Study on the relevance and the effectiveness of ERDF and Cohesion Fund support to Regions with Specific Geographical Features – Islands, Mountainous and Sparsely Populated areas

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Executive Summary

1) Study Context

- This Study analyses the relevance and the effectiveness of ERDF and Cohesion Fund support to regions with specific geographical features - islands, mountainous and sparsely populated regions. The focus is on the 2000-06 and 2007-13 programming periods and four main Tasks were carried out.
- Firstly, the Literature Review explored the ways in which the territories can be defined as well as the different challenges they face and respective policy approaches that have been developed.
- Secondly, an analysis of ERDF interventions in fifteen selected NUTS2 regions was carried out based on desk-based research drawing on programme data and documents for the two respective programming periods.
- Thirdly, to explore the role and effectiveness of ERDF at the local level, six NUTS3 case studies were carried out based on face-to-face (and some telephone) interviews with the main stakeholders in each of the selected regions.
- Lastly, Policy Conclusions were drawn based on the lessons learned from the previous tasks.

2) The main findings from the six NUTS3 case studies

- The six case studies provide the core of this Study. Of course, it is not possible to extrapolate the findings from only six cases to apply them more generally across all regions with specific geographical features. However, the mix of the six cases and range of examples generated allows certain useful conclusions to be derived about the role of ERDF in such territories. The six cases are listed below.

REGION CODE	REGION (NUTS2) NAME	NUTS 3 selected (code)	Territory type
Spain (ES42)	Castilla la Mancha	**Cuenca (ES 423)**	Sparsely populated and mountainous
Sweden (SE33)	Övre Norrland	**Norrbotten (SE332)**	Sparsely populated
Greece (GR41)	Voreio Aigaio	**Lesbos (GR411)**	Islands
Denmark (DK01)	Hovesdstaden	**Bornholm (DK014)**	Islands
France (FR71)	Rhône-Alpes	**Ardèche (FR712)**	Mountainous
UK (UKM6)	Highlands and Islands	**Western Isles (UKM64)**	Sparsely populated & islands

- Each of the case studies addressed five main evaluation questions and the main findings from each is summarised below.
- Firstly, geographical specificities do indeed matter. Islandness and sparsity seem to pose the most severe challenges whilst remoteness (peripherality) and 'scattered small communities' emerged as important elements. Moreover, the demographic challenges are common to all of the studied regions, which are negative natural growth rates, out-migration of young people (often women) and an ageing population. These combine to make a kind of *vicious circle* that is very difficult to tackle.
- In terms of the economic situation, some of the regions are wealthier than others but they all face serious longer term socio-economic vulnerability issues. Importantly, stakeholders in the case study regions underlined the key role played by ERDF in tackling such issues.
- Secondly, in terms of policy responses, it seems that the perception of the geographical features is crucial and has a direct impact on the policy responses developed in the respective regions. In other words, the programmes tend to be more tailored to addressing geographical specificities when they are considered as 'opportunities' rather than 'handicaps'. The two Nordic cases (Norrbotten and Bornholm) have succeeded in considering opportunities rather than handicaps, although they are really the exceptions to the rule. Another important element is alignment to domestic policy and there is no 'one size fits all' approach to dealing with geographical specificities.

- Thirdly, regarding the relevance of ERDF, the main strategic focus is at the NUTS2 level whilst there is much less focus on the NUTS3 level (or below). In terms of the main fields of intervention, there is definitely a strong focus on 'hard' infrastructure. Transport, environment and ICT are dominant and the Cohesion Fund plays also an important role in this regard. Even though 'key gaps' still remain in certain areas especially in broadband and ICT, there is a strong need to move on to 'softer' measures (e.g. productive business, innovation, and 'green' technology projects).
- In terms of sectoral approaches, there is a strong focus on specific 'asset-based' sectors (e.g. tourism, culture and natural resources); renewable energy is emerging thanks to ERDF, but innovation and RTD projects remain limited. Lastly, higher education seems to play a key role especially in Lesbos, Western Isles and Norrbotten in terms of attracting and retaining young people.
- Fourthly, there have been significant improvements in basic infrastructure and, to some extent, in accessibility, in each of the case studies. However, there has been relatively much less success in encouraging innovation (except in the Nordic cases).
- On the whole, however, the dominant challenges facing the regions, such as remoteness, intra-regional differences, fragile economic situations and, last but not least, demographic issues are still very much present. These cannot be solved by the Structural Funds alone.
- Lastly, the governance and implementation scenario is mixed. In Bornholm and Western Isles, the flexibilities of the respective national/regional systems have ensured relatively good governance. The case of Ardèche is quite interesting since it uses both a vertical (national, regional, and local) and a horizontal ('trans-regional' through the Massif Central) approach. There is a clear disjuncture between NUTS2 and NUTS3 especially in Cuenca and Lesbos. These two regions seem to have far too rigid governance systems.

3) The main Policy Conclusions emerging from the Study

- The findings from the Study clearly illustrate that ERDF and the Cohesion Fund do play a crucial role in regions with specific geographic features and provide added value in several ways.
- Although ERDF support often only represents a (small) part of public resources available in these regions, it has played a crucial role in providing a long-term, stable financial framework in which the regions can operate to develop a range of projects, especially in hard infrastructure (roads, environmental, ICT and broadband etc) that may well have not otherwise been funded.
- ERDF has been an important catalyst for attracting, and indeed directing, domestic funds in order to develop important projects in the regions. The message from the case studies is clear that if it wasn't for ERDF funding in these regions certain investments wouldn't have been made. The case of Cuenca is pertinent in this regard.

- ERDF provides a flexible tool that can be tailored to meet the needs and challenges of the regions in question. Whilst, ERDF is not the only funding tool of relevance in these regions, it is viewed by stakeholders as the primary driver of economic development as well as being complementary to both domestic as well as EU funds (such as EAFRD and ESF).
- The ERDF programming process has clearly been important in improving the strategic focus, partnership and stakeholder involvement, helping to improve the levels of 'good governance' in the case study regions.
- The clear message that emerges from the Study is that ERDF is an appropriate tool for the development of regions with specific geographical features. Moreover, rather than each of the territories requiring a specific funding instrument, the main point is that the existing ERDF framework provides the necessary *funding*, *flexibilities* and *focus* for effective economic development projects to be developed.
- Certain improvements, however, could be made to enhance the ways in which ERDF can be utilised in the three types of territory. These are summarised in the box below:

1. There needs to be a more explicit recognition of geographical specificities at each key stage in the ERDF programming process;
2. There needs to be stronger encouragement for ERDF programmes to move on from perceiving geographical characteristics as 'problems';
3. The demographic challenge is common to all regions and requires an integrated and co-ordinated policy approach, involving all levels of government, in order to tackle the different issues;
4. There needs to be stronger encouragement for ERDF programmes to move on from an 'infrastructure fixation';
5. A strategy to develop specific 'asset based' growth sectors is required in the regions;
6. A focus on renewable energy as a potential growth sector;
7. There needs to be a more explicit territorial cohesion dimension;
8. There is a need for flexible multi-level governance arrangements;
9. There needs to be a more integrated 'bottom-up approach' to ERDF in the regions;

PART 1: Study overview and challenges of regions with specific geographical features

1. Introduction

This Final Report contains two Volumes.

Volume 1 has three parts. Part 1 of the first Volume has five main sections. The Introduction is followed by Section 2 which outlines the context, goal and organisation of the Study. Section 3 focuses on how to define the three territorial types of region with specific geographical features – islands, mountainous and sparsely populated regions - as well as the main challenges they face. Section 4 focuses on the range of policy responses apparent in the three types of region. Section 5 explores the main findings of the analysis of ERDF and Cohesion Fund (CF) interventions in 15 NUTS2 regions (five regions from each territorial type). Then, Part 2 of the first Volume provides an analysis of the six NUTS3 regional case studies carried out. Lastly, Part 3 provides the Policy Conclusions that emerge from the Study.

Volume 2 of the Report contains the detailed findings from each of the six case studies.

2. Context, goal and organisation of the Study

Over the years, European legislation has recognised the existence of permanent structural handicaps in the development of some regions due to their specific geographical features. These permanent 'handicaps' have been identified in three types of areas: mountainous areas, territories with low population density and island territories. Though highly diverse in terms of geography, population and economic development, most of these regions face common challenges: insufficient access to key infrastructure facilities and other services, specialisation of local economies and dependency on imports, low population density, fragile ecosystems, etc. At the same time, due to their specific geographic features, these territories have potential for growth and important assets such as unique natural and cultural heritage, preconditions for tourism industry.

In particular, Article 158 of the Amsterdam Treaty and its annexed Declaration 30 recognised that island regions in particular suffer from structural handicaps due to their island status which permanently hamper their socio-economic development. The Treaty calls for specific measures in favour of these regions to help them better integrate in the internal market. Subsequently, the Treaty on the Functioning of the European Union reinforces these provisions by including *territorial cohesion* as one of its objectives. Article 174[1] states that *"particular attention should be paid to rural areas, areas affected by industrial transition, and regions which suffer from severe and permanent natural or demographic handicaps such as the northernmost regions with very low population density and island, cross-border and mountain regions".*

The consideration of the very existence of inherent assets or advantages in these regions recently led to a subtle but important shift of terminology and emphasis when considering EU strategies for these regions and the designing of appropriate territorially focused policies. Whereas the focus in the legal texts mentioned used to be on regions 'with structural handicaps', there has been a slight shift to 'specific geographical features', as used in title for this Study. This greater emphasis on the importance of territorial cohesion was underlined at the beginning of the present EU programming period, 2007 to 2013, with both the Community Strategic Guidelines for Rural Development as well as Cohesion Policy recognising the issue as crucial to achieving balanced development across the EU. Furthermore, the Green Paper on Territorial Cohesion, published in 2008, raised some interesting elements because it helped to shed some light on defining the issue as well as the role of ERDF in helping to tackle the range of challenges in different geographical contexts across the EU. In particular, stressing that there is a *"growing awareness of the need to frame development strategies around the particular assets of territories" in a context where eligibility for support is principally determined at the regional level"* (pg 4).

[1] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:115:0047:0199:EN:PDF

More recently, the Europe 2020[2] strategy prioritises the EU's sustainable socio-economic future based on the three main themes – *smart, inclusive and sustainable* growth. The challenge, however, for the implementation of Europe 2020 is to overcome the distinct territorial differences that exist across the EU. There exist strong differences in the opportunities, vulnerabilities and risks for regions from the contemporary challenges of globalisation and the economic downturn, demographic change and social inclusion, climate change and energy. The last point is especially pertinent for regions with specific geographical features because of the relative risks from flooding, extreme weather or natural disasters potentially resulting from changes in climate.

The role of ERDF, therefore, in regions with specific geographical features (islands, mountainous and sparsely populated areas), which is the focus of the Study, is particularly timely given the policy discussions surrounding territorial cohesion across the EU. For these regions, the support of both national and European funds is crucial to help them to develop integrated and tailored solutions to meet such territorial challenges as well as create future opportunities. Moreover, both ERDF and the CF play such a potentially important role in these regions as they provide a range of intervention tools that can be tailored to the specific territories themselves, dealing with a range of territorial characteristics. The main objective of this Study, therefore, is to assess the extent to which Cohesion Policy interventions made through the ERDF and the CF have been and are both appropriate and effective, during respectively the 2000-06 and 2007-13 programming periods, in regions with specific geographical features. The other main objective is to explore policy and governance approaches in implementing territorial cohesion in these regions with a view to identifying good practices followed by main stakeholders (decision makers, actors and beneficiaries) at several levels (regional, national, European).

The methodology for the Study focused on understanding the nature and extent of the specific features and their economic impact, and the types of policy response that can be best developed for these regions. This is crucial in order to understand the differences between the respective ERDF programming periods as well as the synergies with national and other European funding instruments. The focus was on both Convergence and Regional and Competitiveness regions, at both NUTS2 and NUTS3 levels, focusing on a sample of regions selected from the list of regions annexed to the tender specifications. Overall, the Study consisted of four main phases: the Literature Review (Task 1); the desk analysis of 15 NUTS2 regions (Task 2); six case studies of NUTS3 regions based on field missions (Task 3), which form the core of the analysis and is the focus of Part 2 of this Report; and finally, policy conclusions (Task 4).

For Task 2, the methodology used was desk-based research drawing on the programme data and documents (for 2000-06 and 2007-13) and the ex ante/interim/ex post evaluations (for 2000-06) supplied by DG Regional Policy. Most of these documents were in respective national languages. In addition, for quantitative data, several sources were consulted including DG Regional Policy's SFC2007 for the current period; the SWECO Study database (2008) for figures relating to the previous period including ERDF expenditure at NUTS3 level; the ADE study of ERDF indicators for the 2000-06 period. A

[2] Source: http://ec.europa.eu/eu2020/index_en.htm

range of socio-economic data was collected from Eurostat. For Task 3, for each of the six NUTS3 case studies, face-to-face (and some telephone) interviews were carried out with the main stakeholders in each of the respective regions.

It is important to point out several methodological issues that arouse during the course of the Study. Firstly, making comparisons between the two programming periods for the three types of territory is not a straightforward task. Several factors inhibit this, for example shifts in eligibility between periods say from Objective 1 to Phasing-out or to Regional Competitiveness and Employment; this was the case in several NUTS2 regions that were analysed for the Study, including the Highlands and Islands (UK), Sterrea Ellada (GR), Itä-Suomi (FI) and Ővre Norrland (SE). In addition, the two programming periods have different fields of interventions which make comparison very complicated.

Secondly, the availability of programme data is also different given that the current programme is still ongoing. This is also relevant when examining the impact of CF interventions as there was a shift from a project approach (in 2000-2006) to a programming approach (in 2007-2013).

Thirdly, the specific geographic characteristics of the regions have an impact, to a differing extent, upon a range of drivers and factors of economic growth and development, such as transport, environmental issues, business dynamism etc. Assessing the extent that certain ERDF interventions influence (or not) such specificities is not a trivial task, especially at NUTS2 level.

The key point as the Study has explored which is discussed in more detail in the following section is actually defining the territories themselves is not a straightforward task and requires several levels of analysis. Moreover, a key point is that *geography really matters* meaning that there is a heterogeneity of territorial contexts both within and between the three types of regions. Ultimately, what seems to matter more for a region's economy is not belonging to one (or several) of the three territorial types *per se* but the 'intensity' and 'mix' of the inherent characteristics it is exposed to (e.g., issues such as remoteness, accessibility, small local markets, transport cost). Interestingly, as is discussed in more detail in Part 2 of this Report, the analysis of the case studies confirms that actually issues such as remoteness and accessibility are common to all regions. In addition, a very important non-geographic challenge faces all of the regions, that of demographic change.

3. Regions with specific geographical features: definitions and main challenges

From the outset it is important to recognise that the regions with specific geographic features - island, mountainous and sparsely populated regions - do not represent a 'standardised' category or definition. Firstly, the categories themselves are as much sociological or cultural constructs as geographical or territorial ones, as often definitions and perceptions change depending on regional or national context. Secondly, there are differences within the categories themselves; for example, Sicilia (IT) is an island although due to its size and location, the effect of its 'island-ness' is very different to a smaller island, such as Bornholm (DK) which is considerably smaller in size and population. In addition, sparsely populated is actually a demographic feature, which in theory, could change over time whereas being an island or a mountain is a fixed, 'natural' geographical feature. Thirdly, some regions belong to more than one category i.e. islands that are also mountainous, such as Corse (FR) or Highlands and Islands (UK). In short, defining the territories is far from straight-forward plus the range of features plays out differently in the contrasting contexts.

The next sections focus on some definitional points in order to the 'set the scene' for the rest of the Report.

3.1 Islands

Insularity (or 'islandness' which according to Baldaccino, 2004, is freer of negative semantic baggage) is a surprisingly difficult geospecific characteristic to precisely define or measure. There are problems even at the most basic geophysical level (e.g. to include or not islands completely surrounded by water at low tide). On a more serious level, there has been a fierce debate in the literature on whether islands with fixed rail or road links to the mainland should be included as islands or not (see, for example, Baldacchino, 2007a for a view on retaining them, but others do not agree, Planistat Europe, 2003). Besides, there are many different typologies possible for islands as there are different purposes of the research (Dapraetere and Dahl, 2007). Fortunately, when it comes to the social and economic analysis of islands which is the focus of this Study, there is at least a modicum of common ground. For example, it is generally accepted that for socio-economic research it is pointless to include uninhabited small islands, of which there are many within the EU. This then, however, begs the question of just how large (in population terms) an island must become before it is worthwhile subjecting to economic analysis. Again it is generally agreed that there is little point in subjecting the very smallest islands to detailed analysis since where the population numbers only a few tens of people statistical analysis runs into insuperable 'small numbers' problems.

The EU has therefore gradually developed its own definition of what constitutes an island for the purposes of data collection and quantitative analysis, as well as for the purpose of policy formulation. Hence starting with Eurostat (1994) and then in the major study by Planistat Europe (2003) the EU developed the following definition of islands of interest:

(a) Minimum resident population of 50 persons;

(b) Minimum land area of 1km^2;

(c) Minimum distance from the mainland of 1km;

(d) No fixed link (bridge, tunnel, dyke) to the mainland;

(e) No Member State capital on the island.

However, with the accession of Cyprus and Malta in 2004 even this definition had to be changed to "island member states eligible under the Cohesion Fund, and other islands except those on which the capital of a member state is situated or which have a fixed link to the mainland" (Monfort, 2009, p.4), thus keeping out Britain (with London and also the fixed tunnel link to the Continent), Ireland with Dublin and Zeeland with Copenhagen and a fixed bridge link, but incorporating Cyprus and Malta (See Table 1).

Table 1: Classification of EU islands according to their population

Category	Population size	Number of islands
Large islands	More than 50.000 permanent inhabitants	15 islands of which 5 have more than 500.000 inhabitants (Sicilia, Sardegna, Mallorca, Cyprus, Crete)
Medium-sized islands	Between 5.000-50.000 permanent inhabitants	44 islands
Small islands	Between 50 and 5.000 permanent inhabitants	303 islands
Very small islands	Less than 50 permanent inhabitants	228 islands

Source: ESPON, 2010

Data availability and comparability is also an issue. This is a particular problem for within-EU islands where harmonised Eurostat data are drawn upon. The problem of truncation is exacerbated here by the tendency of Eurostat NUTS regions to merge smaller offshore islands with littoral mainland areas. This is true even at NUTS3 level. The inevitable result is not only systematic truncation in the data set but also the exclusion of huge numbers of islands one would ideally wish to analyse.

A recent European Observation Network (ESPON, 2010) report noted that there were 362 EU islands with populations over 50 persons (excluding the outermost regions, but including Cyprus and Malta) and a further 228 with populations less than this, but analysis could only effectively be conducted with 31 NUTS2 and NUTS3 islands and island groups. Monfort (2009) was able to analyse some 56 NUTS3 island regions, but these included cases where there were more than one NUTS3 region within a *single* island (e.g. Crete, Sicilia) as well as the usual amalgamations of smaller islands into groups for statistical purposes. Moncada et al. (2010) were able to demonstrate that the EU25+3 (excluding Bulgaria and Romania but including Iceland, Norway and Switzerland) contained an astonishing 5.116 islands (populated and unpopulated), but ended up being able to analyse only 28 islands and island groups.

Most recently, Dijkstra and Poelman (2011) provided an updated definition of islands using the methodology in the 5th Cohesion report[3]. The presence of a national capital and the eligibility for the Cohesion Fund were both discarded. Here are the main contents:

a) Island regions are NUTS3 regions entirely covered by islands;

b) Minimum resident population of 50 persons;

c) Minimum land area of 1km^2;

d) Minimum distance from the mainland of 1km;

e) No fixed link (bridge, tunnel, dyke) to the mainland;

f) NUTS3 island regions can correspond to a single island, or can be composed of several islands, or can be part of a bigger island containing several NUTS3 regions;

g) There are five categories in the typology of NUTS3 island regions, depending on the size of the major island related to the NUTS3 region.

3.2 Mountains

Defining mountainous areas in Europe is also not a trivial task. There is considerable diversity within the EU between the different types of mountainous regions and it is not possible to define a 'typical' category. The focus here is not to add to the literature that examines the variety of different definitions of mountain areas as a considerable amount of work has already been carried out elsewhere[4]. In short, a range of definitions have been used in different studies on the subject. The definitions need to take into account a range of factors including *topography* (i.e. altitude, slope); *dominant climatic conditions* (i.e. contrasts in temperature); *land use and coverage* – for example, forests are dominant in mountainous areas across Europe, although not in southern Greece, Sicilia and Scotland where moor lands are common. In addition, there is proportionally more grassland in northern whilst arable land is more common in central and southern European mountainous regions. In Scandinavia, due to the location and more extreme climate, there is proportionally more barren land as well as permanent ice coverage (EEA Report, 2010).

The Nordregio (2004) study estimated that mountain areas cover 40% of Europe and include 20% of its population. Moreover, this study developed a set of definitions for mountain areas in Europe on the basis of criteria combining slope, altitude and climatic constraints that were calculated for 1x1 km^2 grid cells across Europe. Interestingly, high altitude is not a sufficient criterion to identify mountain areas, as some mountains go down to sea level. Individual municipalities were defined as mountainous if more than 50% of the grid cells within their boundaries satisfied these criteria (Nordregio, 2004, p. 271).

Several other studies tackle the issue of how to define mountain areas. For example, in 2006, according to the study carried out by Monfort (2009), approximately 39.5 million people, which amounted to 8% of the EU population, lived in mountainous regions. In terms of territorial size, a recent study published by the European Environment Agency,

3 http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion5/index_en.cfm

4 This issue has been examined elsewhere. For example, through various ESPON studies including GEOSPECS www.geospecs.eu and Territorial Diversity in Europe: ww.espon.eu/main/Menu_Projects/Menu_TargetedAnalyses/espontedi.html

based on data from digital elevation models, derived a figure of 36% of Europe's area as mountainous, which dropped slightly to 29% for the EU27 (EEA Report, 2010).

Overall, then, there is considerable complexity in trying to develop consistent definitions across the whole European continent for mountainous regions and inevitably certain compromises have to be made. Hence, the sociological and cultural dimension is particularly relevant as national, regional and even local perceptions are clearly important and play a role. For example, the general observation or 'rule of thumb' is that the more mountainous a country is, the more restrictive the perception of mountains will be. Thus, Switzerland will tend to have a more restrictive understanding of mountains than a country such as Poland or the UK which are both larger and are less mountainous[5]. On the other hand, there are exceptions as Belgium, for example, does not have a national notion of mountain areas yet the Ardennes plateau does enter in the analyses of mountainous regions in a European perspective (Philippe de Boe et al., 2005).

