and/or in relative isolation from each other. For these reasons, public policies may be required to maintain the quality of life of the inhabitants, based on ideas of a "European model of society" whereby economic development shall be based on balanced and sustainable communities. The possible roles of public actors as instigators, mediators and/or organisers of a socially, ecologically and economically sustainable development in Territorial Diversity regions therefore need to be further explored.

The idea that economic potentials of Territorial Diversity regions are not fully exploited through market mechanisms alone justifies the focus of the TeDi study on development opportunities. Two concepts have been highlighted in

by the stakeholder group as part of the feedback on the inception report, namely the notion of "small scale economies", on the one hand, and the possibility of identifying so-called development "hotspots" in TeDi regions, on the other. "Small scale economies" may be approached in two different perspectives. On the one hand, as the opposite of "economies of scale", it suggests that small functional areas benefit from certain advantages in terms of economic development. Relationships of trust between local actors, higher quality of life, access to nature may be mentioned as possible such assets of "small scale economies". "Economy" is then considered as a means or process of increasing the efficiency of production.

On the other hand, "economy" may be used as a descriptive notion, "small scale economies" reflecting the fact that functional production and exchange systems in Territorial Diversity regions tend to be smaller in size than their counterparts in other regions. In this perspective, one is encouraged to reflect upon the factors of closure of these functional production and exchange systems. While local labour markets are generally circumscribed by daily mobility and commuting patterns, the intensity of interaction between companies and within entities of individual companies situated in different locations follows more complex patterns. One cannot presume that individual localities constitute a functional economic unit, but must also consider the physical distance, time distance and cost of accessing other centres as well as the external network relations with different types of measures of connectivity. While these principles may not always be possible to operationalise in terms of quantitative analysis, they do encourage a critical distance whenever one analyses territorial statistics and maps. The systematic underlying hypothesis of all such territorial analyses is indeed that each of the considered geographical units constitutes a coherent context for the assessment of trends and performances.

This is particularly important when considering settlements, administrative units and functional units of small size. These will indeed tend to function in more extrovert way than larger areas (except in cases where self-subsistent agriculture is the predominant type of activity¹). In other words, the determinants of performance may be found in the nature and intensity of their external relations rather than in the considered area as such.

In order to approach these issues analytically, one may need to differentiate a range of economical spaces of relevance to each TeDi area. The space of

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¹ It should be noted here that the region of Suceava is classified as a belonging to the "semi-subsistence agriculture" category in the draft EDORA typology of rural development environments.

local service provision, either public (e.g. school, local health office) or private (e.g. provision of daily subsistence goods), may be different from that of more exceptional services (e.g. specialised shops, theatre, hospital). Likewise, the functional labour market areas may be quite different from the space in which companies operate to obtain their production inputs and interact with their clients.

This makes the notion of "small scale economy" more complex than it may seem at first glance, as it is not a priori possible to consider an isolated settlement with a small population as a "small scale economy". It is however possible to compare the size of the territorial units of relevance for democratic dialogue, administrative management and for daily mobility, on one the hand, and for production and economic exchange, on the other. Small local areas that are well-integrated in wider systems of production and exchange may effectively function as a component of a "large scale economy". The effects of external factors, such as fluctuations on world market prices, product cycles or financial crises may however be more brutal as their "circular economy" (i.e. locally organised exchange of goods and services) is less developed and therefore will not help absorbing these types of shocks.

These same types of considerations are also relevant when considering the notion of development "hotspots" in TeDi regions. A "hotspot" will generally develop based on a combination of external network connections, and a capacity to organise and attract elements of the local human and natural capital. Understanding the dynamics leading to the emergence of "hotspots", and designing policies to promote such processes, therefore presupposes combining different scales of analysis.

The definition of a hotspot may also need to be further specified, especially in relation to notions such as "growth poles". Growth pole theory, as it has been formulated since the 1960s, presupposes that self-reinforcing retroaction processes and diffusion effects are triggered by localised industrial initiatives. The physical characteristics of territorial diversity regions may constitute obstacles to these processes: in cases where individual settlements are of small size and relative isolated, job creations in the growth pole do not necessarily lead to a balanced and robust labour market, but may create a specialised and vulnerable one. Furthermore, physical obstacles to spatial interaction may effectively reduce the possibility of diffusion effects, of which the reality as a general principle for regional economic development is in case debated in the literature.

This leads to an idea of hotspots which is quite different from that of "poles" around which the regions would organise their growth dynamics. As suggested in the feedback on the inception report, a "hotspot" more generally describes a local urban or rural area in which growth dynamics or trends towards a socially, economically and ecologically more sustainable development are observed. Rather than being approached as "motors" in the overall development of TeDi regions, they are therefore rather to be considered as examples of good practice overcoming the challenges and exploiting the potentials in a specific type of locality.

A core objective for the project is therefore to systematise the categorisation of TeDi areas, so as to facilitate transfers of good experience on the exploitation of development opportunities. The present interim report focuses on the progress made in this respect. Firstly, data describing their physical characteristics, settlement patterns and levels of accessibility and connectivity have been compiled to provide a basis for a general typology. Secondly, the statistical characterisation of TeDi areas seeks to assess their current situation and trends as a basis for benchmarking. These different quantitative inputs will feed into the qualitative assessment of development opportunities and challenged in each case study area.

In these different respects, various inputs from other ESPON projects can be exploited. First results from the DEMIFER project (Demographic and Migratory Flows Affecting European Regions and Cities) provide wider scale information on some trends that can help explaining some of the trends and structures in TeDi areas. The EDORA project (European Development Opportunities in Rural Areas) has presented a draft typology of rural areas; we have sought to relate our reflection to the methodological discussion around it. More generally, the results from these projects have been considered when analysing the first quantitative results in the present report.

In terms of identifying urban centres, and proposing methods on how to analyse city-hinterland relationships and urban influences, the FOCI project (Future Orientation for Cities) has in its interim report focused on the lack of adequate data and delimitations. The possibility of approximating the delimitation of cities to NUTS 3 or NUTS 2 is mentioned, but with reservations on the usefulness of such a delimitation. From the perspective of TeDi regions, and especially in regions with both significant urban centres and areas with geographic specificities, such an approach would be particularly questionable. It effectively results in averaging out gradients between core areas and geographically specific one, and makes it difficult to

consider measures of the relative access to urban areas. The FOCI project is however also reusing and renewing analyses based on the more geographically detailed delimitation of urban areas in PUSH² and PIA³ initially produced by the ESPON 2006 1.1.1 project. The present project uses the same type of data to assess the access of TeDi case study areas to urban nodes, thereby creating the conditions for possible future exchanges with the FOCI TPG.

The ReRisk project (Regions at Risk of Energy Poverty) deals with a range of issues of which are very relevant for TeDi regions, as relative isolation and demographic sparsity induce higher energy consumption per capita, a high degree of dependence on long haul transport and/or a larger dependence on transport by individual cars. While it may be difficult to relate the TeDi case study areas to the quantitative results at NUTS 2 level presented by the project so far, we will seek to integrate the general analytical framework and methodological considerations in our assessment of energy related issues related to Territorial Diversity.

Finally, the update of Air and Multimodal Potential Accessibility Indicators, finalised by Spiekermann & Wegener in March 2009, provides a starting point for the assessment of the accessibility and connectivity situation in ESPON TeDi regions. It appears particularly important to consider the extent to which such overall European analyses may reflect the specific accessibility and connectivity challenges of TeDi regions.

² The PUSH, or Potential Urban Strategic Horizon, is defined as the area within 45 minutes road travel distance from the main urban centres. Different ways of approximating this area to municipal boundaries may then be implemented.

³ A PIA, or Polycentric Integration Area, is a group of PUSH areas overlapping by more than one third.

2. Theoretical background

Development opportunities in TeDi regions are the project's main object of enquiry. In the context of a knowledge economy, where the most important parameter for economic development is the capacity to constantly develop, access and implement efficient production methods, this leads us to question the specificity of innovation processes in regions with geographic specificities.

Within the wide literature on innovation processes, three major geographical approaches may be distinguished:

- Innovation and spatial constraints or disavantage related to centre-periphery relations. This approach has been adopted not only in geography (Reynaud, 1981) but also in regional economics and particularly in the so-called "new economic geography" (Fujita, Krugman & Venables, 1999; Espace géographique, 2007). The academic recognition of results produced by this school of thought has recently been confirmed with award of the Nobel Price to Paul Krugman, while their impact on policy applied research for example appears in the spatial doctrine set out in the World Bank's latest report on world development (World Bank, 2009). This doctrine postulates the inevitability of development stimulated and capitalised by urban areas and metropolitan environments. The only margin for manoeuvre is in the accompaniment and facilitation of the spatial diffusion of the effects of development.
- The "innovation milieus" approach, which seeks to identify local social and economic environmental qualities capable of compensating for the relative disadvantage of small population numbers and a peripheral situation. This approach therefore seeks to demonstrate that the trends and processes observed by the "new economic geography" do not necessarily lead to regional discrepancies in wealth and living standards, insofar as they may be effectively countered by other types of dynamics. It is upheld by numerous studies in the field of regional economics that attempt to identify the different forms of innovative milieus (Camagni & Maillat, 2006), industrial districts and other local productive systems (Benko & Lipietz, 1992 & 2000; Fauré & Labazée, 2005). Other researchers have focused on the processes allowing local actors to identify and exploit economic potentials based on natural resources, cultural heritage and/or other territorial characteristics (Pecqueur, 2005; Landel & Senil. 2009).

Organisational innovation and the pursuit of efficiency in territorial arrangements relate more to political geography, political science and development studies. Research in this field focuses on innovative forms of spatial and institutional constructions that go beyond the narrow codes of territorial modernity and its spatial patterns, such as exclusive sovereignty, continuity, fixed limits, strict hierarchical relations between administrative units and territorial levels of decision making. (Gerbaux & Giraut, 2000; Antheaume & Giraut, 2005; Vanier, 2008).

While the first of these approaches (innovation and centre-periphery relations) corresponds to a scientific enquiry on structural constrains on innovation and its spatial diffusion, the two latter provide an analytical framework to approach the territorial dimension of innovation, either in terms of (favourable) milieu, or of territorial governance structures and institutional arrangements.

Considering development opportunities of regions with geographic specificities, the two former approaches tend to lead to opposite conclusions. The shift from a focus on structural constraints due to centre-periphery relations to a more agency oriented reflection on the qualities of local milieus and specific territorial resources is reflected in territorial policies. The new generation of regional policies do not focus on convergence as the main priority, but encompass wider concerns for territorial competitiveness and the exploitation of local assets.

This change of paradigm does not directly concern the third type of organisationally focused approaches of innovation, which helps specifying the institutional and spatial dimension of transformations induced by geographic specificities. The innovative institutional and territorial arrangements observed are in most cases a form of "new regionalism" built on territorial projects (Pike et al., 2006). These projects however necessarily derive from a negotiation process bringing together a coalescence of actors in a design process. Their coming together reflects new types of variable geometry functional territorialities that evolve over time; it however also constantly needs to relate to the more stable institutional boundaries and structures within which public authorities and bodies intervene. Organisational innovation emerges from these complex interactions between groups and territories. It can be a particularly relevant notion in TeDi areas, insofar as the geographical specificities create a relative isolation or "a sense locality"

that makes it easier to challenge norms and structures imposed by central authorities.

Because of their diversity and internal contradictions, the three approaches provide complementary answers to central questions surrounding innovations in TeDi areas. In the present project, they will therefore help guiding enquiries on the extent to which TeDi regions can be considered as innovative milieus in their own right, or as mere recipients of externally produced innovations. In the latter case, the structural obstacles and facilitating factors of diffusion need to be further explored. Furthermore, the effects of a permanent situation of being, at best, "one step behind" core regions need calls for a further discussion: do the effects of such constant territorial contrasts need to handled politically to avoid processes triggering an aggravation of disparities? If yes, what measures are needed?

With the focus on "contributions to overall policy goals like Lisbon and Gothenburg Strategy" and "development potentials" already present in the Terms of Reference, the ESPON TeDi project adopts a resolutely optimistic stance. In other words, the framework for the study is based on an optimistic perspective on centre-periphery relations that does not condemn areas with geographic specificities to dependency but, on the contrary, credits them with the capacity of generating potentially innovative environments.

Are the situations evoked, however, related to geographical specificities or to socio-spatial marginality? Is a mountainous, insular or sparsely populated location sufficient to determine a peripheral situation? We know that regions described as peripheral from a continental or national point a view can be characterised by a great diversity of local environments (Scholz, 2005). Centre-periphery relations indeed prevail within the peripheral regions, establishing come places are as central nodes. Other places can function as gateways on the basis of privileged connections with external centres. Debates on the status of winter sports resorts illustrate this issue in the Swiss context: Are they to be considered as local hotspots for the exploitation of climate and landscape resources, or rather "offshore" (or "deterritorialised") extensions of metropolitan economies? The same types of questions are being raised for a range of economic exploitation where the embeddedness of initiatives and operations in local economic structures is not obvious, as for example in the case of mining resources in the North Calotte.

In the typology of peripheries proposed in 1981, Alain Reynaud had already envisaged that these would not only correspond to "deprived isolates",

"dominated" and "exploited" areas, but could also be "associated" to central growth centres or build a successful growth strategy by "relying on their own strength". With the intensification of economic globalisation since the 1980s, it is all the more important to focus on local areas in TeDi areas that may develop metropolitan and global connections.

The optimistic perspective on TeDi area is therefore potentially a plea against the theoretical foundations of the new economics of geography, that is, against the deterministic constraints generated by increasing returns (agglomeration effects) and path dependency (historical sequence that confers an advantage on already "acquired" situations). However, it does not simply relate to a blissful theory of meeting a challenge, so important in the historiography of pioneer regions. It focuses on the wiggle room available to TeDi areas to design development strategies that are not dependent on agglomeration economies, and on the need these areas may feel to free themselves from norms, regulations and standards imposed by core regions. Philippe Bourdeau (2009) describes the numerous advantages local communities in TeDi regions can draw from "disconnecting themselves from prevailing norms" in order to design solutions to their particular challenges and issues. Insofar as TeDi areas are disconnected from core regions, such specific local arrangements have a lower probability of challenging established national or European institutional and ideological arrangements. This situation can enable TeDi areas to become experimental areas (Antheaume & Giraut, 2002).

An inherent risk of these approaches is of course to overestimate the potential economic and social effects of processes that, from a quantitative point of view, secondary. It is however important to differentiate between geographical scales in this respect, as minor processes from a macro perspective may be of decisive importance for the development of individual communities. Integrative and participative methods of exploiting local heritage are for example marginal when considering the economy as a whole, but have proven their efficiency from a local development perspective in a number of cases.

An central question to be addressed in ESPON TeDi is therefore how one may systematise the knowledge on solutions that may be marginal from a macroeconomic perspective, but create the framework for a socially and economically sustainable future in local communities.

3. Typology of Territorial Diversity situations in European regions

Different axes are explored in view of producing a typology of Territorial Diversity situations. Firstly, the physical specifications are further described, taking the delimitations of mountainous, insular and sparsely populated areas proposed in the Annex to the Green paper on Territorial Cohesion as a point of departure. The objective is to further describe the physical characteristics of the TeDi regions.

