





Bundesamt für Bauwesen und Raumordnung

# **Matera Guidance Paper**



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Thursday, 19 February 2004

The content of this guidance paper does not necessarily reflect the opinion of the ESPON Monitoring Committee



# **ESPON Matera Guidance Paper** by ESPON Project 3.1 , Bonn, 19.02.2004

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# ESPON Co-ordination towards May 2004/ October 2004

This Matera Guidance Paper follows the tradition of reflecting on the latest interim reports and ESPON seminars as well as preparing guidance papers for the ongoing ESPON projects. The last Guidance Paper was the "Crete Guidance Paper", and this "Matera Guidance Paper" starts from there but also adds new aspects. The main focus of the Matera Guidance Paper is on the final reports of the first round projects, their policy recommendations and the methodologies used to come to sound analytical results and conclusions.

The main aim of this Guidance Paper is to strengthen the common platform of the whole ESPON exercise and give all participants some guidelines that might help to navigate to excellent project and common programme results. At this stage it is obvious that co-operations and interchange between the TPGs are absolutely necessary.

This paper mainly focuses on the *Analysis of Trends and Policy Impacts*. A detailed timetable until the 4<sup>th</sup> ESPON Seminar in Lillehammer in May 2004 and a rough timetable until the 5<sup>th</sup> ESPON Seminar in Nijmegen in October 2004, will show the work the ESPON Programme 2006 participants have to realise.

In Crete and Matera all TPGs agreed, based on the currently existing projects preliminary results and the seminar outcomes, that common elements are needed which can be used by different TPGs. These common elements are necessary (1) to make things simple and efficient by using results from other TPGs and (2) to achieve coherent ESPON results.

The most important elements of the common platform are:

- 1. the ESPON data base (core indicators) including
- 2. some (core) typologies of regions;
- 3. a collection of ESPON maps (visualising the core indicators and typologies);

These are the basic elements for:

- 4. the analysis of trends and policy impacts related to different types of regions;
- 5. the operational definition and measurement of policy goals and concepts as a base for
- 6. the assessment and evaluation of results (trends and policy impacts) with reference to these policy goals and concepts;
- 7. conclusions for policies (policy recommendations).



#### Methodology of analysis

In the Crete GP this approach has been visualised by this picture:



The Crete GP concentrated on some very basic elements that should be useful to be considered by the TPGs to get comparable and coherent results. These elements were mainly related to the common ESPON data base and its application for territorial and spatial analysis of European trends and policy impacts.

According to the progress that has been achieved after the Crete Guidance Paper, this Matera Guidance Paper mainly focuses on the forthcoming results of the ESPON studies and the conclusions and policy recommendations that follow from them. In our judgement, one of the crucial points for the successful communication of ESPON results to political decision-makers stemming from the field of spatial planning as well as sectoral planning will be that these results and recommendations must be based on a sound analysis and are strictly connected to this analysis. This would mean that we (in the next TPG Lead Partner meeting) should devote some of our time to the discussion of these methodological questions. The following graph and its explanation might make clear what is meant.

The main focus of all ESPON projects is on the question how spatial structures and development trends (Measure 1 projects) and spatial impacts and incidences of sector policies (Measure 2 projects) match with spatial and territorial development goals that have been formulated by the spatial planning ministers of the Member States and the European Commission in several documents like the ESDP and the Cohesion Report. In their latest interim reports, all TPGs have addressed this question and have developed and used different statistical methods and methodologies to answer these questions on a sound scientific base. It would be worthwhile to have an in-depth discussion during the next TPG Lead Partner meeting and to exchange on the different project groups. Also a reflection on the approach of territorial impact analysis (TIA) should be included in this discussion. In order to evaluate trends and policy impacts against territorial goals, obviously two strands have to be followed (as shown in the graph).





One important part of the analysis is dealing with the structure and territorial trends of selected features of the territory (Measure 1 projects) as well as the spatial and territorial impacts of selected policies (Measure 2 projects). In the case of Measure 2 projects, not only the immediate output of a sector policy or a concrete intervention is addressed but also the results, impacts and effects that follow from this intervention. In a similar way this is also true for Measure 1 projects that do not only analyse specific structures and trends but also their spatial impacts and effects. All projects have addressed this task in their specific field and will produce valuable results in this respect. But, on the other hand, there are still some deficits in this field which, however, are very difficult to overcome. Mainly due to the lack of data, many projects are restricted to an analysis in one point of time describing territorial structures and regional incidences of expenditure rather than development trends and changes that were induced by policies and interventions. These deficits, as said, are very difficult to overcome but should be addressed in the next Lead Partner meeting to think once more about possible solutions.

The second strand in this argumentation has its origins in the political debate and the political consensus about goals and aims of a sound and balanced future development of the European territory. It is part of the political nature of this consensus that the goals agreed are not clear and operational but fuzzy and open for further discussion and interpretation. But it is obvious that, when ESPON projects



have to evaluate whether territorial structure, trends and impacts are in line with those goals (like polycentric development, balanced accessibility etc.), each project and the whole of the ESPON exercise can simply not avoid to give its own interpretation and operationalisation of spatial development goals. Of course, this operationalisation is not directed towards the formulation of feasible policy strategies. Rather, in a first and basic step, this operationalisation of political aims and goals is needed for a data-based statistical and empirical judgement of the coincidences and discrepances of development trends compared with development goals. Of course, this ideal model against which to check reality is and has to be in most cases very simplistic and should therefore not be confused with the complexity of real life and real politics or policies. To give an example: Any kind of disparities are usually statistically measured against the model of equal distribution. The deviation from this equal distribution is a measure of the degree of disparities and imbalances. Of course, this simple model of equal distribution must not be confused with any complex political strategy!

It is a central part of the methodology used by the TPGs (cf the hexagon in the graph) to define operational models of policy goals (as developed in the last paragraph) and to confront statistical data about the real world with these models of the reference model world. In the latest round of intermediate reports we have seen different strategies to cope with this methodological problem. We have seen that some projects escape from this problem by "jumping" directly from the description of structures to policy recommendations. Other projects have a more implicit model of spatial development goals using for instance correlation analyses between expenditure and population densities as a proxy for a balanced or unbalanced regional expenditure structure. Other projects again have developed some interesting ideas about operational models for polycentrism, accessibility etc. but have not yet implemented these approaches and produced statistical results that could be discussed. It is our opinion that it is time now (especially for first-round projects!) to have an in-depth discussion about the different approaches that are used in the different projects and about the tricky methodological questions that are related to this analysis. It is important to make the underlying models more explicit and to implement these models through empirical data analysis. We suggest to have this discussion in the next TPG Lead Partner meeting and to ask the TPGs to reflect on this topic and to present their proposals.



# The ESPON data base and technical support

Policy relevant list of territorial core indicators

The discussion of core indicators must enter its final stage defining the contributions of the 'older' projects and including the new projects that started later. The list will finally describe the main regional indicators necessary for analyses and research on cross-border, transnational and Europe-wide structures and trends which influence regional development.

This list of indicators, which are sometimes elaborated with massive engagement of TPG partners, should be defined through and launched from the ESPON community as minimum requirement to support any ongoing spatial monitoring system. Problems and difficulties related must be part of a process bringing the results of ESPON into the European Statistical System. The strengths of ESPON should be used to define demands from the side of scientific users.

#### Thematic orientation of the data base

The ESPON data base in its present form is a collection of data and indicators provided by the TPGs until now. The extraction of data in general is only possible with at least basic knowledge of the ESPON project structures and topics.

This structure was thought of being used in the initiation phase of the data base to keep an overview of the contribution from the TPGs. Now, most, but unfortunately not all of the TPGs have delivered their first round of data and indicators.

It is not suitable for the general use within the ESPON heading for the combination of data, indicators and typologies of different TPGs. Furthermore, the origin results of the ESPON data base could not be forwarded in a proper and sufficient way because of the existing mixture of raw data (Eurostat Regio, etc) and ESPON generated indicators.

A thematically orientated structure will make access to data and indicators more convenient. For reasons of harmonisation and habit, it seems to be suitable to use the 19 Data Navigator thematic categories and the sub-themes established in the process of compilation as the starting point for the thematic reconstruction of the data base (see Annex 1).

For a quick overview and a more general use, synoptic tables, e.g. for the core indicators, will be included. The question of the integration of thematic tables with main indicators in the respective field is not yet finally answered.

The proposed provision of ESPON results in form of regional indicators to persons interested outside the ESPON circle need further structural re-arrangements of the data base.

Without anticipating further legal clarification, the first step of separating the elements of the ESPON data base into raw data (e.g. Eurostat data) and indicators (assumed



original calculations of ESPON TPGs) will be undertaken. The ESPON data base will be divided into two areas; the area of data and the area of indicators.

