ESPON

LP3LP

Landscape Policies for the Three Countries Park

Targeted Analysis 2013/2/21

Inception Report | 21/06/2012

EUROPEAN UNION
Part-financed by the European Regional Development Fund
INVESTING IN YOUR FUTURE

This report presents a more detailed overview of the analytical approach to be applied by the project. This Targeted Analysis 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 www.espon.eu

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.

List of authors

Prof. Dr. Frank Lohrberg
Timo Matti Wirth
Anja Brüll
RWTH Aachen University (Lead Partner)
Chair of landscape architecture
Jakobstraße 2
52056 Aachen
Germany

Marc Nielsen
Alain Coppens
Free University of Brussels (Project Partner)
50 av. F. D. Roosevelt
B-1050 Brussels
Belgium

Annet Kempenaar
Prof. Adri van den Brink
Wageningen Universiteit (Project Partner)
Droevendaalsesteeg
36708 PB Wageningen
Netherlands

Table of contents

Inception Report Annex

Please also consult this Annex which contains further information, clarifying and complementing the information given in the Interim Report.

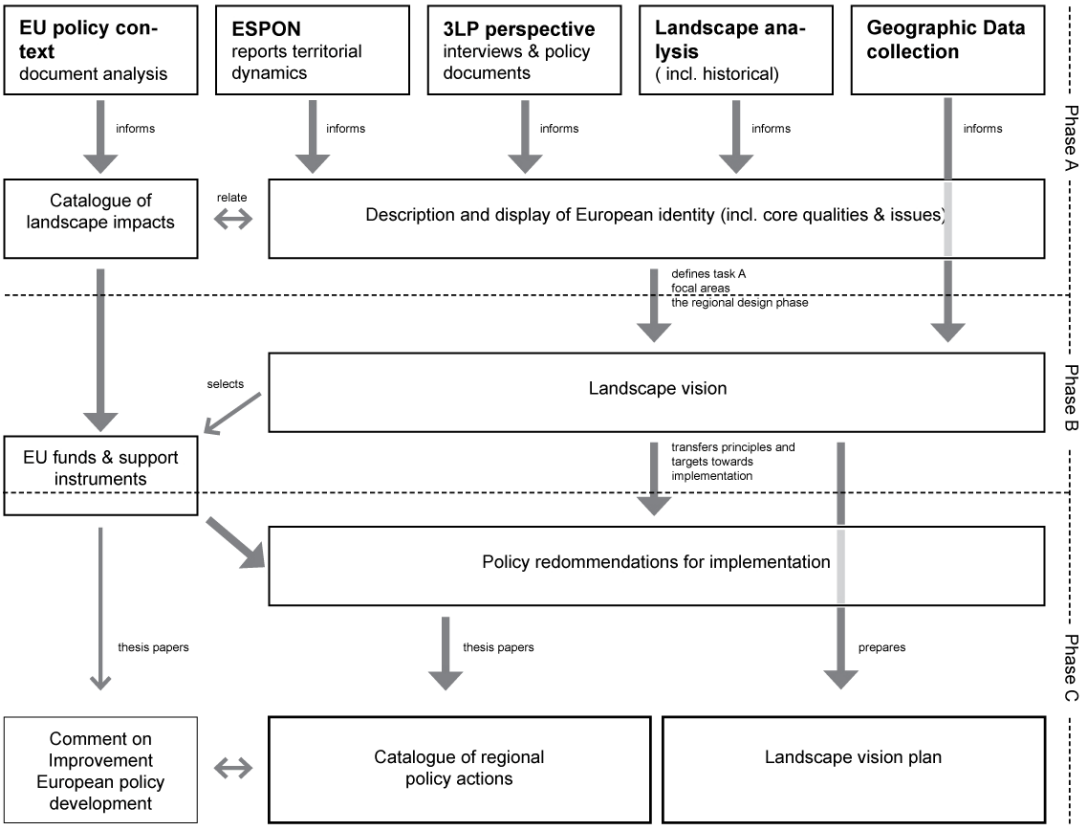
1 Introduction – project approach

The project LP3LP aims at the creation of a landscape vision for the ongoing initiative “Three-Countries-Park” within the Aachen-Liège-Maastricht area. Simultaneously, the study attempts to operationalize the principles of the landscape vision within regional policy and to consider them regarding the European scale. Because of its blending of design and policy, the Three Countries Park forms a new type within the existing range of ESPON projects. The project is informed by existing stakeholder initiatives for the cross-border region, which exist since 2001. About 2 Million people of three different lingual backgrounds and a variety of lifestyles and traditions inhabit the Three-Countries-Park. The settlement structure of the region is polycentric, while its landscapes are characterized by spatial heterogeneity and a richness of cultural and natural heritage. Set in this context, the project looks specifically at cross border challenges, for example regarding ecological structure, water management, agricultural use, recreational infrastructure, settlement – and how these could develop in synergetic ways. Analysis within the first work phase examines various topics including European identity, European policies, existing regional strategies and landscape development. The analysis is accompanied by the attempt to arrange a tri-national map base for the region and to gather other relevant data. Following these actions, the following work phases will develop a landscape vision and subsequently re-consider its regional and European dimension in the policy context. The project will be disseminated to a broader audience with journal publications and public events.

Since the start of the project, the overall framework has been optimized for a more efficient integration of the work phases with each other. As already described in the project proposal, the question of the region’s European identity serves as an overarching theme for the first work phase, which segues via a description and display of 3LP core qualities and issues into the next phase (landscape vision). The enlargement of the 3LP vision to the European context will highlight new challenges and territorial capital (phase B) and orient its dialogue with Europe (phase C).

More specifically than outlined in the initial project proposal, other work steps within the first work phase can simultaneously inform the entire project development. For example, the analysis of the EU policy context will be used to define a catalogue of landscape impacts that is relative to the description of core qualities and issues in the first phase, however it will also directly inform the landscape vision of the second phase, then identify EU funds and support instruments for policy recommendations and implementation in the third phase. Finally this will result, together with the other investigations, in a catalogue of regional policy actions (e.g. existing or suggested strategies, projects, programs) and comments on European policy development. Other work steps, such as the analysis of existing 3LP strategies and stakeholder perspectives, or the landscape analysis are understood in similar ways, providing assets that can be consulted (and partially supplemented) at different times during project development.

The optimized framework of the project approach is summarized in the below graphic:



2 Methodologies and further investigation

2.1 Analytical approach with regard to European identity

(includes the analysis of 3LP area in ESPON studies)

The growing influence of regional and European policies, as well as a position in the heart of the Euregio Maas-Rijn area, force stakeholders on either side of the borders to place the 3LP in a broader European context. The issue of the identity of 3LP in regard to its polycentric metropolitan situation has to be tackled as well as the definition of its territorial capital and potentials within a European context by, notably, comparing the area with other similar (cross-border) regions.

Within this project, landscape is used as a gateway to understand the European identity of the region. The transversal nature of the concept allows highlighting the importance of the 3LP territorial capital – i.e. in its physical, social, cultural, institutional and economic dimensions. By providing information on macro challenges and dynamics that occur at European level and affect the 3LP (such as mutual relations between rural and urban area, counter urbanisation movements, economic diversification, demographic

changes, territorial sensitivity to climate change), European landscape identity (ELI) will support the designing of the landscape vision. On the other hand, by better understanding the specificities of the 3LP, the TPG will be able to compare it to other regions with similar features. The purpose of this identity is therefore to better dialogue with EU level by providing stakeholders an EU wide scientific knowledge of their territory.

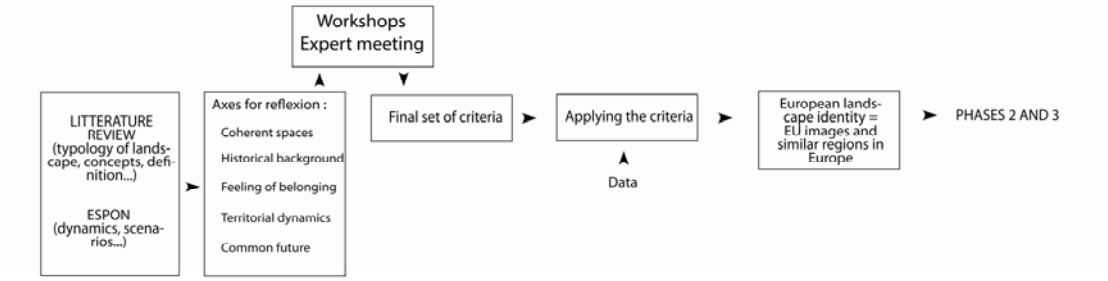
As a first step, the TPG will proceed to a literature review of European landscape classifications and the complex links between landscape and identity. In parallel to that, the main dynamics that affect landscapes are also identified. That latter kind of information will be mainly mobilized through ESPON works. As the program does not directly inform about landscape, an exercise has to be done to find territorial dynamics that have a significant impact over landscapes. Significant impact would mean a visible one but a distinction has nevertheless to be made between direct impact (equipment, housing, infrastructure...) and indirect impact (accessibility, demographic growth). Valuable information will also be found in the prospective approaches of the ESPON researches so that the different types of scenarios have to be examined in order to support/orient the 3LP policies developed in phase B. A framework of analysis (see below) allows the TPG extracting information according different fields.

A-Characters	A1-landuse character
	A2-Bio physical character
	A3-Cultural character
B-State	B1-Sustainable functions
	B2-Natural functions
	B3-Economic functions
C-Driving forces	C1-Economic changes
	C2-Social changes
	C3-Environmental changes (climate)
D-Recommendations and future perspectives	D1-Scenarios
	D2-Recommandation

Fig. Framework for using ESPON results

Those collected information (scientific information) lead to several axes of reflexion (see scheme below) for defining the European landscape identity of the 3LP. All components of landscape will have to be tackled: physical conditions (topography, soil, climate, etc.), cultural components (languages, cultural groups, etc.), territorial components (dynamics, typologies, etc.) and sensitivity (feeling of belonging, perception, etc.). Those axes of reflexion are confronted to practitioners (local information) and experts (external information) through workshops and meetings, leading to a final set of criteria with their respective indicators. Mapping those allow the production of EU thematic images and will help positioning the 3LP in broader context. Therefore, according to the TPG, the ELI can hardly be seen as unique

answer but is more like a multifaceted concept that combines several elements of identity. In addition, the EU images, rather than only providing scientific knowledge on the wider territorial and landscape context that embed the region, will also allow identification of regions with similar features in terms of dynamics, challenges or landscape features. Stakeholders can therefore collaborate as they are facing common challenges in terms, for instance, of types of governance.
For a transversal and global understanding of the approach described above, see the scheme below.



The combination of scientific, local and external information allows the TPG to provide an objective diagnosis supported by stakeholders as they are deeply involved in the process.

2.2 Analysis of existing EU policies with impact on 3LP landscape

European policy impact, and (2) regional stakeholder perspectives are currently addressed in two parallel lines of investigation. For this purpose, policy effects of major EU policy areas are being identified in relation to the themes of the development perspective (2003). Their interrelation is shown with the below diagram:

EU POLICY AREAS:	Regional policy	Culture (incl. Cultural Heritage)	Agriculture and Rural Development	Transport (&Travel)	Environment > Urban	Environment > Habitats, Biodiversity	Environment > Water	Environment > Air, Waste, Noise, Soil	Energy	Climate	Enterprise&Industry
3LP - THEMES: From „development perspective 3 Countries Park" (2003)	Regional Landscape Development (overall theme)	Cultural landscape and history	Agriculture	Urbanization & infrastructure		Nature (ecological structure, habitat, biodiversity)	Water and Environment		(not specifically adressed)	(not specifically adressed)	Tourism

The landscape of the 3LP is understood as partly a product of European policies. Therefore this working step is assessing EU regulations that have a significant impact on both image and usage of the landscape. By evaluating

the range of future influences, it is possible to identify landscape impacts on the system and resulting (ongoing and prospective) measures at the scale of the 3LP. The analysis is identifying focal points related to major EU policy areas shown in the diagram, e.g. agricultural policy (i.e. CAP), Environment-Water (e.g. Waterframework directive) or regional policy (e.g. the Territorial Agenda 2020). Key inputs will be the evaluation of planning literature and comparable case studies.
(*> See preliminary list of EU policy documents and further literature (to be) analysed under in the Appendix under A1*)
(*> See more detailed information on EU policy analysis throughout the three project phases under Point 6.3*)

2.3 Analysis of existing 3LP strategy and stakeholder perspectives

Regional and local landscape development policy is analysed first regarding transnational planning and initiatives, starting off with the existing 3LP project and its related projects (e.g. “AQUADRA” or “Project Agriculture”), but also looking at other transborder activities (e.g. “Pays des terrils”, which comprises both Belgian and German territory). Separately, selected activities in relation to landscape development within national boundaries will also be considered (e.g. realization measures of the water framework directive like “lebendige Gewässer” in Germany or other important activities that have a fundamental impact on landscape development).
An example of how planning activities are assessed is given with the below matrix showing the example of transborder activities (in progress, reduced version for visual purposes):

		Formal planning (documents)	Informal planning and initiatives					
EU policy area	**3LP - Themes From "development perspective 3 Countries Park" (2003)**	Maas River Basin Management Plan (2009) (as a consequence of the European Water Framwework Directive)	Three Countries Park (continuous)	Stichting Euregio Maas-Rhein EMR (organization, multiple	Aquadra (2009 - 2012) (with some pilot projects)	Habitat Euregio (2010 - 2013)	Project Agriculture	(et cetera)
Regional policy	Regional Landscape Development (overall theme)		x	x				
Culture (incl. Cultural Heritage)	Cultural landscape and history		x	x			x	
Agriculture and Rural Development	Agriculture	x	x	x			x	
Transport (&Travel)	Urbanization & infrastructure		x	x				
Environment> Urban		x	x	x				
Environment > Habitats, Biodiversity	Nature (ecological structure, habitat,		x	x		x	x	
Environment > Water	Water and Environment	x	x	x	x		x	
Environment > Air, Waste, Noise, Soil		x	x	x	x		x	
Energy	(not specifically adressed)			x				
Climate	(not specifically adressed)			x			x	
Enterprise&Industry	Tourism	x	x	x				

Also, by scaling the observation back towards EU policies it may be possible to identify a kind of accumulative “European project” that is ongoing within the 3LP region. Additionally, stakeholder interviews will be conducted by RWTH in order to receive direct and most up to date input on this issue.

