**Appendix: Tables**

Table A1: Comparison between the rationalistic and functional approaches used for the delineation of geographic specificities

|  |  |  |
| --- | --- | --- |
|  | Rationalistic approach(Dijkstra and Poelman, 2011) | Functional approach(Geospecs, 2013) |
| Rationale | Develop a pan-European categorization for steering regional public investments and benchmarking monitoring of differentiated regional performance. | Address territorial development challenges and opportunities of communities by choosing a relevant definition of the ‘local’.  |
| Method | Regions are characterised based on the extent of the coverage of a geographic specificity within its borders. First, delineate the extent of the ‘physical reality’ and then, assess the amount of population located in these areas. | Territories are defined as aggregations of areas or municipalities into larger geographical ensembles based on the contiguity of a geographical phenomenon.  |
| Mountainous | *Mountain regions* at NUTS 3 level are defined as regions: - in which more than 50% of the surface is covered by topographic mountain areas; - or in which more than 50% of the regional population lives in these topographic mountain areas.*Topographic mountain areas* based on altitude and/or steepness of slopes in the surrounding areas. | The delineation is based on altitude, terrain roughness and slope.A total of 16 mountainous massifs were identified, based on the aggregation of mountainous municipalities.LAU2 units with more than 50% mountainous terrain should be considered as mountainous. |
| Islands/Insularity | Islands are defined as territories having:- a minimum surface of 1 km²;- a minimum distance between the island and the mainlandof 1 km;- a resident population of more than 50 inhabitants;- no fixed link (bridge, tunnel, dyke) between the island andthe mainland.NUTS 3 island regions distinguished into five categories, depending on the size of the major island related to the NUTS 3 region:1. regions where the major island has less than 50,000 inhabitants;2. regions where the major island has between 50,000 and 100,000 inhabitants;3. regions where the major island has between 100,000 and 250,000 inhabitants;4. regions corresponding to an island with 250,000 to 1 million inhabitants, or being part of such an island;5. regions being part of an island with at least 1 million inhabitants. | All territories that are physically disjoint from the European mainland or the main islands of the British Isles (UK and Ireland) are considered as insular, includingparts of municipalities, but excluding inland islands. The typology recognises islandswith a fixed connection to the mainland as a separate category and uses a multilevel approach (NUTS 1 to LAU2), as the socio-economic impacts and political significance of insularity differ depending on its occurrence at the national, regional or local scale.A total 319 “island territories”, defined as an individual municipality comprisingmultiple islands, or a single island with one or more municipalities were identified. Multiple islands belonging to one municipality were considered as a single unit. |
| Sparsity | *Low population density regions* as areas made up of:*-* NUTS 2 geographic regions with a population density of less than 8 inhabitants per km²;- or NUTS 3 geographic regions with a population density of less than 12.5 inhabitants per km²’ | Sparsity was characterised using the population potential measure, i.e. the total number of people that can be reached within a certain radius (50km) or within a certain travel distance (45 minutes by car). Sparsely populated areas are places where this population potential is under the threshold of 100,000 people, corresponding to 12.7 persons/km² within 50 km. Sparsely populatedmunicipalities for which more than 50% of the area are below the threshold.39 ‘sparse territories’ were identified and aggregated based on the contiguity of sparsely populated municipalities and in some cases belonging to the same NUTS 3 region. |

**Table A2: List of 15 NUTS2 regions with specific geographical features selected as case studies** (Source: ADE, 2012)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| REGION (NUTS2) NAME | Member State | Operational Programme (OP) at NUTS2 level | ERDF Objective & Cohesion Fund (CF), 2000-2006 | ERDF Objective & Cohesion Fund (CF), 2007-2013 |
| Mountainous |
| Steiermark | Austria | Yes | Objective 2 (except in AT221 Graz: no fund) | Regional Competitiveness |
| Rhône-Alpes | France | Yes | Objective 2 | Regional Competitiveness |
| Silesia | Poland | Sectoral programmes | Objective 1 & CF | Convergence & CF |
| Centro | Portugal | Yes | Objective 1 & CF | Convergence & CF |
|  Eastern Slovenia | Slovenia | Yes | Objective 1 & CF | Convergence & CF |
| Islands |
| Copenhagen capital regional  | Denmark | A national programme | Objective 2 | Regional Competitiveness |
| Balearic Islands | Spain | Yes | Objective 1 & CF | Regional Competitiveness |
| Corsica | France | Yes | Objective 1 | Regional Competitiveness |
| Northern Aegean | Greece | OP 2007-2013 covers several NUTS2 level regions | Objective 1 & CF | Convergence & CF |
| Sicily | Italy | Yes | Objective 1 | Convergence |
| Sparsely populated regions |
| Castilla-la-Mancha | Spain | Yes | Objective 1 & CF | Convergence & CF |
| East Finland | Finland | Yes | Objective 1 | Phasing in |
| Sterea Ellada | Greece | OP 2007-2013 covers several NUTS2 level regions | Objective 1 & CF | Phasing in |
| Övre Norrland | Sweden | Yes | Objective 2 | Regional Competitiveness |
| Highlands and Islands | UK | Yes | Objective 1 | Phasing out |

