

# EU-LUPA European Land Use Patterns

Applied Research 2013/1/8

Annexes to Inception Report | Version 3rd/December/2010



This report presents a more detailed overview of the analytical approach to be applied by the project. This Applied Research Project is conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

The partnership behind the ESPON Programme consists of the EU Commission and the Member States of the EU27, plus Iceland, Liechtenstein, Norway and Switzerland. Each partner is represented in the ESPON Monitoring Committee.

This report does not necessarily reflect the opinion of the members of the Monitoring Committee.

Information on the ESPON Programme and projects can be found on <a href="https://www.espon.eu">www.espon.eu</a>

The web site provides the possibility to download and examine the most recent documents produced by finalised and ongoing ESPON projects.

This basic report exists only in an electronic version.

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# **Annex I Project Management Structure**

A governance structure has been established for an effective management of the project. (See figure below). In addition, a Partnership Agreement has been signed laying down the division of mutual responsibilities and rights of partners and ensuring smooth working mechanisms.

TECNALIA as the Project Lead Partner (LP) takes over the responsibility for management, communication, implementation and co-ordination of activities among the involved partners. The budget includes all necessary project management work. The LP will act also as a Financial Manager (FM) and Communication Manager (CM) leading WP3. The LP will be the administrative link between the project and the ESPON programme, namely the project expert in charge at the Coordination Unit as well as the sounding board assisting the project. The LP is responsible for reporting progress to the ESPON 2013 Programme and transferring the ERDF contribution to the project partners. The LP will be the single contact point acting as principal liaison of the project with ESPON during the negotiation phase, being authorized by project partners via Memorandum of Agreement, and also the project phase. LP as FM will be responsible for the accounts, financial reporting and internal handling of Programme financing. It would work in close contact with all the partners and the first level controllers in order to enable efficient financial management of the operation. LP will be assisted by UAB (PP2) as Project Coordinator (PC) to guaranty scientific quality of the project and follow up. The Project Coordinator will be responsible for the organisation of the project's work. The coordinator is highly qualified in the management of transnational projects as well as in the thematic priority of the project. The coordinator should act as a driving force in the partnership in order to achieve the project objectives within the foreseen schedule.

Although the overall responsibility of the project relies on the LP, UAB and TECNALIA are permanently coordinated, defining together and agreeing about the conceptual framework and methodological approach as well as the work plan and actions to be taken.

The present project proposal considers 3 Work Packages (WP's), each one with a Work Package Leader (WPL) who is responsible for organizing a system of decision making and management as well as the review of the progress of project and the reporting to the LP. Also regularly WP meetings will be organized to discuss scientific issues and progress of the project. Finally, the WPL is responsible for WP-wide publications. The Task Leader (TL) is responsible for the scientific content and the progress of tasks defined within each WP.

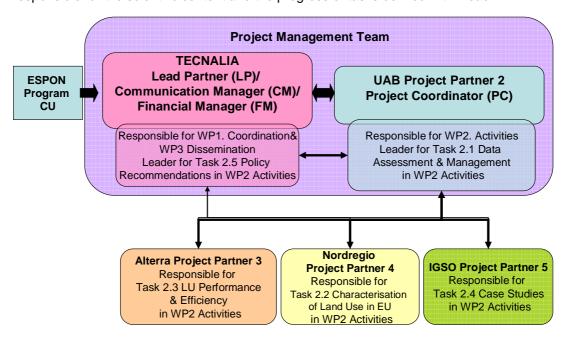


Figure 1 EU-LUPA Project Governance Structure

#### TPG meetings calendar:

- 1<sup>st</sup> TPG Meeting: 27<sup>th</sup> October 2010 in Brussels KO Meeting
- 2<sup>nd</sup> TPG Meeting: January 2011 with SB in Bilbao
- 3<sup>rd</sup> TPG Meeting: June 2011 after Interim Report is submitted with SB in Bilbao
- 4<sup>th</sup> TPG Meeting (including workshop from task 2.4): February 2012 in Warsaw
- 5<sup>th</sup> TPG meeting (including workshop from task 2.5): June 2012 with SB in Bilbao
- 6<sup>th</sup> TPG meeting (end of the project): December 2012 to be define according to ESPON conference

Despite those project meetings, the consortium will meet at least once a month by means of a teleconference in order to supervise the advances of the project activities, identify potential deviations, share information and impressions on the project development.

#### a) Roles and Responsibilities

#### Lead Partner's tasks and responsibilities

The LP's responsibilities in preparing, implementing and closing the project are the following:

- Establish a Partnership Agreement setting mutual rights, obligations and duties between project partners;
- Ensure the implementation of the entire applied research project being responsible for the division of tasks among the partners involved in the project
- Ensure that these tasks are subsequently fulfilled in compliance with the Subsidy Contract
- Ensure an efficient internal management and control system agreed between those beneficiaries:
- Verify that the expenditures presented by the beneficiaries participating in the project have been validated by the controllers;
- Ensure that the tasks regarding the signature of the contract by the other contractors are carried out in a timely and correct manner.
- Act as the intermediary between the consortium and the ESPON CU. All information related to the project shall be transmitted timely by the consortium to the Commission through the co-ordinator, with the exceptions foreseen in the contract.
- Prepare a conclusions report of the WP's including their relationship and to submit them to the ESPON CU
- Introduce appropriate corrections if necessary
- Guarantee first level financial control in order to validate the expenditure declared by each beneficiary participating in the project.
- Take care of the information flow and methods between the co-ordinator and the WP leaders
- Schedule the co-ordination meetings
- Submit all the periodic reports, technical and financial
- Submit all supplementary reports (outputs)
- Establish a meetings calendar
- Oversee the promotion of gender equality in the project
- Approval and monitoring of the information analysis and dissemination process
- Approval of the exploitation and dissemination plan

## Financial manager's role & responsibilities:

To keep accounts making it possible to determine at any time what portion of the Community funds has been allocated to each contractor for the purposes of the

project and inform the ESPON CU of the distribution of the funds and the date of transfers to the contractors on an annual basis.

- Request and receive payments of project funding;
- Transfer project funding to the partners without delays in compliance with the amounts reported in the progress report
- Make sure that the project expenditures presented by the beneficiaries participating in the project have been incurred in for the purpose of implementing the project and correspond to the activities
- Submit all the periodic financial reports

### Coordinator's role & responsibilities:

- To review the initial work plan for the different tasks. To suggest changes if appropriated and to agree final work plans
- To follow up the development of every task, according to the milestones established in every work plan.
- To assist LP in the preparation of the progress report, a six monthly report will be asked by the Co-ordinator to every task leader with the progress of every task, including the man power effort. An advance of these six month report will be asked every three months.
- To review outputs done by task leaders before sending them to the EC
- To assist the task leaders if some difficulties arise

#### Role & Responsibilities of the various task leaders

#### Coordination of a task means:

- To review the initial work plan of the different participants in each task
- To prepare a report of the activities carried out for each task for which the partner acts as coordinator
- To introduce appropriate corrections if necessary
- To follow up the development of every task, according to the milestones established in the work plan.
- To do this job, a six monthly report will be asked by the task leader to every participant with the progress of every task, including the man power effort. An advance of these six month report will be asked every three months.
- To assist task participants if some difficulties arise
- To review with the task participants the activities and budgetary control of the partners before periodic reports and cost statements
- **b)** Communication flow and methods. The communication flow will be bottom -up and top-down through the typical communication methods such as: meetings, videoconferences, e-mail, phone, fax etc.

An FTP account will be set up for internal sharing of project information and documents. From January 2011 a Geodatabase will be made available for the management of the project data.

Meeting arrangements: The LP will be responsible for convening the TPG mid term-report meeting, and for preparing the agendas, minutes and documents for these meetings based on member input. Mid term review: The LP will be responsible for convening a progress reports with the ESPON CU every 6 months. LP will also be responsible for producing and circulating the minutes of this meeting. The co-ordinator will be in charge of collecting and reporting information to be provided by the work package co-ordinators. Final Report: The LP, together with the WP leader and with contribution of the task leaders, will be responsible for preparing the final project report to the ESPON CU. This will describe the achievements of the project, critically assess its operation and recommend further action, as appropriate. Project progress monitoring: Work package leaders will check progress by communication with the task leaders and the relationship among tasks, and will communicate this to the LP. At each milestone in the project, there will be a review of progress by the project management team (including a mid-term review of progress at months, and a review of progress at the end of the project). Reporting: there will be regular progress reports (every 6 months), which will

contain the detailed progress of the project and the plan for the next reporting period. Mid term report and final report will be part of these reports. Financial reports will be sent every 12 months. Audit certificates of all partners will be also reported. In addition the outputs will be sent to the EC at due time.

