

Policy guidelines for regions falling under the new regional competitiveness and employment objective for the 2007 - 2013 period in the fields of the knowledge economy and the environment, in line with the Lisbon and Gothenburg objectives

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**Policy guidelines for regions falling under the  
new regional competitiveness and  
employment objective  
for the 2007 - 2013 period**

*EXECUTIVE SUMMARY*

Prepared for:  
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## DISCLAIMER

*This report was produced by a consortium led by CSIL-Centre for Industrial Studies (Milan) for the Regional Policy Directorate General and represents the views of the contractor. These views were produced in order to provide analytical support for the Commission services. They have not been adopted by the Commission and do not necessarily represent the view of the Commission itself or the Directorate General for Regional Policy.*

*The Team takes full responsibility for the data, information and judgments expressed in the present report.*

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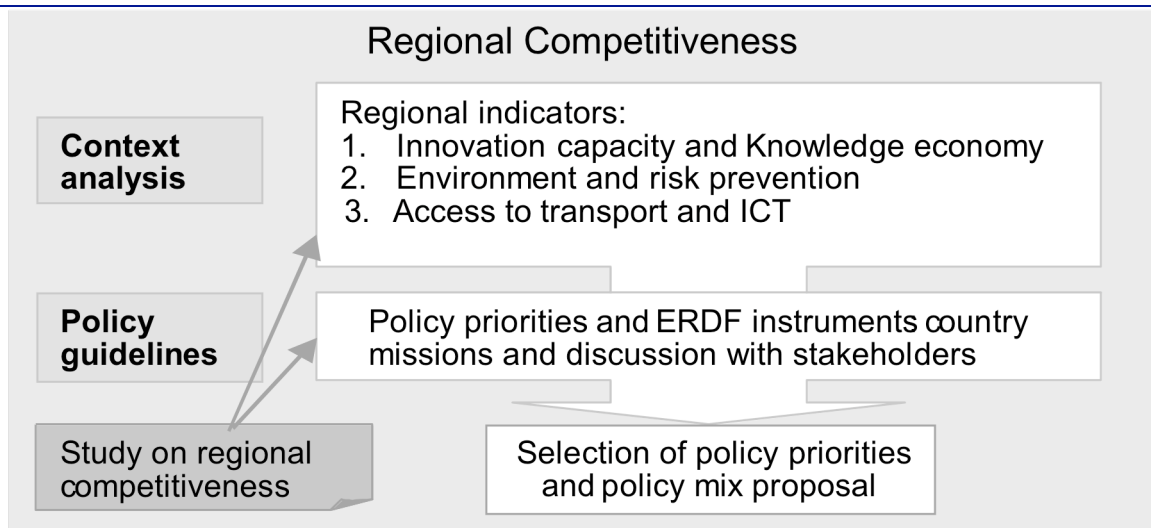
# Executive summary

## Methodology

### Role

The role of this study is to provide the Commission with an expert assessment about the strengths, weaknesses, opportunities and threats faced by the eligible regions for the new regional competitiveness objective, and provide a policy analysis about priorities to be financed through the European Regional Development Fund (ERDF) scheme. It will support the Commission in policy formulation and negotiation tasks. The results of the study will feed into the Community Strategic Guidelines, proposed by the Commission and adopted by the Council.

### Role of the study within the regional policy framework



The methodological approach was based on a combination of statistical context analysis and policy field analysis. The detailed statistical methodology and selection of indicators is described in the first volume at an aggregate level, while the main results at a regional level represent the first section of the country reports. The second section of the country reports contains the policy priority assessment on the basis of the field analysis.

### Statistical analysis

The statistical analysis was based on a three-step approach:

- Selection of relevant indicators
- Multivariate analysis
- Link of thematic performance to economic performance

The analysis is based on a consistent set of indicators selected at the Inception stage of the study by the Statistical group in partnership with the Steering Committee. These indicators are related to the themes to be financed under the ERDF in the 2007-2013 programming period: innovation and the knowledge-based economy; access to transport and TCL/ICT infrastructures; environment and risk prevention<sup>1</sup>. Indicators were collected for the European regions at the NUTS2 level (2003 classification)<sup>2</sup>. These indicators were selected and discussed at the first meeting of the Scientific Committee and the Commission, and validated by the thematic experts.

A separate multivariate statistical analysis, one for each thematic area, is followed by the linking of each set of thematic indicators to a set of economic performance indicators. The rationale behind such a joint analysis relies on policy purposes: a set of control variables for the economic position and the dynamics of the different regions must always be taken into account. There is a need to distinguish between regions with a similar share of expenditure on R&D, level of technological risk, or percentage of firms with Internet access, showing different levels and rates of change in economic performance. This helps, albeit in a preliminary way, to single out the real and major strengths and weaknesses, opportunities and constraints faced by the different groups of regions. Given the diverse nature of the variables and the descriptive purpose of each analysis (we are looking for measures of statistical association rather than causal relationships) the most appropriate statistical procedures to be performed could be those of correlation and factor analysis.