#### Formulation and operationalisation of further data requests

The concerted data request from the TPGs towards Eurostat and EU institutions in spring of last year was very successful, unfortunately in the case of Eurostat hindered in the final stage by internal problems of Eurostat last summer which have lasted in some respect up to now. Additionally to the proposed up-date of Eurostat Regio data, the formulation of in this context missing data should be launched. Furthermore, concerted actions of TPGs channelling non-EU and special interest data requests will improve access to data and avoid double work. TPGs should aid one another to each other's benefit.

#### Meta data rules

Meta information on data and indicators are fundamental to ensure the use of a data base especially in a case like ESPON with a data base which combines the work and output of a lot of different authors and users. Meta information were often missing in the data contribution of the TPGs or incomplete in respect of the guidelines for the meta data. Those information are necessary when the structure of the data base is no longer project- but thematically orientated. Being aware of the finite lifetime of ESPON projects, this information is also of fundamental need for potential updates of data.

Related to the thematic structure of the data base, the meta information will include the Data Navigator category of the related theme as further element in the future. It will be integrated in the meta information in the process of restructuring. In future data provision this indication will be obligatory.

Changes in the NUTS nomenclature (see above in more detail) need to be considered (at least in a transition phase) in the meta data information as well because future data will base on the NUTS 2003 version. To assure the proper mapping of the data and NUTS version, the indication of the version used will be necessary. This will be done in the process of restructuring the existing data. In future data provision, this indication will be obligatory.

#### Quality control of ESPON data sets

The verification of the data is of essential importance for the quality of the data base. The control of the quality of the data concerning thematic and formal accuracy is primarily necessary before provision to the joint data base.

#### Map-making update

The ESPON map kit needs a technical upgrade fitting into newer software which is already used by different project partners. This means that a transfer of the old map kit should be enabled and the existing parts will be transferred into a new software environment (transfer of shape files to layers). The provision of both file formats gives freedom of use to the TPGs. It might be worth mentioning that shape format can be integrated in ArcMap but not vice versa. Geographic information generated as a TPG



result must be provided in a shape format to ensure data exchange between TPGs using different versions.

The ESPON programme faces its first change in the NUTS systematics. In November 2003, the NUTS 2003 replaced the NUTS 1999 used up to now within ESPON. From this date on, the data of Regio will refer to NUTS 2003. Therefore the geographic data must be supplemented accordingly. Since no changes in NUTS 3 are obvious besides changes in the regional identification due to new regional shape on NUTS 2, a reference key for NUTS 3 will enable migration between the versions. To enable the use of former data and indicators for a transition period (and not to lose data) the ESPON geographic data for NUTS will be provided for both versions.

<u>Final guidelines for mapping - including note on legal notes and citation</u> In the meantime, the ESPON map design starts in the phase of common use. Related to the provision of the revised and updated map kit, revised final guidelines for the design of maps and their use will be published and bring this process to an end (at least until technical and regional updates and changes necessitate further adjustments).

The legal notes of all uses of the SABE data in any reports within the ESPON programme or in publications of project results must include the following note:

#### ©EuroGeographics Association for administrative boundaries

The licence used in ESPON does not allow a commercial use of data or provision of the SABE data as a vector file.

Task	time	responsible
Final verification or provision of core indicators respectively (see Annex 2)	end of March 2004	TPG - all
Elaboration of missing indicators and data	end of March 2004	3.1 – support by TPGs
Formulation and clarification of data requests towards Eurostat, EU institutions within ESPON	end of March 2004	TPG – all, co- ordination by 3.1
Provision of NUTS 2003 references	end of April 2004	3.1
Provision and presentations of the test version of Web-Based GIS, Hyperatlas and Policy Support System for individual interactive tests	10/11 May	3.1 – all TPGs
Thematic restructuring and structural division of ESPON data base	mid-May 2004	3.1 – support by TPGs
Data processing and provision	end of May 2004	Eurostat
Co-ordination of data request to national statistical offices etc.	ongoing	TPG - all
Provision of an adjusted ESPON map kit including ArcMap geographical basis layers	mid-May 2004	3.1

#### Deliverables until May 2004



# Typologies of regions and their interpretation

#### Typologies:

Typologies of regions and territories are needed as one background against which to check trends and policy impacts. Based on typologies, statistical measures and indices can be developed to produce tables that summarise spatial structures and trends in quantitative, visual insight into spatial structure and trends in Europe.

Five typologies were mentioned in the Crete Guidance Paper:

- (1) typology of urban and rural regions
- (2) (inductive) typologies related to specific themes
- (3) typologies for specific geographical situations
- (4) typologies directly related to Structural Funds discussions
- (5) three-level approach of typologies<sup>1</sup>

With regard to the typologies

- their completion, improvement and further development
- concerted interaction of the TPGs and
- the consideration of the 3-level approach

is important.

The draft reports as well as the ESPON seminar in Matera reveal/ externalise premature typologies as well as gaps. To improve and further develop the typologies, a concerted interaction of the TPGs is inevitable. Also the work on typologies has to bear in mind the agreed 3-level approach (see Annex 3: Core Typologies).

#### Concerted interaction of the TPGs

The TPG interim reports as well as the Matera Seminar showed that a more intensive networking, inter- and exchange between the TPGs is necessary. One aim of the ESPON programme is to come to common and well-founded results. Therefore concerted interaction is needed. All TPGs agreed in Matera to do so.

#### Short-term task list

The main – short-term – tasks of the TPGs in this context are:

- the contact with other TPGs which are of interest (with which an interchange seems possible and productive)
- the exchange of data, indicators and typologies
- maybe the development of new indicators and typologies for the own project

<sup>&</sup>lt;sup>1</sup> For further details please see: Crete Guidance Paper, June 2003



#### Deliverables until May 2004

Task	time	responsible
Contact with other TPGs, which are of interest (with which an interchange seems possible and productive)	since Oct. 2003 15.03.2004	TPG - all
Exchange of data, indicators and typologies (methods?)	since Oct. 2003, ongoing process	TPG - all
Consensus on the list of data, indicators, typologies, cross- typologies Provision of the data, indicators, typologies, cross-typologies	Mid March 2004 End May 2004	TPG - all TPG - all

#### Consideration of the 3-level approach

One of the central elements of the first Guidance Paper, prepared for the first Lead Partner meeting 25/26 Feb 2003, was the introduction of a three-level approach to analyse spatial development in Europe. During the Crete ESPON Seminar all TPGs agreed to support the idea to perform analyses with reference to 3 spatial levels.

- micro level (local/regional)
- meso level (national/transnational)
- macro level (European/global)

The review of the reports has shown that the three-level approach can be strengthened in a number of projects, especially with regard to the policy recommendations. This can be done in various ways; one possible line of conceptualising this is by focusing on polycentric development and taking advantage of the work carried out by ESPON 1.1.1.

#### Macro level

As regards polycentric development at macro level, the dichotomy between the pentagon and the rest can be used as an indicator. Thus, the question occurs to what degree the discussed trends/developments/policies have strengthened regions containing a functional urban area with an international profile within and outside the pentagon.

#### Meso level

As regards polycentric development at meso level, the relation between regions having FUAs with national profile and other regions has been used as an indicator. A possible operationalisation is to assess country by country whether the dominance of the strongest functional urban area in a country has been reduced by other (inter-) national functional urban areas becoming stronger. Do the discussed trends/developments/policies have strengthened those regions and thus contributed to a more balanced development in the country?

#### Micro level

As regards polycentric development at micro level, the relation between different parts of a region are crucial. Accordingly, information provided at NUTS III level is of



limited value, however, a look to local/regional functional urban areas or regions without any functional urban areas may be of help.

	Short-term task list
The	e main – short-term – tasks of the TPGs in this context are:
•	the implementation of the 3-level approach

#### Deliverables until May 2004

Task	time	responsible	
Preparation of the approach for the Lillehammer Seminar	10./11.05.2004	TPG - all	

#### **Topic related performance of regions**

- Combination of typologies and indicators
- Outlining the trends and describing the timeframe for analysed trends
- 3-level-related regional interpretation

#### The regional puzzle

Finalising the ESPON map collection

The integration of ESPON results into the 3rd Cohesion Report and the accompanying ESPON Synthesis Report are first important steps as regards the results of the ESPON projects. Owing to the intended thematic concentration on polycentrism and accessibility, the broad thematic range of the TPGs is not yet properly presented and visible in the wider perception. The map collection was thought to ensure a more representative information transfer between all ESPON TPGs.

Some of the TPGs provided their contributions to the map collection shortly after the finalisation of their interim reports last year. Others did not for reasons that are understandable because of many other pressures at this time.

