

Working Papers

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Territories with specific geographical features





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1. Introduction

On 6 October 2008, the Commission adopted the Green Paper on Territorial Cohesion with a view to deepening the understanding of this concept and its implications for policy and co-operation. In order to launch the debate, the Green Paper presented a series of themes that were considered relevant for feeding and structuring the reflection on Territorial Cohesion. These ranged from concentration of activities to connecting distant territories, from co-operation to territories with specific geographical features. However, the number of issues to be covered and the conciseness required for a document like the Green Paper implied that none of these issues could be covered at length.

Further development of the work initiated in the Green Paper was clearly needed. The theme of territories with specific geographical features, in particular, deserves closer attention for a number of reasons. On the one hand, the draft Treaty calls on the Community to take into account these territories and in particular '...regions with very low population density and islands, cross-border and mountainous regions'. On the other hand, the Territorial Agenda of the European Union (EU) underlines that global sustainable economic development in the EU could be achieved through the mobilisation of diverse territorial assets, an idea that is also central in the Green Paper on Territorial Cohesion. In this context, a more in-depth analysis of the characteristics and dynamics of territories with specific geographical features seems therefore particularly relevant.

The objective of this paper is to provide an updated analysis of the economic and social situation of the territories with specific geographical features and their evolution in recent years in order to identify possible systematic trends that characterise various types of territories. In particular, the paper highlights the performance of such territories compared to other EU regions. It also analyses how such performance varies within one particular type of territory from one region to the other.

This analysis confirms the picture of a European scene with diverse processes and situations. Such diversity exists not only between different categories of regions but also inside them. This paper intends to foster a broader reflection on territories with specific geographical features and to complement analyses such as the one conducted under the ESPON Programme (e.g. ESPON Applied Research Project 2013/1/12, European Perspective on Specific Types of Territories¹) which seeks to identify the development opportunities of specific types of regions.

2. Definition of specific territories

There is no formal definition of a territory with specific geographical features. The range of specificities that could legitimately be taken into account is wide and one has to decide what type of territories should be included in the analysis. This paper focuses mainly on the territories that can be morphologically or physically defined, leaving aside those that can only be defined based on their functionality. In particular, the paper does not tackle issues pertaining to urban and rural areas as this would mean having to consider the vast majority of EU regions, thereby losing focus on regions with genuine geographical specificities².

The report therefore distinguishes five types of specific regions:

- border regions;
- mountainous regions;
- island regions;
- sparsely populated regions (SPRs);
- outermost regions.

These types of regions can be considered to have easily identifiable geographical features, some of which imply particular development

¹ http://www.espon.eu/mmp/online/website/functions/home/homepage/index_EN.html

² The Commission is currently working to consolidate a typology of the EU territory along the urban-rural dimensions.

challenges, notably regarding demographic change and migratory phenomena, accessibility, or regional integration.

The following table summarises the number of NUTS3 regions included in each category of specific territories as well as the share of the EU population living in those regions. The group of border regions is by far the largest, being home to 39.5% of the EU population. The next group is mountainous regions which accounts for 8% of the EU population. The remaining groups represent a much smaller fraction of the EU population, the last group being that of sparsely populated regions with 0.6% of the EU population. Appendix 2 provides the list of NUTS3 regions included in the various categories of specific territories.

Table 2.1 - Categories of territories: number of regions and share of the EU population (2007)

Regions	Number of regions	Share of EU population (%)
Border	547	39.5%
Internal	488	35.3%
External	124	9.1%
Terrestrial	389	27%
Maritime	194	16%
Mountainous	168	8%
Islands	56	3%
SPRs	18	0.6%
Outermost	13	0.9%
Total*	642	44.3%

Source: Eurostat

Note that a number of regions are in fact included simultaneously in various categories. This is why, in the table above, numbers in the border regions' sub-categories do not add up to the number of border regions. Also, mountainous regions and sparsely populated regions are often border regions. In many cases, island regions are mountainous and more than half of their population also live in a border region while the category includes 6 of the 7 outermost regions. The following table shows the distribution of regions between the various categories.

benefiting from the support of the European community under various frameworks.

Specifically, border regions are NUTS3 level regions which are eligible for cross-border co-operation programmes under the European Regional Development Fund regulation. This corresponds to regions along all the land-based internal borders, some external borders, maritime borders separated by a maximum distance of 150 km and regions that share borders with European Free Trade Area countries. Regions included in the European Neighbourhood and Partnership Instrument (ENPI) and the Instrument for Pre-Accession Assistance (IPA) also come under this category.

The characteristics of these regions vary considerably according to the type of border considered. For analytical purposes, this paper distinguishes four types of border regions:

- NUTS3 regions with border(s) internal to the EU;
- NUTS3 regions with border(s) external to the EU;
- NUTS3 regions with territorial border(s);
- NUTS3 regions with maritime border(s).

Mountainous regions

Mountainous regions are defined as NUTS3 regions with at least 50% of their population living in topographic mountain areas. The definition of topographic mountain areas is largely based on the study commissioned by DG REGIO in 2004³ on mountain areas in Europe. This definition includes criteria on altitude, slope and local elevation range. It is described in details in Appendix 1.

Island regions

Island regions are usually defined as regions having a substantial part of their population living on islands or a large fraction of their territory covered by islands. For analysis purposes, island regions are defined as NUTS3 regions completely covered by islands.

An island is defined according to the criteria specified in Article 52 of the Structural Fund and Cohesion Fund regulation⁴. Thus, the following are considered as islands: 'Island Member States eligible

Table 2.2 - Distribution of EU-27 NUTS3 regions in categories of territories

Regions	Number	Border	Mountainous	Island	Sparsely populated	Outermost
Border	547	100%	15%	7%	2%	1%
Mountainous	168	50%	100%	11%	1%	4%
Island	56	71%	34%	100%	2%	21%
Sparsely populated	18	67%	11%	6%	100%	6%
Outermost	13	54%	46%	92%	8%	100%

Source: Eurostat

In order to clearly delimit the areas included in the analysis, a definition of each type of specific territories must be provided. This defines the criteria for each territory and determines which regions should be included in the different categories.

Border regions

In principle, border regions are regions with part of their territory demarcated by an international border. However, in order to also account for the reality of regional development programmes, this paper adopts a definition which ensures covering the areas

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'. This definition is coherent with those used in the past (see for instance Eurostat publications⁵ or the Planistat study on island regions⁶) but with the important difference that

^{*} Number of regions included in at least one category

³ NORDREGIO, Mountain Areas in Europe: Analysis of mountain areas in EU member states, acceding and other European countries, European Commission contract No 2002. CE.16.0.AT.136, Final report, 2004.

⁴ Council Regulation (EC) No 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund the European Social Fund and the Cohesian Fund

European Regional Development Fund, the European Social Fund and the Cohesion Fund. 5 EUROSTAT, Portrait of Islands, European Commission, 1994.

⁶ Planistat, Analysis of the island regions and outermost regions of the European Union, Part I: The island regions, European Commission Contract No 2000.CE.16.0.AT.118, Final report, 2003.

it allows the inclusion of Malta and Cyprus in the group of island regions. Appendix 1 provides the details of this definition.

Sparsely populated regions

Sparsely populated regions are regions with a population density below certain thresholds. Paragraph 30(b) of the Guidelines on national regional aid for 2007–13 (2006/C 54/08)⁷ defines low population density regions as 'areas made up essentially of NUTS-II geographic regions with a population density of less than 8 inhabitants per km², or NUTS-III geographic regions with a population density of less than 12.5 inhabitants per km²'. Since most of the analysis included in this report is at the NUTS3 geographical level, sparsely populated areas are defined as NUTS3 regions with a population density less than 12.5 inhabitants per km².

Outermost regions

Outermost regions are identified by Article 299(2) of the Treaty establishing the European Union as the French overseas departments (Guadeloupe, Martinique, French Guiana, La Réunion), the Azores, Madeira and the Canaries. The Treaty specifies that when taking account of the structural, social and economic situation of outermost regions, specific measures should be adopted that aim to lay down the conditions of application of the Treaty to those regions, including common policies. It is worth noting that outermost regions are both NUTS2 and NUTS3 regions, except for the Canaries which include six NUTS3 regions.

3. Performance of specific territories

This section examines the performance of each type of territory in various dimensions. The analysis is based on a large variety of indicators, including those most used in regional analysis and covering aspects such as demography, economic performance, and labour market outcomes. It also rests on variables such as accessibility and proximity measures that are more territorial in nature. Different indices are used to gauge the extent of disparity within the various types of territories considered.

However, specific territories being most of the time reconstructed by assembling a number of NUTS3 regions, the scope of the analysis is limited by the availability of data at this geographical scale. This is the reason why some aspects, such as for instance the age structure of the population or levels of education attainment, could not be covered in spite of their possible interest.

Finally, it should be noted that some categories of territories include a relatively small number of regions. In such cases, standard statistics – such as the mean or the coefficients of variation – should be interpreted with caution as their computation on a limited number of observations obviously reduces their statistical significance.

Border regions

In 2006, more than 195 million people lived in border regions of the EU-27, which represented 39.5% of its population. Internal border regions are the most important category in terms of population, hosting more than 35% of the EU population. It is followed by the group of terrestrial border regions where 27% of the EU population live. Between 2000 and 2006, the population

7 http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/c_054/c_05420060304en00130044.pdf

in border regions increased at an average annual growth rate of 0.26%, which is less than the EU average of 0.37%. The population growth was however higher in maritime border regions (Table 3.1).

In general, the economic performance of border regions is below that of the EU. In 2006, GDP per head in border regions was only 88.3% of the EU-27 average. This development gap barely reduces in time, with the relative GDP per head index increasing by 0.1 percentage points between 2000 and 2006. This however hides important differences between the various categories of border regions. Maritime border regions are in fact very close to the EU average with a level of GDP per head corresponding to 99.2% of the EU average. This is much higher than the level observed in the group of external border regions where GDP per head is only 64% of the EU average. However, this group is also catching up much faster than the others, with an increase of relative GDP per head index of 1.1 percentage points between 2000 and 2006 (Table 3.1).

Overall, unemployment is slightly lower with a stronger downward trend than on average in the EU. The rate of unemployment is however higher in the external border regions than in the EU (8.2% in 2007 against 7.5% for the EU-27) but declines at a much faster pace (-4.7 percentage points between 2000 and 2007 against -1.7 percentage points for the EU-27). The sectoral distribution of employment significantly differs from the EU average, being more oriented towards agriculture and less towards services. This is particularly true for external border regions where in 2004 the share of employment in agriculture was 20% and the share of employment in the service sector only 54% (Table 3.2).

In general, border regions have less access to basic services. This is particularly the case for external border regions where proximity to a hospital or a university is much lower than in the rest of the Union (Table 3.3). Flight accessibility is also lower than the EU average, especially for regions in and around the Carpathian Mountains in Romania, regions of North-East Poland and Hungary, South-Lithuania, regions along the eastern borders of Finland and Estonia as well as the Spanish-Portuguese and Greek-Bulgarian border regions.

The major characteristic of border regions is that the level of development between neighbouring regions located on different sides of the border can vary substantially. Development gaps are particularly important for regions on the eastern external border of the EU but in some cases significant gaps are also observed between internal border regions. For instance, the level of GDP per head is up to more than three times higher in the border regions of Lithuania than in the neighbouring regions of Belarus (factor 3.13) but there is almost the same gap between Luxembourg and the neighbouring regions in Belgium (factor 2.85). Table A3.1 in Appendix 3 presents an index of cross-border disparities.

Mountainous regions

Mountainous regions supply a substantial part of the Union's water and are important sources of hydroelectric power. They are also centres of biological and cultural diversity, providing opportunities for recreation and tourism, based on natural attributes and cultural heritage. Their ecosystems are fragile and highly sensitive to environmental alteration, such as those likely to derive from climate change.

In 2006, around 39.5 million people, 8% of the EU population, lived in mountainous regions. As regards economic development, mountainous regions are below the EU-27 average. In 2006, the level of GDP per head in mountainous regions corresponded to 77% of the Union's average. This gap tends to widen slightly over time, increasing by 1.3 percentage points from 2000 to 2006 (Table 3.1). Unemployment is moderately higher compared to the EU average but is also characterised by a stronger fall over time (Table 3.2).