Secondly, settlement patterns are considered, with a specific focus on the appropriate levels of analysis to understand their possible impact on social and economic dynamics.

The third dimension of the typology is accessibility and connectivity of TeDi regions, in which the cross analysis of data at different scales plays a key role. The relative importance of European peripherality measures is assessed against more local and regional accessibility, connections and flow intensity.

Bringing together these three dimensions at this stage seems premature. The objective at this stage is to demonstrate the complexity of the each dimension, as a basis for further discussions within the TPG and with the stakeholders.

For this purpose, we compare European typologies or representations of the themes listed above with the observed structure at the level of ESPON TeDi case study areas. Crossing scales in this way allows us to assess the degree to which European maps and representations may reflect patterns of Territorial Diversity that are being perceived as relevant for social and economic development by regional and local stakeholders. This is one of aspect of creating a basis for the generalisation of ESPON TeDi results. It is also an important component of a methodological reflection on how an empirical basis for a European policy focusing on Territorial Diversity may be constructed.

3.1. The physical characteristics of TeDi regions

The physical categories considered in ESPON TeDi are mountainousness, insularity, demographic sparsity and high population densities in peripheral areas. With the exception of the latter one, these categories have been the subject of specific attention in European policy making through dedicated studies commissioned by DG REGIO⁴ or by the concerned regions⁵. They have also been given special attention in the Green paper on Territorial cohesion published by the European Commission in September 2008, which describes them as "facing particular development challenges" and proposes delimitations at the NUTS 3 level.

Our initial understanding of what constitutes a mountain areas, an island and a sparsely populated region is based on the criteria and delimitations proposed in these reports. In the Annex to the Green paper on Territorial cohesion, the European Commission has however sought to simplify these delimitations at NUTS 3-level.

For mountain areas, the Green paper criterion is that over 50% of the population would be living in areas identified as mountainous in the Nordregio study on Mountain regions produced for DG REGIO in 2004. In Map 1, the resulting delimitation of mountain areas is represented in brown. As previously noted in the inception report, this implies neither of the two case study areas Alba and Suceava are identified as mountainous in this map. Map 1 therefore also represents regions with proportions of mountain population below 50%. Additionally, the same analysis has been carried out using an alternative mountain delimitation excluding areas assimilated to mountain areas on the basis of climatic criteria (Map 2). This only leads to changes in northern Norden, and helps illustrating the diversity of topographic situations in the North Calotte, where only the Norwegian regions of Finnmark, Troms and Nordland are massively mountainous.

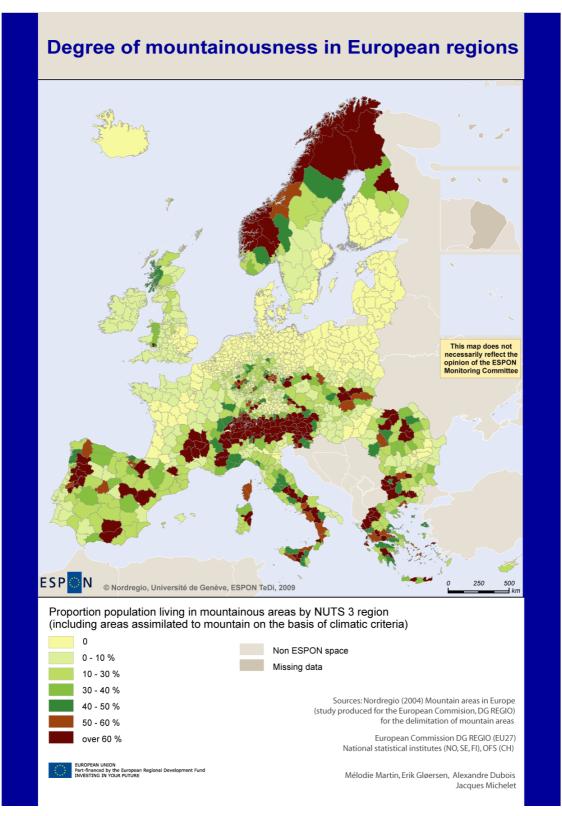
⁴ Planistat and Bradley Dunbar et al. (2003) Study on the islands and outermost regions / Analyse des régions insulaires et des régions ultrapériphériques de l'Union européenne, Study commissioned by the European Commission DG REGIO.

Nordregio et al. (2004) Mountain Areas in Europe: Analysis of mountain areas in EU member states, acceding and other European countries, Study commissioned by the European Commission DG REGIO.

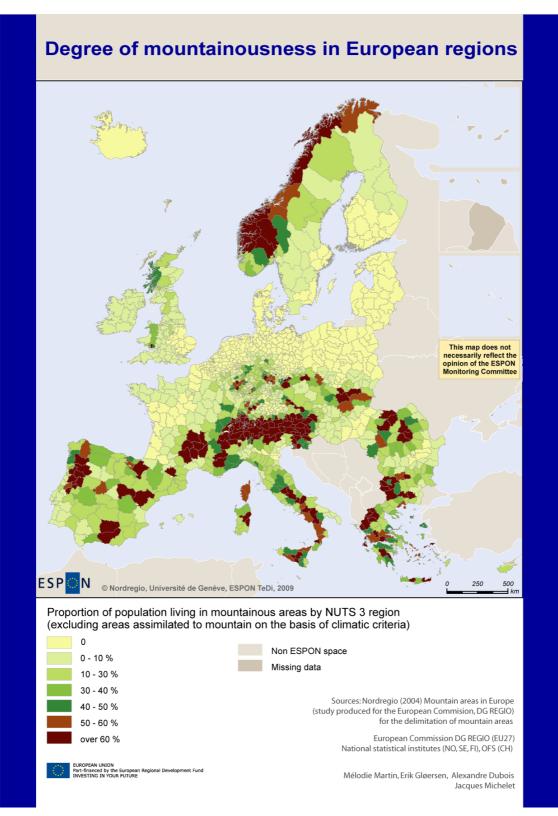
http://ec.europa.eu/regional policy/sources/docgener/studies/study en.htm

⁵ Erik Gløersen et al. (2006) *Northern Peripheral, Sparsely Populated Regions in the European Union and in Norway*, Nordregio Report 2006:2.

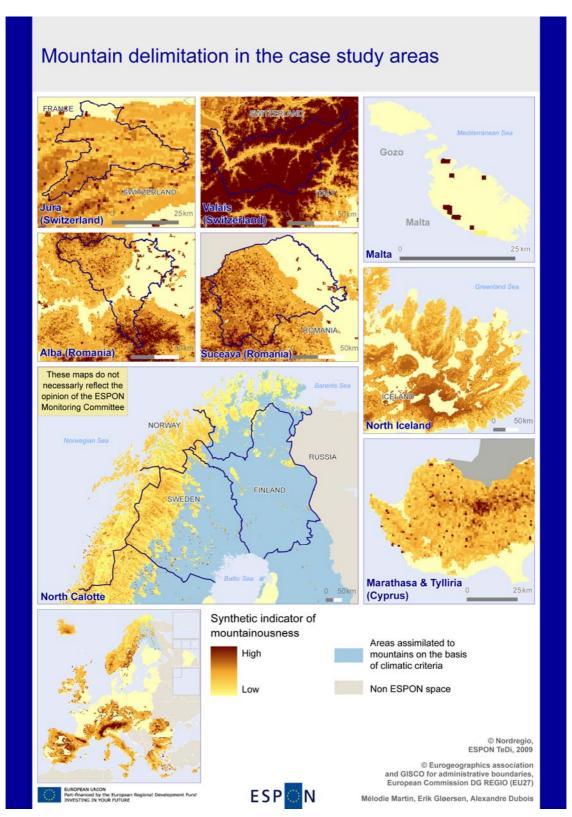
http://www.nordregio.se/Files/r0602.pdf



Map 1 Degree of mountainousness of NUTS 3 regions, including areas assimilated to mountain on the basis of climatic criteria



Map 2 Degree of mountainousness of NUTS 3 regions, excluding areas assimilated to mountain on the basis of climatic criteria



Map 3 Delimitation of mountain areas in the case study areas

Table 1 Proportions of persons living in mountain areas

			Percentage of population living in mountain areas		
			Excluding areas	Including areas	
_			assimilated on the	assimilated on the	
Supra		Infra	basis of climatic	basis of climatic	
NUTS 3	NUTS3	NUTS 3	constrains	constrains	
	Valais		100%	100%	
	Jura		94%	94%	
		Marathasa	100%	100%	
		Tylliria	54%	54%	
	Cyprus	1 9	12%	12%	
				100/	
	Alba		42%	42%	
	Suceava		35%	35%	
	Norrbottens la	än	8%	82%	
	Lappi		1%	96%	
	Nordland		45%	51%	
	Troms		48%	54%	
	Finnmark		31%	71%	
North Cal	otte		25%	71%	
Malta			-	-	
Gozo			0%	0%	
Maltese islands			0 %	0 %	
North Iceland			No data	No data	

 $^{6\,000}$ persons are identified as living in mountain areas in Malta. This figure has been excluded from the calculations, as it corresponds to a $2\,\mathrm{km^2}$ area situated close to coastal cliffs, which does not confer any character of mountainousness to the living environment.

In terms of insularity, the Annex of the Green paper only considers NUTS3 regions composed completely of one or more islands as insular. Applying this criterion to the ESPON TeDi areas, one observes that this implies that the approach excludes the insular areas of the Bothnian sea, as well as outside the coast of Norway (Map 4), while the revision of the initial delimitation of the delimitation of islands allows Malta and Cyprus to be considered as islands⁶.

Applying the more general criterion that islands are territories not connected to the mainland by any physical link, one finds that the North Calotte comprises slightly over 100 islands with a year-round population⁷, 48 of which have more than 50 inhabitants and only 2 more than 1000 inhabitants along the coast of the Norwegian Sea⁸. Considering employment, there are about 72 islands on which there is employment (66 with employment and housing on the same islands), 14 of which have more than 100 jobs, with a maximum of 510 jobs in Karlsøy⁹. In total, North Calotte insular areas along the coast to the Norwegian have a population estimated to about 14 900 inhabitants, and slightly more than 4 322 jobs (2001 data).

The North Calotte coast along the Bothnian Sea has a large number of islands, but these only totalise a population of about 500 persons and less than 20 employment opportunities. The numbers of inhabitants and jobs on these insular territories is therefore weak in comparison to the mainland. The importance attached to a human presence on these isolated and remote territories however remains to be further verified among the stakeholders.

Double insularity is another important dimension not considered in the Green Paper delimitation, i.e. an island situated outside the coast of another island. Among the ESPON TeDi case study areas, the main case in this respect is the Maltese island of Gozo, with a population of 31 300¹⁰. Differences in social and economic dynamics and development levels between Malta and Gozo constitute a main territorial development concern for Malta.

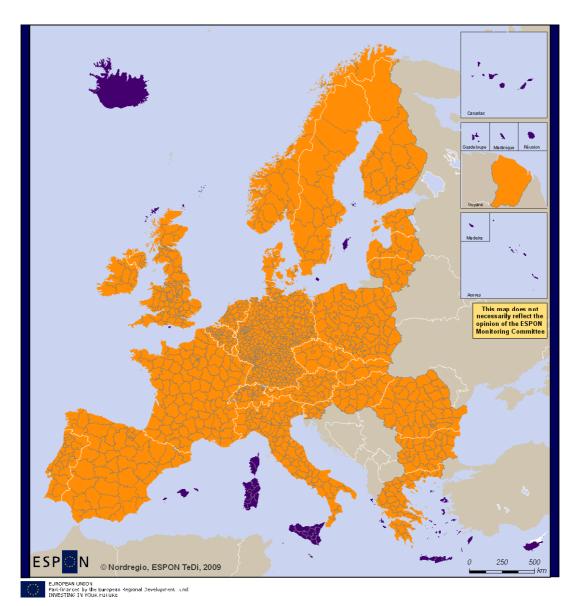
⁶ Comment to the list of regions with geographic specificities on the DG REGIO website: "After further discussions, DG Regional Policy has opted for analytical purposes to use a definition of island regions based on the criteria specified in Article 52 of the Structural Fund and Cohesion Fund regulation instead of the definition used in the Eurostat publication "Portrait of the Islands" which was used in the Green Paper and its annex. Please find below the classification of regions amended accordingly. The main difference with the classification used in the Green Paper is the inclusion of Cyprus and Malta in the group of island regions." http://ec.europa.eu/regional-policy/consultation/terco/terr-classifications nuts3-2009.xls

⁷ 2001 data.

⁸ Vega and Dønna

⁹ 2001 data.

¹⁰ 2007 data

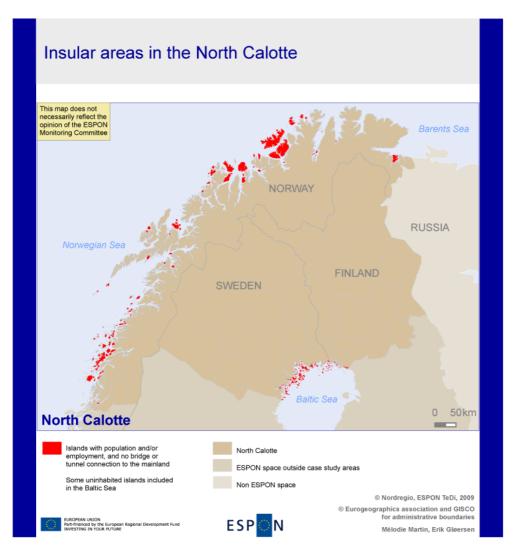


Map 4 Delimitation of insular NUTS 3 regions in the Annex to the Green Paper on Territorial Cohesion

Island regions were initially defined as NUTS3 regions composed completely of one or more islands, an island being defined according to the criteria used in the Eurostat publication "Portrait of the Islands" and in the DG REGIO study on island regions 2003-2004. After the publication of the Green paper, the European Commission announced that it would rather use a definition of island regions based on the criteria specified in Article 52 of the Structural Fund and Cohesion Fund regulation¹¹. The main difference with the classification used in the Green Paper is the inclusion of Cyprus and Malta. These criteria have been applied in Iceland, Norway, and Switzerland to produce the present map.

¹¹ Council regulation (EC) No 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:210:0025:0078:EN:PDF



Map 5 Islands in the North Calotte

Considering islands as territories not connected to the mainland with any physical link, but with a fixed population and/or employment opportunities, one can identify a considerable number in the North Calotte. These totalise a population estimated to 14 900 inhabitants along the coast of the Norwegian Sea, and only about 500 inhabitants along the Bothnian Sea (2001 data).

