Liveland
Liveable landscapes: a key value for sustainable territorial development

Targeted Analysis 2013/2/22

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Part A Executive Summary & Part B Main report

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This basic report exists only in an electronic version.

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Abbreviations

ARN – Natural Recreation Area (Study case of Navarre, legal instruments)

BC Basque Country

CAF Common Analytical Framework. Also refers in the next to the Liveland spreadsheet (matrix)

CAP Common Agricultural Policy

CoE Council of Europe

CSPT - Social Council of Territorial Policy (Study case of Navarre, legal instruments)

EC European Commission

ELC European Landscape Convention

ESDP - European development perspective

EU European Union

FA - Factor Analysis

GIS Geographic Information System

LP Landscape Plan

LLP Local Landscape Plan

LUR Ljubljana Urban Region

NGO – Nongovernmental organisation

NP National Park

NUTS Nomenclature of Territorial Units for Statistics

MD Midden-Delfland

PCA - Principal Component Analysis

PP – Protected Landscape Area (Study case of Navarre, structure of participation and deliberation)

UNCED - United Nations Conference on Environment and Development

WTA - Willingness To Accept

WTP - Willingness To Pay

A Executive summary

In the framework of territorial cohesion principles, regional policies in EU increasingly focus on **harmonious territorial development towards sustainability.** Highly inspired by the European Landscape Convention (ELC, 2003), landscape and its integration within spatial planning has become a potential asset in regional development (ESPON, 2010). In this context, the relation between territorial development strategies and landscape planning is a political priority addressed now by ESPON with the Liveland project.

Liveland project assumes that landscape (evaluation, planning and management) ***"could enrich and improve spatial planning in different ways*** **(integrated and participatory approach),** ***being an asset for harmonious territorial development, smart and sustainable economic development"***– on the basis of the following statements**:**

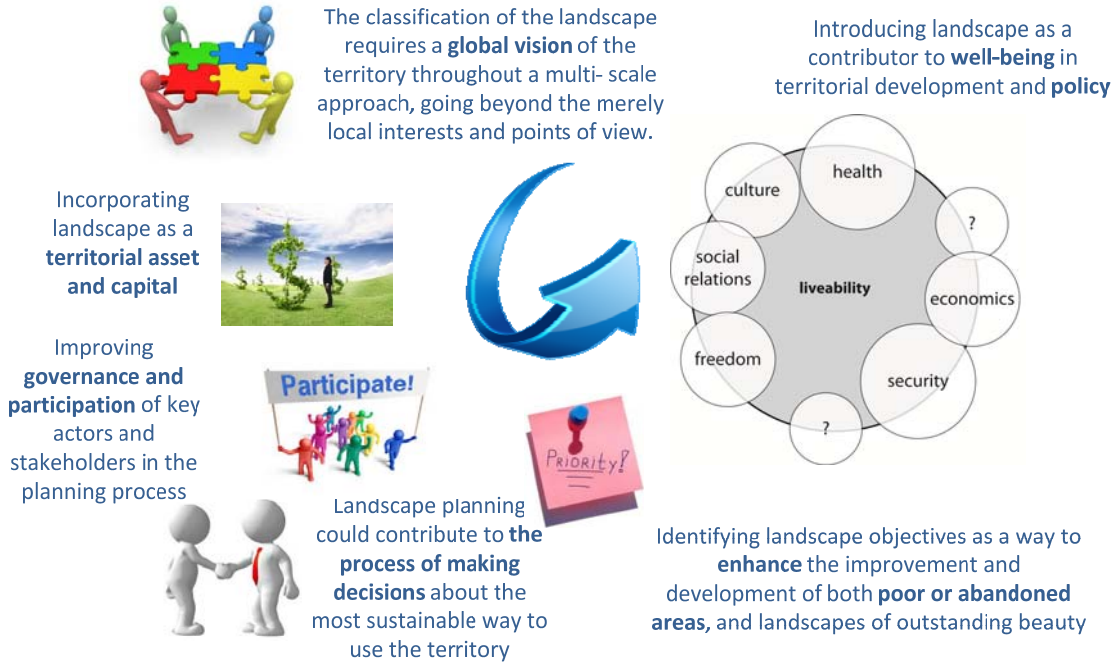


Figure 1 Liveland base statements

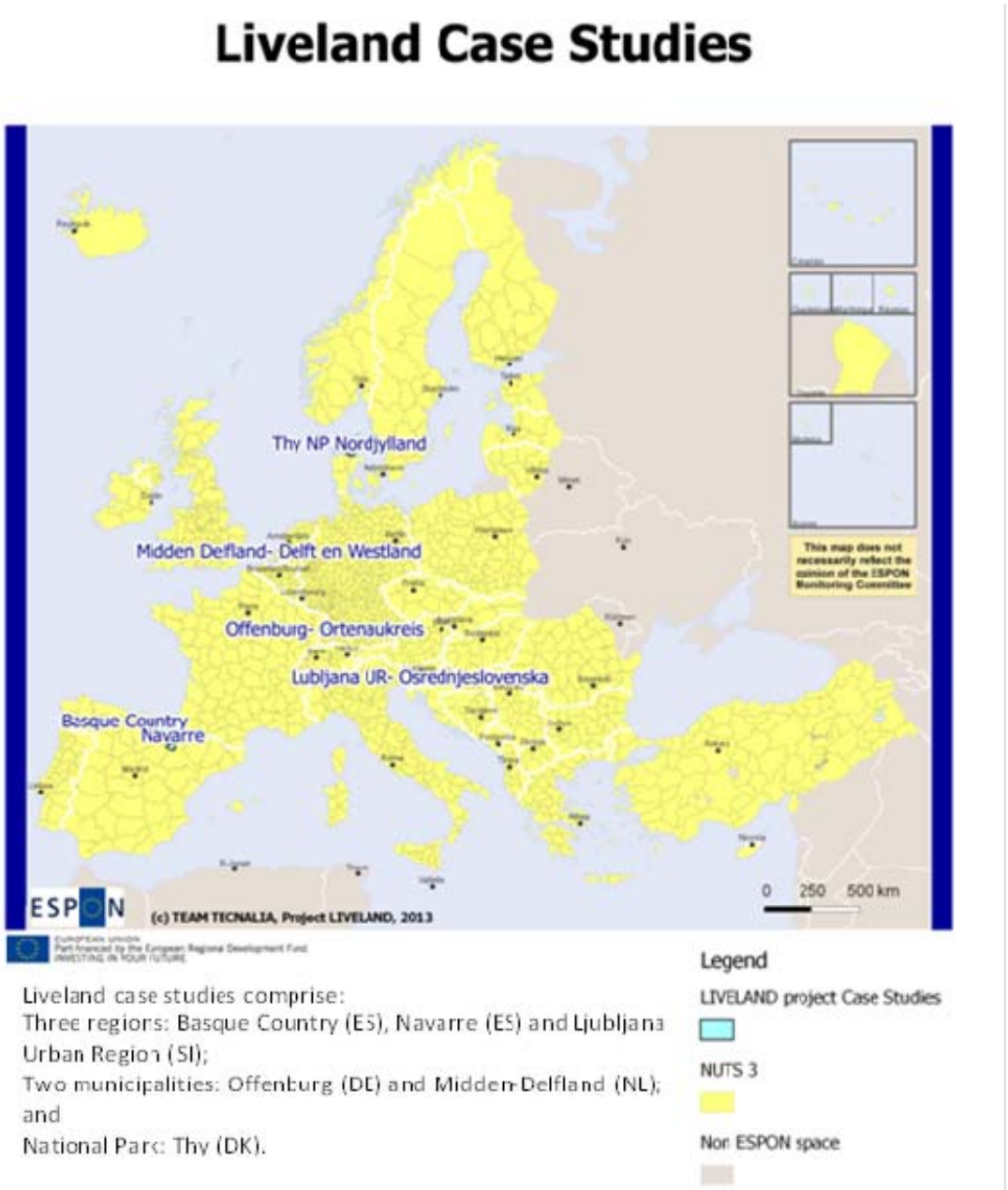
In order to prove this hypothesis the Liveland project mainly explores the concept of liveability and how it could be applied in policy making for "liveable landscapes". It c**omparatively analyses six landscape practices** in different European regions and provides **policy options and recommendations** for improvement of **landscapes integration into spatial planning** towards more sustainable territorial development. The analysis is conceived as an interactive exercise among researchers and involved stakeholders. Each case study represent a different planning cultures, levels of competences and scales of landscape policy making in EU, as briefly outlined below and further developed in the Annexes of the Part C Scientific Report of the Final Report. The cases have been selected on the basis of pragmatic criteria of data availability and distribution north – south, and new – old EU member states.

It is important to mention beforehand, that it is out of the project scope to look at the whole planning course in the involved cases but only at ***specific experiences*** where the stakeholders have identified ´good practices' of landscape planning to be explored in depth by Liveland, being the following:

1. **Offenburg Local Government** (Municipal Service) presented the making and implementing of the "Landscape Plan" (action plan on nature and landscape) for the area of Offenburg and surrounding rural municipalities. Offenburg will need to designate new land for residential and industrial functions, but also green and natural areas, to reach a harmonious spatial and sustainable urban development. The association of administration in Offenburg states that liveability is not only provided by beauty of landscape, but is related to a variety of all factors of human living, including the basic needs as well as additional aspects that make a good life, like culture and identity. (See Annex II of the Scientific Report)
2. **Navarre Regional Government**[1] (Department of Environment) presented the protection (designation and regulation) of the "Protected Landscape of the Basaburua and Ultzama Valleys. Orgi Oak Forest" It must contribute to biodiversity conservation as well as to the improvement of the living conditions of the population in those areas (socioeconomic tier of Liveland). Although the compatibility of uses (golf course, primary sector, forest, etc.) comes from old, with several actions to improve environmental conditions with cattle breeders (manure control) as well as to endorse local employment. (See Annex III of the Scientific Report)
3. **Basque Country Regional Government** (Department of Environment and Territorial Policy) presented the making of a "Landscape Catalogue" (a study to analyse landscape and define quality objectives) and the related "Landscape Guidelines" (on objectives) for the planning area Laguardia (inter-local scale). (See Annex IV of the Scientific Report)
4. **Midden- Delfland Local Government** (Municipal Service) put forward the making and implementing of the "Landscape Plan" (action plan on landscape) for the open space of Midden-Delfland and surrounding urban municipalities. Main ambition is improving the spatial quality of the open space in an intensively urbanized area to improve connections between the countryside and the surrounding cities (See Annex V of the Scientific Report)
5. **Thy National Park** (Governmental foundation) put forward the making and implementing of the "National Park Plan" (activity plan on management and development of nature and cultural landscape) in the National Park area (inter-local scale). (See Annex VI of the Scientific Report)
6. **Ljubljana Urban Region LUR** (Regional Development Agency) put forward the making of the "Expert Basis for Regional Spatial Plan" (study) for the Ljubljana urban area. The purpose of the project "Background for the preparation of regional spatial Plan LUR" was to prepare technical documents for the Regional Spatial Plan, which means to make the analysis of the space and its components, analysis of the individual areas in the region, to develop scenarios for spatial development and to propose solutions in form of spatial systems concepts. Expert bases represent the first phase of developing regional spatial plan of Ljubljana Urban Region. The region has a diverse landscape character. (See Annex VII of the Scientific Report)

Other well-known and widely recognized best landscape practices in EU have been also explored as external reference cases, although not deeply analysed: Province of South Holland (NL), Catalunya (ES), England (UK), Västra Götaland (SE), Switzerland, Fulufjället National Park (SE). See Annex I of the Scientific Report.

[1] The oficial name in Spanish is "Comunidad Foral de Navarra", in English "Foral Community of Navarre". The "Foral" means the Autonomous Act of Navarre (1841 and 1982). http://www.navarra.es/home_en/Navarra/Asi+es+Navarra/Autogobierno/Los+Fueros.htm>>



Map 1 Case studies in Liveland project

The transnational research team in Liveland project has confronted such an exciting field of study but not without facing also several constrains, both conceptually and methodologically speaking.

To start with, what we do understand by landscape?

Trying to find a single and common understanding of "landscape" within the planning cultures in Europe and among different disciplines is quite a challenge.

Science and humanities have increasingly split 'landscape' up into a number of different areas of expertise and some of these respond to rather narrow fields of interests. The sum of findings from diverse and thematically specific research is not equal to gaining knowledge about landscape as a whole.

However, the European Landscape Convention (ELC, 2003) has managed to provide a useful definition by referring to landscape as an "**area as perceived by people**"; this definition is

reminiscent of the old saying that 'landscape' refers to the "total character of an area of Earth" (allegedly but unconfirmed by Alexander von Humboldt).

Two other dimensions of landscape have been considered:

'Landscape as a resource' relates to a materiality found in physical space. The measuring for pertinent criteria might include the amount of oxygen found in water samples taken from river or the total number of trees counted in a suburb.

'Landscape as institution' refers to interactions of society with space and territory. Institutions is the term used here to describe how space/territory is socially ordered and organized, for example by protecting some areas and developing others, by allowing free access to some areas while closing off others, etc. A useful term in analysing landscape as an institution is that of 'cultural landscape'. For analytical purposes the concept of cultural landscape leads to questions such as: What is the history of a landscape, which traditions are related to this landscape, etc.? But also a none-historic understanding of cultural landscape is being also emphasized: e.g. recent developed landscapes energy-landscapes, mining-landscapes.

Having the three above mentioned dimensions of the Landscape concept in mind, Liveland project particularly focuses on the definition of "***Liveable Landscapes***" as an asset in regional development towards sustainability, emphasizing among other things the need for:

- "Balance between landscape protection and social welfare and economic development"
- "Improvement of governance and participation of key actors and stakeholders in the planning process", and furthermore.
- "Assess, evidence based, opportunities on how to consider and integrate landscape planning in the framework of territorial cohesion policies".

We will come back to the term ***"Liveable"*** later on in the text, since it is this our differentiating feature. But before entering on that.

How to measure landscape planning influence on territorial development?

A second major challenge was to scientifically evidence the relationship between landscape (planning and management) and a certain level of territorial development by means of coherent and widely used *spatial-based* indicators.

Any attempt from our side to isolate the influence of a single landscape practice as a driver for achieving current level of territorial performance in an area, would have been not only pretentious but also completely meaningless, particularly when trying to transfer to local scale the comparable data only available at regional scale.

Nevertheless Liveland offers a socio-economic and environmental framework to contextualize the subsequent analysis undertaken in the project. This framework allowed finding communalities in the overall setting of the case studies, clustering the case areas in view of their behaviour facing key European territorial challenges. The territorial challenges were later used for framing landscape policy options and recommendations in a final stage of the project.

How to assess liveability in landscape planning and management and its potential value for sustainable territorial development?

Liveability approach is our differentiating feature, and it has been used to analyse landscape value for sustainable development.

When confronted with the term '*liveability*' the first question that comes to mind is:

☞How might such a vague term be defined?

Liveability refers to: habitable; comfortable, worth living; endurable: something to make life more livable and agreeable. So Liveability is, in many instances, seen as closely related to happiness, well-being and quality of life, although it goes beyond that reflecting many subjective aspects which are not fully considered when analyzing quality of life in economic terms.

Many liveability rankings exist, which were originally designed by employers assigning hardship allowances as part of job relocation (for instance the well known the Economist Intelligence Unit's "Liveability Ranking and Overview") although nowadays those rankings are used for other purposes. A deeper analysis could be found in Chapter 3 of the (main) Final Report and also Chapter 2 of the Scientific Report)

Liveability is nowadays a subject of policy and it is on the agenda of planning. But still it is not clear which planning practices, actions and measures lead to increased liveability throughout landscape and how landscape as asset of liveability can be addressed within regional development.

The next question is:

☞How might any definition of liveability become useful in practical application?

A first step towards answering this question was to find out how liveability could be evaluated. To date a number of approaches on how happiness (and liveability) can be 'measured' exist: some use self-reported happiness; others would directly ask sources of satisfaction; willingness to pay (WTP) and willingness to accept (WTA) are also in use. But in most studies methods are triangulated. Nevertheless it is possible to group different types of (research) strategies:

- Liveability rankings make use of outcome of happiness research. They attempt to make findings operational and split them up into different factors. These are used to survey certain areas (countries and cities) and compare liveability by the degree of factor fulfillment.
- Happiness surveys ask people to report on what makes them happy. Consequently these studies report on what is the source of people's happiness.
- Sectoral research: The third group starts from a hypothesis to investigate certain aspects that might influence happiness. In many instances the basis for the hypothesis appears to be utilitarian.

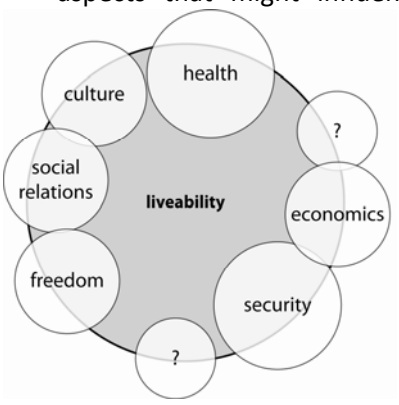


Figure 2 Components of Liveability

Although liveability is as previously mentioned closely related to quality of life, however 'quality-of-life indexes' are based mainly on economic factors. Such indices only reflect part of what is important for liveability. Many approaches to integrate qualitative factors into measuring of quality-of-life have been reported. Two mayor issues that exceed what some classic liveability indexes offer have to be taken into account:

- Where happiness is at the basis of quality-of-life any attempt to rely on objective measures need to be supplemented by parameters that reflect subjective aspects; for

the purpose of Liveland landscape aspects need to be considered (including what people cherish in their surroundings that contributes to their quality of life).

- Where landscape is to be considered, in relation to quality of life, measuring must attempt to include landscape as a holistic entity (as "an area as perceived by people"). The measuring of quality would have to include perception aspects and these would, at least partly, be subjective in nature.

Therefore Liveability is **more than** what can be measured quantitatively by **economic an environmental indexes**. Liveability is, in many instances, seen as **closely related to quality of life**. However 'quality-of-life indexes' are based mainly on economic factors. Nevertheless as a starting point -by literature review- it is possible to identify a set of components that are commonly agreed on to be important for liveability (See figure 2). Landscape function concepts seem to be a useful approach to make concepts of liveability and landscape useable for assessment. Moreover it meets the idea of multilevel assessment, as it is generally applicable on every planning level.

A similar approach was also presented in "The Millennium Ecosystem Assessment" (Reid 2005). This project was focusing on the relation of liveability and **Ecosystem Services** with a slight emphasis on the "Basic Materials for a Good Life". It was developed to an approach related to multifunctional landscapes (Groot and Hein 2007) that identified three mayor groups of landscape functions (Table 1). Based on this landscape contribution to liveability can be identified in six different fields: health, culture, social relations, economics, freedom and security with "freedom" being especially related to planning culture and participation (Table 1)[2].

	Regulation Function	Production Functions	Cultural Functions
Health	high	high	middle
Security	high	low	low
Social relations	low	low	high
Culture	low	low	high
Economics	middle	high	low
Freedom	not related to landscape services, but important in planning landscapes		

Table 1 Landscape-liveability spreadsheet: estimation of interrelation of landscape function groups and components of liveability

And, with regards to Liveland, a final question is:

☞How landscape might contribute to liveability?

A lot of research has already been conducted in the field of landscape's and nature's contribution to liveability mostly resulting in the conclusion that landscape, open green spaces, and a certain amount of natural elements in the environment lead to an increased well-being and higher liveability (e.g. Abraham, Sommerhalder and Abel 2010; Finke 2009; Körner, Nagel and Bellin-Harder 2009; Ward Thompson, Aspinall and Bell 2010). Consequently, a high quality landscape management and planning is a contribution to liveability and human well-being, which again is one of the mayor aims of regional development.

Through many studies and publications we could argue that the geographical context and the availability of resources, alongside the push of demographic evolution and the economic development have played a key role in shaping Europe's landscapes. Moreover, recent

[2] Eventually due to a preliminary analysis of the stakeholder's plans it turned out that the aspect of security would not result in any outcomes for all of the plans and was no longer used.

studies show that increased human landscape intervention is among the strongest pressures on biodiversity (Environment Council, 2010).

In order to analyse landscape contribution to liveability, Liveland project has undertaken a benchmarking exercise -conceived as a process of comparing and evaluating different landscape experiences in the involved case studies- identifying "best practices" at different stages of the planning process and its contribution to liveability components (see figure 2). Eventually, the outcomes of the benchmarking exercise provided some light on criteria for successfully integrate landscape planning and management into spatial planning and in term, in regional strategies, achieving a higher level of performance.

The question of "best practice" is often dealt with as an important "measuring stick", as the identification of successfully demonstrated practices may provide useful information on as well where to look for solutions, and what issues to use as means of comparison. Insight from others who have dealt with the same questions and addressed issues characterising the problems dealt with is important[3].

Inputs and feedback from stakeholders have been remarkably important in that respect, gathered through a series of workshops hold during the project life.

A spreadsheet was developed in order to quantitatively evaluate the different plans and landscape practices and to compare their performance regarding landscape's liveability by means of indicators. The spreadsheet (for now on called CAF) has been designed in such a way that allows normalization of indicators used towards a quantitative analysis. By quantitative procedures, responses can be used to generate a spider diagrams that may serve as a comprehensive analysis tool.

But some aspects could only be addressed qualitatively

During all phases of this research it became apparent that qualitative information is rather difficult to investigate, mainly because pertinent processes and procedures are normally not documented well or reflected on in planning or policy documents. Moreover it was found that participation models and decision making procedures have a high influence on liveability of landscape and the valorization of landscape.

To overcome such limitation an additional qualitative approach is used to understand how plans and policies address such issues. Qualitative interviews have been undertaken supporting the spreadsheet and diagrams by providing important inputs to be considered during the subsequent analysis.

Based on the benchmarking outcomes and aligned with the inputs from stakeholder's challenges and views, Liveland is providing:

- Policy messages and recommendations for policy development at general level and to professionals in the stakeholder regions to improve their processes and performance of landscape and territorial planning
- Key policy messages and awareness raising for the relevant European (EC and CoE) and ESPON, to encourage the incorporation of landscape in the territorial cohesion and territorial planning policies

[3] As a general principle: Andersen, B. and Pettersen, P-G. (1996): Benchmarking Handbook. Chapman and Hall, London; As a concrete issue in relation to landscape planning: Termorshuizen, J.W., Opdama, P. and van den Brink, A. (2007): Incorporating ecological sustainability into landscape planning. Landscape and Urban Planning 79 (2007) 374-384.

- Assessment on the use of ESPON data, objectives and results from relevant projects and studies as policy instrument- and identification of knowledge gaps to be covered by future ESPON projects.

Figure 3 bellow shows the strategy defined in Liveland in order to evaluate and compare the landscape practices in the project case studies in terms of liveability

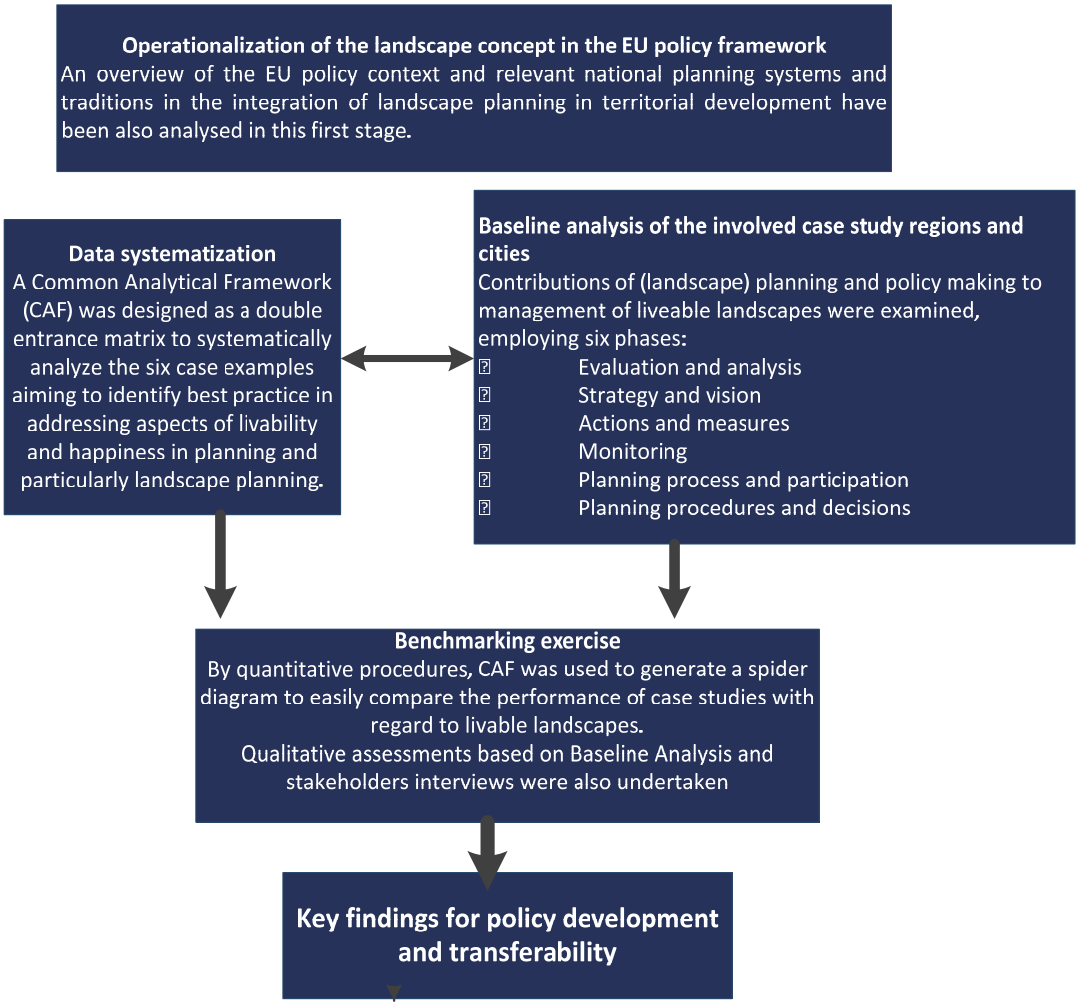


Figure 3 Liveland project methodological approach

1. What have we learned out of the benchmarking exercise?

→ Landscape is present in spatial planning

Throughout the six practices analyzed it could be seen that landscape concept is always present within land use and spatial planning although to a diverse extent. The concept varies depending on cultural and national contexts although the **ELC** offers somehow *a consensus (notice Germany did not sign the ELC)*

Besides, landscape is no longer perceived as only been ecological aspect. Besides, deliberatively or not, the notion of liveability is addressed, - although not mentioned as such-but present by means of its different components and landscape functions.

→ Investment in Landscape protection, planning and management is considered a key element in economic development (territorial asset – linked to cultural and economic functions):

- **Strengthen Landscape identity:** within the context of territorial cohesion policy in EU all regions should identify their own potentials for differentiation and singularity a very strong territorial value towards economic competitiveness
- **Strengthen Landscape attractiveness** and its link to: Quality of life, Tourism, real estate, other economic sectors: Public-private partnerships and investments.
- **Incentive for deprived areas** boosting landscape management as a way of promoting social inclusion and combating poverty, and avoid losing population

→ Also landscape is addressed as a key element in adaptation strategies (regulatory functions), water cycle, quality and supply, flooding regulation → direct correlation between "precipitation and run-off / land cover-use"

→ Boost spatial development patterns for enhancing landscape functions in terms of: Multifunctional landscapes, integrating compatible uses such as sustainable agriculture and forestry for instance, enhancing territorial branding, as is the case of Navarra, Basque Country, Midden-Delfland orThy National Park

Landscape as a territorial asset with the before mentioned functions, improving attractiveness and competitiveness, then as **key value** contributing

- to generate a **shared identity** and
- a **common vision** of territorial challenges-opportunities
- as necessary condition for the definition of **cross border spatial strategies**[4]

☞ In order to indicate which approaches, practices and actions are perceived as desirable for the integration of landscape into spatial planning, we have started by identifying those factors that lead to success and the ones recognized as failures or constraints by the stakeholders themselves in their territorial realities.

[4] ESPON 2013 LP3LP project Targeted Analysis.

http://www.espon.eu/main/Menu_Projects/Menu_TargetedAnalyses/LP3LP.html

Factors that lead to success

- **Mature spatial planning system and well developed planning systems allow better integration of landscape concept and approaches**

This means that such integration could be materialized in form of particular instruments for landscape planning and management as is the case in Midden-Delfland, Offenburg and Thy National Park or by means of the integration of landscape objectives, guidelines, actions and measures within existing spatial planning and/or land use planning instruments.

There is a debate regarding the **need for a formal landscape plan legally binding versus the integration of landscape considerations in the already available plans and instruments** of the planning system (land use plans at local level or spatial planning plans at regional/subregional level). The analysis of the practices revealed that having a formal landscape plan is not a guarantee for good practices.In terms of liveability other landscapes practices could be as relevant as the formal plans.

In the Basque Country catalogues define and characterize the landscape units with a multi-scale and multi-sectoral approach. The characterization is per se transdisciplinary. The objectives defined, also go beyond, on one hand the local scale, on the other a unique activity. This is only possible if different perspectives from administrations at different levels, general public (citizens) and other stakeholders (private sectors, NGOs, etc) are considered.

In Navarra the intervention is framed by the regional environmental legislation on Natural Spaces of Navarre, which is only capable to intervene with regard to construction investments when ecosystem management is involved. An example of such maturity is exemplified by the change of the local policy in environmental management of a communal mount in Orgi in order to destine it to public use, conservation of nature, and environmental education for the whole of society.

In Offenburg the nature and landscape policy has own instruments but is not generally legally binding. The main regulative power to implement the measures of the landscape plan lies within the comprehensive Land Use Plan. Landscape and Land Use Plan have been developed in parallel to gurantee best implementation of landscape issues in the legally binding land use plan.

In Midden Delftland a top-down approach is encourage from National interests encourage the protection of green spaces

- **Strong and comprehensive methodology for landscape evaluation within the landscape practices as a precondition of success**

A proficiency landscape and spatial planning expert group would be needed for the elaboration of the practices, together with quality supporting material, data and spatial information. A robust and comprehensive approach to landscape guarantees rational prioritization of actions and measures.

In the elaboration of the catalogue in the Basque Country is worth mentioning the definition of tangible objectives for each of the landscape units. Each objective is identified considering public perception and interests and it will be later translated into specific actions and in terms incorporated: a) as guidelines in the spatial comprehensive plans b) special actions – interventions in areas of special interest.

The model of Orgi in Navarra is an example of sustainable management, of analysis, and environmental protection that may be extrapolated to other zones of interest.

In Offenburg a natural science based approach is used in landscape characterization and evaluation towards planning and management. Very relevant is also the inclusion of cultural aspects and identity.

In Midden- Delfland making of a local landscape plan for a small area- surface 6.500 ha (65 km^2). Midden-Delfland is not an agricultural community, as an island surrounded by high density cities, but the inhabitants are integrated in the urban network, in a physical, social and mental way. The landscape is not static, but dynamic. There are always developments. The question is not how to stop them, but how can we use them in our mutual benefit.

Ljubljana Urban Region has its diverse landscape character as a key element for success but also a challenge in spatial planning terms.

- **Early participation and consultation**

In Midden-Delfland a strong participatory process led by external bureau- Bosch Slabbers tuin- en landschapsarchitecten constitutes a corner stone of the Landscape Plan.

In Thy National Park a successful participatory process was established: with 400 participants in the first meeting. The process was loosely steered by a steering group, and the stakeholders were divided into thematic groups. An example of the success of bringing the local stakeholders together was that a possible conflict between interests in agriculture and nature was solved by the stakeholders themselves, and that the precise borders of national park was agreed upon by the participants.

Very important in the case of the catalogues in the Basque Country is the consideration of objective component of landscape- expression of territorial system alongside the subjective component- Perception. In that sense, participation and citizens´ analysis and information during the process became essential during the work at earlier stages.

In Navarra Implication of a local public entity in the management of a protected space shared by the Regional Government and other public institutions; town council of the valley, Cederna-Garalur Association…etc.

- **Cooperation and coordination – Governance**

In Midden-Delfland the collaboration between different municipalities for the design of the plan later materialized in the cooperation for its execution, is patent.

In Offenburg the collaboration between different municipalities in administrative cooperation, which form a functional coherent area of spatial planning, represent a big factor for success.

Navarra experience was selected in the Best Practices Competition (Dubai in 2006), and listed as “good”. (http://www.unhabitat.org/bp/bp.list.details.aspx?bp_id=1744). The Orgi oak forest is an example of Natural Recreation Zone, included in a bigger Protected Landscape Area under protection by Regional Law 9/1996 on Natural Reserves of Navarre, which shows actions on Landscape protection and management where a protected area and an economic activity coexist. http://www.bosque-orgi.com/

- **Financing**

Finances are always short and getting funding is considered one of the big contains in the implementation of actions. However is also true that for spatial developments and for nature management local administrations are dependent on higher governments and private investors.

In Midden-Delfland support from the national government is crucial in the implementation of activities.

In the case of Orgi ARN in Navarra, management and maintenance, is almost 100% funded through an agreement between the Government of Navarre and Lizaso Council (Local Authority equivalent to NUT6). These activities are performed by a local company contracted by public tender until 2017. Other activities and investments are often financed by sponsorships or European initiatives or financial institutions.

- **Multi-scale and multi-sectoral approach to landscape**

In Midden-delfland an intensive multi stakeholder approach represents an effective way to create a common vision. But that takes time, patience and effort, qualified people and a design process of zoom-in and zoom-out. The design principals are working very well in the daily practice of the officials, especially related to private developers.

One of the most interesting things about national parks in Denmark is that both a top-down and bottom-up processes are applied: the Ministry prepared the legal framework (the Act on National Park (NP)) and assigned certain geographical areas (no precisely given borders) to possibly become NP's. The Act made it possible for the local level to discuss the initiative of establishing the NP – which ultimately had to be approved by the Minister by making a legal order on the NP. The NP has received its own budget for running the NP according to the Act on NP. The NP Plan is a management, activity and development plan – which is to be carried out by cooperation (on a voluntary basis) with the municipal, the national (environmental) authorities, and other public and private actors.

Failure factors or constraints

- **Landscape concept**
  - Still biased consideration of landscape in spatial planning mostly from the point of view of conservation and aligned with sector policy (protection of rivers, coastline management, renewal energy, and agro-forest). This is still the case in Navarra, Basque country and Ljubljana Urban Region. The Landscape practices in Navarra and Basque Country case studies are now overcoming such constraint.
  - Stakeholder from Ljubljana Urban Region recognizes its landscape as underused development opportunity. Further efforts must be done to promote this potential. The strength of its identity should be further activated.
  - In Thy National Park it is stated in the law that the minister can only establish a national park if there has been a public survey of the interest for the park. When some of the locals hear the word 'national park' they are skeptic because they think 'preservation'. So one first step was making them think differently about the concept of a national park.

- **Administrative and institutional constrains**
  - Political rhythms, changes in parliament composition and resources, might delay the process and in a worst case scenario even stop it.

- In Navarra and Basque Country administrative complexity and division of competencies at different levels unable the implementation of a comprehensive approach to landscape
- Complexity of political networks and the length of the decision making process in Midden-Delfland alongside with a decentralization process, made the process exhausting.

- **Participation and consultation**
  - Participation is a time consuming and expensive process.
  - Participatory culture in Slovenia seems still to be underdeveloped.
  - Public participation often starts too late when the mayor decisions have already been made.
  - Price of high level of participation; time consuming; maybe not all groups are represented; how much should the process be steered?
  - Full participation process is needed when you're making the plan and thus need the input.
  - Balancing nature protection and the wishes of different visitors.

- **Lacking governmental instruments** (Regulations, finances, cooperation, communication)

- **Implementation:** constrains (financial and in terms of resources)
  - Lack of financial resources seems to be a problem in most of the cases

2. Options for policy development

2.1. General messages

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EVALUATION AND ANALYSIS

- **Concentrate in local intrinsic features**:
- "**Multifunctionality of landscapes**"
- **Expertise of the team**
- **Measurable goals and targets** for evaluation of landscape and landscape "quality"
- **Investments in relevant data is important not only quality but relevance of the information is crucial**
- **Data management** Use of decision support systems through GIS data management and visualization.
- **Include biodiversity and accessibility** as a key aspect of liveable landscapes

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PLANNING PROCESS AND PARTICIPATION

- **Public participation and consultation at the early stages of decision making**
- However, "relevant public participation process are needed, considering:
  - Avoiding false expectation to participants
  - Sensitive management of the participatory processes
  - Time consuming and expensive consuming great amount of resources
- **Awareness raising**: to society in general and also within the administration
- **Better coordination** of formal/ institutional and social participation for improved and shared ownership

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STRATEGY AND VISION

- **Vision on liveable landscapes**: the ELC recognizes 3 elements that should be balanced: protection, development and management
- **Territorial Potential**: Include identity from specific types of land use: landscape character
- **Improve relation and connection between city and country side**
- **Perception on people and social vision** in the configuration of the strategy and vision is remarkably important.
- **Strengthen a multi-scale approach but also multi-sector approach** in the configuration of the strategy and vision-

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ACTIONS AND MEASURES

- **Responsible land use management:** Cooperation between Land Use Planning and Spatial Planning
- **Take the ELC implementation options as a reference**
- **Flexibility of the instruments :** multi-scale and multi-sectoral cooperation is essential for implementation of actions and measures
- **Specific options towards "informal" implementation** of actions and measures: Land stewardship; Territorial contracts, offsets and compensation
- **Financial support and prioritization of actions**
- The consideration of the landscape as a "public space" should not limit the ability of governments to finance their maintenance, especially in the case of unique landmarks with large crowds.

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PLANNING PROCEDURES AND DECISIONS (1)

- Landscape should as far as possible be **integrated in present spatial planning** instruments in order to avoid burdens and barriers in the planning system.
- **Incorporating landscape criteria** could facilitate coordination among the relevant sectoral policies and spatial planning
- **Combination of top-down and bottom-up approache**s as the most successful option towards multi-scale approach to landscape
- **Better coordination of timeframes**: This could be remarkably important, considering political cycles and duration of mandates
- **Avoid additional administrative borders in the planning systems**

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PLANNING PROCEDURES AND DECISIONS (2)

- **Boosting coordination among administrations**:
- Landscape Plans could become the basis for the **Strategic Environmental Assessment** of the planning instruments (at regional and/or local scale, (as well as for the EIA for project)
- **Formal Commissions:**

Navarra has particular spaces such the brand new Landscape Commission: Set the appropriate methodology for the implementation of the landscape in Navarra in line with the ELC

In the Basque Country the Committee of Spatial Planning is perceived as a key instrument for the coordination between different administrations

MONITORING The indicators should be able to measure the practice itself (policy, plan or program) and the achievements and actions implemented

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Table 2 General messages for policy development

2.2. Individual messages

Basque Country

1. **Strengthen Awareness rising - Planning culture:** There is a need for institutionalize and operationalize landscape concept and approach into the spatial planning culture and planning system in place, aiming at reducing particular interests or competences and boost a holistic approach to the territory.
2. **Improving institutional coordination- planning in practice:** A well know challenge in almost all regions at EU level is the need for improved institutional coordination, together with the strengthen stakeholder's involvement in the planning process.
3. **Boosting management of rural areas near densely populated metropolitan areas:** Integration between different public administrations and sectorial policies is seen crucial to define activities to preserve the landscape, and recognize their value in these particular areas. There is a need for a co-participation between private and public stakeholders.
4. **Reinforcing multiscale approach to landscape and spatial planning.**
5. **Development of methodologies of landscape evaluation.** There is still a need for the development of indicators for impact measurement: recreation of open spaces, protection of nature qualities, remediation or improvement of natural balance.
6. **Planning processes and participation:** need for a more interactive and participative process; institutions and stakeholders working together with
7. **Planning procedures & decisions:** The formulation of landscape quality objectives as well as guidelines for protection, planning and management and its integration into spatial planning and land use planning instruments constitutes the basis to give normative dimension to such objectives and actions.
8. **Actions and measures.** There is a need for instruments for attract public investments to overcome the challenge of getting a real implementation of the actions and measures proposed throughout the planning.

Navarra

1. Navarre should take advantage of **the operating consultative and participatory process**
2. Interesting to **meet, disseminate and implement the findings and recommendations of Social Council of Territorial Policy** (**CSPT)** and in particular Landscape Specific Commission formalized by the CSPT in June of 2013 which aims to "implement the landscape in Navarre under the ELC"
3. The Future Landscape Plan or Strategy of Navarre will set the framework for the **incorporation of criteria, determinations and guidelines for landscape** and for each spatial scale and tools available today
4. The CSPT council will provide the Government of Navarre guidance on methodologies adapted to Navarre for the perception and evaluation of the quality of the landscape.
5. **Use scientific materials available** at universities, research centres and groups linked to the study of the environment.
6. **To adapt the plans and projects to ELC requirements** should be programmed actions in all analysed components of Liveland with an integral and holistic vision of landscape.
7. It will be studied what **criteria and landscape guidelines should be incorporated into sectoral regional legislation, and in particular into the legislation on spatial planning and land use planning**

Ljubljana Urban Region

1. Ljubljana urban region is recognising its landscape as underused development opportunity and further efforts must be done to **promote this potential and effectively, more productively communicate** this vision with local community, residents and other specific stakeholders.
2. With current legislation and governance model, best solution would be to start a process of cooperation that would lead to the preparation of **informal spatial development programme and plan** which would engage local stakeholders from the early beginning and would reach the agreement by participation. Opportunities that lie in the landscape are strategically important for further development of the region and the strength of its identity so further attempts to activate them are necessary.
3. The active **participation of the interested stakeholders** (in particular the local public) in formal procedures would enable them to have a stronger and more creative influence on important spatial decisions. Basic instrument for the productive protection of the landscape would be not only to balance spatial interests and appropriate land use but to involve new programme, stakeholder and activity as well. It is only fair to point out from the early start of the process that landscape based development in Ljubljana urban region is competed with the huge potentials of the country's central urban area. Thereby the motivation must be strongly supported by common vision built in an open participatory procedure.
4. Landscape planning could thus be the creative fusion of development needs with protection mechanisms into a functional and harmonious urban and natural environment that produces a quality landscape.

Offenburg

1. **Development of a system for monitoring and evaluation** of planning outcomes as well as measures and actions.
2. **Implementation of proposed actions and measures** by strengthening the implementation of public-private-partnership as well as awareness raising and voluntary work.
3. **Strengthen the political power of landscape** in procedures and decision making especially by integration of aims, actions and measures in the legally binding comprehensive plan (land use plan)
4. **Continuous revision and update of relevant and quality data related to landscape and land use.** Development of a procedure to keep landscape data up to date. Especially to fulfil the plans function as basis for EIA and SEA.
5. **Boosting public involvement** as contribution to freedom and therefore to liveability.

Midden- Delfland

1. In line with the provincial guidelines on spatial quality to develop a ***municipal 'guidance'*** for spatial developments, which are more detailed as the provincial 'inspirations' and are the frame work for 'good consultations' between municipal licensing authorities and developers
2. **Existing execution organisation** 'Hof van Delfland' (as muliti-level organisation, including private stakeholders) should be continued and get a broader task: not only programming of spatial developments, but also of management of nature and landscape, including the new rural development program (as frame work for EU subsidies).

3. **Landscape Plan Evaluation.** LP (decided in 2010) Report on execution (2013) and Execution Plan Hof van Delfland should be evaluated the next years (for instance in 2015) by an independent monitoring institute (for instance the National Environmental Bureau).
4. The 'broad' evaluation could be the starting point of an analysis and development of tasks and measures in a Program for Nature, Landscape and Environment for the next 10 years. This new planning process could be done by a team of experts on landscape and environment.

Thy National Park

1. **Multifunctional land use** is a key feature of the Thy National Park in that only by focusing on this aspect does Thy National Park become more than just an enclosure for preserving the landscape. Balancing protection and use of landscape is already a key issue in the NPP, and this builds upon intensive cooperation and continuous dialogue between various actors, which is essential for avoiding possible conflicts among different interest groups.
2. **Prioritisation** of the activities in the NPP could be improved. Such a prioritization would also pinpoint to which parts of the plan the monitoring of progress should be focused.
3. **Monitoring and evaluation** can be improved. A first step is to think about what should be monitored: plan implementation; achievement of goals; activities; landscape changes? This has to be very concrete in order to be able to set up measures for how to monitor and evaluate.

2.3. Key policy messages and awareness raising for relevant European entities (EC and CoE) and ESPON

Could it be possible from the outcomes of the Liveland research to extract some messages for rising awareness on relevant aspects challenges and opportunities to EU (DG Regio mainly), the CoE and national authorities for strengthening the consideration of landscape in territorial policies towards sustainable development?

Our attempt to respond to such question is sketched bellow:

- Reinforce the relations between environmental policies and territorial development through landscape policies

- Landscape as key territorial value for territorial development in areas of special characteristics such as cross-border areas. This is the case of the ESPON LP3LP project[5] analyses Landscape as a cross-border territorial asset in Europe, providing recommendations at EU level in that connection (LP3LP Draft Final Report Chapter 5, version 14/10/2013).

- Strengthen the role of landscape in the urban-rural relationship

- Multifunctionality of landscape: there is a need for development of methods where the question of harmonious and disharmonious functionalities could be a way of improving the planning process.

[5] ESPON LP3LP Landscape policy for the three Countries Park http://www.espon.eu/main/Menu_Projects/Menu_TargetedAnalyses/LP3LP.html

- Liveable landscapes as a response to degradation and social exclusion
- Incorporation of landscape principles into the Common Agricultural Policy (CAP)
- Development of landscape quality objectives and criteria for action in relation to European infrastructures
- Inventory of Landscapes of general public interest across Europe as well as in the national states.
- More research is needed for detecting territories with complementary potential matters towards sustainable land use
- Need to develop tools which enables the inclusion of differences in relation to both intensity and diversity of the use of landscapes
- Landscape and Governance: Considering the political, technical and administrative dimensions of Landscape management, it could be argued that they perfectly fits into the governance principles, above all: subsidiarity and participation (social vision of landscape), openness and liability (administrative coordination and effective articulation and management of competences) efficiency and coherency (organization with respect to the different polices and administrative levels from local to European) [6]

3. Need for further research

Application of Liveland approach to other European territories at different scales

The use the CAF liveability spreadsheet out of the project case studies would be very interesting in order to provide more insights on best practices and policy options in EU.

We propose the **evaluation of the LPLP case study with CAF** liveability spreadsheet reporting to Liveland on the results and also on the usability of the tool itself.

Interactive design of the spreadsheet CAF

If a more planning authorities or researchers should make use of the CAF spreadsheet to analyse their planning practices the usability of the CAF should be improved. It might be possible to develop the spreadsheet into a highly automatic tool that might also include the visualisation of the outcomes of the analysis using e.g. spider diagrams as shown below. At least full options of Excel functionalities should be applied.

Components of liveability that are not addressed within the CAF

Initial attempts to fill the CAF- showed that a number of components of liveability that are related to landscape are not regularly addressed in official landscape plans and policies. For practical reasons 'security' is no part of the CAF. Nevertheless, these components and indicators are still important to characterize liveability of landscape as an asset in regional development.

Consideration of Biodiversity

In the present version of the CAF biodiversity is not a prominent aspect although many topics that relate to biodiversity are addressed. It is often argued that biodiversity is contributing to liveability in one way or another. It cannot be ignored that there are some

[6] COMISIÓN EUROPEA: "La gobernanza Europea. Un libro blanco" COM (2001) 428 final

evidences that point to an interrelationships in multiple dimensions between biodiversity and liveability. This needs to be investigated on in future revisions of the CAF-spreadsheet.

Landscape approach as a way to operationalize Ecosystem Services within spatial planning
Further explore the use of ecosystem services approach to landscape and identification of landscape functions, aligned to multifunctional landscape development towards for instance adaptation. It has been suggested for developing and/or evaluating “quality objectives”.

Criteria for landscape policy implementation
Further research work is required for the elaboration of a set criteria for the the selection of the policy interventions and a set criteria for implementation with regard to sustainable, responsible,efficient land use and land use management. This could be materialized in a target analysis, under priority 2 in the next ESPON programme.

Analysis of the potential for transferability of key messages to other European contexts
The transferability assessment and guidance for policy development will be addressed as a final stage of the project, generalizing the experiences, best practices and benchmarking of content and procedures of landscape and territorial planning and their impact on sustainable development as inspiration for future planning approaches (systems, planning and cultures).

Development of indicators
The follow up of landscape policies needs two types of indicators for different scales: regional and landscape practice. Liveland has already focused in the regional scale as it has been already exposed. Liveland project has developed a methodology for evaluation of liveability of landscape practices and on top of that, the research team has acquired enough experience in order to establish in the near future a set of indicators useful for both landscape views “top-down” and “bottom-up”.

The set of proposed indicators must be homogeneous for the whole Europe, both in the form of measurement as in the interpretation of results.

B Report

Preface

This Final Report presents the key outcomes of the Liveland project, an ESPON first attempt to address landscape planning, as a key territorial value and a potential asset for sustainable development.

Competitiveness and attractiveness of regions have become important aims of territorial and environmental policies in Europe, particularly as contributing to harmonious territorial development. Moreover, the European Landscape Convention states that landscape "*constitutes a resource favourable to economic activity*" and responds "*to the public's wish to enjoy high quality landscapes and to play an active part in their development*" (Council of Europe, 2003). The ELC also recognizes the importance of including the landscape concept in promoting the consolidation of the European identity. This is necessary because the development in all sectors of activities accelerates the transformation of landscapes whereby an important component of the identity is at risk of disappearing.

With this premise, the Liveland project hypothesis is that landscape approach (assessment, planning and management) - ***"could enrich and improve integrated spatial planning and urbanism in different ways, and be seen and used as an asset for harmonious territorial development and for smart, sustainable economic development"-*** considering that**:**

- The classification of the landscape requires a global vision of the territory throughout a multi- scale approach, going beyond the merely local interests and points of view.
- Landscape planning could contribute to the process of making decisions about the most sustainable way to use the territory.
    - Improving governance and participation of key actors and stakeholders in the planning process
    - Incorporating landscape as a territorial asset and capital, a key element for territorial development within cohesion policy principles
    - Introduce landscape as a contributor to liveability and well-being in territorial development and policy
- The identification of landscape objectives can enhance the improvement and development of both poor or abandoned areas, and landscapes of outstanding beauty.

The project mainly explores the concept of liveability and how it could be apply to policy making for liveable landscapes. Liveland, as a targeted analysis project, constitutes a practice oriented analysis about landscape planning and territorial development in some European planning systems.

The report structures in seven chapters. An introductory chapter describes the case studies analysed in Liveland project. It is followed by Chapter 2 introducing the conceptual approach to the connections between landscape and liveability. Chapter 3 is devoted to the methodologies used in the research, the description of the benchmarking analysis undertaken. This is followed by Chapter 4 which gives an overview of key findings of the benchmarking analysis. Chapter 5 presents an integrated interpretation of quantitative and qualitative analysis. Policy options and recommendations for policy development are enclosed in Chapter 6. The report ends with the identification of further analytical work after the closure of the project and the advices for future research within ESPON framework in Chapter 7.