Dijkstra and Poelman (2011) raised an interesting point by arguing that the definition depends more on the subject which is discussed in an analysis. This can be considered in two different ways. On the one hand, a study may focus more on sociological or cultural aspects. It is thus more appropriate to study mountainous regions with a majority of their population living in a mountain area. Whilst, on the other hand, if a study addresses, say, environmental issues, regions with a majority of mountainous surface are preferred. In this regard, mountains regions at NUTS3 level can be defined as regions covered by more than 50% of topographic mountains (the concept of topographic being itself defined in Dijkstra and Poelman, 2011) or where more than 50% of the regional population lives in these topographic mountain areas. This gives us three categories of NUTS3 mountain region to distinguish: a) regions with more than 50% of their population living in mountain areas; b) regions with more than 50% of their surface covered by mountain areas; and c) regions with both more than 50% of their surface covered by mountain areas and 50% of their population living in these areas.

3.3 Sparsely populated regions

The most comprehensive study on sparsely populated areas (Gloersen et al., 2006) identifies the issue of sparsity in the following terms: "Sparsity characterizes regions where low population densities and dispersed settlement patterns create specific challenges for economic activity and public service provision". In other words, it is the small size of the local economies combined with long distances between them that make the issue of sparsity so specific compared to other types of territories found in Europe. Indeed, only three main areas in Europe can be deemed to be significantly impacted by sparsity: Northern and Eastern parts of the Nordic countries, Northern Scotland and North-eastern parts of Central Spain (between the triangle Madrid-Barcelona-Valencia). Yet, the latter two are relatively smaller geographically speaking; in Scotland, therefore, the focus is more on remoteness and rurality, and in Spain, the focus is on the relation between depopulation and rurality. Only in the Nordic countries is the term 'sparsely populated areas' to be found which is combined with the issue of peripherality, i.e. the remote position from the main domestic and European agglomerations, and harsh cold climate conditions (Gloersen et al., 2006).

5 From Geospecs project, Handbook of Territorial Diversity, 2010

In the EU context, the issue of 'sparsity' was introduced via the Accession Treaties of Finland and Sweden to the EU in 1995. Sparsely populated areas (SPAs) understood as "regions with extremely low population density" where initially covered by a specific Objective of Regional Policy, the Objective 6. In the EU vocabulary, 'Sparsity' is translated essentially in terms of low population density. As a matter of consequence, this indicator is used as the main criterion in order to establish if a region can be characterized as sparsely populated or not. In the protocol 6 of the Accession Treaties of Finland and Sweden, the Objective 6 regions were covering regions at NUTS2 level with a population density of 8 persons per km². As mentioned in the Monfort (2009) study and confirmed by Dijkstra and Poelman (2011) in their recent work, low population density regions are defined in the Paragraph 30(b) of the Guidelines on national regional aid for 2007–13 (2006/C 54/08)[6] as "areas made up essentially of NUTS2 geographic regions with a population density of less than 8 inhabitants per km², or NUTS3 geographic regions with a population density of less than 12.5 inhabitants per km²". In 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 km²". The same definition is used in the more recent Fifth Cohesion Report.

Yet, recent research has argued that the case of sparsity is more complex than a mere problem of low population density. Gloersen et al. (2006) object to the relevance of 'population density' as a pertinent stand-alone indicator for identifying the areas that fall under the labelling of sparsely populated areas. Indeed, their argument is that the main issue of sparsity relates to the lack of 'critical mass' available at the local level for the labour markets to function properly. In that respect, they propose the 'population potential' indicator, which is the total population available within a 50km radius, as a more relevant criterion for identifying sparsely populated areas across the European territory, the 50km radius representing a proxy for the daily commuting distance (calculation is based on grid cell and municipal population data). Gloersen et al. (2006), therefore, argue that "the appropriate method for delimitating sparsely populated areas is to use the proportion of each region characterized by population potentials below a certain threshold, rather than average population densities." Applying the same threshold of 12.5 inhabitants/km² show a more nuanced picture of where such sparsely populated areas can be found in Europe: in the Northern and Eastern parts of the Nordic countries, in the Highlands and Islands region of Scotland and in Central parts of North East Spain.

The Green Paper on Territorial Cohesion (2008), and the study produced by Monfort (2009), has shown that other regions of Europe have as well low levels of population density. These areas are especially found in Northern Scotland and Central Spain. Yet, national regional policies in the UK and Spain do not seem to make reference to them as 'sparsely populated areas'. In Scotland, sparsely populated areas are often called **remote rural**[7] territories, thus referring both to the difficulty to access them (remote) and the structure of the economy (rural), which are areas with a greater than 30 minute drive time to the nearest settlement with a population of 10,000 or more. The term **fragile areas**[8] is

6 http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/c_054/c_05420060304en00130044.pdf
7 See for instance http://www.scotland.gov.uk/Publications/2005/09/08115837/58393
8 See for instance http://www.scotland.go.vuk/Resource/Doc/320175/0102396.pdf as well as http://www.highland.gov.uk/NR/rdonlyres/267DCD97-B9B0-4BF3-BE1C-15D662186C48/0/fragile_paper.pdf

also used in policy-related analysis, which refers to the specific vulnerability of these territories, by combining demographic indicators (density and decline), socio-economic indicators (unemployment and income support) and accessibility indexes (access to services). The fragile areas characterisation already takes the stand that the challenges of sparsely populated areas are due to the synergies between several negative trends, and not only a single one.

In Spain, which is another country where sparsely populated areas have been identified, the equivalent term used by Regional Development Policy documents is "**zonas desvitalizadas"** (i.e. less favoured areas). Population density is used first in order to distinguish rural from urban areas as well as the different sub-categories of rural areas. These less-favoured areas, described as rural areas to be 'revitalized', are those with low population density, dominance of agricultural activities, low levels of income and considerable geographical isolation or difficulties of territorial integration. The issue of depopulation, if not explicitly used as a variable for identifying sparsely populated areas, are tightly connected to the general development paradigm: sparsely populated and depopulating areas are almost the same. Academic studies on sparsely populated areas in Spain have focused essentially on access to services (Escalona-Orcao and Díez-Cornago, 2007). Actually, in order to capture the differences in the sparsely populated regions across the EU, both Nordic as well as the Spanish and Scottish cases has been chosen to be further analysed in the case studies (see Part 2 of this Report).

Having discussed some of the issues involved in defining territories with specific geographical features, the next section deals with the main challenges facing the different regions.

3.4 The main challenges facing regions with specific geographical features

Whilst *a priori* the three geographic categories of regions do not necessarily share many common points at the geographical level *per se*, there are certainly commonalities in terms of the consequences of the respective territorial features. Of course, each situation is different and the mix and intensity and hence their impact change in relation to each individual territory type. Below is a summary of the most common types of territorial feature that are apparent in the respective regions:

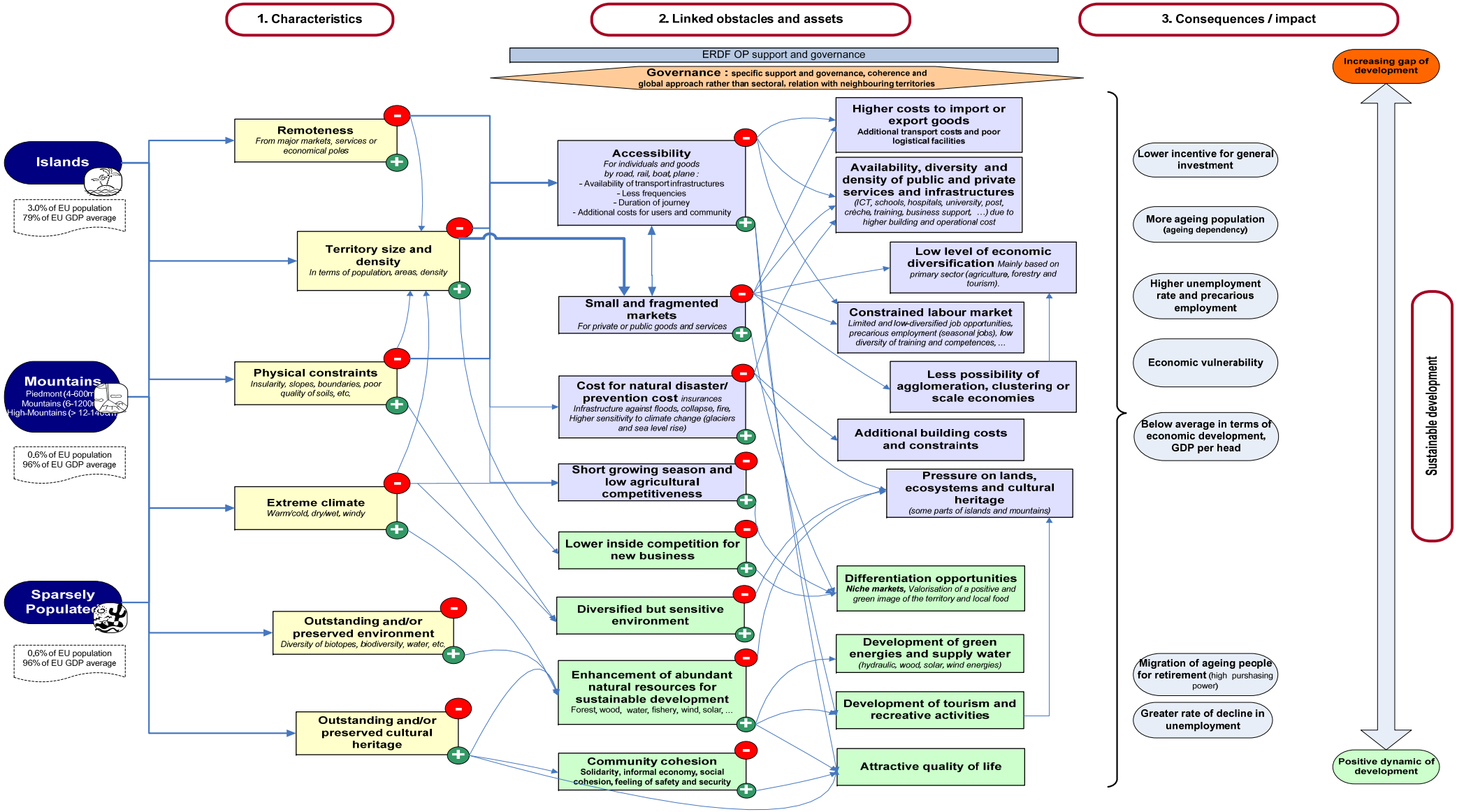
- **Remoteness**: from major markets, services or industrial 'poles' or clusters;
- **Territorial (small) size:** in terms of population, density and/or GDP
- **Low density**: in terms of population per square kilometre;
- **Physical constraints**: in terms of insularity, slopes, boundaries, poor quality of soils etc;
- **Extreme climate conditions**: i.e. hot/cold, dry/wet, windy;
- **Outstanding and/or preserved environment and habitats**: in terms of the biodiversity of flora and fauna;
- **Outstanding and/or preserved cultural heritage**: historical traditions linked to the landscape, specific cultural identities.

These are inherent or quasi-inherent characteristics on which the population has little or no influence in the short to mid-term, and even *ad infinitum* in some cases. In the latter case, these could be described as *natural* constraints, as opposed to *structural* ones, since structural obstacles can be addressed and indeed, changed or reversed, in the longer run, provided appropriate policies are implemented, whereas natural characteristics, such as the geographical remoteness of an island, simply cannot. The inherent or quasi-inherent characteristics lead, in each particular territory, to specific socio-economic circumstances each with particular economic advantages and disadvantages, which in turn create particularly variable outcomes.

It is necessary, therefore, to provide an overall framework to analyse the different territories and in particular to find issues that are common to all. This framework is outlined in Figure 1 below. It shows how, for any of the three geographical categories of regions concerned, there are inherent characteristics that lead, in any given governance and policy-making setting, to specific sets of constraints and assets for socio-economic development, and from there to (relatively bad or good) performance. In this framework, socio-economic performances clearly result from the combination of the impact of the particular territorial feature(s) together with the quality of policy making/governance structures.

As illustrated in Figure 1, there is a considerable inter-relationship between different factors driving socio-economic development in the respective regions. Of course, there are differences between territories, as well as in the level and intensity of the respective geographical specificities. Put simply, 'geography matters'. On the other hand, it is clear that public policy and governance also play a very significant role. In other words, the socio-economic impacts of certain geographical features are not exactly the same in one region as in another. There are clearly different approaches to dealing with such specificities both historically, culturally and most certainly in terms of domestic economic policy. Again, this is something that is explored in more details in Part 2 of the Report comparing the six case studies.

Figure 1: The dynamics of regional economies with specific geographical features



Building on this framework, some of the main common characteristics of three territories are discussed in more detail below.

3.4.1 Remoteness

Remoteness is most often considered as geographical distance. Indeed, as for size, what matters most is *economic distance*, not the simple geographical one, since the two are not perfectly correlated. The costs of accessibility to and from a place depend at least on two elements: its nature and its peculiar location. As for the former, insularity implies some discontinuity (and no alternative choice) of transport mode, with some strong implications in terms of multidimensional transport costs. As for the latter, location matters a lot since the unit price of transport will depend much more on the possibilities to reap (or not) economies of scale and competition benefits, both of which requires large volumes to materialize. Logically, this is unexpected in the most remote and smallest territories, especially islands and above all archipelagos which might end up with very expensive costs of accessibility (except for a few exceptional cases).

Islands can be very remote or very accessible depending on which insular territory we are talking about, including its size - distinguishing between big, medium and small islands (ESPON, 2011) and taking into account archipelago specific related issues of 'double insularity'. Even allowing for methodological limitations, accessibility indexes developed through the ESPON Atlas (2006) or EURISLES (2002) projects clearly show that islands, as a group, have relatively lower accessibility compared to the European average. The same holds true for some mountainous areas and probably for some sparsely populated ones, but to a much lesser extent in general. Some of the mountainous or sparsely populated areas are even rather central in their Member State territory (e.g. Castilla La Mancha), and/or very close to some big agglomerations (e.g. Rhone Alpes with respect to Lyon, the third largest city in France with a population of 475 000 inhabitants in 2010).

3.4.2 Territory size and density

The territorial size of the regions concerned does vary significantly. This is particularly the case for the islands, many of which are very small indeed, but it is also an issue for the mountainous and sparsely populated regions. An important implication of this for the case studies is that the distinctive characteristics of what may be termed 'islandness', 'mountainous' and 'sparseness of population' are likely to become diluted as population size/density and economic size increase. At some point (or threshold) the regions will become so large and/or have a population density significant enough that they exhibit virtually identical socio-economic traits to any other type of EU region. In other words, it is difficult to generalize on this issue and a case by case basis needs to be applied. For some of the territories, small size (or very small size) of the local economy is an inherent characteristic, but not for all concerned territories.

3.4.3 Given geophysical constraints, resource endowments and environment

Geophysical features here are defined in the broadest sense to include physical constraints such as slopes, boundaries, poor quality of soils, etc. as well as climatic conditions (warm/cold, wet/dry, windy, etc). Again, in different ways, each of the three territories face with specific characteristics which can strongly impact (or not) the socio-economic development process. For example, some territories have limited resource endowments whereas others have an abundance of natural resources. The ways in which such resources are used is also a key point of comparison.

3.4.4 Outstanding and/or preserved environment and cultural heritage

As a result of their relative isolation or reduced accessibility, these territories most often have developed some specific community 'feelings' with their own communication 'codes' and sense of belonging/togetherness. For example, 'islandness' is often considered at the sociological/psychological level as bringing some sense of greater independence of mind and behaviour among its people (Selwyn, 1980). This also can hold true for communities living in harsh conditions (e.g. cold climate) or having extreme working conditions linked to the nature of their particular work (e.g. miners or fisher(wo)men). Such specific 'sociologics' can imply both advantages (e.g. a strong community cohesion) but also weaknesses (propensity to collusion or even corruption, lesser reactivity in face of the need for change, etc.). Clearly, these effects evolve through time, with some specific migration dynamics and/or some human interventions with regard to infrastructure. For example, building a bridge from the mainland to an island means that the area will not strictly considered as an island with regard to the EU definition. In addition, perhaps over time the sense of being 'islanders' amongst the inhabitants may progressively diminish.

3.4.5 The combination of characteristics: what cumulative effects?

All three types of regions have found their weaknesses to have been exacerbated by the fact that they have inherently internally scattered and fragmented populations, urban centres and business communities. These are caused by different physical geographies – archipelagos for the islands, topography within mountains (creating 'island valleys') and sheer space (distance) between communities within the sparsely populated areas. Moreover, in all regional types the coincidence of other geographical characteristics tends to exacerbate the extent of internal fragmentation. Hence if an island is also mountainous the degree of internal fragmentation is exacerbated. Similar effects occur when any pair or all three of the characteristics exist in any one region. This is a factor that is considered in more detail in Part 2, exploring the case studies.

It is clear from the above analysis of each inherent characteristic taken individually that the intensity of each characteristic varies strongly both within and between each of the three territories with specific geographical features. As a consequence, if for a given area, we consider a single characteristic (e.g.: size of the local market), we may end up with the observation that this area is closer to a 'standard' situation. However, the reverse might be true for another area. In addition, what also matters, is the mix (or combination) of

characteristics in each specific territorial case. Indeed, having a small local market size may not be a constraint if the concerned territory is well connected to neighbouring markets or the EU as a whole. Conversely, if the concerned area has both a small local market and faces high accessibility costs then benefitting from an enlarged market may not be an option. For each of the territories with specific geographical features, therefore, it is difficult to assess the intensity of each characteristic as well as the combination of characteristics, which makes it very difficult to draw *ex-ante* conclusions about the existence (or not) of a specific socio-economic setting in any given territory. Indeed, as mentioned earlier, the findings from this Study suggest that it is actually the common characteristics, such as remoteness and accessibility, which play a decisive role in each of the three territorial types.

The question that emerges, therefore, is how are such geographical features perceived in the different territories and then how does this influence upon particular policy responses. The conventional wisdom is that 'geographical specificities' have often been viewed as 'handicaps' or 'constraints' to socio-economic development. Whilst this view is clearly valid, another approach is to also consider the specificities as opportunities or factors that can be utilised, building on the right forms of public (and private) interventions, in order to improve the socio-economic situation of particular areas. For example, opportunities with ICT and broadband have really opened up the potential for a new set of opportunities for economic growth as well as public service provision. In certain circumstances, therefore, geographical specificities can also provide socio-economic opportunities.

Having discussed in some detail the different assets and obstacles in the three types of territory, the next section turns to a discussion of the policy approaches that have been adopted to try to overcome them. This is provides useful context to compare and contrast the kinds of policy approaches that were actually adopted in the six case study regions, discussed in Part 2.

4. Policy responses and approaches in regions with specific geographical features

The evidence suggests that what unites all three territories is the enormous *variation* within each category in terms of socio-economic performance. As illustrated in Figure 1, it is vital to explore the role of territorial policy approaches in order to analyse the extent to which governance and institutions matter in helping to shape the very different socio-economic trajectories. The key point is that economic performance of any particular region with specific geographical features will vary with the quality of its policy-making and implementation, including the policies aimed at mitigating specific constraints, specialisation policies, and so on. In that regard these economies do not differ from any other economies: after all, authorities of any economy shape, to a certain extent, their own destiny. The very fact that economic performances may vary, over any given period of time, according to both the particular set of specific geographical circumstances and the quality of the policies that have been implemented helps to understand why the regions under the scope of this Study present such divergent socio-economic scenarios.

Each of the three territories contain some of the best performing as well as worst performing regional economies within the EU. This in itself is evidence that despite the many and distinctive challenges faced by these types of regions, many of the regions have either managed in some way to offset the challenges faced or else have strengths which compensate for their inherent challenges. The situation is complex however because, as the six case studies illustrate, the socio-economic fortunes of a particular region depend to a large extent upon the national situation. Moreover, again the question of perception is important because even though a particular island or sparsely populated region is relatively well-off, at least statistically, it still faces significant challenges related to remoteness, accessibility etc. Such factors really inhibit the potential to create durable socio-economic possibilities without continued public support and intervention from funds such as ERDF.

There is 'no-one size fits all' approach to understanding the impact of the various specific characteristics in the different territories. As the next sections discuss, each of the territories have adopted slightly different policy responses and approaches. This provides an overview of the types of approach which can then be compared and contrasted to the actual approaches adopted in the respective case study regions.

4.1 Policy approaches in islands

In terms of territorial policy approaches in islands, it is apparent that the role of national government policy is the key player in terms of funding and strategies for economic development. At the EU level there is no specific policy for islands. In fact, there are three main types of governance arrangements:

(a) Own local governments with unusual degrees of political and economic autonomy, which is applicable to a very small group of EU islands. One example is the Åland Islands of Finland[9];

(b) Own local government whose boundaries are coterminous with the island or island group (i.e. no overlap of the local government boundary with the mainland littoral). Even though such local governments (e.g. Balearic Islands of Spain, Corse) have similar powers to those on the 'mainland', their ability to focus what policy levers they have solely on island issues without being distracted by 'mainland' concerns means that they can develop distinctive highly-focused policies and also more effectively use their lobby power with both the national government and the EU;

(c) Local government areas shared with the mainland littoral. Here the island communities must compete on virtually all policy matters with the mainland littoral parts of the local government area. Mainland and island communities often have very different concerns and issues and hence very different needs for government action.

It is very rarely the case in the EU that one finds national government islands policy handled separately via a specific government ministry or through some quasi-autonomous organisation (e.g. a development agency specifically for the islands). Much more typical is the case where islands benefit from special treatment but within a pre-existing system of government ministries.

This overlap of islands with non-island areas in governance arrangements can occur either for elected regional/local governments or for cases of quasi-autonomous governance arrangements. Take, for example, the Danish island of Bornholm, which is also the focus of a case study in Part 2. This had separate *county* and *municipal* status prior to 2007. In 2007, however, it became integrated into *Region Hovedstaden* (the Copenhagen Capital Region), thus sharing powers with the littoral region at this particular level of government. However, at the next tier down (municipalities or *kommunes*), Bornholm was allowed to retain its separate single municipality status during the 2007 reforms, reforms which saw many of the smaller municipalities being amalgamated.

Different EU member states, therefore, have developed very different policies designed to assist their island economies and communities. It is possible to classify national policies into three main types:

1) **Reactive strategies.** These are policies designed to compensate for handicaps and structural difficulties. These types of strategies are to be found amongst the very earliest islands policies in the EU, especially those aimed at offsetting higher transport costs and transport disruption. In most countries island reactive policies have gone well beyond just addressing the transport problems and now typically

[9] Note that the Åland (NUTS2) region (FI 20) has not been selected among the 15 regions for Task 2.

seek to offset higher costs of many different types, and for both businesses and individuals.