In 2004, the share of employment in the agriculture sector remained particularly high, with more than 14% of the labour force employed in the sector. This structure of employment obviously reflects an environment with many natural areas where small-scale farming and related businesses still account for a considerable part of economic activity. Mountainous regions with a strong agricultural profile are concentrated in southern Europe (for instance in Bulgaria, Spain, or southern Italy) and Poland.

Industry also occupies a larger fraction of the population than on average in the EU, with mountainous regions of northern England, the Czech Sudetes, the Black Forest in Germany, and the Basque Country in Spain having a relatively high share of industry employment. Accordingly, the service sector represents a much lower share of employment compared to the EU-27 average (Table 3.2). Note that high proportions of employment in the service sector are found both in economically prosperous mountain areas (for instance French Northern Alps) and in less advanced areas where the provision of public service is the main activity.

Mountainous regions are not without advantages. Natural resources constitute major assets for the economies of these regions, which enjoy a particularly attractive environment (Table 3.3). The availability of renewable energy sources, with significant potential in terms of hydroelectric and solar energy, also reduces their energy dependency. At the same time, mountainous regions are more likely to be confronted with the challenges posed by climate change, reliance on a limited number of activities within each economic sector, pressure linked to tourism, and loss of biodiversity. This makes their productive base rich but fragile, requiring well-balanced development schemes that seek to foster sources of economic growth and, at the same time, contribute to the preservation of the natural capital.

Mountainous regions are generally served by good transport links, which is crucial for exploiting their potential as popular tourist destinations. However, the nature of the terrain significantly increases the costs of constructing and maintaining transport infrastructure and their quality significantly differs between northern Europe, central Europe, and southern Europe. Many mountainous regions have fair access to basic services although on average less than the EU and there is significant variation from one region to the other.

Mountainous regions show great diversity in economic performance. Some have an extremely low level of GDP per head, like Kardzhali in Bulgaria whose GDP per head is only 25% of the EU-27 average. At the other end of the spectrum, Heidelberg in Germany has a GDP per head of 78% above the Union's average. Wide disparities are also observed in terms of the unemployment rate, from 21.6% in Ilm-Kreis to 2.2% in Belluno.

Island regions

Almost 15 million people – 3% of the EU population – lived in island regions in 2006. Between 2000 and 2006, the European island population grew by around 0.85% per annum, which is slightly above the EU average demographic growth rate of 0.37% over the same period (Table 3.1). Island regions are divided uniformly among three major geographical areas, the Atlantic, the North and the Mediterranean. However, the distribution of the population among island regions is highly uneven. About 95% of the EU insular population concentrates on the Mediterranean islands and five islands or groups of islands – Sicily, Sardinia, the Balearic Islands, Crete and Corsica – account for 85% of this population, headed by Sicily with 5 million people.

Island regions generally have a lower level of GDP per head than the rest of the Union (in 2006, the average GDP per head for the island regions was about 79% of the EU average) and the unemployment rate was higher (with an average of 11.6% in 2007 compared to the EU average of 7.5%). Island regions however slowly converge towards the EU average. The GDP per head gap with the rest of the Union decreased by 3.3 percentage points between 2000 and 2006. The unemployment rate fell by 7 percentage points between 2000 and 2007, much faster than on average in the EU (Tables 3.1 and 3.2). This positive tendency is accompanied by a slight increase in the working age population as well.

The distribution of employment across sectors of economic activity follows the general European trends with a fall in agricultural employment and a rise in service employment. The latter is however much higher than in the rest of the EU, reflecting the importance of the tourism industry for island regions (Table 3.2). The service sector is central to the development of island regions, yet its weight in the activity of island regions induces an almost mono-activity structure of the productive base. This coupled with the relative scarcity of essential resources, such as drinking water, energy, raw materials, living space and arable land, as well as a certain degree of ecological fragility makes the economies of island regions relatively vulnerable.

Growth capacity in the island regions is usually limited due to the small size of the local markets and the problems of reaching larger mainland markets. This is particularly true for islands with less than 5 000 inhabitants which generally exhibit negative rates of population growth and a lower level of facilities and infrastructure. However, more populated islands also face problems related to high population densities. On the other hand, islands have very strong assets to build on: fishery resources, renewable energy sources, economic activities linked to tourism, strong cultural identity, natural and cultural heritage.

On average, access to basic services from island regions is more difficult than for other regions. Distances to health or education services are in general higher compared to the EU average. Access to passenger flights is also lower in island regions than on average in the EU, the daily number of passenger flights accessible within 90 minutes travel by road being 144 in island regions against 720 in the EU (Table 3.3).

The group of island regions is characterised by important diversities: high concentration of population on a few islands and a very large number of small islands; population from 50 people to 5 million; area from 1 km² to over 25 000 km² (Sicily); distance from the mainland from 1 km to 430 km (San Pietro and Sardinia). Economic performance is also extremely diverse. In 2006, the richest island region was Åland with a GDP per head corresponding to 147% of the EU-27 average while Medio Campidano in Sardinia had a level of GDP per head of 54% of the EU-27 average. The unemployment rate in 2007 was the lowest in Kıbrıs (3.9%) and the highest in La Réunion (25.2%).

Sparsely populated regions

In 2006, the total population of sparsely populated regions was about 3 million people, corresponding to 0.6% of the EU population. On average, the number of people living in those regions remained relatively stable between 2000 and 2006, the population marginally increasing annually by 0.19% (Table 3.1) or around 35 500 people. However, this picture is biased by the fact that French Guiana experienced a substantial increase in its population which grew by around 42 500. In the other regions, the population globally decreased by around 7 000 people, some regions recorded an increase in their population (e.g. Cuenca in Spain with an average annual demographic growth rate of 0.57%) while others experienced a decline in their population (e.g. Kainuu in Finland with an average annual demographic growth rate of -0.8%).

The GDP per head gap between sparsely populated regions and the EU-27 remained practically unchanged from 2000 to 2006. Sparsely populated regions remain close to the EU average with an average GDP per head corresponding to 96% of the EU average (Table 3.1). Sparsely populated regions have generally converged towards the EU average. In particular, except for French Guiana, all the regions which started with a GDP per head below the EU average in 2000 had reduced the gap by 2006.

With regard to unemployment, sparsely populated regions generally showed favourable trends. Overall, the unemployment rate is somewhat above the EU-27 average in 2007 but it has substantially decreased in recent years, falling by 2.4 percentage points between 2000 and 2007. The sectoral distribution of employment is almost identical to that of the EU-27, being slightly more oriented towards agriculture and less towards industry but with the same proportion of employment in the service sector (Table 3.2). However, the economies of sparsely populated regions generally feature a relatively strong dependence on primary industry, which is a concern with regard to their development perspective.

The situation strongly varies from region to region. In 2006, the Swedish Norrbottens län and Dalarnas län had levels of GDP per head 21% and 13% above the EU-27 average respectively. At the other end of the spectrum, French Guiana had a GDP per head corresponding to 49% of the EU average. Wide disparities also exist in terms of unemployment rates. In 2007, the unemployment rate was 21% in French Guiana while in the Spanish Teruel, it was only 4.4%.

Sparsely populated regions generally have to support extra costs for diseconomies of scale and for the lack of a critical mass, which in turn implies a lack of specialised business-related service sectors

(such as banking, lawyers, tax advisers, translation services). Sparsely populated regions also differ significantly from other EU regions in terms of their peripherality and the relatively more difficult access to basic services. Within the sparsely populated regions, the share of the population living more than 30 minutes from a hospital or more than 60 minutes from a university is more than five times the EU-27 average while passenger flights are 14 times less accessible (Table 3.3).

Outermost regions

The most significant factor explaining the specific situation of outermost regions is obviously their distance to economic or administrative centres and/or to the mainland. Distances to the capital of their state range from 1 000 km (Madeira) to 9 400 km (La Réunion) while distances to the mainland vary from 250 km (the Canaries) to 1 700 km (La Réunion) (Table A4.1).

Beyond such remoteness, other constraints are geo-morphological conditions (most of them are mountainous, some are archipelagos), seismic activity and extreme climatic conditions (storms). The small dimension of local markets, the dependency of the economy on a few products and their location in less developed parts of the world also constitute key challenges for the outermost regions.

In 2006, almost 4.3 million people lived in the EU outermost regions, representing 0.9% of the EU population (Table 3.1). The age structure of the outermost regions' population differs significantly from the average of the EU-27 regions. The proportion of young is generally higher, the largest difference being observed for French Guiana where 36% of the population is aged under 15 against an EU-27 average of 16.4% (Table A4.1).

The economies of outermost regions generally underperform compared to the EU average. In 2006, the highest level of GDP per head was in the Canaries but is only 92.6% of the EU-27 average. French Guiana had the lowest level with a GDP per head corresponding to 49% of the EU average. However, rates of economic growth are higher which indicates that these regions are slowly catching up with richer EU regions. Growth is particularly strong in French Guiana and in the Canaries with annual average growth rates of 5.6% and 3.4% respectively between 2000 and 2005 (Table A4.2).

The labour market remains a concern for all outermost regions. Employment rates are generally low and unemployment rates particularly high. In 2007, the unemployment rate was higher than 20% in all of the French outermost regions, with French Guiana and La Réunion recording unemployment rates of more than 25%, which is way above the EU-27 average rate of 7.5%. Except for the Portuguese outermost regions, the employment structure is significantly oriented towards the service sector which reflects the importance of the tourism industry for the outermost regions' economies. In 2006, the share of workers employed in the service sector reached 84.5% in La Réunion. Employment in the Azores and Madeira is more oriented towards agriculture and industry, the service sector representing slightly more than 60% of employment in these two regions, while agriculture still occupies more than 10% of workers (Table A4.3).

The following tables display the main indicators for the categories of regions in various economic, social and environmental dimensions.

Table 3.1 - Specific territories: demography and production

	2006 195 184 174 297 45 060 133 435	Demography		Production and growth					
Regions	Population, 1000 inh.	Average annual change in population, %	Share of EU population, %	GDP/head (PPS), index EU-27 = 100	Change in GDP/head index, p.p.				
	2006	2000-06	2006	2006	2000-06				
Border	195 184	0.26%	39.5%	88.3	0.1				
Internal	174 297	0.25%	35.3%	91.5	-0.8				
External	45 060	0.18%	9.1%	64	1.1				
Terrestrial	133 435	0.12%	27%	83.2	1				
Maritime	79017	0.52%	16%	99.2	-1.1				
Mountainous	39514	0.17%	8.0%	77.0	-1.3				
Islands	14870	0.85%	3.0%	79.2	3.3				
SPAs	3 023	0.19%	0.6%	96	0.5				
Outermost	4 287	1.65%	0.9%	79.5	12.7				
EU-27	493 925	0.37%	100.0%	100	-				

Source: Eurostat

Table 3.2 - Specific territories: labour market

			Lab	our market			
Regions	Annual average change in employment, %	Employment	by sector (% o	f total), 2004	Unemployment rate (%)	Change in unemployment rate p.p.	≥,
	2000-04	Agriculture	Industry	Services	2007	2000-07	
Border	-0.02%	9%	26%	65%	7.4%	-2.2	
Internal	-0.02%	8%	27%	66%	7.3%	-2	
External	-0.03%	20%	27%	54%	8.2%	-4.	.7
Terrestrial	-0.03%	10%	27%	63%	7.4%	-2.	.6
Maritime	0.03%	5%	23%	72%	7.7%	-1.	.9
Mountainous	0.20%	14%	30%	57%	8.2%	-3.6	
Islands	2.00%	7%	20%	74%	11.6%	-7	
SPAs	-0.01%	8%	24%	68%	8.2%	-2.4	
Outermost	:	:	:	:	14.8%	-13	
EU-27	0.20%	7%	25%	68%	7.5%	-1.7	

Source: Eurostat

Table 3.3 - Specific territories: accessibility and environment

		Accessibility		Environment				
Regions	Proximity hospital (a)	Proximity university (b)	Passenger flights (c)	Proximity to a natural area, EU-27=100 (d)	Particle concentration (e)			
	2001	2001	2007	2001/2004	2007-08			
Border	15%	11.6%	532	116	15.3			
Internal	13.1%	10.1%	586	115	15.4			
External	24.9%	24.0%	112	123	14.3			
Terrestrial	14.4%	11.6%	524	117	16.4			
Maritime	16.7%	11.5%	571	115	13.2			
Mountainous	21.3%	20.6%	288	161	12.3			
Islands	27.8%	36.8%	144	165	10.1			
SPAs	55%	38.7%	53	218	6.5			
Outermost	32.9%	30.3%	180	239	:			
EU-27	10.4%	7.4%	720	100	15.7			

⁽a) Share of population living more than a 30-minute journey from a hospital, %.