2.4 Landscape Analysis of the 3LP landscape

A landscape analysis is a part of a landscape architecture design process, its aim is to get to know the specific context of the landscape at hand as a base for the proposal of interventions and developments. The landscape analysis of the 3 LP area will be used as a base for the landscape vision that is developed in phase B of the LP3LP project.
Basis for the analysis is the perception that the landscape has come about through a continuous interaction between abiotic (e.g. soil, relief, water), biotic (flora and fauna) and anthropogenic (settlement, transport) processes, and that it will continue to change over time due to changes in these processes.
The landscape analysis of the 3LP area will focus on the vertical and horizontal relations in the existing landscape, on the coming about of the landscape over time and the current dynamics in the landscape. Therefore the landscape analysis will include relief, soil, hydrology and water structures, vegetation, landuse, infrastructure and settlement patterns. The crossborder character of the 3LP area will get special attention in the landscape analysis, especially the historical development of borders in the LP3LP area and the influence of this specific history on the physical development of the landscape. The landscape analysis will be conducted for the entire 3LP area in order to get an understanding of the entire landscape and its relations.
The overall landscape analysis will be input for the development of the landscape vision for the 3 LP area. When needed the landscape analysis will be extended and more detailed depending on the issues and questions that arise during the design phase of the project (phase B).

2.5 Research by design approach

The development of the Landscape Plan for the 3LP will be approached as ‘research by design’. In ‘research by design’ design is used as a means to explore solutions for spatial problems. Design is a means to investigate and explore what might be. Through this exploration insights and knowledge is produced on possible and probable futures. Besides this the design process can also broaden or deepen the insight in the spatial problem itself.
The knowledge on both spatial problems and solutions in a research by design approach can be used in different manners.
-As the research by design process can bring about new information on spatial problems, it can be used to articulate spatial problems and set an agenda for furthers investigation, exploration or policy development.
-The developed knowledge on possible and probable futures can be used to inform decision making processes or discourses on spatial development in an area.
In the LP3LP project regional landscape design is used to investigate and explore the future options for the landscape of the 3 LP. The development of the 3LP landscape vision is done in cooperation with the main stakeholders through their engagement in several workshops. This is a crucial element in

the development of the landscape vision. The perspective of the stakeholders is leading for the focus of the landscape vision and the elaboration of the vision in a regional design and the exemplary locations by the TPG.
The design phase of the research by design process is structured as an iterative design process. This means that the exploration and development of the design is progressing through several stages, and that based on questions, issues and insights that arise the findings of the previous phases will be adjusted and more focussed *(> see also point 6)*.

3 Literature and data sources

(> For various literature lists: see Appendix A1.)
(> For existing ESPON results specifically: see Point 4.)

3.1 3LP level: local and regional policy

(including existing 3LP strategy and stakeholder perspectives)

Currently, assessed transnational strategies and perspectives include:

- Maas River Basin Management Plan
- Stichting Euregio Maas-Rhein EMR

From the 3LP strategy (since 2003):

- Aquadra
- Habitat Euregio
- Project Agriculture
- Grenzrouten
- Grensschap Albertkanaal
- Via Belgica
- *From Interreg:*
- TIGER
- Euregio met Smaak
- AMICE FLOODWISE
- PURPLE

From the Euregionale 2008:

- Grünmetropole

Local and regional policy on German territory includes (in progress):

- Regionalplan (Bezirksregierung Köln)
- Flächennutzungspläne (FNP)
- Landschaftspläne (6 valid, one in progress)
- Umsetzungsfahrplan Rur
- Programm "Lebendige Gewässer"
- Agrarumwelt- und Tierschutzmaßnahmen in Nordrhein-Westfalen (ongoing)
- Kulturlandschaftsprogramm KULAP
- Indeland Entwicklungsgesellschaft

Local and regional policy on Dutch territory includes (in progress):

- Structuurvisie Infrastructuur en ruimte (2012) - Ministerie I&M (national policy)
- Nationaal Waterplan (2009 -2015)/ Stroomgebiedsplan MAAS - ministerie I&M (national polocy)
- POL-provinciaal omgevingsplan Limburg (2006, geactualiseerd 2011) - provincie Limburg
- Beleidsnota Natuur en Landschapsbeheer (2010-2020) - provincie Limburg
- Limburgs Kwaliteitsmenu -LKM- (2010) -provincie Limburg
- Actieprogramma Klimaatadaptatie (2009) - provincie Limburg
- Ambitie document Vrije tijdseconomie (2011-2015) - provincie Limburg
- Provinciaal Verkeer en Vervoersplan (2007) - provincie Limburg
- Regio dialoog Parkstad - we zijn wat we delen; wij zijn Parkstad (2009) - Stadsregio Parkstad Limburg
- Waterbeheersplan Waterschap Roer en Overmaas (2010-2015)
- IBA Parkstad Limburg (2011 - ??) - Stadsregio Parkstad
- Programma Maastricht Noord/Belvedere - gemeente Maastricht
- A2-Maastricht
- St Pietersberg
- de Nieuwe Grensmaas
- Gebiedsontwikkeling Maastricht Valkenburg
- Ontwikkeling A2 zone Maasbracht - beek
- Euregionaal openbaar vervoer
- Gebiedsontwikkeling Parkstad (buiten)ring
- Open Campus Avantis
- Cultuursprong Maastricht
- Maastricht Health campus

Local and regional policy on Belgian territory includes (in progress):

- Schéma de Développement de l'espace regional (SDER-1999, currently being updated)
- Pays de Herve futur « Inventaire du paysage des communes du Pays de Herve », (started June 2012)
- Parc naturel Hautes Fagnes-Eifel « Charte paysagère » (starting 2012)
- Ruimtelijk Structuurplan Vlaanderen (RSV)
- Gewestelijke ruimtelijke uitvoeringsplannen (RUPs)
- Subsidies programme for maintenance and restoration work to archaeological, architectural and landscape heritage
- vzw Regionaal Landschap Haspengouw en Voeren
- vzw Regionaal Landschap Kempen en Maasland

3.2 Data sources for the landscape analysis

- GIS data on:
  - Topography
  - Soil
  - Geology
  - Hydrology/soil
  - Elevation

- Historical maps
- Observation / site visits
- Landschapsanalyse MAHL project by Taken Landschapsplanning (1992)

3.3 List of geographical data

At this stage, geographical data is being collected for three major targets:

1. A *geo-referenced base map* of the 3LP at scale 1:50.000 (making use of GIS software and GIS compatible data).
2. A *set of cartographic planning/policy documents and other data*, that will be only partially geo-referenced (only partial use of GIS software and GIS compatible data) – according to needs and technical feasibility.
3. A *provisional base map of the 3LP area* - that can be used before 1. and 2. have been achieved, for example in workshop 1.

3.3.1 The *geo-referenced base map* will include layers on:

- Topography
- Soil
- Geology
- Elevation
- Administrative units (provinces, municipalities)
- Land cover - current
- Traffic infrastructure (incl.bike routes)
- Geomorphology
- Water bodies/water infrastructure
- Land use
- Air photos

Partially, the layers will be assembled as GIS shape files as well as in form of online web map services.

3.3.2 The set of *cartographic planning/policy documents and other data* will comprise cartographic material on policies, such as related to:

- Spatial Policy (e.g. German “Regionalpläne”)
- Landscape Policy (e.g. German “Landschaftspläne”)
- Landscape Analysis (e.g. landscape units)

- Nature (e.g. Protected Biotops)
- but also parts of the themes:
- Geology
- Geomorphology
- Soil
- Cultural history
- Infrastructure
- Energy
- Agriculture
- Recreation/tourism

  etc.

3.3.3 The *provisional base map of the 3LP area* will be extracted from a free data provider (openstreetmap.org).
For issues related to the timing/progress of data collection see Point 8.

4 Use of existing ESPON results

The review of ESPON studies will highlight the main territorial dynamics that are taking place on European level and that may potentially concern the 3LP in terms of landscape. No ESPON study is investigating directly this topic. Therefore, we'll be considering researches that have a connection with that theme through issues like land use, demography, rural development, relation urban-rural, territorial structure, ecological networks, etc. Other issues such as cross-border cooperation, governance, energy management are also taken into account. The following list ranks the ESPON studies according to their relevance in the LP3LP project. Results will be used not only in phase A but also in the two other phases of the project according to their content.

ESPON study	**Focus on research area**	**Focus on (available) results**
EDORA (Priority 1)	Analysis of endogenous development opportunities of rural areas. Study of under-used opportunities for cooperation between towns in rural areas. Identification of main driving forces and opportunities of rural areas Projections on the likely evolution	Typology of rural areas Indicators (type of rural areas, development opportunities, socio-economic situation and competitiveness).
ATTREG (Priority 1)	Key factors of attractiveness of European regions and their distribution across Europe.	Indicators of attractiveness and competitiveness. European maps revealing the

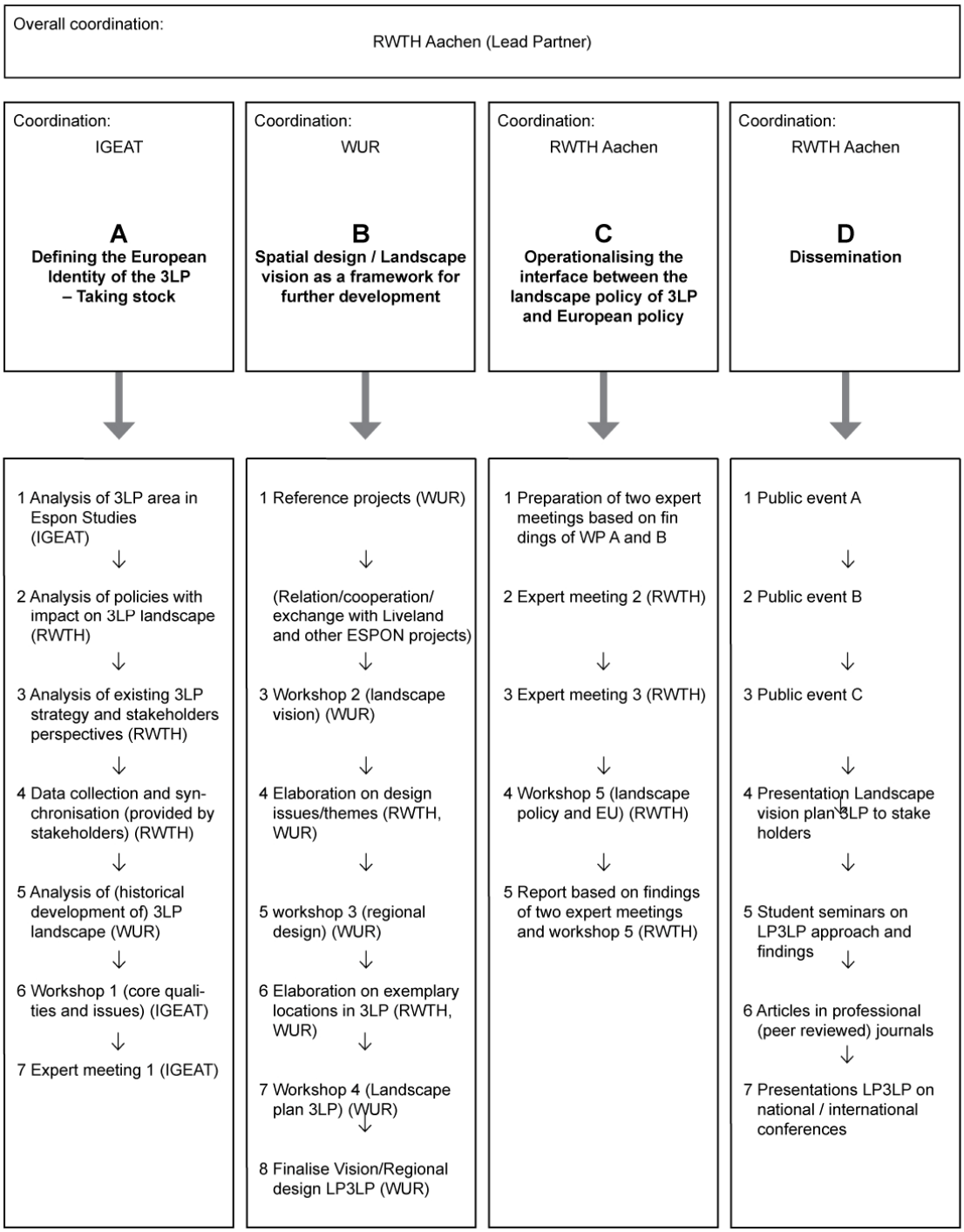
ESPON study	Focus on research area	Focus on (available) results
	Analysis of the role of sectors and trends for attractive regions and cities. Identification of challenges and development opportunities related to natural, cultural and landscape heritage in enhancing attractiveness. Analysis of possible development paths/future perspectives for both, attractive and still unattractive regions,	attractiveness of European regions and cities.
EU LUPA (Priority 1)	Current European land use patterns and land use changes, dynamics and trends. Relations between land use patterns (and more specifically urban land use patterns) and drivers of development. Efficiency of land use patterns taking into account the relations between urban areas and open space	Maps visualizing land use processes in Europe. Relations between specific land use patterns and performance of European regions. land use development patterns in cross-border regions and the differences between patterns inside neighbouring cross-border regions and between border regions and inland
METROBORDER (Priority 2)	Main characteristics of cross-border metropolitan regions. Analytical support for strategy building	Common reference framework for the main functions of cross-border metropolitan regions and for governance structures. Map of metropolitan polycentric cross-border areas. Analysis of the particular territorial potentials and challenges and the main threats for the case study areas. SWOT analysis of the case study areas. Indications for actions related to the EU and the national level. Presentation of appropriate instruments to promote a metropolisation process.
POLYCE (Priority 2)	characteristics of the polycentric system	Macro-regional polycentric structures in Europe.