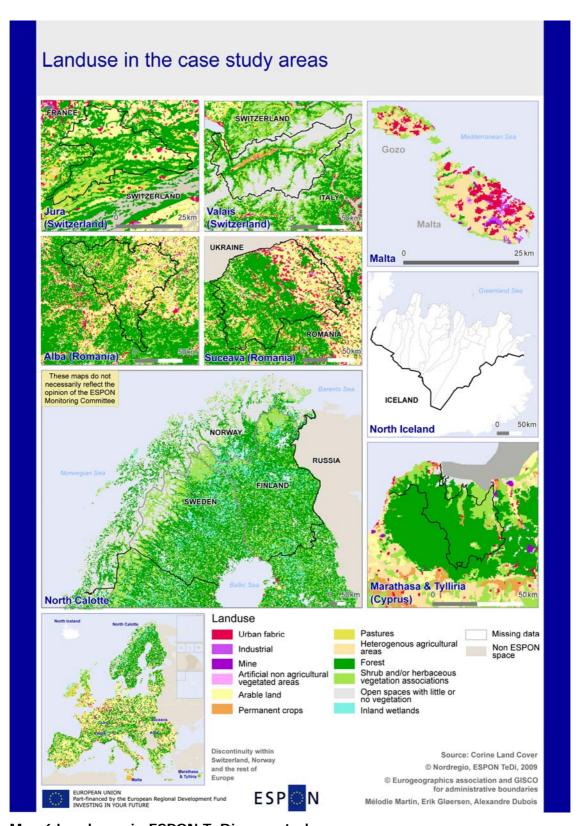
The number of inhabited islands in the Bothnian Sea is overestimated in the present map, as it corresponds to islands overlapping with 1k1 km grid cells with population.

In terms of land use, it has proved surprisingly difficult to collect comparable data from the ESPON TeDi case studies to compare the relative extents dedicated to specific types of agricultural and forestry related practices. We have therefore carried out a first mapping of land use patterns based on CORINE landcover data (Map 6). This first shows the importance of forested areas in the TeDi case study areas, covering most of the Finnish and Swedish components of the North Calotte and of the Marathasa valley in Cyprus, over half of Jura, Alba and Suceava regions and extensive parts of the Valais valleys. The extent of wetlands are however a specificity of North Calotte forest areas, while the higher degree of intertwining of built up and agricultural land in mountain areas characterise Alba and Suceava. The different characteristics of the forest areas, and their respective economic potential, should therefore be the object of further enquiries.

Malta is in an exceptional position with built-up areas and arable land making up the major part of the land use, both in Malta and Gozo. The nature of the arable lands, the types of exploitation and the evolution of the agricultural sector has been particularly focused upon in the data collection. The objective is to assess the relative importance of these types of activities in TeDi areas, and the possible existence of unused potentials, e.g. in a context of increased demand for bio-energy or for .

At the other end of the scale, highland parts of the North Calotte and of the Valais have either shrub or little to no vegetation, land use types which are also likely to be predominant in North Iceland¹². If they are barren from an agricultural point of such, these types of land use can be a major asset for tourism, especially when the climatic conditions make winter tourism possible. They are also of importance as sources of water and hydro-electric energy.

¹² Iceland CORINE land cover data should become available during the summer months of 2009.



Map 6 Land use in ESPON TeDi case study areas

3.2. Sparsity and settlement patterns in TeDi regions

In the Annex to the Green Paper on Territorial Diversity, Sparsely populated areas are defined as NUTS3 regions with a population density of less than 12.5 inhabitants per square km, with reference to paragraph 30.b of the Guidelines on national regional aid for 2007-2013 (2006/C 54/08). The corresponding list of regions (Map 7) includes a Nordic areas extending considerably beyond the North Calotte, as it includes most of East Finland, the Swedish inland down to Jämtland, the inland of south-eastern Norway as well as coastal counties including large uninhabited mountain areas. All of Iceland is sparsely populated except Reykjavik, as well as the three NUTS 3 regions of the Scottish highlands and islands, the Spanish inlands regions of Soria, Teruel and Cuency and the Greek region of Evrytania. Additionally, the French outermost region of Guyana also belongs to this list.

Zooming down at the level of TeDi case study areas, and observing municipal population density values within these, one finds that the spread of values within regions that is as wide as that observed between regions at NUTS 3 level. Even the most sparsely populated regions have municipalities with population densities above 100 inh/km²; in the more densely populated ones (Malta excepted), values go down to below 8 inh/km². In all TeDi areas, there is therefore a need to manage contrasted situations.

The extent of these contrasts is not fully reflected by municipal figures: Grid population figures (Map 8) for example make it obvious that the Valais regions is not characterised by a contrast between high and low population density areas, but by a combination of densely populated valleys and a mostly uninhabited highland. The development perspectives and planning challenges are in other words very different from those of Jura, with its rural population spread out on the entire territory. Similarly, while the municipal map of the North Calotte suggest comparable municipal population densities over most of the territory, the grid data shows distinct patterns from country to country: While the Norrbotten (SE) and Lappi (FI) rural population is organised along rivers and transportation axes, it is mostly concentrated in small communities along the coast in Norway, creating different types of challenges, e.g. for accessibility and public service production.

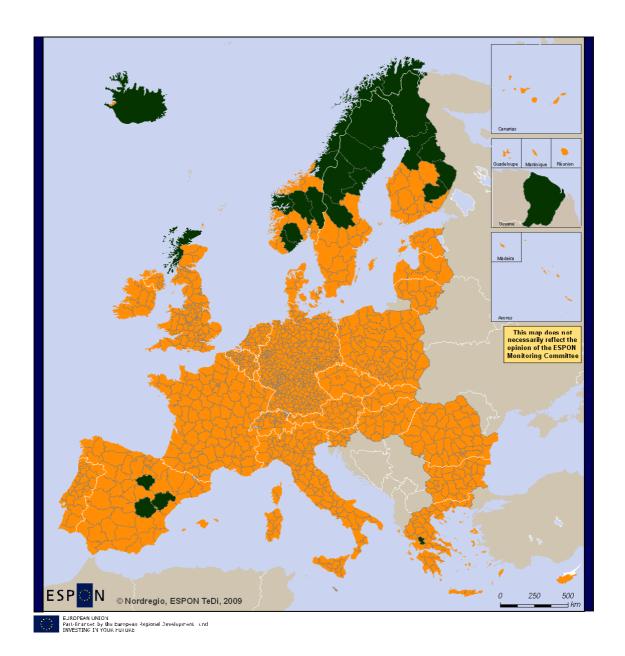
The European environmental agency has sought to estimate grid population data across Europe by disaggregating municipal population according to CORINE land use types (Map 9). The underlying hypothesis is that one can associate a certain level of population density to each of land use type,

identified through remote sensing. The comparison of Map 9 and Map 10 however illustrates the extensive differences between register-based and estimated grid population data, e.g. by consider the contrasts along the French-Swiss and French-Italian borders. This shows that the estimated data suggest more outspread population patterns than the ones one may observe when register-based data area available. The extent of this bias in each area is however difficult to assess, as most ESPON countries do not have register-based population data. Building a systematic knowledge basis on settlement patterns throughout Europe is therefore a challenge yet to be overcome. This would allow a better informed dialogue on the diverse forms of demographic sparsity across European regions.

Furthermore, observing the extent of differences between regional and municipal values, one may question the relevance of the very notion of sparsity; population density values appear as a reflection of the delimitation and size of geographical units, rather than of territorial structure. From a territorial development point of view, the core issue is however the number of persons to be found within each functional region. Relevant questions are for example:

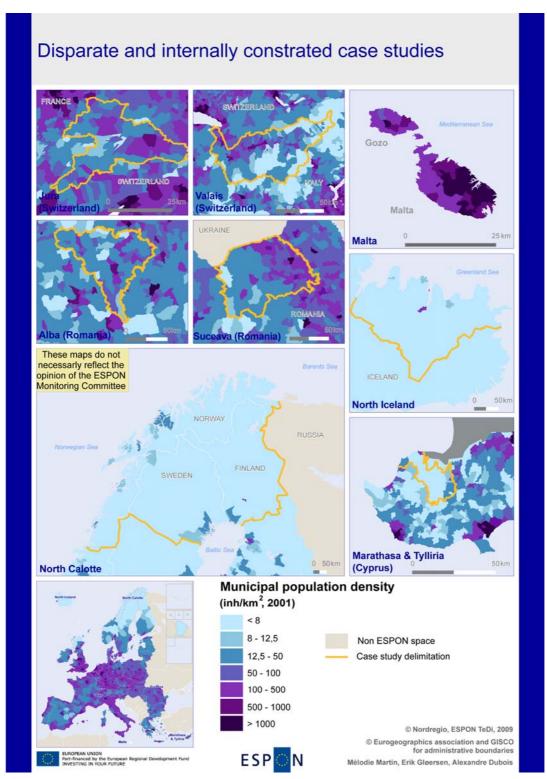
- can the labour market operate efficiently, with a sufficient number of actors to generate dynamics of offer and demand that may regulate the local economy?
- are there enough persons to operate public and private services costefficiently?
- do population numbers and the settlement patterns make it possible to operate public transportation?

While functional regions are generally approximated to labour market areas, another option, in a more prospective perspective, is to consider the number of persons within daily mobility distance. In Map 11, the number of persons within 50 km airline distance is represented. This effect of such an alternative representation is particularly striking in Malta. The from European standards high population density figures of Malta correspond to population potential figures just above average, close to those to be found for example in the Swiss Valais or in Western Alba and Suceava. The TeDi case study are with the highest population potential is Jura, with values more than five times superior to the European average over most of the territory. As such, in terms of population potentials, Jura belongs to the European core area



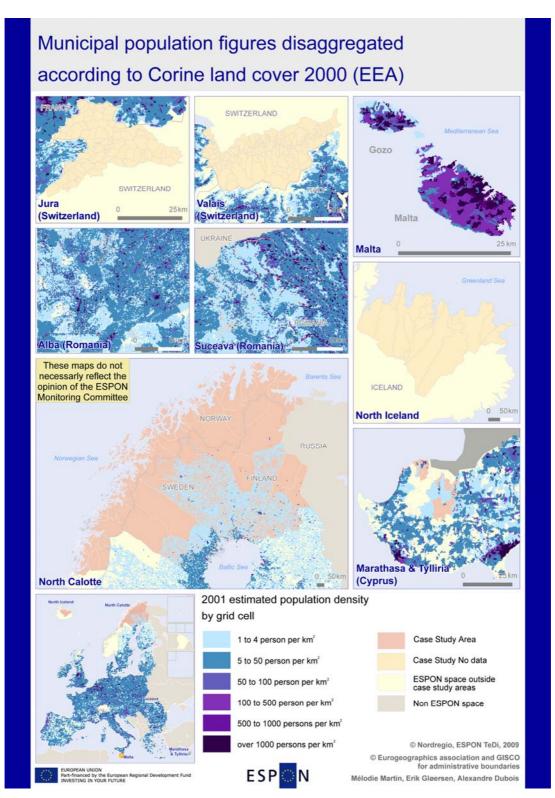
Map 7 Delimitation of sparsely populated NUTS 3 regions in the Annex to the Green Paper on Territorial Cohesion

Sparsely populated areas are defined as NUTS3 regions with a population density of less than 12.5 inhabitants per square km, with reference to paragraph 30.b of the Guidelines on national regional aid for 2007-2013 (2006/C 54/08). These criteria have been applied in Iceland, Norway, and Switzerland to produce the present map.

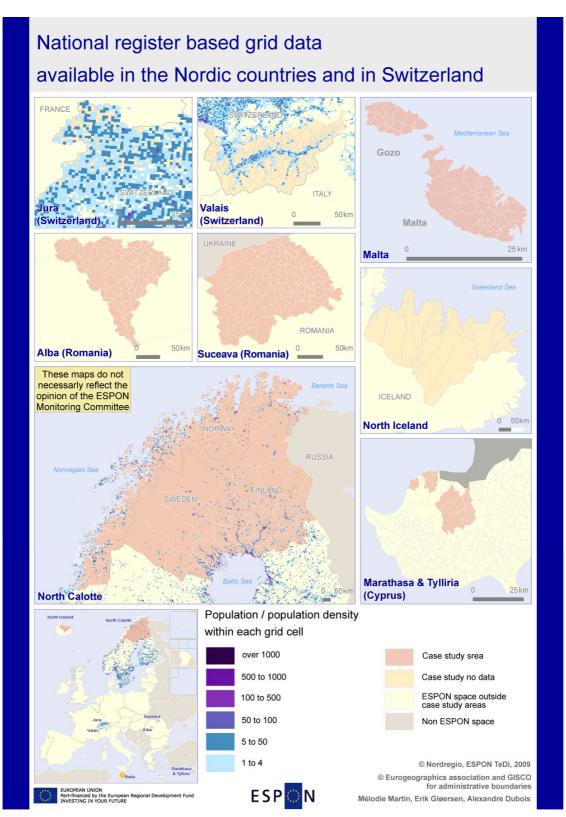


Map 8 Municipal population densities in TeDi case study areas compared to European NUTS 3 values

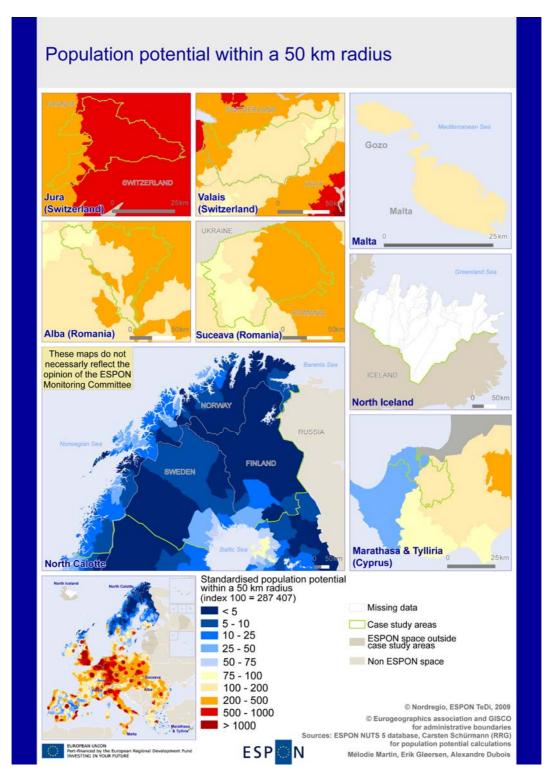
Most case study areas display the same range of municipal values as those observed at NUTS 3 level for Europe.



Map 9 Estimated grid population: Disaggregation of NUTS 5 municipal population according to land use zones



Map 10 Register-based grid population



Map 11 Municipal population populations within 50 km

This representation reflects population sparsity patterns of relevance from a regional development perspective, as it corresponds to the number of persons to be found within a daily mobility area (estimated to 50 km airline distance).

stretching from the West Midlands to northern Italy. Alba and Suceava display relatively similar East-West gradients. These can also be found in the Marathasa Tylliria area, but with distinctly lower values.

A representation such as Map 6 can however only be a starting point for more detailed discussions and analysis, as it does neither reflect the orientation and quality of transportation networks nor the effects or cultural, institutional or legal frontiers. Furthermore, there are significant variations in accepted daily mobility distances from region to region. Nonetheless, they do offer a good basis for typologies based on population density compared to equally unsatisfactory data on regional and municipal population densities.