- c) Quality assurance. To ensure the quality of outputs and the smooth running of the project, there will be a Quality Assurance Plan (QAP). This plan will contain (amongst others) all the procedures with regard to the communications between the partners, the documentation standard of all the outputs, the full detailed work plan, and any other relevant standards to conform to.
- **d)** Audit Trails. It is the Lead Partner's responsibility to ensure an adequate audit trail which implies that the Lead Partner has an overview of: who paid, what was paid, when was paid, who verified, where the related documents are stored. Additionally, in order to set up an audit trail within the TPG, the LP with the project partners have to select the first level controllers, whose role will be the setting up of the audit trail and the validation of the expenditure both at LP's and at project partners' level.

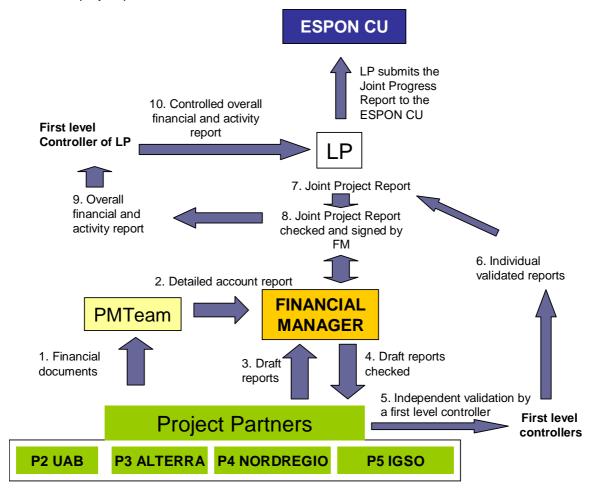


Figure 2 EU-LUPA Project Audit trail

## Annex II Dissemination & identification of targeted groups

The concern for dissemination and policy applications will guide the organization of the research effort throughout the entire process and, as such, will not merely be organized during the last six months of the project. The overall project structure is designed to reach the dissemination results according to ESPON requirements. The coordination of knowledge management will be guaranteed by the Project Lead Partner. The respective work package and tasks leaders are responsible for managing the knowledge gathered within this project.

This implies that dissemination activities will be carried out all along the project, with special emphasis in Tasks 2.4. and Tasks 2.5, as different end users and policy actors need to be addressed at different moments. The project partners are integrated in extensive scientific and policy-oriented networks, which facilitate the spread of relevant information on regional, national and international levels.

The involvement of relevant end-users in the project development is seen crucial, so as far as possible, it will be done by creating a sense of ownership with regard to the purpose, methods and outputs of the study.

The resulting guidelines and recommendations should be disseminated to every EU region, which will constitute a high added value to the project since this will help to establish a good information network on the land use management. The workshops organized within Task 2.4 Case Studies and Task 2.5 Policy recommendations will constitute themselves a dissemination activity to widespread project objectives and preliminary results to end-users and administrations.

As such, common partner links with other ESPON 2013 projects will be cultivated to facilitate the exchange of data where permissible. Moreover, all EU-LUPA activities in this field will be coordinated with the dissemination activities of the ESPON 2013 Programme.

To ensure the consistency of a project's dissemination activities with respective activities organised at Programme level, the EU-LUPA project will consider the objectives and actions of Priority 4 of the ESPON 2013 Programme "Capitalisation, ownership and participation: Capacity building, dialogue and networking", as it represents a core element in making the knowledge base of ESPON operational and used in practise, and for the preparation of effective territorial policies. The dissemination activities will use the communication channels generally available to partners involved in the project (web pages, newsletters, conferences, scientific journals), and, will also participate in disseminations events organized by the ESPON Programme, in the framework of international conferences and seminars, e.g. transnational activities of the ECP Network, events organised by the CU. An important activity regarding dissemination of the project results will consist in a individual communication (by post mail, e-mail, interview on-line, if it is possible) to concreted EU regions authorities in a wide scope, in order to spread their regional profiles, and policy recommendations, among others. The regional contact information will be extracted from some European sources as Innovating Regions in Europe (www.innovating-regions.org), Assembly of European Regions (www.a-e-r.org) and other relevant regional networks in a EU scope.

The EU-LUPA project will address the following target groups with a double perspective:

- on one hand to get in-puts for project development
- on the other hand to make sure that the project has relevant impact on related EU research and European and regional policy making

Table 1 EU-LUPA Targeted groups

Target groups	Objective	Level	Addressed by
ESPON Programme Community, including experts and clients	Provide relevant information to ESPON Orientation and needs for further research	EU	Presentations, Conferences 2010, 2011, 2012 and 2013 and when solicited by ESPON CU
Scientific community		EU	Dissemination of project results
Land use research centres in EU	Provide relevant information at EU level /Impact on EU research	EU	Dissemination of project results in Technology Platforms Dissemination of
Environmental Research centres in EU	Impact on EU research	EU	project results in Technology Platforms Dissemination of
JRC/IES	Impact on EU research	EU/ Regional level	project results in Technology Platforms Consultation and Participation in Project Workshops
Spatial Planning Experts	Get in-put and feedback/Impact on EU research	EU/ Regional level	Consultation and Participation in Project Workshops
Environmental Experts	Get in-put and feedback/Impact on EU research	EU/ Regional level	Consultation and Participation in Project Workshops
Transportation Experts	Get in-put and feedback	EU/ Regional level	Consultation and Participation in Project Workshops
Urban planning/ development	Get in-put and feedback	Local Level	Consultation and Participation in Project Workshops
European policy making		EU	Consultation and Participation in Project Workshops
DG REGIO	Impact on EU policy making	EU	Project Workshop 2
DG AGRI	Impact on EU policy making	EU	Project Workshop 2
DG ENV	Impact on EU policy making	EU	Project Workshop 2
EEA	Impact on EU policy making	EU	Project Workshop 2
The Committee of Regions <b>Regional policy making</b>	Get in-put and feedback	EU	Project Workshop 2
Regional Land Use Planners	End-users	Regional/ National	Project Workshop 1 and 2
Local Planners/ Urban planners	End-users Get in-put and feedback	Local	Project Workshop 1 and 2
Regional infrastructure planers	End-users	Regional/ National/ local	Project Workshop 1 and 2

## Annex III Literature review

- Andrew Copus and Joan Noguera. 2010 A Typology of Intermediate and Predominantly Rural NUTS 3 Regions. EDORA (European Development Opportunities for Rural Areas). ESPON
- Arcaini E., Boscacci F., Camagni R., Capello R., Porro G., 1999, A typology of rural areas in Europe indicators on strength and weakness of rural territories and selection of areas (NUTS III), Politecnico di Milano, Milan.
- Ballas D., Kalogeresis T., Labrianidis L., 2003, A comparative study of typologies for rural areas in Europe, Paper submitted to the 43rd European Congress of the Regional Science Association.
- Blunden J. R., Pryce W. T. R., Dreyer P., 1998, The classification of Rural Areas in the European Context: An Exploration of a Typology Using Neural Network Applications, Regional Studies vol. 32, pp.149-160.
- C Ling, J Handley (2007): Restructuring the post-industrial landscape: A multifunctional approach. Landscape Research, Routledge 2007
- COM (2008) 616 final Green Paper on Territorial Cohesion Turning territorial diversity into strength
- COM (2009) 400 final Mainstreaming sustainable development into EU policies:2009 Review of the European Union Strategy for Sustainable Development
- C.T.J. Slager, B. de Vries, A.K. Bregt1 and A.J. Jessurun (2008): Methodology to generate landscape configurations for use in multi-actor plan-making processes. Proceedings of the ninth international conference on design and decision support systems. - Leende: TUE, 2008
- European Commission (1999) European Spatial Development Perspective Towards Balanced and Sustainable Development of the Territory of the European Union
- European Commission (2010) 5th Cohesion Report Investing in Europe's future
- EEA Report No 11/2006 Land accounts for Europe 1990–2000 Towards integrated land and ecosystem accounting
- European Environmental Agency, JRC European Commission and World Health Organisation (2008): Impacts of Europe's changing climate- 2008 indicator-based assessment. Luxemburg: Office for Official Publications of the European Communities. http://reports.eea.europa.eu/eea report 2008 4/en
- EU (2007) First Action Programme for the implementation of the Territorial Agenda of the European Union
- EU (2007) Territorial Agenda of the European Union
- FARO-EU: Foresight Analysis of Rural areas of Europe. Deliverable reports WP2 'Rural indicators, typology and past trends and patterns'.
- Feranec J., Jaffrain G., Soukup, T., Hazeu G., 2010. Determining changes and flows in European landscapes 1990-2000 using CORINE land cover data. *Applied Geography* 30 (1), 19-35, doi:10.1016/j.apgeog.2009.07.003
- Gallego F.J., Peedell S. (2001): Using CORINE Land Cover to map population density. Towards Agri-environmental indicators, Topic report 6/2001 European Environment Agency, Copenhagen, pp. 92-103.