ESPON study	Focus on research area	Focus on (available) results
		Urban structure, quality of life and governance. Strengths and weaknesses in different aspects of metropolitan development. Indicators for polycentric development. New strategic and cooperative initiatives.
PURR (Priority 2)	Methodologies to assess territorial potential.	Worked example of the application of the territorial potential methodology.
ESPON 1.3.2 Territorial trends of the management of the natural heritage	Natural heritage as an asset for territorial development (including cities)	Links between landscape and formation of local culture. Contribution of landscape to European identity.
ESPON Project 1.3.3 - Impacts of cultural heritage and identity	Cultural heritage and identity. Cultural landscapes.	Classification of regions based on their cultural components and orientations. Case study of management practices and territorial effects of cultural heritage at local level.
SGPTD Secondary Growth Poles and Territorial Development in Europe; Performance, Policies and Prospects (Priority 1)	Performance of secondary cities. Prospects for secondary cities.	Typology of secondary cities in terms of performance and how policies affect them.
DEMIFER (Priority 1)	Study of the size and structure of population. Development of alternative scenarios for European regions.	Typologies of European regions. European maps on the current demographic and migratory flows.
TERCO (Priority 1)	Analysis of the appropriate scale for different domains of transnational territorial cooperation. Identification of the most favourable framework conditions and good governance models for territorial cooperation.	Typologies of transnational and cross-border cooperation areas. European maps (typology of different possible cooperation areas, territorial state per possible cooperation area, territorial potentials and challenges).
FOCI (Priority 1)	The relation of cities to their	Typologies of the urban system

ESPON study	Focus on research area	Focus on (available) results
	hinterland. Analysis of existing and identification of potential « polycentric » inter-city cooperation	of Europe. Maps of the European urban system
ESPON Climate (Priority 1)	Degree of vulnerability to climate change and impacts, mainly in environmental terms. Potentials for mitigation	Typologies of European regions in terms of vulnerability
ARTS (Priority 1)	Methodological framework for territorial impact assessment Sensitivity of the different types of territories to selected EU directives	Territorial/regional sensitivity to different types of European directives
ReRISK (Priority 1)	Examination of the vulnerability for energy poverty. Scenarios for different types of European regions.	Typologies of European regions. European maps revealing the degree of vulnerability of different types of European regions.
TIGER (Priority 1)	Impact of globalisation on European territories. New forms of territorial organisation and integration responding to globalisation.	Identification of the territorial aspects of the globalisation process.

5 Distribution of work packages among partners

The distribution of work packages among partners is shown in the below diagram.



6 Project specific part

(includes proposals for Phases A, B, C and their interrelations from project specification and responses to Annex III to the subsidy contract)

6.1 – Phase A - Defining the European identity of the 3LP – taking stock

(includes proposal for the use of existing ESPON results with regard to the identity of 3LP in a European context)

Phase A is preferentially oriented toward EU level by providing information in terms of great landscape structures, global territorial dynamics, issues and scenarios; using notably ESPON outputs. Focus is also made on policy impacts as the main EU policy documents with landscape impact are analysed. In parallel to that, the 3LP scale is also taken into account as data are collected at regional level: geographical data for portraying the 3LP landscape, revision of existing planning documents (down to municipality level), and stakeholders interviews.
Therefore, Phase A offers a portrait of the 3LP in itself and how it position itself in Europe.
> See Point 2 for more detailed information.

6.2 – Phase B - Spatial design/landscape vision as a framework for further development

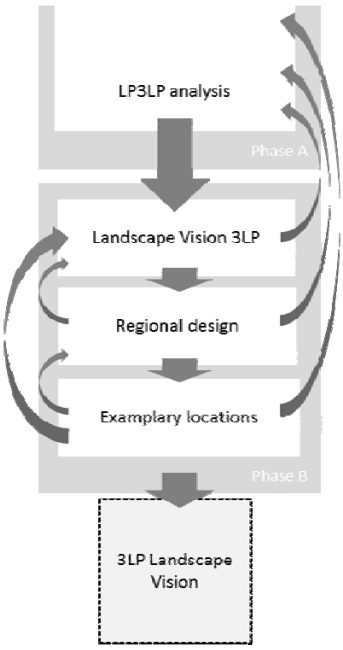
(includes proposal for the development of the landscape vision of 3LP taking in account the identity of 3LP in a European context and the landscape core qualities)

The development of the landscape vision will be done along the lines of a design process. This 'research by design' focuses on creation and elaboration of integral options for future development of the 3LP. The elaboration will be based on the outcomes of phase A. This means that the landscape vision will be based on the themes and issues that arise in phase A, especially the identity of 3LP in a European context and the core qualities. In preparation of the design process a series of reference projects will be identified and analysed in order to localise the 3LP with regards to its content and specific design and development issues. What are similarities and how are they different? What can be learnt from the reference projects?
The process for the development of the landscape vision (phase B) is structured as an iterative design process. After the analytical phase (phase A) a landscape vision is developed in three steps.

1. First the overall outlines for the landscape vision are developed. The outcomes of the analysis of phase A, the core qualities and the themes arising from the European identity, form the base for the outlines of the landscape vision.

2. This second stage in the design process will test the outlines and ambitions of the landscape vision and make them more concrete. The elaboration on a regional scale is expected to lead to adjustments and more focus in the landscape vision.
3. The third step is to work on exemplary locations in the area in order to test the ideas and ambitions of the landscape vision and the regional scale. These localized explorations will illustrate the possible outcomes of the regional design and proposed development, and are also expected to lead to adjustments and more focus in the landscape vision.

Throughout this process new question can arise on particular issues in the landscape. These questions will be addressed and lead to further analysis throughout the design process. This process is visualised as follows:



For each of the steps in the process a workshop with stakeholders is organised. In these workshops the findings of the researchers are tested and complemented with the perspective of the stakeholders. At the end of each workshop the findings of the workshop are concluded and homework is defined in preparation to the next workshop session.

6.3 – Phase C - Operationalizing the interface between landscape policy of 3LP and European policy

(includes proposal for the approach of assessments of potential effects of EU policies on the landscape vision, developed in phase B, and ways to improve negative effects of EU policies on the landscape development in 3LP

As described briefly under Point 1., and in more detail under point 2., effects of EU policies on the landscape development in the 3LP will be addressed not only in phase C, but also during phase A and B. Here, European policy effects will be identified in relation to the themes of the development perspective (2003) for two parallel lines of investigation: European policy impact, and (2) regional stakeholder perspectives.

Main policy documents in each EU policy area will be reviewed with prospect to period 2014-2020, followed by a selection of main documents to be analyzed. Policy objectives and regulatory measures will be translated into general 'landscape impacts' (impacts on the landscape area and its actors). The guiding question here is: What is to be provided in the landscape area, and by the people and living organismic communities using, managing and inhabiting it, to achieve policy objectives? Outcomes may cover e.g. site and resources for economic development used efficiently (Europe 2020), carbon sinks (Climate action), water retention (WFD), habitat (Natura 2000), identity (culture).

Possible outcome (phases A-B):

→ catalogue of landscape impacts

General political landscape impacts will be adapted to the specific 3LP situation together with the comparison of findings with the results of analysis of 3LP perspective and existing regional policies.

Moreover, ESPON studies and literature review on policy and landscape change, multifunctional landscapes and place-based policy integration will be consulted additionally or as part of work step "analysis of 3LP area in ESPON studies". Preliminary results of EU-political landscape impacts should already feed into the regional design phase and development of the landscape vision/regional design:

In parallel to the regional design process in phase B, thesis papers will articulate which regional strategies, programs, projects etc. could synergistically integrate sectorial policy objectives within the overall place-based context of the 3LP landscape vision. The analysis of European policy instruments and funding schemes will examine how they can be used to develop and implement such regional policy initiatives. Also, analysis will be used to find out how European policy counteracts envisioned landscape development (eventually by stakeholder interviews asking for their experiences with past European policy implementation). Are there also barriers by national policy?

Possible outcomes after regional design process (phase B-C):

→ Catalogue of regional policy recommendations / actions

→ Comments on future European policy development

6.4 Annex III of subsidy contract

The Annex III to the subsidy contract asks specifically for clarification on 6 points, which are addressed below in their initial order:

a) Consideration of a stronger integration of the European perspective
- *For this topic, see entire document (esp. Points 1, 2, 3 and 4)*

b) The interface between the landscape policy of 3LP and EU policy
- *For this topic, see Point 6.3 (also Point 1, summarizing the approach).*

c) Consideration of the cross-border and polycentric character of 3LP

The consideration of these characteristics is an overarching theme to be addressed throughout the project and therefore not addressed in a separated work step or measure. However, the analysis of ESPON studies will specifically look at cross border and polycentric regions (> see Point 4).

d) In-depth information on data sources
- *For data sources, please see Point 3.*

Contact with LIVELAND has been established, however there are yet no first results from the project.

e) Clarification on dissemination activities

Dissemination activities have to be discussed in more detail with the stakeholders.

A final dissemination event has been scheduled at the place of the lead stakeholder in the beginning of the year 2014 (outside of the official ESPON project duration. The TPG has reserved two working days for this event in the year 2014, one for preparation of a presentation and one for the event itself.

f) Coordination and timing of the different work packages

The following diagram shows the revised workflow, including the work packages starting off with April 2012.

More detailed information on workflow can be found with the calendar in the appendix under A2 and with a workflow diagram under A3.

7 Overview of more detailed deliveries and outputs

Phases A-B:

→ expert meeting report (European identity)

→ catalogue of landscape impacts

→ criteria set for defining the European identity

→ EU images (mapping of criteria)

→ data set (including 1. geo-referenced base map of the 3LP at scale 1:50.000 - 2. A set of cartographic planning/policy documents and other data,

that will be only partially geo-referenced - 3. A provisional base map of the 3LP area)
→ Inception Report
→ Interim Report

Phase B:
→ Landscape vision
The result of phase B will be a Landscape vision with regional design implications and exemplary locations. The format and form of the final result will be developed and focussed during the design process.

Phase B-C:
→ Two expert meeting reports (one with thesis papers, the other with a preliminary catalogue of recommendations)
→ Catalogue of regional policy recommendations / actions
→ Comments on future European policy development
→ Draft Final Report
→ Final Report

Phase D (Dissemination):
→ Presentations for public events
→ Other dissemination deliveries/outputs, such as journal articles or potential presentations at non-ESPON events have to be discussed with the stakeholders and the ESPON CU.

8 Likely barriers

The progress on the collection and integration of data has been more slowly than expected:
It does not seem possible to use already integrated data of the previous INTERREG project “Wege des Wassers”. The project contains synchronized elevation models and land cover data covering the entire 3LP region.
Regarding the German part of the project, progress has been so far slower than expected due to the fact that many components have to be requested from other sources than the stakeholders (for example from the Geodataservice of the Bezirksregierung Köln).
The landscape analysis is partly depending on the GIS data collection and could therefore due to the barriers in the data collection be delayed.