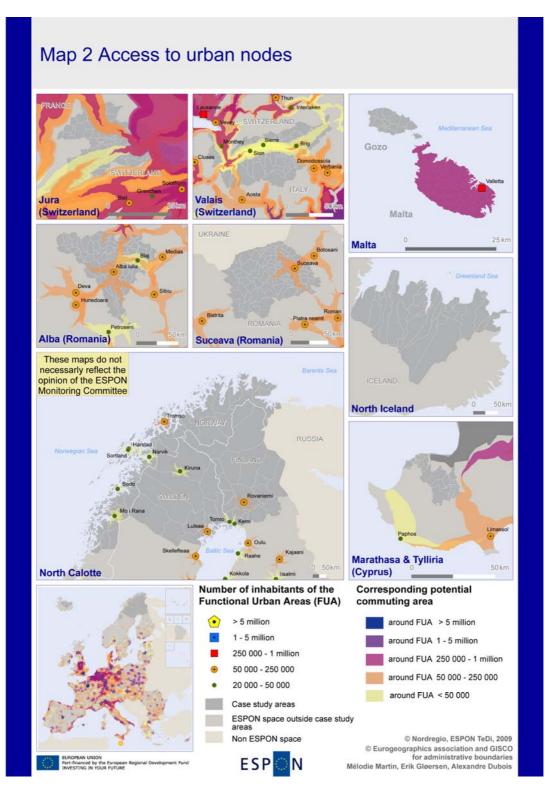
3.3. Accessibility in TeDi regions

The necessary connection between measures of sparsity and accessibility is illustrated in Map 12. Based on the 45 minute isochrones delimited around the centres of Functional Urban Areas (FUA) by ESPON project 1.1.1, one may characterise the relative access to urban centres in TeDi case study areas. The ESPON 1.1.1 project only considered FUAs of more than 20 000 inhabitants¹³ - only the central nodes of such areas therefore appear on the map. From these central nodes, the area within reach in 45 minutes by road was delimited¹⁴. The network model used for this purpose included trunk roads mainly – some areas accessible with minor roads may therefore not appear. The 45 minute threshold was used as a travel time often referred to in the literature as a typical maximal daily commuting distance for most persons.

Based on this representation, on may identify distinct situation in each case study area: In the Maltese islands, contrary to the population potential map (Map 11), the difference between Malta and Gozo is quite obvious. While all of Malta is within daily commuting distance from Valletta, this is not the case for Gozo.

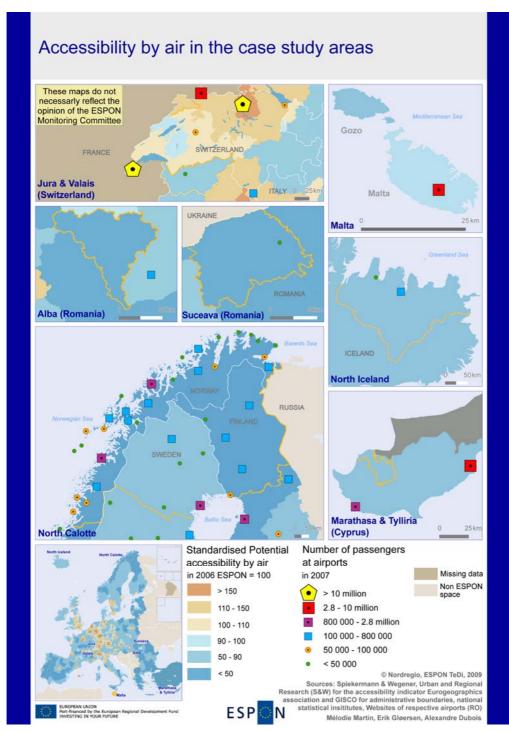
¹³ A Functional Urban Area generally corresponds to a labour market area. The threshold therefore correspond to the labour market area as a whole, and not

¹⁴ The isochrones were delimited by Carsten Schürmann (RRG)



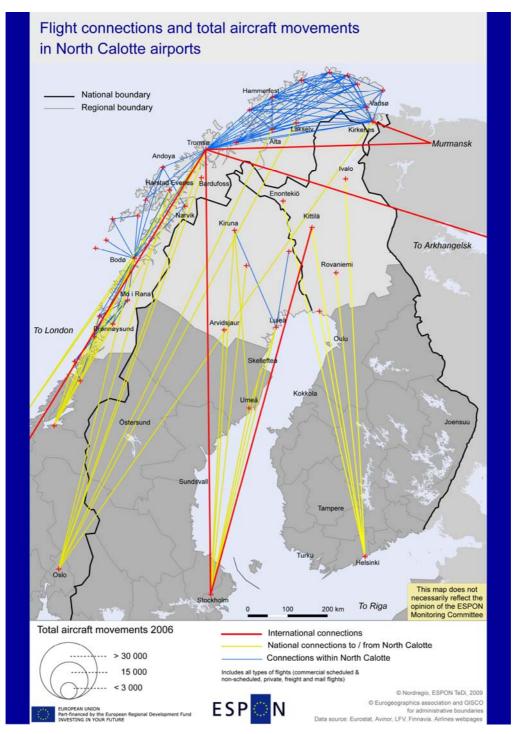
Map 12 Access to urban nodes.

While the highest values regional accessibility values are well correlated to the proximity to a major



Map 13 Airport traffic and endowment compared to European measures of air accessibility.

While the highest values regional accessibility values are well correlated to the proximity to a major international airport (e.g. Jura and Valais), lower air accessibility is a result of both a more peripheral position in the European airport system and a lower endowment in infrastructure.



Map 14 Airport traffic and endowment compared to European measures of air accessibility.

The North Calotte is specific as the only ESPON TeDi case study area where internal air transport plays a major role. The difference between the Norwegian part, with multiple connection and two "hubs" and the Swedish and Finnish parts where Stockholm and Helsinki may be the most convenient meeting place for persons from neighbouring cities, is however striking.

In Jura, no FUA centres can be identified. However, there is access to numerous external centres of FUAs of major significance. The main planning challenge therefore lies in the positioning of predominantly rural region in close proximity to major urban poles. Valais has a series of smaller FUA centres, but only its westernmost parts are within commuting distance of a major agglomeration. Regional development will therefore be organised around these minor poles, whose specificity is to be organised along a linear spatial pattern imposed by the topography.

Alba and Suceava have similar patterns, with only parts of the regional territory within commuting distance a medium-sized main node, and a smaller accessibility to external centres.

Part of the specificity of Marathasa and Tylliria derives from being beyond commuting distance from both Nicosia and Limassol.

Finally, in the North Calotte, the delimitation of 45 minute isochrones from the main urban centres make the difference is scale compared to the previously described case studies quite obvious: only a minor proportion of the study area is within commuting distance of FUA centres. We have however in other studies demonstrated that the 20 000 inhabitants threshold is not adapted in the North Calotte. The observation of population changes at settlement level rather demonstrates that access to towns down to 10 000 and sometimes 5 000 inhabitants can be sufficient to generate a stable or positive demographic trend. In other areas, however, the lack of access to significant urban centres becomes a major obstacle to a socially and economically sustainable development.

Equally, in north Iceland, one would need to draw a 45 minute isochrones around the main urban node of Akureyri to reflect the area with a satisfactory access to urban areas.

In terms of long range accessibility, we have focused on the comparison between air accessibility values derived from the "Update of Air and Multimodal Potential Accessibility Indicators" produced by Spiekermann & Wegener in March 2009, and the airport traffic and airport infrastructure endowment of the ESPON TeDi regions. The Spiekermann & Wegener measures are based on centroids in each region, and therefore do not purport to reflect the effects of territorial diversity. The question is however whether they do, as a synthetic regional value, give some indication on the development challenges and opportunities in the concerned areas.

The calculation of air accessibility was based on a "detailed air transport network" with "a description of scheduled flight connections between all European airports, including "smaller regional airports as well as flight services of low-cost carriers"¹⁵. The results show that while the highest values regional accessibility values are well correlated to the proximity to a major international airport (e.g. Jura and Valais), lower air accessibility is a result of both a more peripheral position in the European airport system, a lower endowment in airport infrastructure and fewer connections.

It will be useful to confront such representations with the concrete development opportunities and challenges related to air accessibility identified by local actors. The need for a "sufficient accessibility" or for an "air accessibility adapted to the needs and development perspectives of local industries" is not necessarily reflected in measures comparing the accessibility of TeDi regions to that of global hubs such as London or Paris.

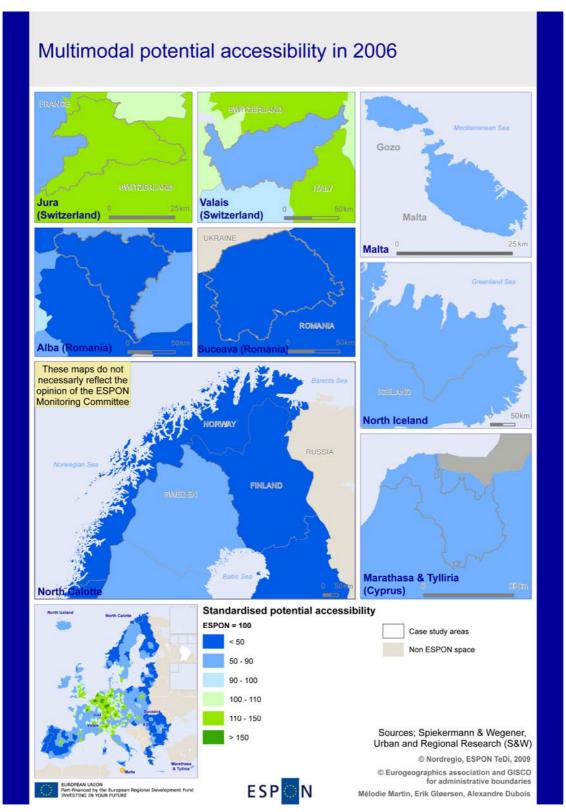
As previously noted, the North Calotte is a specific case study area because of the distance between its towns and cities. The quality of air transport connections within the case study area is therefore a relevant issue. As illustrated by Map 14, there are contrasted patterns in terms of endowment in airport infrastructure and network systems within the North Calotte. Northern Norway has two regional "hubs" in Bodø and Tromsø, and numerous connections between small local airports. There are also some direct international connections available. Most connections in Sweden and Finland are on other hand directed towards the national capital city, creating a direct dependence on a remote external airport. Furthermore, in spite of multiple attempts, it has so far not proved possible to establish lasting transnational connections within the North Calotte.

These characteristics can have a significant impact in terms of regional coherence of the North Calotte, as they reduce the capacity of actors to meet and construct joint development strategies. The comparison between the perceptions of Norwegian insight providers, and those expressed by Swedish and Finnish ones, may be particularly interesting to explore the relevance of these aspects in terms of development opportunities.

This type of overlay between infrastructure endowment and actual connections, on the one hand, and European accessibility maps, on the

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¹⁵ Spiekermann, Klaus (2009) Update of Air and Multimodal Potential Accessibility Indicators - Final Report March 2009, p. 11.



Map 15 Multimodal accessibility maps from the point of view of individual ESPON TeDi regions

other, therefore provides useful inputs to an exchange between the European and local/regions on issues of transport. It makes the need for a distinction between the two types of approaches quite obvious. While European maps typically focus on the integration of the continental territory, local actors identify obstacles to economic development related to transport issues that are not necessarily limited to Europe, and that do not always focus on improved connections in direction of areas with largest population or GDP but rather on observed bottlenecks for exports environmental issues related to transport. Rather than a reflection of transport and accessibility related economic development challenges, the European representation of multimodal accessibility (Map 15) is therefore rather a starting point for enquiries and discussions. Questions to be addressed concerning TeDi region are for example whether the situations of Malta, Cyprus, North Iceland, Norrbotten (SE) and Valais are comparable with regards to accessibility, as suggested by Map 15. What types of local intra-regional gradients need to be taken into account when considering development potentials? Finally, the calculation reflect does transportation challenges, implying that the infrastructure investments considered desirable for local development would increase the standardised potential measure of accessibility? Or are the issues of local transportation needs and European accessibility measures on the contrary quite separate?

3.4. Possibility of establishing an overall typology of TeDi regions

On the basis of the successive presentations of mountainousness, insularity, settlement patterns, urban endowment, access to urban areas and air transport accessibility, we have attempted a synthetic characterisation of the various case study areas in Table 2. This is a draft version, mainly to be considered as a basis for further discussions within the TPG, with the Stakeholder and with the Insight providers.

The table takes into account the different scales of the case study areas, particularly insofar as this is of relevance for the institutional context of formulation of development strategies. Marathasa and Tylliria are groupings of municipalities with no specific institutional status; it therefore seemed

Table 2 Draft synthetic multi-scalar classification of the ESPON TeDi case study areas

Supra NUTS 3	NUTS 3	Infra NUTS 3	Mountainous	Insular	Settlement Pattern	Urban Endowment Relative to population	Access to Urban areas	Air transport Accessibility
	Valais		Exclusively	No	Sparse – concentrated	Intermediate	Low	Major airports, long dist.
	Jura		Predominantly	No	Sparse – dispersed	Very low	Very high	Major airports, long dist.
	Cyprus		Marginally	Exclusively	Sparse - contrasted	High		Contrasted
		arathasa	Exclusively	Exclusively	Very sparse	Very low	Low	Large airports, long dist.
	Ту	Iliria	Partly	Exclusively	Very sparse	Very low	Low	Large airports, long dist.
	Alba		Partly	No	Sparse – dispersed	Intermediate	Intermediate	Single airport, few connect.
	Suceava		Partly	No	Sparse – dispersed	Intermediate	Intermediate	Idem
North Calotte			Partly	Partly	Very sparse	High	Contrasted	Contrasted
	Norrbottens	län	Marginally	Marginally	Very sparse – rel disp.	High	Contrasted	Multiple airports, few connections
	Lappi Nordland Troms Finnmark		Marginally	Marginally	Very sparse – rel disp.	High	Contrasted	idem
			Partly	Partly	Very sparse – rel conc.	High	Contrasted	Numerous airports – multiple connections
			Partly	Partly	Very sparse – rel conc.	High	Contrasted	Idem
			Partly	Partly	Very sparse – rel conc.	High	Contrasted	Idem
Maltese islands			-	Exclusively	Very dense	High	Contrasted	Contrasted
	Malta		-	Exclusively	Very dense	High	Very high	Well connected large airport
	Gozo		-	Exclusively	Very dense	High	Very low	Large airport, long dist.
	North Icela	nd	Partly	Exclusively	Very sparse – rel conc.	High	Contrasted	Multiple airports, few connection

necessary to include a characterisation of Cyprus as a whole to put their situation in perspective. Admittedly, this is also the case for northern Iceland, but in this case Akureyri as the main urban node gives a greater functional and symbolic coherence to the area.

At the other end of the scale, the Maltese islands and the North Calotte are grouping of NUTS 3 regions, each of which are well-identified sub-entities with specific institutional frameworks and policy agendas. These case study areas have therefore been dealt with both as a group and considering their NUTS 3 sub-entities.

The table demonstrates the uniqueness of the situation in each case study area, confirming that the selection of case studies offers a good basis for enquiries on a wider European typology but rendering a typology exercise among the TeDi areas themselves relatively meaningless. The main proximity can be identified between the situations of the North Calotte and North Iceland.