1. Presentation of landscape practices studied in Liveland: Baseline Analysis Summary

The six Liveland case studies each represent a different planning culture and different levels of competences and territorial scales of landscape policy making, as is briefly outline below, and further developed in the Annexes of the Part C Scientific Report of the DF Report. They have been selected on the basis of pragmatic criteria of data availability and distribution North – South, and new – old EU member states.

The stakeholders in the Liveland project have chosen following 'good practices' of landscape planning:

1. **Offenburg Local Government** (Municipal Service) presented the making and implementing of the "Landscape Plan" (action plan on nature and landscape) for the area of Offenburg and surrounding rural municipalities. Offenburg will need to designate new land for residential and industrial functions, but also green and natural areas, to reach a harmonious spatial and sustainable urban development. The municipality of Offenburg states that liveability is not only provided by beauty of landscape, but is related to a variety of all factors of human living , including the basic needs as well as additional aspects that make a good life, like culture and identity. (See Annex II of the Scientific Report)

2. **Navarre Regional Government**[7] (Department of Environment) presented the protection (designation and regulation) of the "Protected Landscape of the Basaburua and Ultzama Valleys. Orgi Oak Forest" It must contribute to biodiversity conservation as well as to the improvement of the living conditions of the population in those areas (socioeconomic tier of Liveland). Although the compatibility of uses (golf course, primary sector, forest, etc.) comes from old, with several actions to improve environmental conditions with cattle breeders (manure control) as well as to endorse local employment. (See Annex III of the Scientific Report)

3. **Basque Country Regional Government** (Department of Environment and Territorial Policy) presented the making of a "Landscape Catalogue" (a study to analyse landscape and define quality objectives) and the related "Landscape Guidelines" (on objectives) for the planning area Laguardia (inter-local scale). (See Annex IV of the Scientific Report)

4. **Midden Delfland Local Government** (Municipal Service) put forward the making and implementing of the "Landscape Plan" (action plan on landscape) for the open space of Midden Delfland and surrounding urban municipalities. Main ambition is improving the spatial quality of the open space in an intensively urbanized area to improve connections between the countryside and the surrounding cities (See Annex V of the Scientific Report)

5. **Thy National Park** (Governmental foundation) put forward the making and implementing of the "Plan" (activity plan on management and development of nature and cultural landscape) in the National Park area (inter-local scale). (See Annex VI of the Scientific Report)

[7] The official name in Spanish is "Comunidad Foral de Navarra", in English "Foral Community of Navarre". The "Foral" means the Autonomous Act of Navarre (1841 and 1982). http://www.navarra.es/home_en/Navarra/Asi+es+Navarra/Autogobierno/Los+Fueros.htm>>

6. **Ljubljana Urban Region** (Regional Development Agency) put forward the making of the “Expert Basis for Regional Spatial Plan” (study) for the Ljubljana urban area. The purpose of the project "Background for the preparation of regional spatial Plan LUR" was to prepare technical documents for the Regional Spatial Plan, which means to make the analysis of the space and its components, analysis of the individual areas in the region, to develop scenarios for spatial development and to propose solutions in form of spatial systems concepts. Expert bases represent the first phase of developing regional spatial plan of Ljubljana Urban Region. The region has a diverse landscape character. (See Annex VII of the Scientific Report)

The national policy context

The most strict landscape planning regulations are valid in **Germany** in the federal legislation on Nature & Landscape, with a special possibility to develop formal, autonomous landscape plans with an own planning cycle. However, local implementation may still vary, as our case Offenburg demonstrates: Region or land (‘landscape programme’), Sub- Region or Kreis (‘landscape framework plan’) and Municipality (‘landscape plan’) can interact in various ways.

Although also in the **Netherlands** landscape planning used to be organised well as own policy field and in the framework of spatial planning, recently landscape policy at national level has almost entirely been abandoned. However, the planning system leaves ample room for voluntary initiatives from provinces (sub-regions) and municipalities. Our case of the municipality of Midden-Delfland shows for example of a very well developed landscape plan, politically approved. Also here a proper planning cycle is adopted for the landscape plan, while the associated actions are partly implemented through spatial planning regulations, partly through an implementation plan related to sector policies, such as nature, recreation and culture.

In **Spain** landscape policies are the competence of the regions. Both in Basque Country and in Navarra active development of strategies and policies is being promoted for landscape, e.g. through special landscape studies, partly as a component in Spatial Planning Law (Basque Country) or as a component in the Regional Law on Natural Resources (Navarra). These Laws cover landscape aspects in terms of vision at a higher spatial scale level.

In **Slovenia** the spatial planning and landscape planning is strongly oriented on heritage. The Nature protection Act (1993, 2003) includes a definition of the landscape in the context of nature conservation, whereas the importance of landscape diversity for the biodiversity is highlighted. The Culture Heritage Conservation Act (1999) defines the cultural landscape which might be valued for its heritage aspects.

In **Denmark,** the National Park Plan is based in the Danish Act on National Parks, which is under the competence of the Ministry of the Environment, while the NPP itself is also developed in cooperation with the Municipality. Landscape aspects can be taken on board as long as the municipality, voluntary agreements with landowners and cooperation with the public do not object.

Although all countries concerned – except for Germany – ratified the European Landscape Convention, in formal terms this has had limited consequences for the spatial planning system in the countries (see also chapter 4, 10.1 and 10.2 of the Draft Final Report Scientific Report). Table 3 gives an overview of the characteristics of the landscape policy as relevant for the different case studies. Table 4 shows planning system described by laws and actors and competences.

The concept of Landscape in planning	Recognition of Landscape in Law	Responsible ministry	National Policy on landscape?	Regional and local landscape plans?	Public participation	Themes / Spatial Elements
Denmark	*Yes, at national level Ratified ELC in 2000*	*Ministry of the Environment*	*Not a specific landscape plan but landscape is part of the national plan reports and the national binding restrictions*	*No specific landscape plans but the municipal plans are to cover both built-up and open land; hereby also taking landscape into consideration, particularly by using the tool of the LCA.*	*Yes, both legally binding, and in tradition and practice.*	*Ideally the Landscape Character Assessment is to cover all types of landscape, but in the planning policies there is some emphasis on the attractive landscape.*
Netherlands	*Ratified ELC in 2004 No recognition or definition of landscape in laws on Nature and Space*		*No national landscape policy since 2010. No more protected landscapes and financial programs. On-going attention on spatial quality*	*Local landscape plan (Voluntary)*	*Overall regulation on public participation, but tendencies of centralization and restriction of interested parties*	*Sectoral nature conservation, spatial quality, deregulation and decentralization*
Germany	*Landscape is mentioned in Nature Law but no definition of landscape is provided.*	*Federal Ministry for the Environment, Nature Conservation and Nuclear Safety*	*No (currently, the BfN is investigating the needs for national landscape policy making to comply with international statutes and strategies).*	*Regional landscape Plan (Binding, except for individual people) Local landscape plan (binding as integrated into local plans and ordinances)*	*Yes (mostly limited to what is legally prescribed)*	*Strong focus on nature conservation. In some instances additional emphasis is on cultural heritage and, more recently, on landscape energy potentials.*
Slovenia	*Yes, at national level mainly in Spatial Planning Act, Nature Conservation Act, Cultural Heritage Act & Construction Act Ratified ELC in 2003*	*As of 2012, the Ministry of Infrastructure and Spatial Planning and the Ministry of Agriculture and Environment.*	*Slovenia has prepared a specific document on the Implementation of ELC. Landscape included in relevant policies such as Spatial Management Policy (2001), the Spatial Development Strategy (2004) & the Spatial Order of Slovenia (2004)*	*No regional and local landscape plans*	*Yes, the importance of participation is stated in national level legislation and in national policy documents.*	*Focus on protection and reservation of natural and cultural landscapes.*
Spain	*The national level land law includes landscape protection.*	*No key institution or key planning agency at national level, the*	*No; but the autonomous communities have full authority to legislate for, regulate and execute spatial*	*Especially the autonomous community of Catalonia has been active in landscape planning.*	*Spain recognizes public participation through formalised measures such as public debate and hearings, and also through*	*Consideration of all types of landscapes Traditionally focus on cultural*

	The national Nature Conservation Act includes natural resource management and natural resources management. *Ratified ELC in 2007* *The autonomous community of Navarra recognises landscape in several acts and the Basque Country develops a Landscape Regulation and several instruments for landscape planning which will be eventually integrated into the spatial planning system.*	*autonomous regions have the full competence* *Only the Ministry of Education, Culture and Sports deals with the Cultural Landscapes and Heritage*	*planning. Some of the autonomous communities include landscape management (e.g. Catalonia). The autonomous community of Navarra and the Basque Country are in the process of including landscape management in policy.* *National Plans for the protection of cultural landscapes*	*In Navarra, a landscape plan will be drawn up.* *Galicia has a Law for the protection of Landscape Ley 7/2008* *The Basque Country is developing a Landscape Regulation.* *National level natural resources management plans (binding) manage the development of national parks and nature parks and natural resources. They all above all the other plans on different levels and legally binding.*	*principles such as the right of citizens to access information and for the government to provide it.* *Navarra states explicitly that planning should be democratic.* *The Basque Country recognises explicitly by law the right for public participation in the planning proces.*	*landscapes and protection of natural areas* *At present the Basque country "Focus not only in protection of natural landscapes, but also in recovering deprived areas".* *Navarra has focused on the protection and preservation of various soil types or specific areas, lacking specific guidelines regarding the landscape as a result of their own Spatial Strategy of Navarre (2005).*

Table 3 Characteristics of the landscape policy in force for the difference case studies

Table 4 Characterization of the spatial planning system valid for the case studies considered.

	Planning System	Planning culture	Laws and regulations				Competences			
			National	Regional	Subregional	Local	National	Regional	Subregional	Local
BASQUE COUNTRY	decentralized	top-down	No spatial planning law and competences at National level National Plans for the protection of cultural landscapes	Basque Law in Spatial Planning 4/1990 Spatial Planning Guidelines	Spatial Planning Guidelines applied to Territorial and Sector Plans	Land Use Plans /Master Plans Spatial planning guidelines provide determinations-binding content for Land Use Plans	Ministry of Education, Culture and Sports deals with the Cultural Landscapes and Heritage	Basque Government Ministry of Spatial Planning	Provinces – Integrated spatial plans in functional areas	Municipalities development of Master Plans
NAVARRA	centralized	top-down	No spatial planning law and competences at National level National Plans for the protection of cultural landscapes	Laws on Spatial planning Regional Law 35/2002, of Spatial Planning, Regional Law 14/2005 cultural landscape, Regional Law 9/1996 on natural reserves	N/A	Land Use Plans and permits on Master Plans	Ministry of Education, Culture and Sports deals with the Cultural Landscapes and Heritage	Navarre Government Ministry of Environment and Spatial Planning	N/A	Municipalities
LJUBLJANA URBAN REGION	centralized	top-down	Regional Spatial Plan, made by Regional Development Agency (national body)	N/A	N/A	Local Spatial Planning	Ministry of Planning Regional Spatial Plan	N/A	informal	Municipalities
OFFENBURG MUNICIPALITY	decentralized	top-down	National law on nature including landscape	Comprehensive and environmental planning Regional law on nature (incl landscape) and Landscape programm	Binding plans if approved by competent authority Landscape framework	Land Use Plan Binding plans if approved by competent authority	None	Land Baden-Württemberg	Region Südlicher Oberrhein	Offenburg Municipality
MIDDEN DELFLAND	decentralized	mixed	No law; No more policy on landscape	N/A	Spatial vision and regulation on space by province	Landscape plan (voluntary) and Land Use Plans (permits)	None	N/A	Province South Holland: space nature, landscape	Midden Delfland Municipality space, landscape
THY NATIONAL PARK	decentralized	mixed cooperative	There is not comprehensive national law on landscape but a number of landscape elements have their own regulations: - National Law on National	N/A No concrete landscape planning is carried out at the regional lever; however the regions are responsible for certain specific	None	Municipal Plan, Local Plans, and Landscape Character Assessments National Park Plan (NPP)	Ministry of Environment Nature Agency	N/A	North Denmark Region	Thisted Municipality National Park Board

			Parks - Nature Conservation Act Hunting and Wildlife Management Act - National Forest Act, and the spatial planning has its framework in the National Planning Act	landscape elements, such as ground water management						

1.1. Summary Basque Country: Landscape Catalogue and Guidelines in Laguardia

Central in the 'good practice' of the region of Basque Country (BC) is the making of a study on Catalogue and Guidelines in the sub-regional area of Laguardia, which has been prepared in the years between 2011 and 2012. The landscape Catalogues and Guidelines are the operational materialization of the Basque Government commitment with the ELC and its desire of integration of landscape consideration into spatial planning.

In the BC the concept of 'landscape' (as integrating approach) is rather new. The government, inspired by the ELC, aims at giving 'landscape' legal recognition and integrating landscape in the already existing planning instruments within the successful and stable spatial planning system. The study on Laguardia, entrusted by the Department of Environment and Territorial Policy, is one of the three pilot cases being undertaken nowadays in the Basque Country. The idea is that all the 15 planning areas in the Basque Country develop their Landscape Catalogues and Guidelines. But this will be done in several stages.

The main ambition of the study is the filling-in of methodologies (from analysis to action) and the development of instruments, to influence other governments and private stakeholders.

Landscape **CATALOGUES**: Analyze and evaluate landscapes in each of the Functional Areas and define quality objectives. The identification of many landscape qualities on maps is bundled in Landscape Units, which have a certain character distinguished to others. The evaluation of landscape values results in a map with Areas of Special Interest, which is the basis for further policy development. Special Interest can cover high identity value as well problems because of degradation. Related to the geographical information, next phase is elaboration of objectives and measures. The objectives represent principles of conservation and protection of certain landscapes and creation of new landscapes.

Landscape **GUIDELINES**: Legally incorporate the landscape quality objectives into territorial planning. Regarding actions is distinguished between binding rules and recommendations. Most actions are related to Areas of Specific Interest and cover countryside (vineyards, orchards) and built-up areas (historical sites). Derived from the Guidelines there are two mechanisms of measures implementation:

Landscape ACTION PLANS: For implementation of specific measures in specific areas that may require special attention due to its vulnerability. The study on Laguardia made proposals for several of such plans, some on specific landscape units (like a river valley) and some for a big area (like a network of scenic routes).

STUDIES OF LANDSCAPE INTEGRATION: related to projects and activities that will potentially have a significant impact on landscape

The process of public participation has been quite ambitious and challenging. Several forms of informal participation focused to stakeholders, different actors and general public were used like interviews (also on E-mail), workshops / round tables and social media.

1.2. Summary Navarre: Protected Area Orgi

The case of Navarre Region is a Protected Landscape including the Natural Recreation Area of the Orgi Oak Forest under regional law on Natural Reserves (1996). Its vision and strategy and is mainly related to natural character and biodiversity protection. Educational and recreational component is added in the enclave of Orgi oak.

In its execution and implementation process has been public participation processes as befits environmental and territorial procedures established by law in Navarre. Plans of use and management of natural reserves of Navarre are considered planning instruments at sub-regional level.

The character of the protected area is "countryside" and is determined by human use in the past: is a mosaic of oak forest and pastures of traditional uses (livestock and agriculture). Focus of protection is on nature and biodiversity values. One of its peculiarities is the presence of a type of oak that can live in the waterlogged soils at the bottom of the valley, the English oak, many of which are a hundred and even two hundred years old. Those primitive oak groves were spread over the humid valleys of northern Navarre. Since recent times, the action of man has made them disappear, converting the land into agricultural terrain and prairies.

An important goal of Navarre is 'multifunctionality' and compatibility of strict nature protection (European importance and EU Natura 2000 network) and recreational use as Golf Course.

17 years of functioning (1996/2013) have taken place with the experience of public use of nature, Orgi has received 650,000 visitors who are satisfied with the space. Monitoring annual report of indicators exist. In the case of Orgi is monitoring the indicators of participation, volunteerism and environmental education.

Achieved results

1. Establishment of a local management organisation shared by the Regional Government and public institutions, private organisations, etc.
2. Change of the local policy on environmental management in direction of public use, conservation of nature, and environmental education.
3. Creation of local employment, to develop the plans and programs of Orgi.
4. Preparation of environmental volunteer programs.
5. Through the steering of the type of visitors to the space, and attitudes of these, the environmental impact on the space has been diminished.
6. Adapt a natural space for persons with different types of incapacities.
7. Create a meeting place between different social groups, urban and rural, facilitating the integration of other cultures and creating access, without exclusions, to nature.
8. Management of a protected area, through economic austerity and with rustic criteria.

1.3. Summary Ljubljana: Study Regional Spatial Plan

The Ljubljana Urban Region in Slovenia is an informal, voluntary cooperation of 26 municipalities, chaired by with the central city of Ljubljana. The study and development of a Regional Spatial Plan was commissioned by the Regional Development Agency, which is a national agency. The 'expert basis' for this Plan was prepared between 2008 and 2009. The comprehensive study addresses all relevant spatial issues (environment, demography,

settlements, infrastructure etc.) and gives special attention to natural resources and landscapes, in particular the less recognized ones.

The Ljubljana Urban Region is inspired by the European Landscape Convention and searches development potentials in landscapes, going further than only protection as Landscape Park, which exists since long in national policy.

In the study 3 scenarios of general spatial developments are presented, assuming different future changes: gradual change, high ambition on quality of life and adoption to climate change. The outcomes of these scenarios were translated into spatial concepts and guidelines for landscape development. It contains guidelines for protected areas (concept of protection through use, professional management), forestry (sustainable management) and agriculture (organic production and urban-rural partnership).

A second ambition is the active participation of the interested stakeholders (in particular the local public), which would enable them to have a stronger and more creative influence on important spatial decisions. Basic instrument for the 'productive protection' of the landscape would be a balance in spatial interests and appropriate land use. The plans indicate that more stakeholders should be involved in a new program of activities as well. Landscape planning could thus be the creative fusion of development needs with protection mechanisms, which produces a high quality landscape around the Slovenian capital.

The results of the study in the years after 2009 were not adopted by the political decision makers in the cooperation of the Ljubljana Urban Region. So until now (2013) no further activities are under way for the implementation of a Regional Spatial Plan.

1.4. Summary Offenburg: Landscape Plan

The focus of the 'good practice' of the association of administration of Offenburg is on the development of the Local Landscape Plan (LLP), which has been prepared in cooperation of the city of Offenburg and surrounding municipalities in the years between 2006 and 2013. To better integrate landscape topics in spatial planning the LLP has been prepared parallel to th Land Use Plan that is the only generally legally binding plan.

In Germany 'landscape' for a long time has been linked with spatial planning already. It is seen as part of nature policy, where 'nature' is the overarching concept. The country has a tradition of comprehensive planning, including an elaborate system of plans on all levels. The drawing up of landscape and spatial plans is obligatory. A municipality is an executing government, with strong instruments for (detailed) steering of spatial developments. The LLP binds the involved governments; the local spatial plan binds private actors.

Main ambition of the LLP Offenburg is protection and improvement of biodiversity, natural resources and beauty, subsidiary to national law. Handling of spatial conflicts and deciding on future spatial developments (conforming to higher order plans) are the main functions of the plan. Goals are related to protection, development and restoration. These goals are detailed for nature, landscape and environment and represented on maps in a detailed way.

The LLP delivers a program of actions of governments, mainly as 'physical measures'. The program contains 3 items: green spaces and recreation, natural household and protected areas. A large amount of 'tables with measures' are delivered, which contain short descriptions of concrete physical developments.

Another challenge of the Offenburg-example was the cooperation between municipalities, officials as well as politicians. Participation of private stakeholders in the planning process took place, but in an extensive way. There was informal input from experts from NGOs.

Implementation of the LLP has started via the Land Use Plan and related permits.

Implementation of 'autonomous' projects, regarding nature, landscape and recreation seems rather weak, probably because of lack of financing. There is no cooperative execution organisation.

1.5. Summary Midden Delfland: Landscape Plan

Central in the 'good practice' of the municipality of Midden-Delfland (MD) is the making and executing of the Local Landscape Plan (LLP), which has been prepared in cooperation with other governments in the years between 2007 and 2009. This plan is now implemented in an execution organisation, which includes a bigger area of green spaces.

In the Netherlands 'landscape' (as spatial quality) has since long been integrated in the spatial planning on all levels. The country has a broad set of plans on space, but recently only on regional and local level. A LLP is a voluntary instrument of the municipalities. Spatial plans on regional and local level are obligatory. A municipality is an executing government, with strong instruments for (detailed) steering of spatial developments. The LLP binds the involved governments; the local spatial plan binds private actors.

Main ambition of LLP is creating a 'green space' in an urbanized area of very high density. Goals are related to the relation (partnership) between city and countryside and to management of landscape by agriculture (dairy sector).

In MD there are spatial conflicts between such components as recreational areas (parks) and agrarian landscape (accessible cultural landscape) versus other functions, like spread dwelling (which should be an exception outside urban areas) and industrial agriculture (horticulture). Choices have been made in earlier spatial plans (called 'visions'); the LLP makes an operationalization.

The LLP focuses not on designations, but on development and management of landscape. It defines actions of governments, mainly as 'physical measures'. The objectives of the LLP are not translated into measurable targets in words, but directly carried on to concrete measures, mainly described on maps. So the 'Perspective 2025' is an action plan, which includes an overview on a synthesis map, 'principles of design' (guidelines) of future spatial developments and additional maps with networks of ecology, water, public transport and 'slow roads'.

During the process of making the LLP stakeholders and the officials of the municipalities felt the need of a more detailed approach, which resulted in a elaboration of smaller landscape units (19 polders). For each polder a map was made which showed the existing qualities and another map showed the desired development direction. This approach was crucial for the success of the LLP. The 'elaboration per polder' includes maps with description of character and designation of nature, recreation, demolition of glass houses and new dwellings. These detailed guidelines should be useful in the practical execution of the plan, especially in permits for private initiatives of developments.

Another challenge of MD municipality was the participation and involvement of private stakeholders in the planning process. During the preparation of the LLP many and diverse stakeholders (organisations and individuals, also from surrounding cities) were involved. Many working forms were used, like 'cafés', 'design tables' and 'kitchen table talks'.

In the implementation of the LLP a lack of financial resources (because of national budget cuts) has been a limiting factor. But in the execution organisation, together with other governments, a solution will be found.

1.6. Summary Thy: National Park Plan

The Thy National Park Foundation developed the first national park plan for the Thy National Park in 2010.

This foundation has no formal power, but has the task of managing and developing the areas – protected as well as non-protected – that lies within the borders of the national park and to mediate between the different stakeholders and authorities in order to fulfill the visions and goals of the national park plan.

The NP was chosen in 2007 by the Danish ministry of Environment to be the first Danish national park, after a pre-study in which all stakeholders and authorities in the designated area were involved and came to local agreement. The decision-making process on the goals and specific extent of the NP was a combination of bottom-up negotiations and top-down legal approval.

The NP Plan is a management and development plan on the activities in the national park and of the NP Foundation. It is based on voluntary cooperation with the land owners (primarily the Danish Nature Agency, the municipality and local farmers). The goal is to protect and develop the nature (dunes, heath and forests) and the landscape (historic sites) while also further develop outdoor activities and tourism in a sustainable way and to promote education.

The measures are targeted to reach a balance of protection and use for e.g. recreation, business and fishing. One instrument is zoning of different levels of protection; which also contains a temporal aspect, such as a stronger protection level of certain areas in e.g. breeding season.

2. Conceptual approach to the connections between landscape and liveability

When confronted with 'liveability' the first questions that come to mind are: how might such a vague term be defined and used? How might any definition of liveability become useful in practical application? And finally, with regards to Liveland, the question is how landscape might contribute to liveability. This is extensively described in Chapter 2 of the DF Scientific Report.

2.1. Happiness, Well-Being, Quality of Life and Liveability

Liveability is subject to policy and it is on the agenda of planning. Pertaining to people's surroundings, the most important measure of liveability appears to be the so called 'self-

reported happiness'. For Liveland we suggest to use 'happiness' in this narrow conceptualisation[8].

What is of interest then, from the realm of happiness research, are conceptualizations of happiness, and its measurement in relation to landscape explanations. Also for the purposes of Liveland, we need to turn the attention to the happiness concepts of being.[9] A number of approaches exist that might lead to ideas of how happiness can be 'measured'. One is the idea of direct happiness ranking; another one is the ranking of liveability employing parameters that definitely are closely related to happiness. A third one is the concept of using human well-being indexes; these are mainly oriented towards some of peoples' basic needs (This measure would be one that most closely relates happiness to the concept of possession).

2.2. Operationalization of Happiness, pertaining to liveability

There are different methods to evaluate the influence of environment and human behaviour to happiness. Some methods use self-reported happiness; others would directly ask sources of satisfaction. Willingness to pay (WTP) and willingness to accept (WTA) are also in use. But in most studies methods are triangulated. It is possible to group different types of (research) strategies:

- Liveability rankings make use of outcome of happiness research. It attempts to make findings operational and split up into different factors. These are used to survey certain areas (countries and cities) and compare liveability by the degree of factor fulfilment. For Liveland such examples are important sources for operationalization.
- Happiness surveys ask people to report on what makes them happy. These studies report on what is the source of people's happiness. For Liveland such examples are important sources for what happiness is for people.
- Sectoral research: The third group starts from a hypothesis to investigate certain aspects that might influence happiness. In many instances the basis for the hypothesis appears to be an utilitarian one For example, FREY[10] assumed that, because many people spend a lot of time watching TV, it is likely that watching TV is of benefit to people's happiness – a hypothesis which the studies did not approve. For Liveland such examples are important sources for what happiness is for people and how it could be influenced.
- Liveability is, in many instances, seen as closely related to quality of life. However, where 'quality-of-life' indexes are based mainly on economic factors, such indices only reflect part of what is important for liveability. Many approaches to integrate qualitative factors into the measuring of quality-of-life have been reported. Two mayor issues have to be taken into account that exceeds what some classic liveability indexes are offering:

[8] "Satisfaction of life" is what could be defined as the narrow meaning of the term happiness.

[9] The 'Concept of Being' relates to a definition of happiness that emphasis what is called 'the event driven society. It has recently replaced the 'concept of possession'. In difference to that the basic idea is that purchased goods and services provide a feeling or even a point of identification to people while in former times in happiness research utility was the most important indicator.

[10] Frey (2010: 93–106)

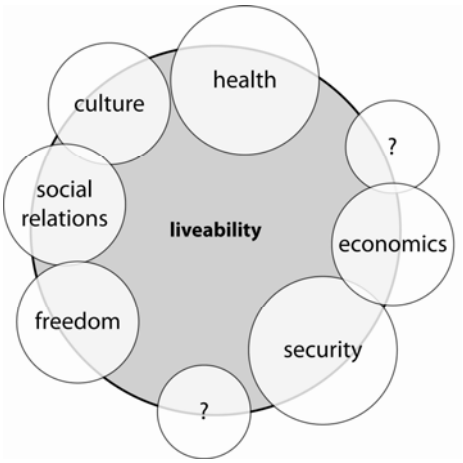

Figure 4 Components of Liveability

Where happiness is at the basis of quality-of-life any attempt to rely on objective measures need to be supplemented by parameters that reflect subjective aspects; for the purpose of Liveland landscape aspects need to be considered (including what people cherish in their surroundings that contributes to their quality of life).

Where landscape is to be considered, in relation to quality of life, measuring must attempt to include landscape as a holistic entity (as "an area as perceived by people").

The measuring of quality would have to include perception aspects and these would, at least partly, be subjective in nature. A list of components that are commonly agreed on regarding what is important for measuring liveability in connection to quality of life are included in (Figure. 4).

2.3. Linking Liveability Research and Landscape Concepts

Landscape function concepts seem to be a useful approach to make the holistic concepts of liveability and landscape useable for assessment. Moreover it meets the idea of multilevel assessment agreed upon in the application, as it is generally applicable on every planning level. Nevertheless the parameters of assessment might vary depending on the scale. A related approach was presented in "The Millennium Ecosystem Assessment". This project was focusing on the relation of liveability and ecosystem services with a slight emphasis on the "Basic Materials for a Good Life". The approach was further developed to an approach related to multifunctional landscapes.[11]

Therefore we propose to use a spreadsheet of liveability parameters (Table 5) on the one hand and landscape functions on the other hand to identify and describe landscapes contribution to liveability. It should be clarified that this spreadsheet is neither final nor exhaustive, but should serve as the basis for a discussion on landscape contributions to liveability. Output from the first stakeholder meeting especially on the landscape concepts present in the stakeholders' policy, plans and concepts of liveability have to be integrated[12].

	Regulation Function	Production Functions	Cultural Functions
Health	high	high	middle
Security	high	low	low
Social relations	low	low	high
Culture	low	low	high
Economics	middle	high	low
Freedom	not related to landscape services, but important in planning landscapes		

Table 5 Landscape-liveability spreadsheet: estimation of interrelation of landscape function

[11] Groot and Hein (2007)

[12] Freedom concept in Project Liveland is focused in participation mechanisms, but this concept has a wider meaning related to citizenship building.

3. Liveland methodological approach

Liveland applies a clock-wise strategy -as shown in the figure bellow- where all different research activities undertaken in the project move towards a benchmarking exercise conceived as a process of comparing and evaluating different practices in the involved case studies with the aim to achieve a higher level of performance, here specifically providing criteria for successfully integrate landscape planning and management into spatial planning and in term, in regional strategies. A detailed explanation of the methodology followed in the project is included in Chapter 5 of the DFR Scientific Report.

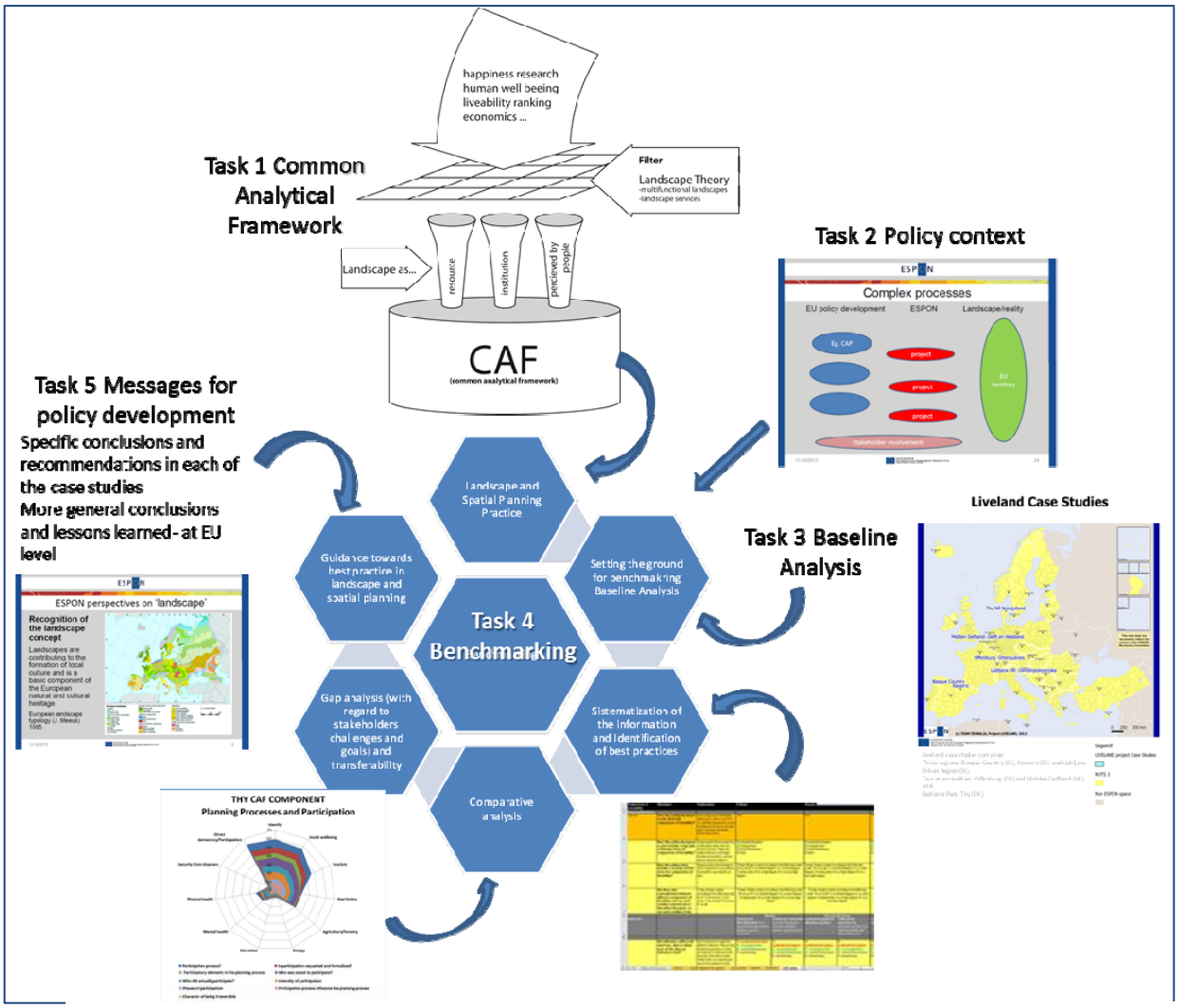

Figure 5 Interrelationships between different research activities in Liveland project

The benchmarking exercise aims at bringing up the specific approach to landscape and territorial planning in each case study, facilitating the exchange of experiences and feedback between the participant stakeholders. It intrinsically involves a process of interaction between researches and stakeholders (professionals of planning) accomplishing three goals:

1. A **comparison** between the practices of different administrative territorial entities
2. A **tool and agenda for the stakeholders** to discuss and compare their performance at two potential levels:

- Internally, aiming at providing a comparison between different practices of landscape and territorial planning within one's own organization by evaluating own practices against the other cases and thereby acquire an important contribution to the internal knowledge management efforts.
- Externally through testing (by the research group) and evaluation (by the stakeholders) the usability of the results, indicating the options for generalizations beyond their own situations.

3. **Transferability assessment and guidance for policy recommendations** to be addressed in the final stage of the project.

The expected results are:

- An overview of good and best practices of landscape and territorial planning, with focus on approaches which can serve as general inspiration for landscape planning in a territorial planning context.
- Examples of actions or measures which have proven towards harmonious and sustainable territorial development, like for instance combining landscape protection and socio-economic development.
- As illustration of good practices, examples of impact on regional development where socio-economic development has gone hand in hand with successful landscape protection and management should be taken forward. This could be done by means of:
    - an overview of the current practice of landscape policy making,
    - examples of implementation of European landscape policy in the national regulations,
    - identification of terms, concepts and practice shared among the landscape policy makers, and finally
    - identification of concepts related to practices and procedures constituting the local, national and regional planning and management in each of the stakeholder-countries.
- Interaction between researchers and stakeholders: input to a higher level of practice of the stakeholders and recommendations for benchmarking tools for evaluation and improvement.
- A set of indicators that can serve as a common base for comparisons and benchmarking performance in landscape and territorial planning entities.
- Besides, appropriate indicators and examples of good practices that can serve a broader audience in the 'ESPON space'.
- And finally a draft version of "Guidance towards best practice in landscape and spatial planning" that could be used in different territorial realities in Europe.

The proposed methodology for the benchmarking has 6 stages:

- **Stage 1. Domain to benchmark.** Landscape and spatial planning practice- in six selected case studies in Europe.
- **Stage 2. Setting the ground for benchmarking: Current status**. A characterization of the case studies involved in the project constitutes the basic input for the benchmarking exercise. The policy context a long side the spatial character, the planning system and competences, the government challenges, vision and strategies and data sources, have been analyzed for each of the case studies (See Annexes I to VII of Part C Scientific Report), together with short description of other potential reference cases outside the project stakeholders.

- **Stage 3. Systematization of the information and Identification of best practices.** A common model for the systematization of the practices evaluation is defined in the Common Analytical Framework (CAF).
- **Stage 4. Comparative analysis**. The analysis entitles the use of comparative indicators, a proposal for grouping the cases under analysis, the assessment of results and finally validation with stakeholders in the 2º Stakeholders´ workshop.
- **Stage 5. Gap analysis** with regard to stakeholder's challenges and goals. Transferability analysis to other cases in the European context.
- **Stage 6. Draft guidance towards best practice in landscape and spatial planning** as an input to General guidelines and recommendations for policy development in the final phase of the project.

Figure 6 Stages for benchmarking methodology in Liveland project

The two first stages are devoted to:

a) The identification of the domain to benchmark that in the context of Liveland project is -Landscape and spatial planning practice- in six selected case studies in Europe and

b) A characterization of the case studies involved in the project as the basic input for the benchmarking exercise. The policy context a long side the spatial character, the planning system and competences, the government challenges, vision and strategies and data sources, have been included in individual reports" (see Annexes to Part C Scientific Report) produced for each of the case studies, together with short description of other potential reference cases outside the project stakeholders.

The subsequent activities in the methodology are explained in the following subchapters.

3.1. Systematization of the input information: Aims of the Common Analytical Framework and expected results

For the systematization of the input information for the benchmarking exercise a "Common Analytical Framework" was designed. The Common Analytical Framework (CAF) contributes to the overall aim of the Liveland-project in several ways:

1. Identify good and best practices of knowledge based decision making for liveable landscapes in the stakeholder regions, in particular of landscape and spatial planning, and of their impact on regional development. Examples are compared where socio-economic development is grounded in landscape and has gone hand in hand with successful landscape protection and management.

2. Define criteria for the integrating of landscape into regional strategies. A benchmarking of the content, the procedures and the impact of relevant plans and policy are to be undertaken. The benchmarking (process of choosing best practice) intents to improve the processes and performances of planning in stakeholder regions.

3. Identify actions or measures in the stakeholder regions which have proven to be successful in implementing combined landscape protection and socio-economic development.

For the achievement of such goals a framework to assess the performance of plans and policies with respect to landscape as an asset in regional development and as a source of liveability and well-being was developed and materialized in a spreadsheet.

The development of the CAF pursuits to become a tool to guide and support the systematic and consistent policy and plan assessment for all of the involved case study regions. This systematic approach also guarantees that scientific quality standards of research are followed while undertaking case investigations during the Liveland-project. Results achieved could be reliable and, at the same time, systematically coherent.

Methodology followed in the elaboration of the CAF spreadsheet

According to the overall project aim the development of the CAF started with research on concepts of liveability (see Chapter 2 of the Scientific Report) and on concepts of landscape (particularly those concepts that are prevalent in European policy, such as the European Landscape Convention). In addition recent scientific discourses on landscape contributions to liveability were analysed. It was important to make use of a landscape concept that is recognized throughout the stakeholders' regions and also to define a concept of liveability that is supported by the stakeholders.

After defining a common understanding of concepts of liveability and of landscape the interrelation of both was investigated by making use of a modified landscape functions concept.

On the basis of clearly defined concepts of liveability and landscape the contributions were examined that policy making and planning might make to creating and managing liveable landscapes. In this context a common understanding of planning is made use of. This understanding is based upon the Landscape Convention as well as on other European policies.

The systematic structure and process of planning used in this project refers to planning stages that had been identified within the project application:

- Evaluation and analysis
- Planning process and participation
- Strategy and vision
- Actions and measures
- Monitoring
- Planning procedures and decisions

The structure of the CAF spreadsheet is based on these planning stages. By correlating them with liveability components and indicators the structure of the CAF spreadsheet is formed. The CAF- can be applied to analysing different cases within the project and beyond. To this end, the spreadsheet is adoptable to analyse a variety of different kinds of plans and policies. On the other hand, the CAF is able to deliver results that can be used to produce not only qualitative but also quantitative outputs. To meet these expectations the CAF is not focused on specific types of results but on following certain standards and practices of planning for liveable landscapes.

The whole process in CAF configuration is explained in more detail in Chapter 2 of the Scientific Report.

The further needs for refining the CAF spreadsheet mostly pertain to issues of language and formulation. Several CAF questions have been rephrased in order to become more precise and easier to communicate. In order to provide further information more explanations have been added to several questions, components and indicators of the CAF. In some instances examples have been supplied.

Normalization and Quantification of the CAF spreadsheet

The quantitative approach of using results obtained by applying the CAF is very useful to obtain an overview of the different cases and to compare their performance regarding liveability and landscape. Some indicators can only be applied in qualitative ways. To overcome limitation of quantitative analysis of liveability contributions of landscape additional qualitative approaches are used to try and understand how plans and policies address such issues. Interviews have thus becomes part of the common analytical framework, CAF. They support the spreadsheet and diagrams by providing important inputs to be considered during the benchmarking tasks. Interview results complements the baseline reports and contribute to making a comprehensive analysis of planning for liveable landscapes within the case studies.

One aim of revising the CAF-spreadsheet was to make it possible to normalize most answers in order to use them in quantitative analysis. To do this was possible for most of the CAF questions. For this purpose a set of different scales was developed:

- **Yes / No** (Yes = 1 / No = 0)
- **Lickert 1** (5 steps: 0=not at all; 1= to a limited degree; 2= to some degree; 3=adequately; 4=to a high degree; 5= to a very high degree)
- **Lickert 2** (5 steps: 0=no; 1= for very few; 2= for some; 3=for several; 4=for most; 5= for all)
- **Summary** (summarizes the number of options that are ticked)

As previously discussed the overall goal of the Common Analytical Framework is to develop a framework that can be used to assess the performance of plans and policies with respect to

landscape as an asset in regional development. Furthermore it intends to provide input to the identification of the landscape as a source of liveability and well-being which can contribute to the overall aim of the Liveland-project in several ways.

A large set of qualitative characteristics tend, however, to become very complex and therefore difficult to recognize similarities and differences in the regional approaches beyond the comparison of individual statements.

As a consequence a quantitative approach has been developed aiming at identifying the overarching characteristics across the regions and cases at large. This has had implications on the CAF aiming at ensure:

- Consistency ensuring the logic of the questionnaire to be evident for the partners;
- Convertibility aiming at ensuring a qualitative characteristic being convertible into one of the following:
  - A *Unidimensional scaling* method such as the Likert scale approach (for instance a scale from 1 to 5 showing a range from 1=strongly unusable to 5=strongly usable) where the output in this case would be a number between 1 and 5;
  - A *Categorical quantity* (for instance a set of categories within the same framework such as "Public involvement in planning procedure outlines □; Public involvement in drafting plans □; Public involvement in planning decisions □; Public involvement in plan revisions □") where the output in this case would be a number between 0 and 4.
  - A *Binary quantity* with the range 0 and 1 indicating not existing and existing respectively. The difference between the binary and the categorical quantities is that any registration of a binary quantity would be independent on other quantities (eve others may be depending on the binary) while the elements in a categorical quantity are related to the same topic.
  - It has been decided to this limited set of scales in order to keep the response options both relevant and transparent for the partners.
- Completeness – In order to ensure comparativeness the body of the questionnaire should be based on components which are relevant for all cases.

Presentation and usability of results

By quantitative procedures, responses can be used to generate spider diagrams that serve as a comprehensive analysis tool. It also offers the opportunity to easily compare the performance of case studies with regard to liveable landscapes. A number of different visualisations of the results have been applied, being the spider-diagram on the best ways for showing similarities and differences between the cases. Spider diagrams have been developed per case study showing their contribution to the components of liveability and also to the landscape functions.

3.2. Comparative analysis

The objectives of this exercise are to show the potential application of a set of quantitative approaches in quantifying similarities and differences between case study areas and the conducted case studies. Three issues relevant for the benchmarking process have been identified as relevant:

1. **The socio-economic and environmental framework** which is about communalities in the overall setting of the case studies. The task has focussed on a clustering of the case areas through a set of indicators which have been available at a proper NUTS level.
2. **The conceptual interpretations** which is about turning a large set of qualitative reflections on the concept of Liveability into quantitative identifications based on a merge of the Landscape-Liveability Spreadsheet and the Common Analytical Framework (CAF) being a basis for the systematization of input information for benchmarking, with regard to the "Planning Practice" in each of the project case studies, and with its practical application acting as the interface between the Baseline Analysis and the benchmarking analysis itself
3. **The planning practice approaches** which is about generalising planning experiences into practice recommendations that enables a performance check as basis for the identification of benchmarking criteria.

When trying to identify communalities between cases and case study areas as well as pointing to cases which may serve as "best practices" two sides are apparent:

- A qualitative side where qualities of the practices in the different cases are identified and compared, but also confronting the organisation with identifying indicators that on one hand are defined through the qualities, but also convertible into quantities that can facilitate the benchmarking.
- A quantitative side recognizing that policy-making demands the formulation of verifiable and therefore concrete and measurable targets (Smith and Sheate, 2001; Pope et al., 2004)[13] – an issue that is fundamental to ESPON. And furthermore important when we - as stressed by Termorshuizen et al. (2007) - are recognising that landscape planning is often practised in multifunctional landscapes, and therefore need to focus on semi-natural and natural ecosystems and ecosystem mosaics and in that connection not the least include the socio-economic characteristics of the populations and communities supported by them. And therefore also challenged by the fact that this may not yet be practical enough for goal-setting in landscape planning[14], but nevertheless important to reflect on and include in the planning systems.

The reasoning for taking this approach is basically that both quantitative and qualitative approaches individually show limitations, while used parallel adds important dimensions. A mixed method design that integrates qualitative and quantitative research enables quantitative methods that are enhanced with qualitative measures of key processes and outcomes. Qualitative methods provide data that can give insights into how findings work and how findings can be translated to practice. By itself, a quantitative method can identify what works, but has limited explanatory power. Qualitative designs may generate rich information, but the information about what worked is more subjective and cannot be generalized. By

[13] Pope, J., Annandale, D., Morrison-Saunders, A., 2004. Conceptualising sustainability assessment. Environ. Impact. Asses. Rev. 24, 595–616;

Smith, S., Sheate, W., 2001. Sustainability appraisal of English regional plans: incorporating the requirements of the EU strategic environmental assessment directive. Impact Assess. Proj. Apprais. 19, 263–276.

[14] Termorshuizen, J.W., Opdama, P. and van den Brink, A. (2007): Incorporating ecological sustainability into landscape planning. Landscape and Urban Planning 79 (2007) 374-384.

combining the two methods it is possible to obtain a much richer understanding. In other words, using a rigorous design the quantitative methods can tell us what works, while the qualitative methods can tell us how it works[15.]

☞Quantitative evaluation

A set of quantitative approaches has been applied in relation to a number of objectives. On one hand to bring forward some methodological approaches where identification and coding of qualitative characteristics can result in analytical quantities and on the other hand to promote the need to ensure compatible measures. It is in this connection important that the coding processes are parallel and identical in the cases.

Socio-economic and environmental framework

As part of the case studies characterization the assessment of the Territorial Performance of the involved regions aligned with the objectives set in the Lisbon Strategy, Territorial Agenda 2020 and Europe 2020 Strategy has been considered relevant.

Several ESPON projects have attempted to assess Territorial Performance (INTERCO, TPM, ULYSSES among others) all of them capturing key policy objectives of the aim of the European Territorial Cohesion.

For Liveland project the outcomes of the INTERCO project[16] have been used, a selection of territorial performance indicators aligned with the indicators of the LISBON Strategy, Territorial Agenda 2020, EU2020 Strategy and the 5º Cohesion Report.

In order to complete the characterization of the territorial performance, it is also possible to incorporate key results from other ESPON projects, linked to Liveland project such as EU-LUPA[17] , ESPON CLIMATE[18] and ATTREG[19].

Conceptual interpretation: Quantitative assessment through the CAF Liveability spreadsheet

Despite the fact that the diversity in the nature of the involved case studies is one of the most interesting and attractive aspects of the project, it is also true that cases are not directly comparable. In order to compare the experiences it is therefore necessary to define pre-set criteria on the basis of the following principles:

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[15] Condelli, L., Wrigley, H.S. (2004): Real World Research: Combining Qualitative and Quantitative Research for Adult ESL. Paper presented at the National Research and Development Centre (NRDC) Second International Conference for Adult Literacy and Numeracy, Loughborough, England, March 25-27, 2004. For a further discussion on the issue of combining Uncovering the actual integration of qualitative and quantitative approaches in any particular study may be experienced as a considerably more complex undertaking than simply classifying the study into a particular category on the basis of a few broad dimensions or characteristics, an issue which is much more elaborated on by Bryman, A. (2012) Social Research Methods. Oxford University Press.

[16] ESPON Territorial Indicators. A first selection of ESPON Territorial Indicators based on the Final Results of the ESPON INTERCO Project Working paper Version 26 June 2012.

[17] EU-LUPA European Land Use Patterns 2010-2013. ESPON Applied Research.

[18] ESPON CLIMATE Climate Change and Territorial Effects on Regions and Local Economies in Europe 2009-2011. Applied research

[19] ATTREG - Attractiveness of European Regions and Cities for Residents and Visitors 2010-2012. ESPON Applied Research

- Stakeholders´ **key challenges and learning goals.** The project stakeholders already raised their interest in learning from other case studies. This will be considered at the time of compare different cases

- The **practices** of making and implementing local and regional plans, which give guidance to future measures of protection, development and management of space and landscape.

☞Qualitative evaluation: stakeholder's interviews

The qualitative interview was developed as a complement to the CAF-spreadsheet that is used as a quantitative approach to examine best practices in planning of liveable landscapes. Qualitative interviews include questions addressing issues that could not be answered properly in the CAF-spreadsheet. Complimentary to the spreadsheet, qualitative questions are designed to gather qualitative and complex information. Such information is usually to be found within the before mentioned fields of analysis, particularly 'process and participation' as well as 'procedures and decisions'. Several reasons led to the decision to complement the CAF with another qualitative approach:

- During all phases of this research it became apparent that some qualitative information is rather difficult to investigate, mainly because pertinent processes and procedures are normally not documented well or reflected on inside of planning or policy documents.
- Moreover it was found that participation models and decision making procedures have a high influence on liveability of landscape and the valorisation of landscape as such an asset.
- Lastly it became apparent that the procedures, decisions, participation and the whole planning process are too complex to examine by using a simple spreadsheet

Within the qualitative interview there are references to the CAF spreadsheet that has to be filled before the interviews can be conducted. As an interviewee a person is chosen that is responsible for the plan within the stakeholders' organisation.

3.3. Guidance for policy development

Generalization of the experiences, best practices and benchmarking of content and procedures of landscape and territorial planning is being assessed as inspiration for identifying general policy messages and elaborating recommendations for future planning approaches at the level of the involved case studies. The outcomes of the comparative assessment in previous stages, constitute the basic inputs to the findings and recommendations to diverse actors, but moreover the information related to challenges and learning goals, provided directly by the project stakeholders during the workshops

4. What does the benchmarking exercise tell us?

4.1. Quantitative evaluation: Socio-economic and environmental framework.

A number of socio-economic and environmental indicators are quantified and comparable across Europe. Based on an analysis of a series of ESPON project a number of potential

indicators were selected and organized in a total of 8 themes identified, encompassing, in short, the following issues:

- Economic performance and competitiveness
- Inclusion and Quality of Life
- Environment and territorial capital
- Innovative territories
- Integrated polycentric territorial development
- Attractiveness
- Climate change vulnerability
- Land use characterization

For the contextualization of the socio-economic and environmental performance of the case study regions participating in Liveland project, 13 indicators were finally chosen, shown on table 6. A clustering analysis allowed the identification of the regions which are most alike when comes to the 13 identified indicators. The first regions to combine are the Basque Country and Navarre. In a next step Slovenia combines with the EU27 average. And a third step combines Zuid Holland and Nordjylland. Freiburg is the region that is the last to enter into any of the generated clusters, showing that Freiburg is the region that – when taking all indicators into account – is the one that deviate the most from the other regions.