Source: Eurostat

⁽b) Share of population living more than a 60-minute journey from a university, %.

⁽c) Cumulated daily number of passenger flights available within a 90-minute journey by road.

⁽d) See Appendix 5 for details about the proximity to a natural area indicator.

⁽e) Population-weighted surface level concentration of PM10 particle matter ($\mu g/m^3$).

4. Within group disparities

On average, the performance of territories with specific geographical features is generally lower than the whole of the EU. This is particularly true for the groups of external border and outermost regions which combine low levels of GDP per head and high rates of unemployment. However, this hides large disparities within each group and the analysis of the various categories of regions highlights a wide variety of situations in each group.

Regions within categories strongly differ in terms of GDP per head and unemployment, possibly reflecting differences in the fundamentals of their economies. The following table summarises measures of regional disparities computed for each category of regions on the dimensions of GDP per head and unemployment rates.

Table 4.1 - Disparities within categories of specific disparities (GDP per head, 2006)

	Reg	ional disparity in	dex							
Regions	GDP/head (PPS), 2006									
	CV (a)	Max/Min (b)	Q3/Q1 (c)							
Border	43.0	15.0	1.8							
Internal	41.0	13.1	1.8							
External	47.6	7.0	2.5							
Terrestrial	47.8	15.0	2.3							
Maritime	32.5	6.6	1.4							
Mountainous	40.6	7.2	1.9							
Islands	20.3	2.7	1.4							
SPAs	19.1	2.5	1.3							
Outermost	20.4	2.4	1.3							
EU-27	50.0	33.7	1.7							

Source: Eurostat

- (a) CV = Coefficient of variation.
- (b) Max/Min = Ratio of the maximum to minimum values.
- (c) Q3/Q1 = Ratio of the third to the first quartiles.

Table 4.2 - Disparities within categories of specific disparities (unemployment, 2007)

Regions	Regional Unemployment rate, 2007										
Regions	CV (a)	Max/Min (b)	Q3/Q1 (c)								
Border	0.5	11.8	2.1								
Internal	0.6	11.8	2.0								
External	0.5	8.7	2.4								
Terrestrial	0.5	10.7	2.0								
Maritime	0.6	10.1	2.4								
Mountainous	0.5	10.0	2.2								
Islands	0.5	6.4	2.3								
SPAs	0.5	4.7	1.5								
Outermost	0.5	5.8	2.4								
EU-27	0.5	16.9	1.9								

Source: Eurostat

- (a) CV = Coefficient of variation.
- (b) Max/Min = Ratio of the maximum to minimum values.
- (c) Q3/Q1 = Ratio of the third to the first quartiles.

The extent of regional disparities within each category of specific territories is relatively large. In fact, except for the ratio of the maximum to the minimum values, which is extremely sensitive to outliers, disparity indices computed for specific territories are not significantly different from those obtained for the EU-27.

The following graphs give an idea of the spread of the distribution within the different categories of regions. For GDP per head and unemployment rates, the box plot displays the minimum value; the first, the second and the third quartiles; and the maximum value.⁸

Figure 1 - Distribution within categories of specific territories (GDP per head, 2006)

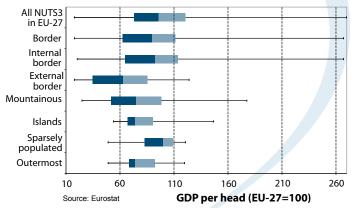
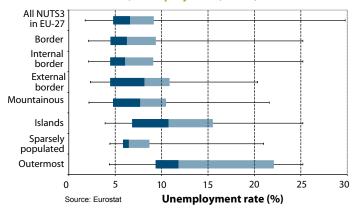


Figure 2 - Distribution within categories of specific territories (unemployment, 2007)



These figures confirm the wide variance within each group of regions. In general, this diversity is of an order of magnitude comparable to that of the EU-27. Categories of specific territories do not show performance levels that drastically differ from those of the EU as a whole. Possible exceptions are external border regions and outermost regions which more frequently host regions with particularly low levels of GDP per head and, in the case of outermost regions, extremely high rates of unemployment. However, even within these two categories, the situation varies substantially from region to region. It is therefore difficult to identify a category of territories with specific geographical features constituting what could be considered as a homogenous group of regions.

Such variance in the performance of regions partly stems from the fact that many regions are included in several categories of territories, as indicated by Table 2.2. About 85% of the regions in the groups of island, mountainous, sparsely populated and outermost

⁸ As already mentioned above, the statistical significance of these figures is limited for groups of regions with a small number of observations. Results for sparsely populated areas and outermost regions should therefore be interpreted with caution. Each quartile indeed includes only four to five observations for sparsely populated areas and three to four observations for outermost regions.

regions are also border regions. Around 34% of island regions and 11% of sparsely populated regions are also mountainous while 11% of mountainous regions are islands. This implies that in general each category of territories includes regions that are not only facing the challenges specific to that category but also those related to a set of other categories, the set changing from one region to another. For instance, in addition to the challenges linked to their insular territories, some island regions also face the difficulties linked to a mountainous environment while others have to cope with the difficulties specific to border regions.

Rather than suffering from one type of constraint specific to a particular territory, regions which are under-performing generally face an accumulation of disadvantages, i.e. a number of associated constraints which reinforce each other. However, as discussed above, the combination of constraints is not homogenous within each category. Similarly, a given combination of constraints can hamper the development of regions included in each group. For instance, low-density, peripherality and structural weakness are problems which are often found to co-exist in sparsely populated regions but also in some island and mountainous regions.

5. Conclusions

This paper presented an overview of the socio-economic performance of various categories of regions corresponding to territories with specific geographical features. Five categories of regions were considered: island, mountainous, sparsely populated, border and outermost regions.

These groups of regions have been examined using most of the indicators available at the NUTS3 level and covering dimensions related to population and demography, production, growth and structure of the economy, labour market performance, accessibility and access to services of general interest, as well as aspects related to the quality of the living environment. The analysis has also provided an assessment of the extent of disparities between the regions within each category.

The categories of territories considered generally include regions that perform relatively poorly compared to the EU-27 average. In particular, they often record lower levels of GDP per head and higher unemployment rates. By nature, they are also less accessible and on average services are more distant from their population.

However, each category includes a wide variety of situations. In particular, the extent of disparities within categories often compares with that observed when considering the EU-27 as a whole. Most of these categories can therefore not be considered as groups where development potential is systematically lower than the EU average. Although regions in a given category may share the difficulties tied to their specific geographical feature, they do not present the same socioeconomic profile and do not face the same development constraints. This reflects the wide variety of regional fundamentals and contexts found within each category.

For instance, most mountainous regions have to address the challenges related to the preservation of a unique and fragile eco-system. However, this category includes regions like Kardzhali in Bulgaria which is in a situation of under-development and Heidelberg in Germany which is a high performing region located in one of the world's leading economies. Both can progress on

their own development path but the needs to achieve such progress are unlikely to be the same.

Within each category of territories, development is generally affected by a complex set of constraints, which are often not all specific to the type of territory included in that category. For example, island regions may all be affected by their insular nature but at the same time, this group includes a region like Malta which must address the problems of a capital city region with a very high density of population and a region like Corse-du-Sud which faces the challenges of a mountainous and mostly rural economy.

The main implication of such observations is that the categories of specific territories are far from constituting homogenous groups of regions. Moreover, for regions facing difficulties, the disadvantage syndrome is generally made up of several types of constraints which are not systematically the same within a given category of territory. It follows that it is difficult to use such categories as a reference for setting up specific regional development programmes. In fact, such an approach is likely to be ineffective. The wide range of differing situations and performances within each category instead calls for a case by case approach where policy interventions are specific to the local context rather than to a given type of territory.

Appendix 1 – Definition and identification of specific territories

Mountainous regions

a) Topographic definition

The study on mountain areas in Europe (NORDREGIO, 2004⁹) defines topographic mountain areas using the following criteria¹⁰:

- Above 2 500 m, all areas are considered as mountain areas;
- Between 1 500 m and 2 500 m, only areas with a slope above
 2° within a 3 km radius are considered mountainous;
- Between 1 000 m and 1 500 m, areas had to justify one out of two sets of criteria to be considered mountainous. The first of these is that the slope within a 3 km radius should be above 5°. If the slope is less steep than that, the area can still be considered mountainous if altitudes encountered within a radius of 7 km vary by at least 300 metres. If neither of these two sets of criteria is met, the area is considered non-mountainous;
- Between 300 m and 1 000 m, only the latter of the two previous sets of criteria is applied. This means that only areas where altitudes encountered within a radius of 7 km vary by at least 300 metres are considered mountainous;
- Below 300 m, the objective was to identify areas with strong local contrasts in the relief, such as Scottish and Norwegian fjords and Mediterranean coastal mountain areas. Selecting areas according to the standard deviation of elevations in the close neighbourhood of each appeared to be the best approach to include these types of landscapes. For each point of the digital elevation model, the standard deviation with the 8 cardinal points surrounding it (North North-East East South-East South South-West West North-West) was calculated. If this standard deviation is greater than 50 metres, the landscape is sufficiently rough to be considered as mountainous despite the low altitude.

The definition of NORDREGIO also accounts for climatic constraints by considering a temperature contrast index of 0.25. The addition of the temperature contrast index results in the inclusion of the Nordic areas of Kainuu, Lappi and Norrbottens län. However, since these regions have no topographic mountainous characteristics as such and are in fact included in the group of sparsely populated regions, this criterion has not been retained in the context of this paper.

In order to create more continuous areas, and considering that topographic constraints play a greater role when they extend over a certain area, isolated mountainous areas less than 5 km² in area are not considered. Similarly, non-mountainous areas within mountain massifs are included.

b) Mountain municipalities

To allow the use of socio-economic data on mountain areas, the study has defined a set of mountain municipalities, i.e. those municipalities with a predominantly mountainous surface.

This approach is especially useful when using census-based local statistical data. Unfortunately, at local level, data are not systematically available for more recent years. Consequently, an updated analysis of mountainous regions must rely on data available at NUTS3 regional level.

c) Mountainous regions at NUTS3 level

It has been demonstrated that a classification of NUTS3 according to the share of their surface within topographic mountain areas is unsatisfactory. Alternatively, NUTS3 regions can be categorised according to the share of their population living in topographic mountain areas.

The categorisation of NUTS3 regions into mountainous regions is based on the following criteria:

- regions with at least 75% of their population living in mountain areas (can be considered as predominantly mountainous);
- regions with between 50 and 75% of their population in mountain areas;
- regions with between 25 and 50% of their population in mountain areas;
- other regions (less than 25% of population in mountain areas).

Socio-economic data could be aggregated for each of these categories, analysing the differences and similarities between them. To assess to what extent this categorisation covers the topographic mountain areas, a poster map compares the topographic zoning with the result of the NUTS3 classification. Not surprisingly, the bigger mountain massifs are rather well represented, but a number of smaller mountain areas are not taken into account.

Island regions

Islands are defined according to the criteria used in the Eurostat publication *'Portrait of the Islands*ⁿ¹ and in the DG REGIO study on island regions 2003-04¹²:

- minimum surface area = 1 km²;
- minimum distance between the island and the mainland
 1 km;
- resident population >= 50 inhabitants;
- no fixed link (bridge, tunnel, dyke) between the island and the mainland;
- no Member State capital on the island.

Many islands, corresponding to these criteria, are part of NUTS3 regions, or even part of local administrative units (LAU2). Consequently, an update of statistical data on these small territories would require the use of detailed census data. The next census round being scheduled for 2011, a quantitative analysis of island territories before that date will have to rely on some approximation of insular territories, in terms of NUTS regions.

⁹ NORDREGIO, Mountain Areas in Europe: Analysis of mountain areas in EU member states, acceding and other European countries, European Commission contract No 2002. CE.16.0.AT.136, Final report, 2004.