The complexity of the table with regards to scale reflects a more general challenge for the European approaches of territorial diversity. The table only considers the relation of each case study area to regions with NUTS 3 status, but could also have incorporated the wide differences between the case study areas in terms of geographical extent. While the European observation of territorial trends and design of development policies needs to relate to a stable and reasonably homogenous system of geographical units (e.g. NUTS), this implies that territorial diversity can only be addressed if statistical methods, criteria of eligibility and implementation principles take into account these differences of scale. Rather than "homogenising out" territorial diversity by considering NUTS 2 or 3 average values, one may construct regional indicators focusing on the stocks of population, production unit or wealth creation that is taking place within areas characterised by geographic specificities.

We have also showed that an understanding of social and economic challenges related to geographic specificities would require a detailed knowledge of settlement patterns. Settlement patterns determine the physical framework within which individual communities may create a strategy for lasting and sustainable development or be functionally integrated in the dynamics created by neighbouring towns, cities or communities. It is therefore important to emphasize that we only have register population data allowing for a systematic detailed knowledge of settlement patterns in a few European countries.

Further steps in this typology could be to identify the different opportunities of economic growth, as well as the perspectives of promoting a socially balanced and ecologically harmonious development. Current living standards are an important element in this respect, as well as institutional structures and the quality of social and economic networks. Additionally, the extent of natural resources and the capacity to develop an exploitation of these that benefits the local economies need to be taken into account. The risk is therefore to construct an all-encompassing typology of limited heuristic value.

This implies that a main challenge for the project will be to identify how one may in a meaningful way isolate issues of geographic specificity and overall economic, social and institutional performance. Considering that geographic specificities only become sources of opportunities or obstacles to development in interaction with a given economic, social and institutional framework, and not taken in isolation and mechanically, this issue will require careful consideration.

4. Statistical characterisation of the TeDi case study regions

The progress of data collection for the TeDi case study has been slower than initially foreseen. It has been especially difficult to establish complete data sets on individual topics. There have also been some discussions on the appropriate scale of data gathering. The municipal scale does not appear as the most appropriate in all respects. It has particularly been emphasized in Malta that the social and economic significance of the local communities is questionable in some respects.

The question of comparability between the case studies has also been raised. As noted in the previous section, the North Calotte is an extensive area, belonging to three countries and with urban areas separated by large distances. North Iceland also covers and extensive area, but is more clearly dominated by the town of Akureyri as the only major urban node. At the other end of the scale, in spite of its small size, Malta is a sovereign country with all the specific dynamics inherent in such a position. Marathasa and Tylliria are not regions in the traditional sense, but rather isolated rural areas. Jura, Valais, Alba and Suceava are closer to the traditional notion of regions, with an administrative and institutional status as an identified unit within the national context. The Jura is however specific with its exceptionally modest urban infrastructure.

Considering this great diversity, a comparative benchmarking between the case study areas does not appear meaningful. The objective is rather to use the case studies as a basis to explore the notion of territorial diversity, in view of facilitating the formulation of development perspectives in each region that can be interrelated to the European notions and principles of Territorial Cohesion.

It should however be noted that it has not been possible for the TPG to analyse and discuss these quantitative results because of the short period available. The present section therefore only presents a first description of the results and some hypotheses connected to these.

4.1. Demographic structures and trends

Overall demographic change is a powerful synthetic indicator of the general social and economic dynamics in each locality. At the same time, the interpretation of local results can be difficult, precisely because the causal factors are so numerous and interrelated. As illustrated by Map 16 demographic change between 1981 and 2007 shows the strongest polarising trends in Marathasa, North Iceland, Alba and the North Calotte. The reasons behind this decline in population need to be further explored.

Net migration figures between 2003 and 2007 (Map 17) however suggest that this process of population decline is due to imbalances between in and out migration, rather than to low birth rates.

All case study areas except Marathasa however comprise at least one growth municipality. In the Swiss case study areas, there are distinct intraregional gradients with population losses eastern Valais and northern Jura, contrasting with population growth in western Valais and southern Jura. The general pattern is however one of urban-rural contrasts in terms of demographic trends, with main cities and towns growing more or less rapidly while the urban areas are declining or stable.

Maltese demographic trends show a consistent growth in all parts, including Gozo. The only exception concerns some population redistribution out of Valletta. Municipalities neighbouring Valletta have actually experienced demographic decline between 2001 and 2007. It would be interesting to further explore the changes in population structures, e.g. in terms of age groups that may have accompanied these systematic increases in population.

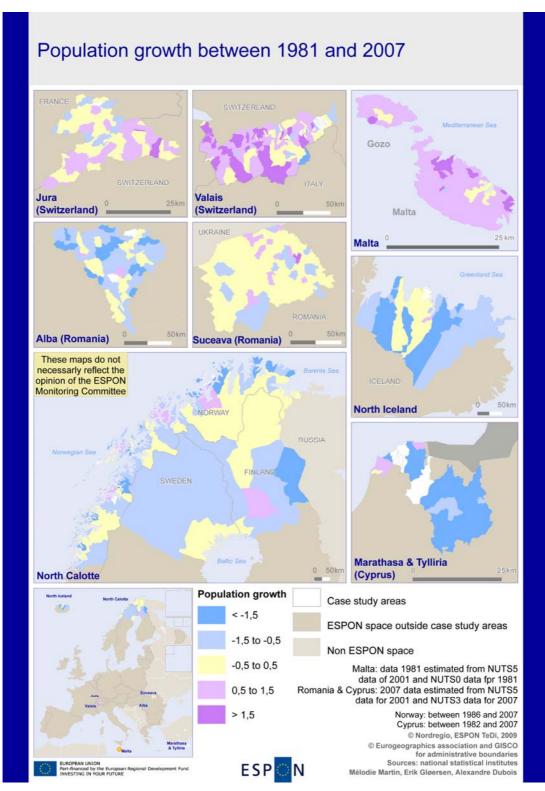
A factor of out-migration of particular importance for economic development perspective is the absence of higher education opportunities encouraging youth to leave some TeDi areas in their late teens or early twenties. In this type of situation, encouraging return migration or the in-migration of young graduates from other regions is of vital importance. Observing the proportions of youth in the total population (Map 18) compared to the national average to reduce the bias from national specificities in the age structures, gives an indication on the extent of this challenge for local communities. While the youth under-representation rates observed in rural parts of Switzerland and in most peripheral municipalities of the North Calotte and North Iceland are relatively similar, the Jura and Valais have a considerably higher proportion of municipalities with an over-representation of 20-24 year-olds. The fact that the other areas remain within commuting distance from the rest of the territory implies that all areas may draw on the

competences of the recent graduates upon completion of their education for their economic development. This is not the case in North Iceland and in the North Calotte, where youth out-migration is considered a major challenge. The effect of cultural factors can however be noted, as municipalities with a large Sami population¹⁶ have higher proportions of youth.

Changes in working-age population (Map 19) confirm these differentiated effects of youth migration, as numerous Swiss municipalities with an under-representation of young adults nonetheless have a growth in working age population, while North Calotte and North Iceland municipalities experience a decline in this age group that is markedly stronger than in the population as a whole. These figures should however also be considered

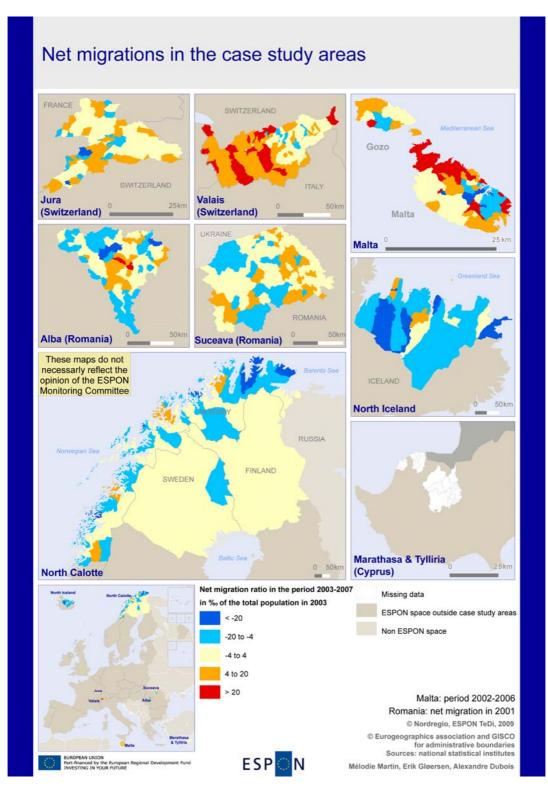
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¹⁶ The Sami are the indigenous people of the North Calotte.



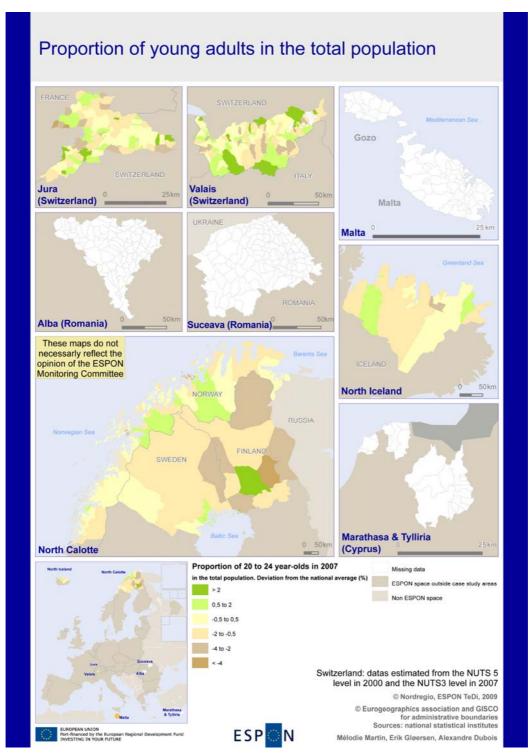
Map 16 Demographic change between 1981 and 2007 at municipal level

The strongest overall decline is observed in Marathasa, while polarising trends are particularly intense in North Iceland, Alba and the North Calotte.



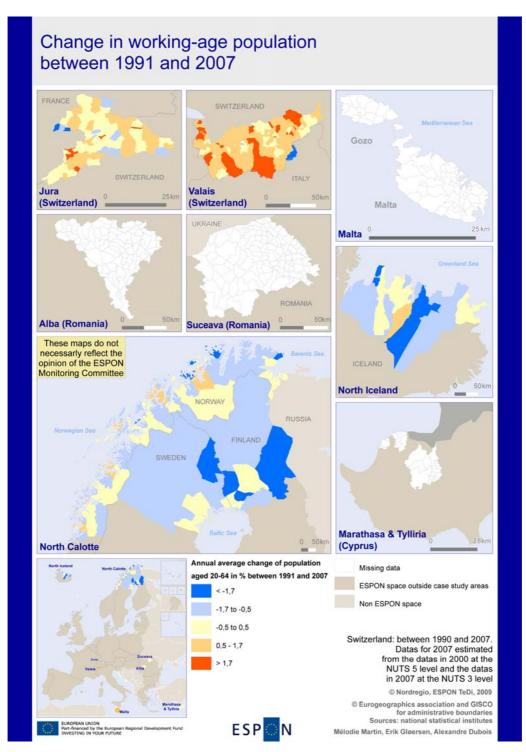
Map 17 Average annual net migration rates 2003-2007

Negative migration rates appear as a particularly string factor of population decline in Norh Iceland, North Norway, Alba and Suceava. Maltese figures, calculated on the basis of total demographic change, births and deaths, need to be confirmed.



Map 18 Proportions of 20 to 24 year-olds, compared to national average

Low relative proportions of 20 to 24 year olds indicate that young people move out to access higher education, to find jobs or a living environment corresponding to their aspirations. In these types of situations, encouraging return-migration or inmigration is of vital importance for the long term economic development.



Map 19 Change in working age population

Reductions in working age population are more rapid in the North Calotte and in North Iceland than the general change in population, reflecting ageing and outmigration of young adults. The strong growth in most of the Valais on the other hand tends to confirm that demographic growth is connected to a dynamic economy.

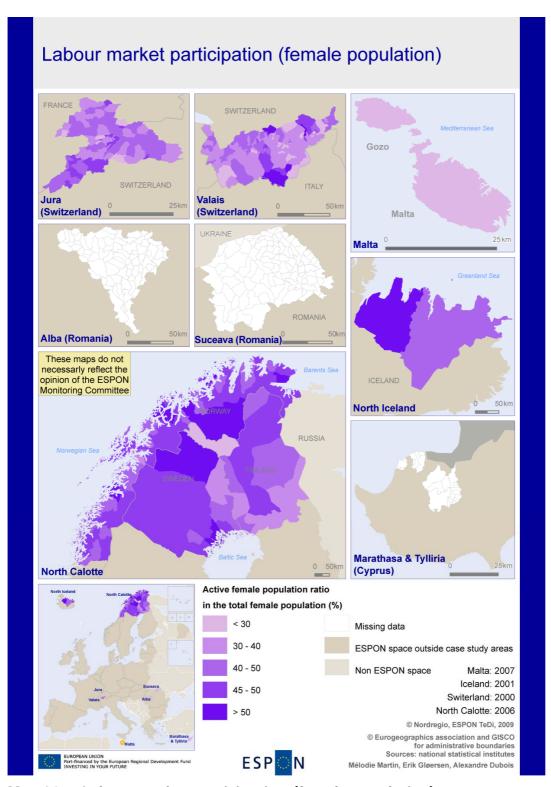
4.2. Economic structures and trends

An important part of the analysis of economic structures and trends will be on data on employment profiles by sector of activity. These data have however been collected too late to be processed and presented in the present interim. The focus in the present section is therefore on labour market participation and unemployment figures.

The proportion of active population in the total population reflects both age structures and the degree of participation in the labour market. It is however difficult to isolate the working age population in a transnational analysis, as national norms with regards to the "working age" vary.

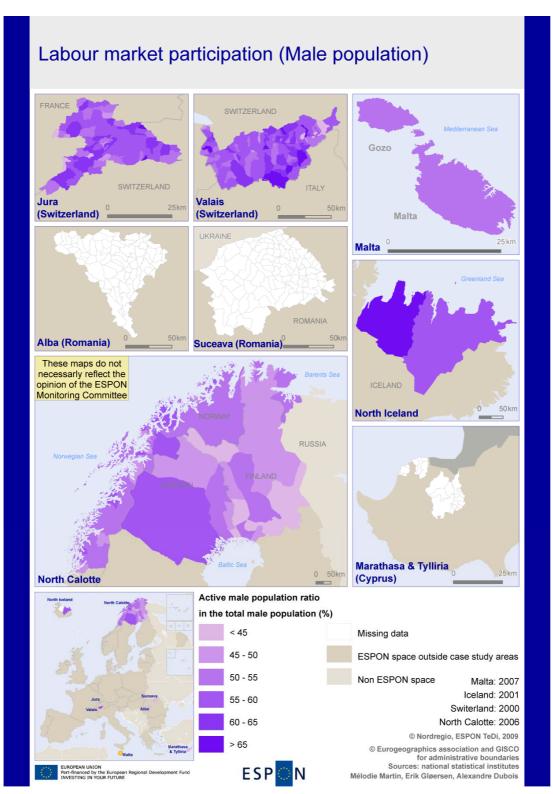
There are significant variations within and between case studies concerning the male and female labour market participation ratios (Map 20 and Map 21. Malta stands out with an exceptionally low female labour market participation rate, while the male participation rate is around average. The low levels of female participation in the labour market have previously been identified as a specific challenge for Malta. The male participation rates are higher than the female ones in most TeDi areas for which we have data, but are relatively weak in large parts of the North Calotte. This can be explained through a combination of a stronger tradition of participation of women in the labour market, but in some parts ill-health, lower education and the involvement of the male population in informal and seasonal activities such as hunting, fishing and herding are also part of the explanation. In the mining community of Kiruna in northernmost Sweden, the labour market participation of women is considerably higher than that of men, mainly because women will tend to leave unless they have an employment. In general, any connection of these gender specific labour market participation patterns with geographic specificities remains to be identified.