The outcome of this phase is a set of regional maps for the whole of Europe as well as specific country tables. They can be used to identify the regions or groups of regions characterized by major problems or strengths with respect to innovation, environment, and access to transport and TLC/ICT infrastructures. The taxonomy of regions resulting from the above statistical analysis is significantly dependent on:

- the availability indicators for all the European regions eligible for the competitiveness objective
- the methodology used to extract combined indicators from a variety of basic data. As a consequence, clear or unique policy implications cannot emerge solely from the findings of the statistical analysis. The latter should be viewed as the initial inputs of a more in-depth policy analysis carried out for each country as the next step of the study.

### *Field analysis*

The statistical analysis was the main input for the field analysis, which is the second research tool of the methodological approach. The results of the reports are discussed and organised in order to stress, for each specific country, the strengths, weaknesses, opportunities and threats

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<sup>1</sup> See Vol. I, Annex III for the full list of variables, data sources and coverage of EU eligible regions.

<sup>2</sup> See Vol. I, Annex I for the full list of 167 regions. According to the latest available data on GDP per capita (Eurostat, April 2005), Burgenland does not fall under the Regional Competitiveness objective but is instead eligible for the Convergence objective. In the statistical analysis (performed before April 2005) Burgenland was included. However, being a region with intermediate performances with respect to all the thematic areas as well as economic variables, its exclusion does not significantly change the results of our statistical analysis. As a consequence, in some descriptive tables reported in this volume a number of 168 regions is indicated while the exact number of EU eligible regions (December 2005) is 167.

in terms of regional competitiveness. They draw together all of the findings from the background data and provide a starting point for strategy design.

The output of the field analysis is twofold:

- A list of themes, chosen from among those proposed in the ERDF draft Regulation, identified as strategic for fostering regional competitiveness;
- A prioritisation among them.

More specifically the country experts provided three different kinds of input:

- Comments and revisions of the general overview resulting from the statistical analysis: both qualitative interpretation of data and completion of data sets including national sources gave the statistical analysis a fine-tuning in order to take into due account all the regional specificities and challenges;
- An overview of the expectations at a regional level of the future programming period and the institutional framework: some highlights about the planning exercise and the sharing of responsibilities between regional and national level were collected during the discussions with stakeholders and independent experts;
- A discussion of the policy priorities to be recommended for the future period.

The proposed list of priorities, based on objectively verifiable evidence from the statistical analysis, was discussed with stakeholders and experts, in order to enrich the objective view with a critical discussion that also considers the previous experience in each region and the implementation problems.

The consultation process was implemented by the network of national experts in coordination with the Core Team evaluators. The country experts' network and the Core Team together identified a full list of addressees and a suitable strategy for each country.

The typology of interviewees was:

- national, regional, thematic stakeholders;
- civil servants, evaluators, independent experts (academics, consultants).

They were selected for being:

- aware of the regional development strategy implemented in the region;
- involved at different levels in the management of Structural Funds at regional and national level;
- experts (at an academic or professional level) in one of the thematic priorities;
- independent evaluators.

The number of key stakeholders was one per each region and two or three at a national level, for a total of 180 interviewees.