Now, with more and more better results foreseen, the map collection will be an adequate means for information transfer to a broader public including results of TPGs so far giving an overview on all main sketches of the three ESPD fields polycentric development, urban system and urban-rural relations, access to infrastructure and knowledge and cultural and natural heritage.

#### Clear description of the map messages

The map collection is not intended and will not be an uncommented compilation of ESPON maps. As outlined in the design proposal of the map collection, each map will be accompanied by a short description outlining the main spatial findings presented in the map (see Annex 4 & 5).



Investigation and identification of regions with specific handicaps and/or potentials Data and indicators lay ground for the analysis of the spatial structures and trends in Europe, and typologies provide the main regional framework in the characterisation and differentiation of European regions. What is missing by now is a thematically based regional classification. In a first step, this includes an indicator-based classification by e.g. the high, medium, low value of a TPG-relevant set of indicators based on the theme-related specific knowledge limits of classes.

In a second stage, this classification could be used for the elaboration or identification respectively of regions with specific handicaps and/or potentials in the specific TPG topic. This condensed and concentrated regional information will enable a more synoptic interpretation and integration of different TPGs' results. By this, the European regional puzzle elaborated from the TPGs' main trends, transfers regional information into spatial views in the end.

On the basis of regional classification results of the TPGs and with their support Project 3.1 will elaborate the platform of spatial concept-related fields of analysis. That is the starting point of the first cross-thematic and cross-sectional regional classification analysis.

#### Short-term task list

- The main short-term tasks of the TPGs in this context are:
- the verification of contributions to the ESPON map collection delivered until now or to be delivered in short time and medium range
- the elaboration of the regional classification of the TPGs' main indicator set

Deliverables until May 2004		
Task	time	responsible
Indicator-based regional classification of main indicators	end of March	TPG - all
	2004	
Clarification of input in the map collection	end of March	TPG - all
	2004	
Elaboration of final concept of the map collection	End of April	3.1 – TPG –all
	2004	support
Presentation of first results of cross-sectoral regional	10/11 May	3.1 – TPG –all
classification analysis		support
Presentation of map collection prototype	10/11 May	3.1 – TPG –all
		support

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#### Common ESPON glossary

Agreement on terms used in ESPON and compilation of the glossary For the ongoing development of a common ESPON platform, an agreement on central terms used in the programme is of high importance. This could be realised via an ESPON glossary. The design and development will be done by the 3.1 project. It is obvious that such a glossary with a scientific demand needs the support and help of the TPGs and their specialists. (Annex 6: Preliminary list on terms for the ESPON glossary)

#### Short term task list

The main – short term – tasks of the TPGs in this context are:

- development of the structure
- agreement on the content
- selection of most important terms
- draft version of the glossary
- final version of the glossary

#### **Deliverables until May 2004**

Task	time	responsible
Development of the structure and first selection of terms	15.03.2004	TPG - 3.1
Support in finding definitions for the terms	29.03.2004	TPG - all
First draft version of the glossary	15.04.2004	TPG - 3.1

#### Self-evaluation of the TPGs

<u>Critical review of the work that has been done and "further research needed"</u> Eight of the TPGs will present their final report in September 2004. The experience made by and the know-how of the mentioned TPGs as well as the other ongoing TPGs should not get lost after finalising the projects. ESPON TPGs, which have started later, as well as new ESPON projects and the ESPON management level will highly benefit from the critical review and from constructive ideas.

#### Short-term task list

The main – short-term – tasks of the TPGs in this context are:

- a brainstorming self evaluation (or questionnaire)
- to find actual gaps and weaknesses (content of the project, organisational aspects, financial aspects)
- to develop ideas for improvements and for new projects

#### Deliverables until May 2004

Task	time	responsible
Presentation of self-evaluation results during an envisaged workshop in Lillehammer	10./11.05.2004	all TPGs



### Structure of final reports

The final report shall be a well-edited document with consistency between the different chapters. A compilation of inputs from different work packages is not sufficient. The TPGs responsible have to make sure that they have the time necessary for a solid editing. Projects facing their Third Interim Report are already asked to apply the proposed structure as far as possible.

In addition, it is very important that the final report includes an easily readable Executive Summary with focus on key messages with a few maps related to the main findings. As a target, the executive summary should be elaborated into an article on the project which can be used in the communication of project results to the policy development process. The target group for the Executive Summary is at the political level, and too detailed ("too scientific") explanations on methodological questions should be left for the main text of the final report.

The following structure should be used for the final reports:



#### Part One: Summary

- Executive Summery of main final results (max 30 pages (to be discussed!)), including
  - $\circ$   $\,$  Key messages and findings
  - Main maps, including interpretations
  - Key policy recommendations
- "Scientific" summary covering main concepts, methodologies, typologies and indicators used/developed
- Short report on networking undertaken with other ESPON projects
- Short report on further research issues and data gaps to overcome

#### Part Two: Results of the project

- All points mentioned in the Addendum to the contract for the August 2004 reports shall be covered (minimum requirement).
- Please avoid that any important outcomes "are lost" in previous interim reports and transfer important findings from all your interim reports to your final report as well as new results which you will have achieved by August 2004.

#### Part Three: Annexes

- List of indicators developed and datasets provided to the ESPON data base
- List of maps and tables
- List of missing data
- List of abbreviations and glossary
- List of references, including the use of results from projects outside the ESPON programme
- Additional maps not included in the core text of the Report
- Bibliography

#### **Design** issues

In order to ensure a reasonable coherent appearance of the final reports from the ESPON programme, a design template for the cover of the final report as well as the first page and the Table of Contents will be provided by March 2003.

The implementation of the standard for ESPON maps shows a great variety of maps which shall be further harmonized. In order to ensure a consistent look of the ESPON maps please apply to the following "minimum requirements":

- Use the standard for ESPON map design defined by project 3.1
- Use the Monitoring Committee disclaimer on all maps
- Apply common scientific/editorial standards (indication of data source, designation of year/periods being described by variables, title of map etc.)



The tables used in the final report have as well to be streamlined in accordance with the design template provided.

All projects are obliged to comply with the EC publicity requirement. Further information will be provided on this issue.

#### Timetable

from Jan.04 to May 04

Time / Date	Торіс	Action	Responsibilty			
ongoing	Concerted interaction	contact TPGs, which are of interest (with which an interchange seems possible and productive)	all TPGs			
		exchange of data, indicators and typologies (methods?)	all TPGs			
	Data base	co-ordination of data request to national statistical offices etc.	All TPGs			
Mid of March 04	Concerted interaction	Consensus of data, indicators, typologies, cross- typologies	all TPGs			
now – 15.03.04	Common ESPON glossary	Common ESPON glossary development of the structure and first selection of terms				
now – 29.03.04	Common ESPON glossary	support in finding definitions for the terms	all TPGs			
31 March 04	Data base	final verification respective provision of core indicators (see Annex 2 of this paper)	all TPGs			
		elaboration of missing indicators and data	3.1 – TPG –support by TPGs			
		formulation and clarification of data request towards Eurostat, EU institutions within ESPON	TPG – all, co-ordination by 3.1			
	March 03 Interim Reports	mailing to ESPON CU	all TPGs			
	3-level approach	presentation of implementation of the approach in the March 2004 report	all TPGs			
	Identification of regions with specific handicaps and/or potentials	indicator-based regional classification of main indicators	all TPGs			
		clarification of input in the map collection	all TPGs			
	Concerted interaction (could be part of the IR)	first results – list of TPGs with which inter- and exchange was/ is undertaken	all TPGs			
			17			



Time / Date	Торіс	Action	Responsibilty		
		first results – list of TPGs by which exchange of data, indicators and typologies (methods?) was / is undertaken	al TPGs		
15 April 04	Common ESPON glossary	first draft version of the glossary	TPG 3.1		
30 April 04	Mapping	provision of NUTS 2003 references	TPG 3.1		
	Investigation and identification of regions with specific handicaps and/or potentials	elaboration of final concept of the map collection	3.1 – all TPGs		

# from May 04 to Oct.04 (rough)

Time / date	topic	Action	Responsibilty
10/11 May 04	VI ESPON Seminar , Lillehammer (N)	participation	
	Final report	presentation of a cover sheet for the final report	ESPON CU
	GIS	provision and presentations of the test version of Web- Based GIS, Hyperatlas and Policy Support System for individual interactive tests	3.1 – all TPGs
	Investigation and identification of regions with specific handicaps and/or	presentation of first results of cross-sectoral regional classification analysis	3.1 – all TPGs
	potentials	presentation of map collection prototype	3.1 – all TPGs
	3-level approach	all TPGs	
	Self-evaluation of TPGs	presentation of results (during an envisaged work shop in Lillehammer)	all TPGs
Mid-May 2004	Data base	thematically restructuring and structural division of ESPON data base	3.1 – TPGs
	GIS	provision of adjusted ESPON map kit including ArcMap geographical basis layers	TPG 3.1
	Lillehammer Guidance Paper		TPG 3.1
End of May 04	Data base	data processing and provision	Eurostat
	Concerted interaction	Provision of the data, indicators, typologies, cross- typologies	all TPGs
31 Aug 04	Aug Reports 04	interim and final reports	all TPGs
October 04	V ESPON Seminar, Nijmegen (NL)		