Overall labour market participation figures (Map 22) on the other hand tend to be correlated to a "degree of geographic specificity" within the North Calotte study area. The particularly sparse and peripheral inner parts of Norrbotten (SE), northern and eastern parts of Lappi (FI) and parts of Northern Norway remote from significant towns and cities all tend to have lower labour market participation ratios than the more central parts. A similar correlation can however not be observed in Valais and Jura, nor in Iceland where the more rural Vestra Nordurland region stands out with a significantly higher active population ratio then Eystra Nordurland. The reasons behind these differences need to be further explored.



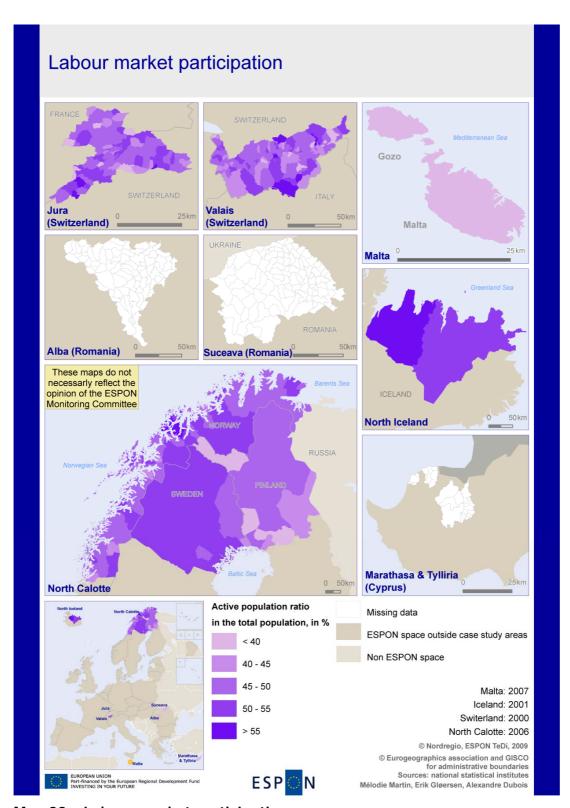
Map 20 Labour market participation (female population)

The contrasts between male and female labour market participation are strongest in Malta, and weaker in the North Calotte and Iceland.



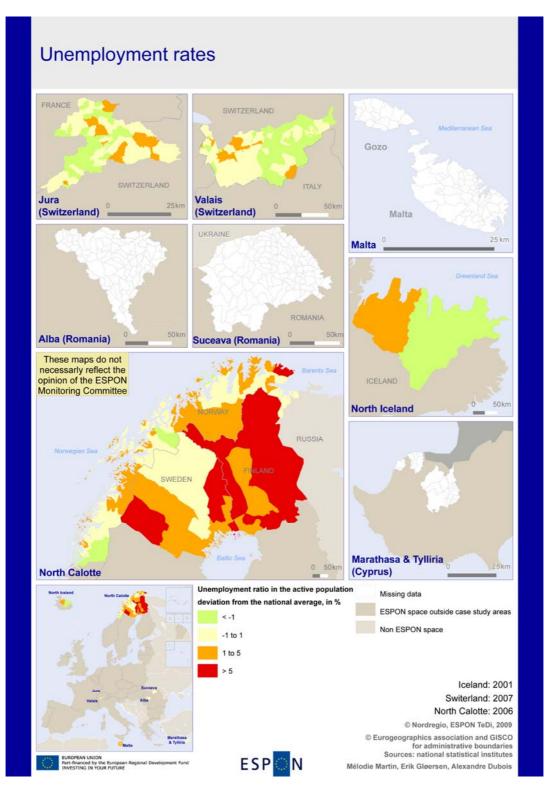
Map 21 Labour market participation (male population)

The only area with a male labour market participation significantly below that of women is in the Swedish northernmost mining municipality of Kiruna.



Map 22 Labour market participation

The relations between the overall labour market participation and "degrees of geographic specificity" vary according to case studies, calling for further analysis.



Map 23 Unemployment rates relative to national average

Relations between unemployment geographic specificities exist, but they are not systematic.

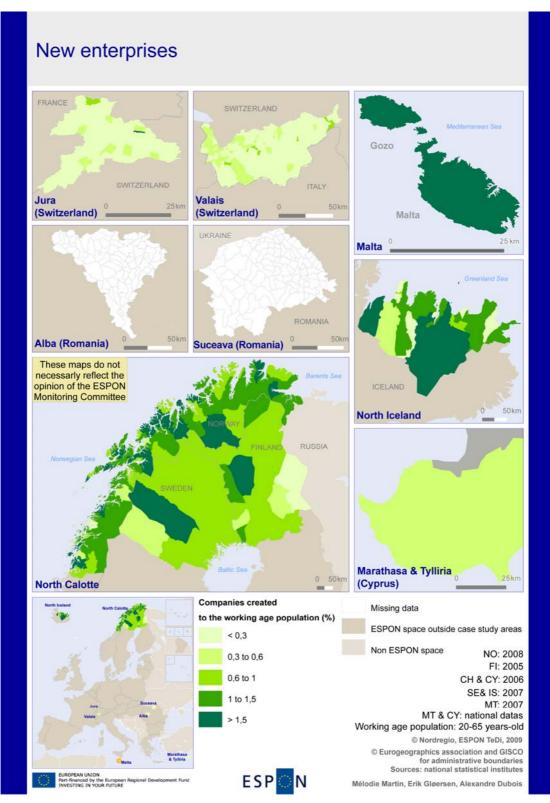
Unemployment figures are shown compared to the national average values so as to make it possible to observe gradients that can be related to geographic specificities. The resulting figure (Map 23) shows contrasted patterns. In the Valais and Jura, the most mountainous parts generally appear as having the lowest unemployment figures. Likewise, in inner Norrbotten (SE) unemployment figures are around average around the sparsely populated mining municipalities while they are above average in the more populated coastal municipalities. In Lappi (FI), on the other hand, very sparsely inland municipalities have considerably higher unemployment figures, especially along the border to Russia. Iceland also displays a relatively distinct contrast between the lower rates in Eystra Nordurland compared to the more rural Vestra Nordurland. The patterns in Northern Norway are less clear, and correspond to local more or less favourable economic contexts along the coast.

It should however be noted that the figures for Iceland, Norway and Switzerland correspond to variations from a low average national unemployment rate of around 3%.

The further analyses will need to focus on the specific types of unemployment and exclusion from the labour market that may be related to geographic specificities in the case study area.

Company creations compared to the working age population (Map 24) show extreme variations from country to country, and the consistency of the data with regards to methodologies therefore needs to be checked. Considering differences within each country, it can however be observed that there is not general tendency to a concentration of company creations in the larger towns or more densely populated parts of the TeDi case study regions. On the contrary, both in Iceland and in the North Calotte, many small and peripheral municipalities stand out with high ratios. The Maltese islands also display a high ratio; it is however unfortunately not possible to differentiate Malta and Gozo in this respect on the basis of the data provided so far.

The economic significance of company creations is however variable. It has for example been noted that the tourism sector can generate a large range of small company creation initiatives that may only generate limited employment and income. Data on company creations however give a certain indication on the degree of entrepreneurship, and can provide a basis for discussions on the capacity of local communities to exploit development opportunities.



Map 24 Ratio of new company creations to the working age population

The highest ratios are not observed in the most central area

5. Guidelines for interviews and qualitative approaches

As highlighted in the inception report, the ESPON TeDi project will develop extensive qualitative analyses in complement to the quantitative, statistical approaches.

A central assumption of the TPG underpinning this part of the exercise is that development opportunities in territories subject characterised by territorial specificities such as insularity, mountainousness and sparsity cannot be solely identified through the comparative, statistical outward and inward benchmarking (i.e. with other territories belonging to the ESPON space and highlighting the diversity within the territory itself, respectively). The role of the benchmarking is therefore primarily to prepare the qualitative investigation of development opportunities and challenges by providing a basis for transnational comparison and by identifying some fundamental structures and trends on which the documents and interviewees may provide further explanations.

The ESPON TeDi project investigates development opportunities at three levels of economic and policy governance:

- the European and national scales, as the essential contexts for conception of policies and elaboration of potential actions;
- the regional and local scales, highlighting path dependencies in the local economic development structure in places but also the capacity of regional and local actors to develop new policy practices and foster the adaptation of their territories to contemporary challenges;
- the global context, which provides insights on the general economic development context within which development opportunities have to be found. The identification of sustainable, long-term development opportunities for TD regions needs to be found at the intersection of these three scales.

Source of information for qualitative approach

In order to be able to gather relevant information on development opportunities, the TPG has decided to ground its qualitative approach on two main sources of information. First of all, each national expert has identified a set of 'insight providers with the help of the national stakeholders¹⁷. These insight providers are regional and local actors that may provide different perspective on development opportunities in the region. The identification of these insight providers was the first task assigned to the national experts, and the list of insight providers was finalised during the spring 2009. A list of these actors was annexed to the inception report; a few amendments have been made since then.

It is obvious that the perspective given by each insight provider is subjective, and connected to her or his personal background and current occupation. Yet, the TPG believes that the wide diversity of actors that were selected in each region makes it possible to provide a balanced view of the future development opportunities in the region. Moreover, the inclusion of regional and local actors in the process of elaboration of an ESPON project will enhance the sense of ownership of its future results as well as the awareness of the programme to regional actors.

A second main source of information for the qualitative approach is the available policy documents issued at the European, national and regional levels. At the European and national levels, the documents ought to be dealing with the issues of territorial cohesion, economic competitiveness or strategies for growth and employment. For instance, such documents can deal directly with these themes, e.g. the National Strategic Reference Framework (NSRF), or indirectly, e.g. sectoral strategies such as energy or transport ones. At the regional level, the policy documents can be linked directly to EU or national policies, e.g. the Operational Programmes of the Structural Funds, or be more 'bottom-up', i.e. a development strategy elaborated by the regional authorities for the region itself, as it is the case of the Regional Development Plan in Swedish counties (*Regionalutvecklings plan*).

The central challenge in the review and synthesis of these documents will be to focus on the ways in which they are dealing with geographic specificities, without going into extensive descriptions of the documents as such nor of the processes within which they have been elaborated. The ambition is therefore

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¹⁷ See inception report for the list of insight providers.

to allow a wide but selective review of document, which would lead to the identification of examples of efficient and innovative ways of dealing with the social and economic dimensions of mountainousness, insularity, demographic sparsity and high density situations in peripheral locations.

As a conclusion, the work performed in the qualitative approach of ESPON TeDi will be based on (1) the review of key national and regional documents and (2) the performing of interviews with the recruited insight providers.

Scope and phases of work in the qualitative approach

Two phases for the qualitative analysis process: first, the three main dimensions will be tackled through the analysis of strategic documents at national and regional levels. This will enable us to develop some preliminary hypotheses. One should bear in mind that, although the TD regions will be benchmarked against each other, one important benefit of the exercise is to highlight the differences in trajectories (both past and future) displayed by the set of case studies. These differences of trajectories are not only based on differences in terms of performance, but also reflect differences in terms of values that are connected to historical or cultural distinctiveness.

One hypothesis is that the states and the regions take a reactive stand on the issue of regional development when it comes to 'specific types of regions'. Rather than considering these territorially specific areas' potential contribution to national and European growth, the focus is on maintaining existing settlement patterns and on preserving economic activities.

Another hypothesis is that while the existence of territorial disparities and challenges are in many cases identified by European and national authorities, most policies remain sectoral and are insufficiently adapted or coordinated to address the situations of areas with geographic specificities. The challenge in this respect is to design efficient strategies to incorporate the territorial dimensions in sectoral policies.

- Phase 1 (April May 09): Collection of strategic policy documents at regional/local and national levels
- Phase 2 (June September 09): Analysing of strategic policy documents according to guidelines
- Phase 3 (October 09): Interviews with regional stakeholders (insight providers)

Design of the guidelines

The main tool developed for gathering the information within the above mentioned qualitative approach is in the form of guidelines. The entire guidelines can be found in annex to the present interim report.

These guidelines are not meant to be sent to third parties, but are rather deigned as an analytical framework enabling national experts to collect similar information across the 8 TD territories. The guidelines will be filled in by each national expert along the time period dedicated to the qualitative approach, i.e. from summer to autumn 2009.

The guidelines were designed by the Lead partner, Nordregio, with inputs from the national experts, members of the TPG, and the national stakeholders, members of the Steering Committee.

The guidelines are divided into two main parts:

- European/National policy framework Contributions of TD regions to the objectives of Lisbon and Gothenburg. This chapter is subsequently divided into two sections, with distinct analytical perspectives, investigating the integration of regional specificities in policy documents at national level on the one hand, and studying the integration of European and national policy objectives into regional development plans and strategies on the other.
- Role of the regional/local settings and global context for shaping developing opportunities. This chapter is also divided into two sections: one investigating the potential role of the regional and local institutional, social and economic networks of actors in fostering development opportunities, and another examining the potential importance of macro processes in make those development opportunities possible (or not...).

Each of the sections is composed of a series of detailed questions. The task of the national expert will be to progressively formulate answers on each of these points throughout the process of information collection, complementing information that cannot be collected through the review of documents by focusing on these specific points in the in-depth interviews with insight providers. The review of policy documents will therefore primarily be carried out before the interviews, even if these may allow the identification of some additional relevant written material.

Section 1: Contributions of TD regions to the objectives of Lisbon and Gothenburg

The first section of the guidelines aims at investigating the degree to which territorial diversity is considered in the objectives and methods of European and national regional policy, as well as in the plans and strategies developed at the regional and local levels. Consequently, this part aims at indentifying how the joint pursuits of the intersection of development opportunities between a top-down (from the EU/national level) and bottom-up (from the regional/local) identification of potential development opportunities. The assumption made by the TPG is that to be sustainable and long-term, the identified development opportunities for the TD regions need to be anchored in both the EU/national discourse and the Regional/local practices. This section essentially operationalises the research questions of WP 2.B.

The objective of this section is therefore to provide an overview of how territorial diversity is expressed and conceived in policy documents elaborated at national and regional/local level:

- the identification of territorial specificities (mountainous, insular...) in the national and/or regional territory;
- the translation of these specificities into specific territorial constraints (isolation, lack of critical mass...)
- the translation of these territorial constraints into socio-economic challenges (labour shortage, vulnerability of regional economies due to narrow sectoral extent...) and structural deficiencies (poor connectivity, low economic and institutional capacity...);
- the translation of these specificities into territorial opportunities (landscape and climate as assets for tourism, natural resources made available for exploitation, peripheral position, position in the European periphery used to develop interface function ...)
- the translation of these territorial opportunities into improved socioeconomic stability and growth (balanced and well-functioning labour markets, improved living standards, demographic equilibrium...) and structural strengths (improved connectivity, high economic and institutional capacity...);
- the instruments that are put in place at national and regional/local level for addressing the constraints linked to the territorial specificities (e.g. coordination of sectoral instruments, use of specific instruments such as

INTERREG or LEADER) and to draw full benefits from the territorial opportunities.