Economy	GDP 2009, Unemployment rate 2010, Unemployment change, Patent applications to the EPO by priority year (Per million of inhabitants), 2009, Increase in Patterns
Environment	Share of Natura 2000 areas (% of total NUTs area) Solar energy resources (kWh per year; Wind energy potential (Number of hours per year); Soil sealed area per inhabitant (m2 per inhabitant); Soil sealed area (% of total NUT area)
Human resources	Female Education rate 2010, Total Education rate 2010, Male education increase

Table 6 Selected indicators for evaluation of socio-economic and environmental performance in the case study regions

Going through the different clustering on Figure 7 it is quite clear how consistent the similarities between the regions are maintained more or less independent of which variables are included in the clustering. Going from four down to two clusters it is apparent how the clusters basically consist of the same group of regions. At the same time it shows that the differences between the clusters indicate variations between them that may become useful when results from the analyses should be extrapolated to a general EU27 setting. In this connection the inclusion of the EU27 average data comes in handy because they help to show the variations in the included regions. For more detailed explanation on the evaluation of environmental and socio-economic performance in the case studies please go to Chapter 6 of the Scientific Report.

Figure 7 show results from all the clustering which have taken place by individual indicator categories and by the composite of all 13 chosen indicators.

FOUR CLUSTERS		THREE CLUSTERS		TWO CLUSTERS	
ECONOMICS: GDP-INNOV-UNEMPLOYMENT					
1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra
2	NL33 Zuid Holland DK05 Nordjylland		NL33 Zuid Holland DK05 Nordjylland		NL33 Zuid Holland DK05 Nordjylland
3	SL02 Zahodna Slovenija	2	SL02 Zahodna Slovenija		SL02 Zahodna Slovenija
4	DE13 Freiburg	3	DE13 Freiburg	2	DE13 Freiburg
ECONOMICS: GDP-UNEMPLOYMENT					
1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra
2	NL33 Zuid Holland DK05 Nordjylland	2	DE13 Freiburg NL33 Zuid Holland DK05 Nordjylland		NL33 Zuid Holland DK05 Nordjylland
3	DE13 Freiburg				DE13 Freiburg
4	SL02 Zahodna Slovenija	3	SL02 Zahodna Slovenija	2	SL02 Zahodna Slovenija
ENVIRONMENT: NATURE- URBANIZATION					
1	ES21 Basque Country	1	ES21 Basque Country DE13 Freiburg SL02 Zahodna Slovenija	1	ES21 Basque Country DE13 Freiburg SL02 Zahodna Slovenija
2	DE13 Freiburg SL02 Zahodna Slovenija				
3	ES22 Navarra	2	ES22 Navarra		ES22 Navarra
4	NL33 Zuid Holland DK05 Nordjylland	3	NL33 Zuid Holland DK05 Nordjylland	2	NL33 Zuid Holland DK05 Nordjylland
HUMAN RESOURCES: EDUCATION					
1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra
2	SL02 Zahodna Slovenija DK05 Nordjylland	2	SL02 Zahodna Slovenija DK05 Nordjylland DE13 Freiburg	2	SL02 Zahodna Slovenija DK05 Nordjylland DE13 Freiburg
3	DE13 Freiburg				
4	NL33 Zuid Holland	3	NL33 Zuid Holland		NL33 Zuid Holland
COMPOSITE: ECONOMIC, ENVIRONMENT, HUMAN RESOURCES					
1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra SL02 Zahodna Slovenija	1	ES21 Basque Country ES22 Navarra SL02 Zahodna Slovenija
2	NL33 Zuid Holland DK05 Nordjylland	2	NL33 Zuid Holland DK05 Nordjylland	2	NL33 Zuid Holland DK05 Nordjylland DE13 Freiburg
3	SL02 Zahodna Slovenija				
4	DE13 Freiburg	3	DE13 Freiburg		

Figure 7 Results of the clustering procedures: From top to bottom according to indicator choice, and from left to right according to choice of number of clusters from four to two.

4.2. Conceptual interpretation of the CAF liveability spreadsheet

Out of the responses to the CAF spreadsheet, a series of spider diagrams were elaborated on the two main issues determining the CAF: liveability components and landscape functions.

The graph below shows the overall characteristics of the distribution of the responses to the CAF in relation to the 6 components which constitutes the main content of one of the two issues determining the CAF. In the spider graph the data for each of the regions sums up to 100% and the graph show how much of this is related to each of the six components.

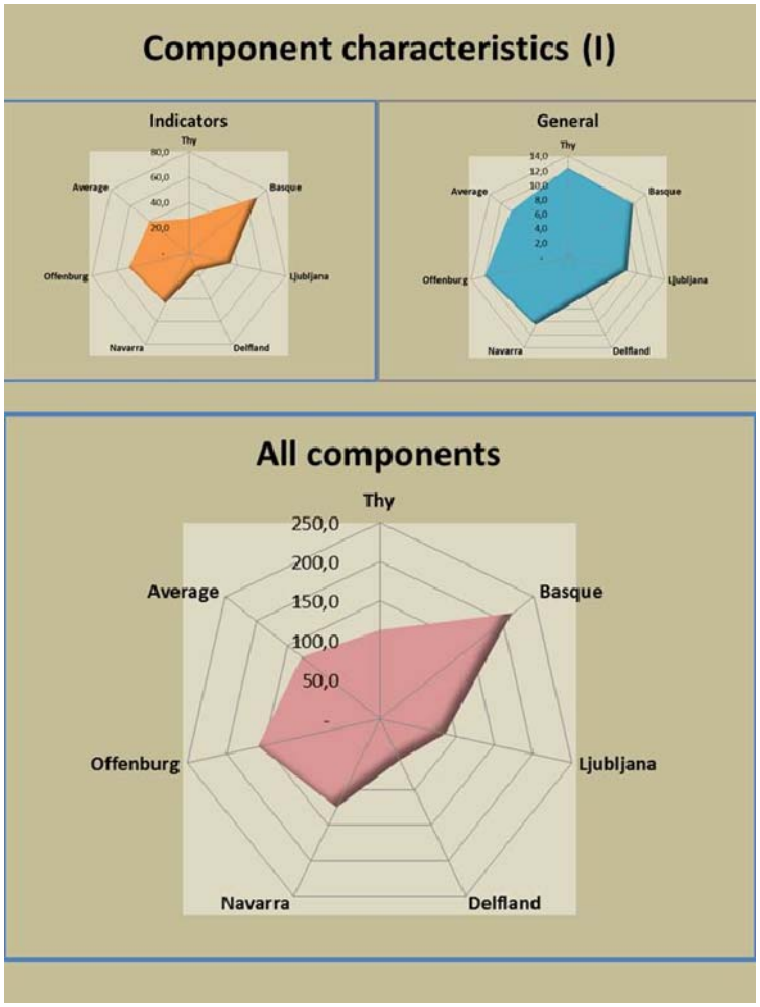


Figure 8 The six case studies as described by the six components

It is quite clear that there are similarities but at the same time also marked differences between the cases. The major differences are seen in relation to 4. Actions and measures, dominated by Basque Country and Offenburg; 5. Monitoring dominated by Navarra; and 6. Planning and Procedures dominated by Thy NP. And the major deviator is Ljubljana with a structure determined by only two of the six components.

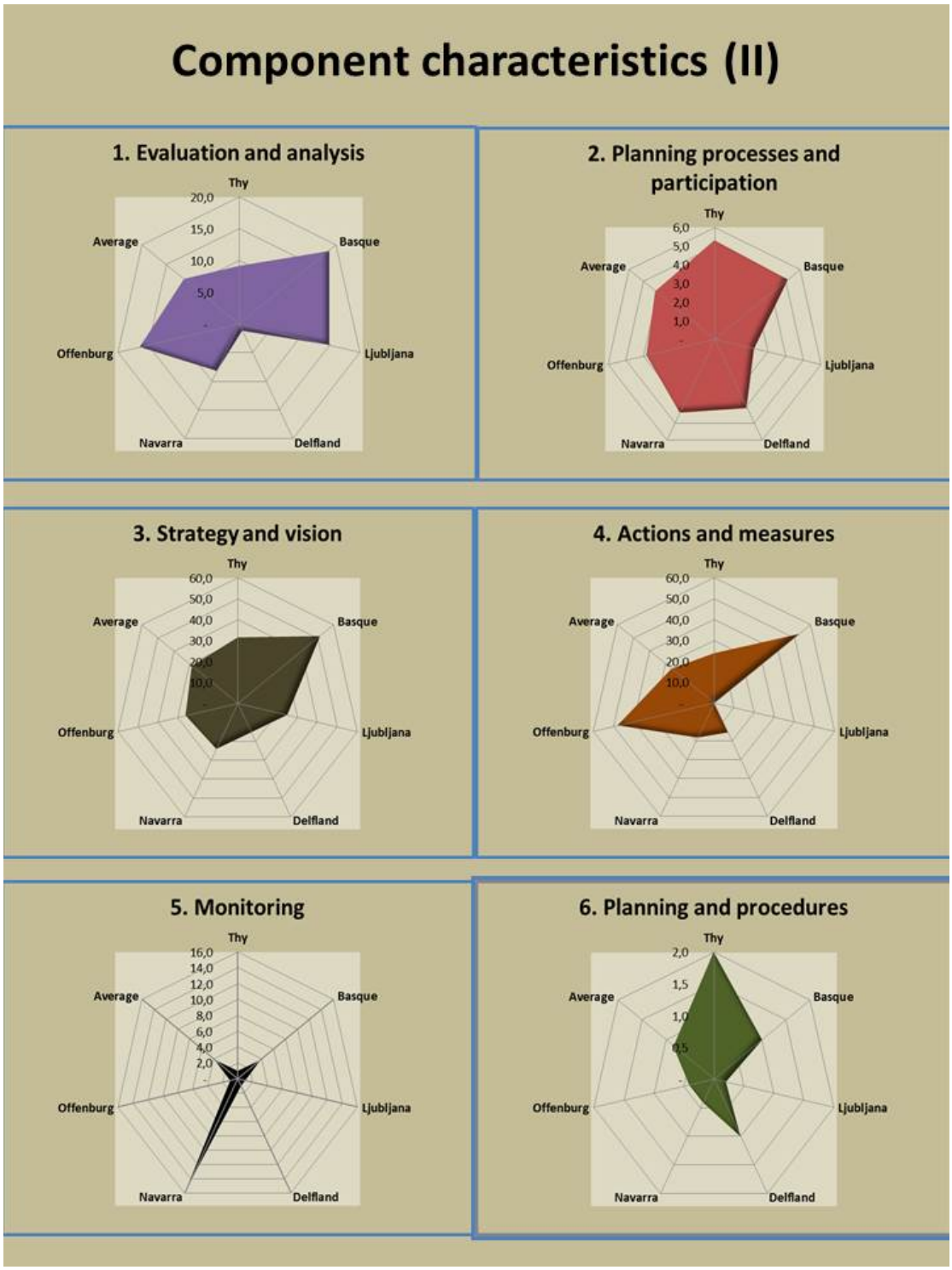


Figure 9 Components per case study

A much more equal situation is showing when turning to the five functions. In this graph the method is the same, i.e. the data distribution for each of the graphs sums up to 100%, and how large a share of this determined by each of the five functions is shown through the situation in the spider diagram.

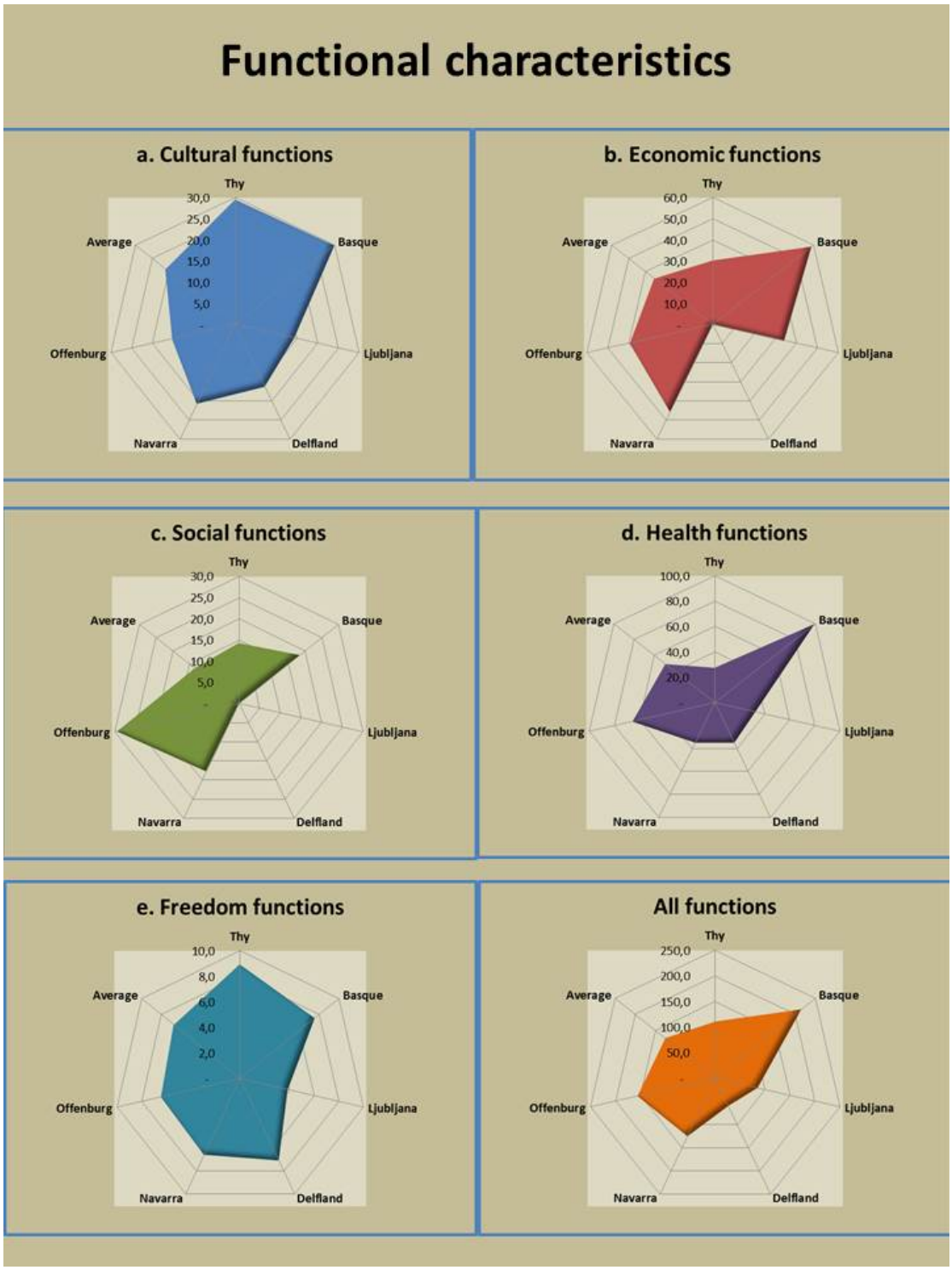


Figure 10 The six cases as described by the five functions.

There are two marked deviators from the general pattern – Offenburg with Social function being a major element, and Basque Country with Culture, Health and Economy being the most dominant functions. Also remarkably important are Culture and Freedom functions in Thy case study. For the other regions the distribution is more even between the function, and in this case Navarra show the most even distribution between the functions – as it did as well in relation to the distribution of the components.

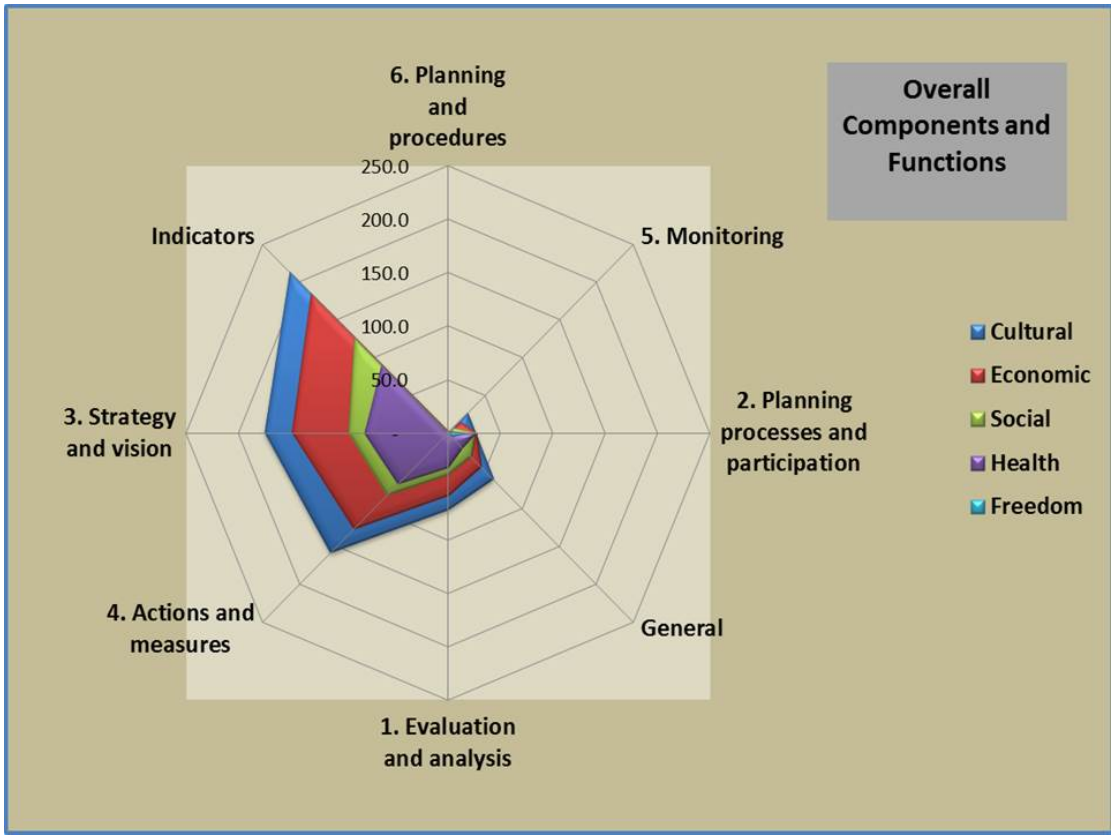


Figure 11 Overall distribution of components and functions

First of all it shows that both the relative and the comparative distribution have importance when interpreting the results. Especially the Monitoring and Planning and procedures components show how the distribution of several functions tends to become invisible when only looking at the comparative distribution.

Furthermore the graphs show that there are limitations to how many categories can be distinguished as separate entities when working with details in relation to both functions and components.

In relation to the latter observation it becomes however also quite obvious that single functions and components may become indicative for specific CAF characteristics, and that a task of importance may be to determine which indicators would be most useful in describing the variations between the cases.

This becomes even more obvious in the following analysis where the parameters are switched. While the above focus has been on the role of the different functions in explaining the variations in the components the next set of graphs are focusing on how much the different components contributes to explaining the differences in functional characteristics of the case regions.

4.2.1. Component characteristics

In order to get more information in relation to interpreting the dataset the components are dissected further by means of a series of graphs.

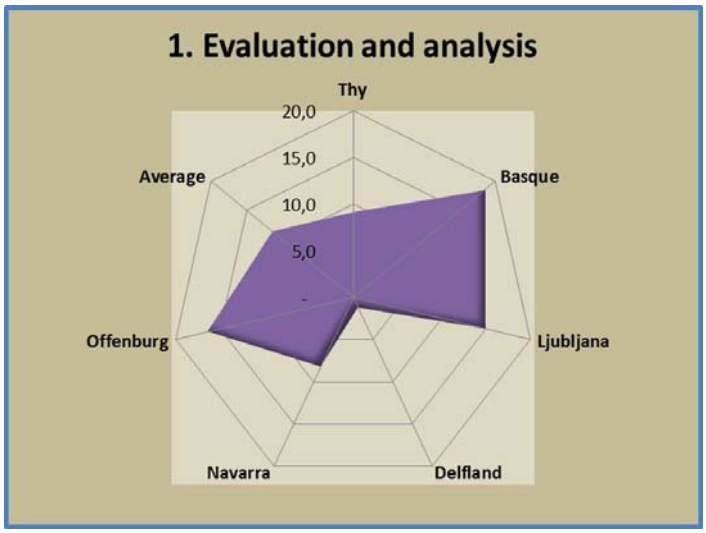


Figure 12 Component 1 Evaluation and Analysis per case study and average

Evaluation and analysis is particularly relevant in Basque Country and Offenburg being testimonial in Midden- Delfland. In the case of Basque Country the practice under evaluation has a strong weight on landscape characterization through the catalogue as an instrument of evaluation instrument.

Figure 13 Component 2 Planning process and participation per case study and average

Apart from Ljubljana UR, all cases present an even contribution to Planning process and participation close to the average being the strongest Thy NP practice.

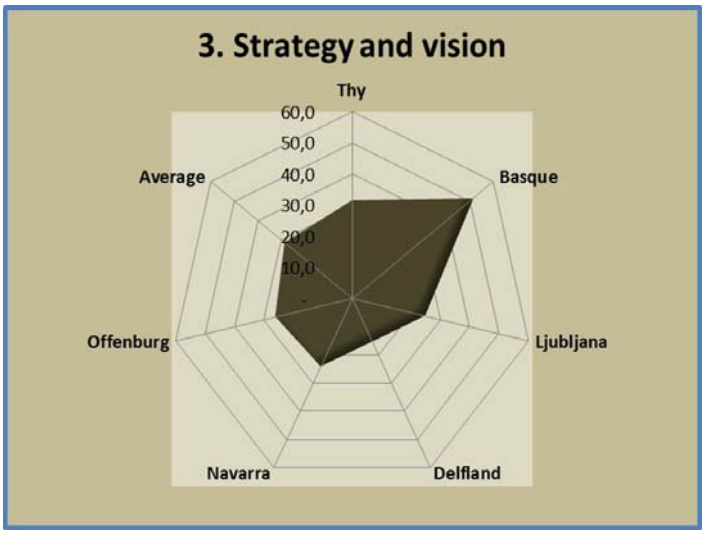


Figure 14 Component 3 Strategy and Vision per case study and average

Strategy and vision is particularly relevant in the Basque case study. It would be expected a more visible contribution from Midden-Delfland which appears quite discreetly in the graph.
Even contribution from the rest of the cases analyzed.

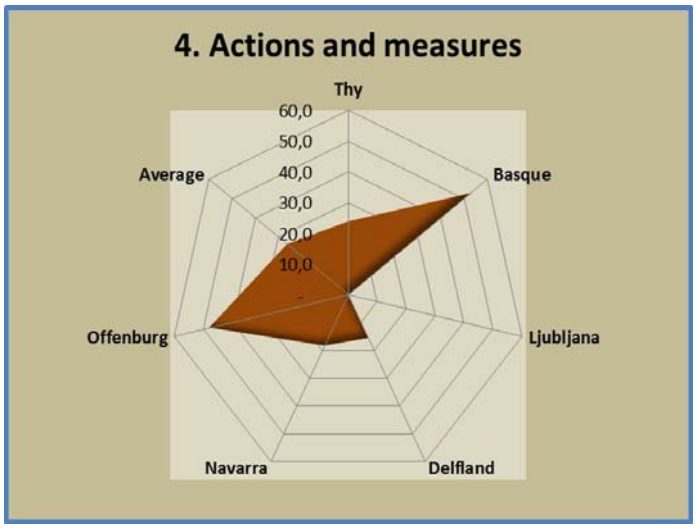


Figure 15 Component 4 Actions and measures per case study and average

Basque Country and Offenburg show the greater contribution to Actions and measures, followed by Navarra. It is important to bear in mind that Basque country has not implemented yet any of the actions d, whereas landscape actions and measures have been already included in Offenburg Land Use Plan. Ljubljana UR is again the major deviator.

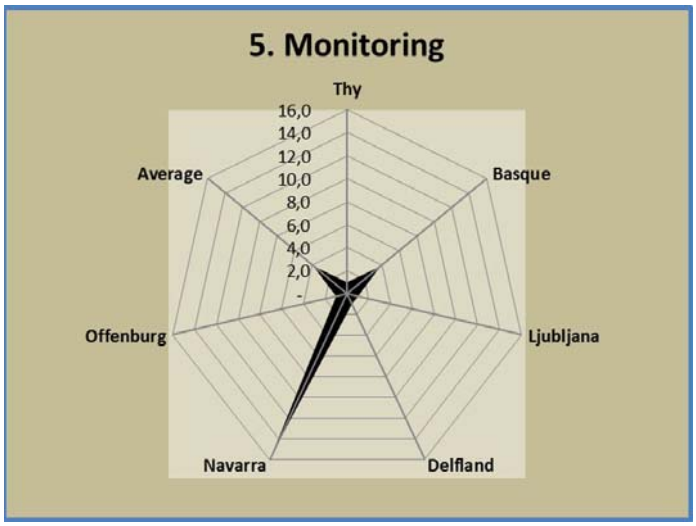


Figure 16 Component 5 Monitoring per case study and average

With regard to monitoring is clearly dominated by Navarra which is the only case study which has really developed an index for monitoring spatial planning and landscape. From the reading of this graph it is evident that Monitoring is a challenge and a component to be strength in all practices analyzed in the CAF.

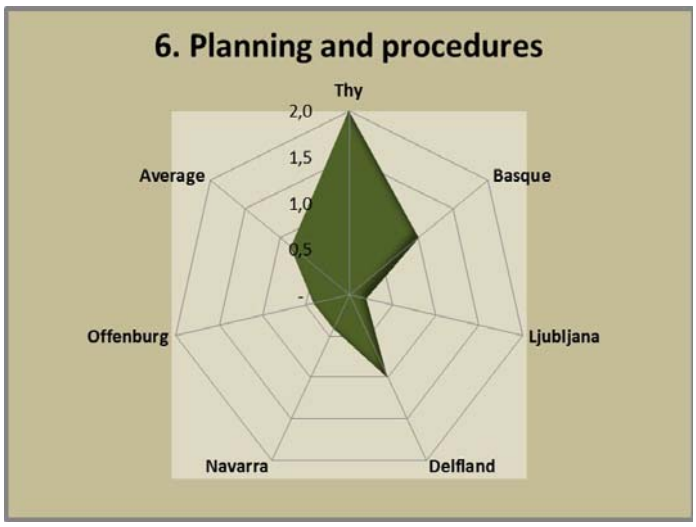


Figure 17 Component 6 Planning and procedures per case study and average

Thy NP clearly dominates this component followed by Midden-Delfland. Since both cases are Landscape Plans it would be also expected a greater contribution from Offenburg, being the other Landscape Plan evaluated.

4.2.2. Functional characteristics

In order to get more information in relation to interpreting the dataset the functions are dissected further by means of a series of graphs.

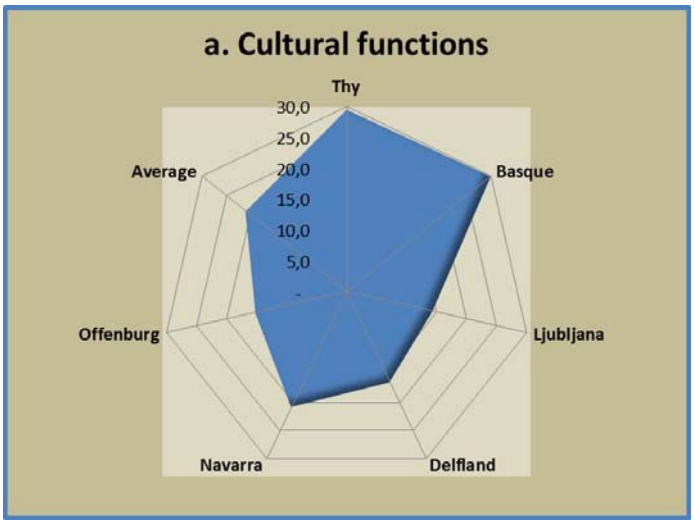


Figure 18 Cultural functions per case study and average

Although there is a quite uniform distribution, Thy and Basque Country show the greater contribution with regard to Cultural functions, followed closely by Navarra. In those cases the question of identity has been proved very relevant at the time of evaluate landscape and define planning and management objectives.

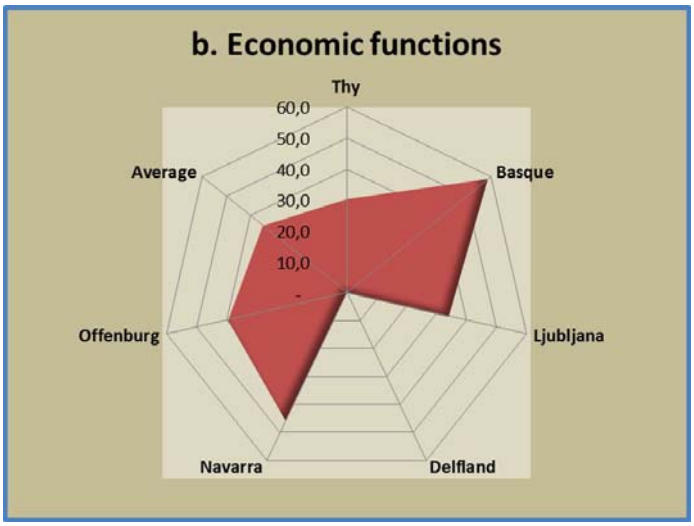


Figure 19 Economic functions per case study and average

Economic functions are irrelevant in Midden-Delfland, revealing a lack of information in this plan. Basque Country and Navarra show the major contribution to this function, revealing the consideration of multifunctional approach to landscape in the cases.
As expected Offenburg also show a relevant contribution to economic function.

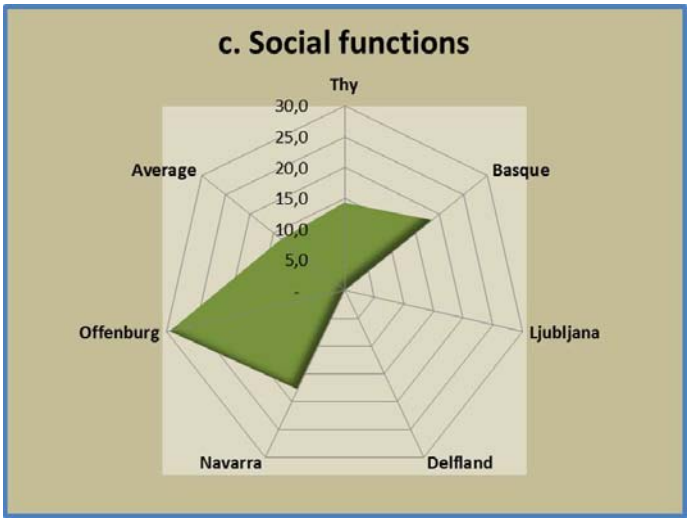


Figure 20 Social functions per case study and average

Social functions are dominant in Offenburg followed by Navarra and Basque Country. The lack of information from Thy, Ljubljana and Midden- Delftland are obvious in relation to the social functions.

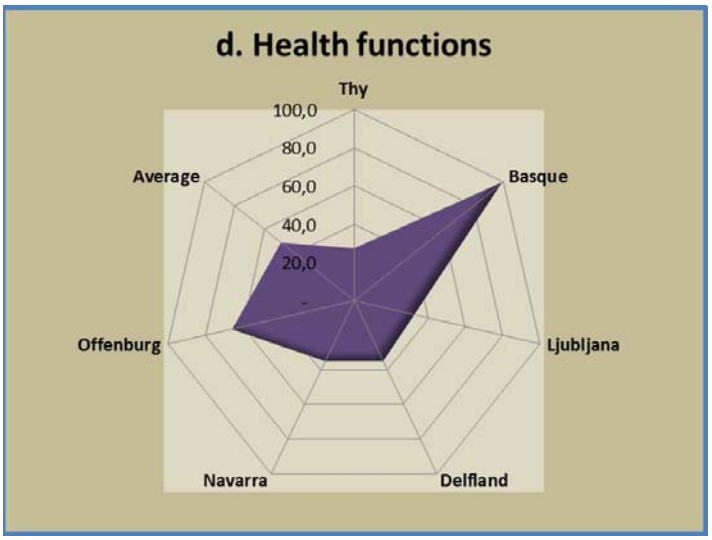


Figure 21 Health functions per case study and average

Health functions are shown for all case regions, but with marked difference in representation. Basque Country clearly dominates the contribution to Health functions followed by Offenburg.

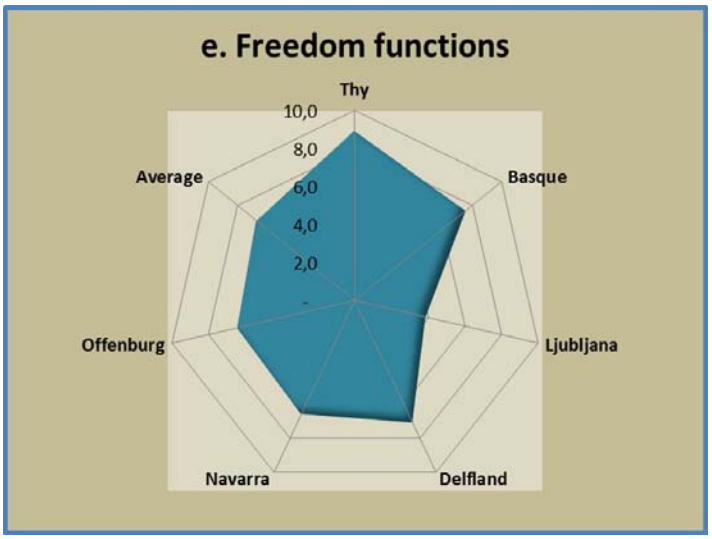


Figure 22 Freedom functions per case study and average

Freedom functions show a very regular pattern.

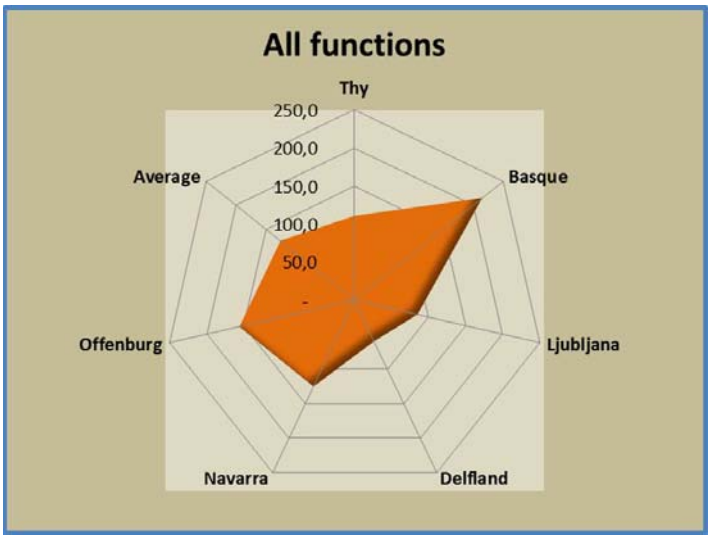


Figure 23 Overall distribution of the functions in case studies

Also here the question of the number of functions and categories represented in each of the case regions become important. Basque Country and Offenburg show the largest number of functions (5) while Delftland is down to the lowest number (3). In the distribution of functions the comparative division is clearly the most important because it show a very distinct difference in characteristics between Navarra, Offenburg, the Basque country and to some extend also Thy on one side, each with around 15-20% of the total variation represented, while both Ljubljana and Delftland are down to around 10% representation. Extensive variations in representation become even more marked when looking into the different functions. Most marked shown by the cultural, health and social functions where Thy, Midden Delfland and the Basque Country show representations of around 25% each and thereby cover half of the variation, while the other case regions are down to 10% and below.

4.2.3. Analytical use of quantitative functional and component characteristics

There are a lot of information more or less hidden in the qualitative approach to the CAF which becomes more obvious when quantified, and in this connection the graphs enables the identifying and describing some important detail that might otherwise be overlooked.

The approach should, however, also be used carefully and not attempting to dig into detail that may not be substantiated in adequate numbers.

Among the graphs presented in the previous sections it is obviously the more overarching presentations that should be considered within an analytical framework. The graphs showing the distribution of components and functions are in this connection obvious choice.

4.3. Multivariate analyses

A way of finding trends and characteristics out of a complex set of quantitative data is to apply different types of multivariate approaches. Some principles have already been presented in the first chapters, so at this point of time the focus will be on the results.

4.3.1. Interpreting 3 dimensions

The starting point for this analysis is the normalized dataset, and on Figure 25 on next page the results have been color coded as this gives a good indication of the variation in the data. And structuring the data in individual matrices for each case region, each spreadsheet with functions across and components top-down provide an immediate overview of communalities and differences between the datasets.

By adding the color-coding the datasets become 3-dimensional which further add to the possibility of overviewing the complexity and thereby starting interpreting the results.

The complexity of the dataset goes however way beyond three dimensions. Each field in the spreadsheet constitutes a dimension, so with six components time five functions it generates a total of 30 dimensions.

4.3.2. Generalizing 30 dimensions

Two obvious approaches to apply in this complexity would be the Principal Component Analysis (PCA) and the Factor Analysis (FA). Both approaches are based on almost the same procedures of calculations, aiming at analyzing groups of correlated variables in order to reduce their complexity. Principal components analysis is used to find optimal ways of combining variables into a small number of subsets, while factor analysis are used to identify the structure underlying such variables and to estimate scores to measure latent factors themselves. In PCA the components are linear combinations that maximize the total variance while in FA the factors are linear combinations that maximize the shared portion of the variance.

In both the principal component analysis and the factor analysis the original 30 dimension dataset is converted into new datasets, still with 30 dimensions, but in the PCA organized so that the largest amount of variance is described in the first dimension, the second largest amount in the second dimension, etc. In the FI the goal is to ensure that that the factors explain the covariance or correlations among the variables. As the objective in this case is the former, i.e. try to collect as much as possible of the variance in the first principal component, second most in the second principal component etc. the focus in the following is on the principal components.

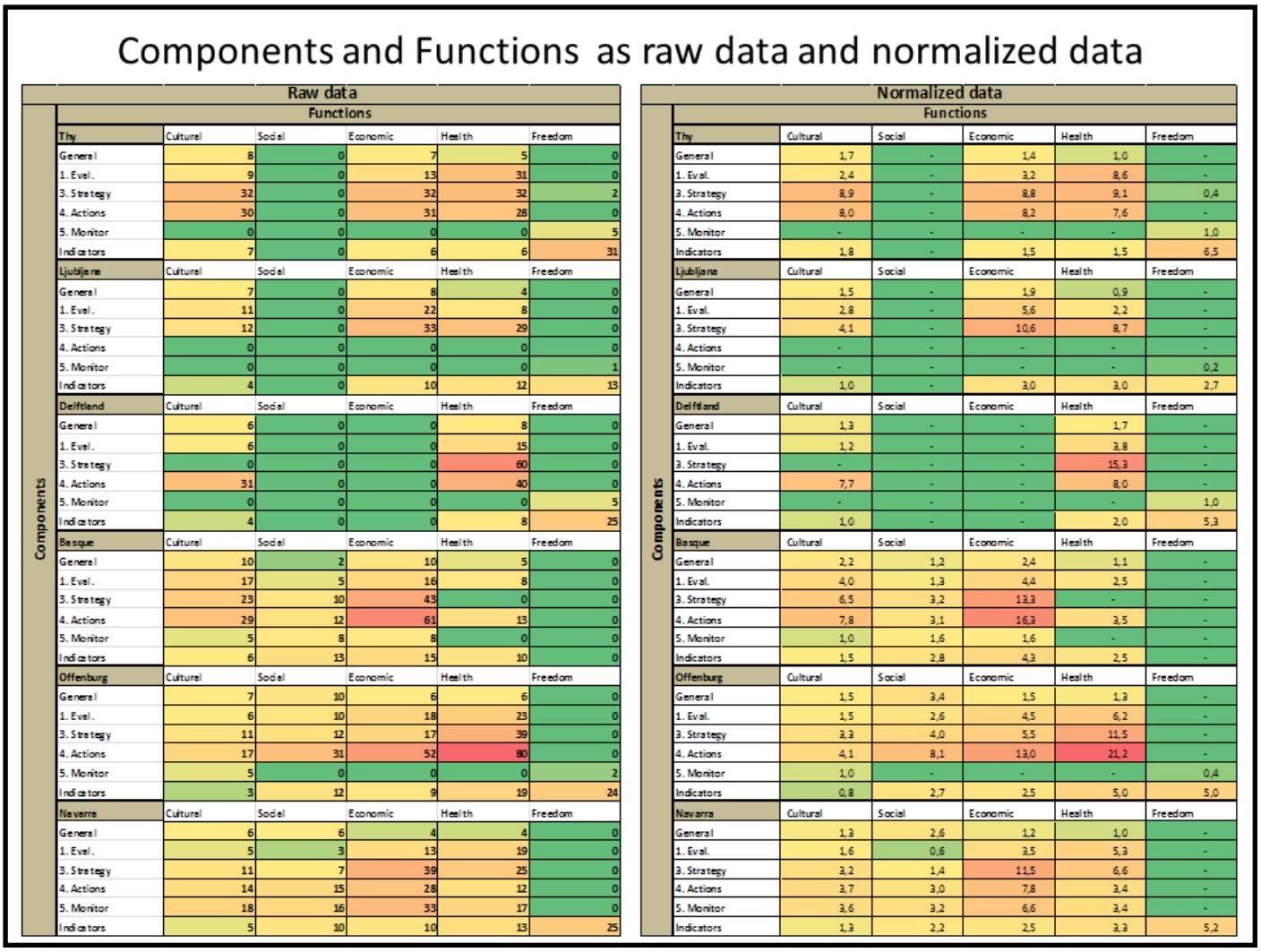
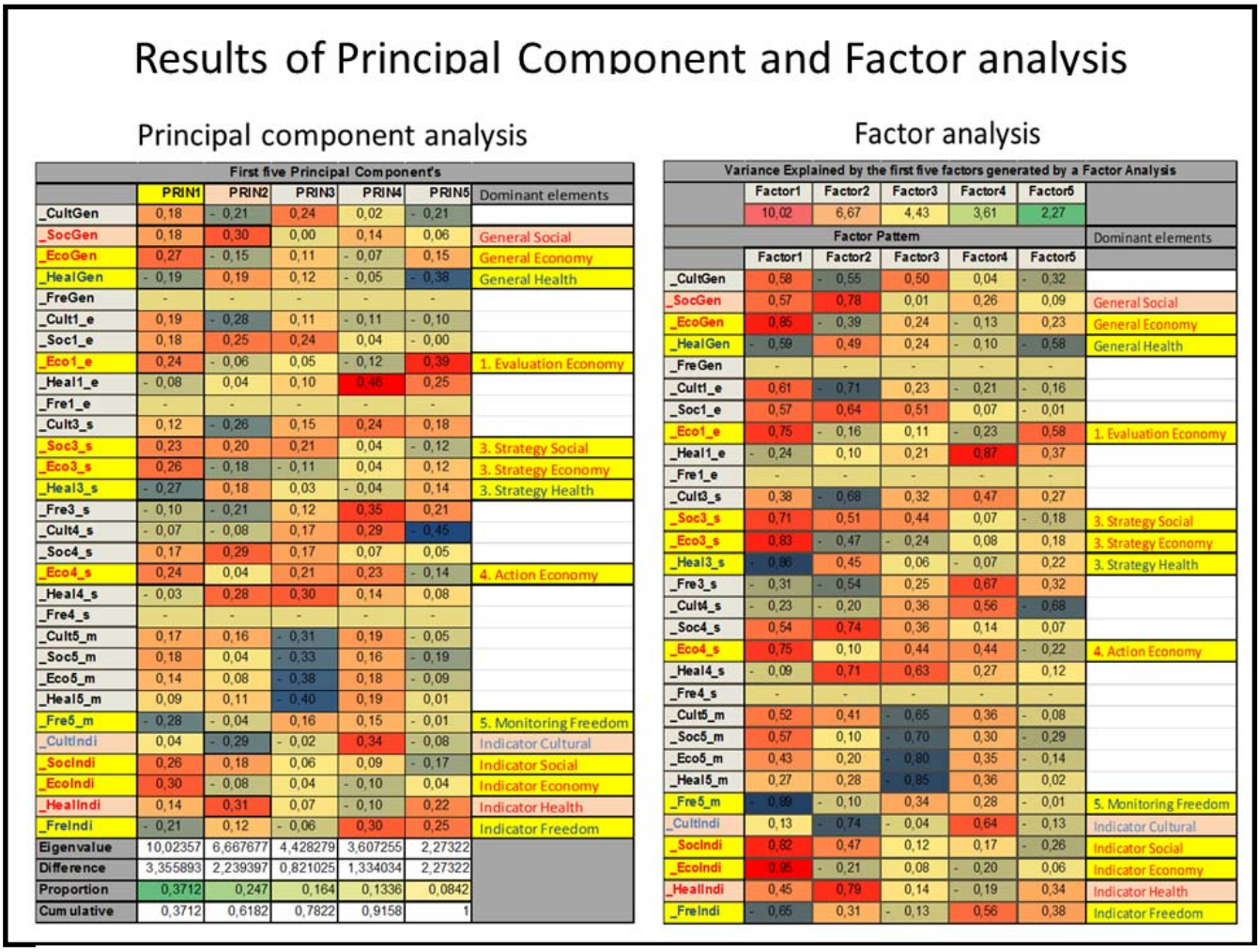


Figure 25 The raw and normalized data structured as a set of matrices, one for each case region with functions across and components top-down. The matrices have been color-coded according to values, from green=0 over yellow to red colour used for the high values.

The critical issue in this context is what is shown in the PCA table Figure 25 in the row called Eigenvalue (four rows from the bottom). The row identifies how much of the variance is to be found in the first Principal Component (PRIN1), how much in the second, the third etc. In this case only the first five components/factors have been shown, but it becomes obvious why only maintaining these five columns. In the second lowest row in the PCA results the row Proportion show how large a percentage of the total variance is included in each of the Principal components, and in the row below the Cumulative sum of proportions are shown. And it show that all variance in the dataset is described in the first five components, with 37.12% by the first component, 24.7% in the second component etc. So by means of the two first components a total of 61.82% of all variance has been described and by component number 5 a total of 100% has been explained

By squaring the number in the PCA column it is shown how much each variable contributes to the total result. So by selecting a combination of the highest positive and lowest negative values it is possible to generate a result where selection of variables are able to describe a relatively high proportion of the total variance in the material.



Results of Principal Component and Factor analysis

Principal component analysis

First five Principal Component's						
	PRIN1	PRIN2	PRIN3	PRIN4	PRIN5	Dominant elements
_CultGen	0,18	- 0,21	0,24	0,02	- 0,21	
_SocGen	0,18	0,30	0,00	0,14	0,06	General Social
_EcoGen	0,27	- 0,15	0,11	- 0,07	0,15	General Economy
_HealGen	- 0,19	0,19	0,12	- 0,05	- 0,38	General Health
_FreGen	-	-	-	-	-	
_Cult1_e	0,19	- 0,28	0,11	- 0,11	- 0,10	
_Soc1_e	0,18	0,25	0,24	0,04	- 0,00	
_Eco1_e	0,24	- 0,06	0,05	- 0,12	0,39	1. Evaluation Economy
_Heal1_e	- 0,08	0,04	0,10	0,46	0,25	
_Fre1_e	-	-	-	-	-	
_Cult3_s	0,12	- 0,26	0,15	0,24	0,18	
_Soc3_s	0,23	0,20	0,21	0,04	- 0,12	3. Strategy Social
_Eco3_s	0,26	- 0,18	- 0,11	0,04	0,12	3. Strategy Economy
_Heal3_s	- 0,27	0,18	0,03	- 0,04	0,14	3. Strategy Health
_Fre3_s	- 0,10	- 0,21	0,12	0,35	0,21	
_Cult4_s	- 0,07	- 0,08	0,17	0,29	- 0,45	
_Soc4_s	0,17	0,29	0,17	0,07	0,05	
_Eco4_s	0,24	0,04	0,21	0,23	- 0,14	4. Action Economy
_Heal4_s	- 0,03	0,28	0,30	0,14	0,08	
_Fre4_s	-	-	-	-	-	
_Cult5_m	0,17	0,16	- 0,31	0,19	- 0,05	
_Soc5_m	0,18	0,04	- 0,33	0,16	- 0,19	
_Eco5_m	0,14	0,08	- 0,38	0,18	- 0,09	
_Heal5_m	0,09	0,11	- 0,40	0,19	0,01	
_Fre5_m	- 0,28	- 0,04	0,16	0,15	- 0,01	5. Monitoring Freedom
_CultIndi	0,04	- 0,29	- 0,02	0,34	- 0,08	Indicator Cultural
_SocIndi	0,26	0,18	0,06	0,09	- 0,17	Indicator Social
_EcoIndi	0,30	- 0,08	0,04	- 0,10	0,04	Indicator Economy
_HealIndi	0,14	0,31	0,07	- 0,10	0,22	Indicator Health
_FreIndi	- 0,21	0,12	- 0,06	0,30	0,25	Indicator Freedom
Eigenvalue	10,02357	6,667677	4,428279	3,607255	2,27322	
Difference	3,355893	2,239397	0,821025	1,334034	2,27322	
Proportion	0,3712	0,247	0,164	0,1336	0,0842	
Cumulative	0,3712	0,6182	0,7822	0,9158	1	

Factor analysis

Variance Explained by the first five factors generated by a Factor Analysis						
	Factor1	Factor2	Factor3	Factor4	Factor5	
	10,02	6,67	4,43	3,61	2,27	
Factor Pattern						Dominant elements
	Factor1	Factor2	Factor3	Factor4	Factor5	
_CultGen	0,58	- 0,55	0,50	0,04	- 0,32	
_SocGen	0,57	0,78	0,01	0,26	0,09	General Social
_EcoGen	0,85	- 0,39	0,24	- 0,13	0,23	General Economy
_HealGen	- 0,59	0,49	0,24	- 0,10	- 0,58	General Health
_FreGen	-	-	-	-	-	
_Cult1_e	0,61	- 0,71	0,23	- 0,21	- 0,16	
_Soc1_e	0,57	0,64	0,51	0,07	- 0,01	
_Eco1_e	0,75	- 0,16	0,11	- 0,23	0,58	1. Evaluation Economy
_Heal1_e	- 0,24	0,10	0,21	0,87	0,37	
_Fre1_e	-	-	-	-	-	
_Cult3_s	0,38	- 0,68	0,32	0,47	0,27	
_Soc3_s	0,71	0,51	0,44	0,07	- 0,18	3. Strategy Social
_Eco3_s	0,83	- 0,47	- 0,24	0,08	0,18	3. Strategy Economy
_Heal3_s	- 0,86	0,45	0,06	- 0,07	0,22	3. Strategy Health
_Fre3_s	- 0,31	- 0,54	0,25	0,67	0,32	
_Cult4_s	- 0,23	- 0,20	0,36	0,56	- 0,68	
_Soc4_s	0,54	0,74	0,36	0,14	0,07	
_Eco4_s	0,75	0,10	0,44	0,44	- 0,22	4. Action Economy
_Heal4_s	- 0,09	0,71	0,63	0,27	0,12	
_Fre4_s	-	-	-	-	-	
_Cult5_m	0,52	0,41	- 0,65	0,36	- 0,08	
_Soc5_m	0,57	0,10	- 0,70	0,30	- 0,29	
_Eco5_m	0,43	0,20	- 0,80	0,35	- 0,14	
_Heal5_m	0,27	0,28	- 0,85	0,36	0,02	
_Fre5_m	- 0,89	- 0,10	0,34	0,28	- 0,01	5. Monitoring Freedom
_CultIndi	0,13	- 0,74	- 0,04	0,64	- 0,13	Indicator Cultural
_SocIndi	0,82	0,47	0,12	0,17	- 0,26	Indicator Social
_EcoIndi	0,95	- 0,21	0,08	- 0,20	0,06	Indicator Economy
_HealIndi	0,45	0,79	0,14	- 0,19	0,34	Indicator Health
_FreIndi	- 0,65	0,31	- 0,13	0,56	0,38	Indicator Freedom

Figure 26 Eigenvalue The row identifies how much of the variance is to be found in the first Principal Component (PRIN1), how much in the second, the third etc

The selected variables have been marked with differing colors, and a combination of the highest values from PCA1 and those values from PCA2 with contributions surpassing any contributions from PCA1 a selection of variables describing a third or more of the variance in the material has been identified. And going across the five components those selected turns out to describe more than 50% of the variance.