A critical element in phase B of the project, focusing on the landscape vision, is the participation of the stakeholders in the workshops. When for any reason one or more stakeholders could not participate in one or more wokshops this might become an obstacle. Up till now there is no indication this might occur.

APPENDIX

A 1. Literature

A.1.1 Literature to be analyzed for the European landscape identity

M. Antonsich, 'EUropean attachment and meanings of EUrope. A qualitative study in the EU-15', Political Geography, vol. 27, no. 6, pp. 691–710, 2008.

Antrop, 'Landscape change and the urbanization process in Europe', Landscape and Urban Planning, vol. 67, no. 1–4, pp. 9–26, 2004.

R. Bartram, 'Landscape, Heritage and National Identity: Nottingham, 7–9 September 1990', Journal of Historical Geography, vol. 17, no. 2, pp. 193–194, Apr. 1991.

B. Dezert and C. Vandermotten, L'identité de l'Europe□: Histoire et géographie d'une quête d'unité. Armand Colin, 2008.

G. Domon, 'Landscape as resource: Consequences, challenges and opportunities for rural development', Landscape and Urban Planning, vol. 100, no. 4, pp. 338–340, Apr. 2011.

F. Duhme and S. B. H. Pauleit, 'Quantifying targets for nature conservation in European landscapes', Landscape and Urban Planing, vol. 37, pp. 73–84, 1997.

V. V. Eetvelde and M. Antrop, 'Caractérisation interrégionale des paysages de la Belgique', EchoGéo, no. numéro 15, Apr. 2011.

B. Einhorn, 'Gender Nation Landscape and Identity in Narratives of Exile and Return', Womens Studies International Forum, vol. 23, no. 6, pp. 701–713, 2000.

S. O. of the E. C. European Commission, 'FROM LAND COVER TO LANDSCAPE DIVERSITY IN THE EUROPEAN UNION', pp. 4–5, 1999.

R. H. G. Jongman, 'Homogenisation and fragmentation of the European landscape: ecological consequences and solutions', Landscape and Urban Planning, vol. 58, no. 2–4, pp. 211–221, Feb. 2002.

J. D. van Mansvelt and M. J. van der Lubbe, Checklist for Sustainable Landscape Management: Final Report of the EU Concerted Action AIR3-CT93-1210. Elsevier Science, 1998.

J. H. A. Meeus, 'Pan-European landscapes', Landscape and Urban Planning, vol. 31, no. 1–3, pp. 57–79, Feb. 1995.

J. H. A. Meeus, M. P. Wijermans, and M. J. Vroom, 'Agricultural landscapes in Europe and their transformation', Landscape and Urban Planning, vol. 18, no. 3–4, pp. 289–352, Feb. 1990.

Milanova E.V, Kushlin A.V, (Eds) 1993, World map of present-day landscapes. An explanatory note. Department of World Physical Geography and Geoecology, Moscow State Univestity, in collaboration with UNEP, 25pp plus annexes.

N. Moore and Y. Whelan, Eds., Heritage, Memory and the Politics of Identity: New Perspectives on the Cultural Landscape (Heritage, Culture & Identity). Ashgate Pub Co, 2007.

C. A. Mücher, R. G. H. Bunce, R. H. G. Jongman, J. A. Klijn, A. J. M. Koomen, M. J. Metzger, and D. M. Wascher, 'Identification and Characterisation of Environments and Landscapes in Europe', Landscape, no. November, p. 119, 2003.

C. A. Mücher, J. A. Klijn, D. M. Wascher, and J. H. J. Schaminée, 'A new European Landscape Classification (LANMAP): A transparent, flexible and user-oriented methodology to distinguish landscapes', Ecological Indicators, vol. 10, no. 1, pp. 87–103, Jan. 2010.

H. Palang, H. Sooväli, M. Antrop, and G. Setten, Eds., European Rural Landscapes: Persistence and Change in a Globalising Environment, 1st ed. Springer, 2004.

G. B. M. Pedroli, T. Van Elsen, and J. D. Van Mansvelt, ‘Values of rural landscapes in Europe: inspiration or by-product?’, NJAS - Wageningen Journal of Life Sciences, vol. 54, no. 4, pp. 431–447, 2007.

Poudevigne, ‘Dynamics of rural landscapes and their main driving factors: A case study in the Seine Valley, Normandy, France’, Landscape and Urban Planning, vol. 38, no. 1–2, pp. 93–103, 1997.

J. Robert, Le territoire européen : Des racines aux enjeux globaux. In Libro Veritas, 2011.
M. D. A. Rounsevell, I. Reginster, M. B. Araújo, T. R. Carter, N. Dendoncker, F. Ewert, J. I. House, S. Kankaanpää, R. Leemans, M. J. Metzger, C. Schmit, P. Smith, and G. Tuck, ‘A coherent set of future land use change scenarios for Europe’, Agriculture, Ecosystems & Environment, vol. 114, no. 1, pp. 57–68, May 2006.

A. Scott, ‘Beyond the conventional: Meeting the challenges of landscape governance within the European Landscape Convention?’, Journal of Environmental Management, vol. 92, no. 10, pp. 2754–2762, Oct. 2011.

O. R. Scott, ‘Utilizing history to establish cultural and physical identity in the landscape’, Landscape Planning, vol. 6, no. 2, pp. 179–203, Aug. 1979.

A. Sgard, Une « éthique du paysage» est-elle souhaitable ?, VertigO - la revue électronique en sciences de l’environnement, no. Volume 10 Numéro 1, Apr. 2010.

K. Soini, H. Vaarala, and E. Pouta, ‘Residents’ sense of place and landscape perceptions at the rural–urban interface’, Landscape and Urban Planning, vol. 104, no. 1, pp. 124–134, Jan. 2012.

W. P. Stewart, D. Liebert, and K. W. Larkin, ‘Community identities as visions for landscape change’, Landscape and Urban Planning, vol. 69, no. 2–3, pp. 315–334, Aug. 2004.
D. P. Tolia-Kelly, Landscape, Race and Memory: Material Ecologies of Citizenship. Ashgate Publishing, Ltd., 2010.

V. Van Eetvelde and M. Antrop, ‘Indicators for assessing changing landscape character of cultural landscapes in Flanders (Belgium)’, Land Use Policy, vol. 26, no. 4, pp. 901–910, 2009.
J. D. Van Mansvelt and B. Pedroli, ‘Landscape - a Matter of Identity and Integrity’, vol. 1, 2003, pp. 375–394.

P. H. Verburg, C. J. E. Schulp, N. Witte, and A. Veldkamp, ‘Downscaling of land use change scenarios to assess the dynamics of European landscapes’, Agriculture, Ecosystems & Environment, vol. 114, no. 1, pp. 39–56, 2006.

W. Vos and H. Meekes, ‘Trends in European cultural landscape development: perspectives for a sustainable future’, Landscape and Urban Planning, vol. 46, no. 1–3, pp. 3–14, Dec. 1999.

Wascher D.M. (ed) 2005. European Landscape Character Areas – Typologies, Cartography and Indicators for the Assessment of Sustainable Landscapes. Final Project Report as deliverable from the EU's Accompanying Measure project European Landscape Character Assessment Initiative (ELCAI), funded under the 5th Framework Programme on Energy, Environment and Sustainable Development (4.2.2) x +150 pp

Landscape, our home: essays on the culture of the European landscape as a task. Zeist : Indigo,, 2000.

The new dimensions of the European landscape: edited by R. H. G. Jongman. Dordrecht : Springer, 2004.

European landscape character areas: typologies, cartography and indicators for the assessment of sustainable landscapes : final report. Wageningen : Landscape Europe, 2005.

‘Term - Definition - Identity : Regenerating Landscape Architecture in the Area of Landscape Urbanism / Susannah C. Drake.’, 2010.

A.1.2 EU level: List of EU policy documents and further literature (to be) analysed – IN PROGRESS - (RWTH)

a) Analysis interface of EU policy context and landscape - Literature Review
ESPON studies:

ESPON project 2.4.1 (2006): Territorial Trends and Policy Impacts in the Field of EU Environmental Policy, Final Report

ESPON project 2.1.3 (2006): The Territorial Impact of CAP and Rural Development Policy, Final Report

b) European policy documents:

(b1, Cross-sectoral European policy orientation)

European Commission (2010): Europe 2020 A strategy for smart, sustainable and inclusive growth, COM(2010)2020

European Commission (2011): A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy, COM(2011)21

European Commission (2011): Roadmap to a resource efficient Europe, COM(2011)571

(b2, Regional Policy/ Territorial Cohesion)
European Ministers responsible for Spatial Planning and Territorial Development (2011): Territorial Agenda of the European Union 2020 – Towards an inclusive, smart and sustainable Europe of diverse regions

[Legislative proposals 2014-2020]

European Commission (2010): Investing in Europe's future – 5th report on economic, social and territorial cohesion

European Commission (2008): Green paper on territorial cohesion – Turning territorial diversity into strength, COM(2008)616

Council of Ministers responsible for Spatial Planning (1999): ESDP European Spatial Development Perspective – Towards balanced and sustainable development of the territory of the European Union

(b3, Environmental Policy/ Water)

European Parliament and Council of the European Union (2000): DIRECTIVE 2000/60/EC of 23 Oct 2000 establishing a framework for Community action in the field of water policy (Water Framework Directive), OJ L327

European Parliament and Council of the European Union (2007): DIRECTIVE 2007/60/EC of 23 Oct 2007 on the assessment and management of flood risks (Floods Directive), OJ L288/ 27-34

(b4, Environmental Policy/ Soil)

European Commission (2006): Thematic Strategy for Soil Protection, COM (2006) 231

European Commission (2206): Proposal for a Directive of the European Parliament and of the Council establishing a framework for the protection of soil and amending DIRECTIVE 2004/35/EC, COM(2006)232

European Commission (2012): Guidelines on best practice to limit, mitigate or compensate soil sealing, SWD(2012)101

(b5, Environmental Policy/ Biodiversity)

European Commission (2011): Our life insurance, our natural capital: an EU biodiversity strategy to 2020, COM(2011)244

European Parliament and Council of the European Union (2009): DIRECTIVE 2009/147/EC of 30 Nov 2009 on the conservation of wild birds, OJ L20/ 7-25

Council of the European Communities (1992): DIRECTIVE 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, OJ L206/ 7-49

… to be complemented and continued in each policy area listed in analytical matrix

c) Scientific literature with regard to policy & landscape change, placed-based policy integration, multifunctional landscapes, e.g.:

Andreas Faludi, Bas Waterhout (2002): The making of the European spatial development perspective: no masterplan, Routledge, London

Simeonova, V., van der Valk, A. (2009): The role of an area-oriented approach in achieving environmental policy integration in the Netherlands, and its applicability in Bulgaria. European Planning Studies, 18 (9) 1411-1443

Vejre, Henrik; Abiltrup, Jens; Andersen, Erling; Andersen, Peter S; Brandt, Jesper; Busck, Anne et al. (2007): Multifunctional agriculture an d multifunctional landscapes - land use as an interface. In: Ülo Mander, Katharina Helming und Hubert Wiggering (eds.): Multifunctional land use. Meeting future demands for landscape goods and services. Springer, Berlin, 93–104

Wescoat, J.L., Johnston D.M (eds.) (2008): Political economies of landscape change. Springer, Dordrecht

A.1.3 Literature for the landscape analysis (WUR)

Cremasco, V., A. Doguet, N. Feremans, C. Neuray, T. Pons and C. van der Kaa (2008), Landschaftsatlas Wallonien, Das Weser-Maas-Land.

Kerkstra, K., P. Vrijlandt, H. de Jong, J. Houwen (2007). Landschapsvisie Zuid Limburg, Maastricht/Wageningen.

Mertens, A. (2000). Loons, Diets en Luiks; Hasselt en de volksvertegenwoordiging in het land van Loon en prinsbisdom Luik (1477-1538), Maaslandse monografieën 62, Maastricht.

Renes, J (1988). Geschiedenis van het zuidlimburgse cultuurlandschap, Van Gorcum, Assen/Maastricht.

Ubachs, P.J.H. (2000). Handboek voor de geschiedenis van Limburg, Maaslandse monografieën 63, Verloren, Hilversum.

Vleeshouwer, J.J. and J.H. Demoiseaux (1990). Bodemkaart van Nederland 1:50.000; Toelichting bij kaartblad 61-62 West en Oost Maastricht-Heerlen, Staringcentrum, Wageningen.

A.1.4. Literature related to the landscape vision/regional design phase (WUR)

Hajer, M., D. Sijmons and F. Feddes (2006). *Een plan dat werkt, ontwerp en politiek in regionale planvorming*, NAI uitgevers, Rotterdam

Meijsmans, N. and K. Beelen (2010). *Designing for a region*. Sun Academia, Amsterdam

Milburn L.S., and R. D. Brown (2003). The relationship between research and design in landscape architecture, in: *Landscape and Urban Planning* 64, 47-66.