By far the most visible and widely practiced use of national policies to offset higher island costs has been applied to transport costs (both freight and passenger transport, and also on both sea and air transport). These types of transport subsidies have attracted derogations from both EU and national competition policy rules, particularly those associated with public service obligations.

2) **Proactive strategies.** Unlike the case for mountain regions, proactive strategies for islands tend not to seek for *diversification* of the economy, except for the very largest islands such as Sardegna. Most small islands, as we have seen, by necessity must rely on niche specialisation. However, in most EU states the proactive strategies seek to *stimulate new economic activities*, with a view to replacing traditional niche sectors (e.g. agriculture, mass tourism) as they die out. A good example of this is the help given for aquaculture on many EU islands, a new sector designed to replace declining sea fishing.

3) **Sustainability strategies.** As with mountain regions, many islands now have special policies designed to focus on environmental sustainability. This is partly to protect the 'green' environment assets so vital for the key tourism and recreational sectors (beaches, landscape etc), but also because the environment now offers excellent opportunities for new industries (e.g. tidal and wind power).

   Starting from a very low base, sustainable development strategies have emerged in the last 15 years or so as a major category for island economies. There are three main reasons for this: (a) islands have both valuable 'green' resource endowment but also highly fragile and vulnerable environments and hence sustainability is vital for their long term prosperity, (b) islands by virtue of their bounded and insular nature make excellent laboratories for seeking environmental sustainability, and (c) there has been a growing realisation that sustainability policies can of themselves generate entirely new economic niches.

Similarly, the EUROISLANDS project (ESPON, 2010) proposes a strategy aiming to turn handicaps into opportunities, with reference to islands' specificities and to the guidelines of the 2020 European strategy. Priorities proposed are the following:

- **Quality islands:** In spite of the consequences of size and insularity (small market, low accessibility), there are various examples where islands' products based on local resources and know-how are competitive. This success can be extended to services' production such as tourism, instead of consuming the islands' limited resources for a mass activity. New knowledge, innovation and skilled human resources are prerequisite for the success of such a strategy that has to be niche 'oriented';
- **Green islands:** is a priority linked with the limited natural resources of islands; the strategy lies on reduced use of resources such as water, land, energy and a recycling of waste produced both by enterprises and the local population;
- **Equal opportunities islands:** is a priority linked with the goal for equal access of all European citizens to Services of General (Economic) Interest (SGI) -which are a *sine*

qua non condition for quality of life and competitive entrepreneurship- as expressed initially in the European Spatial Development Perspective. The relevance of SGI for economic, social and territorial cohesion is underlined in the Lisbon Treaty (Article 14 and Protocol 26).

4.2 Policy approaches in mountainous regions

The socio-economic diversity in mountainous regions raises particularly complex issues about how best to develop policies to assist regional development. Mountainous regions across Europe have been the focus of a range of different policy approaches for a considerable length of time. Actually, the first national laws protecting mountain areas were introduced in the Alpine countries during the late 19th century through national legislation. Indeed, these countries were also the first to develop trans-national policy approaches to tackling problems in mountain regions through the creation of the International Commission for the Protection of Alpine Regions in 1952 (EEA Report, 2010).

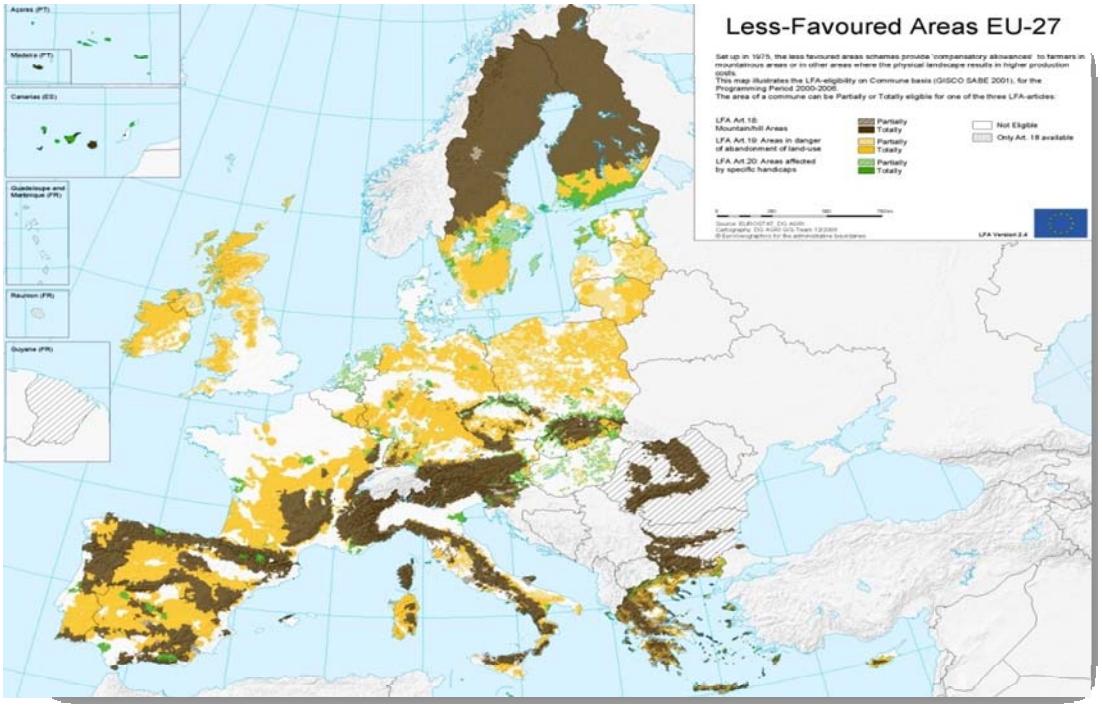
At the European level, a key date was 1975 when the European Economic Commission (EEC) first implemented a Directive on mountain and hill farming in so-called less-favoured areas (LFAs). The aim was to address the challenges for farming and agriculture, through a system of direct payment to farmers in these regions within the framework of the Common Agricultural Policy (CAP). Since the list of less-favoured areas as originally outlined in the Directive 75/268/EEC had undergone various criticisms and amendments, the European Commission answered this debate with a counter action in January 2010 with repeal of the current list of LFAs as laid down in Article 39 of Regulation 1698/2005.

Originally based upon a French system of support in mountain regions, the support for LFAs is still in force today and covers both mountainous and non-mountainous areas (see Map 1). These are:

- Article 18, **Mountain Areas** are characterised as those areas handicapped by a short growing season because of a high altitude, or by steep slopes at a lower altitude, or by a combination of the two. Areas north of the 62nd parallel are also delimited as Mountains;
- Article 19, **'Intermediate' Less Favoured Areas** are those areas in danger of abandonment of agricultural land-use and where the conservation of the countryside is necessary. They exhibit all of the following handicaps: land of poor productivity, production which results from low productivity of the natural environment, and a low or dwindling population predominantly dependent on agricultural activity;
- Article 20, **Areas Affected by Specific Handicaps** are areas where farming should be continued in order to conserve or improve the environment, maintain the countryside, preserve the tourist potential of the areas, protect the coastline.

The interesting point is that the map of eligible Less-Favoured Areas covers a significant number of regions with specific geographic features.

Map 1: Location of Less-Favoured Areas across in EU-27



Source: Eurostat, 2011

Since the 1990s, there has been a significant increase in the number and range of policies, from the all tiers of government – local, regional, national and European - targeted towards mountainous regions. Indeed, there are a range of EU policy and funding initiatives that impact upon mountain regions, including agriculture and rural development, forestry, regional and cohesion policy, environment, nature conservation, biodiversity and transport and infrastructure. The key point, however, is that the policy and governance scenario remains somewhat complicated as different legislation is focused at several spatial scales and on different sectors so it is not straightforward to evaluate the 'sum of the parts' of these different policy interventions in mountainous regions.

In summary, it is possible to delineate four types of category of policy approaches that have been adopted by different countries across the EU (EEA Report, 2010; Price, 2010). These are:

1) **Countries where no mountains policies can be identified:** this includes countries without mountains or with few or low mountains, or indeed countries, such as Greece and Slovenia, which are in fact largely mountainous;
2) **Sectoral policies:** this groups includes most countries with 'middle' range mountains and as well as most newer EU Member States; the main sectoral policy is agriculture;
3) **Multi-sectoral policies:** this is the case for Austria, Germany, and Spain, where mountain policies are addressed through multi-sectoral approaches which go

beyond a specific focus on just agriculture, as in the case above. The broader policy remit includes measures related to addressing economic development issues, including mainly tourism, infrastructure and the environment;

4) **Specific legal and constitutional approach:** this is the case in France and Italy[10] in which integrated policies to enhance the development of mountain regions have specific legal status focused on improving sustainable development. This includes a range of policy tools, legal definitions of mountain areas, usually in terms of altitude and, often, slope; the delineation of massifs; mountain-specific legislation; and specific programmes to encourage research and training.

Again, the message is clear that there is certainly no 'one size fits all' policy approach that has been adopted in all EU mountainous regions. This raises a number of questions about how best to assess the role and impact of the different public policies as well as the interactions and complementarities between them, in different territorial contexts. A useful insight in this regard focused on the different types of strategies that have been adopted in EU mountain areas (Nordregio, 2004). Interestingly, the categories are actually similar to the ones adopted in the islands:

- **Reactive strategies** which compensate for handicaps and structural difficulties; these are most common in newer EU Member states, as well as Spain and Portugal and usually have a primary focus on the modernisation of agriculture;
- **Proactive strategies** which are targeted primarily at a diversified mountain economy, and recognise the crucial importance of good accessibility; these are most common in Austria, France, Slovenia;
- **Sustainable strategies** which focus more on environmental issues and the role of mountains in responding to urban demands for 'natural' environments with opportunities for outdoor recreation; these are most common in some industrial and urbanised countries including Sweden and the UK.

The example below from southern France is an interesting case of how regions have developed joint strategies to overcome common issues in mountain areas. The Ardèche region of France is one of the case studies discussed in detail in Part 2 of this Report:

[10] In France: creation of Massif Commissariats (1973) and the Mountain Law with delimitation of massifs (1985). In Italy (1948), the Constitution refers to a special policy for mountain areas; followed by other provisions including the Mountain Communities (1971) and a Mountain Law in 1994.

Multiregional Operational Programme 2007-2013 in France

The multiregional operational programmes in France are a new initiative of the current programming period. There are four multiregional programs in the country, two of them linked to a mountainous massif: the Alpine massif and the Central massif, involving several regions. They have been developed in order to tackle specific problems that go beyond the regional scale.

During the 2000-2006 programming period, some experiments were already in place to try to develop multiregional initiatives. For example, the Massif Central was included in the Operational Programme of Auvergne.

Following these experiments, and taking into account lessons learnt during the 2000-2006 period, the "Alps region" and "Massif Central" Programmes were developed, both coming under the Regional Competitiveness and Employment Objective. The Alps has a total budget of EUR 72 million of which EUR 35 million is ERDF. The Massif Central has a total budget of EUR 101 million of which ERDF amounts to EUR 41 million.

The two programmes aim to overcome the specific difficulties of these mountain areas whilst also enhancing their attractiveness. Indeed, the programme for the Alps region highlights the specific advantages of the region (beauty of the landscape, the closeness of nature, the quality of the forests, the proximity of recreational areas and the presence of large towns in the surrounding area, etc.) but also the disadvantages (relative isolation from Italy, incomplete transport networks, etc.). In this light, the regional authorities have set out a strategy based on three priority objectives: i) increasing in a sustainable manner the competitiveness of the valley systems around medium-sized mountain resorts, ii) managing natural hazard specific to mountains, iii) developing the use of wood-based energy and other renewable energies.

New forms of governance were put in place in order to manage the 2007-2013 programme between the different regions. Indeed, for example, the Massif Central multiregional programme covers six different French regions. In this region, the prefect of the region of Auvergne is the coordinator and Managing Authority. A Committee of the Massif has been set up and aims at defining the objectives and to specify the actions to be taken. In particular, it facilitates the coordination of public actions in the Massif and the organization of public services. It is composed of 83 members spread into three colleges: i) a college of elected people, ii) a college of the economic activities (representative of consular public institutions, professional, tourist and union organizations) and iii) a college with representatives from associations, parks managing organizations and qualified persons in the domain of the mountain. A permanent commission has also been created.

Source: http://www.massif-central.datar.gouv.fr/index.php?rubrique=645

This classification is useful because it illustrates how policy approaches to tackling the range of challenges faced in mountainous regions really do vary. Several strategic issues need to be borne in mind by policy makers when trying to promote socio-economic development in mountain regions. These include:

- safeguarding the natural resources of mountain areas in ways that will sustain their vital ecosystem functions;
- addressing permanent natural handicaps to sustainable development linked to topographic and climatic barriers to economic activity and/or peripherality;
- tackling socio-economic structural factors relating to demography, production and growth, labour market dynamics and accessibility that impede economic development and social cohesion (EEA Report, 2010);
- the need to encourage and foster greater inter-regional cooperation between mountainous regions through intra-territorial marketing, workshops and networking (Alfare, L. and Ruoss, E., 2007; Bausch et al., 2005; Briquel, 2006).

The combination of diverse territorial contexts with both varied economic structures and performance has contributed to a multi-dimensional and multi-sectoral approach to policy and strategies in mountainous regions across the EU. This diversity really does demand the creation of policies developed to address specific issues, some of which are common to all mountain regions, however the intensity and impact really does vary. The key point is that increasingly territories need to work together beyond local, regional and national boundaries in order to share common policy approaches and strategies. For this reason, ERDF has an important role to play in mountainous regions across the EU, combining both regional specificity and the opportunity to work within a broader European framework.

4.3 Policy approaches in sparsely populated regions

In terms of territorial approaches, each level of governance plays a specific and important role in the development of policy responses for sparsely populated regions.

Regional level

The coordination of sectoral policy initiatives is mainly operationalised through the elaboration by regional authorities of their own development strategies. These focus on overcoming the specific challenges of the respective regions, for instance, matching the development in transport infrastructure with the needs of regional businesses and individuals, for enhanced accessibility and mobility.

In the recent ESPON study on Territorial Diversity (Nordregio et al., 2010), the importance of regional and local level of governance has also been highlighted:

> "*Regional or county Plans are available for all regions in each of the three countries covering the North Calotte area (Finland, Norway and Sweden). For the elaboration and implementation phase of those plans, the County authorities are central actors as their role is to lead the process and to federate other relevant actors to create stronger intra-regional synergies. Economic Growth and Employment are central themes in the regional plans, often reflecting the national priorities.*

> *Strategies also acknowledge the fact that the economic competitiveness of the region needs to support small scale business in rural areas, in order for it to be sustainable in the long run. The elaboration of the regional strategies engages the most important regional actors in each county: regional federations of businesses, labour unions, regional chambers of commerce, but also universities and research centres that are seen as an important link between public action and private sector (Triple Helix model).*"

As highlighted in the ESPON study on Territorial Diversity (TeDi), policy strategies aiming at 'turning handicaps into opportunities' need to involve local stakeholders: "*The central element in the differentiation of 'TeDi areas' capacity to take advantage of economic opportunities on the basis of a strategy of balanced, harmonious and sustainable development however lies in their respective capacity to formulate and to implement locally adapted measures targeting key obstacles to growth.*"

As highlighted in the same study, the capacity for the regional and local stakeholders to turn the assets from their geographic specificity into a development opportunity ought to be based on the synergy between three pillars:

- *Human capital*: fostering the entrepreneurial and learning capacity in the region, enabling a more flexible and adaptive local labour-market and economy;
- *Natural resources/geographic position*: use of the geographic position to act as interface territory, especially across the internal and external borders of the EU, combined with the exploitation of natural resources of global or European interests;
- *Institutional context/Governance structure*: tailored-made policy responses can only be efficiently elaborated and implemented through the local knowledge of the regional stakeholders.

Lastly, a grouping of Nordic regional stakeholders has proved that it is possible for local and regional stakeholders to gather together and to propose clear ideas for the future development of the sparsely populated regions. The Northern Sparsely Populated Areas Network has financed a foresight process enabling to bring together regional stakeholders from Northern Sweden, Northern and Eastern Finland as well as Northern Norway and to propose a 'roadmap' enabling to focus on development opportunities, instead of focusing on handicaps.

National and European level

At the national level, the policy responses are mainly related to target labour-market reforms and to foster a better business environment in the fields of entrepreneurship and innovation. Although the fundamental problems of sparsely populated areas seem to be shared in different parts of Europe (Nordic countries, Scotland, Spain, and maybe other regions), there is no joint approach to date in order to tackle this issue on a pan-European basis.

Firstly, there are no studies that provide a pan-European approach to define and characterise sparsely populated areas. The closest to this was attempted by the Nordic institute Nordregio, which promoted a pan-European approach for delineating sparsely

populated areas across Europe, with a more targeted analysis of the specific Nordic conditions.

Secondly, there is no pan-European organization whose *raison d'être* is to bring forward the arguments for having an integrated, pan-European policy approach to sparsely populated areas, as it is for mountain areas (Euromontana), islands (Islands Commission of the Conference of Peripheral and Maritime Regions) or even border-regions (Association of European Border Regions). The closest to such an organization is the Northern Sparsely Populated Areas Network, but it is Nordic in nature and can hardly be the seed for a pan-European organization. Having said that, a dedicated intergroup at the European Parliament was set up in 2010, which provides a platform for MEPs to "debate and reflect on the new approaches and perspectives brought by the Lisbon Treaty for specific territories. Intergroup discussions will evolve around the Cohesion Policy (the territorial cohesion), the coordination of sectoral policies (CAP, Environment, Energy, Transport, Small and Medium Sized firms, and Research) and governance issues (multilevel governance and macro-regional strategies)."[11]

Within the Nordic context, the European level is especially important in terms of setting the agenda for regional policy initiatives within the Member States. In addition, the recognition in the Treaty of Lisbon of territorial cohesion as a main objective for the EU community, as well as the emphasis in its Article 174 of the need to take particular attention to "to regions which suffer from severe and permanent natural or demographic handicaps such as the northernmost regions with very low population density and island, and mountain regions" provides a policy framework for elaborating and implementing policies at the national and regional levels (Nordregio et al. (2010).

In terms of specific policy areas, regional stakeholders in the Northern Sparsely Populated Areas increasingly see tourism as a possible opportunity for the sustainable development of their region and as a "vector for territorial development" (Nordregio et al., 2010). The attractiveness of such regions for tourism relies on the experience of wilderness, which is unique on the European continent. Moreover, the large availability of uninhabited land is an asset for the development of activities that are land-consuming. Yet, it has become clear that a strategic investment in tourism requires a multi-sectoral approach. Indeed, the development of touristic activities necessitates investments in various sectors: construction (of hotels), transport (with airports and local busses connecting to places), hotel and restaurant (for the accommodation of guests), retail services… Moreover, the development of tourism is often associated to the development of a *territorial brand*, able to connect the territory itself with products and heritage. In that respect, the regional stakeholders-led strategic initiative *Northern Sparsely Populated Areas Foresight* has identified tourism as a strategic component of the development strategy for the whole area.

In the Nordic countries, proactive policies concerning the development of ICT infrastructure has enabled the most remote and sparsely populated areas to be part of the

[11] For more information, see: Intergroup 174 Homepage http://intergroup174.com/

global economy. As a result, the difference in Sweden and Finland between the population coverage of broadband service is marginal, compared to the difference found in other countries (Fifth Cohesion Report and the example below).

The role of ERDF in ICT in the sparsely populated areas

The ERDF has played an important role for the development of necessary infrastructure in the sparsely populated areas, especially regarding transport and ICT. For instance the project "Broadband for the Far North" (Övre Norrland, Objective 1 2000-06) has enabled the outermost regions of Northern Sweden to access broadband. It has had practical implications for education, health and industrial research. It has enabled over 300 villages in Norrbotten to have broadband and once the work has been completed at the end of 2006, 93% of the regional population had access to broadband.

In the Finnish region of Itä-Suomi, the ERDF project "Wireless Access for Rural Areas" (Objective 1 2000-06) aimed at improving the access of remote rural areas to broadband services. Currently, nearly 98% of households and businesses in the 14 municipalities concerned are eligible for high-speed Internet access, compared to only 74per cent when the project was launched in 2004.

In Övre Norrland, the thematic focus of the ERDF is on Innovation and Accessibility, the latter with particular emphasis on better internal connections (regional enlargement) and ICT. For the Finnish regions of Johjois-Suomi and Itä-Suomi, the main focus is on development of business activity, promotion of innovation and networking, as well as the improvement of regional accessibility. In Northern Sweden, ERDF co-financing is used as a financial support for developing business network initiatives targeted to regional small businesses, in cooperation with regional and municipal authorities. The aim is to support the small firms located in Northern Sweden in developing business relations with partners outside the region. The initiatives Kvarken Global Business, Nordic Business Link and RUG are cross-border Interreg projects. Other initiatives such as Swedish Lapland, Design Västerbotten and Globac are funded through the ERDF fund.

Source: http://ec.europa.eu/regional_policy/atlas2007/index_en.htm

Another key policy response in the Nordic countries has been the development of universities and polytechnics in the sparsely populated region. Now the cities of Oulu and Umeå have become big university towns. But the development of decentralized universities, such as the *MittUniversitetet* or *Akademi Norr* in Sweden, with several small venues spread across the region, ensures that a larger share of the population is in reach of a tertiary education facility. A similar policy has been also implemented in Northern Scotland with the University of the Highlands and Islands decentralized in several campuses.

Finally, Regional Innovation Policies focusing on *incremental innovation*, i.e. the improvement of the production processes in already established local economic activities, and using the Triple Helix model is high on the agenda of Nordic stakeholders. Incremental innovation enables the local economies to grow while still keeping their economic comparative advantage and identity. Overall, although the policy responses are the same as those developed in all European regions (eg ICT, education, innovation), the key point is that their implementation is tailored-made to overcome the territorial handicaps, especially the distance between actors sparsely populated regions.

4.4 Overarching policy approaches across the three types of territories

The role of governance and policy, then, is clearly an important element and it is useful to distinguish between three main territorial approaches:

1) **Reactive strategies** that are usually aimed at mitigating the specific 'obstacles';
2) **Proactive strategies** aimed to stimulate the emergence of new innovative sectors with a higher value added and/or develop new governance approaches;
3) **Sustainable strategies** which focus on encouraging development through activities such as environmental protection and valorisation, renewable energies etc.

Clearly, the three strategies are interlinked. Actually, any successful attempt at diversifying the economy with new innovative sectors (under a *proactive* strategy) will both reduce economic vulnerability (by reducing sector concentration) and the economy will benefit from several different 'engines' – if one is affected, another one can still move forward. Similarly, some *reactive* policies aimed at reducing accessibility costs might be helpful – or even decisive as a prerequisite - for the development of new markets, e.g. to enhance tourism with a small airport in the remote islands of an archipelago; or developing better roads links and ICT connectivity in remote mountainous regions.