4.3.3. Dominant functions and components

The selected variables have been color coded in the left hand side of the tables, but furthermore shown in fuller names on the right hand side. And as shown a total of 14 variables which is less than half of them have been identified as major contributors to the analysis, while the remaining contributes with much less little or none to the variations identified in the CAF.

Figure 27 on next page show the normalized dataset organized in spreadsheet form, but now with all variables determined as major contributors to the data analysis emphasized with blue colors for those selected from Component1 / Factor1 and with beige those selected from Component2 / Factor2.

Statistically these 14 variables are those which are explaining more than half of the variance and thereby determining most of the similarities and variations in the results of the conversion of the qualitative CAF information into the quantitative CAF dataset.

What is important to remember when interpreting the results, however, is the fact that correlation between some components may be shadowing over lower level of correlation between other components. It may be seen odd that the cultural functions even well represented throughout all case regions connections between for instance health and economic characteristics may be very dominant.

Furthermore it is interesting to see how indicators are playing an important role in the results. Out of the total 14 variables five are related to Indicator components and another five are related to Economic functions. Component 3 Strategy is represented through three variables. Figure 27 thereby provide a suggestion of which functions and components are important to look further into in order to get a helpful analysis of the qualitative characteristics of the CAF.

Marking of dominant components

Normalized data						
Components	Elements dominating first/second axis/component in multivariat analysis					
	Thy	Cultural	Social	Economic	Health	Freedom
	General	1,7	-	1,4	1,0	-
	1. Eval.	2,4	-	3,2	8,6	-
	3. Strategy	8,9	-	8,8	9,1	0,4
	4. Actions	8,0	-	8,2	7,6	-
	5. Monitor	-	-	-	-	1,0
	Indicators	1,8	-	1,5	1,5	6,5
	Ljubljana	Cultural	Social	Economic	Health	Freedom
	General	1,5	-	1,9	0,9	-
	1. Eval.	2,8	-	5,6	2,2	-
	3. Strategy	4,1	-	10,6	8,7	-
	4. Actions	-	-	-	-	-
	5. Monitor	-	-	-	-	0,2
	Indicators	1,0	-	3,0	3,0	2,7
	Delftland	Cultural	Social	Economic	Health	Freedom
	General	1,3	-	-	1,7	-
	1. Eval.	1,2	-	-	3,8	-
	3. Strategy	-	-	-	15,3	-
	4. Actions	7,7	-	-	8,0	-
	5. Monitor	-	-	-	-	1,0
	Indicators	1,0	-	-	2,0	5,3
	Basque	Cultural	Social	Economic	Health	Freedom
	General	2,2	1,2	2,4	1,1	-
	1. Eval.	4,0	1,3	4,4	2,5	-
	3. Strategy	6,5	3,2	13,3	-	-
	4. Actions	7,8	3,1	16,3	3,5	-
	5. Monitor	1,0	1,6	1,6	-	-
	Indicators	1,5	2,8	4,3	2,5	-
	Offenburg	Cultural	Social	Economic	Health	Freedom
	General	1,5	3,4	1,5	1,3	-
	1. Eval.	1,5	2,6	4,5	6,2	-
	3. Strategy	3,3	4,0	5,5	11,5	-
	4. Actions	4,1	8,1	13,0	21,2	-
	5. Monitor	1,0	-	-	-	0,4
	Indicators	0,8	2,7	2,5	5,0	5,0
	Navarra	Cultural	Social	Economic	Health	Freedom
	General	1,3	2,6	1,2	1,0	-
	1. Eval.	1,6	0,6	3,5	5,3	-
	3. Strategy	3,2	1,4	11,5	6,6	-
	4. Actions	3,7	3,0	7,8	3,4	-
	5. Monitor	3,6	3,2	6,6	3,4	-
	Indicators	1,3	2,2	2,5	3,3	5,2

Figure 27 Dominant component determined through the multivariate analyses connected to the Principal Components and the Factors

4.3.4. Similarities and differences between cases

The final part of the quantitative analysis is related to the question of similarities and differences between the six cases in their responses to the CAF questionnaire.

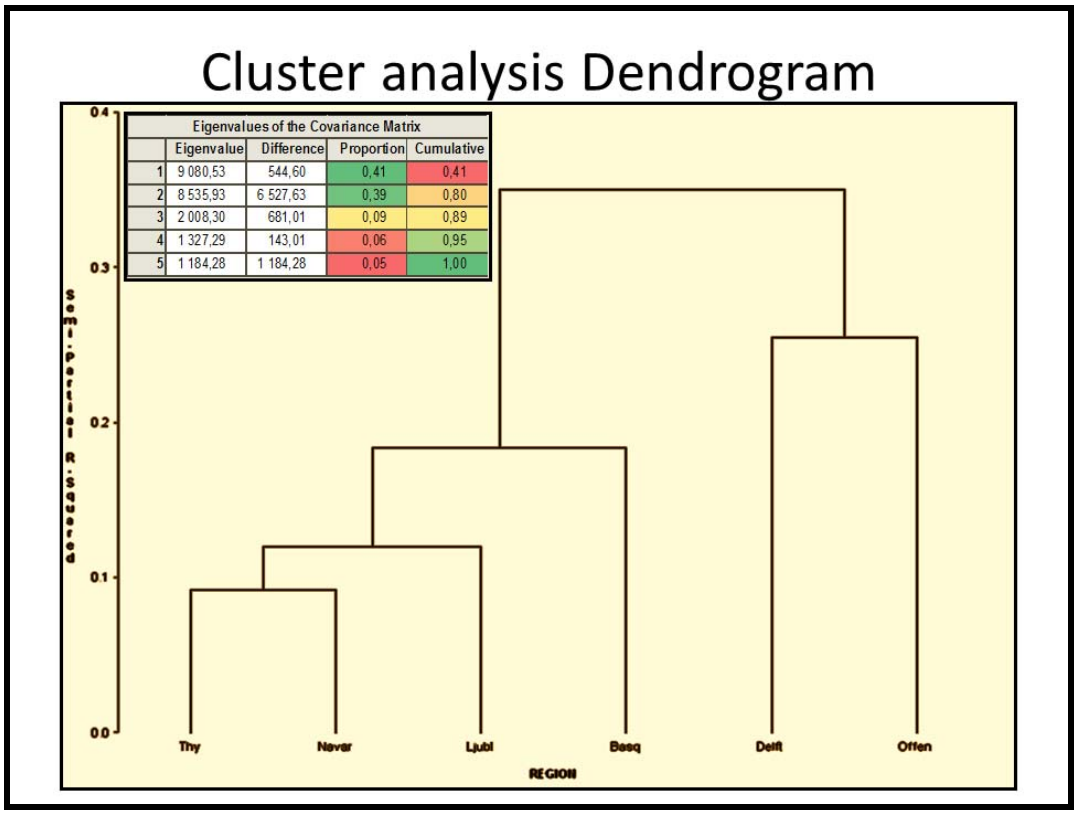


Figure 28 Cluster analysis dendrogram showing the level of similarity between the cases in relation to responses to the CAF.

The comparison has been conducted by means of a cluster analysis, an analysis where the distances between the cases are determined in the multi-dimensional space determined by the variables included in the CAF analysis. In Figure 28 the result of the clustering is shown graphically by means of a dendrogram as well as through the calculation of the changes in eigenvalues when the clustering procedure moves forward.

Method wise the software starts with the six cases searching for the two cases looking most alike and combining these data as a first cluster, and continues to look for similarities, now based on the remaining four and the cluster. Each time clusters are generated the change in Eigenvalue is registered, and the process continues until the final situation where all six cases are considered being one cluster.

As shown by the dendrogram the first cases combined are Thy NP and Navarra. Then Ljubljana UR is added, and in the next step the Basque Country. In the second to the last step Midden- Delftland and Offenburg are combined, and then all cases are finally combined.

The distance shown graphically illustrates the level of “look-alike”ness. For instance the distance between the cluster established through combining Thy and Navarra and the following inclusion of Ljubljana in the cluster is very short, while the distance to include the Basque region is somewhat larger.

A quick overlooking of the result show that while Offenburg and Midden-Delftland are singled out as a distinct group, the other case regions are stepwise merged into a cluster, with Thy NP and Navarra showing most resemblance and then including Ljubljana and later on the Basque Country before merged with the Offenburg-Midden- Delftland group.

4.3.5. Basis for similarity

Interesting in this connection is how this clustering compare to the general clustering conducted in relation to the major socio-economic and environmental conditions discussed in chapter 4.1 in relation to the socio-economic and environmental framework – basically by asking to what extend the regional similarities and differences shown through the CAF with its emphasis on practices in relation to landscape planning can be ascribed to differences and similarities in the general characteristics of the socio-economic and environmental framework.

There are obvious similarities but also differences when comparing Figure 28 with Figure 7. In relation to many components used in the general clustering the Dutch and the German regions and cases often end up in the same clusters, just as the two cases from Spain ends up in the same clusters. And obviously because the two sets of clusters are characterised by a lot of similarities in relation to socio-economic and landscape planning experiences and practices.

The two “odd regions out” are obviously Thy NP and Ljubljana UR. These regions end up in different combinations in Figure 7, Thy mostly in combination with Germany and The Netherlands due to some of the same reasons as the Dutch and the German cases are clustered together, namely a number of similarities in relation both socio-economic and landscape planning experiences and practices. With references back to Figure 7 Ljubljana UR is mostly singled out when more than 2 clusters are generated. This does not, however, explain its position in the case study clustering procedure.

Chapter 7 of the Scientific Report is fully devoted to the analysis undertaken in the CAF spreadsheet.

5. Integrated interpretation of qualitative and quantitative analysis

5.1. Success of landscape approaches, planning practices and planning measures

In order to indicate which approaches, practices and actions are perceived as desirable for the integration of landscape into spatial planning, we started by identifying those factors that lead to success.

- **Mature spatial planning system and well developed planning systems allows better integration of landscape concept and approaches**

This means that such integration could be materialized in form of particular instruments for landscape planning and management as is the case in Midden-Delfland, Offenburg and Thy NP or by means of the integration of landscape objectives, guidelines, actions and measures within existing spatial planning and/or land use planning instruments.

In the Basque Country the catalogues characterize the landscape units with a multi-scales and multi-sectoral approach. The characterization is per se trans-disciplinar. The objectives defined, also go beyond, on one hand the local scale, on the other a unique activity. This is only possible when different perspectives from administrations at different levels, general public (citizens) and other stakeholders (private sectors, NGOs, etc.) are considered.

In Navarra the intervention is framed in the regional environmental legislation over Natural Spaces of Navarre, which is only capable to intervene with regard to construction investments when ecosystem management is involved. An example of such maturity is exemplified by the change of the local policy in environmental management of a communal mount in Orgi in order to destine it to public use, conservation of nature, and environmental education for the whole of society.

In Offenburg the policy field of nature and landscape has own instruments but main regulative power to implement the landscape plan lies within the comprehensive Land Use Plan. Landscape and Land Use Plan have been developed in parallel.

In Midden- Delfland the Landscape Plan as a bottom up initiative of several local governments is based upon 'open space' policy of old national plans and upon recent provincial plans on space and spatial quality.

- **Strong and comprehensive methodology for landscape analysis within the planning practices as a precondition of success**

Experts on landscape and spatial planning have an important role on delivering quality analysis and cartography as preparation of policies. Robust and comprehensive approach to landscape guarantees rational development of actions and measures.

In the elaboration of the catalogue in the Basque Country is worth mentioning the definition of tangible objectives for each of the landscape units. Each objective is identified considering public perception and interests and it will be later translated into specific actions and in terms incorporated: a) as guidelines in the spatial comprehensive plans b) special actions – interventions in areas of special interest.

The model of Orgi in Navarra is an example of sustainable management, of analysis, and environmental protection that may be extrapolated to other zones of interest.

In Offenburg a natural science based approach is used in landscape characterization and evaluation towards planning and management. Very relevant is the inclusion of cultural aspects and identity.

In Midden-Delfland making of a local landscape plan for a small area- surface 6.500 ha (65 km2)

- Midden-Delfland is not an agricultural community, as an island surrounded by high density cities, but the inhabitants are integrated in the urban network, in a physical, social and mental way.
- The landscape is not static, but dynamic. There are always developments. The question is not how to stop them, but how can we use them in our mutual benefit.

Ljubljana Urban Region has its diverse landscape character as a key element for success but also a challenge in spatial planning terms.

- **Early participation and consultation**

In Midden-Delfland strong participatory process lead by external bureau- *Bosch Slabbers tuin- en landschapsarchitecten* constitutes a corner stone in the landscape plan process where representativeness of participants was very important.

In Thy National Park a successful participatory process was established: with 400 participants in the first meeting. The process was loosely steered by a steering group, and the stakeholders were divided into four thematic groups: Natural values, Cultural values, Business, and Recreation. An example of the success of bringing the local stakeholders together is that a possible conflict between agricultural interests and protection of nature was solved by the stakeholders themselves. The specific border of national park was agreed upon by the citizens. One precondition for reaching agreement was that no additional restrictions on the agricultural land can be implemented within the national park as compared to areas outside the National Park boundary.

Very important in the case of the catalogues in the Basque Country the consideration of objective component of landscape- expression of territorial system alongside the subjective component- Perception

In Navarra Implication of a local public entity in the management of a protected space shared by the Regional Government and other public institutions; town council of the valley, Cederna-Garalur Association, etc.

- **Cooperation and coordination – gobernance**

In Midden-Delfland is relevant the collaboration between different municipalities in the design of the plan, later materialized in the cooperation for its execution.

In Offenburg the collaboration between different municipalities in administrative cooperation, which form a functional coherent area of spatial planning, represent a factor for success.

Navarra experience was selected in the Best Practices Competition (Dubai in 2006), and listed as “good”. http://www.unhabitat.org/bp/bp.list.details.aspx?bp_id=1744 The Orgi oak forest is an example of Natural Recreation Zone, included in a bigger Protected Landscape Area under protection by Regional Law 9/1996 on Natural Reserves of Navarre, which shows actions on Landscape protection and management where a protected area and an economic activity coexist. http://www.bosque-orgi.com/

- **Financing**

Finances are always short and getting funding is considered one of the big contains in the implementation of actions. However is also true that for spatial developments and for nature management local administrations are dependent on higher governments and private investors.

In Midden-Delfland a municipality has a week position regarding finances. For spatial developments and for agrarian nature management the municipality is dependent on higher

governments and private investors. So the financial support of the regional national government is crucial in the implementation of activities like the development of recreational infrastructure.

In the case of Orgi ARN in Navarra, management and maintenance, is almost 100% funded through an agreement signed between the Government of Navarre and Lizaso Council (Local Authority equivalent to NUT6). These activities are performed by a local company (five employees) contracted by public tender until 2017. Other activities and investments are often financed by sponsorships or European initiatives or financial institutions. These projects may be new construction projects, environmental volunteering, case studies, etc. In this way were funded, for example, path for blind persons for some campaigns with students from universities of Navarre. Among these entities are Cederna-Garalur Association for Rural Development (LEADER manager), the Regional Tourist Consortium Plazaola, IMSERSO ONCE Foundation, ONCE-Navarra (Spanish National Blind Organization), Caja Navarra Foundation.

- **Multi-scale and multi-sectoral approach to landscape**

In Midden-delfland an intensive multi stakeholder approach represents an effective way to create a common vision. But that takes time, patience and effort, qualified people and a design process of zoom-in and zoom-out. The design principals are working very well in the daily practice of the officials, especially related to private developers.

In Thy NP It is stated in the law that the minister can only establish a national park if there has been a public survey of the interest for the park. When the locals hear the word 'national park', some of them are skeptic because they think 'preservation'. So one first step was making them understand the concept of a Danish national park.

Which factors have been recognized as failures or constraints by the stakeholders themselves?

- **Landscape concept**
  - Still biased consideration of landscape in spatial planning mostly from the point of view of conservation and aligned with sector policy (protection of rivers, coastline management, renewal energy, agro-forest). This is still the case in Navarra, Basque country and LUR. The Landscape practices in Navarra and Basque Country case studies are now overcoming such constraint.
  - RDA in Ljubljana UR recognizes its landscape as underused development opportunity. Further efforts must be undertaken to promote this potential. The strength of its identity should be further activated.
  - In Thy NP It is stated in the law that the minister can only establish a national park if there has been a public survey of the interest for the park. When the local hear the word 'national park' they are skeptic because they think 'preservation'. So one first step was making them think differently about the concept of a national park.
- **Administrative and institutional constrains**
  - Political rhythms, changes in parliament composition and resources, might delay the process
  - In Navarra and Basque Country administrative complexity and division of competencies at different levels unable the implementation of a comprehensive approach to landscape

- Complexity of political networks and the length of the decision making process in Midden Delfland alongside decentralization process

- **Participation and consultation**
  - Participation time consuming and expensive process
  - Participatory culture seems to be underdeveloped still in Slovenia
  - Limited public involvement in the early stages of planning, rather late public participation in the decision making
  - Price of high level of participation; time consuming; maybe not all groups are represented; how much should the process be steered?
  - Full participation process is needed when you're making the plan and thus need the input.
  - Full participation process is needed if the plans content and quality is dependent on the public input.
- Balance of nature protection and the wishes of different users including inhabitants and visitors.
- Regarding the **type of governmental instruments** in MD (Regulations, finances, cooperation, communication) a municipality has a weak position regarding finances. For spatial developments and for agrarian nature management the municipality is dependent on higher governments and private investors.
- **Implementation:** It is a challenge in all case studies.

A wider integrated interpretation of the quantitative and qualitative analysis is described in Chapters 8 and 9 of the Scientific Report.

6. Key messages for policy development

A comprehensive dissertation on key messages for policy development resulting for the research undertaken in the Liveland project is included in Chapter 10 of the Scientific Report. The policy messages follow the systematic structure and process of planning used in this project.

6.1. General messages

EVALUATION AND ANALYSIS

Concentrate in local intrinsic features: Key topics, conflicts, problems and also potentials. The identification, description and assessment of landscapes constitute the preliminary phase of any landscape policy. This involves an analysis of morphological, archaeological, historical, cultural and natural characteristics and their interrelations, as well as an analysis of changes. The perception of landscape by the public is also an important topic that should be analysed from the viewpoint of both its historical development and its recent significance (in order to fulfil the requirements of the ELC) . This is particularly important for local administrative levels but also relevant at supra-local ones.

Multifunctionality of landscapes: This topic reflects richness but also certain complexity that has to be considered:

- Prioritization of landscape functions: since multifunctionality is not always compatible with natural values protection/conservation
- Prioritization of land uses aiming at avoiding conflicts

Expertise of the team developing the landscape plan or practice matters: Especially interdisciplinary teams have proofed to be more successful.

Measurable goals and targets: For evaluation of landscape and landscape "quality", measureable goals and targets make monitoring much more easy. Moreover it helps to demonstrate that targets and goals have been reached.

Investments in relevant data: Landscape data are high effort to collect and landscape is rapidly changing. So are any landscape data. Thus it is important to keep them up to date and ensure data quality. Besides that it is important to analyse the relevance of the information. In some cases also downscaling for the use at local level is still needed.

- Should be use documentation, knowledge and resources to start the political landscape design without creating uniform standards and procedures in all EU administrations: observatories, catalogues, surveys, etc.

Data management: Use of decision support systems through GIS data management and visualization. Information exchange, the circulation of theoretical, methodological and empirical ideas between landscape specialists and learning from these experiences are of fundamental importance in ensuring the social and territorial relevance of the European Landscape Convention and in achieving its objectives.

PLANNING PROCESS AND PARTICIPATION

Public participation and consultation at the early stages of decision making is required for successful planning and acceptance of measures as shown by the experiences in THY NP and Midden-Delfland. This promotes ownership of the plan and encourages peoples feeling of "togetherness". However, "relevant public participation process is needed, considering:

- Avoiding false expectation to participants
- Sensitive management of the participatory processes
- Time consuming and expensive consuming great amount of resources

All actions taken to define, implement and monitor landscape policies should be preceded and accompanied by procedures for participation by members of the public and other relevant stakeholders, with the aim of enabling them to play an active role in formulating, implementing and monitoring landscape quality objectives.

"Landscape" makes more understandable (is "read" and "understood" better) what planning is doing, in its political dimension but also scientific- technical and administrative.

Awareness raising (to society in general and also within the administration): Active public involvement means that specialised knowledge should be accessible to all. It should be easily available, structured and presented in a way that is easy to understand especially by laymen.

Better coordination of formal/ institutional and social participation for improved and shared ownership.

STRATEGY AND VISION

Vision on liveable landscapes: The ELC recognizes 3 elements that should be balanced: protection, development and management. Each administrative level (national, regional and local) should draw up specific and/or sectoral landscape strategies within the limits of its competences. The various strategies should be linked by landscape quality objectives.

Perception of people and social vision in the configuration of the strategy and vision is remarkably important

Strengthen a multi-scale approach but also multi-sectoral approach in the configuration of the strategy and vision- The landscape does not respond to administrative boundaries. It is possible contributing to manage effectively natural resources and facilitating collaboration among local entities that could help reform local map.

Territorial Potential: Specific types of land uses create a specific landscape character that often is also a source of people's identity.. This is a territorial potential that e.g. could be used for branding.

Improve relation and connection between city and country side:

- The urban-rural relationship is an issue of extraordinary importance for a territorial strategy towards cohesion, too.
- Particularly relevant in peri-urban areas
- Identify potential for regeneration of deprived areas

ACTIONS AND MEASURES (IMPLEMENTATION)

Take the ELC implementation options as a reference

Cooperation between Land Use Planning and Spatial Planning for responsible land use management

Every planning action or project should comply with landscape quality objectives. It should in particular improve landscape quality, or at least not bring about a decline. The effects of projects, whatever their scale, on landscape should therefore be evaluated and rules and instruments corresponding to those effects defined. Each planning action or project should not only match, but also be appropriate to the features of the places.

Flexibility of the instruments: multi-scale and multi-sectoral cooperation is essential for implementation of actions and measures

Specific options towards "informal" implementation of actions and measures

- Land stewardship
- Territorial contracts,
- Offsets and compensation

Financial support makes a difference: both in developing the plans but most important in the implementation of the actions designed in the plans Therefore prioritization of actions is remarkably important. -

- The consideration of the landscape as a "public space" should not limit the ability of governments to finance their maintenance, especially in the case of unique landmarks with large crowds.

Export tools from urban management could be used in spatial planning and management

PLANNING PROCEDURES AND DECISIONS

Landscape should as far as possible be integrated in present spatial planning instruments in order to avoid burdens and barriers in the planning system. - Incorporating landscape criteria could facilitate coordination among the relevant sectoral policies and spatial planning

- Landscape should be fully taken into account via appropriate procedures allowing systematic inclusion of the landscape dimension in all policies that influence the quality of a territory. Integration concerns both the various administrative bodies and departments on the same level (horizontal integration) and the various administrative bodies belonging to different levels (vertical integration).

Combination of top-down and bottom-up approaches as the most successful option towards multi-scale approach to landscape

Better coordination of timeframes of different planning instruments:

- This could be remarkably important, considering political cycles and duration of mandates
- Avoid additional administrative burdens in the planning systems

Take advance of existing instruments which are flexible enough to be able to include landscape perspective without relying on a lot of extra procedures and administrative requirements- that might be time and resources consuming

Boosting coordination among administrations:

- **Informal practices:**
  - Collaboration between different municipalities in administrative cooperation, conforming a functional coherent area of spatial planning present in Midden-Delfland as well as Offenburg case studies
  - Landscape Plans could become the basis for the Strategic Environmental Assessment of the planning instruments (at regional and/or local scale, (as well as for the EIA for project)
- **Formal Commissions:**
  - Navarra has particular spaces such the brand new Landscape Commission: Set the appropriate methodology for the implementation of the landscape in Navarra in line with the CEP (European Landscape Convention)
  - In the Basque Country the COTPV Committee of Spatial Planning is perceived as a key instrument for the coordination between different administrations in the area of spatial planning (including coast) and urbanism) in the Basque Country.

MONITORING

In monitoring landscapes, indicators should combine "regional spatial characterization" and other "landscape practices" to compare strategic aspects, features and quality of the landscape (may be subject to Liveland II)

Monitoring of any plan or project is absolutely necessary not only to assess the scope achieved during its implementation but to monitor the effect of certain actions on the territory, identify potential deviation and anticipate undesirable consequences and react consequently.

So monitoring indicators should be able to measure: the practice itself (policy, plan or program) and the achievements and actions implemented.

The follow up of landscape policies needs two types of indicators for different scales: regional and landscape practice. Liveland has already focused in the regional scale.

- Landscape and its situation can be considered as a mirror where the application of European policies and strategies ("top-down" and "bottom-up") can be seen. That is the reason why indicators must be proposed for both views.
- During Liveland the methodology and experience have been acquired by the partners in order to establish in the near future a set of indicators useful for both landscape views "top-down" and "bottom-up".
- The set of proposed indicators must be homogeneous for the whole Europe, both in the form of measurement as in the interpretation of results.

6.2. Specific conclusions and recommendations in each of the case studies

OFFENBURG

Introduction
The outcomes of Benchmarking through the Common Analytical Framework (CAF) are generally perceived as being helpful to figure out recommendations for the policy on the local level. Especially we are happy to see a comparable good performance of the Offenburg landscape plan. Nevertheless there is a variety of opportunities for improvement.

Learning goals
Offenburg municipality at the beginning of the project has figured out some learning goals that are worth mentioning before dealing with recommendations:
Prioritizing key learning goals, it has to be pointed out, that the main learning goal for Offenburg refers to supplying landscape issues with other spatial and territorial requirements under economic pressure.

- **Planning procedures and decisions:** How can authority be added to landscape issues and landscape planning?
- **Specific actions:** How can the implementation of measures are managed, at a time, when the planning and therefore the legal obligation are done?
- **Evaluation / Monitoring:** What are the benchmarks for successful planning and implementation and how can we get acceptance for them?

Policy recommendations
The CAF-Analysis showed a weakness in the field of the implementation of measures as well as the monitoring there which has been predictable as the learning goals have to be taken into account. Moreover it showed that the case studies of Midden Delftland and Offenburg are in a similar situation according to ESPON-indicators. Although in reality there is a big difference in spatial structure and landscape, it seems that learning from Midden Delftland might be very interesting in general.

1. A system for **monitoring and evaluation** of planning outcomes as well as measures and actions is nearly completely missing. Procedures for that have not been developed so

far.[20] Navarra case study in this performs very well but it can be argued, that the highly standardized system might not be adoptable for the local scale and general situation in Offenburg.

2. In close relation to the before mentioned recommendation, it seems of high importance to really conduct the plan, which is the preposition for monitoring and evaluation. In Offenburg there is no legal obligation of the implementation of proposed actions and measures. Those are mostly conducted with the use of finances from the impact mitigation regulation (naturschutzfachliche Eingriffsregelung). To strengthen the implementation public-private-partnership seems as well as awareness raising and voluntary work might be some opportunities that have been shown by different case studies (especially Midden Delftland)
3. Concerning the question of strengthen the political power of landscape in procedures and decision making Midden Delftland might be a good example, as landscape is seen as a anthropocentric issues, more than being an issue of nature protection. Nature protection and liveability are closely related though. Of course one step towards that direction would be the ratification and conduction of the European Landscape convention, but that is not to be decided on local level.
4. One of Offenburg's strengths is the availability of data on landscape e.g. land use data, protected areas, water etc. The data has been widely updated for the plan and would be a good basis for the before mentioned monitoring and evaluation and moreover other instruments, especially EIA and SEA. To make this possible landscape data should be revised constantly.
5. Public involvement is a contribution to freedom and therefore to liveability. Thus strengthening public involvement is important to raise awareness for landscape as well as the acceptance of the plan, actions and measures. Good examples of public involvement come from Midden Delftland and especially from Thy.

NAVARRA

Introduction

Liveland provides a method for using the CAF to analyze a hypothetical full case policy **landscape at different scales** (regional, sub regional and local). In Navarre, the first application of the CAF was to analyze the position of our practices regarding the European Landscape Convention (ELC) regionally and subsequently applied to cases of Orgi oak forest and Arga River Park (See Annex III Navarra Baseline Report).

Learning goals

After participating in the project Liveland **from the Government of Navarra as lessons learned include:**

- **In Navarre there are sufficient scientific studies** and materials to address landscape policies according to the guidelines of the CEP in the components related to "Strategy and Vision" and analysis. Navarre should take advantage of these studies and use them efficiently with an adequate methodology.

[20] A framework of monitoring is given in the LP Under chapter 6 "Forecast of environmental impact of the LP". Under 6.3 "measures for surveillance / monitoring" it is stated that German law on 'environmental impact' obliges municipalities to make environmental observations. In this case: a) state of implementation of the LP and b) accounting / balancing of landscape changes. Under a) a systematic documentation of all measures is needed (the measures in the 'tables' should further filled in) and under b) a list of indicators is given, related to the goals of the LP. A report on the 'state of landscape' should be made every 5 years. But the municipality has work to do (after the LP) regarding a detailed 'implementation plan' and a detailed 'system of landscape reports'

- **In Navarre legal tools are available** to protect and effectively manage certain landscapes. Planning for the "protection" and performance in landscapes is accompanied by concrete management actions, but not in all the components and functions of the landscape.
- **CAF analysis shows that the experiences of Navarre are homogeneous** and balanced in different components: evaluation and analysis, strategy and vision, actions and measures and monitoring. Navarre has appropriate ways of participation under applicable regional law.
- However, **there are no criteria and evaluation of the quality of the landscape** according to the CEP: "social vision of the landscape".
- **Landscapes have a holistic approach** that combines natural and anthropological aspects (social, economic, cultural) that give the character itself and different identity to each of them.

Policy recommendations

Following the learning of both the methodology and the project LiveLand in general and shared case studies from the internal perspective of Navarre, **the Government of Navarre suggests the following related items:**

1. **Planning procedures and decisions / freedom.** Navarre should take advantage of the operating consultative and participatory **Social Council of Land Policy (CSPT)** to incorporate the criteria of the CEP to policy planning and sectoral policies with different instruments through participation. The CSPT council will provide the Government of Navarre guidance on methodologies adapted to Navarre for the perception and evaluation of the quality of the landscape.
    - *Liveland case to apply: Midden Delfland and Thy.*
2. **Landscape commission results.** Interesting to meet, disseminate and implement the findings and recommendations of CSPT and in particular Landscape Specific Commission formalized by the CSPT in June of 2013 which aims to "implement the landscape in Navarre under the CEP" with four lines of action 1) CEP Contents 2) Framework and Methodology 3) Landscapes and Legislation 4) Conclusions of Liveland.
    - *Liveland case to apply: Basque Country, analysis on alternatives to implement the legal framework.*
3. **Strategy and vision.** The Future Landscape Plan or Strategy of Navarre will set the framework for the incorporation of criteria, determinations and guidelines for landscape and for each spatial scale and tools available today (Laws of Land Management, Natural Areas, Heritage Cultural and others with impact on the landscape).
4. **Evaluation and analysis / components.** Use scientific materials available at universities, research centers and groups linked to the study of the environment.
    - *Liveland case to apply: Offenburg.*
5. **ELC requirements.** To adapt the plans and projects to ELC requirements should be programmed actions in all analyzed components of Liveland (Culture and Heritage , Social Relations and Capital territorial , Economic , Health and Freedom) regardless of the planning legal instrument that is used (Laws Management of Natural Areas and Cultural Heritage) with an integral and holistic vision of landscape.
6. **Landscape and sectoral legislation.** It will be studied what criteria and landscape guidelines should be incorporated into sectoral regional legislation, and in particular into the legislation on spatial planning and land use planning - LFOTU and what should be incorporated into a specific Act or Regulation. The future Landscape plan or strategy of Navarre will focus in this regard.

BASQUE COUNTRY

Introduction

Due to the territorial reality of the Basque Country, being such a dense populated area is to find a balance between nature preservation and socioeconomic development since landscape constitutes a fundamental pillar in the Basque culture and identify.

The key territorial challenges that the Basque country is currently facing and that are also common in the practice under consideration in Laguardia could be summarized as follows:

- Simplification and uniformity of certain areas which result in the degradation of the landscape and the risk of identity loss, mainly as a consequence of disorganized industrialization, the transport infrastructures and main modes of transportation.
- Concerning the urban areas, the concept of landscape is generally associated with the protection of buildings or areas that have an architectural or historical interest.
- Maintenance of cultural landscapes particularly associated to certain traditional agricultural practices.

Learning goals

Key interest of the Basque Government for leading the Liveland project is eventually the identification of criteria for effective integration of landscape into other planning instruments.

- **Planning culture:** Institutionalize landscape approach into the spatial planning system.
- **Planning procedures and decisions:**
  - Good governance and regional boost
  - Operativeness of the landscape concept into the spatial planning system
  - Strenghen public participation
  - Relation between sector policy and landscape planning and management
- **Assessment and evaluation methods:** development of specific indicators for analyzing landscape towards liveability
- **Vision and Strategies:** Economic development aligned with landscape protection, planning and management

Policy recommendations

The Basque Government considering results from Liveland analysis and exchange of experience with other stakeholders has defined the following policy recommendations

1. **Awareness rising - Planning culture:** There is a need for institutionalize and operationalize landscape concept and approach into the spatial planning culture and planning system in place, aiming at reducing particular interests or competences and boost a holistic approach to the territory. This will require awareness rising within the administration with competences in landscape. The visibility of Landscape Catalogues and Guidelines developed in the 3 pilot areas to date is remarkably important in that connection.
2. **Improve institutional coordination- planning in practice:** A well know challenge in almost all regions at EU level is the need for improved institutional coordination, together with the strengthen stakeholder's involvement in the planning process.
3. **Management of rural areas near densely populated metropolitan areas:** Integration between different public administrations and sectorial policies is seen crucial to define activities to preserve the landscape, and recognize their value in these particular areas. There is a need for a co-participation between private and public stakeholders. The

consideration of the landscape dimension in the rural spaces is seen crucial considering that land use planning competences relay on local authorities. The processes of intensification agriculture intensification, land abandonment or diffuse urbanization, apart from being contradictory are common challenges in rural areas that should be overcome. This means that the articulation between local authorities with competences in land use planning a regional scale is seen crucial for successful sustainable management of the territory. The revision of the Spatial Guideline of the Basque Country already highlight this issue and incorporate landscape as a relevant topic, although there is still a need for implementation of actions and evaluation of effectiveness.

- *Liveland case to apply: Midden Delfland*

4. **Multiscale approach to landscape and spatial planning.** The Basque Country recognizes the importance of the multiscale approach to landscape and spatial planning. Considering the three levels of planning existing in the Basque Country 3 regional, subregional and local , the scale that is consider more appropriate for boosting the process towards the integration of landscape into territorial development is the regional and subregional.
5. **Methodologies of landscape evaluation.** The landscape practices in the Basque Country for the assessment and evaluation of landscape already have a comprehensive approach supported in a deep analysis of a wide range of territorial elements including references to subjective evaluation and perception that can condition the decisions and proposals regarding landscape planning. However there is still a need for the development of indicators for impact measurement: recreation of open spaces, protection of nature qualities, remediation or improvement of natural balance.

- *Liveland case to apply: Navarra*

6. **Planning processes and participation:** although the public participation process in spatial planning is well developed in the Basque Country, there is still a need for a more interactive and participative process; institutions and stakeholders working together with professionals

- *Liveland case to apply: Midden-Delfland and Thy NP*

7. **Planning procedures & decisions:** The Basque Country is determined to integrate landscape into spatial planning by means of the materialization of the Landscape Guidelines, so current planning instruments are seen as the tool for the protection, development and management of landscape and nature, and there is no need to create a new instrument for landscape planning. The formulation of landscape quality objectives as well as guidelines for protection, planning and management and its integration into spatial planning and land use planning instruments constitutes the basis to give normative dimension to such objectives and actions.
8. **Actions and measures.** There is a need for instruments for attract public investments to overcome the challenge of getting a real implementation of the actions and measures proposed throughout the planning.

MIDDEN-DELFLAND

Introduction

Before developing recommendations from the Project Group to the Stakeholders in Midden-Delfland, the policy context in the Netherlands should be lined out. The municipality is an executional government and has much power to regulate the spatial activities of private actors. The Province of South Holland has more power to develop new vision and strategies. At the moment in the Netherlands the dominant power of spatial policy comes from the national government. The main political trends are: deregulation and decentralisation of policies. The moving down of tasks is currently in progress, and not finished yet. The

national landscape policy has been abandoned (no more national protected landscapes) and decentralized to the provinces. South Holland has chosen to integrate landscape in spatial policy and to focus not on protection but on quality. The provincial spatial policy trend can be described as: fewer rules on designations (especially on urban enlargements) and more voluntary inspirations on spatial quality. The emphasis on quality (visual landscape) will be pushed forward, integrated in spatial planning, but gets a more open-ended character.

Given this context the municipality of Midden-Delfland in the future will only have to make spatial plans: visions and land us plans are the mandatory instruments. The classical Landscape Plan (as subsidised voluntary instrument of municipalities to come to a program of actions) no longer exists. Probably the municipality (in relation with other institutions) will have the wish to develop a program of actions. But it is likely that such programming will be done with other more integrated instruments.

Learning goals
The municipality of Midden Delfland (MD) and the Province of South Holland (PSH, as co-stakeholder) defined as key learning goals:

- From vision to measures: how can landscape quality be improved?
- Planning procedures: how to improve cooperation between public institutions and organize commitment?
- Impact measurement: how to organize monitoring?

Recommendations on landscape planning
1. The CAF analysis of the case of Midden-Delfland shows a strong 'systematic planning process' (ELC), especially from vision (tasks as physical developments) to measures (detailed guidance) to implementation strategy (as multi-level government). The Baseline Synthesis Report states that much could be learned from the practice of Offenburg. Some weak points (compared to Offenburg are the broadness of the analysis (focus on visual quality, delimiting other environmental items) and the monitoring and evaluation phase of planning.
2. Suggestion, in line with the provincial guidelines on spatial quality (see reference case in the Baseline Sysnthesis Report), could be to develop a *municipal 'guidance'* for spatial developments, which are more detailed as the provincial 'inspirations' and are the frame work for 'good consultations' between municipal licensing authorities and developers. In the green space of MD such guidance could focus on rural space / green infrastructure and city borders.)
3. Existing execution organisation 'Hof van Delfland' (as muliti-level organisation, including private stakeholders) should be continued and get a broader task: not only programming of spatial developments, but also of management of nature and landscape, including the new rural development program (as frame work for EU subsidies).
4. The Landscape Plan (decided in 2010), the Report on Execution (by the municipality on 2013) and the Execution Plan Hof van Delfland should be evaluated the next years (for instance in 2015) by an independent monitoring institute (for instance the National Environmental Bureau). Such an evaluation should take into account the goals on landscape, nature, water, soils, recreation, connections, etc. The analysis could be done on a broader scope as the landscape quality as such. An inspiration could be the monitoring indicators of the Landscape Plan Offenburg.
5. Last recommendation is that this 'broad' evaluation could be the starting point of an analysis of 'space, landscape and environment' and the development of tasks and measures for the next 10 years. This new planning process could be done by a team of experts on landscape and environment from inter- local execution agencies. Good

example for such 'Environmental Plan' could be the methodology of analysis of the Landscape Plan Offenburg: landscape, cultural elements, human well-being (leisure), soils, water, air, biodiversity and pollution / environmental stress. One of the items that could be included is the noise nuisance for recreants, coming from the motor ways.

THY NATIONAL PARK

Introduction

Parallel to the key challenge for the implementation of policies for "liveable landscapes", a key challenge for Thy is to balance protection and development of the landscape of the National Park, i.e. conserving/preserving a relatively unspoilt landscape while also applying various forms of recreational activities and general economic development in the area. Furthermore, the public participation requirements – both legally in the Danish planning system but also as a way to build ownership and diminish future (land use) conflicts – are adding extra levels to the above balance in that the planners and managers will have to prioritise between the interests of various stakeholders.

Learning goals

At the outset of the Liveland project, Thy National Park identified a number of issues that highlights the delicate balance of interests:

General planning

- What are the challenges and advantages of combining the formal municipal and regional plans with more voluntary/indicative plans and guidelines for the inclusion of landscape in land use and municipal/regional planning?
- How should land use/landscape changes that are located outside of the area in question but which have great impact on the land use/functionality/attractiveness of the area be dealt with?
- Is it possible to quantify the impact of the new plans?

Stakeholder participation

- How to manage the situation when there are various groups that have interest in/strong opinions on the landscape/land use changes, including local actors as well as regional/national administrations and national/international interest organizations:
    - Who has the right to decide on the landscape?
    - And how should discrepancies between differing opinions in this respect handled?
- In this respect a key issue would be to decide on how to determine who we are planning for, and thus who are to be involved in the planning process:
    - The local actors?
    - The stakeholders?
    - The 'public good'?
    - Whoever shows an interest?

  Should all inputs and interests be treated equally, i.e. with the same 'weight'?
- Is it possible to measure the impact of involving the stakeholders and public in the planning process?

Of these issues the stakeholders were particularly interested in:

- How to manage multifunctional land use which includes for instance tourism, recreation, economic development and nature protection?
- How to effectively monitor the plan goals and eventually how to evaluate the plan?

Policy recommendations

1. Multifunctional land use is a key feature of the Thy National Park in that only by focusing on this aspect does Thy National Park become more than just an enclosure for preserving the landscape. Balancing protection and use of landscape is already a key issue in the NPP, and this builds upon intensive cooperation and continuous dialogue between various actors, which is essential for avoiding possible conflicts among different interest groups. With the National park moving from its start-up phase to the progression in a long-term time perspective, it is important to consider how **continuation of this dialogue** can be ensured, both with regard to the time and resources needed but also in which form a decent level of commitment from the external actors can be expected.
2. **Prioritisation** of the activities in the NPP could be improved. Such a prioritization would also pinpoint to which parts of the plan the monitoring of progress should be focused.
3. **Monitoring and evaluation** can be improved. A first step is to think about what should be monitored: plan implementation; achievement of goals; activities; landscape changes? This has to be very concrete in order to be able to set up measures for how to monitor and evaluate.

LJUBLJANA URBAN REGION

Introduction

Ljubljana urban region decided to search for the opportunities that are supposed to be hidden in its less apparent landscapes. Leaving aside the ones that are being already part of higher recognition and public interest, Ljubljana urban region decided to raise question about the future development of one less exposed but rather characteristic Slovenian landscape.

Learning goals

RDA LUR has figured out the following learning goals at the beginning of the project:

- **Integration of the landscape plan in the regional spatial plan:** What should be the role of landscape plan within spatial plan and how should it be presented?
- They were interested in the methodology for identification of landscape potentials and in guidance on how to integrate the arguments (which are in favour of the protection of the landscape) in the stakeholder dialogue on development in the region.
- **Participatory process:** How to drive a participatory process towards the development of common vision of all stakeholders?
- Stakeholder was wondering how to bring participatory process to the point that the plan would be acceptable for all.
- **Branding of the region:** How to promote proper branding of the region?
- **Local production:** How to promote local production?
- They were interested in the practices or solution on how to stimulate the production and marketing of local products, especially food products.

Policy recommendations

The absence of planning at regional level in Slovenia becomes to be an obstacle in the frame of sustainable development model that is searching for **development opportunities** in the exact areas of higher landscape value since most of them are divided among more than one local municipality. While Slovenia ratified European Landscape Convention and people would declare the highly value the landscape in practice there are numerous gaps from planning level to management and supervision of change.

1. In this circumstances Ljubljana urban region is recognising its landscape as underused development opportunity and further efforts must be done to **promote this potential and effectively, more productively communicate** this vision with local community, residents and other specific stakeholders.
2. With current legislation and governance model, best solution would be to start a process of cooperation that would lead to the preparation of **informal spatial development programme and plan** which would engage local stakeholders from the early beginning and would reach the agreement by participation. Opportunities that lie in the landscape are strategically important for further development of the region and the strength of its identity so further attempts to activate them are necessary.
3. The active **participation of the interested stakeholders** (in particular the local public) in formal procedures would enable them to have a stronger and more creative influence on important spatial decisions. Basic instrument for the productive protection of the landscape would be not only to balance spatial interests and appropriate land use but to involve new programme, stakeholder and activity as well. It is only fair to point out from the early start of the process that landscape based development in Ljubljana urban region is competed with the huge potentials of the country's central urban area. Thereby the motivation must be strongly supported by common vision built in an open participatory procedure.
4. Landscape planning could thus be the creative fusion of development needs with protection mechanisms into a functional and harmonious urban and natural environment that produces a quality landscape.

6.3. More general conclusions and lessons learned- at EU level

Could it be possible from the outcomes of the Liveland research to extract some messages for raising awareness on relevant aspects challenges and opportunities to EU (DG Regio mainly), the CoE and national authorities for strengthening the consideration of landscape in territorial policies towards sustainable development?

Reinforce the relations between environmental policies and territorial development through landscape policies

At European scale there is still a need to strengthen the relations between environmental policies and territorial development and eventually spatial planning. Special attention could be placed to landscape as a way to do so:

- The consideration of the territorial impact of the environmental planning is crucial in that connection: planning and management of protected areas, water resources, soil erosion, and location of hazardous and highly pollutant activities and so on and so forth having a close link to effects in landscape.
- A great example of this could be the Natura 2000 network which could be seen as a multifunctional European territorial structure, representing a wide sequence of natural landscape at European level. Natural Parks could play the same role in other countries as it is the case in Germany.

Landscape as key territorial value for territorial development in areas of special characteristics

Several European documents of territorial development have identified areas with special characteristics such as urban / metropolitan regions, sparsely populated regions remote regions, regions in industrial transition; cross-border regions; mountainous regions; islands; coastal regions.

For these areas of special character explicit measures of territorial development have been proposed mainly highlighting the significance of their local resources as key potential for their territorial endogenous development. However the major emphasis is placed in the evolution of socioeconomic performance of such territories and less on landscapes, only including collaterally their cultural landscapes

Strengthen the role of landscape in the urban-rural relationship

The European development perspective (ESDP, 1999) and Territorial Agenda (2010) have as one of the main objectives towards the reinforcement of territorial cohesion in Europe:

- Development of a balanced and polycentric urban system and a new urban-rural relationship;
- Strengthen polycentric development and Innovation throughout networking of cities and regions.
- Alongside the design of new forms of partnerships and territorial governance between rural and urban areas.

The emphasis this time is placed in the urban-rural relationship and polycentrism opposite to concentration of the urban phenomena as a key objective of territorial development.

But little is said about landscape management, even though the morphology of the European cities and the urban landscape constitute its heritage and eventually its territorial potential. So strengthen the recognition of landscape values in policy could be a way for improving urban-rural relationships.

Multifunctionality of landscape

The expression “multifunctional landscapes” refers to areas serving different functions and combining a variety of qualities, i.e. that different material, mental, and social processes in nature and society take place simultaneously in any given landscape and interact accordingly. Multi-functionality in landscape, therefore, means the co-existence of ecological, economic, cultural, historical, and aesthetic functions. Thus, landscape multi-functionality is not necessarily synonymous with multiple land uses.

Different land uses can be a criterion for multi-functionality in landscapes, but even a single land use can involve numerous functions. Paracchini et al. (2011)[21] therefore emphasizes that the concept of multifunctional land use provides a favourable approach based on the recognition of that in order to maximize the benefits obtained from a given parcel of land, a more equitable balance of the competing economic, environmental and social demands on

[21] Paracchini, M.L., Pacini, C., Laurence, M., Jones, M., Pérez-Soba, M. (2011): An aggregation framework to link indicators associated with multifunctional land use to the stakeholder evaluation of policy options. Ecological Indicators. Vol. 11, Issue 1, January 2011. P 71-80. Elsevier

land is more sustainable in the long-term than an unbalanced system based on individual sector based rationale.

Considering the previous, there is a need for development of methods where the question of harmonious and disharmonious functionalities could be a way of improving the planning process.

Liveable landscapes as a response to degradation and social exclusion

Spatial planning as administrative discipline could provide tools and criteria to better reconcile the different landscape functions. Eventually this would mean sustainable territorial development considering socio-cultural, environmental and economic dimensions.

In that connection the implementation of landscape policies with such principles at local scale could be of great value in order to reduce degradation, improve the situation of deprived areas and contribute to social inclusion and cohesion. Some examples:

- Improving landscape quality in peri-urban areas densely populated
- Prioritizing action in highly deprived spaces (abandoned industrial areas, contaminated land sites, old landfills, etc) recovering their natural conditions and attributing to them public and social uses
- Landscape management, particularly it functions related to health and culture, alongside the public-private cooperation, could contribute to creation of jobs in deprived areas, favouring social integration and cohesion.

Incorporation of landscape principles into the Common Agricultural Policy (CAP)

The argument of the CAP being one of the European policies with greater impact on landscape is far for being new and the impacts of the CAP have been studied in several projects, also efforts to overcome the undesirable effects of the CAP have been implemented. The CAP materializes its impact on landscape mainly through the homogenization and banalization of traditional agricultural landscapes.