- Gary L. A. Fry (2001): Multifunctional landscapes—towards transdisciplinary research. Landscape and Urban Planning Volume 57, Issues 3-4, 15 December 2001, Pages 159-168
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- Helming, K., Pérez-Soba & Tabbush P. (eds). 2008. Sustainability Impact Assessment of land use policies. Springer-Verlag GmbH Berlin Heidelberg ISBN 978-3-540-78647-4.
- Hubert Wiggering et al 2006 Indicators for multifunctional land use- Linking socio-economic requirements with landscape potentials Ecological Indicators pp 238-249
- Jan Feraneca, Gerard Hazeub, Susan Christensenc, Gabriel Jaffrain 2007 Corine land cover change detection in Europe (case studies of the Netherlands and Slovakia) Land Use Policy 24 pp 234-247
- Jesper Brandt, Henrik Vejre (eds, 2004): Multifunctional Landscapes: Volume 1 Theory, Values and History. International Series on Advances in Ecological Sciences, WIT Press, Southhampton
- Katharina Helming, Marta Pérez-Soba, Paul Tabbush (Editors) 2008 Sustainability Impact Assessment of Land Use Changes, Springer
- Nordregio (Lead partner), UMS RIATE, RRG Spatial Planningand Geoinformation, Eurofutures Finland, LIG. REGIONAL DISPARITIES AND COHESION:WHAT STRATEGIES FOR THE FUTURE. http://www.europarl.europa.eu/activities/expert/eStudies.do?language=EN
- Milego, R. & Ramos, M.J., 2010. Disaggregation of socioeconomic data into a regular grid: Results of the methodology testing phase. ESPON database 2013. UAB, Bellaterra, Spain
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- Patrick Galera Lindblom and Rasmus Ole Rasmussen 2008 Bioenergy and Regional Deve Countries Nordregio In cooperation with the Faculty of Landscape Management and Nature Conservation at the University of Applied Sciences in Eberswalde Nordregio
- Pérez-Soba et al. 2008. Land use functions an approach to integrate social, economic and environmental impacts of land use change. In: Sustainability Impact Assessment of land use policies. Helming, K., Tabbush P. & Pérez-Soba (eds). Springer-Verlag GmbH Berlin Heidelberg ISBN 978-3-540-78647-4, pp 375 404.
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- Urban-rural relations in Europe Final Report, 2005, ESPON Project 1.1.2, Helsinki University of Technology, Helsinki.

## Annex IV Data sources

#### Land use/land cover data at European level

#### **CORINE Land Cover**

Geographic coverage: EU 27, Norway, Wesern Balkans, Turkey

Time series:

1990 (±4). Not available for Norway, Sweden, UK, Turkey and some Western Balkans

2000 (±1). The higher availability. 2000. UK and Greece are still missing

#### **Urban Atlas**

This is a high resolution land cover for the cities included in Urban Audit. Because there is no time change for this data it will be used to assess the error associated with CLC for urban areas and to better characterise the cities and agglomerations

Geographic coverage: Same cities as Urban Audit. Currently available for 120 cities.

Time series: 2007

#### High resolution soil sealing

High Resolution Soil sealing layer. This layer has been developed in parallel with the CLC and provides the percentage of impervious surface in Europe. This information is relevant to characterise the urban areas. It is only available for year 2006.

Geographic coverage: full Europe

Time series: 2007, 2009 (available in January 2011 – probably).

#### **LUCAS**

LUCAS is point data on land use in Europe. The information derived from this survey is truly land use since multiple uses are recorded per point if this is the case. It will be used as complementary information, mainly for agricultural areas which was the focus of the first survey (2001, 2003).

The following data sources will be also used to complement the analysis:

#### **Environmental information**

- Natura 2000 sites.
- Air pollution. Air pollution is provided by AirBase and it has a European wide coverage.
- Agricultural census

#### Socio-economic data

At Local level. Urban Audit will provide the required socio-economic information for urban areas which are close to the local scale.

At Regional level (NUTS 2/3) and European level :Population and other socio-economic information will be compiled from Eurostat and ESPON database.

#### **Statistical Sources**

#### General:

Eurostat: http://epp.eurostat.ec.europa.eu/. Survey on Structural Business Statistics: Petra

Sneijers, Eurostat Unit G1, Tel. +352.4301.35024) European Commission- Energy fact sheets by country: http://ec.europa.eu/energy/energy\_policy/facts\_en.htm

ESPON Navigator: www.espon.eu

International Energy Agency: www.iea.org

#### Austria:

Zentralanstalt fuer Meteorologie und Geodynamik: http://zamg.zc.at

Statistics Austria: http://statistik.at

Federal Ministry of Economics and Labour: http://www.bmwa.gv.at/EN/default.htm

#### Belgium:

Statistics Belgium: <a href="http://www.statbel.fgov.be/">http://www.statbel.fgov.be/</a>

Direction géneral Energie du SPF Economie: <a href="http://mineco.fgov.be/energy/energy\_statistics">http://mineco.fgov.be/energy/energy\_statistics</a>

Institut wallon de l'evaluation, de la prospective et de la statistique:

http://statistiques.wallonie.be/

Studiedienst van de Vlaamse Regering: http://aps.vlaanderen.be/

ECODATA: http://ecodata.mineco.fgov.be/

#### **Bulgaria:**

National Statistical Institute: http://www.nsi.bg/Index\_e.htm

#### Cyprus:

Statistical Service of Republic of Cyprus:

http://www.mof.gov.cy/mof/cystat/statistics.nsf/index\_en/index\_en?OpenDocument CIA-World Factbook: https://www.cia.gov/library/publications/the-world-factbook/

## **Czech Republic:**

Czech Statistical Office: http://www.czso.cz/eng/redakce.nsf/i/home

#### Denmark:

Statistics Denmark: <a href="http://www.dst.dk/">http://www.dst.dk/</a>

#### Estonia:

Institute of Environmental Physics of the University of Tartu:

http://ael.physic.ut.ee/KF.public/default\_eng.htm

Statistics Estonia: http://www.stat.ee/

#### France:

Ministère de l'economie, de l'îndustrie et de l'emploi: http://www.industrie.gouv.fr

## Finland:

Statistics Finland: <a href="http://www.stat.fi/index\_en.html">http://www.stat.fi/index\_en.html</a>

#### Germany:

Deutscher Wetterdienst: <a href="http://www.dwd.de/">http://www.dwd.de/</a>

AG Umwelt-ökonomische Gesamtrechnungen der Länder: http://www.ugrdl.de/

Federal Ministry of Economics and Technology: http://www.bmwi.de/English/Navigation/root.html

Statistisches Bundesamt Deutschland EDS Europäischer Datenservice

Statistical Office of Baden-Württemberg: http://www.statistik.baden-wuerttemberg.de/

Statistical Office of Bayern: http://www.statistik.bayern.de/

Statistical Office of Berlin/Brandenburg: http://www.statistik-berlin-brandenburg.de/

Statistical Office of Bremen: http://www.statistik.bremen.de

Statistical Office of Hamburg and Schelswig-Holstein: http://www.statistik-nord.de/index.php

Statistical Office of Hessen: http://www.statistik-hessen.de/

Statistical Office of Mecklenburg-Vorpommern: <a href="http://www.statistik-mv.de/">http://www.statistik-mv.de/</a>

Statistical Office of Niedersachsen:

http://www.lsk.niedersachsen.de/master/C44771399\_L20\_D0.html Statistical Office of Nordrhein-Westfalen: http://www.lds.nrw.de/

Statistical Office of Rheinland-Pfalz: http://www.statistik.rlp.de/index.html

Statistical Office of Saarland: <a href="http://www.saarland.de/statistik.htm">http://www.saarland.de/statistik.htm</a>
Statistical Office of Sachsen: <a href="http://www.statistik.sachsen.de/">http://www.statistik.sachsen.de/</a>

Statistical Office of Sachsen-Anhalt: <a href="http://www.statistik.sachsen-anhalt.de/">http://www.statistik.sachsen-anhalt.de/</a> Statistical Office of Thüringen: <a href="http://www.statistik.thueringen.de/seite.asp">http://www.statistik.thueringen.de/seite.asp</a>

#### Greece:

General Secretariat of National Statistical Service: http://www.statistics.gr

#### **Hungary:**

OMSZ: http://www.met.hu/omsz.php

#### Ireland:

Central Statistics Office Ireland: <a href="http://www.cso.ie/">http://www.cso.ie/</a>

#### Italy:

Ministerio Della Defensa- Servizio Meteorologico: http://www.meteoam.it/

Instituto Nazionale di Statistica: http://www.istat.it/

TERNA: http://www.terna.it/

#### Latvia:

Latvijas Statistika: http://www.csb.gov.lv/

#### Lithuania:

Statistics Lithuania: http://www.stat.gov.lt/en/

#### Luxemburg:

STATEC Luxemburg: http://www.statec.public.lu/fr/index.html

#### Malta:

National Statistics Office: http://www.nso.gov.mt/

#### The Netherlands:

Statistics Netherlands: <a href="http://www.cbs.nl/nl-NL/default.htm">http://www.cbs.nl/nl-NL/default.htm</a>