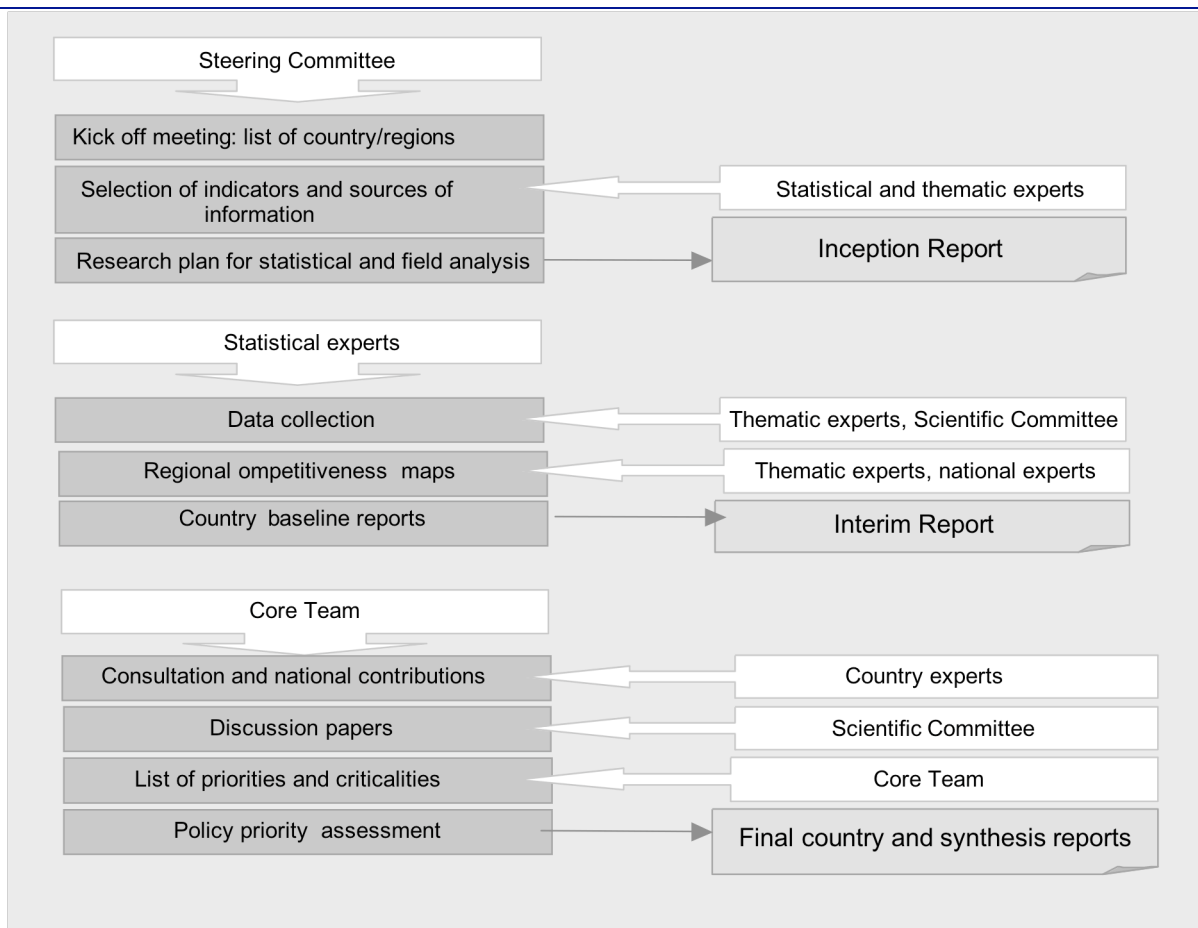
The consultation strategy was different in each member state, according to the strategy proposed by the national expert and shared with the Core Team. It comprised personal one-to-one interviews, phone interviews or interaction by email following a checklist of issues, and open debates (in the form of round tables, workshops and focus groups) or a combination of these.

## Policy priority assessment

The policy priority assessment is the result of the statistical analysis and the field analysis. After collecting all the evidence and discussing it with the relevant stakeholders and experts, the Core Team, together with the Scientific Committee, provided the final assessment on policy priorities in the light of future challenges to the policy framework for the regional competitiveness and employment objective for the programming period 2007-2013.

Moreover, the Scientific Committee members provided working papers on selected policy themes, where they discuss relevant topics for the future programming period, in light of the main findings of the study.

### Work plan



The policy priorities discussion was guided by the list of eligible interventions according to Art.5 of the ERDF draft Regulation. Following the proposed list of themes and sub-themes the national experts made a simulation of the possible eligible measures to be implemented in order to solve the bottleneck to territorial competitiveness stressed by the data analysis. Moreover, the results of the Evaluation reports for the current programming period helped to give some recommendations about the process to be implemented in order to achieve the assessed policy objectives.

## Target regions

In the period 2007-2013 the regional programmes funded by the ERDF under the new Competitiveness and Employment Objective will provide support under two different regimes:

- Phasing-in regions: those regions falling under Objective 1 in the 2000-2006 period which would become ineligible (even in EU-15) because of their economic growth<sup>3</sup>. All other regions not falling under Convergence Objective or phasing-in status.

In addition, the proposal of the new regulations<sup>4</sup> provides outermost regions with additional contributions, and contributions are also distributed to Member States on the basis of the eligible population. Two of these outermost regions will fall under the Competitiveness Objective as phasing-in regions (Madeira and the Canary Islands); in this case, the application of the above mentioned criteria should result in an additional contribution for these regions.

At present 167<sup>5</sup> NUTS2 regions are eligible for the new Regional Competitiveness objective. In the 2000-2006 programming period these regions manage a total of 120 regional Operational Programmes co-funded by the Structural Funds. The institutional level for Regional Operational Programmes does not always correspond to the NUTS2 regions. In particular, for the United Kingdom, Germany, Sweden and the Netherlands, the Operational Programme refers to groups of NUTS2 regions. Moreover, one region, Kozep-Magyarország<sup>6</sup>, has no regional programme and one region, Nord-pas-de-Calais, is eligible for two Operational programmes, one Objective 1 and one Objective 2.