It is also remarkably important to deal with extensive ranching, both in the production related with the environment as well as the traditional management that helps out in dealing with certain risks, in case of Basque Country and Navarre through several standards on “Protected Denomination of Origin”.

It is suggested to stimulate a deep debate on this pattern of land use change globally affecting Europe and reflecting on the need for the development of an action principle for the systematic incorporation of landscape approach towards rural diversification and preservation of cultural heritage in areas affected by the (CAP).

Development of landscape quality objectives and criteria for action in relation to European infrastructures

The impact on landscape from the large European infrastructure has not been evaluated beyond the normative on Environmental Impact Assessment and Strategic Impact Assessment. Two main criteria are suggested:

- Creativity and adaptation to inherent local characteristics of the territory in each intervention

- Recognizing the value of landscapes at local and regional level that such infrastructures must cross, minimizing the impact and even contributing to its enhancement and management

Inventory of Landscapes of general interest

It is suggested that instruments for spatial planning and territorial development (strategies, policies, programs and plans) at national and regional level identify and delimitate landscapes considered of general interest due to their relevance, singularity, vulnerability, provision of irreplaceable functions and services. For its preservation, planning and management is remarkably important to define specific norms, whether it would be through regulation or through not binding recommendations depending on the planning context and country.

Landscape key issue for territorial development in cross-border areas

Cross-border regions could frequently present "natural landscape units" which could lay in different planning cultures, planning systems and rely on different scales of planning competence and responsibilities. This could be translated in incoherent evolution of landscapes in those areas with unwanted impacts also in terms of territorial cohesion. That is why is suggested a particular attention to cross border areas in that connection.

The ESPON project LP3LP[22] is addressing a cross-border European landscape with high importance within its polycentric metropolitan context (LP3LP Draft Final Report Chapter 5, version 14/10/2013). In this project, ESPON studies and results are used to place this region in a European context, to identify the potential effects of EU policies and to take stock of the unique territorial potentials of this region.

More research is needed for detecting territories with complementary potential matters towards sustainable land use

Sustainable land use: means using and manage land assets in a way that benefits the local and regional economy, without compromising biodiversity and ecosystem services, working to sustain the land for future generations. **Sustainable land use** implies a balanced consideration of the range of social, economic, and environmental goods and services provided by the land uses in a certain region/landscape (Wiggering et al., 2006; Pérez-Soba et al., 2008). It also implies a careful consideration of long term attributes of resilience and robustness that are to maintain underlying ecosystem processes.

More research is needed to detect territories with complementary potentials, often neighboring, which can join forces and explore their comparative advantages together creating additional development potential.

There is obviously a **need of developing tools which enables the inclusion of differences in relation to both intensity and diversity of the use of landscapes** in order to become an asset in regional development towards sustainability. Such tools – both quantitative (intensity) and qualitative (functionality) - are needed in order to enable the analysis of questions relating to balances between landscape protection and social welfare combined with different types of economic development.

[22] ESPON LP3LP Landscape policy for the three Countries Park http://www.espon.eu/main/Menu_Projects/Menu_TargetedAnalyses/LP3LP.html

Governance

Considering the political, technical and administrative dimensions of Landscape management, it could be argued that they perfectly fits into the governance principles, above all:

- subsidiarity and participation (social vision of landscape),
- openness and liability (administrative coordination and effective articulation and management of competences)
- efficiency and coherency (organization with respect to the different polices and administrative levels from local to European) [23]

7. Potential for improvement and next steps

Application of Liveland approach to other European territories at different scales

The use the CAF liveability spreadsheet out of the project case studies would be very interesting in order to provide more insights on best practices and policy options in EU.

Proposal for **evaluating LPLP project case study with CAF** liveability spreadsheet reporting to Liveland on the results and also on the usability of the tool itself.

Interactive design of the CAF-spreadsheet

To improve the usability of the CAF-spreadsheet it might be beneficial to make use of interactive functionalities of the Excel software. This tool would increase the usability of the table as it leads to avoidance of extra work. Questions could be masked as long as they are not needed. Additionally, all answers could be checked for logic and consistency where possible. Could also be provide as an online Tool as interactive questionnaire

Consider Biodiversity

In the present version of the CAF biodiversity is not a prominent aspect although many topics that relate to biodiversity are addressed. It is often argued that biodiversity is contributing to liveability in one way or another. For example the 2020 European biodiversity strategy states:
"Its deterioration and loss jeopardises the provision of these services: we lose species and habitats and the wealth and employment we derive from nature, and endanger our own wellbeing."[24]

The link between liveability and biodiversity seems obvious regarding activities that directly relate to biodiversity, e.g. watching birds as a kind of leisure-time activity. Still, it would be an inacceptable generalisation to state that every aspect of biodiversity is enhancing liveability. For example, exposing people to a high variety of pathogens would not be considered a welcome contribution to liveability while, at the same time, it contributes to high biodiversity. It cannot be ignored that there are strong interrelationships in multiple dimensions between biodiversity and liveability; this needs to be highlighted in future revisions of the CAF-spreadsheet. At least this will also contribute to the argumentation of landscape as an asset in liveability.

[23] COMISIÓN EUROPEA: "La gobernanza Europea. Un libro blanco" COM (2001) 428 final

[24] European Comission (2011: 1)

Components of liveability that are not addressed within the revised CAF

Initial attempts to fill the CAF-spreadsheet showed that a number of components of liveability that are related to landscape are not regularly addressed in official landscape plans and policies, namely pollution, parks, traffic, multifunctionality, etc. For practical reasons 'security' is no longer part of the revised CAF. For other components the number of indicators was reduced (see Chap. 5.3).

Nevertheless, these components and indicators are still important to characterize liveability of landscape as an asset in regional development. Dropping them in the revised CAF should not be misunderstood as these components being less important than others.

Moreover, the fact that particular landscape assets are not regularly addressed in official policy documents points to the high potential of yet unexplored realms of liveability that landscape offers as an asset to be included in planning and regional development. As a first outcome of the analysis it can be stated that most of the plans and policies recognize liveability benefits in all of their dimensions. But only a small part of them is currently addressed. There is still much potential for improvement - even more than the results of the benchmarking task might indicate at first glance.

Criteria for landscape policy implementation

Further research work is required for the elaboration of a set criteria for the the selection of the policy interventions and criteria for implementation with regard to sustainable, responsible,effient land use and land use management.

This could be materialized in a target analysis, under priority 2 in the next ESPON programme.

Development of appropriate indicators

The follow up of landscape policies needs two types of indicators for different scales: regional and local. Liveland has already focused in the regional scale as it has been already exposed. .

The Liveland project has developed a methodology for evaluation of liveability of landscape practices and on top of that, the research teams acquired enough experience in order to establish in the near future a set of indicators useful for both landscape views "top-down" and "bottom-up".

The set of proposed indicators must be homogeneous for the whole Europe, both in the form of measurement as in the interpretation of results.

Landscape approach as a way to operationalize Ecosystem Services within spatial planning

Further explore the use of ecosystem services approach to landscape and identification of landscape functions, aligned to multifunctional landscape development towards for instance adaptation. It has been suggested for developing and/or evaluating "quality objectives".

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ISBN

ESPON

LIVELAND
Liveable Landscapes: a key value for sustainable territorial development

Targeted Analysis 2013/2/22

Part C Final Report
Scientific Report

|Version April /2014

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

This report presents the final results of an Applied Research Project 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 on-going ESPON projects.

This basic report exists only in an electronic version.

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Abbreviations

ARN – Natural Recreation Area (Study case of Navarre, legal instruments)

BC Basque Country

CAF Common Analytical Framework. Also refers in the next to the Liveland spreadsheet (matrix)

CAP Common Agricultural Policy

CoE Council of Europe

CSPT - Social Council of Territorial Policy (Study case of Navarre, legal instruments)

EC European Commission

ELC European Landscape Convention

ESDP - European development perspective

EU European Union

FA - Factor Analysis

GIS Geographic Information System

LP Landscape Plan

LLP Local Landscape Plan

LUR Ljubljana Urban Region

NGO – Nongovernmental organisation

NP National Park

NUTS Nomenclature of Territorial Units for Statistics

MD Midden-Delfland

PCA - Principal Component Analysis

PP – Protected Landscape Area (Study case of Navarre, structure of participation and deliberation)

UNCED - United Nations Conference on Environment and Development

WTA - Willingness To Accept

WTP - Willingness To Pay

PART 1 Conceptual approach

1. Benchmarking concept

Addressing and reacting to both on-going and forthcoming changes is a key issue in both policies and practices. LIVELAND as a targeted analysis project constitutes a practice oriented research about landscape planning and territorial development in some European planning systems. And in that connection it is crucial knowing what changes are important, how to embrace the changes, and having a precise idea of both directions and means and measures.

Benchmarking is the process of comparing and measuring one organisation or system or element against others, and in that connection being able to identify "best practices" and generate measures that may help the organisation to take action in order to embrace the new challenges and eventually improve its performance[1]. And in the end provide guidelines that may be useful not only between the participants but more generally.

The question of "best practice" is often dealt with as an important "measuring stick", as the identification of successfully demonstrated practices may provide useful information on as well where to look for solutions, and what issues to use as means of comparison. Insight from others who have dealt with the same questions and addressed issues characterising the problems dealt with is important[2].

The benchmarking within LIVELAND project is conceived as a process of comparing and evaluating different practices in the involved case studies with the aim to achieve a higher level of performance, here specifically providing criteria for successfully integrate landscape planning and management into spatial planning and in term, in regional strategies.

The benchmarking exercise aims at bringing up the specific approach to landscape liveability and territorial planning in each case study, facilitating the exchange of experiences and feedback between the participant stakeholders. It intrinsically involves a process of interaction between researches and stakeholders (professionals of planning) accomplishing three goals:

1. A **comparison** between the practices of different administrative territorial entities

2. A **tool and agenda for the stakeholders** to discuss and compare their performance at two potential levels:
   - Internally, aiming at providing a comparison between different practices of landscape and territorial planning within one's own organization by evaluating own practices against the other cases and thereby acquire an important contribution to the internal knowledge management efforts.
   - Externally through testing (by the research group) and evaluation (by the stakeholders) the usability of the results, indicating the options for generalizations beyond their own situations.

[1] Mardi Coers,Chris Gardner,Cynthia Raybourn,Lisa Higgins (2001): Benchmarking: A Guide for Your Journey to Best-Practice Processes. APROQ (American Productive & Quality Center), Texas, USA

[2] As a general principle: Andersen, B. and Pettersen, P-G. (1996): Benchmarking Handbook. Chapman and Hall, London; As a concrete issue in relation to landscape planning: Termorshuizen, J.W., Opdama, P. and van den Brink, A. (2007): Incorporating ecological sustainability into landscape planning. Landscape and Urban Planning 79 (2007) 374-384.

3. **Transferability assessment and guidance for policy recommendations** addressed in the final stage of the project.

Expected results:

- An overview of good and best practices of landscape and territorial planning, with focus on approaches which can serve as general inspiration for landscape planning in a territorial planning context.
    - Examples of actions or measures which have proven towards harmonious and sustainable territorial development, like for instance combining landscape protection and socio-economic development.
    - As illustration of good practices, examples of impact on regional development where socio-economic development has gone hand in hand with successful landscape protection and management should be taken forward by means of an overview of the current practice of landscape policy making, examples of implementation of European landscape policy in the national regulations, the identification of terms, concepts and practice shared among the landscape policy makers, and finally the identification of concepts related to practices and procedures constituting the local, national and regional planning and management in each of the stakeholder-countries.

- Interaction between researchers and stakeholders: input to a higher level of practice of the stakeholders and recommendations for benchmarking tools for evaluation and improvement.

- A set of indicators that can serve as a common base for comparisons and benchmarking performance in landscape and territorial planning entities.

- Besides, appropriate indicators and examples of good practices that can serve a broader audience in the 'ESPON space'.

- Eventually a draft version of "Guidance towards best practice in landscape and spatial planning"

2. Introduction to the research on liveability

When confronted with 'liveability' the first question that comes to mind is: how might such a vague term be defined? The next question is: how might any definition of liveability become useful in practical application? And finally, with regards to LIVELAND, the question is how landscape might contribute to liveability? To begin with, definitions and practical applications of the term liveability are discussed. A cursory analysis of so-called liveability ranking approaches and a brief introduction to so called 'happiness research' provide a first starting point to understand different concepts of liveability. A discussion of approaches that aim at assessing human well-being, quality of life, standard of living, etc. is then presented, leading the way towards discussing the LIVELAND concept of liveability

2.1. Happiness, well-Being, Quality of Life and Liveability

"Happiness is generally considered an ultimate goal of life; virtually everybody wants to be happy."[3]

In science as well as in everyday language several terms are used to describe what people might describe as the good life. 'Liveability', 'Happiness' and 'Well-Being' are often used as synonyms, especially within economics. Such synonymous usage of terms makes it even harder to understand each one of them. In general the above cited description gives a very blurry idea of happiness, and it does not give any clue as to what happiness really is and what everyone would agree with. The basic problem is due to the fact that happiness is a very subjective experience, and that no one really knows what makes people happy.

A quite outdated definition, the one stating that happiness is the absence of any physical and psychological pain,[4] is still present in general discourse. This statement seems no longer of practical use, at least not in European civilisations where, fortunately, the absence of pain is taken for granted in many ways. Pain can, of course, still be a big issue for the individual happiness but not for the whole society.

A similar critique might be appropriate for the following approach from Jeremy Bentham. He defined happiness to be "the sum of pleasures and pains"[5]. This idea is well known as the basis of the 'utilitarianism' philosophy and 'the greatest happiness principle'[6].

More recently VEENHOVEN[7] applies the 'greatest happiness principle' and gives an overview of the definition of the term happiness. In a broad sense happiness can be seen as what is shown in Table 1. In this broad meaning happiness might also be used synonymous to

[3] Frey and Stutzer (2002: 402); see also Frey (2010: 1)

[4] Thomas Jefferson

[5] Bentham (1789) cited from Veenhoven (2004)

[6] This theoretical basis sums up pleasure and pain of all members of the society. In its original version this means that a society would be happier if everybody is suffering from less pain and enjoys more pleasure. But the major criticism is that based on this theory a society would also be happier if the pleasure of few would be extremely high, will the majority is suffering from high amount of pain. Thus the principle was modified, that and the latter concept of raising happiness was excluded, by stating that average happiness should not be raised by the cost of pain for the majority. Further objections are discussed by Veenhoven (2004).

[7] Veenhoven (2004)

"quality of live" and "well-being".[8] FREY & STUTZER[9] come to the conclusion that there might be a difference but, since all those terms show significant positive correlations, it is not necessary to substantially distinguish between the three categories. Within the matrix below qualities of life result from outer and inner qualities as well as life chances and results (Table 1).

	Outer qualities	Inner qualities
Life chances	**Liveability of environment**	**Life-ability of the person**
Life results	**Utility of life**	**Satisfaction of life**

Table 1 Four qualities of life general quality of life[10] (satisfaction of life is detailed in Table 2)

Within the matrix "satisfaction of life" (underscored) is what could be defined as the narrow meaning of the term happiness. In this meaning happiness is no longer synonymous with the before-mentioned terms. Rather it is similar to what is named appreciation of life and is the objective of the evaluation of self-reported happiness, or subjective well-being[11]. Happiness as a narrow term then might again be analysed using another matrix (Table 2). Life satisfaction in this (second) matrix has an outstanding position. Basically it is what has to be valued over the whole lifespan and might best be compatible with the greatest happiness principle.[12] VEENHOVEN sums up that *"Happiness can be defined as the 'overall enjoyment of your life as-a-whole'."*[13]

	Passing	Enduring
Part of life	**Pleasure**	**Part-Satisfaction**
Life-as-a-whole	**Top-experience**	**Life-Satisfaction**

Table 2 Four kinds of satisfaction according to happiness[14]

In LIVELAND liveability of the environment is the most relevant issue, because this is what planning is able to influence.[15] Nevertheless we have to bear in mind that the aim is to raise people's satisfaction with life (especially Life-satisfaction) or 'happiness' in its narrow meaning.

Finally it has to be accepted that there might neither be a clearer nor an objective definition of what happiness really is. Happiness research is investigating factors that show general

[8] *"When used in a broad sense, the word happiness is synonymous with 'quality of life' or 'well-being'. In this meaning, it denotes that life is good, but does not specify what is good about life."* Veenhoven (2004: 3)

[9] Frey and Stutzer (2000) also Veenhoven (2004: 3) states "When used in a broad sense, the word happiness is synonymous with 'quality of life' or 'well-being'. In this meaning, it denotes that life is good, but does not specify what is good about life. "

[10] Veenhoven (2004: 15)

[11] *"Subjective well-being is the scientific term in psychology for an individual's evaluation of her experienced positive and negative affect, happiness, or satisfaction with life."* Frey and Stutzer (2002: 403); "*The umbrella term for these measures is subjective well-being."* Frey (2010: 17)

[12] Veenhoven (2004: 5–6)

[13] Veenhoven (2004: 6) is referring to the narrow meaning of happiness

[14] Veenhoven (2004: 16)

[15] Veenhoven (2004: 4)

correlation with happiness. Thus many scientists refer to "self-reported happiness" or "subjective self-reported happiness"[16] as the measure of happiness.

Not only is happiness holistic and therefore hard to split up into parts (that can be evaluated separately), it is individual (subjective) and the socially accepted concept is changing eventually. Recently we have seen a change from the idea of 'having' that was most present after WWII to the concept of 'being' that today is observed to be more present to most Western societies.[17]

The possibilities to influence happiness are another important field of research. VEENHOVEN states *"Happiness of the great number can be raised, just like public health can be promoted."*[18]

Summarizing the terms liveability and happiness (in the narrow meaning) are most interesting for LIVELAND. Liveability is the subject of policy and therefore on the agenda of planning. The most important measure of liveability of the environment is self-reported happiness. For LIVELAND we will only use 'happiness' if it is to be addressed in its narrow meaning.

2.2. Happiness Research

"Happiness Research" is done in social sciences such as psychology and sociology but also economics and of course philosophy. There are strong links between happiness research and research on well-being (see below), including research on how insights into happiness might help governmental and civil society agencies in attaining their goals of increasing (in the case of government: national) well-being[19]. These links are so strong that the 'Journal of Happiness Studies' claims that it is mainly „devoted to scientific understanding of subjective well-being"[20]. For the purpose of LIVELAND it is but one segment out of happiness research that is of interest, and that is how and to what extent people' surroundings relate to happiness. What is of interest then, from the realm of happiness research, are conceptualizations of happiness, and its measurement in relation to landscape explanations.

Fundamental discussions on different concepts of happiness research oscillate between the two questions whether or not it might be possible to conduct such research considering the whole of society while, at the same time, any idea of a 'happy life' is, by definition, subjective and the focus must, therefore, be on individual happiness. The basic difference between these two points of view lies in the role of the subject and it is this difference that has led to a number of different theoretical (and philosophical) concepts. In theology, concepts of happiness relate to the subject being part of a Greater System, one that includes elements from another world. The subject might be „filled with happiness" that, at least partly, will become true in another world such as 'In Paradise'. In socialistic happiness concepts, where the subject has a minor role, happiness will be attained mainly through the

[16] Frey and Stutzer (2002: 403); Jordis Grimm (2006: 7))

[17] Schulze (1994); cf. Fromm (2006)

[18] Veenhoven (2004: 12)

[19] e.g. Bhutan government has set the aim to maximize „Gross National Happiness"

[20] http://www.springer.com/social+sciences/well-being/journal/10902 08.10.2012

happiness of society as a whole. Therefore happiness will mainly be found in this world and not in another one.[21]

A third group of happiness concepts includes variants of egocentric concepts of happiness. Two main sub-groups may be distinguished. In one of the egocentric concepts of happiness the focus is on the inside of the subject, while the other concept places the emphasis outside of it; the two are referred to as the 'Concept of Possession', and the 'Concept of Being'.[22] It is the latter of these two that appears to be prevalent today (even though, mainly in philosophy, current thinking is leading the attention to other more intangible factors; some of these we will return to below).

The 'Concept of Being' relates to a definition of happiness that emphasise what is called 'the event-driven society'. A basic dilemma of pertinent research occurs when people's actions lead them to experience 'feelings' that do not meet with their expectations. Such expectation might be a hoped for feeling of fulfilment that one might have after purchasing goods that appeared attractive in some advertisements.[23] Using established scales of usefulness, quality and wealth to measure 'being-related happiness' do not produce empirical results that help explain different degrees of happiness.[24]

For the purposes of LIVELAND, therefore, we need to turn the attention to happiness concepts of being. A number of approaches exist that might lead ideas of how happiness can be 'measured'. Three of these approaches can be identified as potentially useful for the purposes of LIVELAND. One is the idea of direct happiness ranking; another one is the ranking of liveability employing parameters that definitely are closely related to happiness. A third one is the concept of using human well-being indexes; these are mainly oriented towards some of peoples' basic needs (this measure would be one that most closely related happiness to the concept of possession).

2.3. Operationalisation of Happiness and Liveability

Much scientific work has been done on the question of how happiness can be evaluated. Happiness research has come to the conclusion that, for assessment purposes, factors of happiness can be identified. Therefore self-reported happiness is compared to factors of peoples living circumstances. Especially economics have put effort into research on happiness and its economic valuation. Often a theory of utility is applied, but this approach has often also been criticised[25].

There are different methods to evaluate the influence of environment and human behaviour to happiness. Some methods use self-reported happiness (Questioning Are you happy? And to what degree), others would directly ask sources of satisfaction (What makes you happy?), and willingness to pay (WTP) and willingness to accept (WTA) are further ones. In most studies however, the methods are triangulated. It is possible to group different types of (research) strategies:

[21] Schulze (1994)

[22] Schulze (1994) cf. Fromm (2006)

[23] One of the best known examples how advertisements makes use of the happiness concept of being are the Campaigns of Apple. More than in any other Apple sells a feeling and a specific way of life more than a product.

[24] Schulze (1994: 18–19)

[25] Schulze (1994: 18–19)

- Liveability rankings make use of the outcome of happiness research. It attempts to make the findings operational and split them up into different factors. These are used to survey certain areas (countries and cities) and compare liveability by the degree of factor fulfilment. Examples are the Human Development Report[26] and the Economist Intelligence Unit[27]. For LIVELAND such examples are important sources for operationalisation.

- Happiness surveys ask people to report on what makes them happy. These studies report on what is the source of people's happiness. The 'Deutscher Glücksatlas' (German happiness atlas)[28] is an example that illustrates this strategy. For LIVELAND such examples are important sources for what happiness is for people.

- Sectoral research: The third group starts from a hypothesis to investigate certain aspects that might influence happiness. In many instances the basis for the hypothesis appears to be a utilitarian one. For example, FREY[29] assumed that, because many people spend a lot of time watching TV, it is likely that watching TV is of benefit to people's happiness – a hypothesis which the studies did not confirm. For LIVELAND such examples are important sources for what happiness is for people and how it could be influenced.

2.4. Liveability Rankings

'Liveability Ranking' is commonly known to be applied to assess cities for their "liveability". Such rankings are mainly based on surveys of living conditions and some of these are landscape based. Two examples among many are the reputable 'Mercer Quality of Living Survey' and the 'Economist Intelligence Unit's Global Liveability Report'. The comparison of cities is commonly done by employing parameters and criteria such as safety, education, hygiene, public health, censorship, culture, environment, recreation, political-economic stability and public transportation. If the emphasis is placed on quality-of-life, additional aspects are considered such as climate/sunshine, access to nature, urban design, quality of architecture, etc. (see for example "The Most Livable Cities Index" published by the lifestyle magazine 'Monocle').

Mercers[30] recently added a separate 'personal safety section' to its annual ranking of cities, which helps companies determine cost of living adjustments for employees transferred overseas. The Cato Institute's urban planning expert Randal O'Toole takes yet a different track and favours looking at which cities draw the most newcomers. To him this is a sign of affordable, liveable cities. The Economist Intelligence Unit recently started to combine their popular "Liveability Index" with a new measure that focuses on spatial characteristics. The "Spatially Adjusted Liveability Index" takes into account characteristics such as 'sprawl', 'pollution', 'green space', 'natural assets' (including protected areas), and 'cultural assets' (e.g. the number of 'Heritage Sites'). No rankings or measurements are perfect, and this one

[26] United Nations (2010)

[27] Economist Intelligence Unit (2011)

[28] Raffelhüschen and Schöppner (2012)

[29] Frey (2010: 93–106)

[30] http://www.mercer.com/qualityofliving

is no exception: “Only 70 of the cities on the original EIU “Liveability Index” had their spatial characteristics analysed, for example”[31]

Such rankings include a considerable number of qualitative information. When considering the category of quantitative rankings the measurement of living standards might serve as an example. This ranking is based on a highly mathematical procedure that mostly takes into account material facts like the average income, inflation, number of physicians per inhabitant, etc. While living standard ranking deals with quantities, the measurement of living quality also includes social and cultural assets (e.g. the availability of independent media).

Number indexes have been proposed, which - while using different methods - are based mainly on similar categories. For example, the Economist Intelligence Unit[32] has introduced, with their particular ‘Quality of Life Approach’, a so called “Spatially Adjusted Liveability Index”. This approach might be seen as one step towards introducing landscape aspects into the measurement of quality of life. The mere fact that attempts to introduce landscape parameters into such forms of indexing and ranking exist might be taken as a sound indicator for how landscape is increasingly considered important when assessing liveability, even by the more economically minded. The standard approach to city ranking includes more than 30 criteria/indicators[33]. They are organised in five groups:

- stability,
- healthcare,
- culture and environment,
- education,
- infrastructure

These groups are weighted differently while the factors within each group are treated equally. The latter is a point for criticism. For example, by providing good infrastructure, a city might be able to balance out high crime rates. Such comparison does not seem to be reasonable, particularly if the city ranking index is to provide a basis for cities to openly compete on which is the most liveable of all.

While the above mentioned approaches are utilized to e.g. calculate the amount of money you have to offer an employee extra to make him work and live in less attractive cities or - another example – for advertisement in city marketing other rankings seem to follow more serious aims.

Some approaches to measure human well-being are quite simple in structure, while others are rather complex. Where well-being is related to living standards a number of different living standard indexes may be identified. Some of these are very simple using only few parameters, criteria and indicators. One example is the ‘Physical Quality of Life Index’[34]. An example that is more sophisticated is the so-called ‘Human Development Index’[35]. The latter was, at the time of its inception and initial application in 1990, quite revolutionary. It went beyond measuring well-being on the basis of income by also taking health and education

[31] http://www.smartplanet.com/blog/cities/top-10-best-and-worst-cities-to-live/3788

[32] Economist Intelligence Unit (2011)

[33] Economist Intelligence Unit (2011: 4–5)

[34] http://www.enotes.com/topic/Physical_Quality_of_Life_Index

[35] United Nations (2010)

into account. In 2010 the method of the HDI (Human Development Index) was again extended to now measure well-being along five components each using four different measures.

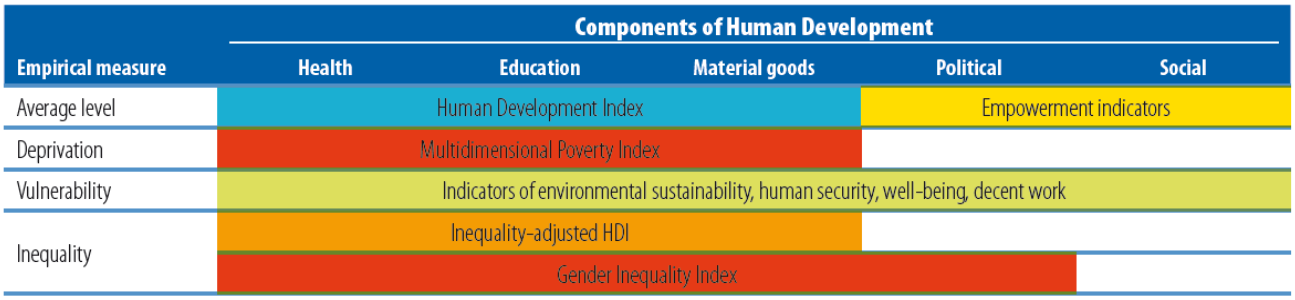

Figure 1 Five components of human development within the Human Development Index [36]

Relevant parameters that are included in the Index are:

- empowerment
- sustainability and vulnerability
- human security
- perceptions of individual well-being and happiness
- civic and community well-being
- demographic trends
- decent work
- education
- health
- enabling environment:
  - financial flows and commitments
  - economy and infrastructure
- Access to information and communication technology

For the purpose of LIVELAND, 'Liveability Rankings' provide a first glance at parameters and criteria that might be included in a Common Analytical Framework CAF to evaluate liveability of landscape practices in the project case studies. According to the definitions of landscape (see above) such parameters and criteria would be most useful if they related to spatial and environmental characteristics; they need not necessarily be physical in nature since the above mentioned concepts of landscape include both tangible and intangible qualities that people might give value to in their surroundings.[37] Parameters from 'Liveability Rankings' that relate to physical space are, to name a few, climate/weather (measured by sunshine hours, temperature, etc.), air quality (measured 'pollution', etc.), access to 'nature' (measured by natural areas per capita, etc.), access to 'cultural assets' (measured by 'historic monuments', 'heritage landscape', etc.), 'scenic quality' (measured by urban design, architecture, view sheds, etc.), and others.

[36] United Nations (2010: 85)

[37] Larsen, Schweitzer and Fondahl (2010) for example developed a setting of "Arctic Social Indicators" taking into account landscape related quality of life indicators.

2.5. Happiness surveys

One example of ranking happiness more or less directly is the "Deutsche Post Glücksatlas 2012"[38]. In this example ranking is done on the basis of different factors that appear to be most important for establishing an index representing happiness. Therefore people were asked to report on their own happiness (self-reported happiness). Relevant parameters were derived from the comparison of socio-economic factors and self-reported happiness. Examples for parameters of the good life turned out to be:

- health
- social life
- income and wealth
- employment situation
- (age)

A study commissioned by the federal government in Germany on self-reported happiness came to comparable conclusions.[39] For the purpose of LIVELAND such parameters would need to be translated into landscape-based criteria. This might best be done by relating these to the functions landscapes have to offer (see the chapter on landscape concepts).

2.6. Happiness Research in Economics

Sector research on different factors of happiness (and liveability) has been conducted by a variety of researchers. FREY[40] gives an overview on the outcomes of happiness research in economics. His research has been focussing on the following topics:

- income
- unemployment
- inflation and inequality
- public sphere
- self-employment and voluntary work
- marriage
- television

The approach to happiness research is mostly based upon the idea of valuation; most likely the value in money people are willing to pay for goods and services.[41] The other paradigm is the idea of usefulness. It is assumed that, if people do something it has to be of use for them. With regard to these paradigms happiness research in economics have revealed that the paradigmatic approach shows significant shortcomings. In many studies (e.g. on television consumption) it turned out, that in many cases people are just not acting according to the principle of utility. That is, because often it is quite hard to estimate utility of actions beforehand and also after even.[42] Other things are just not done for utility but for other reasons. According to the first paradigm on monetary valuation it turned out that for

[38] http://www.gluecksatlas.de/cms/2012/regionen.html#

[39] German Federal Government (2012: 25)

[40] Frey (2010)

[41] When it comes to valuation of goods and services that are not really for sale e.g. air, landscape beauty, people are asked to give value to these.

[42] Schulze (1994: 18–19)

some goods and especially services it is not reasonable to estimate a price or as shown by the example of water, valuation is highly depending on the availability.[43]

Nevertheless the happiness research in economics has led to several important outcomes, which most of the above described surveys and studies are based upon. It has been shown that it is possible to explain dependences of components of liveability to circumstances of life and give an insight into what makes people happy.

2.7. Components of liveability as a conclusion

Liveability is, in many instances, seen as closely related to quality of life. However, where 'quality-of-life' indexes are based mainly on economic factors, such index reflects only part of what is important for liveability. Many approaches to integrate qualitative factors into the measurement of quality-of-life have been published and cannot be reviewed here in detail. Two major issues that exceed what some classic liveability indexes are offering have to be taken into account:

- Where happiness is at the basis of quality-of-life any attempt to rely on objective measures need to be supplemented by parameters that reflect subjective aspects; for the purpose of LIVELAND landscape aspects need to be considered (including what people cherish in their surroundings for contributing to their quality of life).

- Where landscape is to be considered, in relation to quality of life, measurements must attempt to include landscape as a holistic entity (as "an area as perceived by people"). The measurement of quality would have to include perception aspects and these would, at least partly, be subjective in nature.

  A list of components that are commonly agreed upon regarding what is important for measuring liveability in connection to quality of life are included already in the Appendix 3 of the present report.

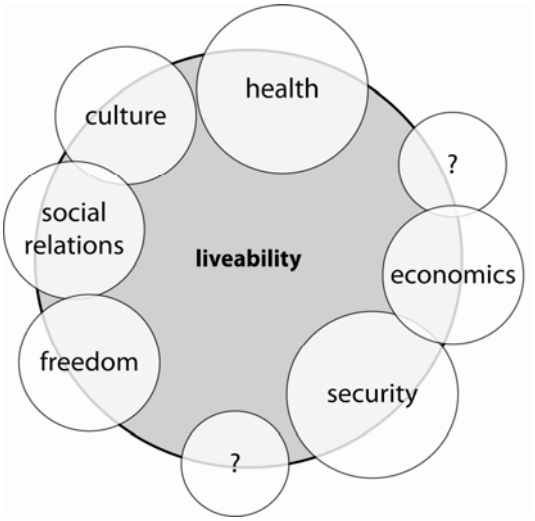

Figure 2 Components of liveability

[43] While the water one needs for drinking is most valuable and thus people are willing to pay the most for that, water for a shower per week is less valuable, water for the second shower per day even less, water for watering the garden again less. Nevertheless as you pay for water every liter has the same price independent on how it is used.

3. Linking Liveability Research and Landscape Concepts

Landscape function concepts seem to be a useful approach to make the holistic concepts of liveability and landscape useable for assessment. Moreover it meets the idea of multilevel assessment agreed upon in the application, as it is generally applicable on every planning level. Nevertheless the parameters of assessment might vary depending on the scale. A related approach was presented in "The Millennium Ecosystem Assessment". This project was focusing on the relation of liveability and ecosystem services with a slight emphasis on the "Basic Materials for a Good Life". The approach was further developed to an approach related to multifunctional landscapes.[44]

Therefore LIVELAND suggests the use of a matrix of liveability parameters (Table 3) on the one hand and landscape functions on the other hand to identify and describe landscapes contribution to liveability. It should be clarified that this matrix is neither final nor exhaustive, but should serve as the basis for a discussion on landscape contributions to liveability. Output from the first stakeholder meeting especially on the landscape concepts present in the stakeholders' policy, plans and concepts of liveability have to be integrated.

	Regulation Function	Production Functions	Cultural Functions
Health	high	high	middle
Security	high	low	low
Social relations	low	low	high
Culture	low	low	high
Economics	middle	high	low
Freedom	not related to landscape services, but important in planning landscapes		

Table 3 Landscape-liveability matrix, estimation of interrelation of landscape function groups and components of liveability

Detailing relations between Landscape and Liveability

For this step landscape functions are organized according to three categories; these are regulation, production and cultural functions. Methods are established, parameters and criteria (and indicators) are developed for each function and scales are defined where "measuring" might be useful. Criteria are specified and it is explained how to use them for the purposes of the CAF. Components of liveability have been analysed according to their relation to different landscape functions. Only traceable combinations of landscape functions and liveability are taken into account which:

- show a significant relation between liveability and landscape functions (you might find any direct or indirect relation for all combinations, but only a limited number is relevant),
- could be influenced significantly by planning, especially landscape planning. (There are landscape - liveability relations that cannot be influenced by any know planning instruments),
- comply with the definition of liveability and landscape within the European policy documents and are part of the findings stage 2 of the project.

When detailing the relation between landscape functions and liveability it turned out that the landscape functions concepts might have some shortcomings when related to liveability (e.g. contribution to health or identity). It might be argued that this is caused by a general

[44] Groot and Hein (2007)

focus on ecology and economics within many landscape concepts. For LIVELAND it seems most reasonable to take into account all those contributions of landscape to liveability that do not fit in the landscape functions concept by DE GROOT and either extent the functions descriptions or make use of the contribution without directly relating it to the functions.

Landscape and Health

The following contributions of landscape to health could be identified with regard to landscape functions:

Production of (healthy) food. Landscape can be used for the production of organic farmed food that is a contribution to the healthy way of living. By this is meant the farming of the land, therefore it differs from the food production function that is listed by DE GROOT ET AL. (see also Annex) It depends on the sustainable use of regulation functions: o **soil formation** o **soil retention** o **nutrient regulation** o **pollination** o **water supply** o **Biological pest control**
Recreation Landscape is an important resource for recreation. Recreation includes activities like hiking, biking, playing etc. but also relates to experiences (see also aesthetic functions)
Water supply. Clear fresh water is the most important source of life. Landscape filters, gathers and offers clear fresh water. This water is used **directly** for drinking etc. as well as **indirectly** for the production of food.
Waste treatment. Waste treatment contribute to hygienic living environment They help to prevent disease and contamination to spread (e.g. via Water supply)
Biological pest control. This on the hand help to hinder diseases to spread that **directly** affect men, or on the other hand are helpful for the production of healthy food.

The following landscape characteristics are important for health promotion within planning and can be addressed in plans on regional as well as local scale.[45]:

Physical health	**Physical outdoor activity in cities (daily life)** • Access and presence of physical activity promoting facilities • General functionality of urban districts (e.g. sidewalks traffic regulation, bicycle and walking paths)
	Physical outdoor activity in cities (leisure time) • Multifunctionality • Street connectivity • Traffic safety (e.g. pedestrian zones) • Landscape perceived as pleasant / Aesthetically appealing landscapes • Nearby parks, playgrounds and sports fields (high quality) • Access to places for physical activities (high quality)
	Physical outdoor activity outside cities • Aesthetically appealing rural green landscapes (e.g. forests)
	Production of healthy food (organic food production) • Fertile soils (see economics / work) • Availability of fresh and clean water (see economics / work) • Variety of land use
	Access to clean fresh water • Surface water bodies

[45] Abraham, Sommerhalder and Abel (2010)

	• Groundwater
	Living in an healthy environment • Provisioning of ecosystems to prevent contaminations • Diseases prevention • Landscape ability to destruct wastes
Mental health	**Attention restoration and recovery from mental fatigue** • Natural landscapes such as beaches, waters, forests, parks, mountains • Availability of public open spaces used for public entertainment and sports
	Recovery from stress • Landscape perceived as pleasant / Aesthetically appealing landscapes • Easy access to green areas with lower sound levels from road traffic The benefits to health when the "soundscape" is consistent with the visual and related pleasant aspects of landscape, are connected with two variables: • Increase the level of well-being and environmental comfort in the area contributing to a more rewarding sensorial experience to the user/visitor/. It is related to the improvement in perceived health too. • Increase the restoring capacity of the area, and therefore the capacity for restore from stress of the people visiting/enjoying/living there. People could better recover from stress, due to daily, in coherent places- sound-views-other stimuli.
	Positive emotions • Landscape perceived as pleasant / Aesthetically appealing landscapes • Open and accessible forests

Landscape and Security

The following landscape functions contributing to security can be identified:

Disturbance prevention: Landscape offers functions of disturbance prevention. This function can be used and maintained by planning.
The following landscape characteristics are related to the landscape functions important for security especially security from disasters within planning and can be addressed in plans on regional as well as local scale:
Disaster prevention o General spatial development that is enhancing landscape functions of disaster prevention o Variety of land use o Sustainable agriculture and forestry
• **Disaster protection** o Features of disaster protection o River restoration reducing for instance flooding risk o Vegetation for slope stabilization

Landscape and Social Relations / Capital

The following contributions of landscape to social relations and capital could be identified:

Recreation functions offer the opportunity for people to meet with each other and get into contact without regard to status and economic situation it therefore: o reduces **inequality** o helps to build **bonding and bridging capital** o to build **trust** between members of the community
With regard to the before mentioned functions the following landscape characteristics are important for social relation and capital within planning and can be addressed in plans on regional as well as local scale.[46]
Promotion of social integration • (High quantity[47] and quality[48]) parks (that provide sufficient level of safety, are attractive and serve multiple purpose[49]) • Community gardens / allotment gardens • Reduce conflicts within society that are a serious threat to security
Ability to collectively experience landscape • "Wild nature" as perceived by people • Accessibility of landscape
Neighbourhood structures that have the potential to build mutual trust • Trust in neighbours, active neighbours

Landscape and culture

The following contributions of landscape to culture could be identified:

Cultural & artistic information and **spiritual & historic information** are sources of **identity**. This information can be found in the landscape. They have to be maintained and carefully developed.
Scientific and educational functions contribute to liveability by keeping alive the knowledge on history and culture as well as natural science.
Identity is built throughout identification with landscape and landscape elements. Individual and community identity help to • to **bond and bridge** between members of different communities as well as between members of the same community. This is achieved mainly by distinction.
The following landscape characteristics are important for culture within planning and can be addressed in plans on regional as well as local scale.
Identity • Building community identity • Elements of identification ('Symbols') • Landscape character (e.g. Swanwick[50])
Education • Landscape as an asset in education

[46] Abraham, Sommerhalder and Abel (2010)

[47] Finke (2009)

[48] Körner, Nagel and Bellin-Harder (2009)

[49] Abraham, Sommerhalder and Abel (2010); Körner, Nagel and Bellin-Harder (2009)

[50] Swanwick (2002)

Landscape and Economics / Work

The following contributions of landscape to economics / work could be identified:

Aesthetic information are a source of attractiveness and therefore important for tourism and real estate, sustainable management will **secure jobs and income**.
Recreation, spiritual & historic information and **cultural & artistic information** are another source of tourism and the related economy.
Production and **regulation functions** are important for agricultural and forestry economics, including energy production and distribution.

The following landscape characteristics are important for culture within planning and can be addressed in plans on regional as well as local scale. In this context the role of planning as moderator of different interest is of high importance and should be addressed within the planning processes and decisions.

Tourism • Landscape as touristic destination ▪ Landscape attractiveness in general as an asset in tourism (Scenic value) ▪ Elements and symbols of touristic meaning ▪ Touristic an recreational infrastructure
Real estate • Landscape as an asset in real estate ▪ Landscape attractiveness as an asset in real estate (scenic value) ▪ Proximity to certain landscape elements and parts
Agriculture and forestry • agriculture / forestry: Fertile soils and Availability of fresh and clean water for growing crops / woods

Landscape and Freedom

There is **no landscape function** directly contributing to freedom. A contribution can only be seen by the planning processes on landscape. Nevertheless this seems of high importance for LIVELAND.

As a conclusion it is stated that a number of landscape functions contribute to liveability and landscape. The summary of the analysis is presented in Table 3. In addition, some indicators are mentioned that might be used in practice. How indicators may be used during the analysis of cases is discussed in section 6 of the present report.

4. Policy context

In the increased focus in the EU regional policies on harmonious territorial development towards sustainability the European Landscape Convention (ELC, 2003) has been an important contribution to the on-going process of stimulation the integration of landscape plans within spatial planning. Differences in land use administration and decision processes in EU are reflecting different historical and contemporary pattern of legal, constitutional and administrative framework. And these differences have been – and are - impacting the European landscapes which are recognized as being a key territorial value.

In the process of identifying means and measures in the integration of landscape plans in the spatial planning an important first step is to explore how "landscape" has been considered and included in the different levels of planning and administration in EU. The EU regional policies and the ELC share the goal of 'harmonious development', a concept which indicates the importance of harmonious development, cohesion, sustainability and the protection of cultural and natural heritage, as is stated in the Territorial Agenda and the Green Paper on Territorial Cohesion, and stresses the need of the inclusion of landscape planning in the overarching territorial development. Not only by means of planning at an overall European level, but through a trickling down of the inclusion of the two processes of planning in practice at different territorial levels.

Such an inclusion requires consistent definitions which recognize that land use, land cover and landscape are terms closely related and very often used interchangeably, but at the same time emphasizing different qualitative as well as quantitative characteristics. An important issue is therefore how the landscape concept has evolved and been introduced and developed in as well EU polices as in the national and regional applications of the concept. And furthermore an overview of how policy development supporting institutions such as ESPON, EEA and others have been instrumental in bringing the concept from theory into practice.

4.1. Evolution of the concept of Landscape in EU planning

4.1.1. The starting point

The development of the European Union is characterised by a process of coordination and integration of historically developed governing and planning systems. However, during most of its existence - from the starting point with the six members of the European Coal and Steel Community to the present situation with 27 EU member countries and additional 6 candidate countries – an overarching focus of the EU has been on economic development. In this context the EU administrative community has been showing differences in land use decision processes due to different pattern of legal, constitutional and administrative frameworks having an impact on landscape.

It has been emphasized that the first planning activities with overarching consequences for the European landscapes were done in the name of Sicco Mansholt, Commissioner on Agriculture in the European Economic Community by developing the Common Agricultural

Policy, a policy which converted Europe during a period of forty years from a net importer to a net exporter due to the establishment of instruments to guarantee farmers' income, manage rural depopulation and encourage modernisation of farms[51]. However, this policy has by some been characterized as being responsible for destroying millions of small farms, forcing European farmers to increase the scale of their operations and thus dramatically changing the European landscape[52].

4.1.2. Planning for sectors and production

While the first decades of planning in the EU were related to the two main issues of economic development and the economic, social and cultural integration of the member states, other issues such as a harmonious territorial development towards sustainability have appeared on the agenda during the last three decades and resulted in the evolution of planning from land use development by means of economic incentives, towards a the concept of cohesion in its social, economic and territorial dimensions emphasising more equal concern with economic development, environmental justice, and social and economic equity[53].

However, this is brought forward with a continued focus on sector development as the determining issue, and without recognition of the role of landscapes in the development process. The rationale for this has mainly been the belief that Europe as a whole only would be able to compete successfully on a global scale by turning the focus on the strongest candidates in its largest regions, and without recognition of the potential landscape impacts of such a strategy.

This goes hand in hand with other efforts such as strengthening polycentric development, networking of agglomerations, and supporting the role of important international clusters. Key aspects also encompassed urban drivers, demographic and economic mass and power, and not the least territorial uses such as comparative advantages of agglomerations, global transport hubs and connectivity between major agglomerations. And on top of that the role of innovation and the creative class. In the policy documents addressing of issues such as quality of life occasionally appears, and then usually in the traditional context stating that economic growth is promoting quality of life. But it is implied at the same time that these discussions for the most part missed to explicitly addressing the processes themselves and their varying economic and territorial effects.

Along with the recognition of the increased complexity connected to EU decision taking a number of institutions was introduced, and an entity which is relevant in this context was the establishing of The European Environment Agency (EEA). The regulation establishing the

[51] Memorandum sur la reforme de l'agriculture dans la Communaute Europeene, Communication de la Commission des Communautes Européennes, document COM (68) 1000, Brussels 1968

Mansholt, S. (1970): The Mansholt Plan. Studies, an Irish Quaterly Review. The Talbot Press, Dublin.

[52] Van Merriënboer, J. (2011): Mansholt. A biography. Mémoires de l'Europe en devenir. Vol. 2, Bruxelles, Bern, Berlin, Frankfurt am Main, New York, Oxford, Wien, 2011

[53] For instance the Aarhus convention: Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, adopted in Aarhus in 1998.

EEA was adopted by the European Union in 1990 and came into force in late 1993. The EEA's task has from the start been "to provide sound, independent information on the environment", ensuring evidence based information "for those involved in developing, adopting, implementing and evaluating environmental policy, as well as the general public"; This in order to help planners and policy makers to advance informed decisions about how to improve the environment, and not the least to work towards the integration of environmental considerations into economic policies which eventually should lead EU towards sustainability[54].

And to do that the emphasis for many years was on having a better understanding of the potential long‑term consequences of human actions, and design policies that stand the test of time. "*Forward studies have been developed to scan the future of agriculture, transport and energy, climate change and air pollution. And more and more governments have started to assess the impacts of their policies in a systematic manner*"[55]. It is interesting how landscapes even in the 2009-2013 strategy document still is considered something other activities may be impacting, but not being an integral part of the development process: "*Over the past decade the Agency has analysed conflicts over the use of space and land-based resources in Europe and observed that they will be exacerbated by urbanisation, transport growth, shifts in agricultural priorities, new forms of tourism, evolving societal aspirations around mobility and housing, demography and the continuous changes to the territorial landscape from climate change putting at risk ecological and social resilience"*[56].

Similarly it is - in the Agriculture and forestry section of the document - said that "*Our main objective [is]: To provide integrated analyses of land use trends in agriculture and forestry through assessments of their current and future impact on water, soils, air quality, biodiversity and landscapes. This will help to assess the impact of new societal demands, demographic and technological trends on the natural environment and form a basis for policy evaluation and feedback into related sectoral and environmental policies*"[57].

As will be discussed below, these statements are to some extend contradicted by what was reported by EEA already in 2007.

4.1.3. Recognition of the Landscape concept

As a preamble to the upcoming discussions in relation to the European Landscape Convention in 2000 the Pan-European Biological and Landscape Diversity Strategy[58] opened up for "recognising the uniqueness of landscapes, ecosystems and species, which include, inter alia, economic, cultural and inherent values …. [in a] Pan-European approach to the

[54] Caspersen, O. (1999): The European Environment Agency. Global environmental Change, vol. 9, issue 1. April 1999, pages 71-75. Elsevier

[55] EEA 2007: Land use scenarios for Europe: Qualitative and quantitative analysis on a European scale. , Technical report no. 9, 2007, European Environment Agency. p8

[56] EEA 2009: EEA Strategy 2009-2013 – Multiannual Work Programme. EEA 2009, p29

[57] (EEA 2009, p30)

[58] Council of Europe (1996): Pan-European Biological and Landscape Diversity Strategy. Nature and Environment, No. 74, Council of Europe Press

conservation and sustainable use of shared natural resources"[59]. The proposed strategy was a response to the Convention on Biological Diversity and included 10 strategic principles for its implementation:

Aims

1) Threats to Europe's biological and landscape diversity are reduced substantially.
2) Resilience of Europe's biological and landscape diversity is increased.
3) Ecological coherence of Europe as a whole is strengthened.
4) Full public involvement in conservation of biological and landscape diversity is assured.

Objectives

1) Conservation, enhancement and restoration of key ecosystems, habitats, species and features of the landscape through the creation and effective management of the Pan-European Ecological Network.
2) Sustainable management and use of the positive potential of Europe's biological and landscape diversity through making optimum use of the social and economic opportunities on a national and regional level.
3) Integration of biological and landscape diversity conservation and sustainable use objectives into all sectors managing or affecting such diversity.
4) Improved information on and awareness of biological and landscape diversity issues, and increased public participation in actions to conserve and enhance such diversity.
5) Improved understanding of the state of Europe's biological and landscape diversity and the processes that render them sustainable.
6) Assurance of adequate financial means to implement the Strategy.