A 2. Calendar (in progress, as of June 21st 2012)

(grey parts of the table = past)

	What?	*Where?*	When?	Who?
M	Kick-off + 1st Steering Committee	Maastricht (NL)	29 MAR 2012	LP/TPG + LS/GSH + CU
E	Expert meeting 1	To be decided	23 MAY 2012	TPG + experts
E	ESPON Seminar (open)	Aalborg (DK)	13-14 JUN 2012	LSH + LP + CU
R	Inception Report	-	21 JUN 2012	LP (+TPG)
E	Workshop 1 (core qualities and issues)	Maastricht	4 JUL 2012	LP/TPG +GSH (+ CU)
E	Workshop 2 (landscape vision)	To be decided	13 SEP 2012	TPG + GSH + CU
M	2nd Steering Committee	To be decided	20 SEP 2012 (morning)	GSH + LP/TPG + CU
E	Public Event – Phase A	To be decided (BE)	20 SEP 2012 (afternoon)	TPG + GSH + invitations
E	Workshop 3 (regional design)	To be decided	22 NOV 2012	TPG + GSH + CU
E	ESPON Seminar (internal)	Paphos (CY)	5-6 DEC 2012	LSH + LP + CU
R	Interim Report	-	31 DEC 2012	LP (+TPG)
E	Workshop 4 (Landscapeplan 3LP)	To be decided	xx JAN 2013	TPG + GSH + CU
M	3rd Steering Committee	To be decided	28 FEB 2013 (morning)	GSH + LP/TPG + CU
E	Public Event – Phase B	To be decided (NL)	28 FEB 2013 (afternoon)	TPG + GSH + invitations
E	Expert meeting 2	To be decided	xx APR 2013	TPG + experts
E	Expert meeting 3	To be decided	xx MAY 2013	TPG +experts
E	ESPON Seminar (open)	To be decided (IE)	xx JUN 2013	LSH + LP + CU
E	Public Event – Phase C	To be decided	xx JUN-JUL 2013	TPG + GSH + invitations
E	Workshop 5 (Landscape policy and EU)	To be decided	xx JUL 2013	TPG + GSH + CU
R	Draft Final Report	-	30 SEP 2013	LP (+TPG)
M	4th Steering Committee	To be decided	24 OCT 2013	GSH + LP/TPG + CU
E	Dissemination events	To be decided	(final event in beginning of 2014)	GSH (+ TPG) + invitations
R	Final Report	-	31 DEC 2013	LP (+TPG)

E = Event

M = Meeting

R = Report

LSH = Lead Stakeholder (Province of Limburg, Department of Spatial Development)

GSH = Group of Stakeholders

LP = Lead Partner (RWTH Aachen, Department of Landscape Architecture)

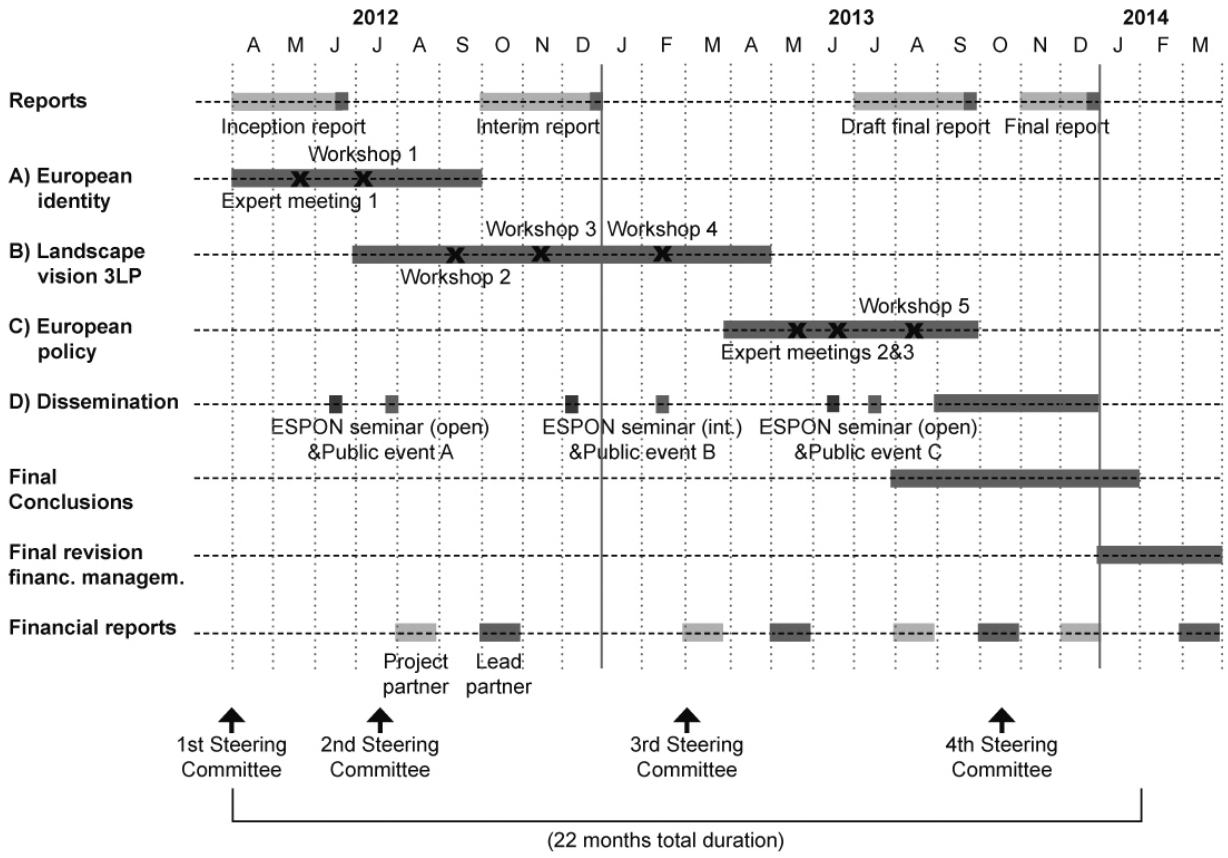
TPG = Transnational Project Group (Research Consortium: RWTH Aachen, Wageningen University, Université Libre de Bruxelles)

CU = ESPON Coordination Unit

Experts = specialists in the subject

Invitations = general public

A 3. Workflow diagram (in progress, as of June 21st 2012)



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.

ISBN

LP3LP

Landscape Policies for the Three Countries Park

Targeted Analysis 2013/2/21

Annex to the Inception Report of 21/06/2012

18/10/2012

EUROPEAN UNION
Part-financed by the European Regional Development Fund
INVESTING IN YOUR FUTURE

This annex provides additional information to the Inception Report of the LP3LP Project with regard to the Response of the Coordination Unit of 13/09/2012.

This Targeted Analysis 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 www.espon.eu

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.

List of authors

Prof. Dr. Frank Lohrberg
Timo Matti Wirth
Anja Brüll
RWTH Aachen University (Lead Partner)
Chair of landscape architecture
Jakobstraße 2
52056 Aachen
Germany

Marc Nielsen
Alain Coppens
Free University of Brussels (Project Partner)
50 av. F. D. Roosevelt
B-1050 Brussels
Belgium

Annet Kempenaar
Prof. Adri van den Brink
Wageningen Universiteit (Project Partner)
Droevendaalsesteeg
36708 PB Wageningen
Netherlands

Contents

Tables

Figures

Point 1: *Detailed information on data sources listed in the Inception Report and the presentation of additional indicators for the elaboration of phase A 'Defining the European identity of the 3LP – taking stock'*

1.1 European scale

Following non-exhaustive data sources are used to characterize the European dimension of 3LP regional identity:

Soil: European soil database (ESDB), available at:
http://eusoils.jrc.ec.europa.eu/esdb_archive/ESDB/Index.htm

Hydrography: Water Information System for Europe (WISE-EEA), available at:
http://www.eea.europa.eu/themes/water/dc

Relief: Digital elevation model (DEM-EEA), available at:
http://www.eea.europa.eu/data-and-maps/data/digital-elevation-model-of-europe

Land use: CORINE landcover Version 16, available at:
http://www.eea.europa.eu/data-and-maps/data/corine-land-cover-2000-clc2000-seamless-vector-database-4

Landscape/land use: Land Use/Cover Area frame statistical Survey (LUCAS) landscape indicators: richness, structure, diversity.

ESPON database and maps: At this stage of the project, it seems difficult to point the exact data the TPG will use as it will mainly depend on the specific needs of phase B. Nevertheless, the METROBORDER data will be used to highlight dynamics at the MAHHL scale: citizenship, commuters and transport data. The comparison with other regions will also be based on the CBPMRs identified in the METROBORDER project, at LAU2 scale.

1.2 Regional scale (the 3LP)

To concentrate the landscape analysis on a preliminary set of 3LP core qualities and to create a solid working base for the regional design phase the TPG proposes to set up a number of maps listed in Table 1.

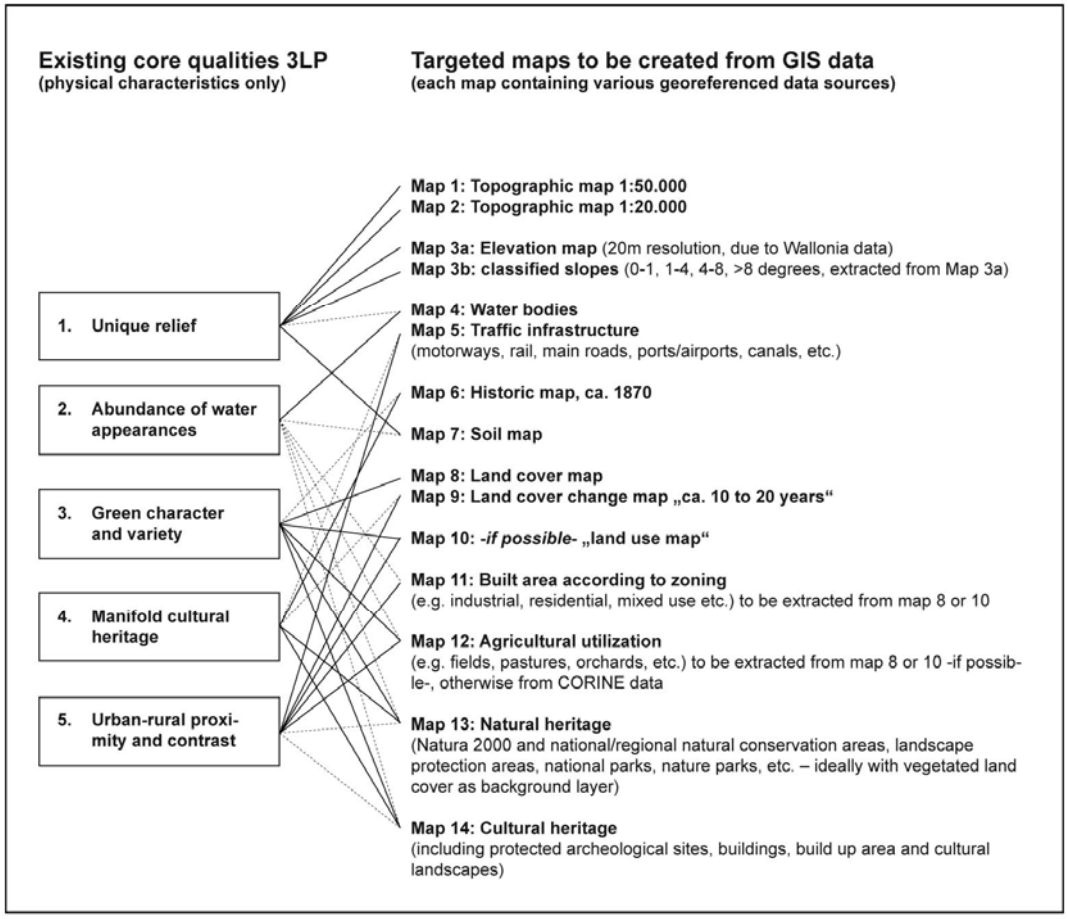


Figure 1: List of maps created for landscape analysis and regional design

For producing these minimum necessary base maps and thematic layers the TPG to date collected approximately 100 geographical data sets in different formats and resolutions (dependent on availability) from various authorities and institutions of the 3 countries BE, DE, NL, respectively 4 regions (BE-Wallonia, BE-Flanders, DE-North Rhine-Westphalia, NL-Limburg) constituting the Three-Countries-Park. The data were requested mainly with regard to an overall representation of the 3LP project area (1:50.000) and partly with regard to possible exemplary locations (1:20.000). The scale of the final output of maps is still under discussion. Presently, the synchronization process of the data sets is on-going. During this process the information of those geographic data sets, which will actually be finally used for the

maps, are being extracted from Meta data. Thus, information on sources, topographic scale, year etc. will be presented in the Interim Report.
Further indicators potentially to be displayed in maps regarding policy recommendations at the interface of European and regional policy will be chosen upon relevance during Phase B and C.