The abolition of micro-zoning implies that in the next period the region as a whole will be eligible and many new territories will become eligible. Therefore, the population coverage within the same region will increase. In some cases - Vlaams-Brabant and Brabant Wallon in Belgium – regions not receiving any Structural aid will become eligible in the new Competitiveness objective.

In the current programming period a broad range of funds and programmes determine the Structural Funds financial inflows to these regions. While a direct comparison between current and future Structural Funds allocation at a regional level is not viable, a broad analysis is due.

Objective 1 and Objective 2 regional operational programmes provide the main support. In the period 2000-2006 the future Competitiveness regions receive €43.1 billion from Structural Funds supported regional programmes.

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<sup>3</sup> According to the draft Progress Report on Cohesion they are: Eastern Finland (Finland); Continental Greece, South Aegean (Greece); Kozep-Magyarország (Hungary); Border, Midland and Western (Ireland); Sardinia (Italy); Madeira (Portugal); Castilla y León, Comunidad Valenciana, Canarias (Spain); Merseyside, South Yorkshire (United Kingdom)

<sup>4</sup> COM (2004) 492, art. 5(4) and art. 16(1)(d).

<sup>5</sup> At the beginning of the study (January 2005) there were 168 eligible regions, but Burgerland (AT) was subsequently moved to the Convergence Objective.

<sup>6</sup> In the current period Hungary benefits from a single national programme.

**Tab. A. Regional operative programme in the eligible regions in the 2000-2006 period**

	Obj. 1		Obj. 2	Total
	Phasing in	Competitiveness		
No. of programmes	11	12	97	120
Total EU contrib. (million Euro)	14,833.53	5,390.65	22,899.61	43,123.79
% of total	34.40	12.50	53.10	100
Total ERDF contrib. (million Euro)	10,306.446	3,499.531	20,482.898	34,288.875
% of total EU contrib.	69.48	64.92	89.45	79.51

Source: our processing of DG Regio data.

The mainstream Operational Programmes represent over 90% of the financial envelope available. However some other initiatives give the full picture of Structural support in the target regions. The ERDF finances Interreg III, Urban II and Innovative actions.

The European Social Fund finances the Objective 3 and the EQUAL initiatives in these regions. For the Objective 3 programmes it is much more difficult to identify the extent of the EU contribution, since, with the exception of Objective 1, support is provided through national programmes. Cohesion Funds also currently support some of the regions eligible for the Competitiveness objective.

#### *Transition from the current to the new planning period*

In the next programming period both Phasing-in and Competitiveness regions will experience diminishing contributions from the Structural Funds. Under the new Competitiveness and Employment Objective, contributions to non phasing-in regions should be equally divided between ERDF and ESF.

It is important to bear in mind the process and results of the past programming experience in each region and country because specific features of these, together with weaknesses and strengths in consensus building, will most likely influence the future assessment of policy priorities.

Generally speaking, in the current period, Competitiveness regions are experiencing different ranges of interventions from Structural and Cohesion Funds. In assessing these interventions with a view to the next programming period, some dimensions are relevant. For example the national/regional dimension of programmes. In fact, in the current period, Objective 1 programmes are implemented with a greater involvement of the national dimension than Objective 2 programmes. Objective 1 support often involves national thematic programmes (they are six in Greece and eight in Portugal, for example), while this is less common in Objective 2 programming.

Thus, it is possible to identify four different typologies of countries falling under the new Competitiveness and Employment Objective that share the same patterns in the two programming periods.

**New Member States** (Cyprus, Prague region, Budapest and Bratislava regions). In each country only one region will fall under the new Competitiveness Objective after having been Objective 2 in the 2004-2006 period (from accession date), except for the Kozep-Magyarország region, which benefits from the Objective 1 national programme for Hungary.

Common features of these regions are the presence of the capital city and a level of development significantly higher than the country as a whole (high population density and GDP per capita, with low rates of unemployment). Moreover, they share a more recent experience with Structural Funds management, and, most likely, a weaker institutional capacity compared to old members.

**Objective 1 regions.** The second typology includes countries currently entirely Objective 1 that will have regions falling under the Competitiveness Objective in the next period (Greece, Ireland and Portugal). In these countries a specific key issue will be the adaptation of the institutional structure to the management of different programmes with a more decentralized approach. As mentioned above, a large part of the financial resources under Objective 1 are spent at the national level.

Both Greece and Portugal finance a sizeable number of national programmes covering a broad range of priority areas. In the next period they will deal with two Competitiveness regional programmes that will be different from the Convergence programmes, both in terms of content and of programming approach.