In this context, regional development strategies and policies clearly have a very important role to play. Thus, the best option is to follow is a case-by-case approach, and that specific support is justified only for areas where the mix and intensity of the characteristics appears to have strongly negative developmental effects. This is precisely why ERDF and the CF play potentially such an important role in regions with specific geographical features. They provide a range of intervention tools that can be tailored to the specific territories themselves, dealing with a range of inherent characteristics. The role of ERDF and the CF is focus of the next section.

5. An overview of the role of ERDF and the Cohesion Fund in regions with specific geographical features

This section provides an overview of the role of ERDF and the CF in regions with specific geographical features. It is worth underlining here that both are two of the main financial instruments designed to facilitate the achievement of the objective of social and economic cohesion provided for in the Treaty. Both have different remits – the role of ERDF is to provide assistance and support primarily to the EU's less developed regions, but all regions are eligible. The CF is a structural instrument that finances up to 85% of eligible expenditure focused on the least prosperous Member States of the EU whose Gross National Product per capita is below 90% of the EU-average for major environmental and transport projects. It is important to note here that ERDF and the CF do not operate in isolation from other EU as well as domestic funding streams and it is precisely the complementarity between them, in particular localities, that can help to drive changes in economic development.

The two most recent programming periods are the focus for this study i.e. 2000 to 2006 and 2007 to 2013. Importantly, there were several key differences in the objectives and priorities between the two periods, which are of significance here. Firstly, for the 2000-2006 programme, the key point is that in Objective 1 regions *all* areas were eligible for support. However, in Objective 2 regions, eligibility was based on a system of *geographical zoning* to identify eligible areas which resulted in a detailed map for each Member State. This form of spatial targeting was effective in focusing support in those areas most in need. However, it also meant that in certain regions, particular parts of a town or village were eligible whilst adjacent areas were not.

For the current ERDF programming period 2007 to 2013, however, a number of changes were made to the shape and focus of the policy. Firstly, the policy shifted towards a greater emphasis on promoting competitiveness and innovation, in line with the EU's Growth and Jobs Agenda, across ALL of Europe's 271 regions. Secondly, an important distinction from the previous programme is that there is *NO* territorial zoning of eligible areas in the Regional Competitiveness and Employment objective i.e. relative wealthy areas in a particular town or city can receive support in line with the strategic focus of the overall regional programme. Thirdly, in order to ensure that regional programmes deliver in these areas a system of so-called *'earmarking'* of funds was introduced. Basically, this is a way of targeting funds for investments directly linked to strengthening regional competitiveness including research and innovation, skills, business services, major European infrastructures and greater energy efficiency.

Understanding the implications of this shift in strategy and implementation between the two respective programming periods for regions with specific geographical features is explored more in Part 2 of this Report in the context of the case studies. It is also

important to point out, as the next section discusses, certain regions with specific features currently receive extra financial assistance.

5.1 Specific support for geographically specific territories

In the context of ERDF for the current programming period, a number of areas facing natural and geographical handicaps are eligible for specific treatment in terms of funding and approach (see below). The key point is that it is up to the Managing Authorities in the respective regions concerned to take the necessary steps to actually benefit from such derogations. The evidence of the take-up of such flexibilities in the ERDF Regulations seems to not be so very widespread, at least in the context of the six case studies analysed in this Study, as is discussed in more detail in Part 2 of the Report.

Listed in Annex II of the Additional Provisions of the ERDF General Regulation[12] and include:

- 18. The NUTS2 regions of Itä-Suomi and Madeira, while keeping the status of phasing-in regions, will benefit from the transitional financial arrangements laid down in paragraph 6(a);
- 19. The NUTS2 region of the Canaries will benefit from an additional envelope of EUR 100 million over the period 2007 to 2013 under the transitional support referred to in Article 8(2);
- 20. The outermost regions identified in Article 299 of the Treaty and the NUTS2 regions fulfilling the criteria laid down in Article 2 of Protocol No 6 to the Treaty of Accession of Austria, Finland and Sweden will, in view of their specific constraints, benefit from additional funding from the ERDF. This funding will amount to 35€ per inhabitant per year and will be in addition to any funding for which these regions are otherwise eligible;
- 29. France will receive an additional allocation of EUR 100 million over the period 2007 to 13 under the Regional competitiveness and employment objective in recognition of the particular circumstances of Corse (EUR 30 million) and French Hainaut (EUR 70 million);
- A number of measures are listed in the General Regulation that are particularly designed for use in regions with handicaps: for example, concentrating investments in improving accessibility, promoting and developing economic activities related to cultural and natural heritage, promoting the sustainable use of natural resources, and encouraging sustainable tourism;
- There are other flexibilities that regions can benefit from in order to tailor ERDF interventions in their respective territories, such as Article 52: Modulation of the contribution rates of the General ERDF Regulation.

[12] http://ec.europa.eu/regional_policy/sources/docoffic/official/regulation/pdf/2007/general/ce_1083(2006)_en.pdf

The next section discusses the ways in which ERDF has been used in the three types of territory to assess the extent to which differences emerge compared to other regions across the EU.

5.2 Analysing the role of ERDF in the three types of territory for 2000-2006 and 2007-13 periods

The analysis of ERDF was carried out for the three types of territory and by field of intervention (1 and 2 digits expenditure categories) for the 2000-2006 ERDF and CF programmes.

It is based on two main sources of information:

- The database of ERDF and CF Regional Expenditure for 2000-2006 programming period at NUTS3 level[13] carried out by SWECO in July 2008 at the request of DG Regional Policy (hereafter referred to as the SWECO database); and
- The classification of NUTS3 regions by type of specific geographical features as listed in the annex of the Terms of Reference for this Study[14].

The SWECO database was based on final commitments rather than effective spending according to the main Fields of Intervention (FOI) for the period (see Annex 1). Final commitments were more suitable for the establishment of a comparable database given the fact that not all payments had been made at the time that the database was created. In addition, the analysis focuses on Objective 1, Objective 2 and Cohesion Fund commitments, at NUTS2 and 3 levels, as Urban and Interreg programmes were outside the scope of the Study.

The SWECO analysis allows us to compare and contrast the ways in which ERDF and CF were used in the three types of territory compared to the rest of the EU regions, at both NUTS2 and NUTS3 level. This is a key point in the context of this Study which focuses on both levels. Moreover, it provides us with an interesting insight into some of the differences in strategies that emerge between the different types of regions in terms of the main expenditure categories for the period 2000-06. Of course, it is difficult to extrapolate the findings into the current period because the data is not available to the same extent. The first question of the analysis is listed below:

[13] In the SWECO study, the main body of commitment data collected (80%) was received at NUTS3 level. For the remaining data, different approaches (statistics and models) were used to establish information on the NUTS3 levels.

[14] Note some approximation was made due to the fact that SWECO study was based on 2003 NUTS classification and whilst the classification of the regions in the three territories is based on 2006 NUTS classification which may be slightly different for some of the regions.

- **Did the specific territories receive proportionately more European funds relative to their population size?**

The aim was to compare the share of population[15] living in the three territory types with their relative share of ERDF/CF spending in 2000-2006. The analysis shows that overall the three types of territory did receive relatively more than their population size:

- *For mountainous regions: 14% of the spending 2000-2006, for 8% of the EU population;*
- *For islands: 5.8% of the spending for less than 3% of the population;*
- *For sparsely populated regions: 1% of the spending for 0.6% of the population.*

This provides some 'headline' figures about the amount of ERDF and CF funding that the three types of territories received. It also shows that over a fifth of the total of the funds (ca. 30 billion Euros) were committed to the three types of territory combined. Clearly, a significant amount of money which shows that the relative need of the territories was relatively high compared to other EU regions.

- **Which funds or programs intervene, and in which proportion according the types of regions?**

As Table 2 shows below, it is significant to narrow the analysis in order to make a clear distinction between Objective 1 and Objective 2 regions in the three types of territory. This step reveals further interesting points.

Firstly, whereas Objective 1 accounts for 66% of EU regional support (ERDF plus CF), it represents 75% in mountainous and 71% in sparsely populated regions as well as significant 90% in islands. In the latter case, less than 2% of the funding was committed to Objective 2. All in all, this indicates the relatively lower level of socio-economic performance within and between these three types of territory.

Secondly, interestingly, the share of CF transferred to islands and mountainous regions is lower than the EU average. At the EU level, these funding commitments amounted to 20% of the total amount for the 2000-06 period (ca. Over EUR 30 billion) whereas the table shows 16% for mountainous regions, 8% for islands and almost 22% for the sparsely populated areas.

Thirdly, in regard to the CF distribution at the European level the investments are only in the area of basic infrastructure (with just over EUR 30 billion) and within this slightly below half of the financial support was allocated to transport infrastructure and the rest to environmental infrastructure projects.

[15] The population data for the three territories is taken from Monfort (2009). However, there are limitations since it includes Romania and Bulgaria, which were no beneficiaries in the 2000-2006 programming period as well outermost regions which are out of the scope of this Study.

Table 2: Comparison of ERDF and CF commitments in islands, mountainous and sparsely populated regions

	In '000 Euros				In % of the total			
	Cohesion Fund	**ERDF Objective 1**	**ERDF Objective 2**	**Total**	**Cohesion Fund**	**ERDF Objective 1**	**ERDF Objective 2**	**Total**
Total (All EU regions)	**30 772 715**	**100 464 657**	**21 080 504**	**152 317 875**	**20,2%**	**66,0%**	**13,8%**	**100,0%**
Total 1 Productive environment	-	*32 924 760*	*12 538 937*	*45 463 696*	*0,0%*	*21,6%*	*8,2%*	*29,8%*
Total 2 Human resources	-	*2 373 934*	*564 944*	*2 938 879*	*0,0%*	*1,6%*	*0,4%*	*1,9%*
Total 3 Basic infrastructures	*30 634 214*	*63 496 840*	*7 498 024*	*101 629 078*	*20,1%*	*41,7%*	*4,9%*	*66,7%*
Total 4 Technical Assistance	*138 501*	*1 669 123*	*478 599*	*2 286 222*	*0,1%*	*1,1%*	*0,3%*	*1,5%*
Total (All EU NUTS3 Mountain regions)	**3 532 089**	**16 011 872**	**1 843 884**	**21 387 845**	**16,5%**	**74,9%**	**8,6%**	**100,0%**
Total 1 Productive environment	-	*5 219 941*	*1 090 025*	*6 309 966*	*0,0%*	*24,4%*	*5,1%*	*29,5%*
Total 2 Human resources	-	*166 855*	*24 108*	*190 963*	*0,0%*	*0,8%*	*0,1%*	*0,9%*
Total 3 Basic infrastructure	*3 522 032*	*10 345 231*	*688 777*	*14 556 041*	*16,5%*	*48,4%*	*3,2%*	*68,1%*
Total 4 Technical Assistance	*10 057*	*279 845*	*40 974*	*330 875*	*0,0%*	*1,3%*	*0,2%*	*1,5%*
Total (All EU NUTS3 Islands regions except OMR)	**672 012**	**7 996 507**	**148 624**	**8 817 143**	**7,6%**	**90,7%**	**1,7%**	**100,0%**
Total 1 Productive environment	-	*2 732 170*	*75 863*	*2 808 033*	*0,0%*	*31,0%*	*0,9%*	*31,8%*
Total 2 Human resources	-	*26 953*	*2 973*	*29 927*	*0,0%*	*0,3%*	*0,0%*	*0,3%*
Total 3 Basic infrastructure	*671 951*	*5 042 713*	*67 329*	*5 781 993*	*7,6%*	*57,2%*	*0,8%*	*65,6%*
Total 4 Technical Assistance	*61*	*194 671*	*2 459*	*197 191*	*0,0%*	*2,2%*	*0,0%*	*2,2%*
Total (All EU NUTS3 sparsely populated regions)	**341 255**	**1 130 144**	**107 519**	**1 578 918**	**21,6%**	**71,6%**	**6,8%**	**100,0%**
Total 1 Productive environment	-	*547 904*	*49 242*	*597 146*	*0,0%*	*34,7%*	*3,1%*	*37,8%*
Total 2 Human resources	-	*23 462*	-	*23 462*	*0,0%*	*1,5%*	*0,0%*	*1,5%*
Total 3 Basic infrastructure	*341 255*	*541 499*	*56 774*	*939 528*	*21,6%*	*34,3%*	*3,6%*	*59,5%*
Total 4 Technical Assistance	-	*17 279*	*1 503*	*18 782*	*0,0%*	*1,1%*	*0,1%*	*1,2%*

Source: SWECO database, 2000-06 period

The total funding committed (Cohesion Fund and ERDF) to ALL EU regions, 2000-06 represented 152.3 billion Euros (at the time the SWECO database was carried out). *Basic infrastructure* was by far the most important significant FOI for Objective 1 regions (just over 40% of the total) whilst *Productive Environment* was the most significant for Objective 2 regions (just over 8% of the total respectively). The trend is similar for all EU NUTS3 mountain regions. The figures are slightly higher for commitments in *Basic infrastructure (48%) in Objective 1* as well as *Productive Environment (5%) in Objective 2*. Priorities are the same for island regions. However, these are almost exclusively financed through Objective 1. Interestingly, for sparsely populated regions, both *Productive environment* and *Basic infrastructure have similar proportions (just over 34% each respectively)*. The total commitment for sparsely populated regions is relatively smaller compared to the other territorial types, at around EUR 1.5 billion.

- **What are the differences in fields of intervention (FOIs) for Objective 1 and 2**

The aim is to explore the extent to which commonalities are apparent between the three types of territory as well as to look at the differences and similarities of Objective 1 and 2 regions more generally. In this regard, it is important to recognise the differences in the types of intervention eligible in Objective 1 and 2; clearly, there are dissimilarities between them, although, as discussed earlier, the majority of the regions are actually eligible for Objective 1. To illustrate this, Table 3 provides information on all the individual FOI's.

Table 3: Comparison of ERDF and CF commitments by fields of intervention in islands, mountainous and sparsely populated regions

share (in %) by fields of intervention	EU	EU	EU	EU	EU	EU	EU	EU
Types of regions		Mountains	Islands	Sparsely populated		Mountains	Islands	Sparsely populated
Eligibility of region	Obj. 1	Obj. 1	Obj. 1	Obj. 1	Obj. 2	Obj. 2	Obj. 2	Obj. 2
Fields of intervention		**M**	**I**	**SP**		**M**	**I**	**SP**
11 Agriculture	0.1%	0.1%		0.9%	0.2%	0.0%		
12 Forestry	0.0%				0.1%	0.0%		
13 Promoting the adaptation and the development of rural areas	0.4%	0.3%	0.0%	0.7%	2.5%	2.1%	5.5%	
14 Fisheries	0.1%	0.2%	0.4%		0.0%	0.0%		
15 Assisting large business organisations	5.8%	4.8%	3.5%	3.4%	5.1%	12.9%	16.4%	7.0%
16 Assisting SMEs and the craft sector	9.6%	12.6%	16.1%	19.2%	31.2%	18.2%	12.7%	27.1%
17 Tourism	2.9%	4.5%	7.7%	3.7%	10.2%	15.9%	5.0%	10.4%
18 Research, technological development and innovation (RTDI)	6.2%	4.1%	3.7%	9.3%	10.1%	10.0%	11.5%	1.2%
21 Labour market policy	0.1%	0.0%	0.0%		0.1%			
22 Social inclusion	0.1%	0.0%	0.0%	0.0%	0.7%	0.1%		
23 Developing education and vocational training	1.5%	0.8%	0.3%	1.6%	1.4%	0.6%	2.0%	
24 Workforce flexibility, entrepreneurial activity, innovation, ICT	0.0%	0.0%			0.4%	0.6%		
25 Positive labour market actions for women					0.1%			
31 Transport infrastructure	34.0%	33.6%	22.9%	39.1%	7.7%	6.0%	4.6%	8.6%
32 Telecommunication infrastructure and information society	3.2%	3.9%	5.0%	4.9%	2.9%	3.0%	6.0%	12.3%
33 Energy infrastructure	1.0%	1.0%	1.7%	0.3%	0.8%	1.9%	0.5%	1.1%
34 Environmental infrastructure	19.3%	17.3%	17.0%	8.2%	5.2%	10.6%	22.6%	15.2%
35 Planning and rehabilitation	10.1%	10.7%	15.1%	5.8%	17.0%	14.6%	8.7%	6.5%
36 Social and public health infrastructure	4.2%	4.6%	4.2%	1.7%	1.9%	1.1%	2.9%	9.1%
41 Technical Assistance and innovative actions	1.4%	1.5%	2.2%	1.2%	2.3%	2.2%	1.7%	1.4%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Total 1 Productive environment	*25.1%*	*26.7%*	*31.5%*	*37.2%*	*59.5%*	*59.1%*	*51.0%*	*45.8%*
Total 2 Human resources	*1.8%*	*0.9%*	*0.3%*	*1.6%*	*2.7%*	*1.3%*	*2.0%*	
Total 3 Basic infrastructure	*71.7%*	*71.0%*	*65.9%*	*60.0%*	*35.6%*	*37.4%*	*45.3%*	*52.8%*
Total 4 Technical Assistance	*1.4%*	*1.5%*	*2.2%*	*1.2%*	*2.3%*	*2.2%*	*1.7%*	*1.4%*

Note : significantly more, more , equal, less, significantly less in comparison to corresponding average Objective 1 or Objective 2 regions.

Source: SWECO database, 2000-06 period

Firstly, for Objective 1 regions, the main FOI's are respectively *Transport Infrastructure, Environmental Infrastructure, Planning and Rehabilitation* as well as *Assisting SMEs and crafting Sector*. These four combined make up over 70% of the commitments for 2000-2006.

There are some differences worth noting, however, in comparison to the three territory types:

- Both the islands, and especially the sparsely populated regions, invest proportionally more than the average of the other Objective 1 regions in the *productive environment* than in *basic infrastructure*;
- Compared to Objective 1 regions generally, the three territories invest relatively more in the FOIs *Assisting SMEs and crafting sector, Tourism* and *Telecommunication and Information society*;
- Overall, the FOI profile for mountainous regions is the closest to the Objective 1 profile for all regions. The islands are slightly different in that *Planning and Rehabilitation* as well as *energy infrastructures* are relatively more important whilst less was committed to *transport infrastructure*. The sparsely populated regions are characterised by proportionately more commitments in the field of *RTDI* and *transport infrastructure*.
- This reinforces the point, therefore, that a sigifnicant majority of the ERDF funding was committed to improving basic infrastructure in the three types of region. This so-called 'infrstructure fixation' is discussed in more detail in both Part 2 (the main findings from the six Case Studies) and Part 3 (Policy Conclusions) of this Volume of the Final Report.

For the Objective 2 regions, in general, the main FOI's are respectively *Assisting SMEs and crafting sector* (31%), *Planning and rehabilitation* (17%), *tourism* (10%) and *RTDI* (10%).

In conclusion, the main points of relevance are:

- Unlike the situation in Objective 1, the islands, and especially the sparsely populated regions in Objective 2 invest proportionally more in *basic infrastructure* than in *productive environment*;
- Certain FOIs were proportionally more important in terms of commitments for the three territories compared to Objective 2 regions in general. These were:
  - Environmental infrastructures (between 10 to 22% compared to 5% for all Objective 2 regions);
  - Assisting large business organisation (between 7 to 16% compared to 5% for all Objective 2 regions);
  - Telecommunication infrastructures (between 3 to 12% compared to 2.9% for all Objective 2 regions).
- Conversely, certain other FOIs were proportionately less important in the three territories compared to Objective 2 regions generally. These were:
  - Assisting SMEs and the craft sector (between 12 to 27% compared to 31% for all Objective 2 regions);

- Planning and rehabilitation (between 6 to 14% compared to 17% for all Objective 2 regions).

- In the mountainous regions, there were relatively higher commitments made in tourism (16% compared to 10%) and energy infrastructures (2% compared to 0.8%);
- For the islands, interestingly, tourism was relatively less important compared to Objective 2 in general with only 5% compared to 10%. Similarly, transport infrastructure was relatively less - 4.6% compared to 7.7%;
- In the sparsely populated regions, relatively higher commitments were made in *social and public health infrastructure* (9% compared to only 1.9% in Objective 2 regions in general);
- There are certain similarities in the ways in which the funds are committed both within Objective 1 and between Objective 1 and 2 for the three types of territory. For example, in Objective 1 there is less support in the three territories for *Assisting large Business organisation* whilst proportionally more for A*ssisting SMEs and Craft sector* compared to Objective 1 regions in general. Clearly, this is linked to the territorial and geographical context of the three territories which are different than the others. Furthermore, the territorial variable is relevant in explaining the relative differences in other FOIs such as *Tourism, RTDI, Energy Infrastructure, Environmental infrastructure, Planning and Rehabilitation and Social and public health infrastructure.*

Turning to analysis of the financial allocations for the 2007-13 period, Table 4 below provides a summary of the spending allocations per economic category and type of territory. As discussed earlier, comparison with the previous programme is difficult due to the differences in spending category nevertheless certain points are worthy of note. For example, allocations to transport and environment are the highest in all three territories which reflect spending patterns in the previous period. Other categories of relative importance are 'unspecified manufacturing'; 'collection, purification and distribution of water'; 'construction'; 'hotels and restaurants'; 'public administration; and 'education'. Although it is difficult to generalise, the figures broadly suggest spending relating to territorial specificity, especially in relation to transport and the environment.