KNMI: http://www.knmi.nl/

#### Poland:

Central Statistical Office Poland: <a href="http://www.stat.gov.pl/english/">http://www.stat.gov.pl/english/</a>

## Portugal:

Statistics Portugal: http://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\_main

#### Romania:

National Institute of Statistics: <a href="http://www.insse.ro/cms/rw/pages/index.en.do">http://www.insse.ro/cms/rw/pages/index.en.do</a>

## Slovenia:

Statistical Office of the Republic of Slovenia: http://www.stat.si/eng/index.asp

#### **Slovak Republic:**

Statistical Office of the Slovak Republic: http://portal.statistics.sk/showdoc.do?docid=359

## Spain:

Instituto Nacional de Estadística: http://www.ine.es/

Statistical Office of the Basque Country: <a href="http://www.eustat.es/">http://www.eustat.es/</a>

#### Sweden:

Statistics Sweden: http://www.scb.se/

#### Turkey

According to the "Mission Report Mission Report on the subject: "Regional Statistics, definition NUTS, coordination with other administrations", by 2002, Turkey has the following territorial breakdown: "Administrative division of Turkey is formed by province, district and villages. There are 81 Provinces. Regional level 3 was defined on the base of provinces. Most of the basic and important statistical data are collected on the base of provinces. Regional level 2 was defined by grouping provinces together (26 Sub-regions, called SRE). Finally, regional level 1 was determined by geographical, economic and social criteria (12 Regions)". According to this document, the Turkish Statistical Office was to submit to Eurostat the "REGIO availability list" with all data contained in REGIO. Some of this data is by now available in the Eurostat database and has been included in the Annex, Section VI.

Turkstat's statistical yearbook contains some more data with regional breakdown:

- City and village population and annual growth rate of population 1990 2000,
- Population, annual growth rate and population density 1990 2000
- Number of households and size. 2000
- Mid-year population estimates (city, village), 2005
- Employment and unemployment rate, 2005
- Employment by sector (agriculture, industry, services), 2005
- No of poor households and no of individual poor in urban and rural zones (2004)
- GDP 2001
- Household income distribution

Turkish Statistical Institute (TURKSTAT): <a href="http://www.die.gov.tr/ENGLISH/index.html">http://www.die.gov.tr/ENGLISH/index.html</a> Phone: 0312 410 04 10 Fax: 0312 425 33 87 E-mail: info@tuik.gov.tr

#### **United Kingdom:**

Office for National Statistics: <a href="http://www.statistics.gov.uk/default.asp">http://www.statistics.gov.uk/default.asp</a>

Planning Portal: http://www.planningportal.gov.uk/

BERR: Department for Business Enterprise & Regulatory Reform: http://www.berr.gov.uk/

Department of Environment, Food and Rural Affairs: http://www.defra.gov.uk/

#### Western Balkan Countries:

EU-LUPA project will integrate the information already supplied as a result of the "ECP Transnational Networking Activity" "Western Balkans".

#### Croatia

The statistical data available for Croatia contains most necessary demographic and economic data and is generally available for 2005.

Croatia: Republic of Croatia - Central Bureau Of Statistics http://www.dzs.hr/default e.htm

#### Federation of Bosnia and Herzegovina

In the Statistical Yearbook 2007, we find very detailed data on "energy and fuel consumption in driving and production purpose" for the year 2006, derived from the "Annual Report on Energy-generating products and raw materials in Industry." Furthermore, the "cost of living indices according to groups and subgroups of products and services" provides very detailed information on the development of energy prices between 1999 and 2006. However, the usefulness of this data has to be confirmed with national experts, since other, much more basic data on energy production and consumption or poverty level is lacking.

Bosnia-Herzegovina: Federation of Bosnia and Herzegovina, Federal Office of Statistics <a href="http://www.fzs.ba/Eng/index.htm">http://www.fzs.ba/Eng/index.htm</a>

## **FYROM (Macedonia)**

Data accessibility for FYROM is more limited than in the rest of the Western Balkan countries, since the Statistical Yearbook cannot be consulted online and all other publications also have to be purchased.

FYROM (Macedonia) State Statistical Office: http://www.stat.gov.mk/english/glavna\_eng.asp

### **Serbia and Montenegro**

National demographic and economic data is available (in English) from the Serbian Statistical Yearbook 2007, which contains most necessary demographic and economic data.

- Demographic series until 2002
- Unemployment 2005, 2006
- Value-added by industry 2002 2004
- GdP 2002 2006 by industry
- Household expenditures on waste collection and, water services and energy products, 2004-2005 (details for electricity, gas firewood and coal and division for urban and rural areas)

Serbian Statistical Office <a href="http://www.statserb.sr.gov.yu/Rzs/erzs.htm">http://www.statserb.sr.gov.yu/Rzs/erzs.htm</a>

#### **Albania**

Institute of Statistics <a href="http://www.instat.gov.al/">http://www.instat.gov.al/</a>

The data that can be accessed free of charge indicates a lack of detail for the economic indicators necessary to evaluate the impact on competitiveness:

- Demographic indicators (1990-2007)
- Employment and unemployment series by activity sector (1995-2006)
- Income by household type (2000)
- GDP at current prices by economic activities (1996-2006)

# Annex V Use of existing ESPON results relevant for this project

FCDONit	Contributions to Lond Hospital attack	Designal tomologica to be used	Other relevant information
ESPON project 1.1.1. Potential for polycentric development in Europe	Contributions to Land Use evaluation ESPON 1.1.1 provides an overview of the European urban system with regards to functional specialisations and current degrees of polycentricity. It also made a prospective analysis of possible effects of regional polycentric integration in different parts of Europe. Finally, the different applications of polycentricity in national policies have been reviewed. In EU-LUPA project Polycentrism will be analysed as potential driving force to explain land use dynamics in Europe.	Regional typologies to be used ESPON 1.1.1 has not produced any regional typology. A separate report was produced explaining why typologies of regions regarding urban infrastructure need to take into account cities in the vicinity of each region and not only within them. The typologies resulting from this separate report where however not included in the final ESPON 1.1.1 report.	Other relevant information ESPON 1.1.1 produced different typologies of cities. A first typology sought to identify the most important cities of Europe, or so-called Metropolitan European Growth Areas (MEGA).
1.1.2. Urban-Rural relations in Europe	Identification of actors that lead to non-efficient and unsustainable use of land (eg.: settlement growth vs. agricultural/rural uses) Analyse the dynamics of rural land use, urban land use and open space (non-built areas)	ESPON 1.1.2 has primarily produced a typology of urban and rural influence in regions at the NUTS 3 level, based on population density, FUA ranking and land cover. It discusses topics such as urbanisation, rural restructuring, the urban-rural characteristics, the relations between urban and rural areas and finally urban sprawl.  The Commission has proposed a revised version of this typology in the Green Paper on Territorial Cohesion that will be also consulted.	ESPON 1.1.2 has produced some detailed analyses of urban sprawl (sections 5.4-, pp. 222-235) one of the main focus of EU-LUPA project
1.1.4: The role of small and medium sized towns	ESPON 1.1.4 SMESTOS is built on the discussions initiated by ESPON 1.1.1 and ESPON 1.1.2. It discusses the role of small and medium size towns within the spatial organisation of	NA	

ESPON project	Contributions to Land Use evaluation	Regional typologies to be used	Other relevant information
	European cities and towns, identifying relevant nodes and analysing the way in which they structure the territory.		
1.4.3: Study on Urban Functions	In puts to the EU-LUPA project methodology to address Land Us Functions within the task of characterisation of land use in Europe	ESPON 1.4.3 first assessed the results of project 1.1.1. It provides elimitation of Functional Urban Areas (FUA).	Polycentricity issue has been discussed.
2.1.3: Territorial impact of CAP and Rural Development Policy	ESPON 2.1.3 concluded that in aggregate the Common Agricultural Policy (CAP) of the European Union (EU) has worked against the ESDP objective of balanced territorial development, and has not supported the ESDP objectives of economic and social cohesion.  Within EU-LUPA project CAP and Rural Development Policy will be analysed as driving forces behind land use changes and dynamics	NA	
2.1.4. Territorial trends of energy services and networks and territorial impact of EU energy policy	Data that can be used if updated: Map 34 Number of Regional Energy Agencies by NUTS 2. Source: European Commission, ManagEnergy Initiative	Regions with influence on national energy policy	
	Renewable potential: Map 16 Wind potential on NUTS 0 (source EWEA, Meteotest, WASP www.wasp.dk) In relation to Land Use Performance of regions	Regions with high / low wind potential	Will be contacted for more detailed grid data
	Map 22 Biomass potential at NUTS 3 in 2002 (GJ) as driver for land use change Table 7 Summary of main energy	Rural regions with high / low biomass potential	Derived from Corinne Landcover data. Analysis needs to be checked