Ireland as a whole moves from two Objective 1 programmes (one of which is phasing-out) to two Competitiveness Objective programmes. This situation could be less problematic since the entire country (covered by only two regional programmes) changes its status; moreover, national programmes in the current period are more concentrated (four priorities).

**Objective 1 and 2 regions.** The third typology includes countries where both Objective 2 and Objective 1 regions will fall under the Competitiveness Objective in the next period. They are Austria, Finland, France, Italy, Netherlands, Spain, Sweden and United Kingdom. In Spain about 22% of the total population will shift from Objective 1 to the Competitiveness Objective. This entails a large change in the programming and implementation of interventions, also taking into account the reduction of contributions due to ineligibility for the Cohesion Fund. In some of these countries (France, Italy, Netherlands and United Kingdom) the percentage of the population shifting from Objective 1 to the Competitiveness Objective ranges from 0.4% (in France) to 4.4% (in the United Kingdom). In the next period all the regions in the Netherlands will fall under the Competitiveness Objective.

**Objective 2 regions.** The fourth typology includes those countries whose Objective 2 regions will fall under the new Competitiveness Objective. They are Denmark, Germany, Luxembourg and Belgium. They will not have any regions coming from Objective 1 that can cope with a considerable shift in the programming approach.

Some differences exist among them. While a single programme will cover Denmark and Luxembourg, the Competitiveness Objective in Germany will extend to many regions, including a large part of the national territory. In Belgium, two regions will be eligible after receiving no Structural Funds in the current period.

Sweden and Finland merit a specific comment. In both countries all Objective 1 regions will be considered under Competitiveness Objective programmes. These areas cover a large part of the territory but are sparsely populated; nevertheless, the percentage of the population is highly significant (roughly 15% and 25% in the two countries). This means that a significant variation in the programming and implementation of interventions may also occur.

## Findings of the statistical analysis

### General economic analysis

The context analysis is based on a set of socio-economic indicators and a set of economic performance indicators.

Indicators of socio-economic structure	Years	Source
1. Population	2000-02	Eurostat
2. Population density (population/surface)	2000-02	Eurostat
3. Share of employment in the primary sector	2000-03	Eurostat
4. Share of employment in manufacturing	2000-03	Eurostat

Economic performance indicators	Years	Source
1. GDP per capita in PPS	Average 2000-2002	Eurostat
2. Rate of unemployment	Average 2000-2002	Eurostat
3. Growth rate of GDP at constant prices	Annual rate 1995-2002	DG Regio
4. Growth rate of GDP per employed person	Annual rate 1995-2002	DG Regio and Eurostat

The rationale underpinning this choice is to find some key features in the economic structure of the target regions that help to better address policy priorities. The analysis identified some relevant dimensions, according to which the regions can be clustered.

The key findings of the analysis of the rural/urban nature of each region<sup>7</sup> are the following:

- France, Finland, Austria and Greece have a large number of regions with a clear rural feature;
- The rural dimension is mostly intermediate in Denmark, the Netherlands, Sweden and Southern Ireland, while intermediate rural regions with a high manufacturing presence are mainly concentrated in Italy and Germany, followed by Spain and Northern France;
- Urban regions are concentrated in the south of the United Kingdom and Belgium;
- Five out of nine urban regions with a high manufacturing presence are located in Germany. As a consequence, considering the ratio of “manufacturing” regions over the national eligible regions, Germany, Italy and Spain have an above average presence of manufacturing activities.

The composite indicator for the economic performance of each region is related to both the ‘performance level’ and the ‘growth of performance’. The factor weights and the percentages of total correlation indicate that, from a statistical point of view, the two factors are almost equally important in describing the different economic performances of European regions. The composite indicator of economic performance ascribes a higher weight to the measure of

<sup>7</sup> It is defined according to a composite indicator from the set of socio-economic structure.

economic level (2/3) and a lower one to the measure of economic growth (1/3). The key findings are the following:

- The performances of six regions diverge greatly from the average. These outliers are: Inner London, Bruxelles-capitale and Luxembourg in terms of GDP per capita; the two Irish regions in terms of GDP growth; Dorset and Somerset (United Kingdom) in terms of growth of GDP per person employed<sup>8</sup>.
- The rate of employment is systematically higher in Northern Europe (Netherlands, United Kingdom and Sweden) than in Southern Europe (Italy, France and Spain). This is due to different labour market conditions which, in Northern countries, favour higher shares of female participation, part-time workers and, to a lesser extent, a lower incidence of irregular employment;
- The regions with low economic performances are particularly concentrated, on the one hand, in the southern part of Mediterranean countries such as France, Spain and Italy and, on the other, in the northern part of Germany, Finland, Sweden and the United Kingdom. This confirms the opposite North-South divide in terms of economic growth and welfare that characterises Northern and Southern European countries.
- The high performing regions in terms of economic performance are concentrated in Northern Italy, Austria, Southern Germany, Southern England, Ireland and the Netherlands.