### Meetings, workshop foreseen

- Lead Partner meeting (3-4 March 2004) •
- ESPON Seminar in Norway (10-11 May 2004) •
- Lead Partner meeting (n.n.) •
- ESPON Seminar in the Netherlands (11-12 October 2004)
  Presentation of the Final Reports and results by the 1<sup>st</sup> round projects

#### Data Base Categories according Data Navigator

#### **01 Spatial typologies**

011 Functional region 012 Spatial classification 013 City System

#### **02** Population

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#### **03 Employment and Labour Market**

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#### 04 Wealth and production

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#### **05 Enterprises and Investments**

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#### 06 Transport

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#### **07 Research and Development**

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#### **08 Utilities**

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#### **09** Communication technology

091 Infrastructure, supply 092 Access, use

#### **10 Household oriented Infrastructure**

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#### 11 Land Use

111 Natural resources 112 Land use

#### **12 Environment**

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# ESPON - Core indicators by TPG responsible

Indicator	ource	TPG responsible	Spatial scope Regional I		Regional level Temporal scope		Temporal scope		🗸 = available		
Commuter	Interna	1.1.1	EU27+2								
Location of TOP 1500 European Companies	Bussin	1.1.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	NUTS 5	2000			$\checkmark$
Turnover of TOP 500 European Companies	Bussin	1.1.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	NUTS 5	2000			
Employment of TOP 500 European Companies	Bussin	1.1.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	NUTS 5	2000			
Gross value added in service sector	EU CO	1.1.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	NUTS 5	2000			
University students	EU CO	1.1.1	EU27+2			NUTS 2		2000			$\checkmark$
Pupils by school level	EU CO	1.1.2	EU27+2			NUTS 2		2000			$\checkmark$
Households	Specia	1.1.2	EU27+2		NUTS 3			2000			$\checkmark$
Income per capita	SES ?,	1.1.2	EU27+2			NUTS 2		2000			
balance of newly founded and bankrupt firms	Bussin	1.1.2	EU27+2		NUTS 3	NUTS 2	NUTS 5	2000			
Household oriented infrastructure	Nationa	1.1.2	EU27+2			NUTS 2		2000			
Cross-border activities in border regions	EU CO	1.1.3	EU27+2			NUTS 2					✓
Population growth	REGIO	1.1.4	EU27+2		NUTS 3	NUTS 2		2000	1995	1990 as possible	$\checkmark$
Natural population growth	REGIO	1.1.4	EU27+2		NUTS 3	NUTS 2		2000	1995	1990 as possible	$\checkmark$
Net-migration rate	Interna	1.1.4	EU27+2		NUTS 3	NUTS 2		2000	1995	1990 as possible	$\checkmark$
Ageing / Dependencies	Interna	1.1.4	EU27+2		NUTS 3	NUTS 2		2000	1995	1990 as possible	$\checkmark$
Reproduction potential (Gross Reproduction Rate (female births/women in fertile age))	Interna	1.1.4	EU27+2		NUTS 3	NUTS 2		2000	1995	1990 as possible	~

Population in "functional"/"stragetegic" age	Interna	1.1.4	EU27+2		NUTS 3	NUTS 2	2000	1995 1990 as possible	$\checkmark$
Total fertility rate	Interna	1.1.4	EU27+2		NUTS 3	NUTS 2	2000	1995 1990 as possible	$\checkmark$
Passenger on airports	GISCO	1.2.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	2000		$\checkmark$
Transport network by mode	GISCO	1.2.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2			$\checkmark$
Transport node my mode	GISCO	1.2.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2			$\checkmark$
Travel time by spatial level and transport mode	GISCO	1.2.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2			$\checkmark$
Daytime accessibiltity by transport mode	GISCO	1.2.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2			$\checkmark$
Travel costs by transport node	GISCO	1.2.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2			$\checkmark$
Network distance to linear distance ratio	GISCO	1.2.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2			$\checkmark$
Proportion of main lines connected to digital exchange	others,	1.2.2	EU27+2						no concretisation ir Interim Reports
ADSL lines as a proportion of total main lines	others,	1.2.2	EU27+2						no concretisation ir Interim Reports
Cable modem lines as a proportion of total lines installed	others,	1.2.2	EU27+2						no concretisation ir Interim Reports
Proportion of exchanges with co- located equipment (local loop unbundling)	others,	1.2.2	EU27+2						no concretisation ir Interim Reports
Availability of Internet service with (a) local rate charges (b) unmetered access	others,	1.2.2	EU27+2						no concretisation ir Interim Reports_
Number of PIAPs per 1000 inhabitants	others,	1.2.2	EU27+2						no concretisation ir Interim Reports
Cellular subscribers per 100 inhabitants	others,	1.2.2	EU27+2						no concretisation ir Interim Reports

ADSL subscribers per 10,000 inhabitants	others,	1.2.2	EU27+2			no concretisation in Interim Reports
Proportion of households with Internet access	others,	1.2.2	EU27+2			no concretisation in Interim Reports
Proportion of households with broadband Internet access	others,	1.2.2	EU27+2			no concretisation in Interim Reports
Proportion of firms with access to the Internet	others,	1.2.2	EU27+2			no concretisation in Interim Reports
ICT Tele-communication	Interna	1.2.3	EU27+2	NUTS 2		
Intensification of agriculture	EU inst	1.3.1	EU27+2	NUTS 2	2000 <sup>1996-</sup> 1995 <sup>1990</sup> as 1999 <sup>1995</sup> possible	 ✓
Area exposed to acidification and eutrophication	Coordi	1.3.1	EU27+2	NUTS 2	1990 as possible	 ✓
Flood areas	EU CO	1.3.1	EU27+2	NUTS 2	2000 <sup>1996-</sup> 1995 <sup>1990</sup> as 1999 possible	✓
Soil and land use hazards (erosion, seal areas etc.)	EU CO	1.3.1	EU27+2	NUTS 2	2000 <sup>1996-</sup> 1995 <sup>1990</sup> as 1999 <sup>possible</sup>	✓
Volcanic eruptions	The Sr	1.3.1	EU27+2	NUTS 3		$\checkmark$
Floods	EC DG	1.3.1	EU27+2	NUTS 3		_ ✓
Landslides / avalanches	GTOP	1.3.1	EU27+2	NUTS 3		_ <b>√</b>
Earthquakes	NGDC	1.3.1	EU27+2	NUTS 3		_ ✓
Earthquake/amount of casualties	NGDC	1.3.1	EU27+2	NUTS 3		_ <b>√</b>
Earthquakes/extent of damage in US\$	NGDC	1.3.1	EU27+2	NUTS 3		- ✓
Droughts	From r	1.3.1	EU27+2	NUTS 3		_ ✓
Forest Fires	EC DG	1.3.1	EU27+2	NUTS 3		_ <b>√</b>
Storms	Munich	1.3.1	EU27+2	NUTS 3		_ ✓
Extreme precipitation (heavy rainfall, hail)	World I	1.3.1	EU27+2	NUTS 3		✓
Extreme temperatures (heat waves, cold waves)	World I	1.3.1	EU27+2	NUTS 3		

Dam failures	ICOLD	1.3.1	EU27+2			NUTS 3	✓	
Nuclear power plants	IAEA	1.3.1	EU27+2			NUTS 3	✓	
Hazards from production plants with hazardous production processes or substances (large-scale chemical works, weapons, fireworks ore processing plants, etc.)	Membe	1.3.1	EU27+2			NUTS 3	✓	
Hazardous waste deposits, such as nuclear waste or ore minig stockpiles and tailure dams	ICOLD	1.3.1	EU27+2			NUTS 3	✓	
Marine transport of hazardous goods (oil etc.)	ITOPF	1.3.1	EU27+2			NUTS 3	✓	
Richness of spezies identified of European importance	Interna	1.3.2	EU27+2			NUTS 2	✓	
Extent and richness of semi- natural habitat type	Interna	1.3.2	EU27+2			NUTS 2	✓	
Protected natural areas	Interna	1.3.2	EU27+2			NUTS 2	✓	
Tourist stays	REGIC	1.3.3	EU27+2			NUTS 2	noc eing	h nicht jetroffen!
Tourist capacity	REGIC	1.3.3	EU27+2			NUTS 2	noc eing	h nicht jetroffen!
Tourist related employment	NEWC	1.3.3	EU27+2			NUTS 2	noc eing	h nicht jetroffen!
Cultural heritage	Interna	1.3.3	EU27+2				noc eing	h nicht jetroffen!
Market accessibility potential by spatial level and transport mode	GISCO	2.1.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	✓	
Travel time by spatial level and transport mode	GISCO	2.1.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	✓	
Travel costs by transport node	GISCO	2.1.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	✓	
Average speed to market	GISCO	2.1.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	✓	