Point 2: *Review of relevant literature for the implementation of the project including a first revision of policy documents*

The research approach for analysing the European policy context is illustrated by Figure 2. In a first step, relevant policy areas as displayed in the Inception Report under point 2.2 have been chosen according to the thematic areas described in the 3LP development perspective[1] and cross-checked with ESPON 2006 studies[2,3] and the 5th Cohesion report[4]. Relevant policy documents have been identified in each area and policy objectives extracted. Policy objectives are translated into 'landscape demands' with the purpose to identify concrete political requirements to the development of landscapes in general and 3LP landscape in particular.

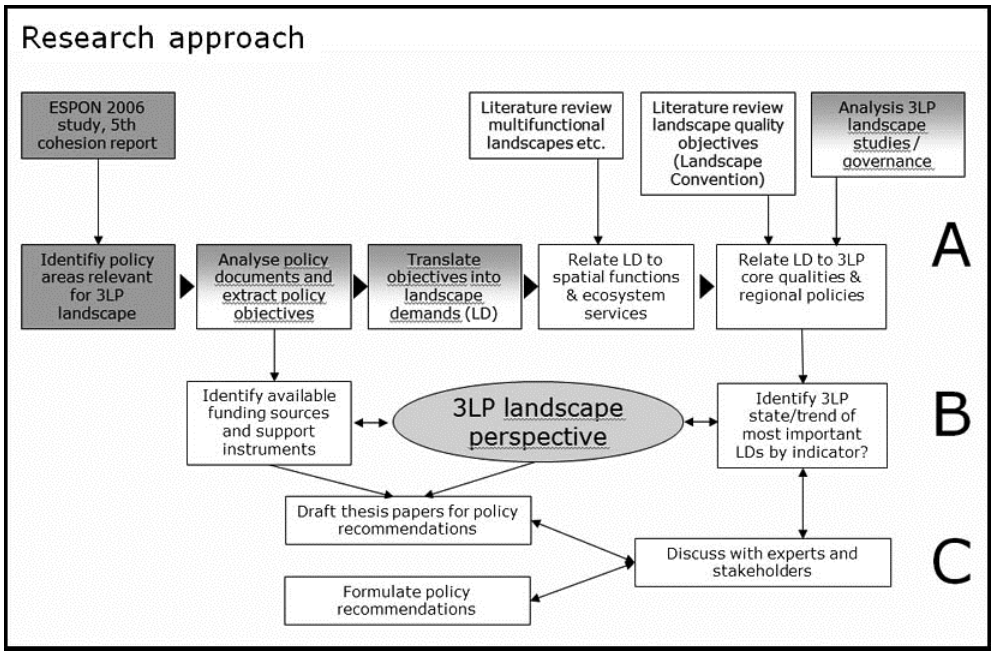


Figure 2: Concept diagram showing research approach

[1] Projectgroep Drielandenpark 2003

[2] ESPON project 2.4.1 2006

[3] ESPON project 2.1.3 2006

[4] European Commission 2010c

The guiding question behind the notion of 'landscape demands' is: What is to be provided by the landscape area and its ecosystems to achieve European policy objectives? Whereas, it is proposed to understand 'landscape' as the concrete, 4-dimensional (spatial-temporal) expression of territory or territorial "area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors"[5] and as the common living and production space of human societies, their economies and other living communities[6] as well as to understand 'ecosystems' including biotic and abiotic agents and human actors (land users/ land managers). A first revision of policy documents and resulting landscape demands is given in Table 1.

Policies	Objectives	Landscape demands
EU overall strategic policy orientation		
Europe 2020[7]/ Flagship initiative resource efficient Europe[8]	To create growth & jobs in a smart, sustainable and inclusive way	Provide sites and resources for economic and social development in a resource-efficient way, especially:
		Provide site for commercial and industrial developments, and knowledge & innovation centers Provide site for housing Provide site for transportation Provide non-renewable resources for production and consumption Provide renewable resources for production and consumption (incl. renewable energy sources) Provide recreational opportunities for the regeneration of productive human labour fource and the tourism sector
EU environmental & cultural sector policies		
Water Framework Directive[9]/ Groundwater Directive[10]	To achieve and maintain good status of all surface and groundwater bodies from 2015	Produce a good quality and provide for renewal of surface and groundwater throughout the whole watershed landscape

[5] Council of Europe 2000, pp. Art. 1 a

[6] Brüll 2012

[7] European Commission 2010b

[8] European Commission 2011

[9] European Parliament and Council of the European Union 2000

[10] European Parliament and Council of the European Union 2006

Floods Directive[11]	Assessment and management of flood risks to reduce adverse consequences for human health, the environment, cultural heritage and economic activity	Provide area-wide water retention throughout the watershed Provide designated retention and flooding areas
Thematic Soil Strategy[12] & Proposal for a Soil Protection Directive[13]	Preservation of the capacity of soil to perform environmental, economic, social and cultural soil functions	Provide and maintain high-quality soils in terms of fertility, water & nutrient retention capacity, carbon content, and soil biodiversity Provide sites for raw material extraction and geological and archaeological heritage sites
Biodiversity strategy 2020[14] (incl. Habitats[15] and Birds[16] Directive)	Headline target: Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020	Provide a variety of typical natural ecosystems and habitats for listed species Provide genetic diversity and ecosystem services
Green infrastructure strategy[17] (in preparation)	To enhance spatial and functional connectivity outside protected areas, to maintain and restore the capacity of ecosystems to deliver multiple ecosystem services	Provide landscape elements (e.g. hedges, tree groups, wetlands etc.) vital for ecosystem services and habitat quality (e.g. landscape permeability, reduced fragmentation)
LULUCF decision proposa[18]l (Climate action)	To increase removals and to decrease emissions of GHG in land use related sectors	Provide carbon sinks in soils and standing biomass stocks Maintain permanent grassland (no conversion to cropland)
TFEU Art.167[19] (EC website on cultural heritage presently under construction)	Improvement of the knowledge and dissemination of the culture and history of the European peoples, conservation and safeguarding of cultural heritage of European significance	Provide and preserve characteristic cultural landscape features contributing to local/regional identity
		to be continued for the policy sectors air, noise, waste and cultural heritage
EU economic sector policies		
Energy 2020 strategy[20] / climate & energy package[21]	Competitiveness, security of supply, and sustainability (i.e. decarbonisation, energy efficieny and renewables 20-20-20-target	Provide renewable energy sources and site for technical installations for their use Provide corridors for energy network installations
Renewable Energy Sources	RES BE 13%, DE 18%, NL 14%	Increasing demand for biomass resources

[11] European Parliament and Council of the European Union 2007

[12] European Commission 2006b

[13] European Commission 2006a

[14] European Commission

[15] Council of the European Communities 1992

[16] European Parliament and Council of the European Union 2009a

[17] EU Working Group on Green Infrastructure 2011

[18] European Commission 2012b

[19] 2010/C83/01

[20] European Commission 2010a

[21] Council of the European Union 2007

Directive[22]	10%- Transport fuel target	
CAP 2020 communication[23] (partly cross-cutting through environmental/ cultural sectors)	(1) Viable food production/ food security, (2) sustainable management of natural resources and climate action, (3) balanced territorial development	Provide high quality, diverse and safe food products Provide public goods (e.g. attractive landscape, farmland biodiversity, resilience to natural disasters) Provide attractiveness & identity (in rural regions)
to be continued for the policy sectors agriculture/ forestry/ aquaculture, transport, and tourism		
EU cross-sectoral policies	→	***Integration of landscape demands…***
Territorial Agenda 2020[24]	Highlights territorial cohesion as common goal for a more harmonious and balanced state of Europe	*...via place-based integrated regional policy action (horizontal, vertical and territorial coordination) to be focused on 6 priorities*
Common Strategic Framework[25] (CSF)	Investment in growth and jobs; Economic, social, territorial cohesion; territorial cooperation	*...via financial support from 5 funds: ERDF, ESF, CF, EAFRD, EMFF available through national programs focusing on 11 thematic objectives*
Proposal rural development regulation[26]	(1) Competitiveness of agriculture, (2) sustainable management of natural resources, and climate action, (3) balanced territorial development of rural areas; specified in 6 priorities	*...via financial support from EAFRD available through national rural development programs selecting from a standardized menu of measures*
Thematic Strategy Urban Environment[27]	To improve the quality of the urban environment, making cities more attractive and healthier places to live, work and invest in, and reduce the adverse environmental impact of cities on the wider environment	*...via guidance e.g. on integrated environmental management*
to be continued and detailed for the field of regional/cohesion policy		
CoE landscape policy	→	***Integration of landscape demands…***
European Landscape Convention[28]	To safeguard and realize quality and diversity of European landscapes as a key element of European common heritage and identity, and individual and social well-being	*… via instruments for landscape protection, management and planning*

Table 1: Translation of policy objectives into landscape demands

[22] European Parliament and Council of the European Union 2009b

[23] European Commission 2010d

[24] Informal Ministerial Meeting of Ministers responsible for Spatial Planning and Territorial Development 2011

[25] European Commission 2012a

[26] European Commission 2012a

[27] European Commission 2006c

[28] Council of Europe 2000

Behind this approach lays the intention to follow a path of place-based policy integration as promoted by the Territorial Agenda 2020, which requires (1) horizontal integration of different policy sectors, (2) vertical integration of levels and scales respectively multi-level governance and (3) territorial integration regarding cross-border functional areas[29] to be adapted to the field of multifunctional landscape development. Since the literature on landscape is vast, the TPG will focus a scientific literature review on two topics: (1) multifunctional landscapes and (2) landscape quality objectives. The topic of multifunctional landscapes is chosen in order to respond to the envisaged results of the project specifications in particular the 'elaboration of recommendations for coordinating spatial developments of various spatial functions in relation to the landscape core qualities'. The topic of landscape quality objectives is central to both the regional 3LP landscape policy context (preserving and enhancing core qualities) and the European landscape policy context, which is mainly exerted through the European Landscape Convention.

The topic of multifunctional landscapes is furthermore consistent with the formalized German landscape planning policy, which uses landscape functions as subject matter of assessment and development[30,31]. Besides this German legal tradition, there is an international discourse on multifunctional landscape development. While landscapes are always multifunctional, since they consist of different land uses, the concept aims at managing landscape processes and single land uses in a synergistic way so as to fulfill many functions or in other words multiple societal demands (ibid.)[32,33]. Societal demands arise from local to global needs and aspirations towards landscapes (e.g. from local inhabitants and enterprises to global tourism and resource flows) as well as from general political requirements imposed on landscapes. Therefore political landscape demands have a direct relationship to landscape functions as shown in Table 2. Vice versa, practices of multifunctional landscape development could ideally serve cross-sectoral place-based policy integration. Moreover, there is a tendency in the international discourse on multifunctional landscapes to merge it with the concept of ecosystem services[34,35].

[29] Böhme et al. 2011

[30] Haaren et al. 2008

[31] Haaren 2004

[32] Brüll 2012

[33] Veijre et al. 2007

[34] Kienast et al. 2009

The ecosystem services approach has gained recognition in European and international policy making reflected in the European biodiversity strategy and the launch of IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services)[36]. The ecosystem services approach has the advantage to provide a clear perspective on value-creation by ecosystems benefiting society and economy and is therefore well suited to guide dynamics of innovation and economic growth impacting the landscape[37]. It also provides tools for local and regional planning[38]. It seems that the ecosystem or landscape services approach is more common in the Dutch landscape development context[39]. However, this will be subject of further research as will be the Walloon and Flemish approach to landscape development/ governance. Table 2 shows how landscape functions and demands correspond with ecosystem services.