Table 4: ERDF Annual Implementation Reports, 2009

Economic vs. Territory (EU 27 + CB)	Mountains		Islands		Sparsely and very sparsely populated areas		Total
00. Not applicable	1 714 582	0.0%	46 177 707	0.2%	213 434 948	0.8%	**27 093 539 078**
01. Agriculture, hunting and forestry	1 446 722	0.7%	1 164 790	0.6%	2 202 827	1.1%	**205 832 345**
02. Fishing			589 645	6.2%	0	0.0%	**9 535 837**
03. Manufacture of food products and beverages	591 408	0.2%	623 700	0.2%	3 067 978	1.0%	**295 929 957**
04. Manufacture of textiles and textile products	607 195	0.5%	658 970	0.5%	110 361	0.1%	**133 889 401**
05. Manufacture of transport equipment	35 500	0.0%	952 926	0.3%	192 698	0.1%	**362 199 690**
06. Unspecified manufacturing industries	10 043 416	0.2%	34 509 816	0.7%	19 695 281	0.4%	**5 193 153 608**
07. Mining and quarrying of energy producing materials	88 181	0.2%	212 630	0.6%	530 162	1.5%	**35 590 696**
08. Electricity, gas, steam and hot water supply	3 471 137	0.9%	23 828 932	6.4%	1 403 390	0.4%	**374 034 123**
09. Collection, purification and distribution of water	13 547 486	0.4%	63 917 897	1.9%	56 698 423	1.7%	**3 414 430 753**
10. Post and telecommunications	1 762 809	0.6%	9 432 566	2.9%	2 834 171	0.9%	**319 800 151**
11. Transport	68 367 196	0.7%	145 603 307	1.4%	1 007 721 123	9.9%	**10 206 605 280**
12. Construction	30 641 261	0.4%	53 490 566	0.8%	18 408 975	0.3%	**7 091 419 998**
13. Wholesale and retail trade	186 557	0.0%	1 161 987	0.1%	3 631 528	0.5%	**775 796 427**
14. Hotels and restaurants	6 910 618	0.8%	12 351 145	1.4%	15 129 242	1.7%	**884 686 869**
15. Financial intermediation			8 084 398	0.6%	0	0.0%	**1 443 966 229**
16. Real estate, renting and business activities	1 388 022	0.1%	2 168 257	0.2%	3 722 659	0.3%	**1 217 824 686**
17. Public administration	33 728 861	0.4%	54 167 848	0.7%	58 977 670	0.7%	**8 179 106 151**
18. Education	13 465 411	0.2%	92 432 056	1.1%	38 336 856	0.5%	**8 223 669 537**
19. Human health activities	504 047	0.0%	51 249 058	2.2%	8 035 334	0.3%	**2 363 175 123**
20. Social work, community, social and personal services	22 813 975	1.1%	26 564 229	1.3%	6 286 852	0.3%	**2 012 939 924**
21. Activities linked to the environment	44 629 543	1.0%	71 583 620	1.5%	138 929 003	3.0%	**4 658 225 380**
22. Other unspecified services	75 333 278	1.0%	203 440 340	2.7%	46 850 162	0.6%	**7 543 468 563**
Total	**331 277 205**	**0.4%**	**904 366 390**	**1.0%**	**1 646 199 643**	**1.8%**	**92 038 819 806**

Source: European Commission, DG Regional Policy, 2011

Having analysed the role of ERDF and the CF in the three territory types, the next section focuses on the relevance and effectiveness of ERDF 15 selected NUTS2 regions across the EU.

5.3 Analysis of ERDF interventions in 15 NUTS2 regions

Building on from the analysis of ERDF for all mountainous, sparsely populated and island regions across the EU, this section drills down even further to focus on 15 selected NUTS2 regions - five of each territory type - in order to explore in more detail the role of ERDF and the CF (Task 2 of the Study) at that geographical scale. Given the diversity within the three respective types of territory, it is important to underline that it was not feasible to select a 'definitive' sample of 15 NUTS2 regions that were somehow 'representative'. In other words, there is no 'typical' type of island, mountain or sparsely populated region. Instead, the selection was made based on several criteria in order to establish a list of regions that provides an interesting mix of different aspects both of geographical specificity

as well as the ways in which ERDF and the CF have been utilised. Table 5 below summarises the 15 regions at NUTS2 level chosen for further analysis in Task 2.

Table 5: ERDF and CF profile at a glance of the 15 selected regions

REGION CODE	REGION (NUTS2) NAME	MS	Operational Programme at NUTS2 level	ERDF and Cohesion Fund (CF) expenditures (2000-2006)	Objective 2007-2013
AT22	*Steiermark*	AT	Yes	Objective 2 (except in AT221 Graz : no fund)	RCE
FR71	*Rhône-Alpes*	FR	Yes	Objective 2	RCE
ES42	*Castilla la Mancha*	ES	Yes	Objective 1 & CF	CONV & CF
ES53	*Balearic Islands*	ES	Yes	Objective 1 & CF	RCE
FI13	*Itä-Suomi*	FI	Yes	Objective 1	Phasing in
FR83	*Corse*	FR	Yes	Objective 1	RCE
ITG1	*Sicilia*	IT	Yes	Objective 1	CONV
GR24	*Sterea Ellada*	GR	OP 2007-2013 covers several NUTS2 level regions	Objective 1 & CF	Phasing in
GR41	*Voreio Aigaio*	GR	No: OP 2007-2013 covers several NUTS2 level regions	Objective 1 & CF	CONV & CF
PL22	*Śląskie*	PL	Sectoral programmes	Objective 1 & CF	CONV &CF
PT16	*Centro (P)*	PT	Yes	Objective 1 & CF	CONV & CF
DK01	*Hovedstaden*	DK	Only 1 national programme	Objective 2	RCE
SE33	*Övre Norrland*	SE	Yes	Objective 2	RCE
SI01	*Vzhodna Slovenija*	SI	Yes	Objective 1 & CF	CONV & CF
UKM6	Highlands and Islands	UK	Yes	Objective 1	Phasing out

This selection has the following characteristics making it interesting to study:

- 5 island, 5 mountainous and 5 sparsely populated regions;
- 6 convergence, 6 regional competitiveness and employment, 1 Phasing-out and 2 Phasing-in regions;
- Regions from 12 Member States are represented, including 2 from 'new' Member States;
- The selected island regions contain both 'small' (i.e. Hovedstaden comprising of Bornholm) and 'large' islands (i.e. Corse and Sicilia) as well as those comprising groups of islands (i.e. Balearic Islands and Voreio Aigaio);

- The selected sparsely populated regions belong to Nordic Countries (Finland, Sweden), two South European ones (Spain and Greece) and a Western Europe one (UK). Hence, the sample is also fairly balanced in terms of sub-regional coverage of each geographical category;
- Some NUTS2 regions are comprised of NUTS3 region that all have specific geographical features (e.g. Balearic Islands) while other NUTS2 regions have a limited part of their space under the category of areas with specific geographical features (e.g. Slaskie, Poland);
- A range of socio-economic performances is observed at the NUTS2 level in terms of GDP per capita, growth rate, employment rate and size of population;
- Some NUTS2 regions have relatively strong intra-regional income differences at NUTS3 level (e.g. Rhône-Alpes in France and Steiermark in Austria);
- Some NUTS2 regions are located in central parts of their Member State territory (e.g. Castilla La Mancha in Spain), while other ones are located in more peripheral areas (e.g. Ővre Norrland in Sweden).

Moreover, there are a range of interesting points of comparison that emerge. For example:

- Seven regions benefitted from the Cohesion Fund during the two programming periods;
- There is a mix of regions implementing their Operational Programme at NUTS2 level (e.g. Steiermark), at higher level (e.g. Voreio Aigaio), through sectoral programmes (e.g. Slaskie) or through one national programme (e.g. Hovesdtaden in Denmark);
- The selection includes some regions which benefit from ERDF additional support as outlined in the ERDF Regulation (as discussed see Section 6) e.g. Corse (Disposition n°29), Ita-Suomi in Finland and Övre Norrland in Sweden (for parts of some of their NUTS3 regions, i.e. respectively Kainuu, Pohjois-Karjala, Etelä-Savo and Norrbotten, alongside outermost regions, Disposition n°20).

In terms of commitments, the following charts make a comparison of the fifteen regions studied between the two programming periods[16]. In order to make this comparison easier, the regions have been ordered by their main geographical feature. For instance, Highlands and Islands (UKM6) are classified as a sparsely populated region whilst it is also a set of islands.

Several constraints should be borne in mind with this analysis. Firstly, the charts are of percentage commitments. One could find them difficult to analyse since it only considers relative values and not absolute ones. However, absolute values cannot be used here because of the differences between the relative sizes of the respective Operational Programmes. For instance, Slovenia has two Operational Programmes covering all the national territory. Moreover, the Greek programmes cover several regions at the same time. Thus, comparison on a "per capita" basis is rendered impossible. Secondly, a thorough analysis of the 2007-13 results is not appropriate since the period has yet to finish. Nevertheless, an overview of the commitments gives a stronger background to the analysis of the 2000-06 period.

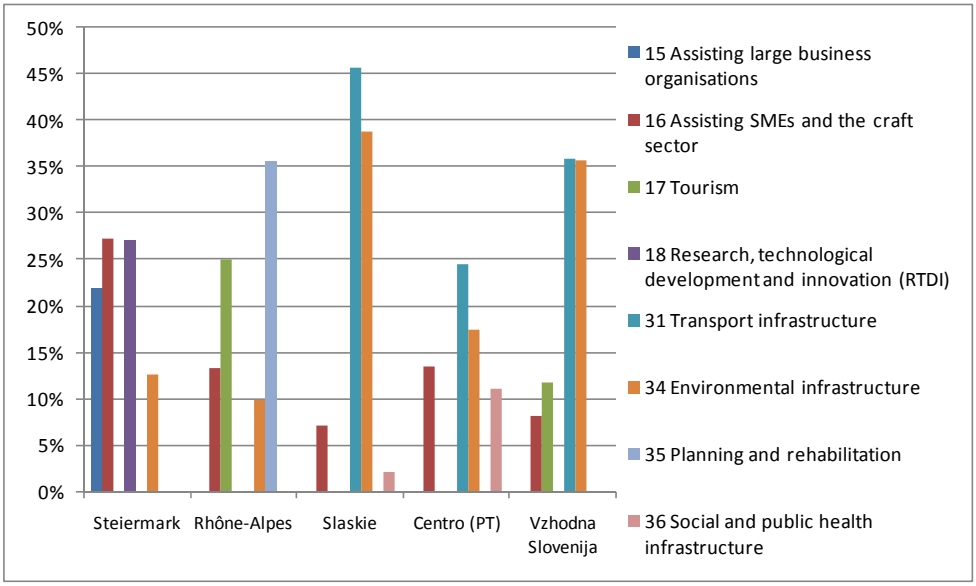
[16] The data for the 2000-06 period come from the SWECO database. For the 2007-13 period, they come from respective regional Operationnal Programmes. Figures are processed by the authors.

- **Mountainous regions**

Figure 2 and Figure 3 begin with a comparison of the mountainous regions. Clearly, it is apparent that there is no specific way to spend ERDF funds (this is also the case for islands and sparsely populated regions). Unsurprisingly, infrastructure improvements are the main approach used. It is worth noting that in regions where geographical features are mostly considered as assets rather than handicap (Steiermark and Rhone-Alps in particular), improving *transport infrastructures* is not one of the four main fields of intervention. The same reasoning can be applied conversely for Slaskie and Vzhodna Slovenija. This is not the question of relevancy to the geographical features that is discussed here but definitely the perception of these specificities.

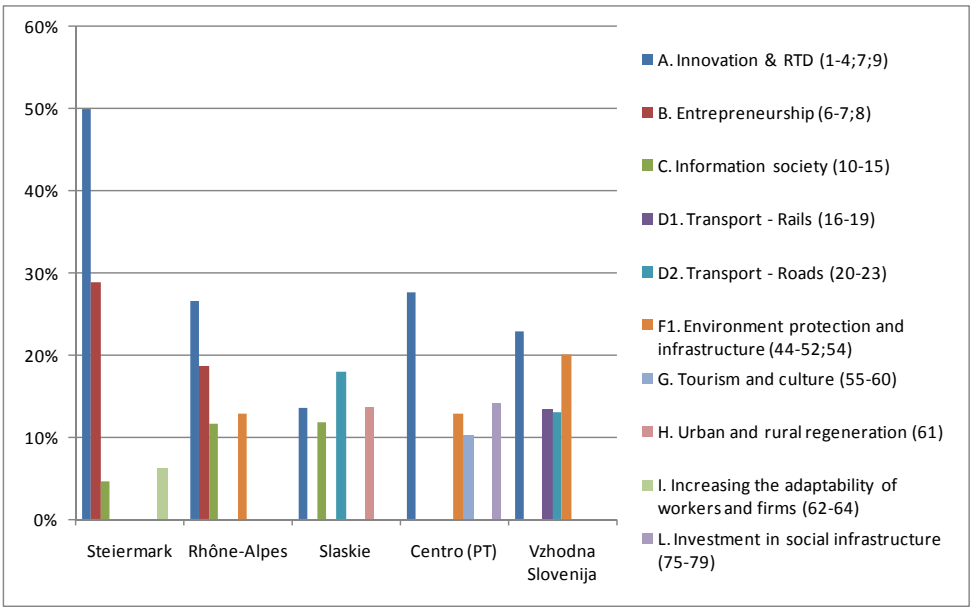
Supporting the economy through the *assistance to SMEs* or *innovation and R&D* is also taken into account. It is even reinforced in the 2007-13 period. Actually, for the two Objective 2 regions - Steiermark's and Rhône-Alpes, these are the main priorities for this period, with relatively less on the enhancement of infrastructures. This issue is discussed in more detail in Part 2 of the Report in the context of the NUTS3 case study of the Ardèche which is located in Rhône-Alpes.

Figure 2: Share of the four main FOIs per mountainous region for the 2000-06 period (% of regional commitments)



Source: SWECO database, 2000-06 period, processed by the authors

Figure 3: Share of the four main FOIs per mountainous region for the 2007-13 period (% of regional commitments)



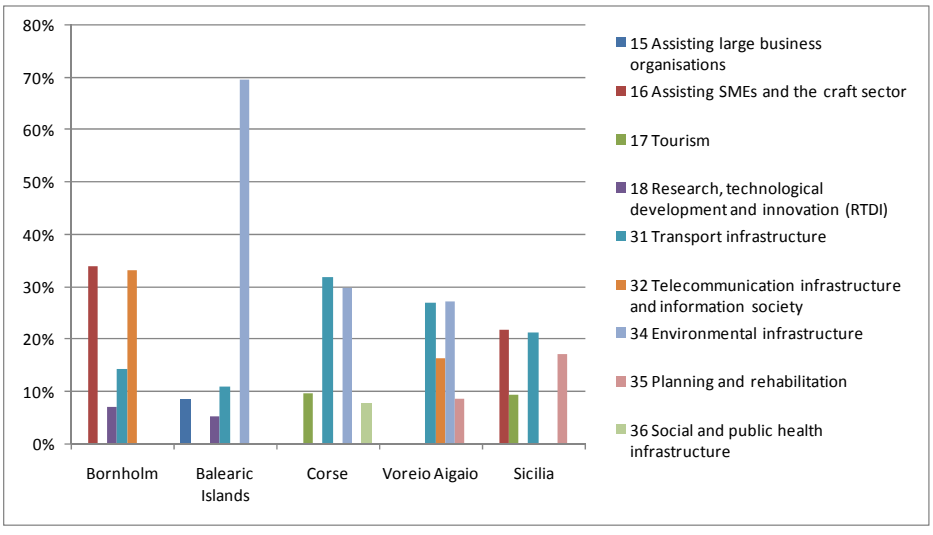
Source: European Commission, DG Regional Policy, 2011, SFC database, processed by the authors

- **Islands**

For the five island regions selected, as shown in Figure 4 and Figure 5, *Transport infrastructure* is relatively less important than *Environmental infrastructure*, although it is still mainly supported. The Balearic Islands are slightly different in this regard. Nevertheless, priorities are really quite similar to those of the mountainous regions.

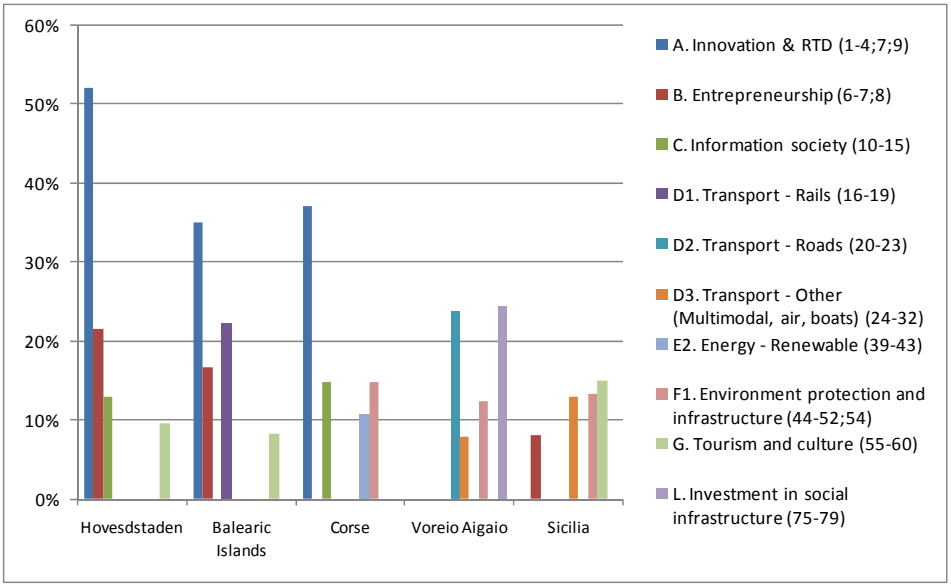
The large islands of Corse and Balearic Islands are the regions which seem to take relatively more account of their geographical features. It is probably due to the consideration of NUTS3 specific needs in addition to a high degree of coordination and alignment of domestic policies with ERDF programmes. However, the key field of intervention - *Environmental infrastructure* improvements - has not been so successful when compared to its related indicators. It is also worth noting the relative importance placed upon innovation and R&D in the current period, for regions where it was not a priority during the previous one. For Voreio Aigaio, however, the focus is still mainly on infrastructure improvement. The island of Lesbos is the NUTS3 case study analysed from the region of Voreio Aigaio; the issue of the focus on transport infrastructure is discussed in more detail in Part 2 of the Report.

Figure 4: Share of the four main FOIs per islands region for the 2000-06 period (% of regional commitments)



Source: SWECO database, 2000-06 period, processed by the authors

Figure 5: Share of the four main FOIs per islands region for the 2007-13 period (% of regional commitments)



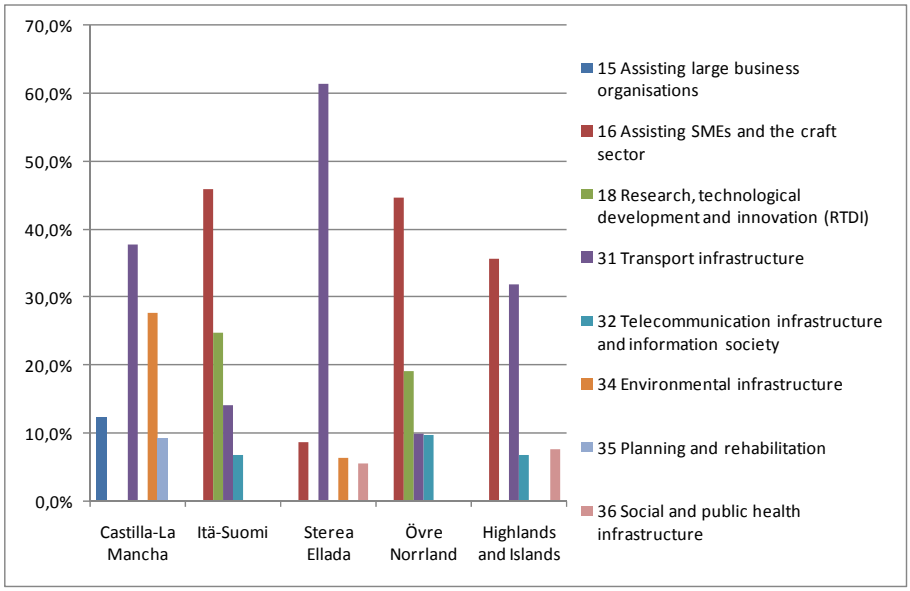
Source: European Commission, DG Regional Policy, 2011, SFC database, processed by the authors

- **Sparsely populated regions**

The five sparsely populated regions are more difficult to analyse. There is no clear trend or similarity amongst the different regions except once again, *Transport infrastructures* which are one of the four main FOIs of each region (with Sterrea Ellada as an outlier). Here, however, *assisting SMEs and the craft sector* seems to have overall more importance than for the islands and mountainous regions (see Figure 6 and Figure 7)

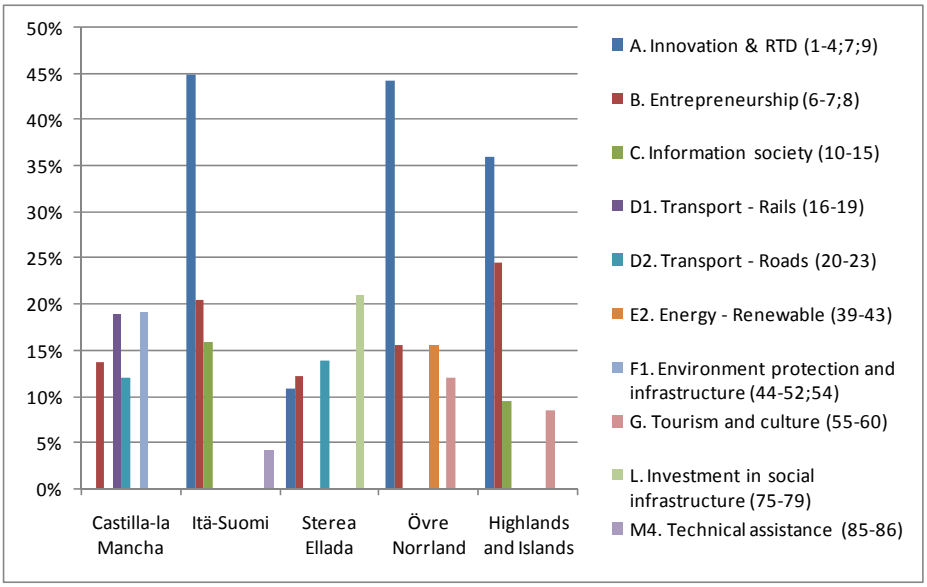
It is interesting to note that for each country where more than one region is analysed (e.g. France, Greece and Spain), priorities are almost completely different for the regions within the same country. The Itä-Suomi and Övre Norrland are fascinating cases due to the similarity of their profile and their consistency through time. They both promote *SMEs and the craft sector* for the first programming period and *Innovation and R&D* for the second one. This issue is discussed in more detail in Part 2 of the Report as one of the six NUTS3 case studies analysed is the county of Norrbotten in Övre Norrland.

Figure 6: Share of the four main FOIs per sparsely populated region for the 2000-06 period (% of regional commitments)



Source: SWECO database, 2000-06 period, processed by the authors

Figure 7: Share of the four main FOIs per sparsely populated region for the 2007-13 period (% of region commitments)



Source: European Commission, DG Regional Policy, 2011, SFC database, processed by the authors

Having highlighted some of the main elements of the ways in which ERDF was committed in the 15 respective regions, the next section focuses on the main findings from the desk analysis of relevant Programme documents from the two periods. Three main areas: strategies and relevance of ERDF to geographical specificity; governance and

complementarity with other funds; and the overall contribution of ERDF to the regions in question are discussed in more details below.