**Table A3: Comparison of ERDF and Cohesion Fund commitments in islands, mountains and sparsely populated regions, 2000-06** (Source: ADE, 2012; SWECO, 2008; authors’ calculations)

|  |  |  |
| --- | --- | --- |
|  | Billion Euros | Percentage of the total |
| Total at NUTS 3 level | Cohesion Fund (CF) | Objective 1 | Objective 2 | Total | Cohesion Fund (CF) | Objective 1 | Objective 2 |
| All EU regions | 30.7 | 100.5 | 21.1 | 152.3 | 20.2 | 66 | 13.8 |
| Mountains | 3.5 | 16 | 1.8 | 21.3 | 16.5 | 74.9 | 8.6 |
| Islands  | 0.65 | 8 | 0.15 | 8.8 | 7 | 91 | 2 |
| Sparsely populated  | 0.34 | 1.13 | 0.13 | 1.6 | 21 | 71 | 8 |
| Total: 3 types of territory | 4.49 | 25.13 | 2.08 | 31.7 |

**Appendix: Table A4: 2000-2006 programming period ERDF: Fields of Intervention by category and sub-category** (Source: ADE, 2012; SWECO, 2008)

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 & 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

**Appendix: Table A5: Socio-economic domains to compare the main Fields of Intervention (FOIs) in 2000-2006 and 2007-2013 ERDF programming periods**

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | Socio-economic domain | 2000-06 main FOIs | 2007-13 main FOIs |
| 1 | Innovation & RTD, helping large firms | 15 Assisting large business organisations  | A. Innovation & RTD (1-4;7;9) |
|  |  | 18 Research, technological development and innovation (RTDI) |  |
| 2 | SMEs and entrepreneurship | 16 Assisting SMEs and the craft sector  | B. Entrepreneurship (6-7;8) |
| 3 | ICT and telecommunications | 32 Telecommunication infrastructure and information society  | C. Information society (10-15) |
| 4 | Transport infrastructure | 31 Transport infrastructure  | D1. Transport - Rails (16-19) |
|  |  |  | D2. Transport - Roads (20-23) |
|  |  |  | D3. Transport - Other (Multimodal, air, boats) (24-32) |
| 5 | Energy infrastructure | 33 Energy infrastructure (production and delivery) | E1. Energy - traditional sources (34-38) |
|  |  |  | E2. Energy - Renewable (39-43) |
| 6 | Environmental infrastructure | 34 Environmental infrastructure (including water) | F1. Environment protection and infrastructure (44-52;54) |
|  |  | 35 Planning and rehabilitation  | F2. Risk prevention (53) |
| 7 | Tourism and culture | 17 Tourism  | G. Tourism and culture (55-60) |
| 8 | Urban and rural regeneration | 11 Agriculture | H. Urban and rural regeneration (61) |
|  |  | 12 Forestry |  |
|  |  | 14 Fisheries  |  |
| 9 | Labour market development | 21 Labour market policy | I. Increasing the adaptability of workers and firms (62-64) |
|  |  | 22 Social inclusion | J. Improving access to employment and sustainability (65-70) |
|  |  | 23 Developing education and vocational training | K. Improving the social inclusion of less-favoured persons (71) |
|  |  | 24 Workforce flexibility, entrepreneurial activity, innovation, ICT  |  |
|  |  | 25 Positive labour market actions for women |  |
| 10 | Social infrastructure | 36 Social and public health infrastructure  | L. Investment in social infrastructure (75-79) |
|  |  |  | M1. Mobilisation for reforms in the fields of empl. and inclusion (80) |
|  |  |  | M2. Strengthening institutional capacity (at nat., reg. and local level) (81)  |
|  |  |  | M3. Reduction of additional costs hindering the OMR development (82-84)  |
| 11 | Technical assistance | 41 Technical Assistance and innovative actions  | M4. Technical assistance (85-86) |