ESPON project	Contributions to Land Use evaluation	Regional typologies to be used	Other relevant information
	features for new Member States		
2.2.1: Territorial effects of structural funds	ESPON 2.2.1 addressed the spatial impacts of Structural Funds with a particular focus on polycentricity and territorial cohesion in Europe.	NA	
2.4.1: Territorial Trends and Impacts of EU Environmental Policy	In puts to EU-LUPA in the sense of analyse the consequences (economic, social and environmental) of EU policy for land use changes ESPON 2.4.1 interpreted the CORINE Land Cover data, combined socioeconomic data, information on infrastructure and data of the Natura 2000 network and proposed a feasible Territorial Impact Assessment (TIA) of EU Environmental Policy.	NA	
Project 3.3 Territorial dimension of the Lisbon-Gothenburg strategy.	Territorial Performance Indicators (Task 2.3) Policy recommendations	Territorialisation typologies	It may provide interest inputs for policy recommendations within Task 2.5 of EU-LUPA project
TIPTAP - Territorial Impact Package for Transport and Agricultural Policies (July 2008- October 2009) under Priority 1 of the ESPON 2013 Programme	Transport and Agricultural policies as driving forcers behind land use changes and dynamics	NA	
SS-LR - Spatial Scenarios: New Tools for Local- Regional Territories (March 2009- June 2010) under Priority 2 of the ESPON 2013 ProgrammE	Adaptation of thematic scenarios at functional territorial scale, equal or lower than NUTS3,	NA	It may provide interest inputs for policy recommendations within Task 2.5 of EU-LUPA project
"European Development Opportunities for Rural Areas	1	Different types of European rural areas.	Rural development as indicator to measure territorial performance in line

ESPON project	Contributions to Land Use evaluation	Regional typologies to be used	Other relevant information
(EDORA)", (Sept 2008- Sept 2010) under Priority 1 of the ESPON 2013 Programme	Identification of drivers for development opportunities in rural areas.		with the Lisbon/Gothenburg Strategy.
"Climate Change and Territorial Effects on Regions and Local Economies in Europe". (March 2009- April 2011) under Priority 1 of the ESPON 2013 Programme	Indicators used to measure regional vulnerability to climate change as driver for land use change.	Typologies of European regions due to their degree of vulnerability to climate change	In puts for policy recommendations.
ATTREG - Attractiveness of European Regions and Cities for Residents and Visitors under Priority 1 of the ESPON 2013 Programme	Indicators providing information on the different types of attractiveness and competitiveness as drivers for land use change	NA	Information of attractiveness at local/city level
METROBORDER - Cross- Border Polycentric Metropolitan Regions under Priority 2 of the ESPON 2013 Programme	Identification of functions supported by metropolitan regions in cross-border contexts	Metropolitan polycentric cross-border areas across Europe and their predominant functions	
INTERCO Indiicators on Territorial Cohesion	Identification of indicators to measure Land Use performance	NA	In puts for policy recommendations

# Annex VI Preliminary list of indicators to be used in the project

The purpose of the indicators is to provide information for the characterisation of the regions of Europe that can be further used to derive the typologies, the land use performance and efficiency evaluation.

The following table suggets the kind of indicators that could be used in the project. Besides a selection of indicators based on existence in both earlier indicator frameworks (IRENA,.....) and use in main EU FP projects (SEAMLESS, SENSOR ....e.a) will be updated in the Interim Report.

TOPIC	INDICATOR	REFRERENCE SOURCE		TIME
	Deminant land cover type	or DATABASE  CORINE LAND COVER	REFERENCE NUTS2/3/4	REFERENCE 1999-2000-2006
Land cover changes	Dominant land-cover type  Share of land cover in municipalities > 250 000 inhabitants	CORINE LAND COVER	NUTS2/3/4	1999-2000-2007
Land cover	Percentage of urban areas	CORINE LAND COVER	NUTS2/3/4	1999-2000-2007
	Percentage of Urban areas  Percentage of Natura 2000	CORINE LAND COVER	NUTS2/3/4	1999-2000-2009
	Percentage of Natura 2000	CORINE LAND COVER	110132/3/4	1999-2000-2009
	Land took per capita	CORINE LAND COVER	NUTS2/3/4	1999-2000-2010
Land cover	Changes in agricultural areas	CORINE LAND COVER	NUTS2/3/4	1999-2000-2011
cnanges	Changes in forest	CORINE LAND COVER	NUTS2/3/4	1999-2000-2012
	Size Index: population and GDP	ESPON Project 1.1.1	NUTS2/3/4	
Polycentric development	Location Index	ESPON Project 1.1.2	NUTS2/3/4	
	Correlation of population and accessibility	ESPON Project 1.1.2	NUTS2/3/4	
	Primacy rate - Share of largest city population to total population in %	ESPON PROJECT 2.4.2	NUTS 2-3	2002
	Population density of permanently populated area - Inhabitant per permanently populated area / artificial area	ESPON PROJECT 2.4.2	NUTS 2-3	-
	Share of population in cities below 50.000 inhabitants	ESPON PROJECT 2.4.2	NUTS 2-3	-
	FUA within the region - Existence of at least one FUA within the region	ESPON PROJECT 2.4.2	NUTS 2-3	-
	MEGA within the region - Existence of at least one MEGA within the region	ESPON PROJECT 2.4.2	NUTS 2-3	-
Urban-rural relationship	Composite index: urban-rural typology. Derived from Population density, Urban influence, FUA ranking, Share of artificial surfaces, Share of agricultural land use, Share of residual land use	ESPON PROJECT 1.1.2		
	share of urban population based on national classifications	ESPON PROJECT 1.1.2		
	share of rural population based on national classifications	ESPON PROJECT 1.1.2		
	typology or urban/rural population based on national classifications	ESPON PROJECT 1.1.2		
	typology or urban-rural characteristics based on harmonised criteria	ESPON PROJECT 1.1.2		
	artificial surfaces	ESPON PROJECT 1.1.2		
	artificial surfaces per capita	ESPON PROJECT 1.1.2		
	artificial surfaces per GDP pps	ESPON PROJECT 1.1.2		

TOPIC	INDICATOR	REFRERENCE SOURCE or DATABASE		TIME REFERENCE
	immigration (2000)	ESPON PROJECT 1.1.2		
	tourists' overnight stays (1995 and 2000)	ESPON PROJECT 1.1.2		
	tourists' arrivals (1995 and 2000 )	ESPON PROJECT 1.1.2		
	level of education, i.e. number of pupils/students by school level (1995 and 2000)	ESPON PROJECT 1.1.2		
Accesibility and connectivity	Multimodal potential accessibility, absolute level	ESPON Territorial Observation No.2	NUTS3	2001
	Potential accessibility by air, absolute level	ESPON Territorial Observation No.2	NUTS3	2001
	Multimodal potential accessibility, standardised	ESPON Territorial Observation No.2	NUTS3	2001
	Multimodal potential accessibility, change of standardised (ESPON = 100) index value	ESPON Territorial Observation No.2	NUTS3	2001
	Multimodal potential accessibility, absolute change (in % of ESPON average for 2006)	ESPON Territorial Observation No.2	NUTS3	2001
	Potential accessibility road, absolute value standardised to the European Average: EU27 = 100	ESPON Territorial Observation No.2	NUTS3	2001
	Potential accessibility road, relative change in %	ESPON Territorial Observation No.2	NUTS3	2001
	Potential accessibility road, absolute change (in % of ESPON average for 2006)	ESPON Territorial Observation No.2	NUTS3	2001
	Potential accessibility road, index change, difference of the index values, index values are standardised to the respective averages of the two years.	ESPON Territorial Observation No.2	NUTS3	2001
	Potential accessibility rail, absolute value standardised to the European Average: EU27 = 100	ESPON Territorial Observation No.2	NUTS3	2001
	Potential accessibility rail, relative change in %	ESPON Territorial Observation No.2	NUTS3	2001
	Potential accessibility road, absolute change (in % of ESPON average for 2006)	ESPON Territorial Observation No.2	NUTS3	2001