Average time to market	GISCO	2.1.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2		
Impact of accessibilty changes on GDP per capita	Own m	2.1.1	EU27+2		NUTS 3	NUTS 2	1997, 2020	✓
Impact of accessibilty changes on Equivalent income measure of user benefits	Own m	2.1.1	EU27+2		NUTS 3	NUTS 2	1997, 2020	_ ✓
Impact of accessibilty changes on Employment	Own m	2.1.1	EU27+2		NUTS 3	NUTS 2	1997, 2020	✓
Impact of accessibilty changes on Unemployment	Own m	2.1.1	EU27+2		NUTS 3	NUTS 2	1997, 2020	_ ✓
R & D personel	REGIO	2.1.2	EU27+2			NUTS 2		_ ✓
R & D Expenditure	REGIO	2.1.2	EU27+2			NUTS 2		_ <b>√</b>
Patents	REGIO	2.1.2	EU27+2			NUTS 2		_ <b>√</b>
Utilizable Agricultural Area (UAA) as a percentage of total land area	Eurofa	2.1.3	EU27+2			NUTS 3	2000	_ ✓
Percentage of farm holders under the age of 35 years	Eurosta	2.1.3	EU15			NUTS 2	1997 1995 1993 1990	_ ✓
Percentage of farm holders over the age of 60 years	Eurosta	2.1.3	EU15			NUTS 2	1997 1995 1993 1990	_ ✓
Agricultural output per hectare	Eurosta	2.1.3	EU15			NUTS 2	Annu al 1990-	_ ✓
Agricultural output per AWU	Eurosta	2.1.3	EU15			NUTS 2	Annu al 1990-	_ ✓
Percentage value added by agriculture, forestry and fishing	Eurosta	2.1.3	EU27+2			NUTS 3	Annu al 1995-	
Value of fertilizer input per hectare of arable land	Eurosta	2.1.3	EU15			NUTS 2	Annu al 1990-	

Electricity production by power	EU inst	2.1.4	EU27+2			NUTS 2		2000	1996-	1995	1990 as	no concretisation in
of source	<b>F</b> LLine								1999		possible	Interim Reports
Final energy consumption by	EU Insi	244	EU27±2			NUTS 2		2000	1996-	1005	1990 as	no concretisation in
sector		2.1.4	LU2/+2			N0132		2000	p.a	1995	possible	Interim Reports
Energy prices for industry (net and tax included)	EU inst	2.1.4	EU27+2			NUTS 2		2000	1996- 1999	1995	1990 as possible	no concretisation in Interim Reports
Structural funds in Euro by funds involved	EU inst	2.2.1	EU15		NUTS 3	NUTS 2		acco	ording f	unding	periods	
Structural funds in % regional GDP	EU inst	2.2.1	EU15		NUTS 3	NUTS 2		acco	ording f	unding	periods	
Pre accesion aid in Euro by programme involved	EU inst	2.2.2	ACC12		NUTS 3	NUTS 2		acco	ording f	unding	periods	$\checkmark$
Pre accesion aid in % of regional GDP	EU inst	2.2.2	ACC12		NUTS 3	NUTS 2		acco	ording f	unding	periods	$\checkmark$
Crime rate	Interna	2.2.3	EU27+2		NUTS 3							
Total population	REGIC	3.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	NUTS 5	2000 P	1996- 1999 p.a	1995	1990 P	
Area	REGIC	3.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	NUTS 5	2000 P	1996- 1999	1995	1990 P	

Population density	REGIC	3.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	NUTS 5	2000 P	1996- 1999 p.a	1995	1990 P
Population by age	REGIC										
		3.1	EU27+2	as possible +pan +med		NUTS 2		2000	1996- 1999 p.a	1995	1990 as possible
Population by sex	REGIC	3.1	EU27+2	as possible +pan +med	NUTS 3			2000	1996- 1999 p.a	1995	1990
Educational level of population	Specia	3.1	EU27+2		NUTS 3						

Labour Force	REGIC	3.1	EU27+2	as possible +pan +med		NUTS 2	2000	1996- 1999 p.a	1995	1990 as possible
Labour Force by age	REGIC	3.1	EU27+2	as possible +pan +med		NUTS 2	2000	1996- 1999 p.a	1995	1990 as possible
Activity rates	REGIC	3.1	EU27+2		NUTS 3	NUTS 2	2000	1996- 1999	1995	1990 as possible
Unemployment rates	REGIC	3.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	2000	1996- 1999	1995	1990 as possible
Total employment	REGIO	3.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2	2000	1996- 1999	1995	1990 as possible
Employment by sector of activity (NACE)	Specia	3.1	EU27+2			NUTS 2	2000	1996- 1999	1995	1990 as possible
Employment by qualification and profession	Specia	3.1	EU27+2			NUTS 2	2000	1996- 1999	1995	1990 as possible
Human Capital	Human	3.1	EU27+2			NUTS 2	2000	1996- 1999		
GDP total	REGIC	3.1	EU27+2	as possible +pan +med	NUTS 3	NUTS 2		1996- 1999	1995	
GDP per capita	REGIC	3.1	EU27+2		NUTS 3	NUTS 2		1996- 1999	1995	
Purchasing power indices	Gesells	3.1	EU27+2		NUTS 3	NUTS 2		1996- 1999		

Productivity	REGIO	2.4	EU27+2		1996-
		3.1	E027+2	NU133 NU132	1999
Productivity per hours worked	REGIO	2.4			1996-
		3.1	EU27+2	NUT5 2	1999
Labour costs	NEWC	2.4		NUTS 2	1996-
		3.1	E027+2	NUT5 2	1999

Remarks: L: Yes, but on regional level less than NUTS 3, P: also on regional level more than NUTS 3

#### ESPON - Core typologies

Legend: available

Туроlоду	Regional Types	TPG respons	ible	Spatial	Regiona	al level	Year
Urban areas	1 Global level 2 International level 3 National/tansnational level 4 Regional level	1.1.1		EU27+2	NUTS 3	NUTS 5	2000
Functional urban areas (FUAs)	1 Metropoltain European Growth Areas (MEGAs) 2 transnational / national FUAs 3 Regional / local FUAs	1.1.1		EU27+2	NUTS 3	NUTS 5	2000
MEGAs	1 Global nodes 2 European Engines 3 Strong MEGAs 4 Potential MEGAs 5 Weak MEGAs	1.1.1		EU27+2	NUTS 3	NUTS 5	2000
6 Type NUTS 3 FUAs	1+ Monocentric NUTS 3 (FUA exceed NUTS 3 boundaries)         0+ NUTS 3 region neighbouring 1+ NUTS 3 region         1 monocentric NUTS 3 (only 1 FUA)         2 bipolar NUTS 3 (two FUAs)         3 polycentric NUTS 3 (three or more FUAs)         0 no FUA	1.1.1		EU27+2	NUTS 3	NUTS 5	2000
19 Type NUTS 3 FUAs	1+A MEGA FUA (exceeds NUTS3 boundaries)         1+B Transnational/national FUA (exceeds NUTS3 boundaries)         1+C Regional/local FUA (exceeds NUTS3 boundaries)         1B transnational/national FUA         1B- transnational/national FUA, but FUA population smaller than non-FUA population         1C regional/local FUA, but FUA population smaller than non-FUA population         2A at least one of FUAs is MEGA						

Туроlоду	Regional Types	TPG respons	sible	Spatial	Regiona	al level	Year
	2B at least one of FUAs is transnational/national FUA			Scope			
	2B- at least one of FUAs is transnational/national FUA,						
	but FUA population smaller than non-	1.1.1		EU27+2	NUTS 3		2000
	FUA population						
	2C two regional/local FUAs						
	2C- two regional/local FUAs, but urban population						
	smaller than rural population						
	3A at least one of FUAs is MEGA						
	3B at least one of FUAs is transnational/national FUA						
	3B- at least one of FUAs is transnational/national FUA,						
	but FUA population smaller than non-						
	FUA population						
	3C only regional/local FUAs						
	3C- only regional/local FUAs, but FUA population						
	smaller than non-FUA population						
	0+ neighbouring 1+ NUTS3 region						
	0 no FUA						
Rural - urban Relation	1 regions dominated by a large metropolis						
	2 polycentric regions with high urban and rural						
	densities						