Spatial / Landscape functions	**EU political landscape demands**	**Ecosystem services**
Multifunctional landscape	Provide ecosystem services	Relates to all services
	Provide public goods (e.g. attractive landscape scenery, farmland biodiversity, resilience to natural desasters)	
Production functions	~	**Provisioning services**
Trägerfunktion' [carrier function]	Provide site for commercial and industrial developments, and knowledge & innovation centers	–
	Provide site for housing	
	Provide site for transportation	
	Provide corridors for energy network installations	
Produktionsfunktion' [production function]	Provide non-renewable resources (incl. fossil energy sources) and sites for raw material extraction	
	Provide renewable energy sources and site for technical installations for their use	Provisioning of renewable resources (incl. renewable energy sources, biomass, biochemicals, timber, medicinal & genetic resources etc.)
	Provide renewable resources (with increasing demand for biomass resources)	
	Provide high quality, diverse and safe food products	Provisioning of food

[35] Hermann et al. 2011

[36] www.ipbes.net

[37] Brüll 2012

[38] TEEB 2010

[39] Opdam, Termorshuizen 2009

Regulation functions	~	**Regulating services**
Klimatische Funktionen und Luftqualität' [climate function and air quality]	Provide carbon sinks in soils and standing biomass stocks	Carbon sequestration and storage
	Maintain permanent grassland (no conversion to cropland)	
	[air quality policy to be investigated]	Local climate and air quality regulation
Wasserdargebotsfunktion & Retentionsfunktion' [water resources function and retention function]	Produce a good quality and provide for renewal of surface and groundwater throughout the whole watershed landscape	Provisioning of fresh water
	Provide area-wide water retention throughout the watershed	Moderation of extreme events
	Provide designated retention and flooding areas	
Ertragsfunktion' [natural yield function]	Provide and maintain high-quality soils in terms of fertility, water & nutrient retention capacity, carbon content, and soil biodiversity	Erosion prevention and maintenance of soil fertility
	[waste (water) and sewage sludge policy to be investigated]	Waste (water) treatment and nutrient cycling
Habitat functions	~	**Habitat/ Supporting services**
Biotopfunktion' [biodiversity function]	Provide a variety of typical natural ecosystems and habitats for listed species	Habitat provisioning (including habitats along migratory routes)
	Provide landscape elements (e.g. hedges, tree groups, wetlands etc.) vital for habitat quality (e.g. landscape permeability, reduced fragmentation)	
	Provide genetic diversity	Maintenance of genetic diversity
Information functions	~	**Cultural services**
Landschaftserlebensfunktion'/ Erholungsfunktion [landscape experience function (including recreational function)]	Provide recreational opportunities for the regeneration of productive human labour fource	Recreation and mental and physical health
	Provide attractiveness & identity (in rural regions)	Aesthetic appreciation and inspiration for culture, art and design / Spiritual experience and sense of place
	Provide and preserve characteristic cultural landscape features contributing to local/regional identity	
Archivfunktion' [archive function]	Provide geological and archaeological heritage sites	

Table 2: List of political landscape demands related to landscape functions and ecosystem services

In a next step the political landscape demands shall be related to 3LP core qualities and storylines of the 3LP landscape perspective. Upon feasibility and availability of data, the state and trend of those landscape demands which may be chosen as subject of the 3LP landscape perspective shall be mapped on 3LP territory.

Point 3: *Presentation of preliminary results of the analysis on existing ESPON results relevant for this project.*

3.1 Introduction

The aim of the following lines is to present the preliminary results of the analysis on existing ESPON results relevant for this project, as requested in Annex III of the subsidy contract. This work is part of Phase A: “Defining European identity”, where the TPG is asked to define identity of the 3LP area in comparison to other areas with similar features in relation to physical qualities, occupation patterns and processes, land-use and economic potentials. By positioning the 3LP within the EU context, it shall become feasible to determine the territorial capital and potentials of the area, taking into account the polycentric metropolitan context of the region. Emphasis is to be made on the use of ESPON studies, particularly the EDORA project. The integration of European challenges will enlarge the debate and bring new evidence based information for the designing of the landscape perspective.

Extracting the ESPON information in the framework of the 3LP project is a difficult task as it imposes an exercise of interpretation. ESPON results have indeed to be considered from the landscape perspective, meaning that only the territorial dynamics that have an impact over landscape must be analyzed. In parallel, specific attention is paid to particular dynamics that occur in the 3LP regions in order to allow comparison with other European regions. As ESPON information is diverse and complex, it was decided to define 4 categories that would summarize the main relevant dynamics. The four categories are the following:

- Recent changes in rural economy
- Climate change and energy paradigm
- Demography and attractiveness
- Metropolisation process

These elements will form a solid basis for the implementation of the landscape perspective by highlighting new challenges or give the European perspective on the already identified ones. Besides that, the TPG expresses the will to keep the overall phase A open and flexible during the whole research project. New questions might indeed emerge in phase B or C, and will be informed from the EU perspective by using ESPON information.

3.2 The 3LP Landscape is between economic diversification and intensification of land use[40]

The European Landscape Convention acknowledges the fact that the transformation of landscapes is accelerated by the main sectors of economy (agriculture, forestry, industrial, mineral production, tourism and recreation), by regional and town planning, transport, infrastructure and at a more general level, by changes in the world economy. Territorial Agenda 2020 is stressing the importance of the diversity of territories, the need for a place-based approach to policy making, the integrated functional area development in order to protect and develop cultural and natural landscapes. The "Roadmap to a Resource Efficient Europe", Flagship initiative under the Europe 2020 Strategy, aims at reducing land take for housing, industry, roads or recreational purposes to zero at the horizon of 2050.

In that respect, the landscape issues are related to the dynamic relationship between economic activities and land use, i.e. land cover and intensity of land use. The latter represents the most acute change in land use in Europe. Between 1990 and 2006, the share of artificial surfaces has increased by 8.8% to reach 4.4% of the EU territory. The territorial dynamics contributing to the land artificialisation are the residential development in extension of existing urban areas or in relation with communication infrastructures, the development of new infrastructures (transport, industries, agriculture and leisure). These dynamics lead to increased territory fragmentation that alters the efficiency of the green and blue networks, to a standardisation of the townscape (town entrance, commercial centres, residential areas, motorway junction) leading to a loss of identity.

In the non urban areas, even though the overseas competition for food and fibre has been resisted through agricultural price support policies, the shift in balance away from primary activities towards secondary and tertiary activities is at work for many decades in most European regions. Less competitive farms are further compensating their incomes through product differentiation, niche marketing, commodification of public goods and also the provision of rural leisure and tourism services. Land, landscapes, natural environment but also wider culture and heritage assets become important factors of local diversification. In some regions, this "countryside consumption" may play a major role in the local economy and goes beyond farming pluriactivity. Trends like the standardization associated with globalisation, the modernisation of agriculture and of local industries along with counter urbanization

[40] Based on EDORA, EU-LUPA

endanger the supply of authentic experience of natural and cultural assets. This issue is particularly crucial in regions experiencing a high pressure of urban sprawl.
According to EU-LUPA typology, the 3LP is located in the very few European NUTS 3 regions characterised by a high urban and infrastructural related land: “suburban areas” and “suburban and peri-urban areas” categories, both characterised by 15 to 20% of artificial surface and a predominance of agricultural land on forests and semi-natural areas. The processes at hand in the regions of the 3LP are of different nature and intensity: high intensity for Zuid Limburg due to high level of economic and residential sprawl and medium to high intensity for the three other regions.
Likewise, along with some regions of Spain, o-rtugal and Croatia, Belgium, and Netherland are characterized by high volumes of land use intensification during the 1990-2006 period.

3.3 The 3LP has a low vulnerability to climate change but needs to lower its energy dependence[41]

The fossil fuel society we are living in is already responsible for many landscape changes (communication network, urban and industrial sprawl, intensification of agriculture, etc.) that are occurring at a significant rate. It has another less predictable impact on climate that will affect unevenly the whole EU territory.
The impacts on European landscapes and ecosystems are numerous and interact with other effects of human actions. Apart from direct physical impact heat waves, draught, coastal flooding, river flooding, there are indirect impacts on socio-economic issues and on environment through ecosystem alteration.
Economic activities especially sensitive to climate change are agriculture and forestry because of significant changes in quality and availability of water resources. “As a generalized picture, it is most likely that Northern Europe will mainly see positive effects in terms of new crop species and varieties and take the advantage of higher crop production and expansion of appropriate areas for crop cultivation. On the other hand, increase in plant protection, risk of nutrient losses and depletion of soil organic matter due to the possible change in the soil types will generate the disadvantages. Southern Europe will face desertification effects in several degrees; increased water shortages, decrease in the appropriate area for the cultivation of usual crops and higher yield variability are examples of the disadvantages that are anticipated”. (EDORA, WP8, p392)
As stated in the ELC Meetings, tourism (summer and also winter tourism) being highly dependent on specific climatic conditions may also be affected negatively or

[41] Based on ESPON Climate, ReRisk

positively according to the region. The energy sector will be highly affected in both demand (households and service sector heating and cooling) and supply (decreased precipitation and heat waves are also expected to influence negatively the cooling process of thermal power plant). The structure and function of ecosystems may be affected by climate change: modification of the distribution of plants and animals, of the growth patterns (forests) causing a highest vulnerability to pests and wind damage, development of invasive alien species leading to new ecosystems, modification of the distribution of forest and wild fire risks, etc.

The challenge of climate change has been widely publicized in the reports of the Intergovernmental Panel on Climate Change, or IPCC, the Stern Review and EU White Paper "Adapting to climate change: Towards a European framework for action". Climate change is also part of the 5 main targets of EU2020 – the 20-20-20 targets (GHG reduction, energy from renewables and increase in energy efficiency).

The actions that a region can take in order to fight climate change are twofold: mitigation measures, aiming to contribute to an overall reduction of global climate change and adaptation measures, aiming at a local level to reduce risk, increase coping capacity and to build adaptive capacity (infrastructures, technology, institutional capacity and efficiency, etc.). The vulnerability of a region to climate change will be based on its exposure, on its sensitivity to climatic events and on its adaptive capacity.

Some measures may affect landscape in an obvious way like the development of renewable energy infrastructures (wind turbines, solar power plants or individual energy infrastructure) or in a more subtle way like the improvement of water and ecosystems management, the change in soil carbon management in agricultural and natural systems, the development of bio-fuel crops, of biomass, the use of fuel wood. The improvement of energy efficiency may also affect the identity of the built heritage.

According to ESPON Climate, there is a European North-South gradient in terms of climate change exposure, with the 3LP being moderately exposed to most of the climatic variables such as temperature, precipitation, evaporation, river inundation, coastal inundation. The aggregated potential negative impact for the 3LP is marginal to low. Combined with a high capacity to adapt to climate change, the 3LP is categorized in the regions having no or marginal vulnerability to climate change. However, facing the uncertainty of the climatic evolution and also because certain impacts transcend borders of individual states – such as with river basins, several countries have adopted adaptation strategies nationwide or on both national and regional level.

Another aspect of the energy challenge is the vulnerability to the rise of energy prices. It has been assessed in ReRisk research against three factors : specialisation of the region in high energy spending industries, region's dependence on motorised transport (both employment and transport use) and the region's social vulnerability (people having problems paying their energy bills). According to the Rerisk typology, the 3LP is attached to the category called "well-off with troubles ahead": those regions are located in the most densely populated regions of central Europe, highly industrialised, characterised by a medium level of employment in high energy spending industries that used to be a cornerstone of the economies, but are now in the process of being replaced by more knowledge-intensive activities, higher than average number of workers commuting between the regions, high level of disposable income. Some regions are rural and semi-rural in relation to coastal, mountain or close to major urban centres, providing potential for tourism and second homes. The regions of that type have a few options for alternative energy as they are characterised by both low wind power and low PV potential.

3.4 The 3LP has a demographic profile in the EU average and an attractiveness that can be enhanced[42]

Demographic trends in Europe are expected to be an important challenge in the coming future as highlighted notably in the DEMIFER project. The most important force behind European population change is international migrations where at the regional level, changes through migrations consist also of internal migrations between regions within individual countries. Contemporary societies are indeed characterized by an increasing human mobility, especially in recent decades. The old pattern of migrations from poor to rich countries has changed toward a mobility shaped by connection between places rather than by borders between states and taking place within a series of global networks (transnational companies, informal economic network, diaspora, scientific network, etc.). Other challenges, still in a demographic perspective, are the decreasing population growth, increasing proportions of the elderly and the declining population. Those dynamics strongly influence labour markets, healthcare expenditure and social security systems i.e. regional economic growth and competitiveness.

Human mobility (including migrations) varies according to regions since their assets and actors differ. The main orientations of European territorial development policies go toward a more balanced development of the regions in order to reduce disparities

[42] Based on ATTREG, DEMIFER, ESPON 1.3.3, METROBORDER, TIGER

(Europe 2020, 5th Cohesion report, ESDP). The ATTREG project shows that there is no simple relationship between increases in attractiveness and economic growth. Much depends on the forms of territorial capital present and how they are utilized. In that perspective, landscape quality must be seen as a factor of attractiveness as it is assumed that characteristics of places depend (among other things) on its constituting natural and environmental, social and cultural components. The environmental capital is richer in regions characterized by high standards of landscape management. Landscape is therefore considered as a response for enhancing attractiveness and being part of competitiveness. A region with outstanding cultural features (good universities, high levels of quality of life, aesthetically inspiring and well-preserved landscapes) is capable of attracting the top skilled workers and the best creative talents; on the other hand, these contribute to further growth and diversity of the cultural fabric of the region. The landscape diversity that is characterizing the 3LP can be conceived as a factor of attraction that can be utilized to generate growth. Attractiveness through landscape has to be managed, and is a concept that shapes the territorial governance process itself, most notably the mobilization process through which territorial assets are activated.