TOPIC	INDICATOR	REFRERENCE SOURCE or DATABASE	REGIONAL REFERENCE	TIME REFERENCE
	Potential accessibility road, index change, difference of the index values, index values are standardised to the respective averages of the two years.	ESPON Territorial Observation No.2	NUTS3	2001
Demographic change	Total population	11_ESPON 2013 Database_Basic indicators	NUTS3	2000-2006
	Total population	13_ESPON Territorial Observation No.1	NUTS2 & NUTS3	1995/96, 2000/01
	Total population change	13_ESPON Territorial Observation No.1	NUTS2 & NUTS3	1995/96, 2000/01
	Natural population change	13_ESPON Territorial Observation No.1	NUTS2 & NUTS3	1995/96, 2000/01
	Migratory population change	13_ESPON Territorial Observation No.1	NUTS2 & NUTS3	1995/96, 2000/01
	Index of sustainable demographic development	ESPON project 3.2	NUTS 2	2000
	Index of sustainable demographic development, estimation baseline scenario	ESPON project 3.2	NUTS 2	2015
	Index of sustainable demographic development, estimation baseline scenario	ESPON project 3.2	NUTS 2	2030
	Index of sustainable demographic development, estimation cohesion scenario	ESPON project 3.2	NUTS 2	2015
	Index of sustainable demographic development, estimation cohesion scenario	ESPON project 3.2	NUTS 2	2030
	Index of sustainable demographic development, estimation competitive scenario	ESPON project 3.2	NUTS 2	2015
	Index of sustainable demographic development, estimation competitive scenario	ESPON project 3.2	NUTS 2	2030
	Life expectancy at birth (years)	ESPON project 3.2	NUTS 2	2000
	Life expectancy at birth, estimation baseline scenario (years)	ESPON project 3.2	NUTS 2	2015
	Life expectancy at birth, estimation baseline scenario (years)	ESPON project 3.2	NUTS 2	2030
	Life expectancy at birth, estimation cohesion scenario (years)	ESPON project 3.2	NUTS 2	2015
	Life expectancy at birth, estimation cohesion scenario (years)	ESPON project 3.2	NUTS 2	2030

TOPIC	INDICATOR	REFRERENCE SOURCE or DATABASE		TIME REFERENCE
	Life expectancy at birth, estimation competitive scenario (years)	ESPON project 3.2	NUTS 2	2015
	Life expectancy at birth, estimation competitive scenario (years)	ESPON project 3.2	NUTS 2	2030
	Median age (years)	ESPON project 3.2	NUTS 2	2000
	Median age, estimation baseline scenario (years)	ESPON project 3.2	NUTS 2	2015
	Median age, estimation baseline scenario (years)	ESPON project 3.2	NUTS 2	2030
	Median age, estimation cohesion scenario (years)	ESPON project 3.2	NUTS 2	2015
	Median age, estimation cohesion scenario (years)	ESPON project 3.2	NUTS 2	2030
	Median age, estimation competitive scenario (years)	ESPON project 3.2	NUTS 2	2015
	Median age, estimation competitive scenario (years)	ESPON project 3.2	NUTS 2	2030
	Density of population	Eurostat		
	Share of population in municipalities > 250 000 inhabitants	Eurostat		
	Share of population > 65 years	Eurostat		
	Education	Eurostat		
		EODON Database Davis		
	GDP in euro	ESPON Database_Basic indicators	NUTS3	2000- 2006
Faces	GDP per capita	Eurostat		
Economy	Value added in agricultural sector	Eurostat		
	Unemployment rate	Eurostat		
	Tourism: number of available beds (check Eurostat)	Eurostat		
Lisbon and Gothenburg objectives	Composite Lisbon performence benchmark: Average of all individual quartiles of performance of seven regionalised Lisbon short list indicators:1. GDP/capita; 2. GDP/person employed; 3. employment rate of 15-64; 4. employment rate of elderly; 5. gross expenditure on research and development, 6. dispersion of regional unemployment rates; and 7. long-term unemployment rate.	12_ESPON Territorial Observation No.3_Lisbon strategy performance	NUTS 2	2000, 2006

TOPIC	INDICATOR	REFRERENCE SOURCE or DATABASE		TIME REFERENCE
	Composite indicator relating to: Innovation and Research. Based on Internet users, Firms with internet access, Available e-government services, Universities students, Innovative dependency index, Population with tertiary education, Population in life-long learning, Research Centres, Old and new technologies	ESPON 3.3 - Territorial dimension of the Lisbon- Gothenburg Process	NUTS2 & NUTS3	2006
	Composite indicator relating to Global/Local Interaction. Derived from General environmental concerns, Specific environmental concerns, Manufacturing enterprise, Products trademarks, Energy self-sufficiency index, FDI intensity, Trade integration of goods, Trade integration of services, Degree of Vulnerability in Europe, Typology Multimodal Accessibility Potential, Fiscal pressure, Labour cost, Long Term Interest rate, R&D Centres, Credit institutions, Insurance companies, Companies (local units), Stock markets capitalization, Population change Tourists inbound, Tourists outbound, Students inbound, Students outbound, Researchers inbound, Researchers outbound, Active people	ESPON 3.3 - Territorial dimension of the Lisbon-Gothenburg Process	NUTS2 & NUTS3	2006
	composite indicator relating to: Quality. Derived from GDPpps per capita, Consumption per capita, Level of employment, Consumer price index, Hospital beds, Hotel beds, Cultural opportunities, Typology Multimodal Accessibility Potential, Old and New technologies, Municipal Waste Generation, Hazardous Waste Generation, Municipal Waste Recycled, Degree of vulnerability in Europe, Total greenhouse emissions, Total gross abstraction of freshwater, CO2 emissions, Confidence in EU commission, Confidence in EU council of ministers, Confidence in EU parliament, National public participation, European public participation, Early school leavers, Inequity of regional income distribution, Risk of children exclusion, At-risk-ofpoverty rate before social transfers, Female employment, Fertility rate, Healthy life years	ESPON 3.3 - Territorial dimension of the Lisbon-Gothenburg Process	NUTS2 & NUTS3	2006
	composite indicator relating to: Resources and Funds. Derived from R&D expenditure, National aids, Human Capital expenditure, Employment expenditure, Climate and Natural Resources expenditure, Efficiency and accessibility, Public Health expenditure, Poverty and Age expenditure, Funds spending, Economic resources	ESPON 3.3 - Territorial dimension of the Lisbon-Gothenburg Process	NUTS2 & NUTS3	2006

TOPIC	INDICATOR	REFRERENCE SOURCE		TIME
TOFIC		or DATABASE		REFERENCE
	GDP per capita in PPS	ESPON Project 2.4.2	NUTS 2	2002
	GDPgrowth in PPS per capita 1995-2002	ESPON Project 2.4.2	NUTS 2	1995-2002
	Productivity - GDP per person employed	ESPON Project 2.4.2	NUTS 2	2002
	Employment rate	ESPON Project 2.4.2	NUTS 2	2003
	Expenditures, R&D, all institut sectors, in %	ESPON Project 2.4.2	NUTS 2	2001
	R&D BES personnel	ESPON Project 2.4.2	NUTS 2	2001
	High education population	ESPON Project 2.4.2	NUTS 2	2002
	Unemployment rate 2003	ESPON Project 2.4.2	NUTS 2	2003
	Developm Unemployment rate 1999-2003 in PP	ESPON Project 2.4.2	NUTS 2	1999-2003
	Youth unemployment 2003	ESPON Project 2.4.2	NUTS 2	2003
	Labour Force Replacement:	ESPON Project 2.4.2	NUTS 2	
	Number of persons employed per km2 2003	ESPON Project 2.4.2	NUTS 2	2003
	Employment in tertary sector	ESPON Project 2.4.2	NUTS 2	2003
	Population ages 65 years and more, share of	ESPON Project 2.4.2	NUTS 2	
	Changes in Natural Growth Potential	ESPON Project 2.4.2	NUTS 2	
	Percent pop change 1995-2002	ESPON Project 2.4.2	NUTS 2	1995-2002
	Artificial surface	ESPON Project 2.4.2	NUTS 2	
	Natural surface	ESPON Project 2.4.2	NUTS 2	
	Agricultural intensity	ESPON Project 2.4.2	NUTS 2	
	Regional average number of flood events	ESPON Project 2.4.2	NUTS 2	1987-2002
	Approximate probability of having winter storms	ESPON Project 2.4.2	NUTS 2	
	Earthquake hazard potential	ESPON Project 2.4.2	NUTS 2	
	Change of dry spell combination with drought	ESPON Project 2.4.2	NUTS 2	
	Potential Accessibility by Air	ESPON Project 2.4.2	NUTS 2	2001
	Potential Accessibility by Rail	ESPON Project 2.4.2	NUTS 2	2001
	Potential Accessibility by Road	ESPON Project 2.4.2	NUTS 2	2001
	Time to market meso-scale	ESPON Project 2.4.2	NUTS 2	2001

# Annex VII Potential Case Studies

Öresund						
Location within	Europe	North	West	East	Central	South
55° 40' 34" N; 1	2° 34' 06" E	Х				
Size	Inhabitants	Density	nsity Surface Pop. growth rate (last 20 yr.)			st 20 yr.)
	3.600.000	170/km2	21.203	10% Expected increase		
			km2	>4 million by 2025		
Qualitative	Cross - border r	egion with imp	ortant impac	t on land us	se of the brid	lge
description of					sh side	
Regional	where most changes have been registered.					
context						