Туроlоду	Regional Types	TPG respons	sible	Spatial	Regiona	al level	Year
	3 polycentric regions with high urban densities 4 rural areas under metropolitan influence	1.1.2		EU27+2	NUTS 3		2000
	5 rural areas with small and medium sized towns						
Typology of population density	1 Densely populated with high urban integration						
and Functional urrban areas	2 Not densely populated but high urban intgration 3 Not densely populated and low urban integration	1.1.2		EU27+2	NUTS 3		2000
Urban - rural typology	1 Urban denely populated and high urban integration	1.1.2		EU27+2	NUTS 3		2000
	2 Urban-rural, densely populated and high urban integration						
	3 Urban-rural, not densely populated but high urban integration						
	4 Urban-peripheral, not densely populated and low urban integration						
	5 Rural -urban, densely populated and high urban integration						
	6 Rural -urban, not densely populated but high urban integration						
	4 Rural-peripheral, not densely populated and low urban integration						
	8 Peripheral-urban, densely populated and high urban integration						
	9 Peripheral-rural, densely populated but high urban integration						
	10 Peripheral, not densely populated and low urban integration						

Туроlоду	Typology Regional Types		sible	Spatial	Regional level		Year
Cross-border functionality and participation	Symmetric with small differences between neighbouring regions and suitable infrastructure for cross-border integration (1) Symmetric with small differences between neighbouring regions but important barriers for cross- Asymmetric with large differences between neighbouring regions and suitable infrastructure for cross-border integration (2)	1.1.3		EU27+2	NUTS 3		
	Asymmetric with large differences between neighbouring regions but suitable infrastructure for cross-border integration (4)						
Population change	Increase of population with in-migration and natural increase (1) Increase of population with in-migration and natural decrease (2) Increase of population with out-migration and natural increase (3)	1.1.4		EU27+2	NUTS 3		1995-1999
	Decrease of population with out-migration and natural decrease (4)						
	Decrease of population with in-migration and natural decrease (5)						
	Decrease of population with out-migration and natural increase (6)						
Population change in regions with high share of elderly people	Increase of population with in-migration and natural increase (1)						
	Increase of population with in-migration and natural decrease (2)	1.1.4		EU27+2	NUTS 3		1995-1999
	Increase of population with out-migration and natural increase (3)						
	Decrease of population with out-migration and natural decrease (4)						
	Decrease of population with in-migration and natural decrease (5)						
	Decrease of population with out-migration and natural increase (6)						

Туроlоду	Regional Types	TPG responsible		Spatial	Region	al level	Year
Typology of depolulation	Very strong depopulation (1) Strong depolulation (2) Depopulation (3) Possible depopulation (4) No depopulation (5)	1.1.4		EU27+2	NUTS 3		1995-1999
Accessibility and GDP	1 Successful regions with high accessibility         2 Successful peripheral regions         3 Lagging regions in the European core         4 Lagging peripheral regions	1.2.1		EU27+2	NUTS 3	NUTS 5	2000
Typology of infrastructure endowment	D Strongly mobitlity dependancy with need of process governement (Low level of infrastructrual density and         C Risk of congestion and need for distribution of activity (High level of infrastructrual density and poor         B Congestion regions with need of infrastructrual improvement (Low level of infrastructrual density and good use level)         A Unproblematic and use adequate poor infrastructure but (Low level of infrastructrual density and good use level)	1.2.1		EU27+2	NUTS 3	NUTS 5	2000
Broadband penetration	1 Low 2 Medium 3 High	1.2.2		EU27+2	NUTS 2		
Introduction of Competitive provision	1 Early 2 Late	1.2.2		EU27+2	NUTS 2		
Broadband penetration / Introduction of Competitive provision	<ol> <li>High broadband - early competition</li> <li>High broadband - late competition</li> <li>Medium broadband - early competition</li> <li>Medium broadband - late competition</li> </ol>	1.2.2		EU27+2	NUTS 2		

Typology	Regional Types	TPG responsible		TPG responsible		Spatial scope	Regiona	al level	Year
	5 Low broadband - early competition								
	6 Low broadband - late competition								

Typology	Regional Types	TPG respons	sible	Spatial	Regiona	al level	Year
Telekom supply and demand characteristics	1 Core Urban Rich2 Core Urban Poor3 Core Rural Rich4 Core Rural Poor5 Periphery Urban Rich6 Periphery Urban Poor7 Periphery Rural Rich8 Periphery Rural Poor	1.2.2		EU27+2	NUTS 2		
Nodal structure of telecommunication networks	to be specified	1.2.2					
Differentation related to advanced echnologies	to be specified	1.2.2					
TN&S related spatial selectivity	to be specified	1.2.2					
Mountainous Regions	to be specified	1.3.1		EU27+2	NUTS 3	NUTS 5	2000
Extent and magnitude of natural and technological hazards	to be specified	1.3.1		EU27+2	NUTS 3		2000
Hazrad potential and vulnerability	Ordinal typology taking inti account degree of hazards and vulnerability	1.3.1		EU27+2	NUTS 3		2000
Costal Regions	to be specified	1.3.2		EU27+2	NUTS 3	NUTS 5	2000
Regions by type of impact of ICTs policies	Lagging regions reacting to cohesion ICTs policies						
	Non lagging regions with low needs of ICTs policies	2.1.1		EU27+2	NUTS 3	NUTS 5	2000

Typology	Regional Types	TPG responsible		TPG responsible		TPG responsible		Regional Types TPG responsible Spa		Spatial scope	Spatial Regional scope		Year
	Non lagging regions reacting particularly to efficiency policies												
Central-peripherical typology	1 Most accessible region												
	+ or - centrality and periperality	2.1.1		EU27+2	NUTS 3	NUTS 5	2000						
	n peripheral regions												
EU Structural Funds Objective	Objective 1 regions						Structural						
regions	Objective 2 regions	2.1.1 / 3.1		EU27+2	NUTS 3	NUTS 2	fund period 2000 - 2006						
Pentagon	Regions within the Pentagon	2.1.1		EU27+2	NUTS 3	NUTS 2							
Lagging Regions	1 lagging regions												
	2 potentially lagging regions	2.1.1		EU27+2	NUTS 3	NUTS 2							
	3 non lagging regions												
R&D and innovation capacity	High R&D capacity and high innovation capacity	capacity and high innovation capacity capacity but low or medium innovation											
	High R&D capacity but low or medium innovation capacity												
	Low or medium R&D capacity but high innovation capacity 2.1.2		EU15 (EU27+2)										
	Medium R&D capacity and medium innovation capacity												
	Low R&D capacity and low innovation capacity												
R&D Regions	1 R&D Rich Regions			<b>EU07</b> .0									
	2 R&D Poor Regions	2.1.2		EU27+2			2000						
R&D Market Regions	1 R&D Producing Regions												
	2 R&D Using Regions	2.1.2		EU27+2			2000						
	3 R&D Poor Regions												
Rural Areas	1 predominantly leading rural areas												
	2 predominantly lagging rural areas												
	3 intermediate leading rural areas	242		FU27+2			2000						
	4 intermediate lagging rural areas	2.1.5		2021.2			2000						
	5 leading urban areas												

Typology	Regional Types	TPG responsible		TPG responsible		Spatial	Regiona	al level	Year
				scope					
	6 lagging urban areas								
Less favoured areas	1 permanent handicaps (altitude, poor soils, climate,								
	steep slopes)								
	2 undergoing depopu-lation or having very low								
	densities of settlement	2.1.3		EU27+2			2000		

Туроlоду	Regional Types	TPG responsible		TPG responsible		TPG responsible		Spatial	oatial Regional level		Year
	3 experiencing poor drainage, having inade-quate infrastructures, or needing support for rural tourism, crafts and other supplementary activities.										
Predominant Farmtype	to be specified	2.1.3									
Agricultural holdings	Level 1: General farm types										
	Level 2: Principal farm types	213		FU27+2			2000				
	Level 3: Particular farm types	2		2027-2			2000				
	Level 4: Subdivisions of level 3										
Regions towards Energy Ladders		2.1.4		EU27+2	NUTS 3		2000				
Energy involvement and sensitivity	1 economically dynamic and energy efficient regions										
	2 regions where energy is a bottleneck impeding development	y is a bottleneck impeding									
	3 regions with a strong potential for alternative 2.1.4 energies		EU27+2	NUTS 3		2000					
	4 regions that are more influenced (either positively or negatively) by energy trends										
Dominant Structural funds spending	R Regional developement, productive infra-structure										
	A Agricultural, fishery, rural development						Structural				
	S Social integration, human resources	2.2.1		EU15	NUIS 3		fund period				
	C Basic infrastructure, European cohesion										
Structural Fund spending and	Low Spending - High Performance										
regional performance	Low Spending - Medium Performance										
	Low Spending - Low Performance										
	Medium Spending - High Performance										
	Medium Spending - Medium Performance	2.2.1		EU15	NUTS 2		Structural fund period				
	Medium Spending - Low Performance										