In 2005, the overall demographic status of the 3LP, based on the DEMIFER typology, was equal to “euro standard”. Close to the average of ESPON space, the age structure is slightly older, a stagnating natural population balance and a positive net migration rate are prevalent. These regions are mainly found in Northern and Western Europe. Peri-urban rural regions of which 3LP is part of, have managed to attract large number of people throughout the period 2001-2007. Net migration for that period place the area in an intermediate position as it is the case for the whole central and densely populated part of the European “Pentagon”. If taking into consideration also the total visitor arrival rates, and according to the ATTREG regional typology, 3LP is described as a region with average net migration and visiting flow rates, along with 157 regions in Europe where net migration rates and arrivals rates are positive but small. Aachen-Liège-Maastricht MUA population (Morphological Urban Area) increased from 1 577 649 in 2001 to 1 588 592 in 2006 (+0.1%) and the FUA population (Functional Urban Area) increased from 1 990 946 in 2001 to 2 005 498 in 2006 (+0.1%). That score is fare behind other CBPMRs (Cross Border Metropolitan Area) such as Lille (+0.8%, +0.8%), Vienna-Bratislava (0.8%, +0.7%), Luxemburg (+1.5%, +1.1%), or Geneva (+1.3%, +2%) but better than Saarbrücken (-0.5%, -0.4%), Basel (-0.4%, -0.2%) or Katovice-Ostrava (-1.1%, -1.7%).

According to the ATTREG project, attractiveness can be weakened if attraction of flows is not embedded in local context. ESPON 1.3.3 project gives interesting elements by introducing the notion of Cultural heritage and Identity (CHI). According to the authors, CHI can be considered as the result and the engine of the social and economic dynamics of the community rather than a static set of features of the territory. It implies that CHI does not simply “exist” but it has to be continuously (re)-produced, (re)elaborated through cultural/social practices and is therefore intimately linked with civil society. The potential of (re)production is evaluated against the “intellectual capital” of the region, that is the extension of the “capacities” on which the region can count to further its heritage and identity or, else, to dynamise it and valorize it. Mapping the share of local workers engaging in cultural professions is a way of estimating how embedded culture is in local production system. 3LP gives a diversified picture where German and Netherland sides show respectively very high and high values, Belgian part is low to average.

Benelux has a long history of protection of environment, culture and cultural landscapes, showing therefore a high density of protected cultural landscapes and heritage conjuncts. Confronted with the user pressures (both local population and tourists, see ESPON 1.3.3 typology), the 3LP is located between an area of low to very low pressure (Belgium and Netherlands) and an area of very high pressure (Germany). When confronted to the potential multimodal accessibility (see ESPON 1.3.3), central Europe starting from Denmark, Belgium, Netherlands and towards Switzerland to North Italy is characterized by a high to very high accessibility and a high density of tangible heritage.

By combining all components of territorial capital (environmental, economic and human, anthropic, social and cultural, institutional), 3LP is described in the ATTREG typology as a “dynamic region in transformation” whose main source of territorial capital is the socio-cultural one but also enjoy high levels of environmental capital, resulting potentially attractive for a certain type of lifestyle migration. The Belgian side is more a region in economic transition that do not score too well in terms of environmental and socio-cultural capital but offer adequate level of infrastructure and economic stability.

3.5 The 3LP is in the core of the urbanized pentagon: challenge of suburbanization and opportunities for polycentric development[43]

Urbanization and metropolisation is a key element for understanding current territorial dynamics and trends. It has been highlighted in many ESPON reports and in the major European policy documents. In the framework of this project, the phenomenon has its importance as it deeply impact landscape directly by the urban forms of agglomerations or sometimes indirectly by the related infrastructure (mainly transport inducing new settlement). 3LP area is concerned by the phenomenon as it is situated in the core of the densely populated and urbanized European Pentagon, which is the result of a long historical process.

Large cities are more and more seen as focal point of competitiveness, mainly regarding their insertion in international economic networks. They are considered as central nodes in a globalizing world. Their degree of insertion are however not to be considered here as it might quickly get out of the scope of this project. However, it seems important to shed light on the core-hinterland relationships as those dynamics are more at stakes in terms of landscape dynamics. In terms of physical process, the relationship between cities and hinterland is illustrated by urban sprawl, which is the most important visual effect of metropolisation, leading often to homogenisation of landscapes and shrinking of agricultural land. Morphological form of cities is a key issue in terms of landscape, in addition to be the driver of urban environmental sustainability (environmental stress on air quality, noise, generation of waste).

In a demographic perspective, a link can be made between position of cities in urban hierarchy and migratory process: they attract young people and expulse older active. In small cities, this process occurs at regional level and is reduced to suburbanization whether in large cities, it occurs at the national and international level.

The 3LP urbanization profile (settlement of several agglomerations and presence of borders) imposes to consider polycentricity and cross border cooperation. Those elements are of paramount importance for this project and have been studied in several ESPON researches (more specifically the METROBORDER project). It appears that borders can be considered as an asset and that the potential of cross border regions has been underestimated so far. The importance of polycentric cross border organization in terms of economy and demographical weight make them comparable to large domestic cities.

[43] Based on METROBORDER , FOCI, DEMIFER, TIGER

The urban context characterizing the 3LP area shows a very mixed and complex image. 3LP seems to enter the fourth phase of urbanization, the “re-urbanization” phase, in line with the rest of the dense and central parts of Europe. In that phase, cities are characterized by their population growth in both core and peripheries, with often higher rates in the core cities. Liège and Aachen have indeed a growing Large Urban Zone (LUZ) but the rates between core and periphery don’t show the same values (decline in the periphery of Liege and growth in the one of Aachen). On the opposite, Maastricht seems to face a decline in the core and in the periphery. Smaller agglomerations of the 3LP (where data are not available in ESPON report due to the scale), are probably facing the so-called “counter urbanization” phase where a shift takes place to the urban periphery and beyond, towards the small and medium-sized town of less urbanized metropolitan surroundings, while the core area loses more people and jobs than the suburbs gain.

In terms of Metropolisation process, the MAHHL region (which 3LP is part of) shows a low score at EU level, as illustrated by the GaWC image - i.e the presence of economic headquarters and decision making. It can hardly be compared with other CBPMRs (Cross Border Polycentric Metropolitan Region) such as Copenhagen/Malmö or the Greater Region.

In terms of functional integration (based on the interaction and convergence between both side of the border), the MAHHL region shows an asymmetric profile. Generally meaning, we note that interactions are weak. There is a slightly positive annual growth (1.1%) in cross border employees between 2000 (16 587) and 2006 (17 695). This may be explained by the fact that rates and regulations of taxation vary strongly between countries inciting people to establish themselves to the country where they work. On the other hand, convergence within MAHHL area (based on similarity of GDP per capita and foreign citizenship of residents) is strong. Accessibility is to be used for structuring the urban regions, as a factor of competitiveness and to facilitate access to services. As highlighted in the FOCI project, 3LP is in the core of a very high contactability area, whether by rail or air but where the former can compete with the latter. In terms of governance, it has to be said that the geographical scope of the 3LP is not clearly defined which brings complexity in choosing the institutions that should be involved in the process. Phase 3 of the project will bring more information about the governance aspects but we can already point at an obstacle: the multilevel mismatch (asymmetric organization of competences on different political and administrative levels on either side of the borders) and the lack of involvement of municipal and economic actors. The geographical diversity can play as an asset or as an obstacle to a clear cross border strategy.

References

2010/C83/01: Consolidated version of the Treaty of the Functioning of the European Union. Source: OJ 83/47-200.

Böhme, K; Doucet, P; Komomicki, T; Zaucha, J; Swiatek, D (2011): How to strengthen the territorial dimension of 'Europe 2020' and the EU Cohesion Policy. Report based on the Territorial Agenda 2020. prepared at the request of the Polish Presidency of the Council of the Europan Union. Warsaw.

Brüll, Anja (2012): Biomass - a renewable energy source? Sustainable biomass (re)production through Landscape Quality Management. Dissertation Manuscript. Leuphana University Lüneburg, Institute of Sustainability Governance, Environmental Plannning.

Council of Europe (2000): European Landscape Convention. ETS No. 176, revised 20/10/2000.

Council of the European Communities (1992): DIRECTIVE 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. Source: OJ L206/ 7-49.

Council of the European Union (2007): Brussels 8/9 MARCH 2007 Presidency Conclusions. 7224/1/07 REV 1, revised 2/05/2007.

ESPON project 2.1.3 (2006): The territorial impact of CAP and rural development policy. Final report.

ESPON project 2.4.1 (2006): Territorial trends and policy impacts in the field of EU environmental policy. Final report.

EU Working Group on Green Infrastructure (2011): Task 1: Scope and objectives of Green Infrastructure in the EU. Recommendations. European Commission. Brussels.

European Commission: Our life insurance, our natural capital: an EU biodiversity strategy to 2020. COM(2011) 244, revised 3/05/2011.

European Commission (2006a): Proposal for a Directive of the European Parliament and of the Council establishing a framework for the protection of soil and amending DIRECTIVE 2004/35/EC. COM(2006) 232, revised 22/09/2006.

European Commission (2006b): Thematic Strategy for Soil Protection. COM(2006) 231, revised 22/09/2006.

European Commission (2006c): Thematic Strategy on the Urban Environment. COM(2005) 718, revised 11/01/2006.

European Commission (2010a): Energy 2020 A strategy for competitive, sustainable and secure energy. COM(2010) 639, revised 10/11/2010.

European Commission (2010b): Europe 2020 A strategy for smart, sustainable and inclusive growth. COM(2010) 2020, revised 3/03/2010.

European Commission (2010c): Investing in Europe’s future. Fifth report on economic, social and territorial cohesion. Luxembourg: Publications Office of the European Union.

European Commission (2010d): The CAP towards 2020: Meeting the food, natural resources and territorial challenges of the future. COM(2010) 672, revised 18/11/2010.

European Commission (2011): A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy. COM(2011)21, revised 26/01/2011.

European Commission (2012a): Amended proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund covered by the Common Strategic Framework and laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Council Regulation (EC) No 1083/2006. COM(2012) 496, revised 11/09/2012.

European Commission (2012b): Proposal for a DECISION on accounting rules and action plans on greenhouse gas emissions and removals resulting from activities related to land use, land use change and forestry. COM(2012) 93, revised 12/03/2012.

European Parliament and Council of the European Union (2000): DIRECTIVE 2000/60/EC of 23 Oct 2000 establishing a framework for Community action in the field of water policy. Source: OJ L327.

European Parliament and Council of the European Union (2006): DIRECTIVE 2006/118/EC of 12 Dec 2006 on the protection of groundwater against pollution and deterioration. Source: OJ L372/19-31.

European Parliament and Council of the European Union (2007): DIRECTIVE 2007/60/EC of 23 Oct 2007 on the assessment and management of flood risks. Source: OJ L288/27-34.

European Parliament and Council of the European Union (2009a): DIRECTIVE 2009/147/EC of 30 Nov 2009 on the conservation of wild birds. Source: OJ L20/7-25.

European Parliament and Council of the European Union (2009b): Directive 2009/28/EC of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC. Source: OJ L114/16-62.

Haaren, Christina von (2004): Landschaftsplanung. 1st ed. Stuttgart: UTB GmbH.

Haaren, Christina von; Galler, Caroline; Ott, Stefan (2008): Landscape planning. The basis of sustainable landscape development. Edited by BfN German Federal Agency for Nature Conservation. Available online at http://www.bfn.de/fileadmin/MDB/documents/themen/landschaftsplanung/landscape_planning_basis.pdf, checked on 15/10/2012.

Hermann, Anna; Schleifer, Sabine; Wrbka, Thomas (2011): The Concept of Ecosystem Services Regarding Landscape Research: A Review. In *Living Rev. Landscape Res.* 5. Available online at http://www.livingreviews.org/lrlr-2011-1, checked on 15/10/2012.

Informal Ministerial Meeting of Ministers responsible for Spatial Planning and Territorial Development (2011): Territorial Agenda of the European Union 2020 – Towards an inclusive, smart and sustainable Europe of diverse regions.

Kienast, Felix; Bolliger, Janine; Potschin, Marion; Groot, Rudolf S de; Verburg, Peter H; Heller, Iris et al. (2009): Assessing Landscape Functions with Broad-Scale Environmental Data: Insights Gained from a Prototype Development for Europe. In *Environmental Management* 44, pp. 1099–1120.

Opdam, Paul; Termorshuizen, Jolande W (2009): Landscape services as a bridge between landscape ecology and sustainable development. In *Landscape Ecology* 24, pp. 1037–1052.

Projectgroep Drielandenpark (2003): Ontwikkelingsperspectief Drielandenpark: open ruimte zonder grenzen = Perspective de developpement du Parc des Trois Pays : espace ouvert sans frontières = Entwicklungsperspektive Dreiländerpark: offener Raum ohne Grenzen.

TEEB (2010): A quick guide to the economics of ecosystems and biodiversity for local and regional policy makers.

Veijre, Henrik; Abiltrup, Jens; Andersen, Erling; Andersen, Peter; Brandt, Jesper; Busck, Anne (2007): Multifunctional agriculture and multifunctional landscapes - land use as an interface. In Ülo Mander, Katharina Helming, Hubert Wiggering (Eds.): Multifunctional land use. Meeting future demands for landscape goods and services. Berlin: Springer, pp. 93–104.

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.

ISBN