5.3.1 Strategies and relevance of ERDF to geographical specificity

From the 15 regions analysed, the focus on specificity within ERDF Operational Programmes (and related documents) seems to be relatively stronger in the sparsely populated areas and the islands and relatively less in the mountainous regions where the picture is more varied, with some regions not focusing at all on the issue. In the sparsely populated areas the focus on specificity between the two periods remains consistent on issues relating to large distance, remoteness, ageing and demographic challenges. Similarly, for the islands, the issues of insularity and accessibility to markets remain the dominant issues to be tackled. For the mountainous regions, the strategies between the two periods are based on a mix of priorities such as rural issues, demographic, or sectoral economic issues.

The socio-economic diagnoses commonly found in the Operational Programmes tend to view the geographical specificities as 'handicaps' or 'obstacles' to overcome and much less in terms of opportunities to be harnessed for enhancing regional economic growth. There are some interesting exceptions though such as Övre Norrland with its focus on utilizing the specificities to develop new growth industries such as the car test industry. In addition, whether a region is Objective 1 or 2 also plays an important explanatory role in how the strategies are formulated between the two periods. Actually, on balance this seems more important in shaping the strategic approach than territorial specificity. The extent to which current legal frameworks are used is very irregular; the use of state aid derogations is the most common tool employed in all territorial types as well as the special ERDF envelopes in those regions that are eligible.

The national context is an important explanatory variable. For example, in some countries such as Greece, Poland and Portugal the focus on geographical specificity is not really viewed as a main priority. The role of the Cohesion Fund is relevant here because it is linked to national priorities rather than regional (or local) priorities. Thus, although the funding in basic or environmental infrastructure clearly has an impact in the regions with geographical specificities, the priorities are the same as all other eligible regions within a particular national context i.e. no other particular provisions are made.

The issue of geographical scale must be emphasised. The majority of the Operational Programmes are developed at the NUTS2 level so often priorities and objectives are transversal and the same for all territories. There is much less focus on the NUTS3 level (or below) which is actually the scale at which the geographical specificities tend to be most dominant in shaping socio-economic outcomes. There are exceptions such as in the case of Highlands and Islands with its specific focus and methodology for identifying support to 'fragile areas' at the NUTS3 level. This issue is explored in more detail in the six case studies.

Overall, three types of regional approach can be broadly defined:

1) **Regions adopting a transversal or sectoral focus** in which specificities are not really considered as important e.g. Bielski, and Eastern Slovenia;
2) **Regions with a mixed approac**h, having at least one or two priorities linked to overcoming obstacles derived from geographical specificity e.g. this tends to be the dominant category;
3) **Regions with a focus on turning specificities into potential opportunities** e.g. this is the case with the two Nordic sparsely populated regions;

5.3.2 Governance and complementarity with other funds

In terms of governance and the complementarity of ERDF with funds, the analysis of the 15 regions clearly shows that the national context is a key variable. Certain countries are more centralised whilst in others the regional and local levels have more autonomy and powers relating to ERDF. The evidence suggests that in those countries where regions and local authorities have greater autonomy with regards to ERDF, there seems to be a greater focus on adapting the programmes to address geographical specificities. It must be said, however, that the national policy context is still important in those contexts as well. The Greek case is interesting as the regions had seemingly more influence on adapting the programmes to geographical specificities in the previous period than the current one.

Generally, there have not been large shifts in the patterns of governance between the two periods in the 15 regions. Those regions that have shifted Objective have undergone some slight changes due to the changes in priorities and level of funding. Stakeholder involvement in the formulation of ERDF Operational Programmes tends to be relatively high in all regions, especially in implementation and project selection, although there is no specific provision for representatives from specific territories to be involved in ERDF and CF progamme development. The French multi-regional approach is an interesting case.

Complementarity with other funds is rather mixed. In some regions there are good links with rural development funds and the European Social Fund although there is no common approach to this issue. In the previous period, however, the multi-fund approach seemed to be more conducive to increasing synergies between the different funds whereas this has been reduced somewhat in the current period with the rather more 'silo' approach that separates rural funding from ERDF. Again, this is something that is explored in more detail in the six case studies.

Overall, domestic policies and strategies seem to be generally well-aligned with EU priorities. In some cases, ERDF is the key driver for promoting regional economic development; this is the case in Portugal and Greece. On the other hand, the case of Highlands and Islands is interesting as the domestic context is really important in terms of strategy and funding as the ERDF programme represents a fraction of national support available.

5.3.3 Overall contribution to regions with specific geographical features

In summary, it is apparent that both ERDF and CF have played, and continue to play, a crucial role in funding and shaping socio-economic trajectories in all of the 15 regions analysed. Even in those regions where ERDF support is relatively smaller and in fact has been reduced in the current period, the funding is crucial. The achievements of the 2000-06 were relatively strong in the majority of the regions and although it is too early to make generalisations about the current period, the indications are that the programmes are on-track to meet the respective targets.

Importantly, the clear message from the analysis is that there is 'no one size fits all' approach to dealing with specific geographical features in the 15 regions; there are clear differences both within and between the regions in the three territorial categories. On the other hand, there seems to be continuity between the two programming periods i.e. if there was a focus on geographical specificities in the 2000-06 period, the strategies and range of measures remain largely the same or actually become more important in the current period. Moreover, there are certainly some innovative examples of good practice of projects that have attempted to turn handicaps into opportunities, which are worthy of further investigation.

Having discussed the main findings from the analysis of the 15 NUTS2 regions, the next section focuses on the six NUTS3 case studies in order to drill down into more detail of the some issues raised here in order to compare and contrast the findings.

PART 2: CASE STUDIES

1. Introduction

This part of the Report is focused on the six NUTS3 case studies, which are the core of this Study. Their purpose is to deepen the analysis and to examine the results generated in Tasks 1 and 2. The main focus is to really go beyond the findings from the desk research phase to examine the role of ERDF at the local, NUTS3 level. The methodology for the cases was based on a series of semi-structured interviews (mainly face to face and some telephone interviews) with a range of key stakeholders in order to explore in more detail the main issues relating to ERDF in the respective regions. The detailed findings from each of the case studies are provided in Volume 2 of this Report, including 6 mini-case studies, which illustrate concrete examples of good practice of the use of ERDF in each of the respective regions.

After a brief summary of the regions studied, Section 3 provides a transversal analysis of the findings from each of the six case studies for each of five main evaluation questions, these are: 1) geographical context; 2) policy responses; 3) the relevance of ERDF to addressing the territorial specificities; 4) the effectiveness of ERDF and CF interventions; and 5) the dominant implementation and governance and patterns found in the respective regions.

Lastly, Section 4 focuses on the Policy Conclusions that emerge from the findings of the Study.

2. Overview of the six NUTS3 case study regions

The six regions listed below are those that were the focus for case studies for Task 3 (see Table 6 below). The cases were chosen based on the findings from Task 1 and Task 2 in order to have a range of different territorial and socio-economic contexts as well as examples of contrasting uses of ERDF and the CF. Of course, it is not possible to extrapolate the findings from only six cases to apply them more generally across all regions with specific geographical features. However, the mix of the six cases and range of examples generated allows certain useful conclusions to be derived about the role of ERDF in such territories. The rationale for each of the six regions is discussed further below.

Table 6: The six NUTS3 case study regions

REGION CODE	REGION (NUTS2) NAME	NUTS3 selected (code)	Territory type
Spain (ES42)	Castilla la Mancha	**Cuenca (ES 423)**	Sparsely populated and mountainous
Sweden (SE33)	Övre Norrland	**Norrbotten (SE332)**	Sparsely populated
Greece (GR41)	Voreio Aigaio	**Lesbos (GR411)**	Islands
Denmark (DK01)	Hovedstaden	**Bornholm (DK014)**	Islands
France (FR71)	Rhône-Alpes	**Ardèche (FR712)**	Mountainous
UK (UKM6)	Highlands and Islands	**Western Isles (UKM64)**	Sparsely populated & islands

Source: Eurostat, 2011, DG Regional Policy, 2010

Cuenca (in Castilla La Mancha)

- The province of Cuenca is located in the heart of Spain around 150 km east of the capital Madrid. Geographically, it is a sparsely populated area but on in northeastern part of the province, bordering the neighbouring province of Guadalajara, there is the Sistema Ibérico mountainous area. In 2007, the province of Cuenca had a population of just over 211 000 with a density of 12 per km^2. The city of Cuenca, the administrative capital, accounts for 25% of all residents of the province whilst, in 2008, nearly 85% of the towns in the province had less than 1,000 inhabitants spread over a territory of over 17 000 km^2;
- It is one of the few non-Nordic regions that is sparsely populated and so it provides an interesting comparative case as much of the literature on sparsity focuses on the Nordic cases;
- ERDF and the Cohesion Fund have played an important role in the region and have been used to try to address some of the territorial constraints (e.g. hi-speed rail link (Madrid to Valencia), enhanced road network, tourism promotion etc. In terms of successful projects that have capitalised on its handicaps to produce opportunities is the 'Plan to Promote Tourism Product of the Serrania de Cuenca Alta'. Co-financed by ERDF, this project is a joint effort between various governments and agents, with the aim of promoting the tourism sector in an area that, despite having sufficient resources, have not hitherto been fully exploited.

Norrbotten (in Övre Norrland)

- Norrbotten is in some ways an 'extreme' and remote region. Its geographical location in the far north of Europe means that is has a harsh climate with a dispersed population with a very low density of only 2.6 persons per km^2. This combined with its vast territory (98 911 km^2, one quarter of the whole of Sweden) and the long distances ensure that internal travel is very time consuming;
- The demographic trends seen in many parts of rural Europe, with an ageing and shrinking population is really quite marked within the various settlements within Norrbotten making it a very interesting case to study from an EU point of view;
- At the same time, Sweden has a long tradition of strong welfare and regional policies resulting in a high level of public services, regional redistribution of wealth and investments in new technologies to try to overcome the problems of remoteness and sparsity. The traditional focus on redistribution, however, has been rather tuned down in Swedish national development policies and debates more recently, with the focus shifting to building competitive regions based on endogenous resources;
- Norrbotten is a very good example, therefore, of the alignment between domestic and EU policy in this regard as the region is making use of its inherent resources, partly with the use of ERDF funding, to develop innovative projects. Indeed, the region is eligible for additional ERDF financial support because of its territorial specificity;
- Norrbotten constitutes an interesting case of a NUTS3 region that has really focused on turning its considerable territorial handicaps into opportunities to foster economic growth through the innovative use of both ERDF and domestic funds.

Lesbos (in Voreio Aigaio)

- The Greek islands make up a significant number of the EU's islands and Voreio Aigaio is interesting because it is a Convergence region (and Cohesion Fund) which needs to deal with the issue of 'double insularity' due to being an archipelago with problems of remoteness, small size of markets etc. It is also a border region being located very close to Turkey;
- The NUTS3 region of Lesbos is the largest of the seven islands in the archipelago of Voreio Aigaio and the administrative and commercial capital. In fact it is the third largest Greek island and actually the largest in the Aegean Sea;
- In terms of the strategy for using ERDF it is apparent that there was much more focus on issues relating to the territorial specificity of the island in the previous than in the current period. This relates to governance issues in Greece because the region of Voreio Aigaio had its own Operational Programme in 2000-06 but that was changed for the current period in favour a multi-regional Programme grouping together four NUTS2 regions;
- The result is that ERDF and CF funding has focused mainly on developing transport and environmental infrastructure rather than being based on a regional strategy to overcome the specific territorial handicaps that the region faces. Clearly, the large amount of ERDF and CF funding have brought benefits to Lesbos in terms of improved transport access etc. however there is not a strong rationale linked to overcoming specific issues on the island. In many ways, the funding is allocated in the same ways as programmes for mainland Greece.

Bornholm (in Hovedstaden)

- In contrast to Lesbos, Bornholm is a Nordic 'small island' which is relatively wealthy and receives much less ERDF support as a Regional Competitiveness and Employment region. It is an interesting case because, although at NUTS2 level it is a part of the Copenhagen capital region, which territorially is very different, administratively the island manages ERDF administration and regional development independently from the Capital Region. In other areas, not related to regional development, Bornholm is a part of the administrative Capital Region;
- This raises the point about the congruence in governance at the NUTS3 level for the management of ERDF. In contrast to Lesbos, which has a highly centralized management structure, the management of ERDF is much more focused on the needs of the island itself;
- The issue of peripheral areas has recently become a more intensified part of the political debate in Denmark, and in 2010 the policy document 'A balanced Denmark in a global world' which allocates additional funding to peripheral areas, e.g. with green growth as one focus area, was introduced. National policy, otherwise, does not seem to have focused on dealing with specific geographical characteristics;
- Even though Bornholm receives relatively small amounts of ERDF funding, it has

developed some very interesting projects that are focused on turning 'handicaps' into opportunities, for example, in areas such as cluster development and tourism.

Ardèche (in Rhône-Alpes)

- The French region of Rhône-Alpes contains several NUTS3 mountainous regions, which depict contrasting socio-economic performances. The selected region Ardèche is located in the Massif Central, which is actually the poorest location in the region compared to the relatively wealthier areas in the Alps;
- Ardèche and the Massif Central actually offer a more interesting and representative case compared to other EU mountainous regions based on the nature of their handicaps such as remoteness, attractiveness to business and demographic challenges;
- With regard to ERDF, Ardèche is interesting since most of its territory was eligible under Objective 2 in the previous period, during which a strong focus was given to the development of tourism and ICT infrastructure. In the current period, however, the abandonment of territorial zoning means that the entire region is eligible for support which has actually meant that the other NUTS3 areas of Rhône-Alpes, which are relatively wealthier, receive proportionately more support than the previous period;
- Complementarity with domestic policy and EU funds for rural development is of particular interest. France is one of the few EU Member States that developed a policy approach and legal framework for supporting mountainous areas, which has been in place for many years. The extent to which such domestic support is aligned with ERDF is an interesting point as well as the complementarity with EU funds supporting rural development (EAFRD);
- In terms of governance, Ardèche provides an appealing case of multi-regional approach between neighbouring French regions in the Massif Central. Some ERDF funding is used to promote such kind of cooperation in order to tackle common issues within and between the mountainous regions. Such examples could potentially provide good practice for other regions to adopt.

Western Isles (in Highlands and Islands)

- The Western Isles have elements of all three territorial types i.e. islands that are sparsely populated with some upland areas as well. Moreover, the island archipelago contains small off-shore as well as 'big' islands. The Western Isles are the most remote and peripheral of the NUTS3 sub-regions within the Highlands and Islands;
- In terms of the socio-economic performance of the Western Isles, there are low levels of growth and new business formation, relatively high levels unemployment and a relative over-dependency on public sector employment. Plus, unlike the other islands in the Highlands and Islands such as Shetland and Orkney, the Western Isles do not have natural resources endowments such as oil or natural gas;
- Demographically, the challenge is one of a falling population with the out-migration of the younger and more educated as well as a drift from rural areas into Stornaway, the main town on the Isle of Lewis in the Western Isles;
- In relation to ERDF, the Highlands and Islands has developed a very interesting methodology for defining 'fragile areas' in the context of regional economic development and the ERDF Operational Programme. This is used to allocate project funding in the respective NUTS3 regions so the case study will explore the extent to which this has been effective in the Western Isles context.

Having outlined the brief context of each of the six NUTS3 case studies the subsequent sections focus in more detail on the main findings and lessons learnt from each of them.

3. Main findings from the case studies

Each of the case studies is structured in the same way, covering the five main evaluation questions listed in the Study Terms of Reference. For each of these, a hypothesis was formulated which was explored in more detail during the fieldwork in each of the respective case studies.

The five main hypotheses for each evaluation questions are listed below:

1) ***Geographical context***: plays a dominant role in determining socio-economic conditions and is more often viewed as a 'handicap' rather than an 'opportunity' by stakeholders at NUTS3 level;

2) ***Policy responses:*** ERDF is an important policy driver and source of funding at the NUTS3 level, although alignment with domestic policy is crucial;

3) ***Relevance of ERDF***: At the NUTS3 level, the approach to using ERDF is more closely attuned to addressing issues related to the specific geographical contexts than at the NUTS2 level;

4) ***Effectiveness of ERDF***: At the NUTS3 level, there are relatively more projects developed that specifically relate to the specific geographical context than at the NUTS2 level;

5) ***Implementation and governance***: the socio-economic impact of ERDF in the NUTS3 regions depends upon a range of factors, e.g. administrative and governance structures, partnership working, domestic policy;

The following sections discuss in turn, per evaluation question, the main, consolidated findings from each of the six case studies.

3.1 Geographical context

Geographical specificities do matter

The case studies have shown that in all cases 'geographical specificities' *do indeed matter* for both the challenges faced and for the opportunities available for exploitation for improved economic development. However, the role of geographical characteristics is more complex and more subtle than might be expected:

Of the three initially pre-specified characteristics (islandness, sparse population, mountainous regions), it is the first two which appear to pose the most severe challenges. Being mountainous posed major challenges in one case study region (Ardèche), but rarely figured elsewhere and in some cases (e.g. Cuenca, Western Isles, Lesbos) is either rarely

mentioned in local narratives at all, or else is seen as a positive attribute (especially as a tourism asset).
In line with the analytical framework discussed earlier (see Figure 1), the geographical features that have emerged from the case studies as being very important, perhaps even more so than the three pre-specified ones, are *remoteness* (peripherality) and the *configuration of the settlement pattern* (sometimes called 'scattered communities' or 'small, isolated scattered communities').

Remoteness has two dimensions: (a) remoteness from the main EU and national markets, and (b) peripherality *within* the local NUTS2 or NUTS3 region. These effects can be subtle and the particular unique characteristics of each region are important. For example, Norrbotten is an extremely peripheral region relative to the main EU markets. However, because of the relatively good rail, road and air transport infrastructure links in Norrbotten itself (a legacy of minerals and forestry exploitation which required heavy investment in export transport links, plus heavy investment in the remote north by the affluent Swedish economy), it is *within-region peripherality* which is the more important challenge. By contrast, in the case of the Western Isles and Lesbos both types of remoteness pose serious challenges.

The Cuenca case is interesting in this regard because although it has good accessibility thanks to the recently completed high-speed train link from Madrid, which connects the province directly to the Spanish capital, there are a number of scattered villages, often with less than 100 inhabitants, which are really quite remote from Cuenca city.

Again, as discussed in the analytical framework, the case studies clearly reveal that it is a mistake to consider each individual geographical characteristic in isolation from one another. In virtually all of the case studies the geographical characteristics act *in combination* with one another to pose challenges or engender opportunities.

This is best seen with the phenomena of 'scattered small communities' (Cuenca, Western Isles, Lesbos, Norrbotten, Ardèche, but not really Bornholm). Scattered communities face higher costs of both business operation and services provision (private and public services), and are regarded as 'less attractive' places to live for lifestyle reasons (resulting in out-migration of younger persons). The root cause of this phenomenon is usually sparse population, but the communities are fragmented further by islandness (particularly where double or multiple insularity exists – 'islands off islands' – Western Isles, Lesbos); mountains (where communities in different valleys are cut off from others in the next valley often close by 'as the crow flies' – e.g. Ardèche); long distances between settlements – internal remoteness (e.g. Norrbotten); and sometimes other 'accident of geography' features (e.g. ria valley sea lochs in the Western Isles which act like mountain ranges do in actually fragmenting communities).

The demographic challenge is common to all

Interestingly, all six case studies showed that a 'non-geographical' challenge at least as powerful as the geographical ones and almost certainly more immediately threatening for the regions studies was *demography*. Moreover, a key point is that this is not related to economic well-being because even in the wealthier regions, such as Bornholm or Norrbotten, the demographic challenges are just as significant.

The key element of this in all six case studies was *out-migration*, particularly of younger, economically active persons. In some of the case studies this was also accompanied by stronger net out-migration of women than men, leading to serious gender imbalances as well as an ageing population (Western Isles, Norrbotten, Bornholm, and Cuenca).

Moreover, the expected reverse migration flow of 'lifestyle migrants' attracted by the excellent quality of life features of the case study regions was, in none of the cases, (apart from Ardèche) actually able to offset out-migration flows. In addition, another interesting point is the difficulty to attract families to the region because of the struggle for both members of a couple to find a job that fits with their career path. This issue is apparent on Bornholm where the numbers of return migrants are restricted for this reason.

The dual outcome of these trends is: falling population and ageing population, leading to falling rates of natural increase (birth rates down and death rates up), and a 'vicious circle' of loss of economically active population, declining competitiveness, loss of jobs and further out-migration. In some cases complete de-population threatens parts of the regions (e.g. Cuenca, Western Isles, Lesbos, and Norrbotten). Moreover, Bornholm is particularly susceptible because of its relatively small population with just over 40,000 inhabitants.

Fragile economic contexts

The key point is that all six of the cases have relatively fragile economic contexts. Statistically, there are considerable differences between the six, with Bornholm being relatively wealthy compared to the EU average whilst Lesbos is relatively poorer. Having said that, the socio-economic situation in all cases is certainly not problem free due in, large part, to the geographical specificities and the challenges discussed earlier such as remoteness, accessibility to markets etc. Moreover, the recent economic crisis has impacted upon certain regions quite markedly; this is especially the case in Cuenca for example. Indeed, stakeholders in all the regions emphasise the crucial role that ERDF plays in providing support for key investments in the local economy, which might not otherwise have been made.

In summary then, the key point that emerges from the case study analysis is that all six regions are essentially dealing with similar challenges, to a lesser or greater extent, combined with their particular geographical features. These challenges include remoteness as well as the demographic dimension; both of which present a number of related policy challenges such as how to provide adequate public services for the elderly; how best to manage schools and nursery provision for the young families that do have children in the regions and of course how to create jobs, services and career paths to encourage young people to stay. The key point, however, is that there is 'no one size fits all' approach to dealing with the different geographical challenges. This point about the policy approaches is explored in more detail in the next section.

3.2 Policy responses to the main geographical challenges

Perception of the geographical features is crucial

The evidence from the cases studies seems to suggest that the perception of the specificities is the key element in the development of relevant policy responses at the local level. The following diagram summarises the causality identified in the six cases.

Causality of the relevancy of ERDF related to specific challenges

The evidence from the case studies is that policy responses are really conditioned by the fact that the geographical characteristics continue to be perceived almost exclusively as *problems* ('challenges') and not as *assets* ('opportunities'). The Nordic cases are the most forward thinking in this regard and there is evidence of a somewhat slow shift in perceptions in the Western Isles (between the 2000-06 and 2007-13 programmes).

In the Cuenca case for instance, the depopulation issue was identified as a clear challenge and policy focus (and ERDF has played a key role), however, the lack of a specific and coherent strategy to dealing with the issue somewhat hindered its success.

Similarly, in Lesbos, the problems that the island is facing are seen as 'handicaps' to be overcome and the dominant policy paradigm, which has been in place since the 1980s, focuses on improving basic infrastructure in order to deal with these problems.