Especially principle 4 on public involvement in conservation measures, objective 6 on optimum use of the social and economic opportunities, and objective 8 on increased public participation in actions to conserve and enhance diversity indicate not only an opening towards the inclusion of the landscape concept, but at the same time also an indication of the need of public involvement.

A next step towards the recognition of the landscape concept as more than just a bystander environmental-cultural aspect was by the adoption of the "ESDP - European Spatial Development Perspective - Towards Balanced and Sustainable Development of the Territory of the European Union", prepared by the Committee on Spatial Development and agreed at the Informal Council of Ministers responsible for Spatial Planning in Potsdam[60]. In this document the concept of landscape planning is recognised:

[59] Op. cit. p. 6

[60] ESPD 1999: European Spatial Development Perspective (ESDP) - Towards Balanced and Sustainable Development of the Territory of the EU. European Commission, 1999

"Natural and cultural heritage in the EU is endangered by economic and social modernisation processes. European cultural landscapes, cities and towns, as well as a variety of natural and historic monuments are part of the European heritage. Its fostering should be an important task for modern architecture, urban and landscape planning in all regions of the EU." (ESPD 1999, p10)

And it is furthermore recognized as an active part in the spatial development:

""*Spatial impact" or "regionally significant" in this context means that Community measures modify the spatial structure and potentials in the economy and society thereby altering land use patterns and landscapes."* (p 13)

As a response to the challenges emphasized above a set of four policy options were suggested (p 34):

- *Preservation and creative development of cultural landscapes with special historical, aesthetical and ecological importance.*
- *Enhancement of the value of cultural landscapes within the framework of integrated spatial development strategies.*
- *Improved co-ordination of development measures which have an impact on landscapes.*
- *Creative restoration of landscapes which have suffered through human intervention, including re-cultivation measures.*

Especially the second point in the suggestion show that the bystander role is vanishing, and instead landscapes becomes an integral part of the spatial development strategies.

A further break-through in the recognition of landscape as a policy issue was the European Landscape Convention[61], adopted on 20 October 2000 in Florence by members of the Council of Europe which include members of the European Community and European non-member states as well. It became binding in 2007, and 27 countries obliged in this connection themselves to acknowledge the importance of landscape protection, management and planning in their legislation as well as raising the public awareness of landscape issues and furthermore promote international cooperation in this field. As stressed in the document the convention covers natural, rural, urban as well as peri-urban areas and includes land, inland water and marine areas. It is, however, furthermore emphasized that not only landscapes that might be considered outstanding are included. Also other landscapes which might be thought of as being ordinary or even degraded should be included as they are the outcome of human activities in the landscape.

The ELC defines landscape as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". It recognizes that landscape "constitutes a resource favourable to economic activity and whose protection, management and planning can contribute to job creation" and responds "to the public's wish to enjoy high quality landscapes and to play an active part in their development". Important in this

[61] Council of Europe 2000: European Landscape Convention, CETS No. 176.

context to emphasize how the definition of landscape used by the ELC and the definition of territory used by EU regional policy come very close. It is therefore embedded in European concepts of landscape that, as people, we do not simply live in a physical reality of 'areas' or 'territory' but mainly in our perception of such areas: in landscapes[62]. 'Landscape' includes the physical and the mental, the natural and the cultural[63]. Landscape is consequently a common good that visibly and invisibly frames everyday lives. For their health and wellbeing people need both, a suitable environment, and a liveable landscape.

It is obvious how the Convention has been stimulating the elaboration of landscape plans and calling for its integration within spatial planning, considering landscape as a key territorial value. Up till now, however, only some of these commitments have been realised so far.

As stressed by D'ejeant-Pons (2006) and others[64] it has been the first international convention to focus specifically on landscape, and is dedicated exclusively to the protection, management and planning of all landscapes in Europe[65]. Furthermore she stresses how the convention highlights the need to recognise landscape in law, to develop landscape policies, and to establish procedures for the participation of the general public and other stakeholders in the creation and implementation of landscape policies. And in this connection it is important to recognize the importance of including the landscape concept in promoting the consolidation of the European identity.

The convention emphasizes how everyone's lives are affected by the quality of landscapes and that it therefore is required to seek a democratic approach where citizens are invited to take an active role in the decision-making process. It furthermore encourages the integration of landscape into all relevant areas of policy, including cultural, economic and social policies. This, however, may generate different impacts throughout Europe. Landscapes are important parts of the quality of life in different areas of the European continent as landscapes – as emphasized in the text - are contributing to the formation of local culture and are a basic component of the European natural and cultural heritage. With

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[62] Moore, N. and Whelan, Y., editors 2007: Heritage, memory and the politics of identity: new perspectives on the cultural landscape.

[63] Council of Europe (2003): Presentation of the European Landscape Convention. Strasbourg, Council of Europe.

[64] Pedroli, B. (Ed., 2000): Landscape – Our Home / Lebensraum Landschaft. Essays on the Culture of the European Landscape as a Task. Indigo, Zeist. 221 pp.

Van Mansvelt, J.D. & B. Pedroli (2003): Landscape, identity and integrity. Towards sound knowledge, awareness and involvement. Contribution to the Second Meeting of the Workshops for the implementation of the European Landscape Convention. Council of Europe, Palais de l'Europe, Strasbourg 27 November 2003.

Pedroli, B. (2004): Die europäische Landschaft, was tun wir mit ihr? Natur + Mensch 2/2004: 2-5.

Wascher D. & Perez-Soba M. (eds.) (2004): Learning from European Transfrontier Landscapes – a project in support of the European Landscape Convention. Alterra report 964, LANDSCAPE EUROPE, Wageningen

[65] Déjeant-Pons, M. (2006): The European Landscape Convention. Paper Presented at the Forum UNESCO University and Heritage 10th International Seminar "Cultural Landscapes in the 21st Century" Newcastle-upon-Tyne, 11-16 April 2005 Revised: October 2006

diversity in both history and impacts it is important to be aware of the differences in both speed and direction of changes, being necessary because the development in the different sectors of activities accelerates the transformation of landscapes whereby an important component of the identity is at risk of disappearing.

According to the ESPON 2006 programme on the spatial development of an enlarging European Union[66], and in order to respond to the increased pressure on or even transformation of the European landscape, it is necessary to:

- Identify and gather existing indicators, propose new indicators, collect data and develop methods such as map-making to measure and to display the state, trends and impacts of the developments.
- Prepare an inventory of indicators and measures for the identification of natural heritage with regard to the typologies of regions, including the identification of areas with most emerging conflicts between their natural heritage and man-made activities; and
- And finally identify which type of territorial development patterns would minimize the conflicts between the conservation of natural heritage and economic activities and, therefore, contribute to a better management of the natural heritage.

The consequence of the adaption of the convention has been an awareness of including the landscape into issues related to territorial structures and territorial development, and the need for a three tier approach: Landscape being a resource (i.e. Land use, Biodiversity, Production, Capital); Landscape being an institution (Customary law, Social order, Land rights, "A way of communicating, a way of acting") and Landscape being a perceived scenery (representation, ideal/mental construction and a way of seeing)[67].

4.1.4. Territorial cohesion with Landscape as a peculiarity

The introduction of the concept of Territorial Cohesion indicates another important milestone in the EUs internal understanding. The origin of the concept is found in the 'European Spatial Development Perspective' (ESDP), agreed by the European Union, the Council of Ministers responsible for Spatial Planning in Potsdam, May 1999. It established the 'territory' as: a New Dimension of European Policy. As summarized by Böhme and Gløersen (2011)[68] "Territorial cohesion is about achieving balanced development, focusing on European solidarity, and stressing inclusive growth, fair access to infrastructure and services, and reduction of economic disparities". As further emphasized a key element is the strengthening the use of development potential outside what used to be the previously targeted territorial entities, namely the main growth poles. This should be done in order to

[66] ESPON 2006: The Espon 2006 Programme – Programme on the spatial development of an enlarging European Union. Interreg III community initiative – ART.53

[67] Widgren, 2004

[68] Böhme, K. and E. Gløersen (2011) Territorial Cohesion Storylines: Understanding a Policy Concept. Spatial Foresight Briefing 2011:1. Luxembourg. www.spatialforesight.eu

ensure a minimum of welfare provision in all regions as the previous assumption of growth poles automatically being the "locomotives" that would pull other regions ahead.

The reasoning behind this shift in focus has obviously been the recognition of that every territory would be endowed with its own distinct set of potentials for further development – defined as the specific "territorial capital or comparative advantages. It is emphasized how every region and local area also has resources available to make use of these assets and offset deficiencies. And that it is not only a question of resource availability being the strength or fragility of a territory, i.e. being on the positive or negative side between the assets and deficiencies, but even more the question of the "resources available to territories to activate their potentials and respond to deficiencies". Ample sources of wave energy are of no use without the ability to convert it into usable electricity. Limited access to energy, however, can be partly compensated if knowing how to limiting heat loss and by being more efficient in making use of existing resources. In this context the question of equal and fair regional development opportunities needs to be supported by fair access to common goods such as infrastructure and services. A development prerogative is therefore a situation where all parts of a territory should be provided with access to certain standards of services. What kind of services, however, would depend on the territorial context.

A suggestion in the ESPON TIP TAP project[69] includes the following 3 main components of infrastructure in relation to the concept of territorial cohesion:

- Territorial Efficiency: resource-efficiency with respect to energy, land and natural resources; competitiveness and attractiveness of the local territory; internal and external accessibility.
- Territorial Quality: the quality of the living and working environment; comparable living standards across territories; similar access to services of general interest and to knowledge.
- Territorial Identity: presence of "social capital"; landscape and cultural heritage; capability of developing shared visions of the future; creativity; productive "vocations" and competitive advantage of each territory.

It is important to emphasize that any mentioning of the landscape concept is in this context still only inter-related to the cultural heritage concept and thus not an overarching issue.

4.1.5. Territorial cohesion recognizing the Landscape complexity

A more diverse understanding of the complexity of land use functions in the EU discussions have been inspired by UNCSD Rio 1992-Agenda 21[70] where it is emphasized that: "By

[69] ESPON Tip Tap (2008) Project 2013/1/6 TIP TAP Territorial Impact Package for Transport and Agricultural Policies. Inception report September 2008.

[70] Rio Declaration: http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm

Mann (1992): "The Rio Declaration", 86 Proceedings ASIL 406

Handl (1995): "Sustainable Development: General Rules vs. Specific Obligations", W. Lang, ed., Sustainable Development and International Law 35

examining all uses of land in an integrated manner, it makes it possible to minimize conflicts, to make the most efficient trade-offs and to link social and economic development with environmental protection and enhancement, thus helping to achieve the objectives of sustainable development".

This focus on territorial development – and thereby on inclusiveness of the landscape concept in territorial cohesion - represents the core interest of the action emphasized by UNCSD in addition to drawing the attention to the role of valuable natural ecosystems, environmentally sensitive areas, cultural landscapes, monuments and historical sites are endangered by pollution, floods, droughts, erosion, fires, earthquakes and landslides, but also where economic development is excluding – or neglecting – the role of territory AND landscapes. In follow-up discussions such as O'Rourke (2008) it is emphasized how landscape planning and land use planning are synergistic in that landscape planning informs the policy-making and legal structure of comprehensive land use planning[71]. And the landscape plan of Offenburg is a practical application of such an approach.

The larger themes addressed in this stage of the territorial cohesion debate are related not only to access to services of general interest and infrastructure, but include territorial diversity, territorial capital, economic imbalances, and to questions on solidarity and territorial justice. As already mentioned above[72] a central issue in this context is the idea that no region can be strong unless the major part of its territorial capital has been developed in combination within an overall framework where unnecessary concentration and polarization, reproduction of territorial inequalities, spatial discontinuities and contrasts at different geographical scales can be avoided. At the same time, however, it is emphasized that the structure should include access to services and infrastructure and not the least options for maintenance and emergence of territorial identity and solidarity.

The future of land use planning and smart growth in the above described context is recognized as being "tied to comprehensive landscape planning in concert with economic development and socio-economic equity planning"[73]. This force to some extend planning of communities to include landscape planners in order to provide a scientific rationale for smart growth that encompasses the environmental as well as cultural quality goals, and to recognize that cultural landscapes are the visible result of history on the territory interacting with present activities, and therefore an utmost important topic. Not the least in Europe.

It is often emphasized that a balanced and sustainable spatial development requires needs to include the landscape component, not only by protecting but also through enhancing the landscape qualities. On one hand typical landscapes related to contemporary rural and urban living conditions. But also including the cultural heritage through ancient agricultural landscapes, infrastructural characteristics related to different époques such as roads,

[71] O'Rourke, M. (2008): Landscape Planning and Land Use Planning: Definitions, History and Roles. In: Landscape Planning and Land Use Planning: Definitions, History and Roles. http://www.asla.org/ppn/Article.aspx?id=15112

[72] Böhme and Gløersen, op. cit.

[73] O'Rourke, op. cit.

railroads, old and newer windmills, old and newer channels and hydropower installations, the marks left by industrialization and urbanization, etc. As indicated above, cultural heritage is a concept that goes beyond historic heritage and needs to be inclusive both in relation to past, present, and future characteristics. It is the cornerstone of local, regional, national and European identity[74]. Accordingly, spatial planning should approach this issue in a comprehensive and integrated manner.

Interesting in the context of the need of spatial planning being integrative is what was emphasized by EEA in 2007: "*Most of the available long‑term studies focus only on one sector or one dimension of a problem. This comes at the expense of analysing inter‑linkages of the many socio‑economic driving forces that contribute to problems in our increasingly complex and fast changing world*"[75].

Referring to 'territorial cohesion' policy EU aims and those of the Council of Europe are close. With regards to achieving highly liveable landscapes the goal of EU regional policy of 'harmonious development' of all European areas76 very much related to the protection, management and planning of such landscapes. As already emphasized above, the UNCED conference emphasized the principle that all territory should be managed sustainably and to meet social, economic, ecological, cultural and spiritual human needs of present and future generations. The principal drivers of change for European landscapes, and the perceptual consequences of specific choices of land management options, are influenced, directed, or constrained, by instruments and legal frameworks, including the European Union's Common Agricultural Policy, Rural Development measures, and others. 'Landscape' has been included into a multitude of policy at European level, and different landscape issues have received priority status with European policy makers. Examples are, to name a few, territorial development, urban development, human rights, environment and agriculture policy.

4.1.6. Green growth and Sustainable Development

With the Agenda 2000[77] the question of the CAP and its role in relation to the environment – and in the end on the landscapes – were again brought to the agenda[78]. And this time with a different focus compared to the Mansholt approach. While the starting point was formulated in Article 39 of the Treaty emphasizing goals of securing a fair standard of living for the agricultural community and ensuring security of supply at affordable prices, the new focus has been on a consistent rural policy[79] where two pillars – one maintaining the focus

[74] Community Initiative Programme: Interreg III B (2000 – 2006) for the CADSES INTERREG III B CADSES Neighbourhood Programme (2000-2006)

[75] McGlade, J. (2006): Visions of the future for Europe – Prelude – five scenarios for 2030. Speech at Friends of Europe, Brussels, 29 November 2006 by EEA. Underlining by us.

[76] Territorial Agenda 2007, recent Territorial Agenda 2020, Green Paper 2008, Common Agricultural Policy 2014-2020, Renewal Energy Directive, Climate Change Programme, Cohesion Policy 2014-2020, Biodiversity Policy 2020

[77] CEC, 1998

[78] EC 2009: Agenda 2000 – A CAP for the future. http://ec.europa.eu/agriculture/publi/review99/08-_09_en.pdf

[79] securing a fair standard of living for the agricultural community and ensuring security of supply

on production and means necessary in that connection, and the other with focus on rural development. In Agenda 2000 a comprehensive rural development policy was introduced. An important issue was the recognition of the multifunctional nature of agriculture and thereby the recognition of agriculture serving different functions besides food production, and at the same time also that other economic activity are taking place in the rural landscape and supporting the rural economy in a broader sense. Measures have therefore been brought together in one regulation which aims to contribute to the regeneration of rural areas and the promotion of diversification. In this connection the concept of landscape is, however, not referenced

With the Europe 2020 targets important goals for the development in Europe have been suggested and translated into national targets in order to let each Member State check its own progress towards these goals as they are to be pursued through a mix of national and EU action.

The following list includes the overall goals[80]:

1. Employment: 75% of the 20-64 year-olds to be employed
2. R&D: 3% of the EU's GDP to be invested in Research and Development.
3. Climate change / energy greenhouse gas emissions: 20% (or even 30%, if the conditions are right) lower than 1990, 20% of energy from renewables, 20% increase in energy efficiency
4. Education: Reducing school drop-out rates below 10% at least 40% of 30-34–year-olds completing third level education
5. Poverty / social exclusion: at least 20 million fewer people in or at risk of poverty and social exclusion.

Besides responses to the on-going change in climate there are no overall nor country based specifications in relation to the environment, for instance the inclusion of landscape in planning.

Further advances in relation to the concept of landscape are, however, taken into account in the most recent reform outline regarding the CAP[81]. According to the proposal the Commission is proposing to spend 30% of direct payments specifically for the improved use of natural resources. As a consequence farmers would be obliged to fulfil certain criteria such as crop diversification, maintenance of permanent pasture, the preservation of environmental reservoirs and landscapes[82]. Furthermore issues such as the development of local infrastructure and local basic services in rural areas, and not the least leisure and culture related activities would be included. In relation to the concept of landscape in this

[80] http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/targets/index_en.htm

[81] http://ec.europa.eu/agriculture/cap-post-2013/legal-proposals/index_en.htm

[82] EC 2011/0282 (2011): Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)

CAP context is a focus not only on the natural landscape but questions in relation to renewal of villages and activities aimed at the restoration and upgrading of the cultural and natural heritage of villages and rural landscapes. Again in contrary to the first CAP the maintenance of natural and cultural landscapes is considered as being an essential element of any effort to realise the growth potential and promote the sustainability of rural areas. This should result in a situation where farmers and other land managers would be responsible for serving society as a whole by "introducing or continuing to apply agricultural practices contributing to climate change mitigation and adaptation and compatible with the protection and improvement of the environment, the landscape and its features, natural resources, the soil and genetic diversity. In this context the conservation of genetic resources in agriculture and the additional needs of farming systems that are of high nature value should be given specific attention"[83]. Furthermore it is emphasized that restoring, preserving, and enhancing ecosystems dependent on agriculture and forestry should work in relation to the improvement of the state of European landscapes, and in that relation include a focus on the cultural and natural heritage of villages and rural landscapes, including related socio-economic aspects.

4.1.7. Multifunctionalities and multi-level governance

Mankind uses land and situate their activities in the landscape for a multitude of purposes. Some of these are directly related to available ecosystem and landscape services. Others are related to the territory due to other constraints. All together these activities generate a diverse set of functions (economic, environmental and social) from any particular form of land use.

While, during the previous 50 to 60 years, development and land use practice has led to spatial and functional segregations, land use strategies increasingly emphasise multi-functionality as an important characteristic of contemporary land use. The landscapes of the future will have to serve, simultaneously and in integrated ways, a number of different functions. It means that such functions should be employed in relation to analysis and policy proposals:

- ecological (as an area for living organisms and natural environments),
- Economic (as an area for production and reproduction),
- Socio-cultural (as an area for cultural actions and identification),
- Historical (as an area for settlement, memory and identity), and
- Aesthetic (as an area for shaping and experiencing)[84].

The concept of territorial cohesion has to do with recognising the territorial diversity in Europe and the interaction of a complex system of functions as outlined above. And its implementation through policy measures involves endogenous development potentials and fragilities (the impact of developments in other territories, and the effects of different sector

[83] EC 2011/0282 (2011) op.cit.

[84] Haber, G.C 1977. Socio-Ecological Dynamics of Wolves and Prey in Subarctic Ecosystem.

policies at various levels of decision making), as well as exogenous factors which importance needs to be recognised in the territorial context in its multifaceted dynamics.

The expression "multifunctional landscapes" refers to areas serving different functions and combining a variety of qualities, i.e. that different material, mental, and social processes in nature and society take place simultaneously in any given landscape and interact accordingly. Multi-functionality in landscape, therefore, means the co-existence of ecological, economic, cultural, historical, and aesthetic functions. Thus, landscape multi-functionality is not necessarily synonymous with multiple land uses.

Different land uses can be a criterion for multi-functionality in landscapes, but even a single land use can involve numerous functions. Paracchini et al. (2011)[85] therefore emphasizes that the concept of multifunctional land use provides a favourable approach based on the recognition of that in order to maximize the benefits obtained from a given parcel of land, a more equitable balance of the competing economic, environmental and social demands on land is more sustainable in the long-term than an unbalanced system based on individual sector based rationale. In such a context there is, however, also a need for evaluation tools which allow a more sensible approach to the assessment of whether competing demands in a multifunctional land use system are sustainable or not. In particular, there is a need to integrate information and data from a wide variety of sources into a single evaluation framework, recognizing that different land uses can result in different functions, but not all functions can be expressed as land uses.

The problem in this connection is that the concept "land use" often is only related to the physical characteristics of the land cover and the economic activities related to its use. This may have been correct when for instance agricultural used land was considered the main activity while for example, aesthetic, and recreational functions were secondary. Today, however, the previous secondary activities have become dominant, for instance when aesthetic or recreational functions are defining what kind of land cover would be acceptable. Another example showing change in valuing without any land-use change is taking place could be the change in image and importance due to social re-interpretation when for instance a stretch of farm land is declared "green infrastructure", or part of a "Regional Park", even without any land-use changes occurring.

Such considerations have become key questions in the on-going discussions of how the future CAP should be structured[86]. In recognition of this more multifaceted aspects of landscapes the Landscape Convention[87] recognizes landscape as having "…an important public interest role in the cultural, ecological, environmental and social fields". Consequently, improving the understanding of the outcomes of landscape planning

[85] Paracchini, M.L., Pacini, C., Laurence, M., Jones, M., Pérez-Soba, M. (2011): An aggregation framework to link indicators associated with multifunctional land use to the stakeholder evaluation of policy options. Ecological Indicators. Vol. 11, Issue 1, January 2011. P 71-80. Elsevier

[86] European Commission (2003). A proposal for establishing common rules for direct support schemes under the Common Agricultural Policy and support schemes for producers of certain crops

[87] Council of Europe op. cit.

decisions is of high political priority[88], stressing the importance of stimulating the elaboration of landscape plans for the considering of landscape as a key territorial value, and constituting a resource favourable to economic activity and whose protection, management and planning can contribute to job creation.

The approach to "land use" should therefore not only be seen from the land cover perspective but also from the perspective of "functionality", which provides linkage with other transversal issues. "Functionality" could be a motivating approach in the integration of land cover, land use management, socio-economics, transportation, energy conservation, water management and climate change. While the concept of "land use" traditionally has been considered (to some extend) to be binary, i.e. one land use activity would exclude other activities, the situation in Europe is that the functionality of land areas has been increasingly diversified: on one hand towards exclusiveness with mono-functional large scale production, and on the other hand towards inclusiveness, which stresses the fact that different activities co-exists. In regards to the latter, policy and planning should develop methods where the question of harmonious and disharmonious functionalities could be a way of improving the planning process.

4.1.8. And the way ahead…

On 12 October 2011 the Commission presented a set of legal proposals to reform the Common Agricultural Policy (CAP) after 201389. According to the proposal the aim of the future CAP will be to guarantee European citizens healthy and quality food production, whilst preserving the environment. According to the proposal, the three broad objectives of the future CAP are: "Viable food production", "Sustainable management of natural resources" and "Balanced territorial development", which responds directly to the economic, environmental and territorial balance challenges identified and which will guide the proposed changes to the CAP instruments.

When compared to the starting point for this overview of the evolution of land based – the Mansholt plan – substantial changes have taken place. First of all through the fact that the planning processes in relation to landscapes have become much more complex, clearly in relation to differences in sector's interest involved, but just as much by planning and policy making being done by a variety of different authorities including experts with different backgrounds the impact of local, regional and national differences should be clarified before the comparison of the examples of planning practice are compared.

In addition the three approaches which were already outlined in the response to the call can clearly be confirmed based on the evolution of the landscape in the overall European setting. This means that landscapes needs to be characterised:

- As spatial structures and appearances: This encompasses landscapes defined through major environmental features (as natural patterns like rivers), and man-made objects

[88] European Union, 1998

[89] Legal proposal for the CAP after 2012. http://ec.europa.eu/agriculture/cap-post-2013/legal-proposals/index_en.htm

and patterns (such as settlements, power-grid lines etc.) These patterns, in their appearance are not only defined through their "locus standii", but also on their areal coverage and their density within the appropriate area unit;

- Through their functional features: This includes landscapes defined through environmental properties such as biodiversity and productivity; socially such as place to live, work, visit temporarily or more frequent through second homes; economically through production and reproduction. Identification of functions is important when dealing with general area characteristics, and especially important when dealing with multiple functions across sectors as a key concept in relation to for instance urban sprawl, homogeneity and heterogeneity of land use; and
- Through values or qualities: the 'quality' or 'value' of space / landscape is an important issue of planning. Beside the function often the natural, economic, cultural and recreational value is mentioned on maps and plans.

And as described above, the concept of "multifunctional landscapes" refers to probably the most important contemporary challenge when dealing with the concept of landscape, namely that areas increasingly serves different functions and combines a variety of qualities, i.e. that different material, mental, and social processes in nature and society take place simultaneously in the landscape and interact accordingly.

Within this context, landscape has become a key territorial value where analyses and assessments could become important elements which could enrich and improve integrated spatial planning in different ways, and be seen and used as an asset for economic and territorial development. But since the European Union is characterized by varying, historically developed governing and planning systems in relation to both landscape and spatial planning, the process of reaching such a goal is not a simple task. The differences in land use decision processes due to different patterns of legal, constitutional and administrative frameworks have obvious impacts on the concept of landscape and practices in relation to landscape management and planning. However, it seems clear that the linkage between territorial development strategies and landscape planning is or will be - a political priority.

4.2. ESPON approaches in relation to the landscape concept

4.2.1. Pre-ESPON inclusion of landscape elements

The European Spatial Planning Observation Network (ESPON) was launched as a programme jointly managed by the Member States and the European Commission in accordance with the work programme adopted at the meeting of spatial planning Ministers in Tampere in 1999. The aim has from the start been to increase knowledge about territorial structures, trends and policy impacts in the enlarged European Union. As emphasized by Johannes Hahn, EU Commissioner for Regional Policy commenting on the ESPON`s benefits to the EU:

"*ESPON provides the European Commission with a lot of information and studies dealing with territorial cooperation. This is exactly the benefit we have out of ESPON. The advantage*

of ESPON is that there are lot of member states participating not only from the European Union but also outside like Switzerland, Norway, Iceland and others. That's why we have a lot of data available for the European Union, for the European Commission. For instance the Fifth Cohesion Report is based on a lot of data given by ESPON"[90]

Throughout the 1990s progress was achieved in advancing the role of spatial planning in Europe, culminated with the adoption of the European Spatial Development Perspective (ESDP) in Potsdam in 1999. Further details on this can be found in chapter 3.1.

The momentum unleashed the Study Programme for European Spatial Planning 2000-2001 (SPESP) providing the basis for a European Spatial Planning Observation Network (ESPON). The programme served as a pilot phase in the preparation for a European network of institutes of spatial research aiming at analysing current issues in European spatial development related to the European Spatial Development Perspective (ESDP). And inspired by this the ESPON programme started in 2002 and was originally planned to continue until 2006.

4.2.2. Early ESPON attempts of addressing landscape elements

As stressed in the first ESPON synthesis report[91], the ESPON programme was designed to improve European knowledge on trends and policy impacts affecting the enlarged European territory and through networking support a further development of a European research community in the field of territorial development and spatial planning. Much in line with the EU policy emphasis the ESPON studies were intended to address:

- Factors relevant to securing a more polycentric Europe;
- Territorial indicators and typologies, capable of identifying and measuring development trends as well as monitoring the political aim of a better balanced and polycentric Europe;
- Tools supporting diagnosis of principal structural difficulties, as well as potential;
- Territorial impacts of European sectorial and structural policies, such as the Structural Funds; and
- Integrated methods to support balanced and polycentric spatial development, including spatial scenarios for 2015 and 2030.

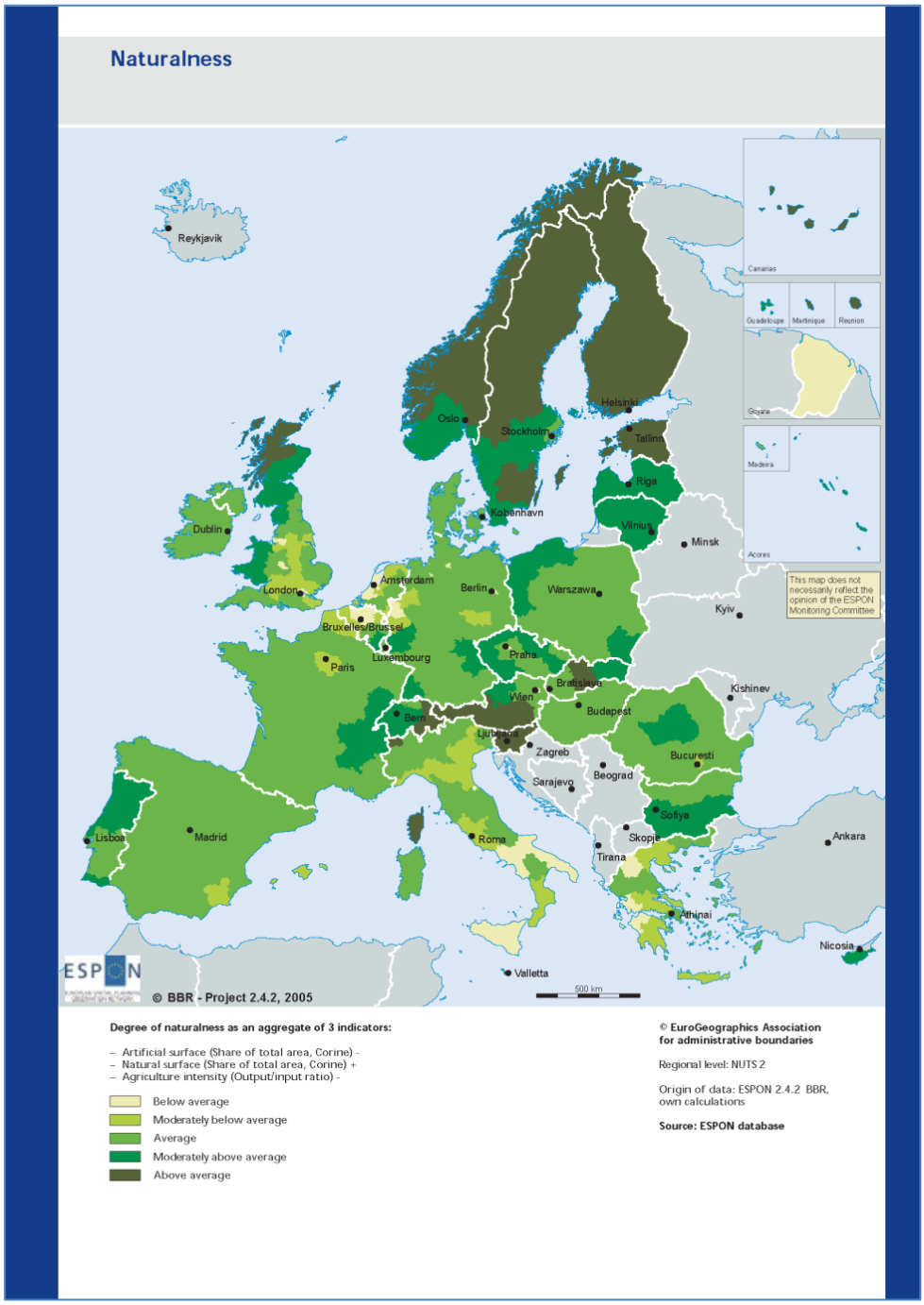
Questions of territorial imbalances were especially emphasized as EU in the process of enlargements, so issues such as centre-periphery, polycentric development, functional urban areas, and development poles were critical issues to be covered by the ESPON projects. The landscape concept was included, but in relation to the urban-rural relationship as "consumption landscapes":

[90] "Date and place: 11/05/2011 Brussels, ESPON High Level Conference on Targeted Analyses.. Johannes Hahn, EU Commissioner for Regional Policy commenting on the ESPON`s benefits to the EU

[91] ESPON synthesis report I (2004). Preliminary results by autumn 2003

"Urban areas extend well beyond the city limits. Although some crude forms of exploitation have disappeared, other softer forms of exploitation have emerged. These include the transformation of rural areas into consumption landscapes. In many ways the influx of urban activities, for instance, ICT companies (information and communication technologies) and new residents brings a new dynamism to rural areas. On the other hand, this invasion and succession can push local people out of housing and labour markets. Redefining urban-rural relationships, therefore, demands new forms of urban-rural partnership"[92].

[92] ESPON synthesis report I p 31



Map 1 The concept of Naturalness

The Landscape concept was in this connection including two aspects: A physical background for on-going changes[93] and a stage for attracting consumption activities[94]. This is elaborated further in relation to the concept of "Naturalness" where the territorial development is related to how a territory is used identifying three types of land surfaces: Land use and the naturalness of land, i.e. the absence of the human forming of surfaces emphasizing that

[93] ESPON synthesis report I p 36

[94] ESPON synthesis report II p 34

landscapes is important in relation to the natural heritage and that "naturalness" can be an asset for territorial development[95].

Among the conclusions during 2002-2006 the analyses recognizes that every territory has its own distinct set of potentials for further development, as well as resources available to make use of its assets and offset deficiencies (project TIPTAP 2006). In this connection it is emphasized that: "Environmental quality is another factor in a territory's attractiveness that is strongly affected by current developments. Decreasing environmental quality often implies decreasing quality of life a*nd increasing difficulties in attracting skilled labour to an area. Currently there are disparities across Europe in pollution, land consumption and care for natural heritage and landscapes. Such differences may well become more important in future decisions on the locating of enterprises and people".*[96]

Similar references to the landscape concept are used in a context where also the concept of Liveability is referenced to as being "Quality of life and competitive places"[97]. In this connection there are references to "cultural landscapes" and "cultural heritage"[98]. But it is at the same time emphasized how Attractiveness and liveability of an area do not only depend on the hard and tangible factors such as infrastructure, human capital and risk of hazards. The concept of "Soft location factors" is introduced in this connection, and it is stressed how this has become a factor of increasing importance for an area to attract both investments and also skilled labour. Furthermore it is also stressed how natural and technological hazards and climate change might put the attractiveness and liveability of a region at risk in the longer term[99].

What is most important in this connection is the following quote: "The strategic objectives for an efficient and modern regional policy contributing to the renewed Lisbon Strategy and its overall aims can be condensed as follows"[100]:

• *Competitiveness*, by building on the existing assets and under-utilised potentials in a region related to its existing economic base;

• *Attractiveness*, by include building new assets in a region that can stimulate new investment and skills, in particular in support of a knowledge-based economy;

• *Liveability, by* ensuring cohesion and sustainable communities, with a high level of quality of life and environment now and in the future, for citizens and businesses.

The landscape – through the concept of Liveability – has thereby moved from an external to an internal planning factor!

[95] ESPON synthesis report II p.36 + map above p. 37

[96] ESPON synthesis report III p.21

[97] ESPON synthesis report III p.79

[98] ESPON synthesis report III p.21 and page 80

[99] ESPON synthesis report III p.7

[100] ESPON synthesis report III p.10

The INTERACT-ESPON synthesis report[101] provided an overview of INTERREG projects reflecting similar approaches to the landscape concept as described above. The landscape is considered being consumption goods and amenity in the territorial potentials[102]. It has specific reference to tourism, recreation, leisure, landscape and environment typically connected to cultural heritage and open space as fields for the rural-urban relations[103]. And in this context it is emphasized that in most of these projects concentrating on landscapes, the built environment, and environmental protection, the focus is on the exploitation, management and/or protection of areas with specific landscape characteristics as well as habitats and/or buildings[104]. In Interreg III project context the landscape concept is connected to priority 3 projects where the focus is on the environment. This priority contains measures for the protection of nature and the countryside. Issue in that connection are: care for the countryside, preservation of the attraction of the region's cultural landscapes, securing resources, and providing a proper basis for establishing cross-border catastrophe, disaster and high-water protection facilities. Further objectives included are the improvement of environmental consciousness and enhancement of the quality of the water in the interior and along the coast[105]. And in relation to the Strategic policy aims formulated in the four cross-border spatial development concepts two 'main objectives' for the future development of the Euroregional territory are included: The strengthening of economic potentials and the lowering of unemployment, while at the same time preserving and developing nature and landscape. These components are considered as active support to the establishment of good neighbourly relations[106].

These objectives are a logical evolution in the framework already established by the ESDP in the promotion of 'Sustainable Territorial Development' of the EU. And for many it is important to keep the conceptual relation with ESDP, since the concepts of territorial cohesion, sustainable territorial development, strategy planning, development model, including cultural landscape, are closely related to ESDP. In the LIVELAND case for instance the Case study of Navarra where it has been used in modelling the Law of Spatial Planning (LFOTU).

4.2.3. Land use typologies and human activities in landscapes

The integration of - or interrelation between – different concepts has been an important trademark for ESPON projects, and at the same time an indication of which concepts have been considered important in understanding the territorial dynamic.

Typologies can be broadly defined as the classification of entities based on shared or common characteristics. In the ESPON 2006 Programme the typologies were mainly a tool

[101] INTERACT-ESPON Synthesis Report 2006/2007

[102] INTERACT-ESPON Synthesis Report 2006/2007, p7

[103] INTERACT-ESPON Synthesis Report 2006/2007, p38

[104] INTERACT-ESPON Synthesis Report 2006/2007, p45

[105] INTERACT-ESPON Synthesis Report 2006/2007, p16

[106] INTERACT-ESPON Synthesis Report 2006/2007, p75

for communicating different aspects of policies. However according to the ESPON typology compilation[107] a typology is not an end in itself but rather a tool enabling meaningful analysis and comparison.

It is emphasized that the understanding of a typology has moved from being a descriptive towards being an analytical tool. And as such it is stressed that typologies – at least in the beginning - have to be of limited complexity as they are meant to be used by other projects to assist the analysis of their own data and typologies. What is important, however, is that "complexity of the typologies will stepwise increase as the typologies are applied by various ESPON projects".

And this evolution of typologies from descriptive to analytical, and from complex towards less complexity and eventually to higher level of complexity through application, is extremely important in this context. It illustrates the evolution of ESPON from being a provider of evidence base for policy development in conjunction with expansion of EU to become a test bed for policy ideas as well as the relevance and implications of new concepts. Especially in the latter case where development of typologies has become an important tool, and in the process have been moving from being "exclusive" and descriptive to be more "inclusive" and analytical. Exclusive/inclusive means in this context to what extend they try to focus on simple characteristics in order to prevent the risk of mixing different types of dynamics (natural, social, economic, cultural etc..) or actually include different dynamics.

The evolution of the process from "Exclusive" toward "Inclusive" and eventually "Dynamic" towards the inclusion of landscape as a component in the territorial development is very relevant in this context because it illustrate how impact of land and territory, environment, and human activities has been approached and evolved since ESPON became an important player in the European territorial planning process.

The homogenous ESPON Typologies

A study on ESPON Typology Compilation started in March 2009 with the purpose is to provide a compilation of existing territorial typologies and to propose a set of eight territorial typologies which can be used throughout the ESPON 2013 Programme. Following the Terms of Reference the fields to be addressed were:

(1) urban / metropolitan regions – analysis of 8 typologies,

(2) rural regions – analysis of 18 typologies,

(3) sparsely populated regions – analysis of 4 typologies,

(4) regions in industrial transition – analysis of 1 typology,

(5) cross-border regions – analysis of 12 typologies,

(6) mountainous regions – analysis of 6 typologies,

[107] Böhme, K., Hanell, T., Pflanz, K., Zillmer, S., Niemi, P. (2009): ESPON Typology Compilation. Scientific Platform and Tools 2013/3/022 – Interim Report

(7) islands – analysis of 3 typologies, and

(8) coastal regions – analysis of 4 typologies.

The number of typologies available for analysis is mentioned for each of the fields to be covered and in the First Interim Report[108], following an Informal Progress Report presented in May 2009, the above listed 56 existing typologies were identified and used as basis for a proposal for eight envisaged typologies. It was concluded in the report that the project did not find any typology which would be proposed as ESPON typology for one of the eight thematic fields. And as a consequence the authors had developed a proposal for the typologies which were supposed to bring together elements from the various typologies reviewed and eventually leading to the composition of a coherent set of eight homogenous ESPON typologies.

Among the 8 typologies number 7 on islands include the Landscape concept and considerations regarding land use. Number 2 on rural regions have some considerations regarding the role of land use, while number one (urban/metropolitan regions), number seven (mountainous regions) and number eight (coastal regions) mention land use, while none of the other typologies include considerations in this relation. It means that these typologies will not be touched upon here.

In ***typology 1 on urban/metropolitan regions*** the only use of land use is in determining whether or not a selected "city" does display any urban land use characteristics. And in the examples

Typology 2 on rural areas constitutes the largest field of typologies addressed in the study, and 17 typologies have been presented in an annex while only one has been included which means that the compilation of the data has been quite incomplete. Even the concept of land use is mentioned in practice the typologies have focussed on a differentiating and delineating of urban and rural areas. The authors find that most of them do not catch the complexity of rural-urban settings, and that population density, accessibility / peripherality and land use are the most common features but often only one or two of them are taken into account. It is mentioned that an ongoing ESPON project EDORA (European Development Opportunities in Rural Areas) at this point of time were developing a new typology that should be considered relevant.

In the proposed typology "Rural regions" the defining typology should only include those regions not covered by the urban typology. And for further differentiation of these regions two dimensions should be used:

1) the relative position of the rural region vis-à-vis larger urban centres (e.g. areas within 45 minutes reach from urban centres), and

2) the importance of primary production to the overall regional economy (GVA branches A-B as a share of total GVA), combined with the importance of primary production as a source of livelihood (employment in branches A-B as a share of total employment).

[108] Böhme et al., 2009

3) as sub-categories in the typology four are suggested: (a) rural areas close to urban centre without agrarian profile (b) rural areas close to urban centres with agrarian profile (c) remote rural area without agrarian profile (d) remote rural area with agrarian profile

As indicated above the proposed overarching typology in relation to Rural Regions has very limited reflection on the rural characteristics beyond the economic categorizations registered through the industrial classifications, and absolutely no references to the landscape concept. And none of the 8 typologies used for the analysis provided that type of information.

Among the available typologies included in the analysis (Urban-rural typology by CURS/ESPON 1.1.2) the typology presented was based on two dimensions (a) the degree of urban influence, which is defined on the basis of population density and the functional ranking of urban centres, and (b) the degree of human footprint, which is defined on the bases of land cover, which means the share of artificial surfaces and of agricultural land. But besides the urban land cover category there were neither reference nor considerations to the landscape concept.

Another typology (Rural areas and their regional diversification by BBR/ESPON Atlas) the typology was based on two dimensions (a) the degree of urban influence, which is defined on the basis of population density and the functional ranking of urban centres, and (b) the degree of human footprint, which is defined on the basis of land cover, which means the share of artificial surfaces and of agricultural land. This is overlaid with information on the infectivity of agricultural and the employment in agriculture, forestry and fishing, but the latter two points were not really integrated in the typology. So the characteristics were quite close to the previous example.

A third typology (Draft Typology of Rural Development Environments, ESPON EDORA) is clearly the most elaborated typology with the following data sources at the point of analysis incorporated into the decision tree: (a) The Dijkstra and Poelman (2008) urban-rural codes, (b) The population trend typology produced by Mats Johansson (ESPON Programme 2008), (c) Gross value added by sector – (the Eurostat REGIO Database), (d) European size units data from the European Farm Structures Survey – (the Eurostat REGIO database), (e) Farm holders with Other Gainful Activities (OGA) from the European Farm Structures Survey – (the Eurostat REGIO database). And the generated types were characterized as:

1. Urban
2. Depleting rural
3. Primary sector dominated rural economy

   3.1 with semi-subsistence agriculture

   3.2 with pre-productivist agriculture

   3.3 with para-productivist agriculture

4. Fordist mixed rural economy with strong manufacturing sector

5. New rural economy

Even different types of rural activities are included there are still no elements of a consistent land-use and landscape approach available.

All other 14 analysed typologies in this category were – more or less similar to the above mentioned – basically determined by the two components: population density and distance to urban centres.

In ***typology number 3 on sparsely populated regions*** the defining type characteristics are related to number of inhabitants per km2 and with sub-categories (a) very sparsely populated, (b) sparsely populated, and (c) non-sparsely populated. But also here with no reflection of the land-use and landscape characteristics of these regions. And in the typologies used for generation of the overarching type there are only references to population density and distance to urban centres.

In ***typology number 6 on mountainous regions*** the defining type is on Population share of mountainous LAU 2 regions (according to DG Regio Mountain Study) within a NUTS 3 region with sub-categories of (a) Mountainous regions / population, (b) Predominately mountainous population, (c) Partly mountainous population, and (d) Non-mountainous regions / population. Similarly to the two previous typologies this has also no reflection of the land-use and landscape characteristics of these regions. And in the typologies used for generation of the overarching type there are only references to the category of mountains and accessibility. For instance as in the ESPON project MOUNTAIN AREAS (2004) by EC, study conducted by Planistat Europe. The typology aimed at delineating mountain municipalities in Europe The methodology follows the UNEP-WCMC approach, which uses altitude alone to define mountain areas above 2500m and combines altitudinal and slope criteria to define mountains above 1000m. For lower elevations (300-999m), an additional criterion based on local elevation range is used to identify mountainous areas. In contrast to the UNEP-WCMC approach also areas for elevations lower than 300m are considered. Beyond, the temperate contrast functions as an additional criterion to define mountain areas, considered as less favoured areas. Small isolated mountainous areas are not included, similarly non-mountainous areas within mountain massifs were are. Finally, a municipality is considered as mountainous if at least 50% of its area within the area delimited as mountain. As overarching types municipalities defined as mountainous according to topographic criteria and municipalities defined as mountainous according to climatic criteria were defined. Based on this delineation 3 thematic typologies had been elaborated:

- social and economic capital
- infrastructure, accessibility and services
- land use and land covers

In ***typology number 8 on coastal regions*** the defining type is on Share of the population living in coastal municipalities (LAU 2) within each coastal NUTS 3 region and subdivision in (a) Island regions, (b) Regions with a high share of coastal population, (c) Regions with a low share of coastal population, (d) Regions with a medium share of coastal population, and (e)

Regions without any coastline. In the typologies used for generation of the overarching type there are only references to distances to the coastline. In some cases (for instance "A typology of coastal regions" by NIBR/ESPON 2.1.5) all regions bordering the coastline are regarded as coastal regions, but then further categorized by aspects of population density and FUAs within the region.

In ***typology number 7 on islands*** the defining type is the Share of islands population (in municipalities at least 1 km from the mainland) within a NUTS 3 region plus NUTS 2 and 3 regions which are islands, and with subtypes a) Island regions, (b) Regions with a high share of islands population, (c) Regions with a low share of islands population, and (d) Non-island regions. This typology is the only one where the typologies used for generation of the overarching type with direct reference to the landscape concept. In the ESPON Project EUROISLANDS from 2003 the typology was aiming at determining differences and similarities among the 286 European islands (following the EUROSTAT definition of islands) based on variables considering the topics size, natural conditions an distance have been combined using statistical methods. A lot of data have been missing for several variables, and the evaluation show that the available ones were considered difficult to obtain and update. The analyses nevertheless resulted in 7 classes and based on this a typology with 5 major categories were identified:

1) Sicilia and Sardinia
2) Islands on the open sea, with high population, high share of mountain area. Mostly Mediterranean islands and islands from the north except Bornholm und Wight Island
3) Islands on the open sea, with medium population, high share of mountain area. Mostly Mediterranean islands plus Bornholm und Wight Island
4) Island with medium population near the continent, less mountainous, without territorial particularism
5) Small islands near the coast with low population density and less mountainous. Typically Finnish, Swedish and French

   In the analysis the overarching framework worked with three themes: Economic efficiency, Social justice/equity, and Environmental conservation in the latter included a series of element encompassing:

   - Availability and quality of drinking water
   - Quality of sea water
   - Air quality/Climate change
   - Land quality
   - Biodiversity
   - **Landscape quality**
   - **Preservation of cultural capital**

- **Quality of urban space**

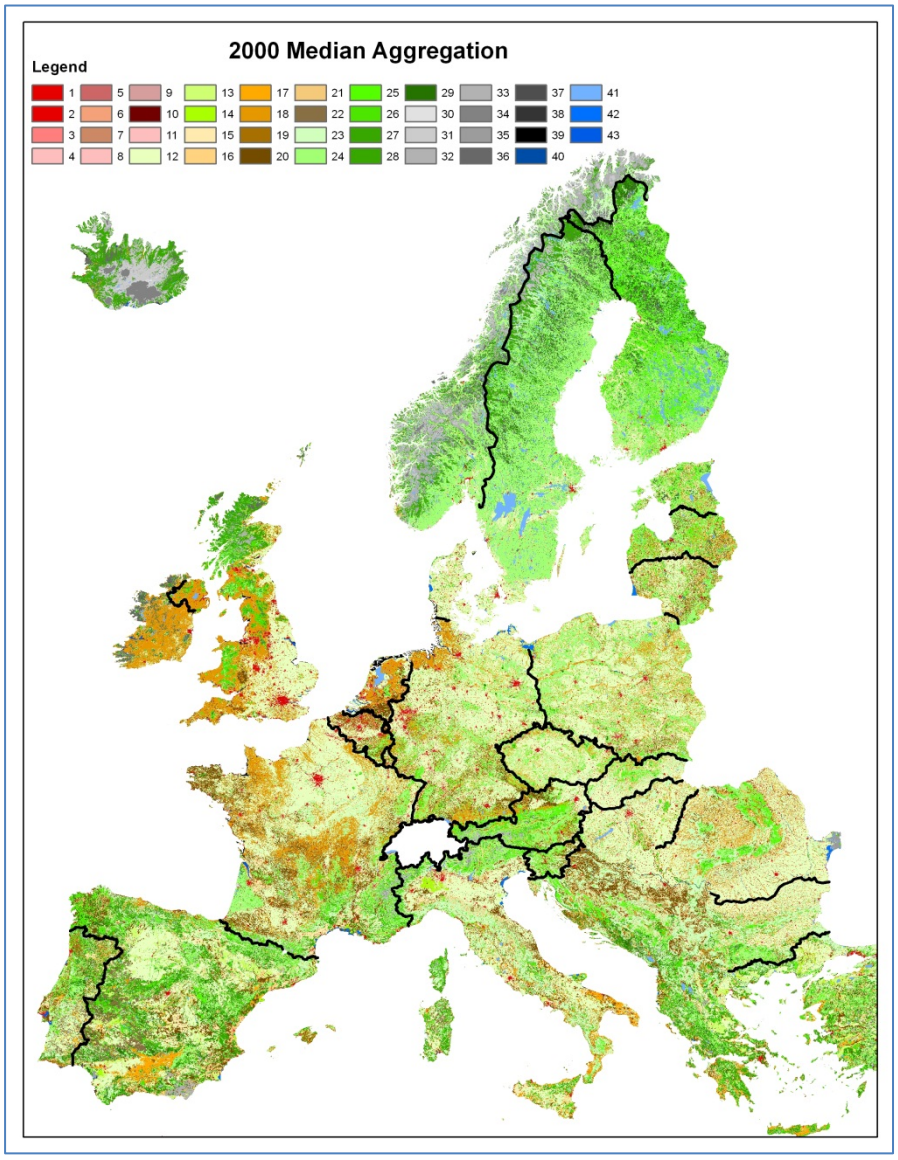
In this context the concept of Landscape is directly reflect through *Landscape quality* explained by the variables *Construction beyond the designated urban areas* and *Artificialisation of coastal zone* (to specified use), while several of the other elements makes indirect references to the landscape characteristics. For instance the question of *Land quality* where issues such as *Desertification*, *Erosion*, and first and foremost the question of *Cultivation practices* are embedded. The latter issue is further elaborated on in relation to *Biodiversity* where issues such as *Change of land use; parcelling, cultivation practices* and *management plans of protected areas* are included. Within the element *Preservation of cultural capital* the proxy variables *classified settlements and monuments* and *Management plans of protected monuments* are included.