¹⁰ The study used slightly different topographical criteria from the UNEP-WCMC 2000 global study (see http://www.unep-wcmc.org/habitats/mountains/homepage.htm) within five elevation belts, using the principle that the threshold for rough topography increases as the altitude decreases.

¹¹ EUROSTAT, Portrait of Islands, European Commission, 1994.

¹² Planistat, Analysis of the island regions and outermost regions of the European Union, Final report of the study conducted for the European Commission, 2006.

The paper therefore uses the NUTS3 regions containing islands corresponding to the above definition, and estimates the share of total regional population living on the islands. This yields a classification of NUTS3 regions according to the degree of 'insularity' of their population:

- regions with less than 50% insular population;
- regions with insular population between 50% and 100%;
- regions with 100% insular population.

In practice, the category between 50 and 100% does not occur.

Regions that are completely insular represent three cases:

- the NUTS3 region is one island (e.g. Bornholm);
- the NUTS3 region is part of a bigger island (often a NUTS2 insular region, e.g. Sardinia, Sicily);
- the NUTS3 region is an archipelago (e.g. Greek archipelago regions, Åland).

The classification of NUTS3 regions identified as island regions is based on the NUTS breakdown of 1 January 2007. It will be updated on the basis of the new NUTS breakdown (1 January 2008) as soon as population figures for the new NUTS regions become available. Nevertheless, the new NUTS breakdown should not alter substantially the resulting list of island regions. The main change will be the inclusion of separate NUTS3 regions for specific islands in the Balearic Islands and Canaries.

The list calls for a few comments:

- Total insular regions cover different types of islands (bigger ones, archipelagos of smaller islands, etc.);
- It does not seem relevant to take into account the NUTS regions with less than 50% insular population. Usually, the estimated percentage of insular population does not exceed 20%. Yet, by excluding these regions, a substantial number of smaller islands is also excluded from the analysis. This seems unavoidable given the data availability constraints;
- The criteria excluding islands with a capital city was introduced in an EU-15 context. In practice, it excluded Ireland and the UK (before the construction of the Channel tunnel). For analysis purposes, it is however appropriate to include Malta (NUTS3 = MT001) and Cyprus as insular regions. This corresponds to the definition provided by Article 52 of the Structural Fund and Cohesion Fund regulation¹³.

¹³ Council Regulation (EC) No 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund.

Appendix 2 – List of NUTS3 regions included in the various categories of specific territories

		I	Bord	er re	gion	5	S		7	ns
							gion	us	ulate	egio
		All	Internal	External	Terrestrial	Maritime	Mountain regions	Island regions	Sparsely populated	Outermost regions
BE211	Arr. Antwerpen	1	1	0	1	0	0	0	0	0
BE213	Arr. Turnhout	1	1	0	1	0	0	0	0	0
BE221	Arr. Hasselt	1	1	0	1	0	0	0	0	0
BE222	Arr. Maaseik	1	1	0	1	0	0	0	0	0
BE223	Arr. Tongeren	1	1	0	1	0	0	0	0	0
BE233	Arr. Eeklo	1	1	0	1	0	0	0	0	0
BE234	Arr. Gent	1	1	0	1	0	0	0	0	0
BE236	Arr. Sint-Niklaas	1	1	0	1	0	0	0	0	0
BE251	Arr. Brugge	1	1	0	1	1	0	0	0	0
BE253	Arr. leper	1	1	0	1	0	0	0	0	0
BE254 BE255	Arr. Kortrijk Arr. Oostende	1	1	0	0	0	0	0	0	0
BE258	Arr. Veurne	1	1	0	1	1	0	0	0	0
BE321	Arr. Ath	1	1	0	1	0	0	0	0	0
BE323	Arr. Mons	1	1	0	1	0	0	0	0	0
BE324	Arr. Mouscron	1	1	0	1	0	0	0	0	0
BE326	Arr. Thuin	1	1	0	1	0	0	0	0	0
BE327	Arr. Tournai	1	1	0	1	0	0	0	0	0
BE332	Arr. Liège	1	1	0	1	0	0	0	0	0
BE335	Arr. Verviers - communes francophones	1	1	0	1	0	0	0	0	0
BE341	Arr. Arlon	1	1	0	1	0	0	0	0	0
BE342	Arr. Bastogne	1	1	0	1	0	0	0	0	0
BE344	Arr. Neufchâteau	1	1	0	1	0	0	0	0	0
BE345	Arr. Virton	1	1	0	1	0	0	0	0	0
BE351	Arr. Dinant	1	1	0	1	0	0	0	0	0
BE353	Arr. Philippeville	- 1	1	0	- 1	0	0	0	0	0
BG311	Vidin	1	1	1	1	0	0	0	0	0
BG312	Montana	1	1	1	1	0	0	0	0	0
BG313	Vratsa	1	1	0	1	0	0	0	0	0
BG314	Pleven	1	1	0	1	0	0	0	0	0
BG315	Lovech	0	0	0	0	0	1	0	0	0
BG321	Veliko Tarnovo	1	1	0	1	0	0	0	0	0
BG322	Gabrovo	0	0	0	0	0	1	0	0	0
BG323 BG325	Ruse Silistra	1	1	0	1	0	0	0	0	0
BG323	Dobrich	1	1	0	1	0	0	0	0	0
BG332	Burgas	1	0	1	1	0	0	0	0	0
BG343	Yambol	1	0	1	1	0	0	0	0	0
BG412	Sofia	1	0	1	1	0	1	0	0	0
BG413	Blagoevgrad	1	1	1	1	0	1	0	0	0
BG414	Pernik	1	0	1	1	0	1	0	0	0
BG415	Kyustendil	1	0	1	1	0	1	0	0	0
BG422	Haskovo	1	1	1	1	0	0	0	0	0
BG424	Smolyan	1	1	0	1	0	1	0	0	0
BG425	Kardzhali	1	1	0	1	0	1	0	0	0
CZ031	Jihočeský kraj	1	1	0	1	0	0	0	0	0
CZ032	Plzeňský kraj	1	1	0	1	0	0	0	0	0
CZ041	Karlovarský kraj	1	1	0	1	0	1	0	0	0
CZ042	Ústecký kraj	1	1	0	1	0	0	0	0	0
CZ051	Liberecký kraj	1	1	0	1	0	1	0	0	0
CZ052	Královéhradecký kraj	1	1	0	1	0	0	0	0	0
CZ053	Pardubický kraj	1	1	0	1	0	0	0	0	0
CZ063	Vysočina	1	1	0	1	0	0	0	0	0
CZ064	Jihomoravský kraj	1	1	0	1	0	0	0	0	0
CZ071	Olomoucký kraj	1	1	0	1	0	0	0	0	0
CZ072	Zlínský kraj	1	1	0	1	0	0	0	0	0

			ı	Bord	er re	gions	5	SI		D.	ns
			All	Internal	External	Terrestrial	Maritime	Mountain regions	Island regions	Sparsely populated	Outermost regions
- [CZ080	Moravskoslezský kraj	1	1	0	1	0	0	0	0	0
1	DK011	Byen København	1	1	0	1	1	0	0	0	0
	DK012	Københavns omegn	1	1	0	1	1	0	0	0	0
	DK013	Nordsjælland	1	1	0	0	1	0	0	0	0
	DK014	Bornholm	1	1	0	0	1	0	1	0	0
]	DK021	Østsjælland	1	1	0	0	1	0	0	0	0
-	DK022	Vest- og Sydsjælland	1	1	0	0	1	0	0	0	0
	DK031	Fyn	1	1	0	0	1	0	0	0	0
-	DK032	Sydjylland	1	1	0	1	1	0	0	0	0
-	DK041 DK042	Vestjylland Østjylland	1	1	0	0	1	0	0	0	0
1 1	DK050	Nordjylland	1	1	0	0	1	0	0	0	0
1	DE114	Göppingen	0	0	0	0	0	1	0	0	0
	DE121	Baden-Baden, Stadtkreis	1	1	0	1	0	0	0	0	0
	DE122	Karlsruhe, Stadtkreis	1	1	0	1	0	0	0	0	0
1	DE123	Karlsruhe, Landkreis	1	1	0	1	0	0	0	0	0
]	DE124	Rastatt	1	1	0	1	0	0	0	0	0
	DE125	Heidelberg, Stadtkreis	0	0	0	0	0	1	0	0	0
1	DE12A	Calw	0	0	0	0	0	1	0	0	0
	DE12C DE131	Freudenstadt Freiburg im Breisgau, Stadtkreis	1	1	0	1	0	0	0	0	0
	DE132	Breisgau- Hochschwarzwald	1	1	0	1	0	0	0	0	0
[DE133	Emmendingen	1	1	0	1	0	0	0	0	0
]	DE134	Ortenaukreis	1	1	0	1	0	0	0	0	0
-	DE136	Schwarzwald- Baar-Kreis	1	1	0	1	0	0	0	0	0
1	DE137 DE138	Tuttlingen Konstanz	0	0	0	0	0	0	0	0	0
] }	DE139	Lörrach	1	1	0	1	0	1	0	0	0
	DE13A	Waldshut	1	1	0	1	0	1	0	0	0
-	DE141	Reutlingen	0	0	0	0	0	1	0	0	0
- [DE143	Zollernalbkreis	0	0	0	0	0	1	0	0	0
-	DE147	Bodenseekreis	1	1	0	1	0	0	0	0	0
	DE213	Rosenheim, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
-	DE214	Altötting	1	1	0	1	0	0	0	0	0
	DE215 DE216	Berchtesgadener Land Bad Tölz-	1	1	0	1	0	0	0	0	0
-		Wolfratshausen									
	DE21D	Garmisch- Partenkirchen	1	1	0	1	0	1	0	0	0
4	DE21F	Miesbach	1	1	0	1	0	1	0	0	0
	DE21K	Rosenheim, Landkreis	1	1	0	1	0	0	0	0	0
	DE21M DE222	Traunstein Passau, Kreisfreie	1	1	0	1	0	0	0	0	0
]	DE222 DE224	Stadt Deggendorf	0	0	0	0	0	1	0	0	0
	DE224	Freyung-Grafenau	1	1	0	1	0	1	0	0	0
	DE228	Passau, Landkreis	1	1	0	1	0	0	0	0	0
	DE229	Regen	1	1	0	1	0	1	0	0	0
] [DE22A	Rottal-Inn	1	1	0	1	0	0	0	0	0

			Bord	er re	gion	S	SU		ba	suc
		All	Internal	External	Terrestrial	Maritime	Mountain regions	Island regions	Sparsely populated	Outermost regions
DE233	Weiden i. d. Opf, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DE235	Cham	1	1	0	1	0	0	0	0	0
DE237	Neustadt a. d. Waldnaab	1	1	0	1	0	0	0	0	0
DE239	Schwandorf	1	1	0	1	0	0	0	0	0
DE23A	Tirschenreuth	1	1	0	1	0	0	0	0	0
DE244	Hof, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DE249	Hof, Landkreis	1	1	0	1	0	0	0	0	0
DE24A	Kronach	0	0	0	0	0	1	0	0	0
DE24D	Wunsiedel i. Fichtelgebirge	1	1	0	1	0	0	0	0	0
DE272	Kaufbeuren, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DE273	Kempten (Allgäu), Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DE27A	Lindau (Bodensee)	1	1	0	1	0	1	0	0	0
DE27B	Ostallgäu	1	1	0	1	0	0	0	0	0
DE27E	Oberallgäu	1	1	0	1	0	1	0	0	0
DE411	Frankfurt (Oder), Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DE412	Barnim	1	1	0	1	0	0	0	0	0
DE413	Märkisch- Oderland	1	1	0	1	0	0	0	0	0
DE415	Oder-Spree	1	1	0	1	0	0	0	0	0
DE418	Uckermark	1	1	0	1	0	0	0	0	0
DE422	Cottbus, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DE429	Spree-Neiße	1	1	0	1	0	0	0	0	0
DE71B	Odenwaldkreis	0	0	0	0	0	1	0	0	0
DE801	Greifswald, Kreisfreie Stadt	1	1	0	1	1	0	0	0	0
DE803	Rostock, Kreisfreie Stadt	1	1	0	0	1	0	0	0	0
DE805	Stralsund, Kreisfreie Stadt	1	1	0	0	1	0	0	0	0
DE806	Wismar, Kreisfreie Stadt	1	1	0	0	1	0	0	0	0
DE807	Bad Doberan	1	1	0	0	1	0	0	0	0
DE80D	Nordvorpommern	1	1	0	0	1	0	0	0	0
DE80E	Nordwest- mecklenburg	1	1	0	0	1	0	0	0	0
DE80F	Ostvorpommern	1	1	0	1	1	0	0	0	0
DE80H	Rügen	1	1	0	0	1	0	0	0	0
DE80I	Uecker-Randow	1	1	0	1	0	0	0	0	0
DE942	Emden, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DE947	Aurich	1	1	0	1	0	0	0	0	0
DE949	Emsland	1	1	0	1	0	0	0	0	0
DE94B	Grafschaft Bentheim	1	1	0	1	0	0	0	0	0
DE94C	Leer	1	1	0	1	0	0	0	0	0
DEA14	Krefeld, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DEA15	Mönchengladbach, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DEA1B	Kleve	1	1	0	1	0	0	0	0	0
DEA1E	Viersen	1	1	0	1	0	0	0	0	0
DEA1F	Wesel	1	1	0	1	0	0	0	0	0
DEA21	Aachen, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DEA25	Aachen, Kreis	1	1	0	1	0	0	0	0	0
DEA26	Düren	1	1	0	1	0	0	0	0	0
DEA28	Euskirchen	1	1	0	1	0	0	0	0	0
DEA29	Heinsberg	1	1	0	1	0	0	0	0	0
DEA34 DEA37	Borken Steinfurt	1	1	0	1	0	0	0	0	0
DEA3/	Birkenfeld	0	0	0	0	0	1	0	0	0