Section II: Role of the regional/local settings and global context for shaping developing opportunities

This section develops a series of questions dealing with the issues raised in WP2.C and WP2.D.

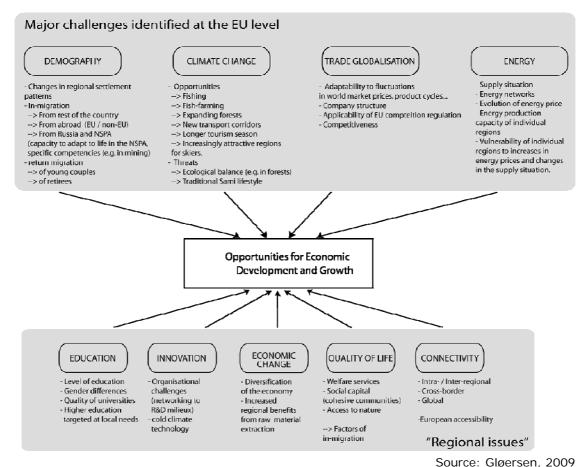
One of our working hypotheses on territorial specificity is that the key to the exploitation of development opportunities is in the interplay between the regional/local economy and society, one the one hand, and wider production systems and global framework conditions, on the other. In that respect, our assumption is that strengths and weaknesses identified at the regional/local level are central in understanding how stakeholders in individual TD region sees the various global trends as either opportunities or threats.

The European and national development policies (See section I) can be approached as potential filters making is possible to establish a certain balance between the regional, European and global levels through actions (1) mitigating regional structural deficiencies and (2) activating key leverages for economic development in the region.

The analytical framework in this section, integrating the regional/local context and the global/macro processes, is a follow-up of the work developed by Nordregio for the Northern Sparsely Populated Areas (NSPA) of the Nordic countries. It is, in essence, an evolution of a classic SWOT analysis (Strengths-Weaknesses-Opportunities-Threats).

The figure below provides a model for connecting the regional and the global levels. The figure proposes two levels for understanding the capacity of the TD regions to develop specific opportunities for economic growth and sustainable development. The upper level, Main challenges identified at EU level, correspond to our "global challenges" identified in WP2.D: these are challenges that are affecting, to different extent, the EU as a whole. The lower level, Regional issues, corresponds to the characterisation of the regional/local context developed in WP2.C.

For each TD region, the aim of this section 3 is to be able to identify the main issues at stake for the region under each headline, both for the upper and lower level.



Source. Classisti, 200

Figure 1: European and local/regional challenges

The analysis of the regional/local setting will be performed through responses to a handful of questions on the following issues:

- Economic governance (role of public and private actors)
- Transport and ICT infrastructure
- Business environment
- Innovation
- Development of human capital
- Cooperation networks
- Exploitation of natural capital
- Quality of life and living environment

A synthetic analytical grid will be created in order to highlight the *strengths* and *weaknesses* of each TD region for each of these issues.

The investigation of macro processes will essentially focus on the implications of global or macro processes on the capacity of the regions to develop sustainable economic activities, and also how the 'global dimension' is perceived in the region.

The identified macro processes are the following:

- Economic globalisation
- Demographic ageing
- ICT and modern logistics
- Urbanisation and selective (international) migration
- EU-Neighbourhood geopolitics
- Energy scarcity
- Climate change

For each of these processes and for each of the TD region, we will try to investigate if these correspond to either *Opportunities* or *Threats*.

The completion of section II will be followed by the elaboration of a global-local analytical grid putting in parallel the micro approach emphasizing regional and local perspectives and ending up by the identification of *Strengths* and *Weaknesses*, and the macro approach, investigating the potential for global processes to turn out as *Opportunities* or *Threats* to the development of the TD region.

Expected results of the qualitative approach

The objectives the qualitative approach is first to identify regional development opportunities more accurately. The underlying idea is that an opportunity is fundamentally a potentiality, and therefore is to be identified through the perceptions and aspirations of concerned stakeholders rather than statistical data.

Secondly, the qualitative approach shall provide examples of good practice when it comes to ensuring that opportunities are identified and exploited so to contribute an economically, socially and ecologically sustainable development in the concerned communities. This for example involves

descriptions of institutional arrangement, policy instruments and incentives that prove particularly efficient as leverages of local and regional development.

Thirdly, the qualitative results shall provide a further basis for interpretation of the results of the quantitative, statistical analysis, facilitating the benchmarking exercise and making it possible to define new indicators that would correspond more closely to the needs of the stakeholders and policymakers.

Finally, the qualitative results shall make it possible to create the framework for a dialogue between the regional stakeholders and the European and national policymakers. The compilation of good practice, with information on the respective achievement obtained through different types of organisations and instruments should make it possible to improve the general knowledge on how to deal with Territorial Diversity. As such, the results will feed into the handbook on territorial diversity to be produced as part of the dissemination strategy of the project.

6. Conclusion

The present interim report synthesising the progress of the ESPON TeDi project focuses on the typology of TeDi spaces and on a general statistical appreciation of their situation. As previously pointed out in the inception report, these are preparatory stages to the central parts on the enquiry, exploring the perspectives of insight providers on the development opportunities and challenges and further specifying the "soft" factors that may allow these regions to improve their performance.

We have also been highlighting the diverse scales of territorial diversity, which are problematic when trying to bring together the statistical results and inputs from the various ESPON TeDi case studies, as illustrated by the complexity of the draft classification (see Table 2 p. 44). The potential importance of this issue for the possibility of transferring experiences and constructing a more coherent European discourse on the social and economic impacts of geographic specificities should not be underestimated. The respective roles of the local, regional, national and European levels in dealing with these issues therefore require specific attention.

The first statistical results have shown a diversity of trends and structures, some of which appear correlated to different forms of geographic specificity and others not. They therefore only provide some first indications when it comes to disentangling processes that stem from physical characteristics, and those that can be explained by economic, social or institutional path dependencies. The first results however confirm the initial idea that the political relevance of "geographic specificity" does not in general stem from "laggardness" or from a low degree of economic performance, but should rather be approached in terms of improving the economic returns and creating the basis for a socially and ecologically sustainable development.

The progressive compilation of more complete datasets covering all case study areas should provide a better basis for formulating some more distinct hypotheses in this regard. The review of policy documents and forthcoming interviews however remain the main input when in comes to identifying the development opportunities and examples of good practice in TeDi regions.

References

ANDERSON A.B. & JENKINS C.N., 2006, Applying Nature's Design: Corridors as a Strategy for Biodiversity Conservation, Columbia University Press

ANTHEAUME B. & GIRAUT F., 2002, "Les marges au cœur de l'innovation territoriale? Regards croisés sur les confins administratifs (Afrique du Sud, France, Maroc, Niger, Togo ...)", *Historiens et géographes*, HS: Regards sur l'Afrique, F. Bart, J. Bonvallot & R. Pourtier (eds.), 39-58.

ANTHEAUME B. & GIRAUT F. (eds.), 2005, *Le territoire est mort, Vive les territoires!*, Paris: IRD Editions.

BENKO G. & LIPIETZ A., 1992, Les régions qui gagnent, Paris : PUF.

BENKO G. & LIPIETZ A., 2000, *La richesse des régions. Pour une géographie socio-économique*, Paris : PUF.

BOURDEAU P., 2008, « Innover [dans] le Pays des Ecrins », presentation at the conference *Innovating [in] the Alps*, held 11th to 14th June 2008 in L'Argentière-la-Bessée.

CAMAGNI R. & MAILLAT D. (eds.), 2006, *Milieux innovateurs : théorie et politiques*. Paris : Economica-Anthropos.

CAMAGNI R., MAILLAT D., MATTEACCIOLI A. (ed.), 2004, *Ressources naturelles et culturelles, milieux et développement local*, Neuchâtel : institut de recherches économiques et régionales, éditions EDES.

CROOKS K.R. & SANJAVAN M. (eds.), 2006, *Connectivity Conservation* (Conservation Biology), Cambridge : Cambridge University Press.

DIENER R. & alii, 2006, *La Suisse : Portrait urbain*, Bâle : Bierkhäuser/Ed d'Architecture.

DAUDE E. 2004, « Apports de la simulation multi-agents à l'étude des processus de diffusion » in *Cybergeo : Revue européenne de géographie*, no. 255, 15p. http://www.cybergeo.eu/index3835.html

ESPACE GEOGRAPHIQUE, 2007, *Nouvelle économie géographique et géographie : Quel dialogue ?*, n°3.

FUJITA M., KRUGMAN P. & VENABLES A.J., 1999, *The spatial Economy*, Cambridge: MIT Press.

FAURE Y.-A & LABAZEE P., 2005, "Les territoires productifs des agglomérations de PME dans les Suds: modèles et problèmes" in *Le territoire est mort, Vive les territoires!*, B. Antheaume & F. Giraut (eds.), Paris: IRD Editions, 269-294.

GERBAUX F. & GIRAUT F. (eds.), 2000, « L'innovation territoriale. Références, formes et enjeux » in *Revue de Géographie Alpine*, no. 1.

GUMUCHIAN H. & PECQUEUR B. (eds.), *La ressource territoriale*, Paris, Anthropos, 2007.

LANDEL P.A., SENIL N., 2009, « Patrimoine et territoire, les nouvelles ressources du développement » in *Revue Développement durable et territoires*, http://developpementdurable.revues.org/index7563.html.

MICHELET J., 2008, *Régionalisation et politique régionale dans les Alpes suisses. Quelles strategies et quel avenir, perspectives valaisannes*, Doctoral thesis, University of Lausanne/Université Joseph Fourier.

MORGAN K., 2004, "The exagerated death of geography: learning proximity and territorial innovation systems" in *Journal of Economic Geography* 4, 3-21.

PIKE A., RODRIGUEZ-POSE A. & TOMANEY J., 2006, *Local and regional development*, London: Routledge.

REYNAUD A., 1981, Société, espace et justice, Paris : PUF.

SCHOLZ F., 2005, "The theory of fragmenting development" in *Geographische Rundchau International Edition* 1(2), 4-11

VALETTE E., 2007, Pour une évaluation des dossiers de candidature PER - Comment détecter et mesurer l'excellence et l'innovation ?, interim report, https://svn.mdweb-project.org/mdweb1/branches/diact/projetPER/docs/rapport intermediaire tetis dec07.pdf

VALETTE E., 2003, *Pour une approche géographique de l'innovation sociale. L'exemple des territoires ruraux périurbains de la garrigue nord-montpelliéraine*, doctoral thesis, Université Denis Diderot - Paris VII. http://tel.archives-ouvertes.fr/tel-00007906/fr/

VANIER M. (2008), *Le pouvoir des territoires. Essai sur l'interterritorialité*, Economica, Anthropos, Paris.

WORLD BANK, 2009, *Reshaping Economic Geography* (first title: *Spatial Disparities and Development Policy*), World Development Report. http://www.worldbank.org/wdr2009

Annex 1: Guidelines for policy document reviews and interviews

ESPON TeDi Qualitative Approach

The present document proposes a common methodology for bringing in a more 'qualitative' approach to complement the quantitative (statistics, mapping...) work that has already started in March. The recruitment of the group of regional stakeholders was the first step of this qualitative approach. The qualitative approach will consist of (1) the review of key national and regional documents and (2) the performing of interviews with the recruited insight providers.

In each of the case study territories, preliminary interviews have been performed with these stakeholders in order to (1) improve the awareness of the regional stakeholders to the objectives and results of the ESPON TeDi project and (2) to anchor the ESPON TeDi project in the regional spatial planning practices.

The purpose of setting up a specific group of stakeholders in the framework of ESPON TeDi is to develop a reflexive process of collaborative research between the scientific partners, the national stakeholders and the regional 'insight providers'.

The pre-interviews with the regional stakeholders were centred on three main questions:

- What do they consider to be the main structural challenges of the case region?
- What are the main strengths and development opportunities?
- What challenges do they see for the sustainable development of the case study region?

O. Why do we need a qualitative approach to territorial diversity?

The scope of work of ESPON TeDi has been divided into 6 main analytical Working Packages: One conceptual (WP2.A), three thematic (WP 2.B, 2.C & 2.D), one synthetic (WP 2.E – Case stories) and one prospective (WP 2.F – Roadmap).

The three analytical WPs propose three different territorial perspectives on the issue of territorial diversity. The three WPs do not only highlight the position of the TD regions according to three distinct geographical scales (global, European and local), but asserts as well the need to connect these different scales to particular socioeconomic or policy processes¹⁸:

- the **European scale** will be tackled through the prism of employment, economic growth and innovation concerns (i.e. the themes of the Lisbon/Gothenburg strategies);
- the analysis of the **local/regional processes** will bring to light the different settings of the regional labour-market and regional economic policies in the TD regions (accentuating the strengths vs. overcoming the weaknesses);
- the **global scale** will be tackled by identifying the extent to which 'macro' processes affecting countries and regions worldwide (yet not uniformly) may act as *accelerator* or *brake* factor to the development of the TD regions (opportunities vs. threats).

From geographical scale to territorial process

European/national scale → room for policy action

Regional/Local scale → structures in place enabling/preventing from embracing development opportunities

Global scale → territorial inertia

¹⁸ Make a link to Jacques Michelet's doctoral thesis (p33) Regional geography: multiscalar and multidimensional

The use of statistical benchmarking alone is not able to provide us with enough information on the *processes* at stake in the TD regions. In order to complement the 'quantitative' aspects of the ESPON TeDi work, a dialogue with both regional and national actors, as well as a review of key documents at regional and regional/local level, is necessary in order to put these results into the regional context. The aim of the qualitative approach is mainly:

- to identify the main development opportunities and the key leverages to support them in TD regions;
- to identify the key structural deficiencies that prevent the TD regions to take full advantage of their development opportunities;

The present guidelines address issues stemming from the three main analytical WP of the ESPON TeDi project: WP2.B (European and national policies), WP2.C (Regional response to development opportunities) and WP2.D (Impacts of Global challenges on European Territorial Diversity). The guidelines are thus thought as a cross-thematic working tool to collect relevant information on the themes developed in WP2.B, WP2.C and WP2.D. In practical terms, when reviewing the documents and performing the interviews, you will be able to address these three themes at the same time.

1. Introduction to the qualitative approach

The analytical work in ESPON TeDi has been divided in three different dimensions, namely the European, the Regional/local and the global.

Two phases for the qualitative analysis process: first, the three main dimensions will be tackled through the analysis of strategic documents at national and regional levels. This will enable us to develop some preliminary hypotheses. One should bear in mind that, although the TD regions will be benchmarked against each other, one important benefit of the exercise is to highlight the differences in trajectories (both past and future) displayed by our set of case study regions. These differences of trajectories are not only based on differences in terms of performance, but also reflect differences in terms of values that are connected to historical or cultural distinctiveness.