Insert map



	CA 100 THE RESERVE	C 3 72	
	Cross border	Mountain area	Highly populated area
Specific type	Outermost	Urban-rural- open space	Coastal
of territory	Other (specify)		
Description	with urban sprawl interactivities as the follow - Protected are mainland - Agriculture, wareas in Sweet - A large number park based were land addition at land district heating interactions as production High mobility bridge being to Swedish side endowned are play.  The region is an except the bridge was erected.	eraction, and consequenting are taking place: as both on islands in the rith South Sweden being are of renewable energindmills, on both landingh production of bioring generation. Especial and conflicts between a strength the most important confunction an important role. Illent illustration of the difference of the right are taking an important of the difference of the right are taking an important of the difference of the right are taking an important of the difference of the right are taking an important of the difference of the right are taking places.	e aspect of land use typologies ently also with multifunctional the region, and on the Swedishing the most intensive producing typroducers both individual and and sea.  Mass for biogas, power and lly on the Swedish side there are agriculture and biomass  and the Danish side, and with the mmuting tool, especially from the mand second homes from both the urban sprawl problem and since other country (on the Swedish
Level of	Classification in Urba	n Audit Ecotec 2007 <sup>1</sup>	GDP per inhabitant
prosperity			49.000 €
Other relevant	This region is already	part of Nordregio's re	search agenda, so accessing

<sup>&</sup>lt;sup>1</sup> http://ec.europa.eu/regional\_policy/sources/docgener/studies/pdf/urban/stateofcities\_2007.pdf

issues for the project	data, interviews etc. would be quite easy.  In relation to the aims of the case studies, this region will contribute by:  - Verify and confirm proposed typology and identified processes and challenges.  - Identify land use functions and undertake a "multifunctionality" assessment  - Identify factors and drivers (natural and socio - economic) of land use changes and land use dynamics in detail in different types of areas;  - Give answer about mechanisms and trends (processes) of land use changes at local scale;  - Identify challenges in those areas and defining policy recommendations to cope with those challenges on the basis of stakeholdes opinion;  NORDREGIO Targeted contact Rasmus Ole Rasmussen				
Targeted contact organisation	NORDREGIO	Targeted contact	Rasmus Ole Rasmussen		

Thy/Mors							
Location within		North	West	East	Central	South	
56° 57′ 9″ N; 8° 41′ 16″ E		Х					
Size	Inhabitants	Density	Surface	Pop. growth rate (last 20 yr.)			
	65.000	2,5 /km2	3000 km2	10% permanent, +20% vacation			
Qualitative	A local population						
description of	second home owners and tourists Klitmøller being among the important						
Regional	windsurfing sites in Europe) triples or quadrubles the population in summer						
context							

Insert map





http://nationalparker.skovognatur.dk/Thy/Kort/NationalparkThyKort.htm

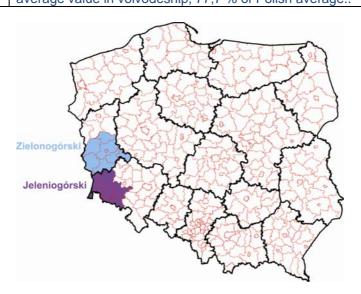
	Cross border	Mountain area	Highly populated area			
		Urban-rural-	Highly populated area			
Specific type	Outermost	open space	Coastal			
of territory	Other (specify)	Example of both pro functions	noting and conflicting la	and use		
Description			s interesting in the aspect of multifunctional landscapes			
	as the following activity	• .				
		tirst Danish national p	ark = protection of spec	ies as well		
	as of pristine - landscapes					
	- Agriculture, with Mors as one of the most intensive producing areas					
	in Denmark					
		er of renewable energ	y producers – both indiv	vidual and		
			tion of biomass for pow			
			ne few geothermal sites			
	Denmark					
	<ul> <li>The establish</li> </ul>	ing of a Windmill testing	g site			
	<ul> <li>Both large sc</li> </ul>	ale and small scale fis	neries			
	<ul> <li>Forestry</li> </ul>					
	- Tourism					
	- Second hom					
			major cities not only in			
	but also in Germany is obvious due to this region being among the most					
Lovelof	attractive places durin		CDD ===:=	habitant		
Level of	Classification in Urbai	Audit Ecotec 2007	GDP per in	naoitant		
prosperity			37.000 €			

 $<sup>^2 \, \</sup>underline{\text{http://ec.europa.eu/regional policy/sources/docgener/studies/pdf/urban/stateofcities} \,\, 2007.\underline{\text{pdf}} \\$ 

Other relevant	This region is already part of N		nda, so accessing			
issues for the	data, interviews etc. would be quite easy.					
project		In relation to the aims of the case studies, this region will contribute by:  - Verify and confirm proposed typology and identified processes and				
	challenges.					
	<ul> <li>Identify land use functions and undertake a "multifunctionality" assessment</li> </ul>					
	<ul> <li>Identify factors and drivers (natural and socio - economic) of land</li> </ul>					
	use changes and land use dynamics in detail in different types of					
	areas;					
	<ul> <li>Give answer about mechanisms and trends (processes) of land use</li> </ul>					
	changes at local scale;					
	Identify challenges in those areas and defining policy recommendations to					
	cope with those challenges on the basis of stakeholdes opinion;					
Targeted	NORDREGIO	Targeted contact	Rasmus Ole			
contact			Rasmussen			
organization						

Jeleniogórski						
Location within Europe		North	West	East	Central	South
50° 53' 01" N; 15° 4	4' 34" E				X	
(jeleniogórski)						
Size	Inhabitants	Density	Surface	Pop. grow	th rate (las	t 20 yr.)
	576 145	103,4	5 571 km2	Averag	e -3,3 ‰ pe	er year
Qualitative			abited (average			
description of	,	•	number of inhal		•	
Regional context			ral movement	,		
			lish conditions	0		,
	61%), without	big cities but	t with many sr	mall towns. 7	The biggest	is Jelenia
	Góra (84,5 t	hous. inhab.)	. Share of ir	nhabitants ir	n postprodu	ictive age
	relatively low	(jeleniogórs	ki 16,2%, Po	oland 16,5	%). High	share of
	unemploymen	t (jeleniogórsl	ki 17,5 %, Pola	and 11,9 %).	High share	of forests
	in land use str	ucture (jelenio	ogórski 39,3 %	, Poland 29,3	3 %), and lo	w share of
	arable lands	(jeleniogórsk	i 32,5 %, Po	land 44,3	%). GDP	per capita
			n in dolnoslask			
			in 77.7 % of P			ļ

# Insert map



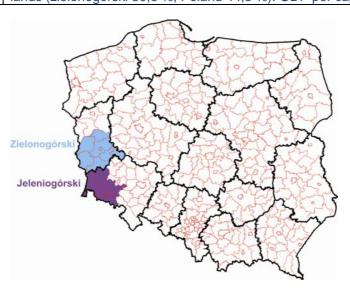
	Cross border	Mountain area	Highly populated area	
Specific type of	Outermost	Urban-rural- open space	Coastal	
territory	Other (specify)	Boundaries Poland-Czech-Germany		
Description	<ul> <li>Valuable na</li> <li>Dense, wel</li> <li>Developme</li> <li>High spatia</li> <li>Relatively h</li> <li>Multifunctio</li> <li>Agritourism</li> <li>Concentrat crossings</li> <li>Dense road</li> <li>Outstanding</li> </ul>	se landscape atural features and si I-developed settleme ent of service, resider Il mobility of population igh number of post-sonality of most rural an upland/mountain are ion of commerce and	socialist factories reas eas and services around certain border al features plus attractive landscape	

	<ul> <li>Special conditions for health and spa-based tourism</li> <li>Increased interest in buying land and second homes</li> <li>Functional diversification of borderland area</li> </ul>					
Level of	Classification in Urban Audi	Classification in Urban Audit Ecotec 2007 <sup>3</sup> GDP per inhabitant				
prosperity			5 952 €			
Other relevant issues for the project	Multifunctional region, well recognized by us, we have some research experience from this region.					
Targeted contact organization for involvement	IGSO	Targeted contact	Jerzy Banski			

http://ec.europa.eu/regional\_policy/sources/docgener/studies/pdf/urban/stateofcities\_2007.pdf

Zielonogórski							
Location within Eur	ocation within Europe		West	East	Central	South	
52° 56' 11" N; 15° 3	0 <sup>°</sup> 52" E				Х		
(zielonogórski)							
Size	Inhabitants	Density	Surface	Pop. growth rate (last 20 yr.)		t 20 yr.)	
	627 277	79,7	7 875 km2	Average -0,5 % per year			
Qualitative	Region relativ	ely rare inha	bited (average	in Poland	122,1 inhab	oitants per	
description of	km2) and with	decreasing i	number of inha	abitants. Urb	an rate rela	tively high	
Regional context	in comparison	to Polish co	onditions (zield	onogórskie 6	32,8 % Pola	and 61%),	
	without big cit	ies but with n	nany small tow	ns. The big	gest are Zie	lona Góra	
			e of inhabitant				
	low (zielonogórski 15%, Poland 16,5 %). High share of unemployment						
			and 11,9 %).				
	structure (ziele						
	lands (zielono	górski 30,6 %	, Poland 44,3 <sup>9</sup>	%). GDP per	capita relati	ively low.	