		ı	Bord	er re	gion	S	SE		ᇢ	ns
		All	Internal	External	Terrestrial	Maritime	Mountain regions	Island regions	Sparsely populated	Outermost regions
DEB16	Cochem-Zell	0	0	0	0	0	1	0	0	0
DEB19	Rhein-Hunsrück- Kreis	0	0	0	0	0	1	0	0	0
DEB1A	Rhein-Lahn-Kreis	0	0	0	0	0	1	0	0	0
DEB21	Trier, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DEB22	Bernkastel- Wittlich	0	0	0	0	0	1	0	0	0
DEB23	Bitburg-Prüm	1	1	0	1	0	0	0	0	0
DEB24	Daun	1	1	0	1	0	0	0	0	0
DEB25	Trier-Saarburg	1	1	0	1	0	0	0	0	0
DEB33	Landau in der Pfalz, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DEB37	Pirmasens, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DEB3A	Zweibrücken, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DEB3E	Germersheim	1	1	0	1	0	0	0	0	0
DEB3H	Südliche Weinstraße	1	1	0	1	0	0	0	0	0
DEB3K	Südwestpfalz	1	1	0	1	0	0	0	0	0
DEC01	Stadtverband Saarbrücken	1	1	0	1	0	0	0	0	0
DEC02	Merzig-Wadern	1	1	0	1	0	0	0	0	0
DEC04 DEC05	Saarlouis Saarpfalz-Kreis	1	1	0	1	0	0	0	0	0
DED12	Plauen, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DED14	Annaberg	1	1	0	1	0	1	0	0	0
DED16	Freiberg	1	1	0	1	0	0	0	0	0
DED17	Vogtlandkreis	1	1	0	1	0	0	0	0	0
DED18	Mittlerer Erzgebirgskreis	1	1	0	1	0	1	0	0	0
DED1B	Aue- Schwarzenberg	1	1	0	1	0	1	0	0	0
DED22	Görlitz, Kreisfreie Stadt	1	1	0	1	0	0	0	0	0
DED24	Bautzen	1	1	0	1	0	0	0	0	0
DED26	Niederschlesischer Oberlausitzkreis	1	1	0	1	0	0	0	0	0
DED28 DED29	Löbau-Zittau Sächsische	1	1	0	1	0	0	0	0	0
	Schweiz									
DED2A DEF01	Weißeritzkreis	1	1	0	1	0	0	0	0	0
	Flensburg, Kreisfreie Stadt	1	1	0	0	0	0	0	0	0
DEF02	Kiel, Kreisfreie Stadt		1	0				0		0
DEF03	Lübeck, Kreisfreie Stadt	1	1	0	0	1	0	0	0	0
DEF07 DEF08	Nordfriesland Ostholstein	1	1	0	0	0	0	0	0	0
DEF08	Plön	1	1	0	0	1	0	0	0	0
DEF0B	Rendsburg- Eckernförde	1	1	0	0	1	0	0	0	0
DEF0C	Schleswig- Flensburg	1	1	0	1	0	0	0	0	0
DEG03	Jena, Kreisfreie Stadt	0	0	0	0	0	1	0	0	0
DEG04	Suhl, Kreisfreie Stadt	0	0	0	0	0	1	0	0	0
DEG0B	Schmalkalden- Meiningen	0	0	0	0	0	1	0	0	0
DEG0E	Hildburghausen	0	0	0	0	0	1	0	0	0
DEG0F	Ilm-Kreis	0	0	0	0	0	1	0	0	0
DEG0H DEG0I	Sonneberg Saalfeld- Rudolstadt	0	0	0	0	0	1	0	0	0
EE001 EE004	Põhja-Eesti Lääne-Eesti	1	1	0	0	1	0	0	0	0

		Border regions					ns		ed	suc
		All	Internal	External	Terrestrial	Maritime	Mountain regions	Island regions	Sparsely populated	Outermost regions
EE006	Kesk-Eesti	1	1	1	0	1	0	0	0	0
EE007 EE008	Kirde-Eesti Lõuna-Eesti	1	1	1	1	0	0	0	0	0
IE011	Border	1	1	0	1	1	0	0	0	0
IE021	Dublin	1	1	0	0	1	0	0	0	0
IE022	Mid-East	1	1	0	0	1	0	0	0	0
IE024	South-East (IRL)	1	1	0	0	1	0	0	0	0
GR111	Evros	1	1	1	1	1	0	0	0	0
GR112	Xanthi	1	1	1	1	1	0	0	0	0
GR113	Rodopi	1	1	1	1	1	0	0	0	0
GR114	Drama	1	1	0	1	0	0	0	0	0
GR115	Kavala	1	0	1	1	1	1	0	0	0
GR122	Thessaloniki	1	1	0	1	0	0	0	0	0
GR123 GR124	Kilkis Pella	1	0	1	1	0	0	0	0	0
GR124 GR126	Serres	1	1	1	1	0	0	0	0	0
GR127	Chalkidiki	1	0	1	0	1	0	0	0	0
GR131	Grevena	0	0	0	0	0	1	0	0	0
GR132	Kastoria	1	0	1	1	0	1	0	0	0
GR133	Kozani	0	0	0	0	0	1	0	0	0
GR134	Florina	1	0	1	1	0	1	0	0	0
GR143	Magnisia	1	0	1	0	1	0	0	0	0
GR212	Thesprotia	1	1	1	1	1	1	0	0	0
GR213	Ioannina	1	1	1	1	1	1	0	0	0
GR214	Preveza	1	1	0	1	1	0	0	0	0
GR221	Zakynthos	1	1	0	0	1	0	1	0	0
GR222 GR223	Kerkyra Kefallinia	1	1	0	0	1	0	1	0	0
GR224	Lefkada	1	1	0	0	1	1	0	0	0
GR231	Aitoloakarnania	1	1	0	0	1	1	0	0	0
GR232	Achaia	1	1	0	0	1	0	0	0	0
GR242	Evvoia	1	0	1	0	1	0	0	0	0
GR243	Evrytania	0	0	0	0	0	1	0	1	0
GR244	Fthiotida	0	0	0	0	0	1	0	0	0
GR245	Fokida	0	0	0	0	0	1	0	0	0
GR252	Arkadia	0	0	0	0	0	1	0	0	0
GR411	Lesvos	1	1	1	0	1	0	1	0	0
GR412	Samos	1	1	1	0	1	1	1	0	0
GR413	Chios	1	1	1	0	1	0	1	0	0
GR421	Dodekanisos	1	1	1	0	1	0	1	0	0
GR422 GR431	Kyklades Irakleio	1	0	0	0	1	0	1	0	0
GR431 GR432	Lasithi	1	1	0	0	1	1	1	0	0
GR433	Rethymni	1	1	0	0	1	1	1	0	0
GR434	Chania	1	1	0	0	1	0	1	0	0
ES112	Lugo	0	0	0	0	0	1	0	0	0
ES113	Ourense	1	1	0	1	0	1	0	0	0
ES114	Pontevedra	1	1	0	1	0	0	0	0	0
ES211	Álava	0	0	0	0	0	1	0	0	0
ES212	Guipúzcoa	1	1	0	1	0	0	0	0	0
ES220	Navarra	1	1	0	1	0	1	0	0	0
ES241	Huesca	1	1	0	1	0	0	0	0	0
ES242	Teruel	0	0	0	0	0	1	0	1	0
ES411	Ávila	0	0	0	0	0	1	0	0	0
ES415 ES417	Salamanca Soria	0	0	0	0	0	0	0	0	0
ES417 ES419	Zamora	1	1	0	1	0	0	0	0	0
ES423	Cuenca	0	0	0	0	0	0	0	1	0
ES424	Guadalajara	0	0	0	0	0	1	0	0	0
ES431	Badajoz	1	1	0	1	0	0	0	0	0
ES432	Cáceres	1	1	0	1	0	0	0	0	0
ES512	Girona	1	1	0	1	0	0	0	0	0
ES513	Lleida	1	1	0	1	0	0	0	0	0
ES531	Eivissa y Formentera	0	0	0	0	0	0	1	0	0

		ı	Bord	er re	gion	S	SI		Ď	ns
		All	Internal	External	Terrestrial	Maritime	Mountain regions	Island regions	Sparsely populated	Outermost regions
ES532	Mallorca	0	0	0	0	0	0	1	0	0
ES533	Menorca	0	0	0	0	0	0	1	0	0
ES611 ES612	Almería Cádiz	1	0	1	0	1	0	0	0	0
ES614	Granada	1	0	1	0	1	1	0	0	0
ES615	Huelva	1	1	1	1	1	0	0	0	0
ES616	Jaén	0	0	0	0	0	1	0	0	0
ES617	Málaga	1	0	1	0	1	0	0	0	0
ES630	Ceuta	1	0	1	1	0	0	0	0	0
ES640	Melilla	1	0	1	1	0	0	0	0	0
ES703	El Hierro	0	0	0	0	0	1	1	0	1
ES704	Fuerteventura	1	0	1	0	1	0	1	0	1
ES705 ES706	Gran Canaria La Gomera	0	0	0	0	0	0	1	0	1
ES707	La Palma	0	0	0	0	0	1	1	0	1
ES708	Lanzarote	1	0	1	0	1	0	1	0	1
ES709	Tenerife	0	0	0	0	0	1	1	0	1
FR211	Ardennes	1	1	0	1	0	0	0	0	0
FR221	Aisne	1	1	0	1	0	0	0	0	0
FR223	Somme	1	1	0	0	1	0	0	0	0
FR232	Seine-Maritime	1	1	0	0	1	0	0	0	0
FR251	Calvados	1	1	0	0	1	0	0	0	0
FR252	Manche	1	1	0	0	1	0	0	0	0
FR301	Nord	1	1	0	1	1	0	0	0	0
FR302 FR411	Pas-de-Calais Meurthe-et-	1	1	0	1	0	0	0	0	0
111411	Moselle		'	U		U	"	"		U
FR412	Meuse	1	1	0	1	0	0	0	0	0
FR413	Moselle	1	1	0	1	0	0	0	0	0
FR421	Bas-Rhin	1	1	0	1	0	0	0	0	0
FR422	Haut-Rhin	1	1	0	1	0	0	0	0	0
FR431	Doubs	1	1	0	1	0	0	0	0	0
FR432 FR434	Jura Territoire de Belfort	1	1	0	1	0	0	0	0	0
FR521	Côtes-d'Armor	1	1	0	0	1	0	0	0	0
FR522	Finistère	1	1	0	0	1	0	0	0	0
FR523	Ille-et-Vilaine	1	1	0	0	1	0	0	0	0
FR615	Pyrénées- Atlantiques	1	1	0	1	0	0	0	0	0
FR621	Ariège	1	1	0	1	0	1	0	0	0
FR622	Aveyron	0	0	0	0	0	1	0	0	0
FR623	Haute-Garonne	1	1	0	1	0	0	0	0	0
FR626 FR711	Hautes-Pyrénées Ain	1	1	0	1	0	0	0	0	0
FR712	Ardèche	0	0	0	0	0	1	0	0	0
FR715	Loire	0	0	0	0	0	1	0	0	0
FR717	Savoie	1	1	0	1	0	1	0	0	0
FR718	Haute-Savoie	1	1	0	1	0	1	0	0	0
FR722	Cantal	0	0	0	0	0	1	0	0	0
FR723	Haute-Loire	0	0	0	0	0	1	0	0	0
FR724	Puy-de-Dôme	0	0	0	0	0	1	0	0	0
FR814	Lozère	0	0	0	0	0	1	0	0	0
FR815	Pyrénées- Orientales	1	1	0	1	0	0	0	0	0
FR821	Alpes-de-Haute- Provence	1	1	0	1	0	1	0	0	0
FR822	Hautes-Alpes	1	1	0	1	0	1	0	0	0
FR823	Alpes-Maritimes	1	1	0	1	0	0	0	0	0
FR831	Corse-du-Sud	1	1	0	0	1	1	1	0	0
FR832	Haute-Corse	1	1	0	0	1	1	1	0	0
FR910	Guadeloupe	1	1	0	0	1	0	1	0	1
FR920 FR930	Martinique Guyane	1	1	0	0	0	0	0	0 1	1
FR940	Réunion	1	1	0	0	1	0	1	0	1
ITC11	Torino	1	1	0	1	0	0	0	0	0