Туроlоду	Regional Types	TPG responsible		Spatial	Regiona	al level	Year
	High Spending - High Performance			30000			
	High Spending - Medium Performance						
	High Spending - Low Performance						
Structural Fund spending and	Low Spending - Rise in Ranking						
ranking	Low Spending - Stable in Ranking						
	Low Spending - Fall in Ranking	2.2.1					
	Medium Spending - Rise in Ranking						
	Medium Spending - Stable in Ranking			EU15	5 NUTS 2		Structural fund period
	Medium Spending - Fall in Ranking						
	High Spending - Rise in Ranking						
	High Spending - Stable in Ranking						
	High Spending - Fall in Ranking						
Sectoral Economic structure in the Candidate Countries	Regions with large agriculture and low to medium employment density						
	Regions with medium agriculture and low employment density	2.2.2	ACC	ACC12	NUTS 3	3	
	Regions with low agriculture, mostly strongly industrialised and low to mediu employment density						
Regional conditions based on potentials and bottlenecks	Capital cities/major urban agglomerations						
	Western border regions						
	Peripheral eastern and rural regions	2.2.2		ACC12	NUTS 3		
	Old industrial regions						
Typology of urban area	Absolute difficulty						
	with 5 subtypes according absolute and relative difficulties						
	Relative difficulty	2.2.2		EU27+2	NUTS2		

Туроlоду	Regional Types	TPG responsible		Spatial scope	Regional level		Year
	with 2 subtypes according absolute and relative difficulties Not in difficulty	2.2.5		LOZPYZ	10105	NOTO 5	
Urban Structural changes	1 Declining urban industrial areas         2 Strengthening urban industrial areas         3 Urban industrial areas in transformation to a service economy         4 Urban areas exhibiting strong socio-economic disparities         5 Urban areas exhibiting a balanced distribution of	2.2.3		EU27+2	NUTS 3		2000
Underlying urban features	wealth and opportunity           1 Economic capital           2 Social capital           3 Network capital           4 Environmental capital	2.2.3		EU27+2	NUTS 3		2000
Settlement structure	1 Central Areas in agglomerated regions         2 Highly densely areas in agglomerated regions         3 Densely areas in agglomerated regions         4 Rural areas in agglomerated regions         5 Central Areas in densely populated regions         6 Densely areas in in densely populated regions         7 Rural areas in in densely populated regions         8 Rural area more densely populated         9 Rural area less densely populated	3.1		EU27+2	NUTS 3	NUTS 2	2000
Border regions		3.1		EU27+2	NUTS 3	NUTS 5	2000
Interreg III A regions		3.1		EU27+2	NUTS 3	NUTS 5	2000
Interreg III B regions		3.1		EU27+2	NUTS 3	NUTS 5	2000

# Proposal for ESPON Map Collection

Legend:	
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Additional offer to first
proposal
Offered, but not delivered
<ul> <li>Included in August report</li> </ul>

Level 1	Level 2	Торіс	<b>TPG responsible</b>	V
II Regional Structures and developments	II. 2 Structure and dynamics of lab	· Employment sectoral structur - Employment by sec	?	
II Regional Structures and developments	II. 2 Structure and dynamics of lab	· Employment by Educational level - Human capital i	?	
III. Towards a more Balanced and Polycentric	III.1 The Urban System	Urban Regions with structural problems	?	
III. Towards a more Balanced and Polycentric	III. 2 The Rural-Urban Relationshi	Rural regions with structural problems	?	
I. The regions of ESPON		- Typology of NUTS 3 regions	1.1.1	√
II Regional Structures and developments	II.1 Structure and development of	<ul> <li>Population Density and Cities by size</li> </ul>	1.1.1	✓
II Regional Structures and developments	II.3 Regional performance	· Sectoral Structure of regional income -Cross value	1.1.1	
III. Towards a more Balanced and Polycentric	III.1 The Urban System	<ul> <li>Urban Areas functional urban areas</li> </ul>	1.1.1	✓
III. Towards a more Balanced and Polycentric	III.1 The Urban System	· Typology of cities and functional urban regions (FU	1.1.1	✓
III. Towards a more Balanced and Polycentric	III.1 The Urban System	·Megas	1.1.1	✓
IV. Access to Infrastructure and Knowledge	IV.1 Infra- and Infostructure	Maps on national and European accessibility	1.1.1	$\checkmark$
IV. Access to Infrastructure and Knowledge	IV.4 Education and Knowledge	· University students	1.1.1	✓
IV. Access to Infrastructure and Knowledge	IV.4 Education and Knowledge	· Pupils by school level	1.1.1	✓
IV. Access to Infrastructure and Knowledge	IV.4 Education and Knowledge	- university networking (Erasmus exchange)	1.1.1	$\checkmark$
V Cultural and Natural Heritage	V.2 Cultural Heritage	Tourism function	1.1.1	$\checkmark$
II Regional Structures and developments	II.1 Structure and development of	Share of urban population per NUTS3 vs. population	1.1.2	$\checkmark$
III. Towards a more Balanced and Polycentric	III. 2 The Rural-Urban Relationshi	Typology of Rural-urban relations	1.1.2	
III. Towards a more Balanced and Polycentric	III. 2 The Rural-Urban Relationshi	Share of agricultural area per NUTS3 area (%)	1.1.2	$\checkmark$
III. Towards a more Balanced and Polycentric	III. 2 The Rural-Urban Relationshi	Share of pasture of all agricultural area etc. (%)	1.1.2	$\checkmark$
III. Towards a more Balanced and Polycentric	III. 2 The Rural-Urban Relationshi	Share of urban fabric per NUTS3 area (%)	1.1.2	$\checkmark$
III. Towards a more Balanced and Polycentric	III. 2 The Rural-Urban Relationshi	Share of artificial area per NUTS3 area (%)	1.1.2	$\checkmark$
III. Towards a more Balanced and Polycentric	III. 2 The Rural-Urban Relationshi	Share of continuous urban fabric per NUTS3 area (%	1.1.2	$\checkmark$
III. Towards a more Balanced and Polycentric	III. 2 The Rural-Urban Relationshi	Share of artificial area vs. population density => ecor	1.1.2	$\checkmark$
IV. Access to Infrastructure and Knowledge	IV.4 Education and Knowledge	Household orientated infrastructure	1.1.2	
VI Geographical and natural determined region	VI.1 Geographical determined regi	· Border region typology	1.1.3	$\checkmark$
III. Towards a more Balanced and Polycentric	III.1 The Urban System	· Major urban systems in accession countries	1.1.3	$\checkmark$
II Regional Structures and developments	II.1 Structure and development of	· Development of Population	1.1.4	✓

II Regional Structures and developments	II.1 Structure and development of I · Natural Development	1.1.4 🗸
II Regional Structures and developments	II.1 Structure and development of I · Regional types depopulation	1.1.4 🗸