In the country reports these results are presented and discussed at a regional level, also giving regional rankings comparing them to benchmarks such as the EU average of eligible regions and the national average.

### *Thematic analysis*

Thematic analysis includes a set of indicators for each theme, the construction of a composite indicator for each theme, and an investigation of the correlation, if any, with the economic performance of each region. Using this correlation it is possible to rank regions as low, intermediate and high performers in terms of both economic performance and the theme considered. There are regions with a potential in the theme that is higher than their economic performance: in these cases a possible problem of unexploited potential arises, which is obviously more evident for the region with a high record for thematic potential and a low economic performance. Conversely, there are regions in which the two composite indicators are not correlated since intermediate or high economic performances are coupled with a low or intermediate thematic potential.

### *Innovation and the knowledge economy*

As far as innovation and the knowledge-based economy are concerned, the indicators used are

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<sup>8</sup> The GDP per capita of Inner London, Bruxelles-capitale, and Luxembourg is equal to, respectively, 60, 48 and 44 thousands Euros, while the average for the European regions eligible for the competitiveness objective is 23. The Irish regions record an annual rate of GDP of, respectively, 7.9 and 8.4 compared to an average of 2.5. The region of Dorset and Somerset, due to a remarkable reduction in the number of employed persons, shows an annual growth of GDP per worker of 7.9 compared to an average of 1.2.

the following:

Innovation and knowledge economy indicators	Years	Source
1. Total R&D expenditure on value added	Average 1995-2002	Eurostat
2. EPO applications per million inhabitants	Average 1995-2002	Eurostat
3. Share of employment in high-tech manufacturing	Average 1995-2003	Eurostat
4. Share of employment in high-tech and knowledge-intensive services	Average 1995-2003	Eurostat
5. Share of population aged 25-64 with tertiary education	Average 2001-2002	Eurostat
6. Share of turnover due to products new to the firm	Average 1996-1998	CIS

Data processing shows that:

- The largest group is the intermediate one followed by that with a low innovation and knowledge potential.
- The old-lived dichotomy between the Southern Mediterranean (less innovative and less knowledge-intensive) and the Northern-Central regions is re-proposed (with a few exceptions). In fact, we observe a marked innovative gap affecting many regions of Italy and Spain, as well as Greece, Portugal, Cyprus and other peripheral areas in Northern Europe. A few notable exceptions refer to France where, besides the capital region, some southern regions are also characterised by a high innovative potential.
- In the UK the higher potential of Southern England is confirmed, while Scandinavian countries perform well as a whole, without marked regional differences<sup>9</sup>.

The key findings of the correlation analysis are the following:

- Most of the low performers belong to the group of Southern Mediterranean countries: this is the case of France and, to a lesser extent, Italy and Spain.
- A portion of those regions having a low score in innovation recorded an intermediate or even high level of economic performance and, thus, are respectively classified as "uncorrelated" or "strongly uncorrelated" (this is the case of the Austrian and Italian regions and, to a lesser extent, those of Ireland, Spain, the Netherlands and the United Kingdom).
- This mismatch between innovative potential and economic performances should be seen as a possible "early-warning": in fact, although the actual situation of these regions is not as critical as their innovative profile may suggest, literature on the economics of innovation suggests that this may change in the future, as soon as the inertia and the path-dependent nature of development are reversed, for example by exogenous shocks.

### *TLC and ICT*

As far as the accessibility to TLC and ICT is concerned the set of indicators selected is the following:

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<sup>9</sup> However, this homogeneity can be partly due to the imputations made to fill the data gaps, both in the case of Finland and Sweden.

Access to TLC and ICT indicators	Years	Source
1. Share of firms with Internet access	2003	ESPON
2. Share of firms with a Website	2003	ESPON
3. Share of households with PCs	2002	INRA
4. Share of households with Internet access	2002	INRA
5. Share of households with broadband Internet access	2002	INRA

The analysis of these indicators stresses the following results:

- The intermediate performers are the largest group, followed by the high performers.
- There is a clear North-South divide among European countries. It must be stressed that in the Northern countries there are many regions with a level of access to ICT/TLC higher or much higher than their economic performances: in these cases, the economic potential of digital technologies seems far from being fully exploited. The opposite phenomenon, that is high economic performances coupled with low levels of ICT diffusion, arises in Ireland, France, Spain and Northern Italy.
- Northern countries such as Sweden, the Netherlands, the United Kingdom, Belgium, Germany, Finland and Austria are characterised by a higher access to TLC/ICT and, moreover, record small differences among their regions (with the exception of Belgium where regional disparities are relatively marked, especially for the Internet access of households). In these countries, the highest level of variability can be found in the households' broadband access to the Internet; this is due to the different stages of development of such infrastructures in European countries in 2002.
- The ICT indicators for Southern countries are relatively lower and this occurs not only in Italy, Spain, Greece and Portugal, but also in France. Actually, the performances of Italy and Spain are better and more differentiated across regions than those of all the French regions, which appear quite laggard in terms of access to TLC/ICT<sup>10</sup>.
- Apart from broadband use, the difference between low and intermediate performers is larger than between the latter group and that of high performers. In contrast, the diffusion of broadband access is heavily dependent on the nature of the regions as the roll-out started from the capital city (or urban areas); accordingly, the largest percentages of broadband access can be found in the most populated areas such as the Belgian, Danish, Dutch and Swedish regions.
- The group with low access to ICT is characterised by a core of laggard regions presenting very low adoption rates in any ICT aspect. The delay is more pronounced in the share of firms with a website and, to a lesser extent, the percentage of households using the Internet.
- The most central regions of continental Europe, with the addition of Sweden and Finland, appear more advanced. Here, two cross-national areas of excellence can be identified: a large portion of Benelux and the southern part of Germany together with some alpine regions of Austria.

<sup>10</sup> These findings are consistent with other data on ICT diffusion and expenditure, which confirm that, within the European context, the French position is particularly weak.

## Transport

The access to transport analysis is carried out on the basis of the following indicators:

Access to transport infrastructures	Year	Source
1. Multimode (road, rail, air) accessibility potential	2001	ESPON
2. Connectivity to transport terminals by car (in hours)	2001	ESPON

Although the two indicators of accessibility and connectivity are correlated, they capture different aspects of strength or weakness with respect to the accessibility to transport infrastructures. Consequently a separate analysis for both indicators is a better solution. Thus, they are combined in order to identify four groups of regions: those with no relevant problems of access to transport with either intermediate and high levels of access to transport indicators, those characterised by low levels both in terms of connectivity and accessibility, and those affected by either connectivity or accessibility problems.

The regions affected by both problems are particularly concentrated in the northern areas of Sweden and Finland, in the central part of France, Spain, Greece, Cyprus and, to a lesser extent, in Italy, Ireland and the UK. Instead, Germany and Austria and Eastern France host a large number of regions characterised only by a low level of connectivity. Finally, the regions with problems of accessibility only are above all in France, followed by Spain, the UK, Ireland and Southern Finland.

A joint analysis with economic performance indicators was performed on the regions classified as problematic in the field of access to transport, in order to differentiate them for policy priorities. The most problematic regions are the low performers, which are particularly concentrated in France, Northern Sweden and Northern Finland. They are followed by the regions characterised by an economic performance much better than their access to transport: in these cases the low access to transport could undermine their future economic growth. These regions are mainly located in Austria, Germany and Ireland. Finally, a significant number of regions with a weak correlation between economic performance and access to transport are found in France and Germany.

## Environment and risk prevention

The indicators for the environmental analysis are grouped into four categories, according to the sub-category of the new ERDF regulations. These categories aim to emphasise how a sustainable development strategy should address the most serious threats to sustainable development in Europe and the world, the so-called unsustainable trends, mainly: climate change, public health, transport and land use, and management of natural resources. The main objective is to use three or four indicators for any given category and then try to summarise them by extracting the principle components, thus obtaining combined or composite variables, possibly one for each group.

The composite indicator of energy sustainability shows that the most numerous regional group is the intermediate one. This concentration is mainly due to the fact that most metropolitan or densely populated regions are characterised by intermediate energy indicators. Low performing regions are particularly present in Finland and Northern Germany. High performers are mainly

recorded in France, Spain and Austria. Data are not available for the United Kingdom and Ireland.

Since the emphasis of this study is on policy implications, the major interest here is in those cases where this complex and bi-directional combination of environmental and economic performances appears to be critical. This critical situation may indeed assume two different forms:

- regions with low economic performances and negative energy features. For these cases greater attention is paid to the low economic performance that may exert a negative impact on energy sustainability or, in any case, reduce the potential for investing in renewable sources. According to this interpretation, these cases are not considered “critical”.
- regions with positive or very positive economic performances and negative energy indicators. In these cases the assumption is that energy drawbacks may actually hamper long-term economic results. Thus, the interpretation is that these environmental problems may represent serious constraints to regional development and the main policy objective should be to make the regional economy more reliable and sustainable in the field of energy.

From a detailed analysis of transportation impact indicators, significant differences among countries emerge: they are mainly due to the different urban-rural structures and the geographical size of the region.

The combination of the composite indicator of transportation impact and that of regional economic performance helps to identify the critical regions.