		Border regions					SL		pa	suc
		All	Internal	External	Terrestrial	Maritime	Mountain regions	Island regions	Sparsely populated	Outermost regions
ITC12	Vercelli	1	1	0	1	0	0	0	0	0
ITC13	Biella	1	1	0	1	0	1	0	0	0
ITC14	Verbano-Cusio- Ossola	1	1	0	1	0	1	0	0	0
ITC15	Novara	1	1	0	1	0	0	0	0	0
ITC16	Cuneo	1	1	0	1	0	0	0	0	0
ITC20	Valle d'Aosta/ Vallée d'Aoste	1	1	0	1	0	1	0	0	0
ITC31	Imperia	1	1	0	1	1	0	0	0	0
ITC32	Savona	1	1	0	0	1	0	0	0	0
ITC33	Genova La Spezia	1	1	0	0	1	0	0	0	0
ITC41	Varese	1	1	0	1	0	0	0	0	0
ITC42	Como	1	1	0	1	0	0	0	0	0
ITC43	Lecco	1	1	0	1	0	1	0	0	0
ITC44	Sondrio	1	1	0	1	0	1	0	0	0
ITD10	Bolzano-Bozen	1	1	0	1	0	1	0	0	0
ITD20	Trento	0	0	0	0	0	1	0	0	0
ITD33	Belluno	1	1	0	1	0	1	0	0	0
ITD35	Venezia Padova	1	1	1	0	1	0	0	0	0
ITD37	Rovigo	1	1	1	0	1	0	0	0	0
ITD42	Udine	1	1	1	1	0	0	0	0	0
ITD43	Gorizia	1	1	1	1	0	0	0	0	0
ITD44	Trieste	1	1	1	1	0	0	0	0	0
ITD56	Ferrara	1	1	1	0	1	0	0	0	0
ITD57	Ravenna	1	1	1	0	1	0	0	0	0
ITD58	Forlì-Cesena	1	0	1	0	1	0	0	0	0
ITD59	Rimini	1	0	1	0	1	0	0	0	0
ITE11 ITE12	Massa-Carrara	1	1	0	0	1	0	0	0	0
ITE12	Lucca	1	1	0	0	1	0	0	0	0
ITE17	Pisa	1	1	0	0	1	0	0	0	0
ITE1A	Grosseto	1	1	0	0	1	0	0	0	0
ITE31	Pesaro e Urbino	1	0	1	0	1	0	0	0	0
ITE32	Ancona	1	0	1	0	- 1	0	0	0	0
ITE33	Macerata	1	0	1	0	1	0	0	0	0
ITE34	Ascoli Piceno	1	0	1	0	1	0	0	0	0
ITE42 ITF11	Rieti L'Aquila	0	0	0	0	0	1	0	0	0
ITF12	Teramo	1	0	1	0	1	0	0	0	0
ITF13	Pescara	1	0	1	0	1	0	0	0	0
ITF14	Chieti	1	0	1	0	1	0	0	0	0
ITF21	Isernia	0	0	0	0	0	1	0	0	0
ITF22	Campobasso	1	0	1	0	1	1	0	0	0
ITF32	Benevento	0	0	0	0	0	1	0	0	0
ITF34 ITF35	Avellino Salerno	0	0	0	0	0	1	0	0	0
ITF41	Foggia	1	0	1	0	1	0	0	0	0
ITF41	Bari	1	1	1	0	1	0	0	0	0
ITF44	Brindisi	1	1	1	0	1	0	0	0	0
ITF45	Lecce	1	1	1	0	1	0	0	0	0
ITF51	Potenza	0	0	0	0	0	1	0	0	0
ITF61	Cosenza	0	0	0	0	0	1	0	0	0
ITF63	Catanzaro	0	0	0	0	0	1	0	0	0
ITF64	Vibo Valentia	0	0	0	0	0	1	0	0	0
ITG11 ITG12	Trapani Palermo	0	0	0	0	0	0	1	0	0
ITG12	Messina	0	0	0	0	0	1	1	0	0
ITG14	Agrigento	1	1	1	0	1	1	1	0	0
ITG15	Caltanissetta	1	1	0	0	1	1	1	0	0
ITG16	Enna	0	0	0	0	0	1	1	0	0
ITG17	Catania	0	0	0	0	0	0	1	0	0
ITG18	Ragusa	1	1	0	0	1	0	1	0	0
ITG19	Siracusa	1	1	0	0	1	0	1	0	0

		Border regions					S		ъ	SL
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		All	Internal	External	Terrestrial	Maritime	Mountain regions	Island regions	Sparsely populated	Outermost regions
ITG25	Sassari	1	1	0	0	1	0	1	0	0
ITG26	Nuoro	1	1	0	0	1	1	1	0	0
ITG27	Cagliari	1	1	0	0	1	0	1	0	0
ITG28	Oristano	1	1	0	0	1	0	1	0	0
ITG29	Olbia-Tempio	1	1	0	0	1	0	1	0	0
ITG2A ITG2B	Ogliastra Medio Campidano	1	1	0	0	1	0	1	0	0
ITG2B	Carbonia-Iglesias	1	1	0	0	1	0	1	0	0
CY000	Κύπρος / Kıbrıs	1	1	1	0	1	0	1	0	0
LV003	Kurzeme	1	1	0	1	1	0	0	0	0
LV005	Latgale	1	1	1	1	0	0	0	0	0
LV006	Rīga	1	1	0	0	1	0	0	0	0
LV007	Pierīga	1	1	0	1	1	0	0	0	0
LV008	Vidzeme	1	1	1	1	0	0	0	0	0
LV009	Zemgale	1	1	0	1	0	0	0	0	0
LT001	Alytaus apskritis	1	1	1	1	0	0	0	0	0
LT003	Klaipėdos apskritis	1	1	1	1	0	0	0	0	0
LT004	Marijampolės apskritis	1	1	1	1	0	0	0	0	0
LT005	Panevėžio apskritis	1	1	0	1	0	0	0	0	0
LT006	Šiaulių apskritis	1	0	0	1	0	0	0	0	0
LT007 LT008	Tauragės apskritis Telšių apskritis	1	1	0	1	0	0	0	0	0
LT009	Utenos apskritis	1	1	1	1	0	0	0	0	0
LT00A	Vilniaus apskritis	1	0	1	1	0	0	0	0	0
LU000	Luxembourg (Grand-Duché)	1	1	0	1	0	0	0	0	0
HU101	Budapest	1	1	0	1	0	0	0	0	0
HU102	Pest	1	1	0	1	0	0	0	0	0
HU212	Komárom- Esztergom	1	1	0	1	0	0	0	0	0
HU221	Győr-Moson- Sopron	1	1	0	1	0	0	0	0	0
HU222	Vas	1	1	0	1	0	0	0	0	0
HU223	Zala	1	1	1	1	0	0	0	0	0
HU231	Baranya	1	0	1	1	0	0	0	0	0
HU232	Somogy	1	0	1	1	0	0	0	0	0
HU311	Borsod-Abaúj- Zemplén	1	1	0	1	0	0	0	0	0
HU312	Heves	1	1	0	1	0	0	0	0	0
HU313	Nógrád	1	1	0	1	0	0	0	0	0
HU321	Hajdú-Bihar	1	1	0	1	0	0	0	0	0
HU323	Szabolcs-Szatmár- Bereg		1	1	1	0	0	0	0	0
HU331 HU332	Bács-Kiskun Békés	1	0	0	1	0	0	0	0	0
HU333	Csongrád	1	1	1	1	0	0	0	0	0
MT001	Malta	1	1	0	0	1	0	1	0	0
MT002	Gozo and Comino / Għawdex u Kemmuna	1	1	0	0	1	0	1	0	0
NL111	Oost-Groningen	1	1	0	1	0	0	0	0	0
NL112	Delfzijl en omgeving	1	1	0	1	0	0	0	0	0
NL113	Overig Groningen	1	1	0	1	1	0	0	0	0
NL121	Noord-Friesland	1	1	0	0	1	0	0	0	0
NL132	Zuidoost-Drenthe	1	1	0	1	0	0	0	0	0
NL211	Noord-Overijssel	1	1	0	1	0	0	0	0	0
NL213	Twente	1	1	0	1	0	0	0	0	0
NL225	Achterhoek	1	1	0	1	0	0	0	0	0
NL226	Arnhem/Nijmegen	1	1	0	1	0	0	0	0	0
NL333 NL335	Delft en Westland Groot-Rijnmond	1	1	0	0	1	0	0	0	0
NL335	Zeeuwsch- Vlaanderen	1	1	0	1	1	0	0	0	0
NL342	Overig Zeeland	1	1	0	1	1	0	0	0	0