II Regional Structures and developments	II.1 Structure and development of	In and out migration areas	1.1.4 🖌
IV. Access to Infrastructure and Knowledge	IV.1 Infra- and Infostructure	· Transport network, access and use	1.2.1, 2.1.1 🖌
IV. Access to Infrastructure and Knowledge	IV.1 Infra- and Infostructure	· Transport Accessibility	1.2.1, 2.1.1 🖌
IV. Access to Infrastructure and Knowledge	IV.1 Infra- and Infostructure	· ICT network, access and use	1.2.2 <b>in Doku</b> i
IV. Access to Infrastructure and Knowledge	IV.1 Infra- and Infostructure	· ICT accessibility	1.2.2 <b>in Doku</b> i
VI Geographical and natural determined region	VI.2 Natural determined regions	<ul> <li>Natural and technological hazards</li> </ul>	1.3.1 🖌
VI Geographical and natural determined region	VI.2 Natural determined regions	<ul> <li>Hazard potential and vulnerabilities</li> </ul>	1.3.1 🖌
V Cultural and Natural Heritage	V.1 Natural Heritage	Extent and richness of semi-natural habitats	1.3.1 🖌
V Cultural and Natural Heritage	V.1 Natural Heritage	Areas exposed to acidification and eutrophication	1.3.1 🖌
II Regional Structures and developments	II.1 Structure and development of	Population growth and density for Nuts 3 regions	1.3.2 🖌
II Regional Structures and developments	II. 2 Structure and dynamics of lab	· Employment sectoral structure -Employment by sec	1.3.2 🖌
V Cultural and Natural Heritage	V.1 Natural Heritage	Protected areas	1.3.2 🗸
V Cultural and Natural Heritage	V.1 Natural Heritage	Richness of species identified of european importance	1.3.2 🖌
V Cultural and Natural Heritage	V.1 Natural Heritage	Potential for future nature protection, minimum size c	1.3.2 🖌
V Cultural and Natural Heritage	V.2 Cultural Heritage	Cultural heritage	1.3.3
V Cultural and Natural Heritage	V.2 Cultural Heritage	Tourist stays and capacity	1.3.3
V Cultural and Natural Heritage	V.2 Cultural Heritage	Tourist related employment	1.3.3
III. Towards a more Balanced and Polycentric	III.1 The Urban System	· Centre oriented accessibility by spatial level and tra	2.1.1
IV. Access to Infrastructure and Knowledge	IV.2 Peripherality	<ul> <li>Travel time by spatial level and transport mode</li> </ul>	2.1.1 🖌
IV. Access to Infrastructure and Knowledge	IV.2 Peripherality	<ul> <li>Travel costs by transport node</li> </ul>	2.1.1 🖌
IV. Access to Infrastructure and Knowledge	IV.2 Peripherality	· Average speed to market	2.1.1 🖌
IV. Access to Infrastructure and Knowledge	IV.2 Peripherality	· Average time to market	2.1.1 🖌
IV. Access to Infrastructure and Knowledge	IV.2 Peripherality	Market accessibility potential	2.1.1 🖌
IV. Access to Infrastructure and Knowledge	IV.3 Effects of Accessibility	· Accessibility to GDP	2.1.1 🖌
IV. Access to Infrastructure and Knowledge	IV.3 Effects of Accessibility	impact of ICT policies on regional income	2.1.1 🖌
IV. Access to Infrastructure and Knowledge	IV.3 Effects of Accessibility	impact of transport policies on equivalent income me	2.1.1 🖌
IV. Access to Infrastructure and Knowledge	IV.3 Effects of Accessibility	impact of transport policies on employment and uner	2.1.1 🖌
II Regional Structures and developments	II. 2 Structure and dynamics of lab	· Employment sectoral structure - Employment in R&	2.1.2 🗸
II Regional Structures and developments	II.3 Regional performance	Patents/GDP per capita	2.1.2 🖌
II Regional Structures and developments	II.3 Regional performance	Primary R&D regions in Europe	2.1.2 🖌
II Regional Structures and developments	II.3 Regional performance	Regions that are leading producers/users of R&D	2.1.2 🗸

VI Geographical and natural determined region	VI.2 Natural determined regions	· Less favoured areas	2.1.3 🖌
II Regional Structures and developments	II.3 Regional performance	· Sectoral Structure of regional income - GDP in agri	2.1.3 🖌
III. Towards a more Balanced and Polycentric	III. 2 The Rural-Urban Relationshi	Agricultural land use	2.1.3 🖌
III. Towards a more Balanced and Polycentric	III. 2 The Rural-Urban Relationshi	Agricultural farms by age of holder	2.1.3 🖌
III. Towards a more Balanced and Polycentric	III. 2 The Rural-Urban Relationshi	Agricultural Production	2.1.3 🖌
IV. Access to Infrastructure and Knowledge	IV.1 Infra- and Infostructure	· Energy network, access, use	2.1.4 🗸
IV. Access to Infrastructure and Knowledge	IV.1 Infra- and Infostructure	<ul> <li>Energy involvement and sensitvity</li> </ul>	2.1.4 🗸
IV. Access to Infrastructure and Knowledge	IV.1 Infra- and Infostructure	· Energy prices	2.1.4 🗸
III. Towards a more Balanced and Polycentric	III.1 The Urban System	· Structural Fund spending in relation to European pc	2.2.1 ✓
VI Geographical and natural determined region	VI.1 Geographical determined regi	<ul> <li>Coastal regions with structural problems</li> </ul>	3.1
VI Geographical and natural determined region	VI.1 Geographical determined regi	<ul> <li>Mountain regions with structural problems</li> </ul>	3.1
VI Geographical and natural determined region	VI.1 Geographical determined regi	<ul> <li>Border regions structural problems</li> </ul>	3.1
I. The regions of ESPON		<ul> <li>NUTS regions in ESPON countries</li> </ul>	3.1
II Regional Structures and developments	II.1 Structure and development of I	· Settlement Structure	3.1
II Regional Structures and developments	II.1 Structure and development of I	<ul> <li>Age structure of population</li> </ul>	3.1
II Regional Structures and developments	II. 2 Structure and dynamics of lab	· Activity rates	3.1
II Regional Structures and developments	II. 2 Structure and dynamics of lab	· Labour Force by age	3.1
II Regional Structures and developments	II. 2 Structure and dynamics of lab	· Employment by Educational level - Employment by	3.1 🖌
II Regional Structures and developments	II. 2 Structure and dynamics of lab	<ul> <li>Employment professional structure</li> </ul>	3.1 🖌
II Regional Structures and developments	II. 2 Structure and dynamics of lab	· Female Employment	3.1 🖌
II Regional Structures and developments	II. 2 Structure and dynamics of lab	· Unemployment	3.1 🗸
II Regional Structures and developments	II. 2 Structure and dynamics of lab	<ul> <li>Development of unemployment</li> </ul>	3.1 🗸
II Regional Structures and developments	II. 2 Structure and dynamics of lab	· Youth unemployment	3.1 🖌
II Regional Structures and developments	II.3 Regional performance	· Disparities in GDP	3.1
II Regional Structures and developments	II.3 Regional performance	· Development in GDP	3.1

# Karte 22

# **Regional Disparities in Gross Domestic Product**

Facing the enlargement of the European Union, the discussions on structural weakness and disparities in Gross Domestic Product (GDR) between the old member states and the accession countries always target the demonstration of the "welfare border" between the old and the new part of the Union. The related maps illustrating this structure are well-known.

Apart from some spots in the old EU - parts of the EU 15 Objective 1 regions -, the poor areas in the accession countries are marked by a more or less homogeneous blue (cold, bad) or red (hot, danger) as their regional GDP per capita in Purchasing Power Standards is below 75% of the EU average. The degree of regional difference depends on the use of the EU 15 or EU 25 average of the GDP.

This map bring a more detailed view to light. It use a more detailed range of regional average values starting with the lowest, 75% of the average of the Accession 12 countries, and ending with those regions exceeding the average of EU 15, a value which will no more exist after 2004.

Within the accession countries, the eastern parts of Poland and almost all regions of Bulgaria and Romania have a GDP per capita even below 75% of the average of the Accession 12 countries. Still below 75% of the average of the Accession 10 countries are some Polish and Hungarian regions and Latvic.

### SHORT INTERPRETATION OF MAJOR MAP RESULTS

GDF in Purchasing Power		
standards per ca	ipita 2000	
Accession 12	8767	
Accession 10	10064	
EU 27	19573	
EU 25	20516	
EU 15	22576	

DIAGRAM OR TABLE OR OTHER KIND OF ILLUSTRATION

# INDICATION OF PROJECT AND SOURCE OF FIRST PUBLISHING IN CASE

ESPON Project 3.1. Intergrated tools for European Spatial Development; Third Interim Report September 2003, p. 76



#### **Regional Disparities in Gross Domestic Product**



From ToR 3.1	r-urban
(comments in FIR 3.1 5.1.1, p.106)	social integration
	spatial integration
	spatial / territorial cohesion
	territorial impact
	accessibility
	environment
	(cultural) landscape
	polycentric development
	territorial impact assessment
	urban area / region
From ToR other TPGs	barrier (effect) / spatial discontinuity
(= list discussed during the 1st LPs meeting)	coastal area
	connectivity
	ecological network
	ecologically / environmentally sensitive area
	European core area
	Euro-corridor
	functional urban area (FUA)
	gateway (city)
	global integration zone
	green quality / area
	hub
	inter-/multi-modality
	island
	lagging / structurally weak area
	low density / sparsely populated area
	metropolitan area / region (MEGA)
	mountain area
	natural area
	node
	old industrial area / region
	(ultra-)peripheral area / region
	pole
	rural area / region
	service of general interest
	small / medium-size city
	transnational co-operation area
	urban - rural partnership / relationship
	urban cluster / network
	urban sprawl

Preliminary list of ESPON terms (first results / to be discussed)

Additional basic notions	scale / level
	space (spatial)
	territory (ial)
Other additional terms	border area / region
(based on TPG reports review until now)	central area / region