All six case studies revealed that the key assets are seen to be *cultural distinctiveness* (e.g. Gaelic culture in the Western Isles; Sami indigenous culture in Norrbotten; mountain culture in Ardèche as part of the wider Massif Central cultural region) and *natural assets*. The latter vary, from for example minerals and forestry in Norrbotten, to landscape (Bornholm, Western Isles, Lesbos, Ardèche, Cuenca – mountainous part), and climate (Lesbos).

The ERDF funded project of the Petrified Forest of Sigri in Lesbos is probably the best example of this because it clearly shows how valuable natural endowments can be exploited to their full potential.

Alignment to domestic policy is crucial

Alignment to domestic policy is important. The key point is that policy responses are developed at multiple levels, especially the national scale, which is the dominant policy driver in several of the cases. Actually, in all cases, alignment (or not) with domestic policy is crucial in creating a successful policy mix to deal with geographical specificities.

Several examples from the cases illustrate this point. In Sweden, for example, there is a strong tradition and focus on regional development to ensure an equality of territorial public service provision. The county of Norrbotten has clearly benefitted from national transfers to build key infrastructure which has helped to address some of the issues of remoteness. Similarly, in France, there is a relatively strong tradition of domestic policy initiatives and funding to support mountainous areas across the country. The Ardèche has benefitted from such domestic support. In these regions, alignment with domestic policy is a crucial element in influencing how policy and funding at the local level is conceived.

On the other hand, national policy in Spain does not really provide any specific support to regions that are sparsely populated or mountainous, as in the case of Cuenca. Moreover, interestingly Greece does not have a specific set of policy measures for its islands, even though it has quite a lot of them. In these regions, the role of ERDF is even more crucial not only in policy terms but also in providing funding for key infrastructure and other projects.

In summary then, there are a range of policy approaches employed in the respective regions and the different challenges are dealt with in contrasting ways in the respective regions. In addition, a key point emphasised in all the six cases is the role played by ERDF as a key "driver" of policy and funding. This is explored in more detail in the next section.

3.3 The relevance of ERDF and CF

ERDF tailored to the NUTS3 level?

The evidence from the case studies about the ways in which ERDF programmes are tailored (or not) to the geographical context at the local level (NUTS3 or below) is really quite mixed. The main issue is that the ERDF Operational Programmes tend to be developed at the NUTS2 level (or above) so it really depends on how important the specificities are seen at that level rather than the NUTS3 and below.

Again, the two Nordic cases seem to focus more on their local economic specificities and respective ERDF programmes are developed in such a way to try to tackle such issues. For example, even though Denmark has a national ERDF Operational Programme for the current period, Bornholm actually has its own Growth Forum which is in charge of designing the ERDF programme. Norrbotten's Regional Development strategy is designed at the NUTS3 level and fully takes regional specificities into consideration. Again, this reinforces the point made earlier about the perception of the geographical challenges which in turn seem to strongly influence policy design in the respective regions.

For the Western Isles, even though ERDF programmes are designed at the level of Highlands & Islands (NUTS2), the local stakeholders have so far succeeded in influencing the focus of the programme, especially in the current period. In particular, the focus on the notion of 'fragile areas' (at the NUTS3 level and below) was introduced in the current ERDF Operational Programme. This was not the case in the previous programming period although there was a strong focus on SWOT analyses which picked up key elements of the local economy such as the specificity of Harris Tweed, the importance of agriculture and the opportunities offered by renewable energies, etc.

The Ardèche case is interesting because there is a mix of approaches used to develop ERDF priorities. In addition, there is a pan-regional strategy for the Massif Central, which combines several French regions that are all located on the mountain range. The regional programme for Rhône-Alpes is designed at the NUTS2 level, although the communication seems to be really good with its NUTS3 sub-regions, including Ardèche.

On the other hand, the cases of Cuenca and Lesbos illustrate the ways in which the ERDF programmes are developed at a higher level (usually NUTS2 or nationally) and hence they do not really take into account respective local territorial specificities. The difference here is that the specificities are not central to the overall list of priorities developed in the respective Operational Programmes. Of course, ERDF spending is still relevant to the regions, such as investments in basic infrastructure but the focus is rather 'top-down' than 'bottom-up'.

Continuity in approach between the two periods

The evidence from the case studies shows that there is largely continuity between the two programming periods without any significant changes in approach. The exception is Lesbos due to the changes in governance in ERDF programme management which means that, for the current period, four NUTS2 regions are grouped together under one Operational Programme. Interestingly, even though Norrbotten went from Objective 1 to Regional Competitiveness, the focus in approach and priorities was still firmly on tackling issues relating to sparsity.

Strong focus on 'hard' infrastructure

The most important finding of all regarding the relevance of ERDF to these regions is the continued over-emphasis on *hard infrastructure* projects, particularly *transport* infrastructure. The CF also plays an important element in this regard. This is very much in line with the findings discussed for the 15 regions analysed in Task 2 (see Section 5).

The case studies revealed quite a wide variation in the degree of dominance of hard infrastructure ERDF spending, being very high in Lesbos and Cuenca and least high in the Western Isles and Norrbotten. In part this pattern reflects the stage on the development path of each region – Lesbos and Cuenca are more typically lagging (Objective 1/Convergence type) regions with a serious basic infrastructure deficit, while the Western Isles and Norrbotten are at more mature stages in their successive ERDF programmes and in nation states whose level of regional development is such that national government infrastructure provision has been sustained over many years and there is less of an

infrastructure deficit. However, it also clearly reflects a genuine perception of geographical characteristics as posing serious barriers to integration and growth, a perception felt more strongly in some regions than others, but nevertheless a shared perception across all six case studies.

The case studies suggest that a strong case can be made for infrastructure spending in regions with 'geographical specificities' to continue in future programmes to be somewhat greater than other ERDF-funded regions across the EU, for two reasons: (a) 'gaps' in infrastructure remain in all six case study regions, and sometimes these are 'key gaps' vital for future progress but with little prospect of national funding without ERDF participation. Examples of this are the need for a Western Isles - mainland combined electricity and broadband cable to improve telecommunications and enable renewable energy exports; the need for a Bornholm-Sweden fixed transport link; and within-Cuenca road links to exploit the opening of the high speed rail link through Cuenca city. (b) the geographical characteristics are such that although previous infrastructure spending has *reduced* the tyranny of distance and islandness, it has not *eliminated* it.

Continued need for infrastructure support as well as 'softer' measures

A continuing programme of upgrading is necessary to avoid the case study regions in the future falling back in their relative competitiveness. This is best seen with the vital broadband networks for all of the case study regions, where regular upgrading is essential, but it also applies to transport infrastructure too.
Whilst a case can be made for a certain degree of continuing disproportionately large hard infrastructure spending in the case study regions, this should not be used to disguise the fact that all regions with specific geographical characteristics need to press on as quickly as possible from hard infrastructure into 'softer' forms of business support, more productive business investments and projects more in tune with both the Lisbon Agenda goals and the Europe 2020 goals.

A second key policy response finding of the case studies, therefore, is that all six regions have struggled, and continue to struggle at the *cusp point* between infrastructure/'defensive' projects and productive business, innovation and environmentally sustainable projects. It is vital that regions with specific geographical characteristics move forward to build upon the greatly improved transport and telecommunications which ERDF (and other EU) programmes have helped to put in place to exploit them to create new and more modern industrial sectors.

There is no doubt that the foundations now exist in all case study regions for this to take place, and there are a number of 'best practice' examples within the case studies of projects designed to build upon what has gone before. The new high speed rail link to Cuenca City, part funded by ERDF, offers major opportunities for both out-commuting to Madrid and attracting new businesses and migrants.

In the Western Isles the 'spinal route' of bridges and causeways along the length of the island chain, again part funded by ERDF, offers major new opportunities for 'trail tourism' of various kinds (e.g. cycling, golf, hiking). Improved air, rail and road links in Norrbotten

have enabled the region to develop a winter automobile testing industry for companies based right across the EU.

Improved access to Bornholm is enabling the island to develop its 'Bright Green Island' strategy exploiting the local environment and landscape. There are, however, not enough of these within the balance of the programmes as yet.

Sectoral approaches

The case studies have shown that the industrial and sectoral policy responses are almost 'textbook' ones in terms of the literature review conducted for the First Intermediate Report. The most successful ERDF policy responses have been those which seek to develop successful 'asset-based' development strategies. Only one of the six case studies had a strategic focus on industrial *clusters* (Bornholm) and even here the terminology used in the policy documents and interview evidence indicates that these are not clusters in the sense of large groupings of interrelated firms, but are much more specialist (i.e. niche sectors). The key asset-based sectors revealed by the case studies are sub-sectors of *tourism* (important in all six case studies, exploiting the cultural and natural assets – see above), *resource-based* (e.g. minerals and forestry and winter car testing in Norrbotten; fishing and fish farming in the Western Isles), and *culturally-based products* (e.g. mountain food and drink products in Ardèche; Gaelic media sector in the Western Isles).

Renewable energy is an up-coming sector in all six case study regions and is a policy response of particular relevance for regions with specific geographical characteristics for two reasons: (a) at a *community level* it enables a small, isolated community to both reduce their high energy costs, whilst simultaneously contributing to the wider EU goal of reduced emissions and carbon costs, and (b) at the *regional level* it offers the prospect of a new niche export industry. All three types of region can potentially exploit both types of developments.

The Western Isles probably has the best prospects of all because of an unusual combination of wind, wave and tidal power assets, but all five other case study regions have good future prospects too. Bornholm and the Western Isles are the most advanced down this route, and Norrbotten has long had hydro-electric power for local use and export.

Innovation and RTD policy responses remain rather muted (with the exception of Norrbotten) and this is an area where much more will need to be done in the future if regions of this type are to play their part in meeting Europe 2020 goals. The case studies suggest that innovation-based policies are likely to be particularly useful where they are directed at existing successful niches or else niches threatened with decline.

The best example of this was the Harris Tweed industry in the Western Isles, a global textiles brand based on local cultural distinctiveness which had been in decline, but as a result of innovation has been given a new lease of life. Many of the important tourism and recreational activities niches are also ripe for this type of 'incremental innovation'.

Policy responses to meet the very serious demographic challenges facing the case study regions have been harder to develop and not as successful as they need to be. Several of the case studies stressed the role of higher education institutions as a means of retaining young people and attracting in other young people from elsewhere (e.g. University of the Aegean in Lesbos; University of the Highlands and Islands in the Western Isles; the Universities of Umea and Lulea in Norrbotten).

3.4 The effectiveness of ERDF and CF

Relatively successful in meeting targets

The monitoring and evaluation evidence shows that in the six case study regions successive ERDF programmes have been successful in meeting targets and in effectively spending programme budgets. The amounts of virement and problems of obtaining match funding do not seem to be different from other regions in receipt of ERDF assistance.

Interview and focus group evidence goes even further than the formal evaluation evidence and has indicated that in some of the regions ERDF assistance has been more than effective; it has been absolutely vital. In Cuenca, for example, it was stated that many small villages would no longer exist had ERDF funding not been available. In the Western Isles interviewees expressed the view that funding had been critical for smaller island and crafting communities at the heart of local culture and distinctiveness.

As noted earlier, a major issue is the difficulty being met in most of the case study regions in moving forward from the cusp point between hard infrastructure and 'defensive' policies to more mature productive environment and 'softer' business measures.

Improvements in accessibility but less in innovation

The considerable focus on improving basic infrastructure in most of the case studies has had a positive impact on accessibility. The improvement in the road network in Cuenca main road has been crucial in helping to develop tourism in the province and the high-speed rail link is hoped to be a catalyst for further economic development although it is too early to assess the impact. Similarly, the extensive road network built up in Lesbos has been important to the island's continued development.

For the Ardèche case, because of the proximity of main transport axes, the focus of investment was on ICT improvements and broadband which is, in a sense, another source of accessibility. However, the results were relatively mixed.

The focus on basic infrastructure, however, was not matched by improvements in innovation and supporting business dynamism. In Lesbos and Cuenca, such activities were almost non-existent whilst the Ardèche and the Western Isles were less "hard infrastructure-driven". On the other hand, Bornholm and Norrbotten clearly supported innovation and main economic sectors through the reinforcement of clusters or developments in the 'green economy'.

Impact on territorial cohesion

Three important *territorial cohesion* findings were revealed by the case studies. (a) The three types of regions are recognised as having particular challenges in becoming more closely integrated into the EU-wide city-region system. This is undoubtedly true, although as noted earlier, remoteness is also important in this respect. (b) There is an important territorial cohesion issue *within* each of these NUTS3 regions. The regions still have fragile economic situations and all are still largely dependent on ERDF as well as other financial transfers to sustain their respective local economies.

In addition, in all cases, the demographic challenge of out-migration and falling population has been combined with increasing *concentration* or *primacy*. The main urban centre(s) have been growing at the expense of the periphery within each region. This poses an important territorial cohesion dilemma: should policy effort be focused on the (more successful) capital cities of these NUTS3 regions (e.g. Stornoway in the Western Isles, Mitylene in Lesbos etc), or perhaps even just across the border of the region (e.g. Grenoble or Lyon for Ardèche), or should effort and money be directed at preserving the smaller, declining settlements on the periphery?

We have no answer to this question here, but note that it is a particularly strong territorial cohesion issue in the six case study regions. (c) An important part of the wider debate on territorial cohesion in the EU has concerned equality of access to public services. This is another aspect of territorial cohesion, or lack of it, found in regions with specific geographical characteristics. Public services provision problems and its high cost are endemic in the six case study regions. This is not just because they are islands, mountainous or sparsely populated, but also because their populations are in small, scattered communities. Innovative ways will need to be found (e.g. e-Services) in order to improve this particular form of territorial cohesion.

3.5 Governance and implementation

Relatively good programme implementation

The evaluation evidence records strong success in the administration and implementation of the programmes across the six case study regions. This may be partly the result of strong local networking and social capital in regions of this type. In one or two cases it is the result of many years of national policy programmes targeted on the region (e.g. Highlands and Islands Enterprise in Scotland) which has helped to lay the foundations for a successful administrative system.

Disjuncture between NUTS2 and NUTS3

It was revealed that generally there is a good alignment between national and regional policies. A major finding, however, is that there is something of a *disjuncture* between policy governance and implementation at the programme level (usually NUTS2) and the more appropriate geographical level for the island, mountainous area or sparsely populated area (usually NUTS3, but sometimes lower than NUTS3 – e.g. the mountainous region in Cuenca, or the island of Limnos in Voreio Aigaio).

The key point that emerged is that most of the regions do not have a dedicated strategy at the NUTS3 level which all local stakeholders can use in order to prioritise and target domestic or EU funds. Irrespective of whether the ERDF Operational Programmes are designed at that level or not, a key policy development would be to encourage such strategies to be developed at the NUTS3 level as a tool to organise territorial policy interventions.

The situation was better in some regions than others. For example, the Western Isles had good inputs into, and good outputs from the 2000-06 programme, but this was less good in 2007-13 as a result of centralisation as the funding declined. Likewise, Bornholm and Norrbotten had specific strategies at the NUTS3 level which were aligned with ERDF.
In Cuenca and Lesbos, however, the setting of national-level goals and a rigid structure for programmes made it very difficult indeed for the NUTS3 level regions, the more appropriate level for regions with specific geographical features, to influence policy implementation and governance. Even in the more successful regions such as the Western Isles, the wider NUTS2 strategy was only partially applicable to the region (e.g. choice of 'driver' key sectors).

Contrasting governance examples

The case studies revealed examples of both good and bad Member State governance systems from the perspective of the NUTS3 regions with specific geographical characteristics. Perhaps the best example was Bornholm. The island is technically a part of the Copenhagen Capital administrative region even though it is isolated from it and with very different economic and social conditions. Nevertheless, the Danish government has been able to develop a flexible and sensible set of governance arrangements in order to allow the island to develop and implement its own distinctive strategy.

The Western Isles too have benefited from a flexible approach to governance in Scotland, having a local council area which coincides with the natural islands boundary even though this has meant it is an unusually small council by Scottish standards.

In other cases the governance structures have been too rigid, this was the case in Cuenca and Lesbos. In the latter, the management of the current ERDF programme meant that the islands had less influence over the priorities and spending compared to the national government. However, a recent local government reorganisation in Greece may increase the role of the island in policy formation for the next ERDF programming period.

Some issues with programme management

The case studies all revealed a serious problem in that ERDF funding is seen as being more bureaucratic and rigid than other relevant programmes. For most of the six case study regions the types of projects and policies are more akin to rural areas policies than to industrial areas. It is interesting to compare that with the Leader initiative which is seen by certain stakeholders as being more flexible and better able to target very small projects in a more 'bottom-up' way than ERDF. On the other hand, several stakeholders made the point that ERDF was relatively more bureaucratic in comparison. However, this was often due to complications created by national and regional rules which effectively 'gold-plated'

the European rules for the management and implementation of ERDF rather than a particular lack of flexibility in the Regulations themselves.

Complementarity with other EU funds

The coherence with other EU funds is relatively good in all the cases. This is partly to do with the size of the territories in question. For example, in Bornholm, the same administration manages ERDF, ESF, EARDF and FIFG. Likewise, in Norrbotten, staff involved in managing the different funds work closely together. At the other extreme, the involvement of regional and national Ministries in Spain and Greece further complicates the possibility of closer coordination.

Interestingly, the issue about the return to a multi-fund approach was mentioned in several cases to avoid the 'silos' which were viewed to be rather common in the current ERDF period. Another point is that the actual funding source of EU monies (i.e. whether it is ERDF, ESF, EAGGF or a mix thereof) does not seem to matter at all at the local level in these territories. Beneficiaries were more interested in the availability of funds and the flexibility to use them.

Limited use of special legal provisions

It should be noted that there is very limited use of different special legal provisions outside of ERDF in any of the case study regions. Norrbotten benefits from the special funding envelope for the sparsely populated regions. Indeed, when the question was posed to relevant stakeholders, the responses were really very vague on this issue. Perhaps this is something that is worth exploring further in order to inform and educate relevant stakeholders in such regions about the range of potential tools available. For example, one potential flexibility relates to Article 52 of the General ERDF Regulation which is about the Modulation of contribution rates, which effectively allows the levels national co-financing to be reduced (or increased). If the national contribution is reduced and the ERDF level increased, this actually results in the size of the overall programme being reduced. This is potentially one explanation as to why such flexibilities have not been widely taken up. Moreover, whether to use such flexibilities in the ERDF Regulations or not often depends on national authorities; the question arises whether such territories have sufficient 'voice' in order to influence the outcome of such decisions.

Having outlined the main findings from the six case studies carried out, Part 3 details the Policy Conclusions that emerge from the Study.

PART 3: Policy Conclusions

1. Introduction

Part 3 of the Report focuses on the Policy Conclusions drawn on the basis of the lessons learned from the previous tasks carried out. The Study has drawn together evidence from a wide variety of sources, both quantitative and qualitative, and from a range of European regions. There are three sections in this part of the Report. The first deals with the added value of ERDF and CF in the regions. The second provides specific conclusions about ways to maximise the effects of the funding. The third focuses on the proposals for the forthcoming programming period, 2014-2020, and the potential relevance of some of these to regions with specific geographical features.

2. The added value and contribution of ERDF/CF to regions with specific geographical features

In drawing Policy Conclusions for regions with specific geographical features - islands, mountains and sparsely populated regions - it is important at the outset to stress just how diverse and individually distinctive these regions are. EU Cohesion Policy has always, of course, recognised that every region is unique in some way, and its structure has evolved over the years to accommodate diversity. However, the key point that emerges from this Study is that, in spite of their territorial and socio-economic distinctiveness, the regions with specific geographical features do in fact have several characteristics in common.

The Study suggests that there are several main reasons for this:

1. The regions are almost invariably faced with the challenges of not just one geographical characteristic, but rather some combination of two or more. The different geographical features combine together in complex and subtle ways which can differ markedly from region to region. Moreover, other geographical characteristics, most notably *remoteness* from key markets and services and the *configuration of settlement patterns* within each region also play an important part in a region's economic performance and in policy strategy formulation;
2. An important 'non-geographical' characteristic is common to all regions – that of the demographic challenge. In fact, this is a key issue for many other regions across the EU although it is arguably more critical in the regions with geographical specificities because of the distinct nature and combination of the demographic processes at work. For all of the regions analysed, these interlinked processes involve the outflow of young people (often women), combined with low natural birth rates as well as ageing local populations. It is crucial, therefore, that future ERDF Operational Programmes (along with other EU and domestic funding streams) seriously take into consideration such issues in order to develop holistic policy approaches designed to tackle the serious demographic challenge;
3. The inherent difficulty the regions face in attempting to develop a diversified economy or generating successful industrial clusters has meant that most have had to rely upon their particular 'assets' in order to promote or sustain their economic development. These 'assets' often stem from the respective geographical specificities, such as natural resources, climate or particular landscape and, for example, have encouraged the development of tourism and related activities. However, such 'asset based' niches are, by definition, often narrow and highly specialised, and as a result greater than usual differences between regions in terms of industrial structure arise. It is crucial that future ERDF Operational Programmes, therefore, focus more on encouraging the exploitation of such 'asset-based' development strategies;

4. The regions examined each have vulnerable economic situations as a result of their particular territorial contexts. The situation, however, is complex as geographical features alone are not sufficient to explain relative socio-economic performance in the regions analysed. In particular, all of them suffer from a lack of 'critical mass' in terms of key socio-economic factors, such as size of domestic market, skilled labour force, access to skills and training, potential and attraction for inward investment, levels of innovation etc. Of course, the pattern is not exactly the same in all regions but overall, the lack of 'critical mass' is a common feature which ensures that the regions still require considerable financial transfers to sustain them. EU funds, particularly ERDF, therefore, are a key element in supporting these regions in order to try to compensate for the lack of such 'critical mass'.

Bearing in mind these issues, the findings from the Study clearly illustrate that ERDF and the CF do play a crucial role in regions with specific geographic features and provide added value in several ways. These are listed in turn below:

1. Although ERDF support often only represents a (small) part of public resources available in these regions, it has played a crucial role in providing a long-term, stable financial framework in which the regions can operate to develop a range of projects, especially in hard infrastructure (roads, environmental, ICT and broadband etc.) that may well have not otherwise been funded to the same extent by domestic sources.
2. ERDF has been an important catalyst for attracting, and indeed directing, domestic funds in order to develop important projects in the regions. The message from the case studies is clear; if that wasn't for ERDF funding in these regions certain investments wouldn't have been made. The case of Cuenca is pertinent in this regard.
3. ERDF provides a flexible tool that can be tailored to meet the needs and challenges of the regions in question. Whilst, ERDF is not the only funding tool of relevance in these regions, it is viewed by stakeholders as the primary driver of economic development as well as being complementary to both domestic as well as EU funds (such as EAFRD and ESF). Having said that, stakeholders also agreed that certain improvements could be made to the ways in which ERDF is implemented in these regions; for example, a more explicit strategic focus to dealing with geographical specificities at the NUTS3 level.
4. The ERDF programming process has clearly been important in improving the strategic focus, partnership and stakeholder involvement, helping to improve the levels of 'good governance' in the case study regions.