		Bord	er re	gion	5	ons		ted	ions
	All	Internal	External	Terrestrial	Maritime	Mountain regions	Island regions	Sparsely populated	Outermost regions
NL411 West-Noord- Brabant	1	1	0	1	0	0	0	0	0
NL412 Midden-Noord- Brabant	1	1	0	1	0	0	0	0	0
NL413 Noordoost-Noo	ord- 1	1	0	1	0	0	0	0	0
NL414 Zuidoost-Noord Brabant	d- 1	1	0	1	0	0	0	0	0
NL421 Noord-Limburg	1	1	0	1	0	0	0	0	0
NL422 Midden-Limbur	g 1	1	0	1	0	0	0	0	0
NL423 Zuid-Limburg	1	1	0	1	0	0	0	0	0
AT111 Mittelburgenla	nd 1	1	0	1	0	0	0	0	0
AT112 Nordburgenlan	d 1	1	0	1	0	0	0	0	0
AT113 Südburgenland	1	1	0	1	0	0	0	0	0
Niederösterreic Süd	h- 0	0	0	0	0	1	0	0	0
AT124 Waldviertel	1	1	0	1	0	0	0	0	0
AT125 Weinviertel	1	1	0	1	0	0	0	0	0
AT126 Wiener Umland Nordteil	/ 1	1	0	1	0	0	0	0	0
AT127 Wiener Umland Südteil	/ 1	1	0	1	0	0	0	0	0
AT130 Wien	1	1	0	1	0	0	0	0	0
AT211 Klagenfurt-Villa	ch 1	1	0	1	0	1	0	0	0
AT212 Oberkärnten	1	1	0	1	0	1	0	0	0
AT213 Unterkärnten	1	1	0	1	0	1	0	0	0
AT221 Graz	0	0	0	0	0	1	0	0	0
AT222 Liezen	0	0	0	0	0	1	0	0	0
Östliche Obersteiermark	0	0	0	0	0	1	0	0	0
AT224 Oststeiermark	1	1	0	1	0	0	0	0	0
West- und Südsteiermark	1	1	0	1	0	1	0	0	0
AT226 Westliche Obersteiermark	0	0	0	0	0	1	0	0	0
AT311 Innviertel	1	1	0	1	0	0	0	0	0
AT313 Mühlviertel	1	1	0	1	0	1	0	0	0
AT314 Steyr-Kirchdorf	0	0	0	0	0	1	0	0	0
AT315 Traunviertel	0	0	0	0	0	1	0	0	0
AT321 Lungau	0	0	0	0	0	1	0	0	0
AT322 Pinzgau-Ponga	u 1	1	0	1	0	1	0	0	0
AT323 Salzburg und Umgebung	1	1	0	1	0	1	0	0	0
AT331 Außerfern	1	1	0	1	0	1	0	0	0
AT332 Innsbruck	1	1	0	1	0	1	0	0	0
AT333 Osttirol	1	1	0	1	0	1	0	0	0
AT334 Tiroler Oberland		1	0	1	0	1	0	0	0
AT335 Tiroler Unterlan	_	1	0	1	0	1	0	0	0
AT341 Bludenz- Bregenzer Wald		1	0	1	0	1	0	0	0
Rheintal- Bodenseegebie	t 1	1	0	1	0	1	0	0	0
PL122 Ostrołęcko- siedlecki	1	0	1	1	0	0	0	0	0
PL215 Nowosądecki	1	1	0	1	0	1	0	0	0
PL216 Oświęcimski	1	1	0	1	0	0	0	0	0
L225 Bielski	1	1	0	1	0	1	0	0	0
PL227 Rybnicki	1	1	0	1	0	0	0	0	0
PL311 Bialski	1	0	1	1	0	0	0	0	0
Chełmsko- zamojski	1	0	1	1	0	0	0	0	0
PL323 Krośnieński	1	1	1	1	0	0	0	0	0
PL324 Przemyski	1	1	1	1	0	0	0	0	0
PL343 Białostocki	1	1	1	1	0	0	0	0	0
PL344 Łomżyński	1	1	1	1	0	0	0	0	0
PL345 Suwalski	1	1	1	1	0	0	0	0	0
PL422 Koszaliński	1	1	0	0	1	0	0	0	0
				1	1	0	0	0	0

		Border regions								
		l	Bord	er re	gions	S	ons		ted	ions
		All	Internal	External	Terrestrial	Maritime	Mountain regions	Island regions	Sparsely populated	Outermost regions
	Miasto Szczecin	1	1	0	1	1	0	0	0	0
	Szczeciński	1	1	0	1	1	0	0	0	0
	Gorzowski Zielonogórski	1	1	0	1	0	0	0	0	0
	Jeleniogórski	1	1	0	1	0	0	0	0	0
	Wałbrzyski	1	1	0	1	0	1	0	0	0
	Nyski	1	1	0	1	0	0	0	0	0
PL522	Opolski	1	1	0	1	0	0	0	0	0
PL621	Elbląski	1	0	- 1	1	0	0	0	0	0
	Olsztyński	1	0	1	1	0	0	0	0	0
	Ełcki	1	1	1	1	0	0	0	0	0
	Słupski	1	1	0	0	1	0	0	0	0
	Trójmiejski Gdański	1	1	1	0	1	0	0	0	0
	Starogardzki	1	1	1	0	1	0	0	0	0
	Minho-Lima	1	1	0	1	0	0	0	0	0
	Cávado	1	1	0	1	0	0	0	0	0
PT115	Tâmega	0	0	0	0	0	1	0	0	0
PT117	Douro	1	1	0	1	0	1	0	0	0
	Alto Trás-os- Montes	1	1	0	1	0	1	0	0	0
	Algarve	1	1	0	1	0	0	0	0	0
PT164	Pinhal Interior Norte	0	0	0	0	0	1	0	0	0
PT165	Dâo-Lafôes	0	0	0	0	0	1	0	0	0
PT166	Pinhal Interior Sul	0	0	0	0	0	1	0	0	0
PT167	Serra da Estrela	0	0	0	0	0	1	0	0	0
	Beira Interior Norte	1	1	0	1	0	1	0	0	0
	Beira Interior Sul	1	1	0	1	0	0	0	0	0
	Cova da Beira	0	0	0	0	0	1	0	0	0
	Alto Alentejo	1	1	0	1	0	0	0	0	0
	Alentejo Central Baixo Alentejo	1	1	0	1	0	0	0	0	0
PT200	Região Autónoma dos Açores	0	0	0	0	0	1	1	0	1
	Região Autónoma da Madeira	0	0	0	0	0	1	1	0	1
RO111	Bihor	1	1	0	1	0	0	0	0	0
	Bistrița-Năsăud	0	0	0	0	0	1	0	0	0
	Cluj	0	0	0	0	0	1	0	0	0
	Maramureş Satu Mare	1	0	1	1	0	0	0	0	0
	Braşov	0	0	0	0	0	1	0	0	0
	Covasna	0	0	0	0	0	1	0	0	0
	Harghita	0	0	0	0	0	1	0	0	0
RO212	Botoşani	1	0	1	1	0	0	0	0	0
	laşi	1	0	1	1	0	0	0	0	0
	Suceava	1	0	1	1	0	0	0	0	0
	Vaslui	1	0	1	1	0	0	0	0	0
	Brăila	1	0 1	0	1	0	0	0	0	0
	Constanța Galați	1	0	1	1	0	0	0	0	0
	Tulcea	1	0	1	1	0	0	0	0	0
	Călărași	1	1	0	1	0	0	0	0	0
	Giurgiu	1	1	0	1	0	0	0	0	0
RO317	Teleorman	1	1	0	1	0	0	0	0	0
	Dolj	1	1	0	1	0	0	0	0	0
	Mehedinţi	1	1	1	1	0	0	0	0	0
	Olt	1	1	0	1	0	0	0	0	0
	Arad Caraş-Severin	1	0	0	1	0	0	0	0	0
	Caraş-severin Hunedoara	0	0	0	0	0	1	0	0	0
	Timiş	1	1	1	1	0	0	0	0	0
	Pomurska	1	1	1	1	0	0	0	0	0
SI012	Podravska	1	1	1	1	0	0	0	0	0

		Border regions					S		p	ns
		All	Internal	External	Terrestrial	Maritime	Mountain regions	Island regions	Sparsely populated	Outermost regions
SI013	Koroška	1	1	0	1	0	1	0	0	0
SI014	Savinjska	1	1	1	1	0	1	0	0	0
SI015 SI016	Zasavska Spodnjeposavska	0	0	0	0	0	0	0	0	0
SI017	Jugovzhodna Slovenija	1	0	1	1	0	0	0	0	0
SI018	Notranjsko-kraška	1	0	1	1	0	1	0	0	0
SI021	Osrednjeslovenska	1	1	0	1	0	0	0	0	0
SI022	Gorenjska	1	1	0	1	0	1	0	0	0
SI023	Goriška	1	1	0	1	0	1	0	0	0
SI024	Obalno-kraška	1	1	1	1	0	1	0	0	0
SK010	Bratislavský kraj	1	1	0	1	0	0	0	0	0
SK021 SK022	Trnavský kraj Trenčiansky kraj	1	1	0	1	0	0	0	0	0
SK022	Nitriansky kraj	1	1	0	1	0	0	0	0	0
SK023	Žilinský kraj	1	1	0	1	0	1	0	0	0
SK032	Banskobystrický kraj	1	1	0	1	0	1	0	0	0
SK041	Prešovský kraj	1	1	1	1	0	1	0	0	0
SK042	Košický kraj	1	1	1	1	0	0	0	0	0
FI131	Etelä-Savo	1	0	1	1	0	0	0	1	0
FI133	Pohjois-Karjala	1	0	1	1	0	0	0	1	0
FI134 FI181	Kainuu Uusimaa	1	0	0	0	0	0	0	0	0
FI182	Itä-Uusimaa	1	1	0	0	1	0	0	0	0
FI183	Varsinais-Suomi	1	1	0	0	1	0	0	0	0
FI186	Kymenlaakso	1	1	1	1	1	0	0	0	0
FI187	Etelä-Karjala	1	0	1	1	0	0	0	0	0
FI195	Pohjanmaa	1	1	0	0	1	0	0	0	0
FI196	Satakunta	1	1	0	0	1	0	0	0	0
FI1A1	Keski-Pohjanmaa	1	1	0	0	1	0	0	0	0
FI1A2	Pohjois- Pohjanmaa	1	1	1	1	1	0	0	1	0
FI1A3	Lappi	1	1	1	1	0	1	0	1	0
FI200 SE110	Åland Stockholms län	1	1	0	0	1	0	1	0	0
SE110	Uppsala län	1	1	0	0	1	0	0	0	0
SE122	Södermanlands län	1	1	0	0	1	0	0	0	0
SE123	Östergötlands län	1	1	0	0	1	0	0	0	0
SE213	Kalmar län	1	1	0	0	1	0	0	0	0
SE214	Gotlands län	1	1	0	0	1	0	1	0	0
SE221	Blekinge län	1	1	0	0	1	0	0	0	0
SE224 SE231	Skåne län Hallands län	1	1	0	0	1	0	0	0	0
SE232	Västra Götalands län	1	1	0	1	1	0	0	0	0
SE311	Värmlands län	1	1	0	1	0	0	0	0	0
SE312	Dalarnas län	1	1	0	1	0	0	0	1	0
SE313 SE321	Gävleborgs län Västernorrlands	1	1	0	0	1	0	0	0	0
SE322	län Jämtlands län	1	1	0	1	0	0	0	1	0
SE331	Västerbottens län	1	1	0	1	1	0	0	1	0
SE332	Norrbottens län	1	1	1	1	0	1	0	1	0
UKH13	Norfolk	1	1	0	0	1	0	0	0	0
UKH14	Suffolk	1	1	0	0	1	0	0	0	0
UKH31	Southend-on-Sea	1	1	0	0	1	0	0	0	0
UKH32	Thurrock	1	1	0	0	1	0	0	0	0
UKH33	Essex CC	1	1	0	0	1	0	0	0	0
UKJ21	Brighton and Hove	1	1	0	0	1	0	0	0	0
UKJ22	East Sussex CC	1	1	0	0	1	0	0	0	0
UKJ24 UKJ31	West Sussex Portsmouth	1	1	0	0	1	0	0	0	0
UKJ32	Southampton	1	1	0	0	1	0	0	0	0
01732			1	-	_			-		1

		Border regions					υs		pa	ons
		All	Internal	External	Terrestrial	Maritime	Mountain regions	Island regions	Sparsely populated	Outermost regions
UKJ34	Isle of Wight	1	1	0	0	1	0	1	0	0
UKJ41	Medway	1	1	0	0	1	0	0	0	0
UKJ42	Kent CC	1	1	0	1	1	0	0	0	0
UKK21	Bournemouth and Poole	1	1	0	0	1	0	0	0	0
UKK22	Dorset CC	1	1	0	0	1	0	0	0	0
UKK30	Cornwall and Isles of Scilly	1	1	0	0	1	0	0	0	0
UKK41	Plymouth	1	1	0	0	1	0	0	0	0
UKK42	Torbay	1	1	0	0	1	0	0	0	0
UKK43	Devon CC	1	1	0	0	1	0	0	0	0
UKL11	Isle of Anglesey	1	1	0	0	1	0	0	0	0
UKL12	Gwynedd	1	1	0	0	1	0	0	0	0
UKL13	Conwy and Denbighshire	1	1	0	0	1	0	0	0	0
UKL14	South West Wales	1	1	0	0	1	0	0	0	0
UKL15	Central Valleys	0	0	0	0	0	1	0	0	0
UKM32	Dumfries & Galloway	1	1	0	0	1	0	0	0	0
UKM33	East Ayrshire and North Ayrshire mainland	1	1	0	0	1	0	0	0	0
UKM37	South Ayrshire	1	1	0	0	1	0	0	0	0
UKM61	Caithness & Sutherland and Ross & Cromarty	0	0	0	0	0	0	0	1	0
UKM63	Lochaber, Skye & Lochalsh, Arran & Cumbrae and Argyll & Bute	1	1	0	0	1	0	0	1	0
UKM64	Eilean Siar (Western Isles)	0	0	0	0	0	0	1	1	0
UKM65	Orkney Islands	0	0	0	0	0	0	1	0	0
UKM66	Shetland Islands	0	0	0	0	0	0	1	0	0
UKN03	East of Northern Ireland	1	1	0	1	0	0	0	0	0
UKN04	North of Northern Ireland	1	1	0	1	0	0	0	0	0
UKN05	West and South of Northern Ireland	1	1	0	1	0	0	0	0	0

Appendix 3 – Border disparities

This appendix presents an index of cross-border disparities. For each (internal or external) national EU border, the index is the ratio of GDP per head of the two regions located on each side of the border with the highest GDP per head difference.