Insert map



	Cross border	Mountain area	Highly populated area	
Specific type of	Outermost	Urban-rural- open space	Coastal	
territory	Other (specify)	Peripheral,		
Description	Clean state Valuable na Greater sha Developme Multifunctio Potential of Agrarian str In socialist Relativelly Polish servi Local cond border cros Functional of	of most environmental atural features and signatural features and signature of population of present of higher education mality of most rural are productive agricultural ructure favouring enlar period domination of sineavy border traffic asices, centration of commersings (along main artediversification of borde of joint actions in the	in regional centres, as, I space to generate organic food, gement of farms, tate farms, and growing German demand for the and services around certain ries),	

Level of	Classification in Urban Aud	Classification in Urban Audit Ecotec 2007 <sup>4</sup>		
prosperity		6.809 €		
Other relevant				
issues for the				
project				
Targeted contact	IGSO	Targeted contact	Jerzy Banski	
organization for				
involvement				

<sup>&</sup>lt;sup>4</sup> http://ec.europa.eu/regional policy/sources/docgener/studies/pdf/urban/stateofcities 2007.pdf

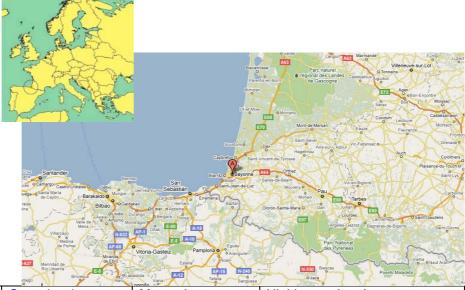
		A	msterda	m			
Location within Eu	rope	No	orth	West	East	Centr	South
		40	951;	4º552;	5º137;	al 4º897	4º735
			.º516	52°227	52º46	;	;
					2	52°39	52º20
Size	Inhabitants	<u> </u>	Density	Surface	Don ar	5 owth rat	8 0 (last
Size	IIIIabitarits		Delisity	Suriace	20 yr.)	Owliiial	e (iasi
	1,235,514		1563	790.32k		2009: 16	1,167
0 114 41			hab/km2	m2	) : <b>7</b> 00		
Qualitative description of	The case study area " in the province of No.						
Regional context	15 municipalities. The						
rtogional comoxi	In the southwest the i						
	Amstelveen, Hoofddo						
	find arable land. The					of pastur	es with
	some places like Purn	nere	end and Eda	m-Volendai	m.		
Insert map	Constitute of the Constitute o	The state of the s		というできる。		というと	

	Cross border	Mountain area	Highly populated area			
Specific type of	Outermost	Urban-rural- open space	Coastal			
territory	Other (specify)					
Description	Twenty nine different types of land use exist in the national detailed land use map of 2008 (LGN6). The main land uses in the NUTS3 region "Groot Amsterdam" are presented in the Table.					
	In between 2004 and 2008 in the NUTS region only 5.9km2 of land use changed between these main classes.  Some socio-economic indicators for the NUTS3 region: GDP per capita 52,857 Euro (2007), labour input of employed persons (1000 full time eq. jobs) 696.4, housing stock in absolute figures for dwellings, recreation houses, capacity recreational buildings are respectively 592,711; 290 and 16,012. And the following table presents the regional accounts					

	Pagional assessm	te: pro-l	uction c-	d gararati	on of	ı		Ī	Ī		
	Regional accoun income by indus		Outpu t (basic prices	Interm Consu	Gross	Compens	Taxes, not produ ct- relate	Subsidies, not product-	Gross	Labour input of employed	
		Subj Perio	j mln	m. mln	value added mln	employee s	d mln	related	operating surplus	persons	
	SIC '93 Total economic activities	ds 2007	12366 9	<b>euro</b> 66513	<b>euro</b> 57156	mln euro 33679	euro 642	min euro 437	mln euro 23273	1000 fte's 696.4	
	A+B Agriculture hunting forestry		9	00013		33079	042	437	23213	090.4	
	fishing C-F Industry	2007 2007	779 19941	377 13802	402 6139	140 3127	8 39	8 79	262 3051	6.2 70.8	
	G-K Commercial services	2007	85522	45455	40067	22639	507	212	17133	437.7	
	L-P Public administration,										
	social work	2007	17427	6879	10548	7772	87	138	2826	181.7	
	Main Lan	d us	е	Area							
	agricultur	е		360	).4						
	greenhou	ses		-	3.2						
	orchards				1.6						
	forest				3.2						
	water urban			256	1.4 3.2						
	infrastruc	ture			1.9						
	nature	tu. o			1.4						
	total			790	0.3						
	At least per municipality information is available on population, education,										
	housing, ir										
Level of	Classificat								a mooni	GDP	
prosperity										inhab	
	Knowledge hub defined as key players in the global economy, positioned above the national urban hierarchy and in the forefront of international industry, business and financial services based on high levels of talent and well-connected to the world.  GDP /capita EU27 = 100:  190 GDP /capita country = 100: 143										
Other relevant issues for the project	<ul> <li>detailed spatial land cover/use information available at 25*25m grid level</li> <li>national statisitics at municipality level from national office of statistics (CBS)</li> <li>geographical information on agricultural farms (GIAB)</li> <li>farmland prices</li> </ul>										
Targeted contact organization for involvement	ALTERRA Province o Municipalit	f No	ord-F	lolland	d			rgeted ntact		Gera	ard Haze

<sup>&</sup>lt;sup>5</sup> http://ec.europa.eu/regional\_policy/sources/docgener/studies/pdf/urban/stateofcities\_2007.pdf

Eurocity Basque Bayonne- San Sebastián									
Location within Europe		North	West	East	Central	South			
Bayonne						Х			
43° 28' 39.3162"									
1° 33' 34.9734" [	≣								
San Sebastien									
43° 19' 1.866" N	,								
1° 59' 58.2432" E			0 (	_					
Size	Inhabitants	Density	Surface	Pop. grov	wth rate (las	st 20 yr.)			
	650.000	about	800 km²		unknown				
Ovelitetive	The Deserve Fr	140/km²	ana Can Cah			41:-  <b>-</b>			
Qualitative	The Basque Eurocity of Bayonne-San Sebastián is located on both sides of								
description of Regional	the dividing line that was historically formed by the Bidasoa River.  "The Bayonne-San Sebastián Basque Eurocity" straddles the French-								
context	Spanish border								
Context									
	km urban corridor that separates Bayonne and San Sebastián. It is the natural access route between the Iberian Penninsula and Western and								
	Central Europe"								
	- At the heart of the Atlantic Arc between Bilbao and Bordeaux.								
	- At the western end of the French- Spanish border.								
	- On the Atlantic façade of the Pyrenees.								
	Both territories share a common Basque cultural heritage and throughout								
	history have lived together through periods governed by mutual goodwill								
	and the desire to promote reciprocal needs and interests, and, as has								
	occurred in other border areas, also through periods of confrontation and								
	estrangement. In effect, the special circumstances of the twentieth century								
	made the Franco-Spanish border very strong.								
Insert map	THE STATE OF THE S	780	·	-					
•		fac.							



	Cross border	Mountain area Highly populated area					
Specific type	Outermost	Urban-rural- open space Coastal					
of territory		орен зрасс					
	Other (specify)						
Description	The desire to live without frontiers and to co-operate across borders, means						
	that sharing differences and diversity produces a new metropolitan reality						
	that adds a new element to the features defining the identity that each of us						
	already has. New squares, avenues, universities, beaches, promenades						
	will spring up out of the sum of those that already exist.						
	Here are just two examples: the Eurocity will have a large square, the Main						

	Square of the Eurocity, which will be the sum of the squares that already exist in our cities today. Our University won't have a single campus, but the university campus of the Eurocity will be the sum of the campuses that we already have. The same will happen with the beach, the coast, culture					
Level of	Classification in Urban Audit Ecotec 2007 <sup>6</sup> GDP per inhabitant					
prosperity	25.000 €					
Other relevant issues for the project						
Targeted contact	TECNALIA	Targeted contact	Efrén Feliú			
organization for involvement	"Cross-Border Agency for the development of the Basque Eurocity Bayonne Saint Sebastien "		Markel OLANO			

<sup>&</sup>lt;sup>6</sup> http://ec.europa.eu/regional\_policy/sources/docgener/studies/pdf/urban/stateofcities\_2007.pdf

www.espon.eu

The ESPON 2013 Programme is part-financed by the European Regional Development Fund, the EU Member States and the Partner States Iceland, Liechtenstein, Norway and Switzerland. It shall support policy development in relation to the aim of territorial cohesion and a harmonious development of the European territory.