**Appendix: Table A6: Comparing ERDF (and Cohesion Fund (CF)) spending profiles by the four largest FOIs (as a percentage of total commitments) and by socio-economic domain in each of the 15 case study regions, 2000-2006 and 2007-2013 periods** (Source: ADE, 2012; SWECO, 2008; DG Regional Policy SFC Database; author’s calculations)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NUTS 2 region | ERDF 2000-06 classification | 4 Main FOIs (% of total commitments), 2000-06 | 2000-06,socio-economic domains | 4 Main FOIs (% of total commitments), 2007-13 | 2007-13, socio-economic domains |
| ERDF 2007-13 classification |
| Mountainous regions |
| Steiermark | Objective 2 (except in AT221 Graz: no fund) | 16. Assisting SMEs and the craft sector | 27.2% | 2 | A. Innovation & RTD (1-4;7;9) | 50% | 1 |
| 18. RTDI | 27.0% | 1 | B. Entrepreneurship (6-7;8) | 29% | 2 |
| Regional Competitiveness | 15. Assisting large business organisations | 22.0% | 1 | C. Information society (10-15) | 5% | 2 |
| 34. Environmental infrastructure | 12.5% | 6 | I. Increasing the adaptability of workers and firms (62-64) | 6% | 9 |
| Rhone-Alps | Objective 2 | 35. Planning and rehabilitation | 35.6% | 6 | A. Innovation & RTD (1-4;7;9) | 26% | 1 |
| 17. Tourism | 25.1% | 7 | B. Entrepreneurship (6-7;8) | 19% | 2 |
| Regional Competitiveness | 16. Assisting SMEs and the craft sector | 13.2% | 2 | C. Information society (10-15) | 12% | 2 |
| 34. Environmental infrastructure | 9.9% | 6 | F1. Environment protection and infrastructure (44-52;54) | 13% | 6 |
| Silesia | Objective 1 & CF | 31. Transport infrastructure | 45.7% | 4 | A. Innovation & RTD (1-4;7;9) | 14% | 1 |
| 34. Environmental Infrastructure | 38.8% | 6 | C. Information society (10-15) | 12% | 2 |
| Convergence & CF  | 16. Assisting SMEs and the craft sector | 7.1% | 2 | D2. Transport - Roads (20-23) | 18% | 4 |
| 36. Social and public health infrastructure | 2.1% | 10 | H. Urban and rural regeneration (61) | 13% | 8 |
| Centro  | Objective 1 & CF | 31. Transport infrastructure  | 24.5% | 4 | A. Innovation & RTD (1-4;7;9) | 28% | 1 |
| 34. Environmental infrastructure | 17.4% | 6 | F1. Environment protection and infrastructure (44-52;54) | 13% | 6 |
| Convergence & CF | 16. Assisting SMEs and the craft sector | 13.4% | 2 | G. Tourism and culture (55-60) | 10% | 7 |
| 36. Social and public health infrastructure | 11.1% | 10 | L. Investment in social infrastructure (75-79) | 14% | 10 |
| Eastern Slovenia | Objective 1 & CF | 31. Transport infrastructure | 35.9% | 4 | A. Innovation & RTD (1-4;7;9) | 23% | 1 |
| 34. Environmental infrastructure | 35.6% | 6 | D1. Transport - Rails (16-19) | 13% | 4 |
| Convergence & CF | 17. Tourism | 11.7% | 7 | D2. Transport - Roads (20-23) | 13% | 4 |
| 16. Assisting SMEs and the craft sector | 8.2% | 2 | F1. Environment protection and infrastructure (44-52;54) | 20% | 6 |
| Island regions |
| Copenhagen capital city region (including Bornholm) | Objective 2 | 16. Assisting SMEs and the craft sector | 33.8% | 2 | A. Innovation & RTD (1-4;7;9) | 52.1% | 1 |
| 32. Telecommunication infrastructure and information society | 33.3% | 3 | B. Entrepreneurship (6-7;8) | 21.5% | 2 |
| Regional Competitiveness | 31. Transport infrastructure | 14.2% | 4 | C. Information society (10-15) | 13.0% | 3 |
| 18. RTDI | 6.9% | 1 | G. Tourism and culture (55-60) | 9.6% | 7 |
| Balearic Islands | Objective 2 | 34. Environmental infrastructure | 69.6% | 6 | A. Innovation & RTD (1-4;7;9) | 35% | 1 |
| 31. Transport infrastructure | 10.9% | 4 | B. Entrepreneurship (6-7;8) | 17% | 2 |
| Regional Competitiveness | 15. Assisting large business organisations | 8.6% | 1 | D1. Transport - Rails (16-19) | 22% | 4 |