Following the same argument for energy sustainability, attention is concentrated on regions with high transportation impact and, at the same time, a high or intermediate economic performance. Here, a more limited number of critical cases emerge (19 regions), mostly concentrated in Belgium and Northern Germany.

As far as the natural/rural assets indicators are concerned major differences among countries may emerge due to the different urban-rural structures and to the size of the region. In the joint analysis we consider as critical cases those regions with a low natural endowment and a high or intermediate economic performance. Due to the homogenous distribution of the eligible regions over the composite indicator of natural/rural assets, a significant number of regions fall into the critical area. These critical cases are particularly concentrated in Belgium, Northern Germany and Southern UK.

The risk prevention indicators involve two different kinds of risk. Natural risks, including specific natural hazards somehow connected to human activity, and technological risks, which involve all those productive activities within a region that imply the possible occurrence of dangerous accidents or acute pollution.

In the specific field of natural and technological risks the usual joint analysis with the regional economic performance is not advisable. In fact, the behaviour of risk prevention indicators cannot be explained by any interpretation of the relation between “exploitation” of the environment and economic growth. On the one hand, there is no clear motivation for any causal relationship with economic growth and, on the other hand, its relevance cannot be regarded as a linear function of hazard intensity.

According to this approach, from a policy perspective, attention should be exclusively paid to those regions where the risk is particularly high (higher than a given threshold) regardless of whether they have good or bad economic performances.

With respect to natural risk, the critical cases are concentrated in France, Italy, Spain and southern Germany while the regions with a high technological risk are in northern Germany, Belgium and, to a lesser extent, the UK, France and Spain.

## Findings of the field analysis

The methodology and the indicators used have been understood as an initial approach to benchmarking and categorizing regions according to a vast set of data, giving a first highlight and dimension of the relative regional needs. Field analysis was used to evaluate and supplement the initial analysis with additional information. In order to have a basis for far-reaching strategic decisions, national experts collected a set of further qualitative (partly also quantitative) informational input.

On the basis of their interpretation of the data, their knowledge of territorial specificities, and the inputs collected by external referees and stakeholders, they provided a list of major themes to be financed under the ERDF Fund and a prioritization among them.

The approach was based on a comparative perspective supported by the results of the previous programming period. The main challenges for the future period will be to guide the managing authorities in new directions that, in some cases, could also mean a strong redefinition of the programme design compared to the previous period. The outline of the main priorities funded in the old Member States in the 2000-2006 period for the Objective 2 regions and the breakdown of financial resources among them gives a first idea of the weight of priorities (in terms of use of financial resources) that will no longer be financed, according to the new thematic concentration proposed in the draft regulation. In fact, the strategic priorities preferred by the policy makers are supposed to be the ones that, in the period 2000-2006, recorded a high level of success in terms of effectiveness, measure of social benefits produced, and satisfaction of key stakeholders. Some of them will no longer be eligible under the new ERDF Regulation. At the same time, some of the thematic priorities of the new ERDF Regulation recorded poor performances in the previous period.

The analysis in terms of regional policy was developed with a two-step approach: identification of relevant policy issues and prioritization among them.

The first step came from the findings of the statistical analysis and discussion of the main relevant topics or regional competitiveness. There is a wide consensus about the big issues for competitiveness in Europe in the future programming period: the Lisbon and Gothenburg agenda have raised awareness of a short-list of policy choices. Prioritizing them is less straightforward. The exercise carried out by the field analysis was aimed at assigning a weight to the short-list of issues identified and well accepted by almost everybody. Some of the aspects that guided the choice in terms of priorities were the following:

- Lessons learned from interventions in the ten fields identified in the draft regulation, both with ERDF and other financial sources.

- Strengths and weaknesses of different typologies of interventions financed by the ERDF, state aid and infrastructures, for the programming period 2000-2006.
- Sharing of responsibilities between regional and national levels in the new programming period compared to the former one.
- Management of the coordination between national and regional levels.
- Number of operational programmes forecasted: multi-regional or national operational programmes forecasted.
- Coordination between the ERDF and the ESF.
- For Hungary, the Czech Republic, Greece, Portugal and Slovakia: coordination between the ERDF and the Cohesion Fund.
- Feasibility of the interventions eligible within the new thematic priorities in the region, according to the previous experience.
- Identification of the less effective typologies of interventions implemented and reasons. Key issues for possible solutions.
- How the new strategy proposed by the Commission, based on the thematic concentration, is useful to tackle weaknesses in regional competitiveness.
- Categories of interventions that are good practice in the region for the period 2000-2006 and are not going to be eligible for the period 2007-2013. Alternative measures for these priorities for the region.

The final regional policy priority set and a tentative prioritization among them is the result of this process and is structured on a regional basis in the country reports.