The clear message, therefore, that emerges from the Study is that ERDF is an appropriate tool for the development of regions with specific geographical features. Moreover, rather than each of the territories requiring a specific funding instrument, the main point is that the existing ERDF framework provides the necessary *funding, flexibilities* and *focus* for effective projects to be developed. As mentioned, certain improvements could be made to enhance the ways in which ERDF can be utilised in the three types of territory. This next section discusses each of these conclusions in more detail.

3. Determining factors for effective policy and maximising the effects of ERDF/CF interventions

Whilst it is not possible to extrapolate the findings discussed here from only six cases and apply them more generally across *all* regions with specific geographical features. Nevertheless, as discussed earlier, the fact that these territories face very similar common challenges combined with the findings from the six case studies and range of examples generated does allow very useful conclusions to be derived about the role of ERDF in such territories. Below is a list of the main conclusions that emerge from the work carried out in the Study.

3.1 More explicit recognition of geographical specificities at each key stage in the ERDF programming process

The key stages are (a) socio-economic and SWOT analysis as part of the ex-ante evaluation, (b) systematic consideration of sub-regions with geographical specificities at the Operational Programme design and implementation stage, (c) regular monitoring of the key indicators and financial outcomes at an appropriate sub-regional level, and, (d) at the ex-post evaluation stage. This would not be as bureaucratic a burden as might initially be thought because in most cases there will only be one or two sub-regions involved (e.g. the mountainous region within Cuenca), and most ERDF programmes already do a certain amount of sub-regional disaggregation of this kind, although it is rarely focused on sub-regions with particular geographical characteristics.

Virtually all of the case study regions experienced problems in that ERDF programmes were designed at too aggregated a level (usually NUTS2 or similar) for their unique set of characteristics to be properly recognised and addressed. The scale of the problems ranged extremely widely from cases where a rigid top-down programme of Operational Programme design and structure was imposed (e.g. Cuenca, Lesbos) to more flexible systems which allowed geographical specificities to be identified, analysed and implemented. The latter situations arose either because fortuitously the programme region happened to coincide with the region with specific geographical characteristics (e.g. Bornholm) or because steps had been deliberately taken to systematically address the situation faced by sub-regions with specific geographical characteristics.

A good example of an interesting approach in this regard is the Scottish Highlands & Islands NUTS2 programme region in 2000-06. Here no fewer than ten sub-regional SWOT analyses (some at sub-NUTS3 level) were undertaken and much of the socio-economic analysis within the SPD was conducted at sub-regional level, as was subsequent monitoring of key indicators. For the case study region within the Highlands & Islands (the Western Isles) a separate Western Isles partnership and strategic planning process allowed this island

and sparsely populated region to have a clear input into the programme formulation. Even here, however, there was no consistent approach over time, with sub-regional analysis and SWOT work being greatly reduced in the 2007-13 Operational Programme.

3.2 Stronger encouragement for programmes to move on from perceiving geographical characteristics as 'problems'

One of the key findings from the Literature Review carried out for the Study is the fact that the global research literature has moved on from regarding mountainous terrain, islandness and sparse population as wholly detrimental characteristics. Instead, there is a much more balanced view of 'strengths' and 'opportunities' as well as 'weaknesses' and 'threats'. However, there is relatively little evidence of such new thinking permeating into the Operational Programmes for the case study regions. Textual analysis of the programme documentation, interview and focus group evidence, as well as the nature of the interventions actually conducted (e.g. the continued over-emphasis on hard infrastructure interventions noted above) all show that the geographical characteristics are still perceived as being overwhelmingly problems to be faced rather than the basis for positive action.

The case study regions, however, also all stressed the importance of distinctive local cultures, excellent 'green environment' characteristics and natural assets for successful 'asset-based' development strategies. Yet many aspects of these assets are themselves derived from the distinctive geography (e.g. insular and mountain cultural attributes; island, mountain and sparsely populated area landscape assets). There seems to be still too 'defensive' an attitude to the geographical characteristics. Greater diffusion of best practice projects and evidence of highly successful (and hence non-ERDF) island, mountainous and sparsely populated regions would help, as would greater encouragement from the European Commission at the initial Operational Programme design stage.

3.3 Coping with the demographic challenge

The case study regions were all, without exception, facing what was essentially the same extremely severe demographic challenge: depopulation. This was either for the region as a whole (e.g. Lesbos, Bornholm) or else the more peripheral parts of it with main towns benefiting at the expense of the periphery (e.g. Western Isles, Norrbotten, Ardèche, Cuenca). Moreover, the demographic challenge was of the most serious type – significant out-migration of younger persons (and more females than males) with not enough in-migration of young people for lifestyle or other reasons. Falling population was therefore accompanied by an ageing of the population, falling birth rates and hence a cycle of depopulation. So serious is this issue that in a number of the case studies interviewees stressed just how vital ERDF assistance had been for the sheer survival of remoter small communities in the province of Cuenca.

In all of the case study regions the demographic projections were such that they pose the single most serious threat to the region (greater even than the geographical challenges) and put future ERDF programmes at an enormous disadvantage as the 'life-blood' of the region flows away. We are facing a textbook cumulative causation process in most of the

regions. We would recommend: (a) that future Operational Programmes for regions with geographical specificities contain an explicit analysis of demographic trends, at regional and sub-regional level, (b) that the programme strategy be expected to explicitly address the specific demographic challenges in which ERDF can be used to play a direct role in addressing (e.g. job creation schemes to help stem the outflow of young people) (c) that particular care be taken to seek alignment of the ERDF with national policy strategies (e.g. rural areas policy, fisheries policy, second home ownership policy, welfare transfers etc), and (d) that ERDF and ESF programmes be more closely coordinated since ESF interventions have an important role to play in retaining more young people and attracting others from elsewhere into the region. This does not necessarily imply a re-merging of ERDF and ESF into single programmes, although that was widely suggested by interviewees and focus groups. In the Western Isles 2007-13 ERDF programme one of the three Priorities (for community-level development) allowed combined ERDF and ESF bids and this might be a model for future programmes. Thus, a holistic approach to tackling the demographic challenge in such regions is vital in order to try to counteract the considerable negative socio-economic consequences arising.

A number of the case study regions stressed how important further and higher education was in enabling indigenous young people to be retained since a common exit route for young people was to leave the region to attend higher education institutions elsewhere (usually in the larger cities elsewhere in the same nation state), and not return once studies are completed. The University of the Highlands and Islands (UHI) in the Scottish Highlands and Islands region is an excellent example of how ERDF (and ESF) interventions have been used to establish and sustain a new university. Moreover, the particular business model for UHI was deliberately designed to ensure a sub-regional network of campuses rather than a distance learning approach in order to retain more young people in their home sub-regions. Having locally-based universities was also stressed in the Lesbos and Norrbotten case studies. However, even where local universities have not been established (e.g. Bornholm, Ardèche), the case studies stressed the importance of other types of research and teaching centres as a means of retaining local young people and attracting others. Regions with specific geographical characteristics have many advantages for attracting in-migrants or attracting back previous out-migrants, most notably lifestyle and (sometimes) lower housing and other costs. However, these aspects of 'attractiveness' seem to be being systematically outweighed by city lifestyle and accessibility 'pull' factors.

3.4 Stronger encouragement for programmes to move on from 'infrastructure fixation'

DG Regional Policy has stepped up the encouragement over successive programmes for partnerships to move on from an over-emphasis on 'hard infrastructure' interventions towards 'softer' business, enterprise and innovation projects and towards more environmentally sustainable development. This has occurred through encouragement by DG Regional Policy in the initial Operational Programme design negotiations and via the Growth and Jobs Agenda and now Europe 2020 targets. The key point to bear in mind, however, is that innovation and R&D type investments in regions with specific geographical features will tend to be rather different than those in other EU regions due to

the territorial context (e.g. lack of population density, lack of industrial dynamism, distance to main markets etc).

The Study found evidence of some success, particularly for regions which have had a number of successive ERDF programmes, and hence have previously funded the key hard infrastructure transport and telecommunications investments and moved on to a more 'mature' policy phase. Regions in Member States further down the transition from Objective 1 'lagging region' development status also tend to have moved on to a degree. Examples of these types of region among the case studies were Bornholm, Norrbotten and the Western Isles. However, the other three case study regions retained something of an 'infrastructure fixation'. This is almost certainly a result of the nature of the geographical challenges faced and local perceptions of them. Removing the direct barriers caused by geography to closer integration with the rest of Europe by building better transport and telecommunications infrastructure links is an obvious first response. Such projects have additional advantages in that they allow large amounts of funding to be quickly spent, more easily attract match funding, and also provide a quick financial shot in the arm for the local construction industry and through local multiplier effects. Infrastructure is, however, only a facilitator for long term development and does not of itself constitute sustainable economic development. Indeed, infrastructure is a two edged sword in that it initially opens local markets to greater competition as well as facilitating exports. We have found considerable evidence that case study regions have found it hard to move on from the *'cusp point'* of over-reliance on hard infrastructure investments. Of course, this is not an issue only for the three types of territory in question; it is a broader issue for Objective 1/Convergence regions across the EU. The key point is that because the three types of territory are over-represented amongst the EU's poorest regions, the issue is particularly pertinent.

Greater encouragement from the European Commission in future programmes will be needed, and should be done right from the start of programme planning. There is, however, one word of caution from the case studies. The encouragement should be flexible and pragmatic because there are two cases where investment in hard infrastructure can continue to be justified: (a) so-called 'gap filling' projects vital to make an earlier large investment project succeed (e.g. access to the 'spinal route' of causeways and bridges along the Western Isles; access to the high speed rail terminal at Cuenca; removal of bottleneck road pinch points linking the Ardèche valleys to the Rhone axis), and (b) vital up-grade projects, particularly ICT and broadband facilities where periodic up-grades are not just necessary, but also of particular importance in the three types of regions studied here. Each case would need to be taken on its merits based upon cost-benefit criteria for hard infrastructure projects.

3.5 A strategy to develop specific 'asset based' growth sectors

In line with the findings from the Literature Review, whilst the bigger regions of the EU with specific geographical characteristics (e.g. Sardinia, Crete, Northern Finland) can develop conventional industrial strategies based on diversification, industrial clusters and regional innovation systems, for the majority of the regions of concern here it is a focus on

their particular 'assets' which offer the only feasible route to economic success e.g. tourism, culture, environmental (or a combination of these). This raises several issues of note. Firstly, such economies are relatively more at risk and more vulnerable to external economic forces (such as changes in the price of natural resources; changes in tourism preferences etc.). Secondly, an increasingly important factor is that of climate change as the three types of regions, due to their specific geographical features, are relatively more at risk of such changes, which in turn, may have a negative effect on their socio-economic fortunes. Thirdly, such 'asset-based' strategies require greater courage and policy nimbleness on the part of the local communities since most of the 'assets' need to be constantly re-evaluated and improved in order to maintain competitive advantage with other regions. For example, the relative remoteness of the regions means that they are relatively more difficult and expensive to get to. Being competitive on the European and global market, therefore, requires more and better innovative policies in order to try to attract tourists all year round or to different cultural events etc. This is not a trivial task.

Future ERDF programmes, therefore, should be encouraged to set out clearly whether or not such a strategy is being adopted, and if so what the existing 'assets' that are to be protected and/or encouraged to adapt to globalisation and technological change (e.g. the Harris Tweed industry on the Western isles) and what new ones are to be developed. In addition, ERDF is a key instrument to encourage more innovation in such 'asset-based' strategies in order to make the regions more competitive. The findings from the case-studies reveal a relative lack of projects to encourage more investment in innovation and research in such key sectors. This was particularly the case in the Convergence regions of Lesbos and Cuenca where the focus on innovation related projects was relatively less because of the lack of mature project ideas to fund. The focus was much more on developing hard infrastructure projects partly as a result of the track record in developing and managing such projects.

On the other hand, there are some successful 'good practice', 'asset based' development policies which could be very profitably publicised to encourage future ERDF partnerships in the regions with geographical specificities to study and perhaps adopt. The case of the car testing industry in Norrbotten is a good example as is the work on clusters as well as renewable energy and smart grids being developed on Bornholm. Likewise, in the tourism and recreational industry sector, there were some developments in the faster growing parts of the industry (e.g. heritage and activity tourism in the Ardèche). They build on the natural and cultural 'assets' found in all regions with specific geographical characteristics (e.g. distinctive food and drink products in virtually all the case study regions).

3.6 A focus on renewable energy as a potential growth sector

The case studies revealed that renewable energy is viewed as a key component for future economic strategies. There is a case for systematically encouraging future programmes in the regions with specific geographical characteristics to incorporate a renewable energy component. This is because the sector offers the potential for a 'double win' situation:

(a) All three types of region of interest here are faced with very high utilities costs and must bear higher costs for imported fuel. The use of renewable wind or marine energy

supplies offers a direct method of both major cost reductions for businesses and households as well as directly contributing to carbon footprint reduction. Indeed, some island communities in the EU are extremely close to having a zero carbon footprint (e.g. Samsö in Denmark) and are regarded by many as excellent laboratory regions for future environmental sustainability policies. The interesting work on smart grids, electric vehicles and renewable energy on Bornholm is an excellent example;

(b) Some of the regions have significant potential for developing renewable energy for export as an 'asset-based' niche sector industry. This is already the case with Norrbotten (hydro-electricity) and both the Western Isles (wind, wave and tidal energy) and Bornholm (wind power) have huge potential for export. All other regions with specific geographical characteristics have some scope for renewable energy for export, although few have the potential of the Western Isles. This is another case where further infrastructure investment may be commercially justifiable.

3.7 A more explicit territorial cohesion dimension

The Study has shown that the concept of territorial cohesion has two particularly important implications for the regions with specific geographical characteristics: (a) intra-regional territorial cohesion, and (b) external territorial cohesion with the rest of the European spatial system (and particularly with the important system of city regions). There is also an issue of how regions of the type considered here can obtain equal access with other regions in terms of public service provision. This is especially pertinent given the demographic challenge facing all of the regions – one the one hand, ageing populations require increased services for the elderly whilst at the same time, reductions in the birth-rate has an impact upon the number of school and nursery places required.

Intra-regional territorial cohesion is a serious issue in all of the case study regions because depopulation of more peripheral parts of the region is being accompanied in most cases with a growth in *primacy* in the settlement pattern as the largest ('capital') city takes most of what population growth and migration is occurring. The ERDF programmes are faced with a very serious challenge. Should funding, as with the current programmes, be focused deliberately on the smaller and more peripheral communities which, although sometimes are in decline, can also be the focus of particular local economic strengths that need to be nurtured further. The case of the car testing industry in a remote area of Norrbotten is a particular example of this. Alternatively, should the limited funding be directed at the most buoyant communities, making the primacy even worse than it already is? We have no answer to this question, and moreover it is surely something for the individual regions to address since in some regions one policy will be appropriate while in others the reverse may be the only option. What we would recommend, however, is that in future programmes the Operational Programme should explicitly address the issue of intra-region territorial cohesion and that the particular strategic stance is made explicit. In addition, closer alignment should be sought with national policies and with land use and other physical planning strategies at the local level.

Turning to extra-regional territorial cohesion, this is already the focus of many of the policy projects (e.g. transport and telecommunications infrastructure). However, once again we

would recommend that Operational Programmes in future periods explicitly address the wider extra-regional cohesion issue. The Ardèche region case study, for example, revealed a key policy dilemma in that the region is located very close to some of France's, and indeed Europe's, most dynamic economies such as Lyon, Grenoble and the Rhône valley axis. This raises an important question of whether it is more sensible to focus on improving cohesion within the region between the various valleys and sub-regions, or whether making better links to nearby successful cities and axes of development may not be better. Clearly, there is *no-one size fits all* approach to solving this matter as each territorial context is different. The key point, however, is that the broader issue of extra-regional territorial cohesion be explicitly considered in future Operational Programmes.

3.8 The need for flexible multi-level governance arrangements

The case studies revealed something of a *disjuncture* between policy governance and implementation at the programme level (usually NUTS2) and at the more appropriate level for the area(s) within the region with the specific geographical characteristic. In some cases flexible governance arrangements had been put in place by the Member State which effectively solved the issue. For example, Bornholm is grouped with the Copenhagen metropolitan region for domestic Danish governance purposes. However, the Danish government has put in place flexible governance arrangements allowing Bornholm effective control of the ERDF programme and its strategy. In other cases, the Member State had put in place governance systems which gave some, but not all, of the sub-regions an effective voice. For example, the Western Isles, Shetland Islands and Orkney Islands have their own local Islands Councils which act as effective forums for lobbying and engaging in ERDF partnerships. However, other sub-regions, such as the Inner Hebrides islands are part of much bigger council areas and hence less well placed to engage in ERDF programme planning and implementation. The same is true for the different large islands in Voreio Aigaio and for the mountainous area within Cuenca. It would, of course, be inappropriate to impose from above a 'one size fits all' governance or partnership system. However, there is a case for encouraging ERDF partnerships at the very start of planning for a new programme period to carefully consider how sub-regions with distinctive geographical features are represented and how their views on an appropriate strategic approach are built into the Operational Programme.

3.9 ERDF and rural areas strategy – towards a 'bottom-up approach'

In all of the case studies, a key message that emerged was the need for more bottom-up involvement of key stakeholders in the develop of policies better tailored to dealing with specific geographical specificities, at the local level (NUTS3 and below). Rural development programmes such as Leader+ were cited as being important examples of what is possible in this regard, designed for smaller rural and community projects and to encourage the development of local development strategies. On the other hand, the case studies all revealed that the culture and regulations of ERDF were not very well suited to the kinds of smaller and more focused *rural areas* projects which predominate in the regions with specific geographical features. There is a case, therefore, for looking again at the ERDF

regulations and asking programme partnerships to review their funding practices to (a) ensure closer alignment with national and EU rural areas policies (e.g. measures for diversification under Pillar 2 of the CAP) and (b) to consider separate Priorities (e.g. as with the Priority 3 'Fragile Areas' priority in the Western Isles 2007-13 ERDF programme focused on community-led development) with a more rural areas policy focus. Moreover, to encourage the development of economic development strategies at the NUTS3 level in order to better align regional, national and EU funding streams. This lack of strategic focus was apparent in several of the case studies which in turn hindered the ways in which funding was allocated.

Interestingly, as the next section discusses, the proposals for the next programming period, 2014 to 2020 do respond to some of the findings drawn from the Study.

4. The role of ERDF programmes post-2013 in regions with specific geographical features

The current draft proposals for the next ERDF programming period, 2014-2020, do provide some potentially important changes, in a number of ways, which seem to align well with some of the main findings arising from this Study.

Firstly, the proposal to have an overarching regulation and set of common rules for each of the main Structural Funds (ERDF, ESF, the Cohesion Fund, EAFRD, and the EMFF (European Maritime and Fisheries Fund)) is a crucial element. In the current period, 2007-13 the lack of common rules was cited by several stakeholders in the case study regions as a hindrance to developing integrated projects, using multi-funds. Moreover, the focus on strategic programming based on clear performance targets in a Common Strategic Framework linked to the delivery of Europe 2020 goals, is welcome and should ensure better coordination of the various Structural funds. The key point, however, that emerged from the Study is that coordination needs to be not only at the national but also at the regional (and local) level. This is to recognise the key role that regions can play in contributing to delivering the Europe 2020 targets at the national level.

Secondly, the Commission proposals for a more integrated approach to EU investment are extremely pertinent to regions with specific geographical features. The proposal includes common eligibility and financial rules and the introduction of multi-fund programmes for the ERDF, ESF and Cohesion Fund. Moreover, the proposals set out an integrated approach to community-led local development, which facilitates the implementation of local development strategies by small communities including local authorities, NGOs, and economic and social partners, based on the LEADER approach used for rural development. Indeed, such 'bottom-up' strategic development plans were mentioned by stakeholders in all of the case studies as being required in future programming periods. This proposal, therefore, provides a potentially useful tool precisely for regions with specific geographical features.

Thirdly, the proposals for ERDF stress the need to strengthen thematic concentration with EU investments concentrated in certain priority areas, especially in the field of energy efficiency, renewables, innovation and SME support. A key finding from the Study was that the regions with specific geographical features have found it difficult to move away from their *'infrastructure fixation'* and fund projects in such fields. It is crucial, therefore, that the future ERDF Operational Programmes in such regions encourage and facilitate this transition to allow the funding of 'asset-based' strategies in fields such as renewable energy as well as business support and innovation. Similarly, the proposals for ESF stress the need for greater thematic concentration in areas such as promoting employment and social inclusion, supporting labour mobility and investing in education, skills and lifelong learning. The key challenge for the next period, therefore, is precisely to get better integration

between the different funds in order to encourage growth in priority areas. Such alignment and integration in policy and funding priorities is particularly crucial for regions for specific geographical features because of the combination of demographic, social and economic challenges that they face.

Lastly and importantly, the proposals for ERDF make reference to reinforcing territorial cohesion. A key element of this relates to areas with specific natural or demographic features, with a precise additional financial allocation for the outermost and sparsely populated regions. Clearly, this resonates with the clear message that emerged from the Study, which is that the fact that regions with specific geographical features really do face vulnerable economic situations and hence require continued support from ERDF (and other EU and domestic funds). However, the key point to emphasise is that all three of the territories - islands, mountains and sparsely populated regions - are recognised as having particular needs, at each stage of the programming process, for the next period. This is vital in order to ensure that such territories do not lose out, not only in financial terms but also in terms of the types of strategic approach, projects and governance arrangements that are developed in the regions with specific geographical features.

Annex 1: Main Fields of Intervention for the 2000-06 Programming Period

Structural Funds: Areas of Intervention by category and sub-category

1. PRODUCTIVE ENVIRONMENT
11 Agriculture
12 Forestry
13 Promoting the adaptation and the development of rural areas
14 Fisheries
15 Assisting large business organisations
16 Assisting SMEs and the craft sector
17 Tourism
18 Research, technological development and innovation (RTDI)

2. HUMAN RESOURCES
21 Labour market policy
22 Social inclusion
23 Developing educational and vocational training not linked to a specific sector 24 Workforce flexibility, entrepreneurial activity, innovation, information and communication technologies
25 Positive labour market actions for women

3. BASIC INFRASTRUCTURE
31 Transport infrastructure
32 Telecommunications infrastructure and information society
33 Energy infrastructures (production, delivery)
34 Environmental infrastructure (including water)
35 Planning and rehabilitation
36 Social and public health infrastructure

4. MISCELLANEOUS
41 Technical assistance and innovative actions

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