| 18. RTDI | 5.1% | 1 | G. Tourism and culture (55-60) | 8% | 7 |
| Corsica | Objective 1  | 31. Transport infrastructure | 31.9% | 4 | A. Innovation & RTD (1-4;7;9) | 37% | 1 |
| 34. Environmental infrastructure | 29.7% | 6 | C. Information society (10-15) | 15% | 3 |
| Regional Competitiveness | 17. Tourism | 9.6% | 7 | E2. Energy - Renewable (39-43) | 11% | 5 |
| 36. Social and public health infrastructure | 7.7% | 10 | F1. Environment protection and infrastructure (44-52;54) | 15% | 6 |
| Northern Aegean | Objective 1 & CF | 34. Environmental infrastructure | 27.1% | 6 | D2. Transport - Roads (20-23) | 24% | 4 |
| 31. Transport infrastructure | 26.8% | 4 | D3. Transport - Other (Multimodal, air, boats) (24-32) | 8% | 4 |
| Convergence & CF | 32. Telecommunication infrastructure and information society | 16.2% | 3 | F1. Environment protection and infrastructure (44-52;54) | 12% | 6 |
| 35. Planning and rehabilitation | 8.6% | 6 | L. Investment in social infrastructure (75-79) | 24% | 10 |
| Sicily | Objective 1  | 16. Assisting SMEs and the craft sector | 21.7% | 2 | B. Entrepreneurship (6-7;8) | 8% | 2 |
| 31. Transport infrastructure | 21.3% | 4 | D3. Transport - Other (Multimodal, air, boats) (24-32) | 13% | 4 |
| Convergence | 35. Planning and rehabilitation | 17.0% | 6 | F1. Environment protection and infrastructure (44-52;54) | 13% | 6 |
| 17. Tourism | 9.3% | 7 | G. Tourism and culture (55-60) | 15% | 7 |
| Sparsely populated regions |
| Castilla la Mancha | Objective 1 & CF | 31. Transport infrastructure | 37.8% | 4 | B. Entrepreneurship (6-7;8) | 14% | 2 |
| 34. Environmental infrastructure | 27.7% | 6 | D1. Transport - Rails (16-19) | 19% | 3 |
| Convergence & CF | 15. Assisting large business organisations | 12.4% | 1 | D2. Transport - Roads (20-23) | 12% | 4 |
| 35. Planning and rehabilitation | 9.1% | 6 | F1. Environment protection and infrastructure (44-52;54) | 19% | 6 |
| East Finland | Objective 1  | 16. Assisting SMEs and the craft sector | 45.8% | 2 | A. Innovation & RTD (1-4;7;9) | 45% | 1 |
| 18. RTDI | 24.8% | 1 | B. Entrepreneurship (6-7;8) | 21% | 2 |
| Phasing In  | 31. Transport infrastructure | 14.1% | 4 | C. Information society (10-15) | 16% | 3 |
| 32. Telecommunication infrastructure and information society | 6.6% | 3 | M4. Technical assistance (85-86) | 4% | 11 |
| Sterea Ellada | Objective 1 & CF | 31. Transport infrastructure | 61.5% | 4 | A. Innovation & RTD (1-4;7;9) | 11% | 1 |
| 16. Assisting SMEs and the craft sector | 8.7% | 2 | B. Entrepreneurship (6-7;8) | 12% | 2 |
| Phasing In | 34. Environmental infrastructure | 6.4% | 6 | D2. Transport - Roads (20-23) | 14% | 4 |
| 36. Social and public health infrastructure | 5.5% | 10 | L. Investment in social infrastructure (75-79) | 21% | 10 |
| Övre Norrland | Objective 2 | 16. Assisting SMEs and the craft sector | 44.6% | 2 | A. Innovation & RTD (1-4;7;9) | 44% | 1 |
| 18. RTDI | 19.1% | 1 | B. Entrepreneurship (6-7;8) | 16% | 2 |
| Regional Competitveness | 31. Transport infrastructure | 9.9% | 4 | E2. Energy - Renewable (39-43) | 16% | 5 |
| 32. Telecommunication infrastructure and information society | 9.6% | 3 | G. Tourism and culture (55-60) | 12% | 7 |
| Highlands and Islands | Objective 1 | 16. Assisting SMEs and the craft sector | 35.6% | 2 | A. Innovation & RTD (1-4;7;9) | 36% | 1 |
| 31. Transport infrastructure | 31.9% | 4 | B. Entrepreneurship (6-7;8) | 24% | 2 |
| Phasing Out | 36. Social and public health infrastructure  | 7.6% | 10 | C. Information society (10-15) | 9% | 3 |
| 32. Telecommunication infrastructure and information society | 6.7% | 3 | G. Tourism and culture (55-60) | 8% | 7 |