One hypothesis is that the states and the regions take a reactive stand on the issue of regional development when it comes to 'specific types of regions'. Rather than considering these territorially specific areas' potential contribution to national and European growth, the focus is on maintaining existing settlement patterns and on preserving economic activities.

One other hypothesis is that while the existence of territorial disparities and challenges are in many cases identified by European and national authorities, most policies remain sectoral and are insufficiently adapted or coordinated to address the situations of areas with geographic specificities. The challenge in this respect is to design efficient strategies to incorporate the territorial dimensions in sectoral policies.

- Phase 1 (April May 09): Collection of strategic policy documents at regional/local and national levels
- Phase 2 (June September 09): Analysing of strategic policy documents according to guidelines
- Phase 3 (October 09): Interviews with regional stakeholders (insight providers)

2. European/National policy framework: Contributions of TD regions to the objectives of Lisbon and Gothenburg

(Addressing issues from WP2.B)

Aim of this section:

This section aims at providing a mental map of how territorial diversity is expressed and conceived in policy documents elaborated at national and regional/local level:

- the identification of specific territorial specificities (mountainous, islands...) in the national and/or regional territory;
- the translation of these specificities into specific territorial constraints (isolation, lack of critical mass...)
- the translation of these territorial constraints into socio-economic challenges (labour shortage, vulnerability of regional economies due to narrow sectoral extent...) and structural deficiencies (poor connectivity, low economic and institutional capacity...);
- the translation of these specificities into specific territorial opportunities (landscape and climate as assets for tourism, natural resources made available for exploitation, peripheral position, position in the European periphery used to develop interface function ...)
- the translation of these territorial opportunities into improved socio-economic stability and growth (balanced and well-functioning labour markets, improved living standards, demographic equilibrium...) and structural strengths (improved connectivity, high economic and institutional capacity...);
- the instruments that are put in place at national and regional/local level for addressing the constraints linked to the territorial specificities (e.g. coordination of sectoral instruments, use of specific instruments such as INTERREG or LEADER) and to draw full benefits from the territorial opportunities.

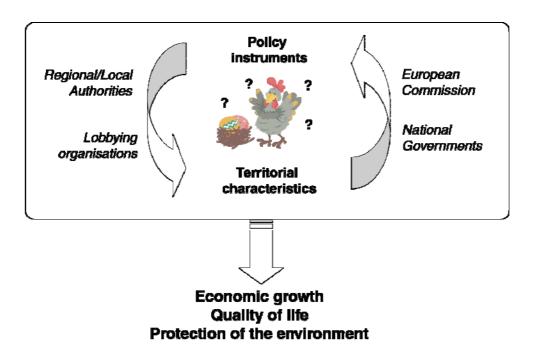


Figure 1: From policy instruments to territorial characteristics... or vice versa?

For some actors (e.g. regional authorities and lobbying organisations), the acknowledgement of specific territorial characteristics should be seen as the starting ground for designing efficient regional policy instruments. For other actors (e.g. European Commission and national governments), it is the operationalisation of existing regional and sectoral policy instruments that should be the main parameter in addressing disparities connected to territorial specificities.

Compilation of policy documents

Title of the	National	Issuing	Date of	Topical focus*	Justification for selecting
document (in	or	authority	adoption		the document
English)	Regional	•	_		

^{*} For instance: Sustainable development, economic growth, transport development, energy, innovation, employment policy, environmental protection... or holistic regional development

National strategic documents

For example, National Strategic Reference Framework, Transport Development Plan, National Sustainable Development Strategy, National strategy for growth, employment and innovation...

From territorial diversity to territorial constraints

Do the national strategic documents make explicit the differentiation of the national territory into different types of territories (e.g. metropolitan, rural, islands, mountains)?

If yes, list the types of territories stated.

Please fill in the box

What are the arguments used for dividing the national territory into different types of territories?

- Differences in geographical settings (topography, climate, green structure)
- Differences in human settlements (high concentration, loose pattern of small settlements)
- Disparities in levels of economic development (engines for national economic development...)

Please fill in the box

For the territorial specificities covered by the ESPON TeDi project (mountain, island, sparsely populated, peripheral), in what terms are the territorial specificities translated into socio-economic constraints (lagging economies, vulnerability, isolation of labour markets...)?

Please fill in the box

For the territorial specificities covered by the ESPON TeDi project (mountain, island, sparsely populated, peripheral), in what terms are the territorial specificities translated into socio-economic opportunities?

Please fill in the box

What are the structural deficiencies stated in the national documents identified as an obstacle to the goals of Lisbon (economic growth, employment, innovation) and Gothenburg (sustainable development, protection and exploitation of the environment...) strategies in the TD regions?

Please fill in the box

From territorial constraints to policy responses

What are the policy instruments and leverages identified in the national documents for tackling the constraints stemming from territorial specificities?

Please fill in the box

Are these instruments sectoral (transport, energy...)? In case several instruments are being used, how are they coordinated?

Please fill in the box

Is Territorial Cohesion explicitly used as an overarching justification of these policies?

Please fill in the box

Regional Development Plans and Strategies

General question

In your region, are there regional development strategies independent from national documents?

What is the time horizon for the implementation of the regional strategy?

Please fill in the box

Is there a specific regional strategy or plan for the ESPON TeDi case study area?

Please fill in the box

What are the regional organisations that participate to the elaboration of these regional strategies or plans?

Please fill in the box

Positioning the TD region in the Europe/national discourse on growth and sustainable development

How does the regional development plan position the region in the national and/or European context:

- in terms of level of economic structure (e.g. lagging/advanced, mono-sectoral/lack of leading activity acting as economic motor)
- in terms of level of quality of life (e.g. access to nature, reduced scope of public and private services, cohesion of local communities, isolation, poverty)
- with regards to its territorial positioning (e.g. peripheral, disconnected, preserved, acting as interface)

Please fill in the box

How does the regional development plan identify the diversity of the regional territory in terms of territorial characteristics (e.g. urban vs. rural areas, coast vs. inland, mountain vs. lowland, north vs. south)?

Please fill in the box

Are specific hypothesis made with regards to causal links from territorial specificities to socio-economic performance? (e.g. "mountains are lagging", "growth potentials are concentrated in regional centres")

Are these causal links presumed (i.e. considered as obvious and needing no further explanation), or are attempts made to describe and explain the processes leading from territorial specificities to certain types of social and economic performance.

Please fill in the box

Regional/local policy responses

How do the regional development plans argue for increased policy intervention in the region from EU and/or national authorities? Is the argumentation based on the need for policy measures addressing the permanent social and economic effects of territorial specificities, or do they focus on observed disparities in terms of social and economic performance?

Please fill in the box

Are there specific planning instruments developed at the regional/local level for overcoming the identified territorial constraints (isolation, vulnerability...) in the region?

Please fill in the box

Are there specific planning instruments developed at the regional/local level for achieving the objectives of economic competitiveness and sustainable development in the region?

Please fill in the box

3. Role of the regional/local settings and global context for shaping developing opportunities

(Addressing issues from both WP2.C and WP2.D)

This section develops a series of questions dealing with the issues raised in WP2.C and WP2.D.

One of our working hypotheses on territorial specificity is that the structure of the regional/local economy and society and the global settings play an important role in enabling or preventing the region from shaping its own development opportunities. In that picture, the European and national development policies (See section 2) act as *filters* that enable to recreate a certain balance between the regional and global levels through actions leading to (1) the lessening of the regional structural deficiencies and (2) the activation of the key leverages for economic development in the region. In that respect, our assumption is that *strengthens* and *weaknesses* identified at the regional/local level are central in understanding how the TD region sees the various global trends as either *opportunities* or *threats*.

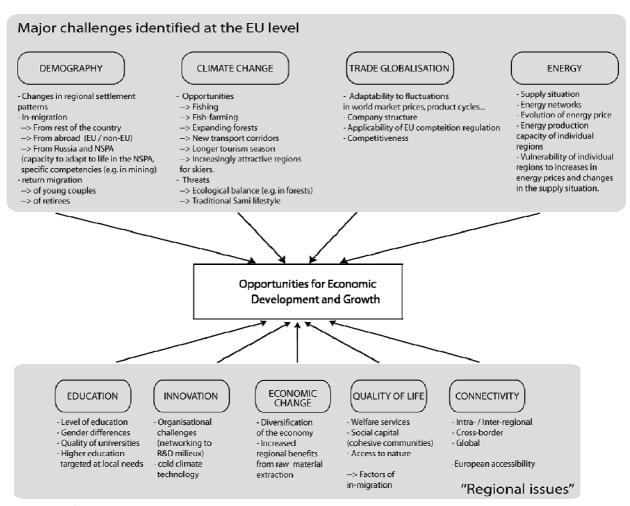
The figure below provides a model for connecting the regional and the global levels. The figure proposes two levels for understanding the capacity of the TD regions to develop specific opportunities for economic growth and sustainable development¹⁹. The upper level, *Main challenges identified at EU level*, correspond to our "global"

ESPON 2013 – ESPON TeDi interim report

¹⁹ The figure was elaborated for the case of the Northern Sparsely Populated Areas of the Nordic countries, in the framework of the NSPA Foresight 2020 project by Nordregio.

challenges" identified in WP2.D: these are challenges that are affecting, to different extent, the EU as a whole. The lower level, *Regional issues*, corresponds to the characterisation of the regional/local context developed in WP2.C.

For each TD region, the aim of this section 3 is to be able to identify the main issues at stake for the region under each headline, both for the upper and lower level.



Source: Gløersen, 2009

Role of regional/local setting in fostering development opportunities (Addressing issues from WP2.C)

By reviewing the regional and local development strategies, please answer to the following questions on your TD region. Do not hesitate to insert illustrations (figure, diagram...)

When answering the question of each regional issue below, please try to keep in mind the following red thread:

- To your understanding, has the territorial specificity (e.g. mountainous, island, sparsely populated or peripheral) affected the regional choices linked to each issue? In other words, are the regional settings described in the TD region different from what can be found in other regions of the same country?
- To you, when it comes to elaborating plans for better taking advantage of the region's territorial assets, how do local communities participate to the local decision-making process for each of the regional issue? State possible grassroots initiatives taken by local communities that aimed at taking advantage of the region's territorial specificity! (e.g. development of solar energy farms)
- Are there some best practices that you think are worth highlighting for other TD region? Please state them in the text!

Economic governance (role of public and private actors)

- How does the regional development strategy address the issue of economic competitiveness?
- Have private actors been associated to the elaboration of the strategy?
- Besides the public and private actors, what other regional actors (universities, chamber of commerce, semi-private 'incubator' organisations...) are identified as central for fostering economic growth?

Max 2 pages

Transport and ICT infrastructure

- What are the main problems and opportunities regarding the connectivity of the transport network in your TD region?
- What is the main purpose of the transport strategy? Improving intra-regional connections? Improving connectivity to national transport systems?

 Improving access to large international markets?
- Are ICT considered as central for promoting economic growth in the regional development strategy?
- Does the strategy highlight potential trade-offs and synergies between transport and ICT in promoting greater 'accessibility'?

Max 2 pages

Business environment

(Diversification, specialisation & entrepreneurship)

- Is there an explicit focus of the regional development strategy on developing 'niche' markets for the region?
- Is the economic profile perceived as too 'mono-sectoral'? What sector?
- Is the diversification of the regional economic basis an explicit goal of the regional strategy? What are the measures planned to achieve this?

Max 2 pages

Innovation

- What are the main actors involved in promoting innovation in the region? Universities? Large Corporations? SMEs? Regional authorities?
- What are the leading sectors in term of R&D in your region?

- Is the development of new technologies related to the territorial characteristics (e.g. cold climate technology, solar panels, and windmills) of the region considered as an opportunity to improve the regional competitive advantage?
- Is innovation in your region considered as a way (1) to develop new leading industrial sectors or (2) to enable already established sectors to improve their international competitive edge?

Max 2 pages

Development of human capital

(employment, education)

- Is the education infrastructure (universities) deemed as sufficient to meet the region's commitment to the Lisbon goals?
- What is (are) the economic sector(s) creating the largest share of the employment?

Max 2 pages

Cooperation networks

- Has the region taken an active role in networking with other regions, both domestically and internationally?
- What was the aim/topical focus of such cooperation?

Max 2 pages

Exploitation of natural capital

- What are the key natural assets of the region identified in the development strategy?

- Are these assets currently over- or underexploited? What are the measures taken to meet these challenges?

Max 2 pages

Quality of life and living environment

- What are the main stated assets of the region regarding quality of life? Close access to nature? Good access to daily services? Good housing possibilities? Cohesive local communities (trust, identity...)? Please explain
- Is the natural environment subject to long-term pollution problems? What are the main sources of pollution in the region?

Max 2 pages

Summary table

	Strengths	Weaknesses
Economic governance	Please summarize the points above in 2-3 bullet points in each box	Please summarize the points above in 2-3 bullet points in each box
Transport and ICT infrastructure	Please summarize the points above in 2-3 bullet points in each box	Please summarize the points above in 2-3 bullet points in each box
Business environment	Please summarize the points above in 2-3 bullet points in each box	Please summarize the points above in 2-3 bullet points in each box
Innovation	Please summarize the points above in 2-3 bullet points in each box	Please summarize the points above in 2-3 bullet points in each box
Development of human capital	Please summarize the points above in 2-3 bullet points in each box	Please summarize the points above in 2-3 bullet points in each box
Cooperation networks	Please summarize the points above in 2-3 bullet points in each box	Please summarize the points above in 2-3 bullet points in each box
Exploitation of natural capital	Please summarize the points above in 2-3 bullet points in each box	Please summarize the points above in 2-3 bullet points in each box
Quality of life	Please summarize the points above in 2-3 bullet points in each box	Please summarize the points above in 2-3 bullet points in each box

Global/Macro processes

(Addressing issues from WP2.D)

From your knowledge of the case study region and the review of key regional documents, please identify the main opportunities and threats that the mentioned macro-trends are catalysing in the case study region.

General question

How is 'the global' connected to your TD region?

- Through the integration of certain local industries in global production chains?
- Through the export worldwide of natural resources available in the region?
- Through the increased flows of labour force, migration and tourist from and/or to your region?

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	Opportunities	Threats	
	To which extent is your TD region benefiting/suffering from each of these macro-trends? In which terms do regional development documents mention the identified opportunities or threats? How are the effects of the macro-trend materialised in your case study region?		
Economic globalisation	Ex: increased demand of regional raw material or tourism	Ex: vulnerability of export industries to fluctuations of global demand	
Demographic ageing	Ex: development of services to elderly	Ex: labour force shortage	
ICT and modern logistics	Ex: access to potential customers worldwide in real-time	Ex: region bypassed by main arteries (Tunnel effect)	
Urbanisation and selective (international) migration	Ex: multiculturalism	Ex: 'brain drain' of young adults	
EU-Neighbourhood geopolitics	Ex: new market openings	Ex: illegal immigration, insecurity	
Energy scarcity	Ex: developing local production of renewable energy	Ex: high energy prices	
Climate change	Ex: expanding forests Ex: floodings		

Synthesis Analytical grid

To be filled and inserted in the Case Stories document (WP2.E)

<i>Micro</i> approach	h	<i>Macro</i> approach	
Regional/local	perspective	Global trends	
Strengths	Weaknesses	Opportunities Threats	