Table A3.1 - Border disparities: GDP/head (PPS), 2004

Bord		Maximum value of aggregat			inimum value of aggregated in		Quotient
AD_ES	AD	Andorra	143.9	ES	España	124.5	1.2
AD_FR	AD	Andorra	143.9	FR	France	83.9	1.7
AT_CH	AT	Österreich	131.7	CH	Schweiz / Suisse / Svizzera	123.8	1.1
AT_CZ	AT	Österreich	76.3	CZ	Česká Republika	67.3	1.1
AT_DE	AT	Österreich	123.6	DE	Deutschland	111.8	1.1
AT_HU	AT	Österreich	89.8	HU	Magyarország	70.4	1.3
AT_IT	IT	Italia	127.9	AT	Österreich	124.1	1.0
AT_SI	AT	Österreich	96.6	SI	Slovenija	86.4	1.1
AT_SK	AT	Österreich	155.2	SK	Slovensko	95.2	1.6
BE_DE	DE	Deutschland	98.0	BE	België / Belgique	88.5	1.1
BE_FR	FR	France	93.0	BE	België / Belgique	88.7	1.0
BE_LU	LU	Luxembourg (Grand-Duché)	251.0	BE	België / Belgique	88.0	2.9
BE_NL	NL	Nederland	124.7	BE	België / Belgique	121.8	1.0
BG_GR	GR	Ελλαδα / Elláda	67.5	BG	България / Bulgaria	25.3	2.7
BG_MK	BG	България / Bulgaria	28.6	MK	Poranešna Jugoslovenska	26.1	1.1
BG_RO	RO	România	28.3	BG	Republika Makedonija България / Bulgaria	25.6	1.1
BG_RS	BG	България / Bulgaria	28.5	RS	Srbija	16.3	1.7
BG_TR	TR	Türkiye	33.8	BG	България / Bulgaria	28.1	1.2
BR_FR	FR	France	54.4	BR	Brazil	31.7	1.7
BY LT	LT	Lietuva	63.1	BY	Belarus	20.2	3.1
BY_LV	LV	Latvija	21.1	BY	Belarus	18.7	1.1
BY_PL	PL	Polska	36.0	BY	Belarus	20.0	1.8
CH_DE	CH	Schweiz / Suisse / Svizzera	150.1	DE	Deutschland	108.5	1.4
CH_FR	CH	Schweiz / Suisse / Svizzera	132.8	FR	France	102.5	1.3
CH_IT	IT	Italia	122.1	CH	Schweiz / Suisse / Svizzera	111.7	1.1
CZ_DE	DE	Deutschland	83.5	CZ	Česká Republika	64.4	1.3
CZ_PL	CZ	Česká Republika	62.0	PL	Polska	45.6	1.4
CZ_SK	CZ	Česká Republika	64.1	SK	Slovensko	51.6	1.2
DE_DK	DK	Danmark	115.1	DE	Deutschland	100.2	1.1
DE_FR	DE	Deutschland	120.8	FR	France	101.9	1.2
DE_LU	LU	Luxembourg (Grand-Duché)	251.0	DE	Deutschland	93.9	2.7
DE NL	NL	Nederland	113.9	DE	Deutschland	92.7	1.2
DE_PL	DE	Deutschland	75.5	PL	Polska	45.0	1.7
DK SE	DK	Danmark	176.9	SE	Sverige	110.4	1.6
EE_LV	EE	Eesti	37.0	LV	Latvija	27.7	1.3
EE_RU	RU	Rossija	40.7	EE	Eesti	35.3	1.2
ES_FR	ES	España	123.8	FR	France	105.8	1.2
ES_PT	ES	España	76.2	PT	Portugal	59.5	1.3
FI_NO	NO	Norge	101.9	FI	Suomi / Finland	96.6	1.1
FI_RU	FI	Suomi / Finland	100.9	RU	Rossija	42.6	2.4
FI_SE	SE	Sverige	116.1	FI	Suomi / Finland	96.6	1.2
FR_IT	IT	Italia	122.3	FR		111.2	
					France		1.1
FR_LU	LU	Luxembourg (Grand-Duché)	251.0	FR	France	93.9	2.7
FR_SR	FR	France	54.4	SR	Suriname	27.8	2.0
FR_UK	UK	United Kingdom	103.1	FR	France	76.6	1.3
GR_MK	GR	Ελλαδα / Elláda	52.5	MK	Poranešna Jugoslovenska Republika Makedonija	26.1	2.0
GR_TR	GR	Ελλαδα / Elláda	60.5	TR	Türkiye	33.8	1.8
HR_HU	HU	Magyarország	47.4	HR	Hrvatska	38.8	1.2
HR_SI	SI	Slovenija	71.6	HR	Hrvatska	45.9	1.6
HU_RO	HU	Magyarország	43.1	RO	România	39.5	1.1
HU_RS	HU	Magyarország	46.2	RS	Srbija	16.3	2.8
HU_SI	HU	Magyarország	61.2	SI	Slovenija	57.5	1.1
HU_SK	HU	Magyarország	76.7	SK	Slovensko	65.2	1.2
HU_UA	HU	Magyarország	35.8	UA	Ukraina	14.5	2.5
IE_UK	IE	Éire / Ireland	104.9	UK	United Kingdom	80.8	1.3
	IT	Italia					
IT_SI			118.1	SI	Slovenija	77.6	1.5
LT_LV	LT	Lietuva	45.3	LV	Latvija	28.0	1.6
LT_PL	PL	Polska	36.9	LT	Lietuva	34.7	1.1
LT_RU	LT	Lietuva	42.8	RU	Rossija	25.1	1.7
LV_RU	LV	Latvija	23.5	RU	Rossija	18.9	1.2
	RO	România	23.9	MD	Moldova	7.9	3.0
MD_RO	NO	Norge	93.4	RU	Rossija	44.4	2.1
MD_RO NO_RU		Norge	145.2	SE	Sverige	112.6	1.3
MD_RO NO_RU NO_SE	NO			DLI	D	25.1	1.6
MD_RO NO_RU		Polska	39.4	RU	Rossija	23.1	1.0
MD_RO NO_RU NO_SE PL_RU	NO	Polska	39.4 39.9	PL			1.1
MD_RO NO_RU NO_SE PL_RU PL_SK	NO PL SK	Polska Slovensko	39.9	PL	Polska	35.3	1.1
MD_RO NO_RU NO_SE PL_RU PL_SK PL_UA	NO PL SK PL	Polska Slovensko Polska	39.9 30.4	PL UA	Polska Ukraina	35.3 17.2	1.1 1.8
MD_RO NO_RU NO_SE PL_RU PL_SK PL_UA RO_RS	NO PL SK PL RO	Polska Slovensko Polska România	39.9 30.4 38.1	PL UA RS	Polska Ukraina Srbija	35.3 17.2 16.3	1.1 1.8 2.3
MD_RO NO_RU NO_SE PL_RU PL_SK PL_UA	NO PL SK PL	Polska Slovensko Polska	39.9 30.4	PL UA	Polska Ukraina	35.3 17.2	

Sources: Eurostat, UN, World Bank, IMF, CIA World Factbook, NSI, ESRI Inc., REGIO-GIS

Appendix 4 - Outermost regions: Main indicators

Table A4.1 - Population

		Demo	graphy			Education				
Regions	Population, 1000 inh.	Population density, inh./km²	% of po	pulation age	d (2007)	Educational attainment of persons aged 25-64 (% of total), 2006				
	2006	2006	<15	15-64	65+	low	medium	high		
Spain	44068	87	14.5	68.8	16.7	49.6	21.5	29		
Canarias	1 973	265	15.7	72	12.3	53.9	21.6	24.4		
France	63 195	100	18.6	65.2	16.2	30.5	40.7	26.1		
Guadeloupe	436	256	24	64.6	11.4	:	:	:		
Martinique	397	352	21.5	65.1	13.5	:	:	:		
Guyane	209	3	36	60.3	3.7	:	:	:		
Réunion	783	313	26.3	65.8	7.9	:	:	:		
Portugal	10584	115	15.5	67.3	17.3	72.5	13.8	13.7		
Açores	243	104	19.3	68.3	12.4	81.4	11.2	7.4		
Madeira	246	296	18	68.9	13.1	75.6	13.1	11.2		
EU-27	493 925	115	16.4	67.3	16.4	28.9	46.8	23.3		

Source: Eurostat

Table A4.2 - Geography

Regions	Distance from capital of Member State, km	Distance from mainland (km)	Number of islands
Spain			
Canarias	2000	250	7
France			
Guadeloupe	6800	560	8
Martinique	6850	410	1
Guyane	7 500		0
Réunion	9400	1 700	1
Portugal			
Açores	1 500	1 450	9
Madeira	1 000	660	2

Source: Eurostat

Table A4.3 - Production and structure of employment

Regions	GDP growth (annual average % change)	GDP/head (PPS), index EU-27 = 100	Employ	al), 2006	
	2000-05	2006	Agriculture	Industry	Services
Spain	3.3	104.1	4.8	29.5	65.7
Canarias	3.4	92.6	3.4	21.1	75.5
France	1.6	109.5	3.9	24.2	71.8
Guadeloupe	2.3	68.4	2.5	13.3	84.1
Martinique	2.2	73.6	5.2	13.2	81.6
Guyane	5.6	49	2.3	14	83.8
Réunion	3	61.6	1.7	13.8	84.5
Portugal	0.9	76.4	11.7	30.6	57.7
Açores	2.6	68.6	12.5	25.9	61.6
Madeira	2.6	97.7	10	27.5	62.6
EU-27	1.8	100	5.9	27.6	66.5

Source: Eurostat

Table A4.4 - Labour market

	Employment arouth	Employme	nt rate (%)	Unemployment rate (%)						
Regions	Employment growth (annual average % change)	Ages 15-64 Women 15-64		Total	Long-term unemployment (% of total)	Women	Young unemployed			
	2000-05	2007	2007	2007	2007	2007	2007			
Spain	3.3	65.6	54.7	8.3	20.4	10.9	18.2			
Canarias	4	62.4	52.3	10.4	21.8	13	22.4			
France	0.6	64.1	59.4	8.3	41.9	8.9	19.5			
Guadeloupe	0.5	48.5	45.3	25	80.8	26.5	55.7			
Martinique	1.5	48.1	46.7	22.1	85.4	21.9	47.8			
Guyane	1.2	44	35.4	21	67	26	:			
Réunion	0.9	44	37.6	25.2	75.2	26.3	50			
Portugal	0.3	67.8	61.9	8	47.1	9.6	16.6			
Açores	1	63	49.8	4.3	38.4	:	:			
Madeira	0.9	66.1	60.4	6.8	46.4	:	:			
EU-27	0.7	65.3	58.3	7.5	43	7.9	15.6			

Source: Eurostat

Appendix 5 – Combined proximity to natural areas indicator

This indicator is based on the proximity to:

- bodies of water;
- Natura 2000 areas;
- natural areas as defined by CORINE land cover, which includes green urban, leisure and sport facilities, forest, semi-natural areas and wetlands.

It does not include agricultural land.

The combined indicator is the average of the three proximity indicators. Each of the three indicators is calculated in a similar way:

- (1) Each 1 km grid cell is assigned a value inversely related to the distance to all natural areas within a radius of 10 km. If the natural area is more than 10 km away the value is zero.
- (2) Each 1 km grid cell is weighted according to its population to obtain a population weighted average per NUTS3 region.

Some grid cells can be both water and Natura 2000 or natural area and Natura 2000 in which case the area counts double. The logic behind this approach is that this area may be more valuable if it is both natural/water and Natura 2000.



Any question, comment or contribution should be sent to the following address:

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