A general conclusion of the activities summarised in the study on ESPON Typology Compilation in 2009 reveal that out of the 56 projects generated within the ESPON community and selected for analysis only one made references to the landscape concept. Almost all other were related primarily towards urban development, population characteristics. And very broad categories in relation to land and land use characteristics – rural, urban, islands, sparsely populated areas, mountains and coastal areas – were taken into consideration.

This pattern, however, does not hold true for ESPON project activities which was clearly shown by the examples mentioned in section 4.2.2 and 4.2.3. But these few examples compared to the many projects used in connection with the generation of the ESPON Typology Compilation not only give an indication of where the main focus of the programme was situated. The key concepts included were reflecting the dominating discourse in EU from 10-20 years earlier. Furthermore the overview show that the either the ESPON community or the project trying to generalize a set of ESPON indicators were not up to speed with the overall development in EU – among other things through the Landscape Convention.

4.2.4. ESPON's evolution into land use and landscape approaches

While the previous sections were more or less focusing on a timeline in relation to ESPON related activities, the following presentation is based on an evolutionary approach to land use and landscape characteristics, and in this connection – and to the extend it is possible - trying to identify ESPON activities that have been reflecting on the different steps in the evolution.



Map 2 Color coding interpretation of the Corine Land Cover data

Baselines

In many ways the Corine land cover data has been a crucial vehicle in promoting land use and land cover characteristics. Satellite images and photos plus fieldwork based surveys mapping land use and land cover data have been used for very long time with the Domesday Book completed in 1086 as a survey to determine who held what and what taxes had been liable under Edward the Confessor considered being the European starting point for public

surveys. The starting point in this connection, however, was the access to partly or fully European coverage on land cover characteristics. And the example on figure 2[109] is simply showing the basic data by means of the categories from the dataset, namely the 43 different Corine level II data. In this situation the interpretation of the dataset has been done through choice of colours with an intention of "mimicking the view" one gets when looking out into the landscape or on atlases with the standardized views that most people are familiar with.

Simple typologies

Next step is the mapping of single elements such as land-cover classes or land use characteristics. Figure 3 show first of all the presentation of a simple typology in relation to land use based on the Corine land cover classification, where the 45 categories of land cover have been merged into nine dominant land cover types where each of these types are characterized as being "landscapes".

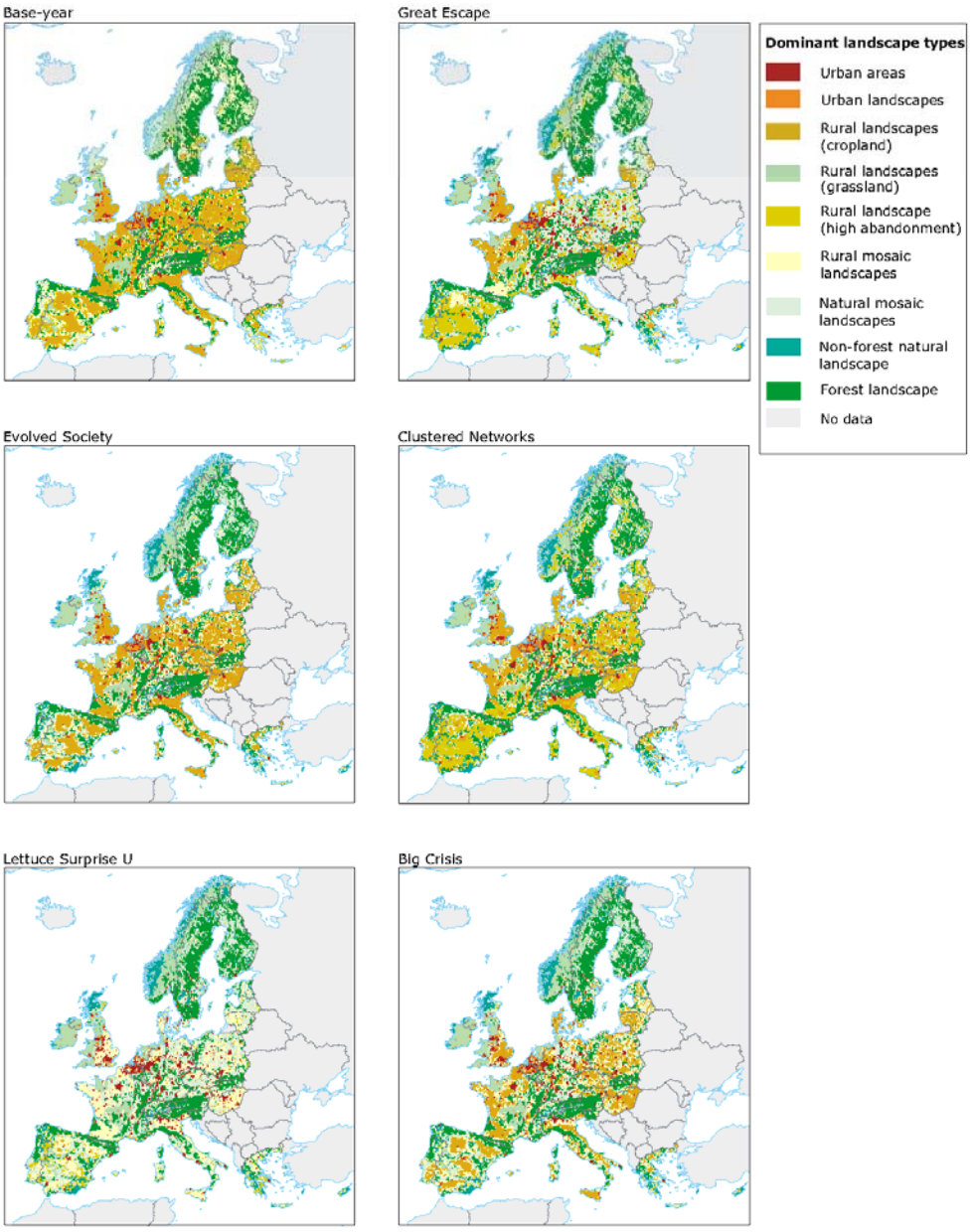
So in order to make the link between land use/cover changes and environmental impacts, the concept of 'dominant' landscape types has been introduced[110]. 'Dominant' means that a landscape type comprises one or more land cover types which share more than the European average plus the standard deviation of this particular land cover type. The landscape type with a dominant agricultural character has to comprise more than 65 % of cropland because the European average share of cropland is 33 % and the European-based standard deviation of this is 32 %, which combined add up to 65 %. It should be noted that for urban land and grassland this dominance threshold is well below 50 % so that in model cells that are dominated by either of these two land cover types, the cells may well be dominated by more than one land cover class.

Starting with the five land cover classes (1) urban land, (2) cropland, (3) grassland, (4) forest, and (5) other land, dominant landscape types were assigned to each model cell for both the base-year situation and for each of the five scenarios in 2035. Based on this analysis of the dominance that occurs in the model cells in all of Europe, nine landscape types are derived.

[109] ESPON EU-LUPA, 2012

[110] Axel Volkery, Ybele Hoogeveen, M. Teresa Ribeiro (2006): Prospective Environmental Analysis of Land-Use Development in Europe: Understanding the problem and searching for robust long-term strategie. European Environment Agency

Map 4.1 Landscape type comparison between 2005 and the five scenarios in 2035



Map 3 Illustration of both single elements and modeling in relation to land use typology

Modelling based on typologies

Figure 5 also show another aspect of typologies, namely how to use them as qualitative characteristics in modelling and in this case more specific in scenario building.

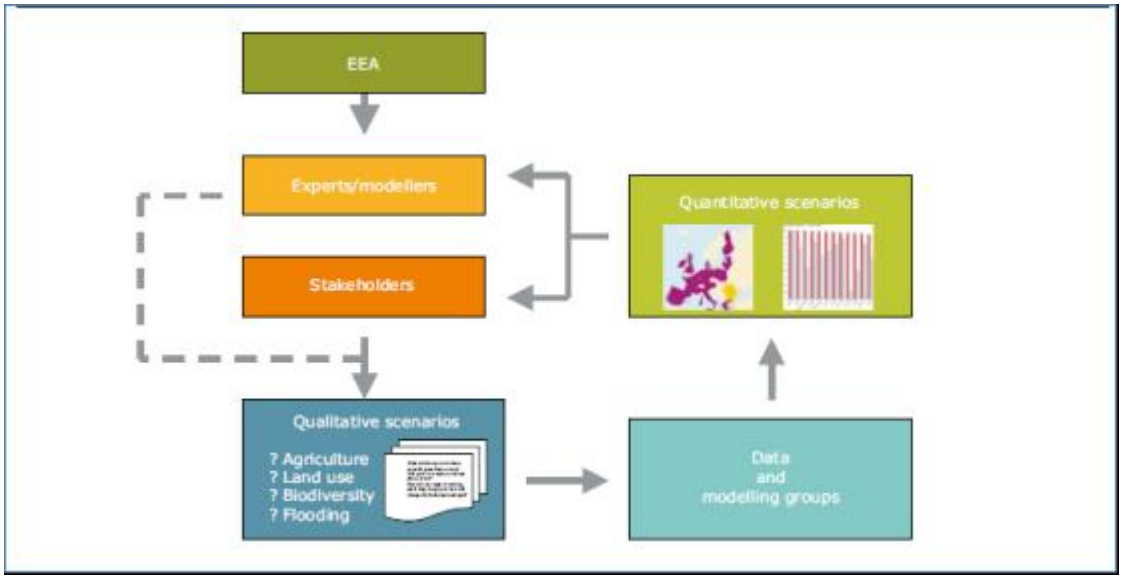


Figure 3 Main components in the expert and stakeholder generation of scenarios based on land cover changes 1990-2000

Scenario generation is often used when the direction of change in the future is unknown. "*Good scenarios should fulfil the objectives exercise and generate results that are plausible and internally consistent….. A credible and persuasive scenario should challenge prevailing mindsets of experts and policy-makers and stimulate strategic discussions about policies that are robust enough to stand the test of time*"[111]. Participatory scenario building may help to give access to practical knowledge and experience and thereby avoid narrow thinking, bridge gaps between the scientific communities and governments, businesses, interest groups or citizens, and thus provide a reality check for research assumptions and methodology[112]. Here a group of stakeholders provided input to the process by developing qualitative storylines, and experts complemented the storylines by quantitative modelling as feedback into the process. The situation in 2005 is shown on the first map while the result of the scenarios was projected on the five adjacent maps.

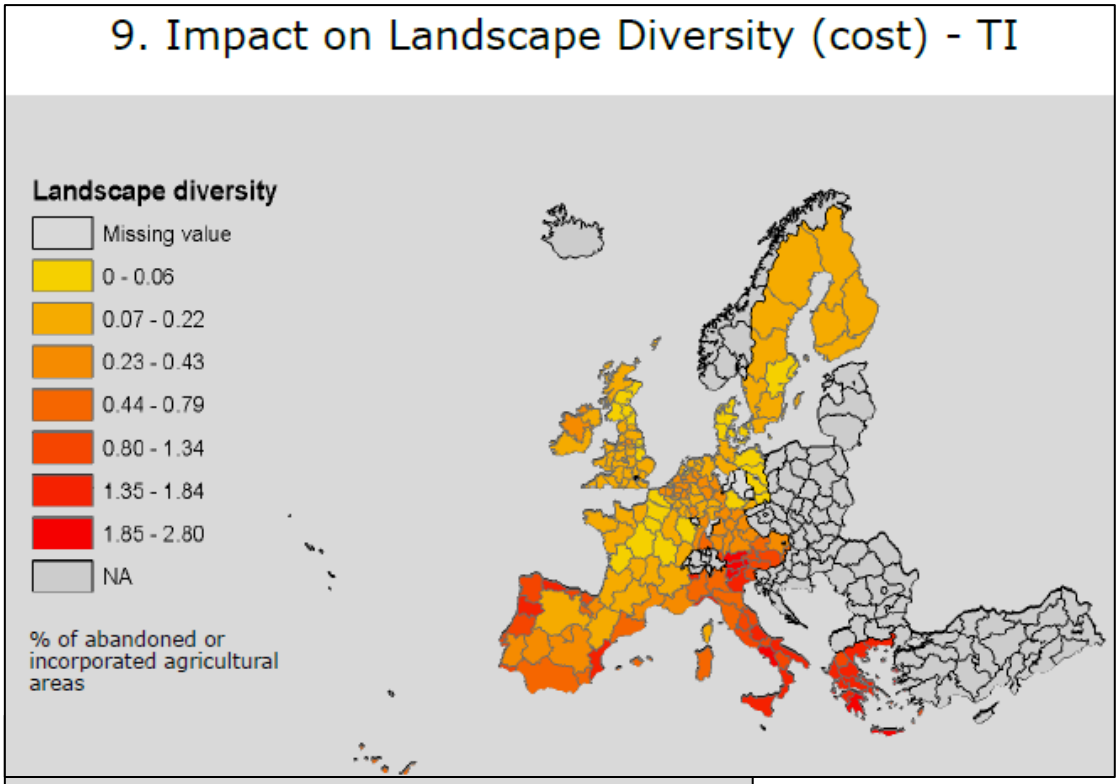
Assigning qualities

Next step is the assigning of other qualities to the single elements, and in this example the purpose has been to recognize that every territory has its own distinct set of potentials for further development, as well as resources available to make use of its assets and offset deficiencies[113]. In this process identification of impact typologies have been a cornerstone of the project.

[111] EEA, 2001, here from EEA 2007

[112] EAA, 2007

[113] TIPTAP, 2006



Criterion	Weight	Variable		Weight
TE Efficiency	0,58	PIM_E1	Economic growth	0,21
		PIM_E2	Unemployment	0,34
		PIM_E3	Tourism diversification	0,45
TQ Quality	0,30	PIM_Q1	Environmental quality	0,38
		PIM_Q2	Community viability	0,08
		PIM_Q3	Emissions	0,01
		PIM_Q4	Risk of soil erosion	0,52
TI Identity	0,12	PIM_I1	Landscape diversity	0,19
		PIM_I2	Community identity	0,49
		PIM_I3	Heritage products	0,32

Map 4 The impact indicator showing impact on landscape diversity, one of the 10 indicators used in identifying the impact of the three overall criteria in connection with the concept of cohesion. See further in the text.

Impact indicators were firstly indicated by sectoral experts and next discussed by the TPG through extensive interactions and discussions. The Project specification required to analyse impacts on the following dimensions: economy, society, environment, competitiveness, climate change and territorial impact (conceived of as the summative impact of single impacts on the above mentioned dimensions). Thus, the indicators selected aims at capturing these dimensions but have been next combined in the three main criteria of Territorial Efficiency, Territorial Quality and Territorial Identity. The indicator on landscape diversity has been based on the fact that agriculture is a multifunctional activity which produces a range of environmental and recreational goods as well as food and fibre. Farmed landscapes are the product of the particular agricultural production methods employed. They may be quite distinctive to single localities and therefore contribute to their territorial identity. Specialisation and intensification in agriculture result in landscape changes by reducing its diversity.

Integrating complexities

Going beyond the simple descriptive and analytical typologies towards a more comprehensive typology has been attempted in the development of typologies in the ESPON LUPA project[114].

It is very easy to mistakenly interchange the terms ”land cover” and ”land use” as terms describing overlapping or even identical perspectives to the way land exists or is consumed in time and space. However, the distinction between the two can be made very simple. Land cover is a term that generally reflects the biological and/or physical nature of the land surface at any given point in space.

The shape and patterns of current European land are an expression of centuries of human intervention on its environment.

The geographical context and the availability of resources, alongside the push of demographic evolution and the economic development have played an important role in driving land use changes and shaping Europe’s landscapes.

Moreover, the legacy of past decisions constitutes a crucial element to understand this changing process, where leadership, policies, planning systems have also had a major influence. Those differences in land use decision processes due to different pattern of legal, constitutional and administrative framework represent an aspect, which macro-regionally shape Europe.

Although the European Union does not have any competence to regulate land use and land planning because land-use planning and management decisions are usually made at local or regional level, there are several policies that have a strong impact on the territory (e.g. Habitats Directive or CAP). Therefore, the European Commission has a role to play in ensuring Member States take environmental concerns into account in their land-use development plans. The Commission’s goals are:

- To analyse the environmental impact of proposed developments
- To improve the geographic information flow about land-use issues
- To develop and implement European urban environment strategy
- To improve the planning, management and use of Europe´s coastal zones

Land use implications on the compliance of the key EU policy objectives and targets is crucial due to its cross-cutting nature touching upon many different territorial challenges such us urbanization and rural-urban relationships, climate change mitigation and adaptation, natural resource management, energy, transport, regional competitiveness and cohesion.

With this premises in mind, the aim of EU- LUPA is to provide and analyse comparable information about European regions based on data from different sources and different levels integrating physical dimension (land cover) with socioeconomic (land use) and environmental, in order to understand and obtain a clear view on land use changes identifying main challenges and defining policy options to cope with those challenges.

In other words, to provide evidence on land use and its changes that could support policy development towards responsible and sustainable land use management.

To determine the land cover is simply to ask one’s self what they see when they look on the ground. Therefore, in its absolute sense it is void of human perception and is zero-sum.

[114] ESPON EU-LUPA, 2012 p. 6

Examples of land cover could be given in relational/binary terms (i.e. natural or non-natural) or in absolute terms (i.e. grassland or bare rock). In contrast to land cover, land use is often used as an adjective to describe the manner in which the land is perceived or consumed by humans. For example, 'recreational', 'preserved' or 'waste' land uses are often legal entities but at the same time speak very much on the human perception or valuation of land.

Land use also relates to describing the nature of human activities relating to the way in which we use, exploit and consume land. For example, arable land, industrial land, urban land or transport areas relate to functional elements of land in space. Here, human intervention does not operate in zero-sum terms and allows for the inclusion of multiple functions on a given piece of land. For instance, we often hear the term mixed land use within planning policy as a way of describing over-lapping and multi-sectoral land functions.

While this distinction is rather straightforward, the confusion especially mounts in two situations. First, when notions of land use are used to apply a supposed 'objective' characterization of land; and related, when human-related aspects (pertaining to human intervention on land) is used in conjunction with bio-physical (non-human) perspectives.

Unfortunately a perfect example of this confusion exists within the CORINE nomenclature that is used to identify land cover; and the fact that relying on CORINE for the basis of EU-LUPA typologies – as has been done in this case - makes this discussion especially relevant. In all classification levels human interventions and perceptions are explicitly used to define land cover. For example, in the Level 1 classification term Agricultural Areas says very little about the bio-physical nature of the land surface, but says a great deal about planned or perceived human use of the land. This is accentuated further in the Level 3 classification where Artificial Surfaces are broken down to an entirely human perspective on use of land (ie Port Areas, Airports, Construction Sites, etc.).

EU-LUPA's approach to analyzing land use patterns through typologies is both an incremental and complimentary process – one that appreciates that it is not possible to cover the multiple important dimensions of land use patterns in a single map. As such, the outputs generated in project seek to answer the following questions through presentation of spatial data, including in typologies:

- What are the general characteristics of land use in Europe?
- What characterizes land use changes?
- How are both of the previous connected/related to trends of socio-economic development?

In answering these questions, regional typologies are defined as the classification of entities – in this case European NUTS2/3 regions - into types based on shared or common characteristics. For EU-LUPA, they aim to be simple, operational, explanatory and communicable tools to evaluate regional land use patterns, and to support the development of land use policy recommendations. To achieve these aims, the research process is broken into six components, of which four typologies are produced: two that account for the current status of land use and two that account for land use changes.

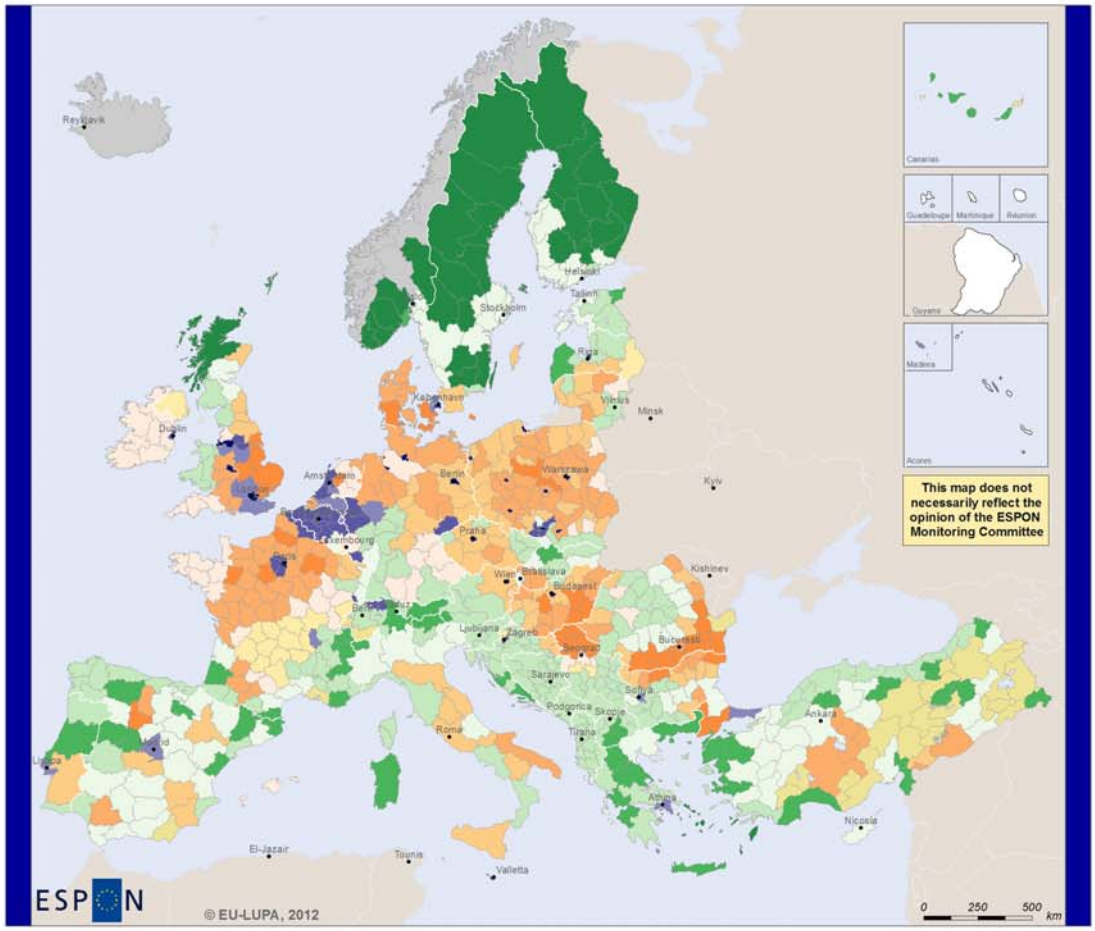
1. In relation to the **prevailing characteristics of land use**: answering the question, based on the distribution to CLC data 1990-2000-2006 what characterizes the land use in Europe? The results are two typologies
    - The prevailing characteristics of land use at a $1km^2$ grid level
    - The prevailing characteristics of land use at a NUTS2/3 level.
2. In relation to the **amount of land use change**, as a percentage of the total areas of NUTS2/3 regions. Answering the question, how much land is changing, and where?
3. In relation to the **intensity of land use change** in NUTS2/3 regions, to answer the question, what is the degree of human intervention on the land in order to meet the needs of our socio-economic activities?
4. In relation to the two previous outputs, a basic typology showing **Hotspots of land use change**. It generalizes regions based on a matrix of absolute change (by area) and intensity of change. This provides a generalized picture of which regions stick out in terms of high levels of physical land change, in terms of the degree of human intervention on the land, or both.
5. In relation to a **Land use change typology**: this is the cornerstone of the EU LUPA land use characterization and it answers the question, what characterizes land use changes for NUTS2/3 regions in Europe?

The **Prevailing Characteristics of land use typologies** seek to answer the question: Based on the distribution to CLC data 1990-2000-2006, what characterizes the land use in Europe? Yet, to provide a high explanatory power it must be provided in both a grid and regional format. On one hand, we know that that land does not operate exclusively within administrative bonds and for the purpose of the case studies it is very important to know what patterns characterize the land within (rather than among) regions. On the other hand, however, generalizations to the regional level allow for regions in Europe to be compared to one another and for interregional patterns to be identified. The regionalization also acknowledges that socio-economic data is constructed and distributed within an administrative, regional framework.

In total there are five steps to the process – the first four producing the gridded typology and a fifth step to regionalize the results. Briefly, the steps include a process of aggregating CLC data from a 100m grid to a 1km grid; an algorithm to identify differences between multiple aggregation techniques; two clustering procedures to group land cover data from the multiple aggregation procedures, and for each of the three time periods; and lastly for the gridded typology, a naming of 13 clusters produced by the results. For the regional typology, a fifth step involves an additional cluster analysis to determine which regions share similar land characteristics based on the per cent distribution of the gridded land use types in each NUTS2/3 region.

The result is 14 clusters, which have been subjectively named and transformed in to regional land use types. The naming is based on the composition of CLC classes in each cluster, which is shown for the CLC 2006 data in Table 1 on page 17. Results provided at the gridded level contribute to sub-regional analysis of land use and land use changes in taken up in the case studies.

Prevailing Characteristics of Land Use 1990 - 2006



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Regional level: NUTS 2/3
Source: Nordregio, 2012
Origin of data: EEA, 2011
© EuroGeographics Association for administrative boundaries

Regional land use types

- Urban cores and metropolitan areas
- Suburban areas
- Suburban or peri-urban areas
- Arable land in peri-urban and rural areas
- Arable land and pastures in predominantly rural areas
- Rural arable land with permanent crops and some forest
- Rural mix dominated by pastures with some arable land
- Rural pastures and complex cultivation paaterns
- Diverse land use in rural areas
- Diverse rural forest coverage with dispersed areas of permanent crops, pastures and arable land
- Arid mixed forest
- Rural forest
- Sparse vegetation with some forest and pasture
- Sparsely vegetated areas
- No Data

Map 5 Regional typology of the prevailing characteristics of land use

	CLC classes		Cluster Numbers													
			CL15	CL16	cl20	CL02	CL07	CL03	CL-05	CL09	CL04	CL6	CL12	CL11	CL01	CL10
1	Artificial surfaces	Continuous Urban Fabric	52,41	18,15	13,38	4,78	4,23	3,99	4,05	2,51	3,15	3,07	1,94	1,17	0,63	0,32
2	Artificial surfaces	Discontinuous urban fabric														
3	Artificial surfaces	Industrial or commercial units														
4	Artificial surfaces	Roads and rail networks and associated land	11,05	2,65	3,36	0,82	0,58	0,60	0,57	0,34	0,50	0,41	0,40	0,20	0,16	0,13
5	Artificial surfaces	Port areas														
6	Artificial surfaces	Airports														
7	Artificial surfaces	Mineral extraction sites														
8	Artificial surfaces	Dump sites														
9	Artificial surfaces	Construction sites														
10	Artificial surfaces	Green urban areas														
11	Artificial surfaces	Port and leisure facilities														
12	Agricultural areas	Non-irrigated arable land	11,75	32,98	27,53	71,61	52,66	40,29	24,94	6,99	28,23	12,32	15,40	16,97	2,36	0,71
13	Agricultural areas	Permanently irrigated land														
14	Agricultural areas	Rice fields														
15	Agricultural areas	Vineyards														
16	Agricultural areas	Fruit trees and berry plantations	9,97	23,81	27,99	10,22	20,17	19,54	41,85	55,77	17,22	26,95	18,59	16,78	2,65	3,29
17	Agricultural areas	Olive groves														
18	Agricultural areas	Pastures														
19	Agricultural areas	Annual crops ass. With permanent crops														
20	Agricultural areas	Complex cultivation														
21	Agricultural areas	Agriculture with sign. Areas of natural vegetation														
22	Agricultural areas	Agro-forestry areas														
23	Forest and semi natural areas	Broad leaved forests	9,57	18,74	25,36	9,26	18,69	33,14	22,19	32,36	44,46	53,53	54,31	31,67	75,34	42,78
24	Forest and semi natural areas	Coniferous forests														
25	Forest and semi natural areas	Mixed forests														
26	Forest and semi natural areas	Natural grasslands														
27	Forest and semi natural areas	Moors and heathland														
28	Forest and semi natural areas	Sclerophyllous vegetation														
29	Forest and semi natural areas	Transitional woodland shrub														
30	Forest and semi natural areas	Beaches, dunes, sands	0,10	0,10	0,25	0,09	1,32	0,50	0,23	0,03	3,47	2,24	7,94	28,73	3,42	42,66
31	Forest and semi natural areas	Bare rocks														
32	Forest and semi natural areas	Sparsely vegetated areas														
33	Forest and semi natural areas	Burnt areas														
34	Forest and semi natural areas	Glaciers and perpetual snow														
35	Wetlands	Inland marshes	4,94	3,54	2,00	3,02	2,28	1,87	6,05	1,99	2,88	1,40	1,35	4,48	15,35	9,78
36	Wetlands	Peat bogs														
37	Wetlands	Salt marshes														
38	Wetlands	Salines														
39	Wetlands	Intertidal flats														
40	Water bodies	Water courses														
41	Water bodies	Water bodies														
42	Water bodies	Coastal lagoons														
43	Water bodies	Estuaries														
44	Water bodies	Sea and ocean	0,21	0,03	0,12	0,19	0,06	0,05	0,12	0,01	0,09	0,07	0,08	0,01	0,09	0,33
		Number of regions	29	32	21	41	97	81	52	18	97	171	56	56	30	27
		Percent of Europe	0,22	1,38	1,20	3,57	11,89	10,82	5,48	2,05	15,24	17,75	7,09	4,60	12,89	5,81
			Urban cores and metropolitan areas	Suburban areas	Suburban or peri-urban areas	Arable land in peri-urban and rural areas	Arable land and pastures in predominantly rural areas	Rural arable land with permanent crops and some forest	Rural mix dominated by pastures with some arable land	Rural pastures and complex cultivation paaterns	Diverse land use in rural areas	Diverse rural forest coverage with dispersed areas of permanent crops, pastures and arable land	Arid mixed forest	Sparse vegetation with some forest and pasture	Rural forest	Sparsely vegetated areas

Table 4 The distribution of CLC 2006 classes within each regional cluster (noted in the top row), leading to the formation (naming) of regional land use types (noted in the bottom row). The purple - orange colour scale shows the share of each CLC class group for each cluster and regional land use type.

1. ***Urban cores and metropolitan areas*** – 29 regions – show a situation where almost 60% of regions can be generally characterized as regional city-states, where peri-urban areas and rural hinterland is accounted for in neighbouring regions. Thus, the urban land features in this type are influential not only for the social, economic and environmental performance of regions within this type but also those regions within near proximity.

   Differential distribution in some Eastern countries is identified: capitals and administrative cities act as attracting pole. Strong contrast urban-rural (polarisation)

2. ***Suburban areas*** – 32 regions – Urban land types have the dominating influence in these regions. Urban and infrastructural related land typically consumes 15-20% of the region and as a result, activities related to urban and infrastructural settings are highly influential in characterizing overall land use in the region.

3. ***Suburban or peri-urban areas*** – 21 regions – Regions in this cluster are situated in near proximity to large urban centres – such as London or Paris –. The urban and infrastructural component typically covers around 15% (and up to 20%) of the land. Relatively high levels of artificial surfaces are also evident in certain regions where large urban areas are situated in relatively large regions (by physical size). For example, regions in Spain or those adjacent to city-states such as London fall into this group. Other examples include larger industrial areas, for instance in southern Poland, or further north in the UK where the region between Liverpool and Manchester serves as a densely populated hinterland for the city activities.

4. ***Arable land in peri-urban and rural areas*** is dominated by the very high content of arable land. These categories cover more than 70% of the land in the 41 regions characterized by this type. The historic role of the agricultural production potential of this land use type for Northern Europe, Central Europe and the Balkans is clearly indicated through its distribution as the immediate hinterland around the major urban centers in the Central-North, and the matrix which constitutes the core population areas along the rivers in the Balkan area.

   This land use type is becoming swallowed up by the **sprawl of industrial and commercial activities, and residential land to a lesser extent; especially in Central Europe**

5. ***Arable land and pastures in predominantly rural areas*** includes 97 regions that share many similarities to the “Arable land in peri-urban and rural areas” type discussed above. The main difference however, is that while arable land covered more than 70% in the previous land use type it is down to 50% while pastures, permanent crops and forested areas make up for the remaining differential.

   In a von Thünean perspective of concentric farming types around urban areas it is likely that, compared to the previous land use type, we are moving to the next intensity level of concentric circles around the major cities. It seems common that regions in this type could still be highly influenced by the major cities and their constant expansion, though.

   Also, compared to the previous prevailing regional land use type, we are clearly moving into a situation where the land use mix is slightly more diverse and has a slightly lower production potential than strictly arable land. While this is a predominant characteristic of more peripheral areas in Northern Europe, it at the same time has occasional appearance in

Southern Europe, for instance with coverage in Spain, Italy, Turkey and Greece, but especially in the Balkan region where it constitutes a natural continuum from the more fertile lowland towards the more mountainous parts of the countries. Nevertheless, it is clear that agricultural activity is still quite prevalent in these regions, but the relatively arid climate for many of the regions means that agriculture is often dominated by less intensive permanent crops.

6. ***Rural arable land with permanent crops and some forest*** is characterized by a mix of arable land, pastures, mosaics and some forest in the 81 regions covered by this regional type. Compared to the previous regional type, this one shows an increased reduction in arable land - even though it is still dominant with a percentage of around 40, followed by forest areas above 30% while permanent crops are around 20%.

   This prevailing regional type has a very diverse extent in Europe; stretching from southern Sweden and Finland through Eastern, central and Western Europe, while also playing an important role in the south. Its coverage is notable throughout Spain, in central as well as in northern Italy, Romania, Greece and Turkey.

   This type of diverse spatial coverage adds credence to the notion of it being a very diverse land structure, both in terms of rural land covers, but especially in relation to the mixed role of urban and rural landscapes.

7. ***Rural mix dominated by pastures with some arable land*** show a diverse land cover throughout its 52 regions. Again, this is a continuation of the trend in the previous three types where arable land, pastures, agricultural mosaics and sporadic forest are being replaced by first and foremost the permanent crops and forest land covers. However, given that no land type accounts for more than 43% of the areas in these regions it is safe to assume a quite diverse land mix in these regions.

   Spatially, regions in this type are situated together with the following regional type in the border zone between northern and southern land production types. This seems to indicate a production zone where on-going changes in climate could result in important changes both positively and negatively.

   What is even more interesting is the connection to the land situated in coastal areas stretching from Ireland through south-western England, Normandy, northwest coastal areas in The Netherlands and Germany, as well as down to the Spanish isles in the Mediterranean. It also appears to have relations to inland water and watercourses in central Europe. In both cases the interaction between land and water are important as they generate challenges as well as new opportunities. For example, opportunities exist in relation to tourism and possibilities for different types of renewable energy production.

8. ***Rural pastures and complex cultivation patterns*** is a relatively small but distinct type which to some extent covering 18 regions. It resembles the previous regional type by having a very high component of permanent crops in combination with some arable land as well as pastures, some agricultural mosaics and mixed forest. Its absolute dominance in south-central France and more occasional appearance in Latvia, Northern Ireland, Romania, as well

as in a few regions in central Balkan show that land is dominated by pastures, agricultural mosaics and mixed forest, while the presence of arable land is significantly diminished compared to the previous regional land types. This seems to point toward a few conditions that could be influencing the rural consumption of land. It is quite clear that pasturing is likely the dominant form of rural land use and the presence of forest may not be as high as compared to Estonia, Latvia or Romania where mix between forest and pasture activities is evident.

9. ***Diverse land use in rural areas*** is among the three major types encompassing a total of 97 regions, but actually represented through two distinctly different types – a northern and a southern type. These show similar overall coverage characteristics, but representing very different landscapes. Being one of the major categories represented in southern Europe and Turkey, it depicts what best can be characterized as typical Mediterranean landscapes. There is a diverse mix of land cover types with statistically significant levels of arable land (25-30%), permanent crops (15-20%) and forests (40-50%).

   Similar characteristics account for the distribution of this type in the Balkans, primarily in Romania and Bulgaria. The northern landscape encompassing this type is characterized by the same mix of land cover, but with arable and grazing land being the dominant characteristic compared to forest and scrub coverage in the southern regions. Furthermore, from southern Scotland, across Norway, Sweden, and Finland, as well as into the Baltic States this type is connected to the expansion of more urban activities into former rural areas previously dominated by forestry.

10. ***Diverse rural forest coverage with dispersed areas of permanent crops, pastures and arable land*** is by far the largest type represented by a total of 171 regions in Europe, and mainly related to mountainous regions dominated by forest. More than 50% of the land is forested, but substantial input of permanent crops (25-30%) and arable land (10-15%) provide a basis for other economic input. However, such a large number of regions in a single clustering with such large variation in terms of landscapes and accessibility make it difficult for further generalization.

11. ***Arid mixed forest*** - represented through 56 regions, this type is in many ways a continuation of the southern type of the diverse land use in rural areas, but with a higher percentage of forest (50-60%) and it is situated in areas with more mountainous characteristics. It stretches across the whole Mediterranean area from Portugal in west to the most eastern regions in Turkey.

12. ***Sparse vegetation with some forests and pastures*** has been identified throughout mountainous parts of Europe, and with a major part of the 56 regions situated in Turkey, while the others are dispersed over most of Europe. The regions are characterized by a mixture of forests (30-35%) in combination with sparse vegetation (25-30%) and with scattered areas of arable land (15-20%) and permanent crops (15-20%). It seems safe to assume the land-based production potential could be quite low in terms of traditional rural activities.

13. ***Rural forest*** is typifies 30 regions with a clear northern orientation and where forest covers more than 75% of the areas, while water and sparsely vegetated areas constitutes the rest. In a Nordic setting these areas are responsible for a major part of forestry in the north stretching from Scotland through Norway, Sweden and Finland.
14. ***Sparsely vegetated areas*** constitute a total of 27 regions, mainly situated in Norway and Iceland, being characterized by a split between sparse vegetation and forest.

4.2.5. Connecting landscapes and land use dynamics

As is immediately noticeable in **Error! Reference source not found.**4, the production of spatial data of land changes is more complex than spatial data of the prevailing land use characteristics. There are four regionalized outputs regarding land changes that, when put together, provide an understanding of how different patterns of land change are distributed throughout Europe. These are:

1. Amount of land change
2. Intensity of land changes, including a validation of the intensity concept
3. Land change hotspots
4. Land use change typology

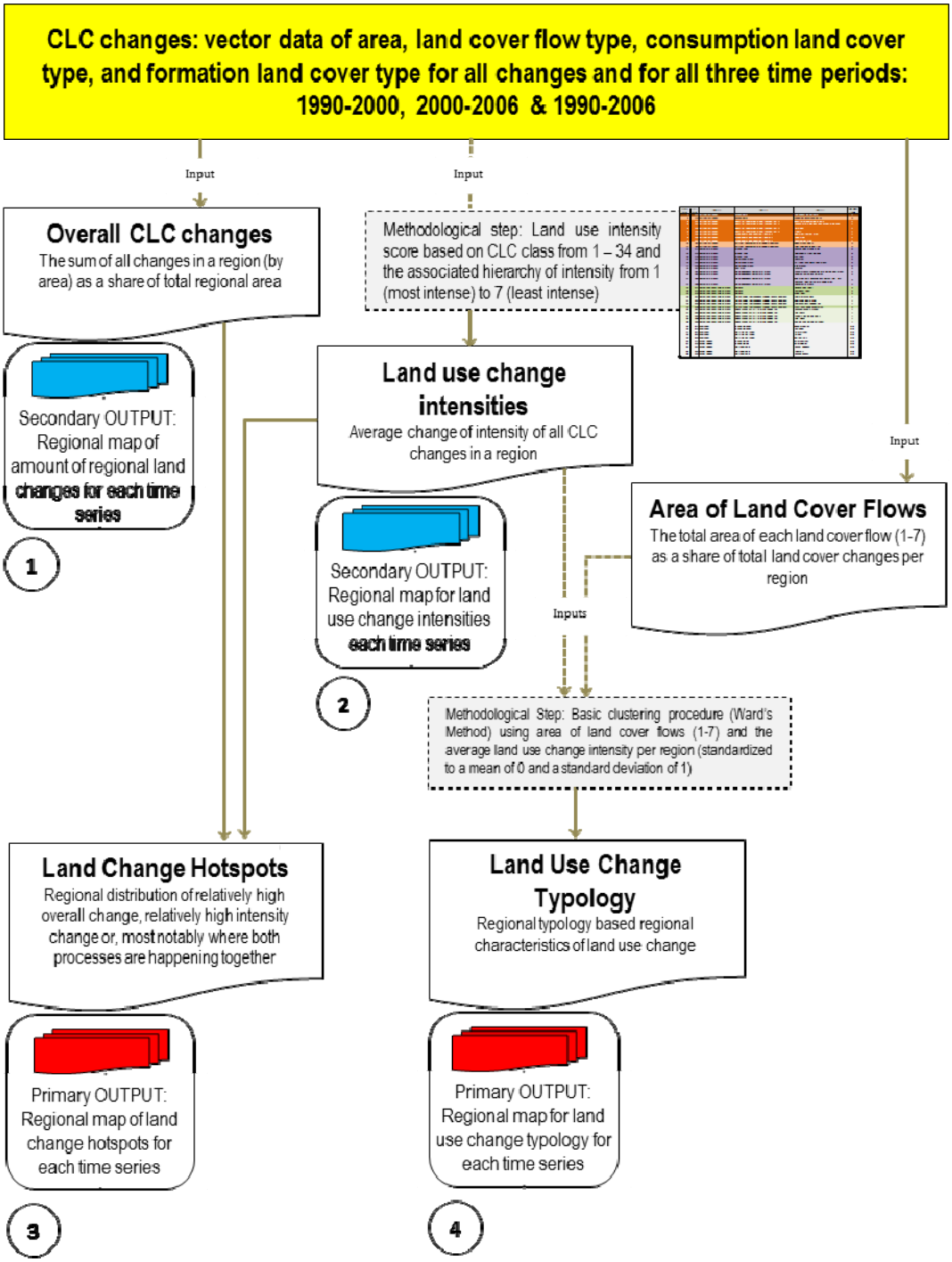


Figure 4 Methodological flow to analyse land changes in the EU-LUPA project

The amount of land change

All CLC changes are summed at the NUTS2/3 level. These totals are then divided by the area of the region to determine percentage of each region undergoing land change. A particular focus of this is placed on regions where changes are above the European median.

When scrutinizing the maps it is important to keep in mind that not all countries and regions are represented throughout the 16-year time span from 1990 to 2006. This limits the

opportunities for general interpretations regarding changing patterns between the 1990-2000 and 2000-2006 time series'.

Nevertheless, within the entire 16-year time period it is notable that some very significant levels of land change have taken place - in some regions almost 30% of the total area has reported change. The spatial distribution of these changes is also quite territorialized, where vast changes are especially evident in areas such as Spain, Portugal, the Czech Republic, The Netherlands and Ireland. What will be very interesting is to determine the socio-economic and environmental contexts of changes in these different national and regional contexts. This will be drawn out by investigating the intensity and types of changes that define these volumes.

Some of the most significant changes between 1990 and 2000 took place on the Iberian Peninsula. Starting with the agrarian reforms taking off during the 1970's and culminating in the late 1980's, the changes are, in part, likely due to the ascension of Spain and Portugal to the EU in 1986. This resulted in a process where the former agricultural structure was broken up and in many places turned into more intensive forms of production. Also the land ownership reforms in Eastern Central Europe during the 1990s resulted in marked changes, a process which was further fuelled by the expectations regarding future membership of EU in the period up to and after the membership in 2004. These are important observations because they highlight the types of changes that can be expected by current or future candidate countries.

The Land use change intensity

As mentioned, the notion of intensity has been applied in the EU LUPA project as basis for analysing the connection between land use and land use changes, and socio-economic development. The concept is a response to the understanding that while socio-economic development is less and less attributed to land-based production; it is an ever increasing driver of land changes. Seen from this perspective, it is not only important to know how much land is changing, but it is crucial to know if land changes reflect minor changes (which usually reflect on-going socio-economic processes) or if they reflect major shifts in land cover (which are often part and parcel with structural socio-economic changes or environmental impacts). Furthermore, it is important to consider that increased human landscape intervention is among the strongest pressures on biodiversity (Environment Council, 2010), and potentiating land use efficiency is a direct means of improving the sustainability of land use in general.

In light of this, land use intensity is defined as: the degree of human intervention caused by activities taking place on a given parcel of land - activities that, in most cases, do not have a direct and one-to-one implication on the characteristics of land cover. Therefore, the intensity is not related to the amount of input used – a driver that usually leads to an increase of production from a piece of land (cf. Gabrielsen, 2005). Such a characterization would be reminiscent of what we are trying to avoid – land use characterization that is preferential to the inputs and outputs of land-based production. But at the same time, land use intensity is not only related to the per capita use of artificial surfaces, for this is also too

narrow a concept which tells more about the efficiency of land use than is doe about intensity (cf. Prokop et al. 2011).

As shown in the Table 2, this quantitative assessment of land use intensity is a classification of the CLC classes (from CLC 34 – Glaciers and Perpetual Snow to CLC 1 – Continuous urban fabric), based on the relative level of land use intensity inferred by each CLC class. The subsequent classification of seven scales of intensity is based on internal expertise, which uses a number of underlying general rules to create the intensity hierarchy. The Intensity ranking has been scrutinized through a detailed validation exercise. This exercise is a correlation analysis based on the percentage distribution of the CLC classes in the regionalized Prevailing land use typology versus regional GDP and population density statistics.

The presence of greater concentrations of people (population density) is quite clearly indicative of higher land use intensity. This impacts land especially through the development of artificial surfaces in order for people to establish their everyday lives and routines in space. As mentioned, the desire for increased living and recreation space reiterates that increased population in a given area creates more intensive land use – which through the creation of impervious surfaces reflects the complete manipulation of land. GDP is considered to be a good indication of land use intensity because of the safe assumption that increasing economic output is equal to situations of greater land intervention. This is not only placed in terms of land-based production but also incorporates the role of urban areas as areas of relatively high economic output. The results show that intensities of land use reflected through the Land use types are clearly correlated to both population density and to GDP. This does not consider the size (area) of the change, only the change of intensity.

In terms of the Artificial surfaces class, there are three classes: CLC class 1 (Continuous urban fabric) is the ranked as the most intensive land cover type because it represents urban cores and centres of sub-urban areas where over 80% of the land is impervious (Bossard et al. 2000). Likewise, these are areas that are known to support a majority of economic activity in Europe, as well as being the home to a high share of the European population. CLC classes 3-9 (Industrial, Commercial and Transport Units or Mine, Dump and Construction Sites) are ranked second because they classify land that is highly manipulated and related directly to meeting the needs of socio-economic production. CLC classes 2 and 10-11 represent the third most intensive urban type. Class 2 – Discontinuous urban fabric – accounts for land where vegetated areas that cover between 20-70% of the land surface (Bossard et al. 2000). It therefore represents transitional, suburban areas between cities and the rural hinterland where the intensity of human intervention is reduced relative to Continuous urban fabric. Green urban areas and Sports and leisure facilities are also included in this group. These are areas of increased protection compared to more intensive urban classes, but are still more intensive than agricultural or forest land due to their proximity to urban areas, and thus heightened contribution to social functions.

Agricultural classes are, for the most part, grouped together because it is is very difficult to differentiate agricultural intensities due to regional topographical, territorial, cadastral and economic (land value) conditions, (see Gabrielsen, 2005). The only distinction that has been

made within the 11 agricultural classes is where Arable land and Permanent crops (CLC classes 12-17) are allocated an intensity score of 4 and Pastures and Heterogeneous Agricultural areas (CLC classes 18-22) are given a score of 5. The rationale behind this distinction is that the former group is indicative of agricultural areas that are strictly dedicated to food production through cropping. In agricultural terms this is characterized as an intensive activity demanding high inputs, especially fertilizer, water, labour and management (Gabrielsen, 2005). In contrast, the latter group is representative of a mosaic of agricultural activity with a generally lower level of intensity. For instance, by area, Pastures is a dominant CLC class in this group, and is an activity characterized as being relatively low-input (Gabrielsen, 2005).

The 11 Forest and Semi-natural Areas classes are broken down into two groups because of the certain CLC groups that represent an economic production dynamic in the forest sector; where harvested forest areas are next classified as Transitional Woodland-shrub. By area, this is by far the most prevalent land cover transition that takes place in Europe. The remaining classes encompass landscapes either covered by vegetation without a specific production potential or by little or no vegetation as all. In turn, they are essentially natural landscapes with minimal prospects for substantial human intervention.

The utility of ranking CLC classes according to intensity allows for the possibility to assess land changes in terms of intensification or extensification of land use. All land changes are accounted based on the consumption intensity score (what the land changes from) and the formation intensity score (what the land changes to). By subtracting the intensity score in the latter year from the intensity score from the former year the intensity score of each land change is determined. For example, a change from Natural Grassland (intensity score: 7) to an Airport (intensity score 2) is an intensification of five. The average intensity score for all changes in each NUTS2/3 regions then provides the regionalized land use change

GRID CODE	CLC CODE	LABEL1	LABEL2	LABEL3	Intensity Code
1	111	Artificial surfaces	Urban fabric	Continuous urban fabric	1
2	112	Artificial surfaces	Urban fabric	Discontinuous urban fabric	3
3	121	Artificial surfaces	Industrial, commercial and transport units	Industrial or commercial units	2
4	122	Artificial surfaces	Industrial, commercial and transport units	Road and rail networks and associated land	2
5	123	Artificial surfaces	Industrial, commercial and transport units	Port areas	2
6	124	Artificial surfaces	Industrial, commercial and transport units	Airports	2
7	125	Artificial surfaces	Mine, dump and construction sites	Mineral extraction sites	2
8	126	Artificial surfaces	Mine, dump and construction sites	Dump sites	2
9	127	Artificial surfaces	Mine, dump and construction sites	Construction sites	2
10	141	Artificial surfaces	Artificial, non-agricultural vegetated areas	Green urban areas	3
11	142	Artificial surfaces	Artificial, non-agricultural vegetated areas	Sport and leisure facilities	3
12	211	Agricultural areas	Arable land	Non-irrigated arable land	4
13	212	Agricultural areas	Arable land	Permanently irrigated land	4
14	213	Agricultural areas	Arable land	Rice fields	4
15	221	Agricultural areas	Permanent crops	Vineyards	4
16	222	Agricultural areas	Permanent crops	Fruit trees and berry plantations	4
17	223	Agricultural areas	Permanent crops	Olive groves	4
18	231	Agricultural areas	Pastures	Pastures	5
19	241	Agricultural areas	Heterogeneous agricultural areas	Annual crops associated with permanent crops	5
20	242	Agricultural areas	Heterogeneous agricultural areas	Complex cultivation patterns	5
21	243	Agricultural areas	Heterogeneous agricultural areas	Land principally occupied by agriculture, with significant areas of natural vegetation	5
22	244	Agricultural areas	Heterogeneous agricultural areas	Agro-forestry areas	5
23	311	Forest and semi natural areas	Forests	Broad-leaved forest	6
24	312	Forest and semi natural areas	Forests	Coniferous forest	6
25	313	Forest and semi natural areas	Forests	Mixed forest	6
26	321	Forest and semi natural areas	Scrub and/or herbaceous vegetation associations	Natural grasslands	7
27	322	Forest and semi natural areas	Scrub and/or herbaceous vegetation associations	Moors and heathland	7
28	323	Forest and semi natural areas	Scrub and/or herbaceous vegetation associations	Sclerophyllous vegetation	7
29	324	Forest and semi natural areas	Scrub and/or herbaceous vegetation associations	Transitional woodland-shrub	6
30	331	Forest and semi natural areas	Open spaces with little or no vegetation	Beaches, dunes, sands	7
31	332	Forest and semi natural areas	Open spaces with little or no vegetation	Bare rocks	7
32	333	Forest and semi natural areas	Open spaces with little or no vegetation	Sparsely vegetated areas	7
33	334	Forest and semi natural areas	Open spaces with little or no vegetation	Burnt areas	7
34	335	Forest and semi natural areas	Open spaces with little or no vegetation	Glaciers and perpetual snow	7
35	411	Wetlands	Inland wetlands	Inland marshes	N/A
36	412	Wetlands	Inland wetlands	Peat bogs	N/A
37	421	Wetlands	Maritime wetlands	Salt marshes	N/A
38	422	Wetlands	Maritime wetlands	Salines	N/A
39	423	Wetlands	Maritime wetlands	Intertidal flats	N/A
40	511	Water bodies	Inland waters	Water courses	N/A
41	512	Water bodies	Inland waters	Water bodies	N/A
42	521	Water bodies	Marine waters	Coastal lagoons	N/A
43	522	Water bodies	Marine waters	Estuaries	N/A
44	523	Water bodies	Marine waters	Sea and ocean	N/A

Table 5 Ranking of CLC classes based on Land Use Intensity

Some of the highlights noticeable in the analysis include:

- There is a clear east-west dimension in each of the maps. Large volumes of land use extensification are almost exclusively found in Eastern European member states; particularly in Poland, The Czech Republic and Hungary. This pattern is very dominant in the 1990-2000 period but continues in 2000-2006 as well.
- High volumes of land use intensification are especially notable in countries such as The Netherlands, Brussels, Spain, Portugal and Croatia. In Spain, this is especially evident for regions along the south and east coast as well as the island regions. On regional/territorial level it is evident that intensification is associated with the growth (sprawl) of urban areas and their associated artificial surfaces. But furthermore – and in a very high degree in, for instance in Portugal, Spain and other Mediterranean areas, the issue of ownership reforms and characteristics of land tenure are a driver of intensification. This issue will be dealt with in more detail in relation to the identification of land change hotspots. Intensification also appears to take place in a greater degree for coastal regions (cf. in Spain, France, Croatia). It is possible that this pattern is related to the growth of the coastal tourism in these regions, but additional validation is necessary.

- In the Czech situation it is interesting to point out the seemingly high degree of rural extensification being countered by urban-related intensification in the capital region of Prague. Further, when comparing the 1990-2000 and the 2000-2006 results, even while taking into account the much larger time span in the former time period) it appears that extensification processes have slowed for the country as a whole. EEA country analyses show that the main driver of extensification has been the conversion of different crop areas into land for pasture. This is a process which has been driven by national policy that uses subsidies to encourage the grassing of arable and extensive grassland management.

  The shift from 1990-2000 to 2000-2006 also relates to changes in mobility, where halted subsidies for dwellings and an increase of suburbanization have been influential on the slowing down and decline in extensification (Vobecká 2010), an issue which is dealt with further in connection with the Land Change Hotspots. In the 2000-2006 time series from very significant intensification is especially notable in particular regions of Norway. These are regions that we know have undergone relatively little amounts of land change (by area); however the changes that have taken place were very intensive. This is due to the development on intensive mining, hydrocarbon extraction and other heavy industrial activities in rural and remote locations. Interestingly, these intensifications are not taking place in parallel with extensification of other land covers in these areas, which indicate that these are "new" economic activities that are taking place on previously stable and unchanged land.

- Quite high rates intensification is notable for many regions in Spain in all three time series. The highest levels of intensification have taken place for coastal regions along the Mediterranean and for the island regions. This is clearly related to the growth of artificial surfaces in urban areas. CLC flow data and EEA land cover analysis (EEA, 2011) indicates that much of this intensification is due to the sprawl of economic sites and infrastructures (which both construction areas and transport infrastructure are grouped).

- For agricultural withdrawal, abandonment processes have been most pronounced in the central-south and north-east regions of Hungary (between 2000 and 2006), on the Italian island of Sardinia (between 1990-2000), and in Ireland southern Portugal to differing degrees throughout the 1990-2006 period.

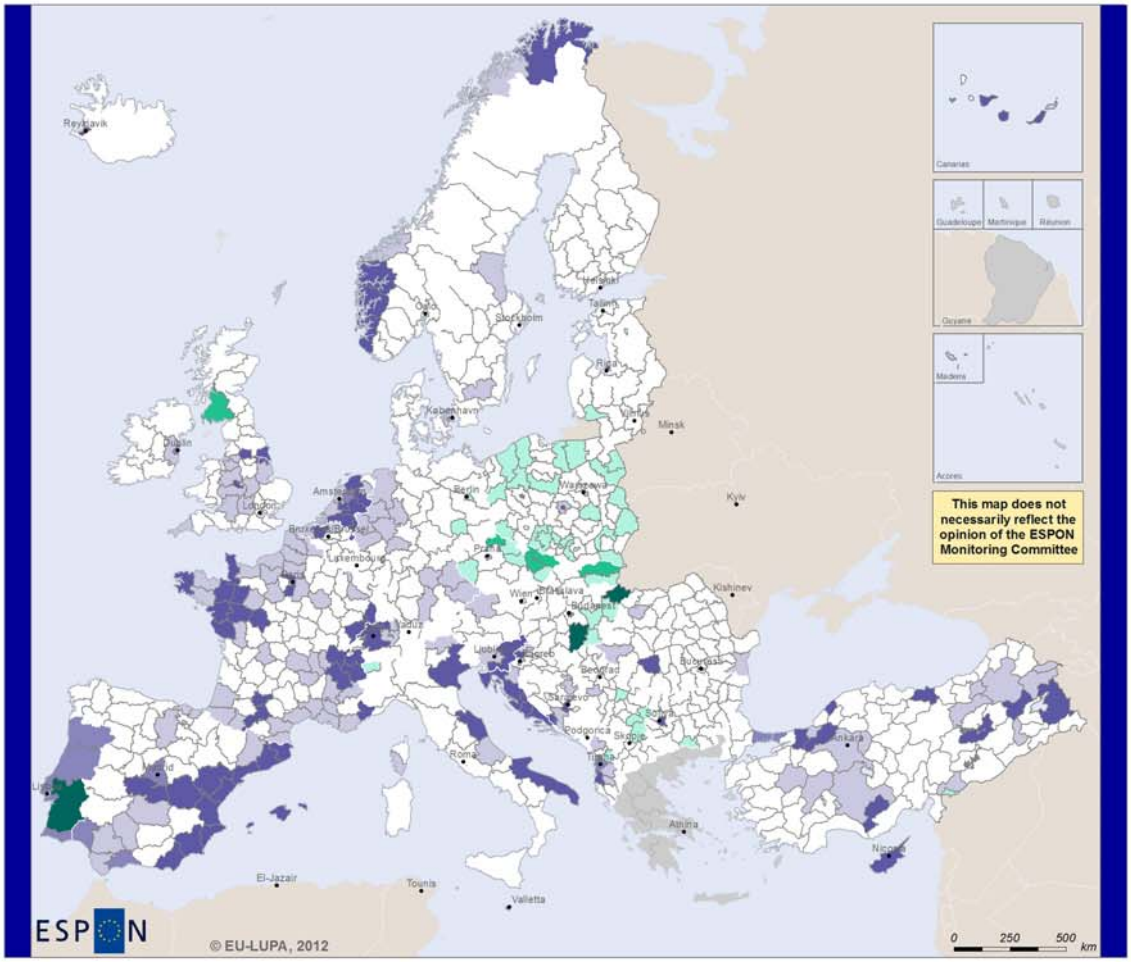
The Hotspots of land change

By combining the outputs of component 3 (amount of land change) and component 4 (land change intensity) we can provide a map showing land change hotspots. In this context, hotspot regions are those that are either characterized by relatively high intensification or extensification, where higher than average amounts land change are taking place, or where both phenomenon are happening together. The method used to determine the hotspots was to create a 5x5 matrix where land use intensity change is classed in five groups on the y-axis and the amount of regional change is classed in 5 groups on the x-axis. Using this matrix, we can effectively combine – and therefore generalize – these change phenomena in order to identify regions where extreme land cover changes have taken place.

The question of land ownership and land tenure has been extremely important in in relation to the registered changes in Southern Europe, and especially on the Iberian Peninsula. Both Spain and especially Portugal land ownership was until the late 1970s and 1980s characterized by Latifundias, i.e. extremely large private estates with the owner usually living in the larger cities. Even providing job opportunities to workers and to some extent leasing out land to tenants, this type of land use has mostly been characterized by very low land use intensity. In Portugal the Agrarian Reform in 1975 being an important part of the "Carnation Revolution" laid down the principles for the expropriation of land from the Latifundias and distributing ownership to former workers or tenants. Even some intensification took place the attempts to establishing cooperatives had limited effect, and a break-through in relation to market based economy followed by the reformed Agrarian law enacted by the parliament in late 1988. This enabled the new ownerships to move towards more intense production structures. At the time of EEC membership in 1986, low land and labor productivities were the most striking features of Portuguese agriculture, reaching before entry only 46% and 13% of EU-10 average, respectively (Mykolenko, Raymond, & Henry, 1987). Especially in areas close to urban centres were the first places to take advantage of the opportunities connected to the CAP (Diogo and Koomen, 2010).

As an important consequence all regions in Portugal are identified as hotspots – albeit to differing degrees – in all of the time series'. Consultation with the maps showing total land change by area shows that – as indicated above - this is mainly due to the fact that all regions show very high levels of overall change. This is by the high levels of ongoing changes related to forest management. Conversely, the intensity maps show more stable patterns with the exception of two regions. Lisbon and Alentejo. In the former, intensification is predominantly related to residential sprawl between 1990 and 2000; a process that has slowed considerably since then (EEA, 2011). In Alentejo, relatively high land change is characterized as an extensification process. This is due to the fact that land abandonment due to the withdrawal of farming activities (EEA, 2011).

2000 - 2006 Land Change Hotspots



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Regional level: NUTS 2/3
Source: Nordregio, 2012
Origin of data: EEA, 2011
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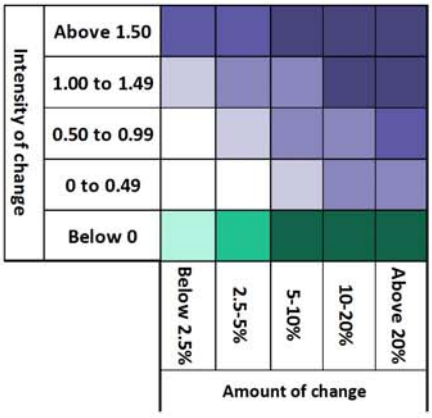
Matrix of land change hotspots

The x-axis shows the amount of land that has undergone change between the given years (in percent) while the y-axis indicates the change in intensity as a result of those changes. Therefore, regions in white represent those with relatively stable land cover characteristics while increaslingly darker shades of green or purple identify "hotspots" of change where high intensifications or extensifications are coupled with increasing levels of overall land change are evident.



No Data

Map 6 Hotspots of land change- 2000-2006

Besides processes similar to the above described, where a clear divide between latifundios (dominating in the south) and minifundios (dominating in the north) both have been characterized by low productivity the membership of EU has had some of the same land use consequences as in Portugal. Intensification due to structural changes in land ownership has been an important factor, and this combined with the CAP accounts for much of the intensification taking place in rural areas. As emphasized by Molina (2002, p2), however, "Land tenure is, after decentralization, the second most important supporting/impeding factor for National/Regional Forest Programmes in the Mediterranean regions". In the case of rural Spain the changes can be illustrated through the example of the Dehesas, a traditional, low-input, extensive agroforestry system (Meeus 1995, here from Plieninger and Schaar, 2008) combining forestry with extensive livestock grazing and farming. Low productivity and low intensity has been an easy target for intensification where the most influential force being the Common Agricultural Policy, which supported the production of cereals and cattle, sheep, and goat husbandry in the dehesas. Again, this is an important process adding to explaining the changes in intensification.

On the Iberian Peninsula, but definitely also in other parts of Southern Europe, a starting point characterized by very low land use intensities in rural areas and farming practices more related to subsistence and local markets than to European and World Market conditions have been an obvious starting point for a process of land use intensification in rural areas that took off before 1990, peaked in the period 1990 to 2000, and now being more or less "normalized" except for regions in Portugal where intensification of rural areas are still ongoing. And instead of rural intensification related to rural activities many of former rural areas – especially in coastal areas – are exposed to a new category of intensification related to urban sprawl.

In contrast to the situation on the Iberian Peninsula, the immediate effects of the inclusion of East-Central European countries - previously part of the "East Block" mostly characterized by state and cooperative ownerships - are reflected through a drastic decline in intensity over substantial areas in the period from 1990 to 2000. In contrary to the situation in Spain and Portugal the basic land reforms distributing former estate land to small and medium scale farming had taken place pre Second World War, and in many cases during the 19th century. The structural changes connected to the post WW2 reforms in ownership instead resulted in the establishing of state farms and cooperatives. It had some immediate consequences in relation to both intensity and productivity, and was paralleled by regional policies in relation to rural areas due to the state interests in maintain a high level of production to serve the requests from the Soviet Union through COMECON. And as a consequence transfer payments and subsidies enabled intensities and productivities that were unrelated to market conditions. So the development from 1990 and onwards abandoning the former state and cooperative ownerships forms has had some immediate consequences in relation to intensity. On one hand that many of the new private farms were small and did not have the necessary means to ensure a high intensity in land use. And on the other hand that the larger farms with intensification potentials in many cases involved foreign investments which did not necessarily lead to intensifications. The situation in

Poland being different in this respect because of a dominance of private land use activities, and as a consequence effects as described above only relating to the relatively smaller areas owned by cooperatives and a few state holdings as well.

The situation in Poland was, however also affected through the lack of funding for investments in many of the small farms functioning more as subsistence bases for a still older population – a situation that can be found in rural areas, not the least in regions remote to the capital regions or in mountainous areas in most of the former "East Block". And several of the regions where this has been the dominating characteristic has continued being regions of decreasing intensity through the 2000-2006 period as well. One important element in this connection has in Poland been the small size of a substantial part of the already private farms. The advantage in other parts of East-central Europe has been that in the aftermath of the first round of extensification the new private farms were able to establish themselves not as subsistence activities but as professional and capital intensive farms on previous state or cooperative owned large scale farms. And similar situations have appeared in relation to other types of land use.

Ireland being a "hotspot" for IT development during the 1990's had some spin-off in relation to increased intensification of activities related to land use. Partly because the attraction of labour force away from direct land use to industrial activities required adjustment in land related activities requiring technology to replace the missing workforce. With a partly collapse of the IT-adventure after 2000 the process described above came to a halt, and the shift is apparent when comparing the 1990-2000 and the 2000-2006 situations.

While missing data for Sweden, Finland and Norway for the period 1990-2000 does not allow a comparison between the two periods, an important issue of the effects of increasing activities related to resource extraction, especially in relation to oil and gas development, is very apparent for the 2000-2006 period shown for Norway. While fisheries used to be a mainstay for coastal communities in Norway the picture today is a high degree of dependency on the sea, but in relation to energy resource extraction. This leads to the inclusion of large areas for on-shore production facilities, but requires at the same time related economic activities – processing, investigation, planning, education etc., which shows through inclusion of still larger areas for housing.

European tourism is an activity requiring still larger areas, and the development of the Spanish coastline illustrates that it is not only a question of short term changes, but seems to have been a consistent development process throughout the whole period from 1990 to 2006.

As a conclusion it could be argued that the map of "hotspots" represents a generalization of land changes which are based on absolute changes in land use. This is advantageous because there is no chance that it "misrepresents" certain land change phenomenon taking place in the regions. At the same time, it lacks in terms of characterizing the underlying processes that are actually the result of these intensifications, extensifications and/or high amounts of overall land change (i.e. the changing social and economic activities that take place as a result of such changes).

The Regional typology of land use change

While the hotspots enables us to identify places in Europe where marked changes have been taking place during the last 16 years, the development of a typology which is able to capture these changes and provide a connection between types and processes of change, an important planning instrument will be at hand. So the next step is to turn the focus on such a typology.

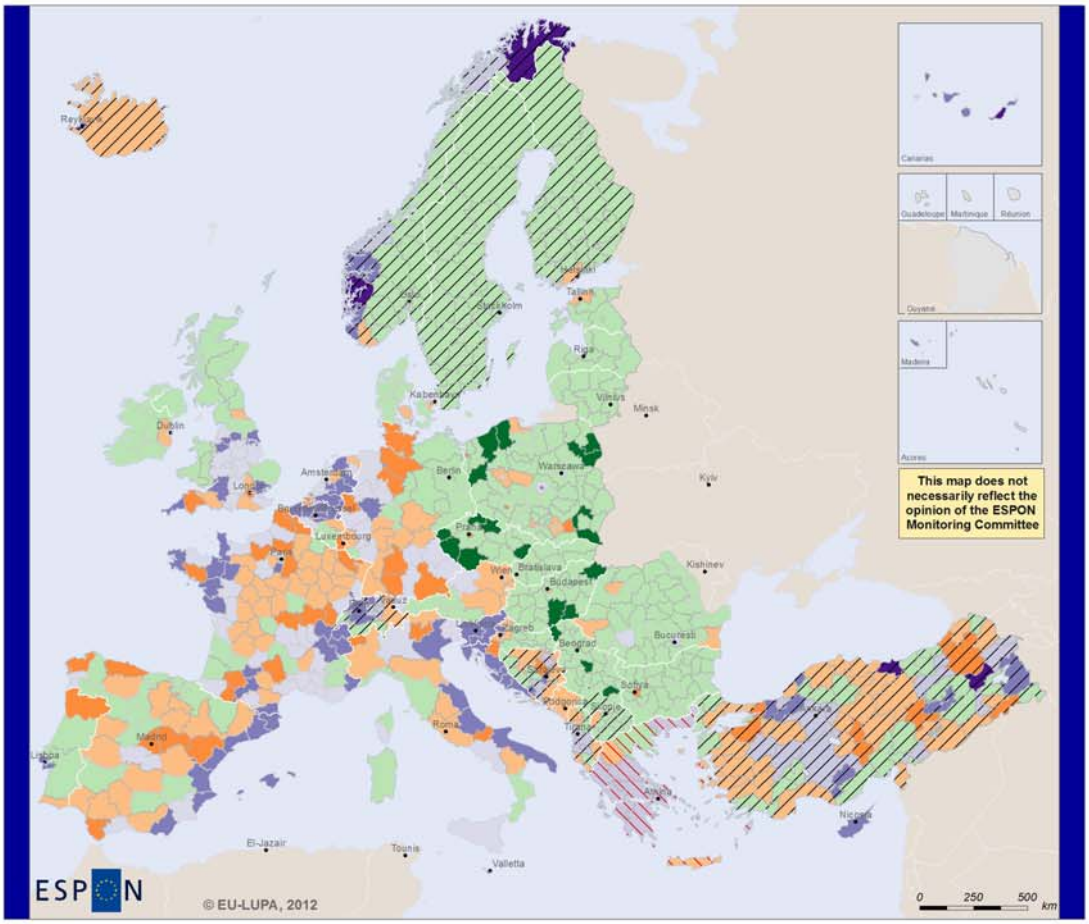
In relation to land use change this is the cornerstone of the EU LUPA land use characterization and it answers the question, based on the regional clustering of all CLC flows, and changes in land use intensity, what characterizes land use changes in Europe?

While the maps of "hotspots" represent a generalization of land changes which are based on absolute changes in land use. This is advantageous because there is no chance that it "misrepresents" certain land change phenomenon taking place in the regions. At the same time, it lacks in terms of characterizing the underlying processes that are actually the result of these intensifications, extensifications and/or high amounts of overall land change (i.e. the changing social and economic activities that take place as a result of such changes).

As an attempt to account for this void, the intention of the Land use change typology is also to generalize land changes in terms of intensity of changes and the underlying usage characteristics of the land changes. This is achieved by trading the measure of amount of land change in the hotspots typology and replacing it with a characterization of changing land uses. Regionalized land use change intensity is therefore combined with the distribution of the most telling groups of land cover changes (LCF's) in a cluster analysis, and then grouping the results into descriptive Land use change types. In this connection, the main benefit of the Land use change typology is that it is able to reflect a limited number of dominant characteristics of land use changes; especially, urbanization from natural areas, intensive urbanization, maintenance of rural functions, and agricultural withdrawal. In terms of urbanization for instance, it adds another dimension where population or employment data is often used to reflect the urban development of regions. Complementing this, we can now see a regional dimension to these processes as they take place, literally, on the ground. In this connection, a direction of further work could be to make a closer comparison to land changes resulting in new or maintained urban areas, and to compare this data with regional – or even municipal – population data. This could give an interesting insight into places that are either maintaining or growing their population (labour force) and what the implications re in terms of land take and urbanization.

Map 3 shows the distribution of Land use change types among NUTS2/3 regions for the 1990-2006 time series. However, only 561 of the 772 NUTS2/3 regions have CLC data for all three time periods. Regions missing data for one of the periods are filled using data from either the 1990-2000 (Greece) or the 2000-2006 (all black cross-hatched regions) time series.

Land Use Change Typology 2000 - 2006



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Regional level: NUTS 2/3
Source: Nordregio, 2012
Origin of data: EEA, 2011
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No.	Land Use Change Types
1	Very high intensification - land take, often from natural areas
2	High intensification - continued urban land take from rural land
3	Moderate/high intensification - urbanizing areas while maintaining rural functions
4	Moderate intensification - rural conversions combined with notable land take
5	Moderate/low intensification - mainly rural conversions with low levels of land take
6	Low intensification - rural conversions with negligible land take. Some agricultural withdrawal
7	Extensification - rural conversions with significant levels of farm withdrawal

Only 1990-2000 data
Only 2000-2006 data
No Data

Map 7 Land Use Change Typology 1990-2006

4.2.6. Multi-functionality in land use and landscapes[115]

In the discussion of characteristics and changes in relation to land use a very common approach is to draw a direct connection between land cover and land use. An example of this approach could be, as done by Lambin et al[116] by defining land use as "the purpose for which humans exploit the land cover". The key element in this connection is the vegetation as a productive resource, and the land cover categories by such therefore showing information related to vegetation as a basis for production[117].

The basis[118]

Historically there have been many reasons for choosing such an approach.

First because it enables an analysis of what is immediately visible through the land cover, enabling the information to be connected to the economic activities to the extent land cover actually reflects such a relationship. And this is the situation in predominantly agrarian societies, just as in societies where forestry and other direct land cover uses provide the main economic activities. Typically this approach is very common in relation to discussions in relation to development in developing countries where these types of direct connections between economic activities are providing the mainstay of the society, for instance as discussed by Lepers et al[119], Turner et al[120], and more recently in a global scale by Lambin[121]. In these approaches where the major part of both population and land are related to direct production on the land, it may make sense to rely on a land use definition as above, and as indicated by Lambin even important dynamics of societies are more or less related to land use characteristics, even it can be argued that the proposed relations to change in land use are missing important components.

Similarly an equivalent tradition has developed in relation to the situation in developed countries emphasizing the historical use of land as a background for understanding the present characteristics of rural areas, with Dovring[122] representing the tradition, followed up by Reenberg[123] and others, and the tradition carried on through many of the ESPON

[115] Please note that the concept of multi-functionality has been discussed in depth and defined in WP 2.1. In this context the question of the territorial implications of multi-functionality is scrutinized.

[116] Lambin et al (2003:216)

[117] It may seem trivial to dig into a discussion of the definition of land use in relation to land cover, but it is considered important for two reasons. Firstly that even we may take a relation between land use and land cover as essential, other approaches exists and is still in use in other parts of the world. For instance in China where water use, water access, and water control has been the determining factor (Wittvogel, 1926, 1929, 1931, 1957). And secondly because the change of perception from mono-functionality where land cover and land use may be seen as equivalences, the multi-functionality does not necessarily show such a 1:1 relationship.

[118] Based on ESPON EU-LUPA, 2012

[119] Lepers et al., 2002

[120] Turner et al., 2007

[121] Lambin, 2010

[122] Dovring, 1960

[123] Reenberg, 2009

approaches discussed in connection with the definition of typologies discussed previously in this paper. Presenting the situation in developing and developed countries in separate paragraphs is not due to any fundamental difference in historical contexts, only that the on-going changes in for instance Europe as of today differ somewhat from the general pattern in most developing countries by increasingly de-connecting land cover and land use.

Second because the definition of land use characteristics by means of land cover information inherently includes a reflection of land use simply because the definitions of the land cover classes are based on such a characteristic. When looking into the land cover classes it is quite obvious that for most of the classes the definitions are based on land use patterns in Europe at the point of time when the land cover classes were defined! The only exceptions are the classes related to urban activities and sealed surfaces where the overall class (sealed surfaces) indicates the absence of land based production activities where the qualities of the land are determining the activities. Consequently the subdivision instead is based on functions independent of the quality of land, meaning that other qualities are determining the types of activities, for instance distances, proximities, access to infrastructure etc. It means that there is actually within the Corine land use classification a marked divide between these (sealed surface) categories where it is functions that are used as the subdividing characteristics (for instance the divide between housing and industries where the buildings may be the same, but the functions differs), while most other categories are reflecting real land cover differences.

It is interesting to see how the definition of the different land cover classes has coped with the difference between land based activities where the qualities of the land are important – which are most of the Corine classes – and the residual land areas where other elements as indicated above are determining the characteristics of land use. And it points to a major problem in this connection, namely to base an analysis only on the Lambin[124] definition of land use as "the purpose for which humans exploit the land cover". By doing so it leaves out what tend to be an increasing part – if not the determining part – of what characterizes the use of the land resources in non-agrarian societies!

Responding to limitations in the traditional analysis

As indicated above, the traditional approach limits the understanding of land cover/land use connection to becoming a uni-dimensional linkage between use of land only for production where the surface is directly part of one type of production, disregarding the fact that land is actually an important part of many other types of human activities. The production of energy by means of for instance windmills requires land for the situation of the mill. And the presence of the mill has impact not only on the square couple of hundreds of square meters where the mill is situated, but impact on a larger environment around the mill through visibility, noise, change in local climate etc. whereby it influences which other activities may take place within a certain distance of the mill. The "consumption" of land through the landscape qualities, for instance diversity in vegetation, etc. by hikers, tourists etc. are

[124] Lambin et al., 2003

representing another way of perceiving land use characteristics. And again without a specific link to production activities that may or may not take place on the land.

Defining land use categories

In order to overcome some of the major problems in the traditional approach to defining land use, at least four types of linkages should be emphasized in connection with the definition of land use categories:

- The use of land as a means of production. This group of activities is similar to the definition by Lambin. And in this context the qualities of the land itself becomes an important contributor to for instance questions in relation to intensity and value. Most of these categories are included in the Corine classification. It may be argued that some more contemporary activities are missing, but they may be included in the existing categories.
- The use of land as Locus Standii for production purposes. This group includes land areas where human activities are localized, but not necessarily directly linked to a "consumption" of the qualities and productive forces of the land areas. Instead other qualities such as the questions of accessibility, proximity, water, sewage disposal, etc. are important issues. In the case of windmills mentioned above several of these issues are at stake. And as mentioned in connection with the conceptualization of the Corine land cover classes, the group of urbanized/sealed activities is subdivided in classes where specific functional qualities have been used in determining the class qualities. Some of these categories are included in the Corine classification, but many if not most of them are missing. Only those activities connected to urbanized activities are directly reflected. And the fact that many of them are impacting their surroundings through visibility, generation of smoke and airborne and waterborne pollutants is totally absent in the Corine classes.
- The use of land as a means of recreation. This group includes land areas where the consumption of land areas is important in relation to recreational purposes. And recreational purposes are in this connection to be seen in a broader perspective, including the direct recreation of human lives, but also recreation of the environment ensuring a sustainable development basis for the future development. Consequently it may be relevant to subdivide in a number of subgroups such as:
    - Reproduction directly connected to activities of humans, including housing, recreational parks, amusement parks, sports facilities, horseback-riding etc. in the near-urban areas, but also including summerhouses, second homes etc. A key issue in this category is the transformation of areas into land cover characteristics where the human activities are defining the content. Some of these activities are already included in the Corine definitions within the urban/sealed surface activities, and as many of new activities can be categorized within the existing definitions it may be possible to include them.

- Reproduction of the environment, for instance through protected areas, is partly included in the Corine definitions. But it is important to note that this category of land use is expanding into new types that were not foreseen when the Corine definitions were decided on. Several new types of protection – some of them directly related to existing categories of use of land – have been introduced, resulting in situations where for instance intensification of agricultural production has been supplemented with intensification of protective measures on agricultural land. As a consequence using only the measures of agricultural intensification as an indicator of increased activities would be misleading, missing that one activity is supplemented or replaced by another.
- Reproduction not necessarily directly connected to the activities of humans, but where the quality of land and landscapes are measured by means of human perceptions. It include for instance the qualities of pristine landscapes, qualities of landscapes with a diversity of land use activities versus homogenous land use activities, which may have huge impact on the valuing of the qualities in for instance the establishing of second homes, recreational activities such as hiking etc. Important for this category is, that it adds or subtracts qualities to other land use and land cover characteristics.

- The use of land through ascribed values to areas that are not attached to land cover but to narratives and symbols, for instance sacred land.

One may argue as Verburg[125] does that the term land functions would be a more suitable concept when referring to the goods and services provided by the land cover classes represented for instance through the Corine classification, a classification of land use systems, or ecosystems within the landscape, and in their approach land functions "not only include the provision of goods and services related to the intended land use (e.g. production services such as food and wood production) but also include goods and services such as the provision of aesthetic beauty, cultural heritage and preservation of biodiversity that are often unintended by the owner of the land." In that connection they emphasize how "the provision of such 'unintended' services is also the main reason why the concepts of land use and land management are insufficient for land characterization since these are specifically related to the intended use of the land". And this issue of unintended versus intended used of the land will become increasingly important as policies are evolution into putting incentives on the protection of landscapes instead of promoting more intensive production measures. For example, a revised CAP could place increasing importance on crop rotation and other less intensive (production-wise) but more sustainable practices. (Priority on letting land lay fallow in intermitted years or restricted use of fertilizers in favour of organic growth). And that is exactly what is happening right now, as described in the last section of the chapter on the evolution of EU policies. With it missing from Corine other forms of land accounting the potential of these functions is next to impossible to gauge, and thus concretely frame within policy packages.

[125] Verburg et al., 2008

In connection with the purpose of projects such as the EU-LUPA project outlined in the introduction, however, it is important already at the level of land use categorization to realize that existing land use include land use characteristics that in Verburg's approach have been re-defined and moved to the category of "functions". The problem with operating for instance with recreation as only a function in an existing land use pattern determined by for instance agricultural production disguises the fact that the two activities may be competing land uses. If this is not made clear at the level of defining land uses important drivers in connection with processes of change in land use may disappear, just as the fact that several uses of the land are taking place simultaneous will be lost in the analysis and instead become inconsistencies in the application of the analysis!

Turning single categories into (multi)functions

Maintaining the fact that land use includes multiple dimensions as outlined above does not take away the fact emphasized by Verburg[126] that more attention should be given to land use and land functions and linkages between these. Not the least because there is an increased attention towards multifunctional land uses requiring methods to assess changes in land functions, and that the mixed use of concepts of land cover, land use and land function in analyses may lead to inconsistencies in land change assessments. In their approach they point to the need of an explicit attention to the non-linear relations between land cover, land use and land function being essential in order to consistently address land change.

A major challenge in connection with the analysis of land use changes in Europe is to be able to realize that the land use category redefined from the use of land cover into the extended categorization of land use characteristics outlined above in reality include several different functions, and therefore requires the establishing of connections between the different land use categories mentioned above. Each land cover category may include a diverse pattern of land uses, and each of the land use categories may include a diversity of functions. As mentioned above, this has already been partly included in the definitions of the categories in relation to the Corine urban and sealed surface categories. And as one of the key elements in the analyses included the project is related to the urban sprawl issue, it is important to emphasize how the spreading of non-agricultural and non-forestry activities are moving into other land cover categories due to different mechanisms related to intensifications in land use that are not necessarily related to intensifications in land consuming production activities such as agriculture and forestry.

And turning (multi)functions into policy

One of the key topics of rural research is the proper functioning and development of local communities. To a large extent rural development involves resources, civil society, institutions, structures and norms[127], and as described by Marsden[128] is about "active

[126] Verburg et al., 2008

[127] Formas, 2006

[128] Marsden, 2009, pp. 124

structural change and behavioural change in the rural economy that raises its competitive capabilities in the face of cost price squeezes, sustainability and vulnerability".

In recognizing this OECD talks about a new rural paradigm where embracing the new rural policy challenges requires co-ordination across sectors and levels of governance, as well as between public, private and non-profit stakeholders. "The defining characteristics of this new rural paradigm are a focus on places rather than sectors and an emphasis on investments instead of national transfers and subsidies"[129].

Linking this to sustainable development may be considered vague or diffuse as the concept reflects the need of involving interests of many different disciplines and institutions[130]. A pragmatic approach to sustainable development, involving simultaneously taking account of the three dimensions of development: ecological (or environmental), economic and social[131], provide a platform for a proper inclusion of the concept.

Today, it is widely acknowledged that the economy has grown so great and global that it is transforming all other activity on earth. As presented by UNEP: "The concept of a green economy does not replace sustainable development, but there is now a growing recognition that achieving sustainability rests almost entirely on getting the economy right". Therefore, it is recognised that to change the way society functions there is a need for a new economy, perhaps even a new paradigm, incommensurate with current values and ideas. A Green Economy, or a Green Growth, builds on the idea of developing cleaner production processes, developing new products and energy solutions and reducing waste. At the same time it takes into consideration the planning of societies, structural changes needed to facilitate this transition and the distributional impacts of such vast changes.

The territorial dimension to Green Growth captures the interaction of resources, people, structures, etc. and the possibility of a nation or a region to become greener in production and consumption. The transformation to a green economy is both driven by the need to reduce emissions and resource use, but also by a recognition that that there are opportunities for investment and growth in wealth and jobs.

The green economy can be either understood as (i) an overarching development framework aiming at the consecution of sustainable development goals including environmental, economic and social targets[132]; (ii) as a means for achieving a more resource-efficient production model, thus mainly focusing on the environment-economy interface[133], or; (iii) as a number of concrete economic activities that jointly form a growing economic sector,(a

[129] OECD, 2006

[130] Bruckmeier and Tovey, 2008; Koutsouris, 2008

[131] UNCHS, 1998; UNCED, 1992

[132] e.g. UNEP 2011b

[133] EEA 2012; OECD 2011

"new green economy") which in the mid-term is supposed to bring about an implicit environmental benefit[134].

One view of sustainable rural development considers agriculture as an important driving force in developing sustainable rural communities in Europe[135]. Knickel and Mikk[136] maintain that farming, more than any other rural activity, has a role to play in integrating the natural environment with the cultural landscape and socio-economic development. Petrezelka, Korsching and Malia[137] discuss what they call 'the sustainable agricultural paradigm', stating that sustainable farming is concerned with the protection of the environment and the place of the community. Parallel to this, the ESPON EU-LUPA project[138] presents a typology on land use functions going beyond agriculture and at the same time emphasize that at least four types of linkages is needed in connection with the definition of land use categories: The use of land as a means of production where qualities of the land itself becomes an important contributor; The use of land as Locus Standii for production purposes which includes activities that are localized, but not necessarily directly linked to a "consumption" of the qualities and productive forces of the land itself. Instead, qualities such as accessibility, proximity, water, sewage disposal, etc. are important issues; The use of land as a means of recreation includes land areas where the consumption of land areas is important in relation to recreational purposes in a dual perspective, both in terms of environmental functions for recreation in the current society but also in terms of recreating (preserving) the environment for future development. Besides qualities of nature the land consumption is directly connected to socio-economic growth through housing, recreational parks, amusement parks, sports facilities not only in near-urban areas, but also including summerhouses and second homes in rural areas.

4.2.7. Liveability and the landscape?

The concept of Multifunctionality serves as a broad concept to describe the joint production of commodity and non-commodity. On one hand as outputs on farms where Lankoski proposed a definition of agriculture as multifunctional if, besides its primary production, the activity affects social welfare by jointly producing multiple positive or negative non-commodity outputs. In addition OECD acknowledges that the core feature of multifunctionality is the joint production of commodity and non-commodity outputs by agriculture, but elaborates further in their New Rural Paradigm emphasized above on the fact that the rural setting has to embracing the new rural policy challenges requiring co-ordination across sectors and levels of governance, as well as between public, private and non-profit stakeholders. The concept of multifunctionality therefore includes a rural development dimension, in which agriculture is regarded as a non-commodity as well as a

[134] U.S. Department of Commerce Economics and Statistics Administration 2010); Rothwell et al. 2011; Pew Charitable Trust 2009; EUROSTAT 2009

[135] Marsden et al., 2002

[136] Knickel and Mikk, 1999

[137] Petrezelka, Korsching and Malia, 1996

[138] ESPON EU-LUPA, 2012

public good where farm diversification can be a strategy for individual farms as well as for rural areas. For instance, as Van der Ploeg et al. show by identifying three different pathways for diversification at the farm level: Broadening through new types of on-farm activities; Deepening through realization of value added in food production. And re-grounding which involves cost reduction, more efficient farming or increasing off-farm income.

By taking these pathways from the individual farms to the rural areas the green economic development in Europe is shaped by new conceptualizations of rural landscapes across Europe where areas which were previously characterized by exclusivity and monoculture can physically and conceptually accommodate non-agricultural activities, such as clean energy production and green manufacturing plants. This not only implies increasing multi-functionality of non-urban areas, but also a higher degree of territorial dispersion of the new functions/activities put in place. This is due to the fact that many new green activities are intrinsically dispersed from the spatial perspective (e.g. windmills) and/or linked to diverse agro-ecological conditions (e.g. biomass production).

The physical conditions – environment, natural resources, land use etc. – are very location-specific and therefore, although the green economy of all regions will share some characteristics, it will look different for each region depending on its natural endowments. All regions are endowed with the renewable energy resources forming the energy basis of the green economy. These endowments and opportunities are, however, very different across regions and the aim of the project is to identify and analyse these differences.

Here, the territorial concept of land use multifunctionality emphasizes the importance of understanding how land activities relate to each other in space. On one hand, production potentials can be zero-sum where pursuit of on production activity means the inability to pursue other activities in parallel, or, more interesting, activities can be multifunctional where more than one activity takes place in near or overlapping proximity.

Thus, land use multifunctionality is an important concept because it recognizes the co-existence of ecological, economic, cultural, historical, and aesthetic functions. It will be especially advantageous when considering the cross-sectoral linkages (i.e. trade-offs, mutual benefits, etc.) between the bioeconomy, experience economy and energy sectors.

Based on the territorial analysis of factors of the green economy, territorial outcomes are introduced as rural development trajectories based on a green growth process that takes as its departure the land base and multifunctionality of rural areas.

What is most important in this connection is as emphasized in the following quote: “The strategic objectives for an efficient and modern regional policy contributing to the renewed Lisbon Strategy and its overall aims can be condensed as follows:

• Competitiveness, building on the existing assets and under-utilised potentials in a region related to its existing economic base.

• Attractiveness, building new assets in a region that can stimulate new investment and skills, in particular in support of a knowledge-based economy.

• Liveability, ensuring cohesion and sustainable communities with a high level of quality of life and environment, now and in the future, for citizens and businesses"[139]

As previously emphasised: The landscape – through the concept of Liveability – has thereby moved from an external to an internal planning factor!

4.3. EU policies in relations to landscape in planning practices

The identification of the use and to some extend the operationalization of the landscape concept in Europe has in the previous sections been based on an analysis of how EU and related institutions have referenced to or included 'landscape' into legislation and into spatially relevant policy documents. Furthermore it has been illustrated how it has been operationalized in cross-sectoral analyses, typically by means of the ESPON environment where planning concepts – first of all as typologies – have been applied.

The European Union is characterised by varying (historically developed) governing and planning systems. Differences in land use decision processes are due to different patterns of legal, constitutional and administrative frameworks, and they all have an impact on landscape. Countries that have signed the European Landscape Convention (ELC) are recommended to develop instruments for making and implementing landscape policies. A landscape plan ('autonomous plan') or landscape studies ('as part of spatial planning')[140] could be such an instrument. In Europe, the responsibility of making 'landscape plans' usually is with local and regional governments: examples are the 'Landschaftsplan' (Germany), 'landschapsontwikkelingsplan' (Netherlands), and 'plan de paysage' (France). In all cases, however, the adopted concept of 'landscape' (more or less) resembles the one outlined in the ELC.

However, since the policy context for landscape plans is different in European countries, the relationship between landscape planning and spatial planning is also different. In Germany a 'Landschaftsplan' is a statutory document that introduces landscape dimensions into spatial planning. Such plans include all territory, not only special areas but also every day landscapes. In France a 'plan de paysage' is a voluntary document and a cooperation of local authorities or a region ('departement') decides on preparing such plans. A French landscape plan is mainly action oriented and it relates to investment programs such as rural development. Most plans are made for special landscapes, including a 'Parc Naturel Regional'. In England the concept of landscape planning mainly relates to specially designated areas. For the Areas of Outstanding Natural Beauty (AONB) a 'management plan' is compulsory. Hence, differences in practice of landscape planning relate to the functions of the product (the 'plan') and to the process by which it is prepared and implemented. Two examples are situations where:

[139] ESPON p 10, vol III

[140] CM/ Rec, 2008

- Policy documents ('plans') are mainly intended to be 'vision plans' their focus is on quality objectives for entire territories; the process aims at reaching a common vision in a regional (or local) community on the future of their landscape, and situations where
- The plan is mainly an 'action plan' the documents produced might pertain to a specific area where a programme or project is to be implemented, often aiming to stimulate collaboration between public and private actors.

In many cases planning documents contain both: a vision with concrete goals and maps of the future spatial structure, and a programme of actions on protection, development and management of landscapes. In governance research, it has been a major challenge to understand and analyse, after the fact, how processes where managed and which participants where involved, and how their interaction lead to different stages of the making of the final product, the actual 'plan'.

To arrive at criteria for 'good governance' this project intends to involve a number of key actors of the stakeholders and to include planning experts and policy makers into process analysis.

Territorial policy making, especially on a regional scale, is designed to be integrated and to contain rural and urban areas and to address regional development in a broad sense, including aspects such as economic development, tourism and energy production. It is the intention in this report to work on relations between territorial policy and landscape planning in the sense of:

- Policy fields: integrated and sectoral;
- Scale: regional and local;
- Policy function: strategic objectives and operational implementation.

Even the challenge of implementing policies for 'liveable landscapes' is beyond the target of this project, such a task could in general terms be described as finding the right equilibrium between protection and development and to apply forms of 'adapted' economic development. A recent example of such a situation has evolved in Denmark where a test site for very large windmills has been situated within a recently established National Park because the site was able to "mimic" the testing of off-shore conditions, and the region being in need of new job opportunities. It would be of particular interest to learn about the political and strategic considerations in relation to a future balanced development between nature, visual values and economy in this case.

4.4. ESPON's role

The ESPON programme indicate an explicit support policy development and ESPON results are expected foreseen to complement, detail and apply the policy orientations as set out in the ESDP. This is being done by studying in-depth trends and the impacts of policies, and by recommending efficient ways to achieve spatial objectives in the enlarged European territory. Linked to a broader agenda, ESPON is also focusing on enlargement and its implications for EU policies; the influence of competitiveness and globalisation; as well as the challenge of sustainable development[141].

ESPON is in many ways a platform for the EU Commission and its administrative bodies - first and foremost DG-REGIO - for experimenting with new ideas, concepts, sources of information etc. Within the ESPON setup-construction it is possible for new ideas to go through a peer reviewed research process as well as being confronted with the reality (stakeholders, case studies) without questions being asked in relation to motives and the need for political clearance in the Commission. In the ESPON setting there are different categories of projects depending on where the "test bed" is located between testing the factual, the conceptual, the stakeholder, and/or the political reality.

In line with the discussion above regarding the process of including the landscape concept as an active part of the Territorial Cohesion policy, LIVELAND is an example of such a process, since where the content of the project is carried out as a balance between the overall policy development and the stakeholder reality.

In concrete terms this means that the expected output from the LIVELAND project serve two different audiences: On one hand fuelling the debate at the EU political level in relation to the interest and need for including the landscape concept into the overall policy development, e.g. in relation to the much needed changes of the CAP. Input to this debate consists in this project case of conceptual considerations tied with evidence based reflections on the potential consequences of its implementation. And on the other hand, the LIVELAND project is to provide input to a broader debate related to exchange of experiences among stakeholders that can pave the way for the implementation of new policy initiatives and at the same time serve as input to ongoing and future activities among the stakeholders of the project themselves.

4.5. Conclusions and outlook

EU is in an on-going process of including the landscape as an important and multi-faceted resource in their strategy towards a sustainable development. This is an evolvement from a hitherto more exclusive focus on mono-functional and sectoral divided activities towards recognizing the need of understanding the complexity of the landscapes and their multifunctional qualities.

[141] ESPON synthesis 1

It has been concluded that such a process implies the need for including the landscape as an important concept in both planning and practice. This, however, does not imply that the policy context operates with any precise definition.

The role of landscape as an asset in territorial development towards sustainable development has definitely some merit at this point of time, and the shaping of such a definition tends to appear through the evolutionary process. But there are obviously more steps to be taken until it appears in a form that can be said to have enough consistency to become a programme objective parallel to for instance the concept of cohesion – which by the way is still evolving!

In this development the ESPON research framework has been – and still is - an important vehicle in testing, evaluating, and suggesting means and measures as well as empirical evidence in relation to the territorial development.

It has been seen how - parallel to the EU development – ESPON project are evolving into recognizing how landscapes as potential multifunctional entities are important contributors to the objectives of territorial cohesion.

In this process, measures of moving from theory to practice have been tested and it has been shown how the planning procedures are in need, however, of cross-sectoral policy goals and public participation as vehicles in achieving the goals of territorial cohesion and sustainable development. And in this connection the inclusion of the landscape concept as a contributor to a sustainable territorial development becomes still more important.

PART 2 Methodological phase

5. Methodological approach to the benchmarking exercise

A benchmarking exercise could, generally speaking, encompass six main stages:

- **Stage 1.** Identification of the domain to benchmark
- **Stage 2.** Description of the current status of the domain to benchmark
- **Stage 3.** Identification of best practices
- **Stage 4.** Comparative analysis
- **Stage 5.** Gap analysis with regard to challenges and goals
- **Stage 6.** Definition of an action plan to implement best practices

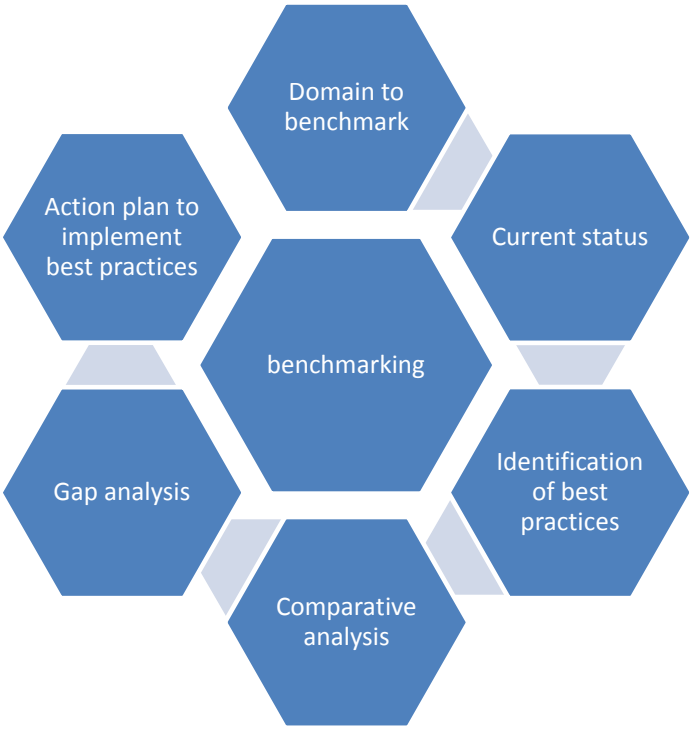


Figure 5 Common steps in a conventional benchmarking exercise

The proposed methodology for undertaking the benchmarking exercise in the Liveland project adapted this clock wise approach, as follows:

- **Stage 1. Domain to benchmark.** The domain to benchmark is -Landscape and spatial planning practice- in six selected case studies in Europe.
- **Stage 2. Setting the ground for benchmarking: Current status**. A characterization of the case studies involved in the project constitutes the basic input for the benchmarking exercise. The policy context a long side the spatial character, the planning system and competences, the government challenges, vision and strategies and data sources, have been analyzed for each of the case studies (See Annexes I to

VII of Part C Scientific Report), together with short description of other potential reference cases outside the project stakeholders.

- **Stage 3. Identification of best practices.** For the benchmarking certain practices, plans and/or instruments have been selected, primarily based on the learning goals stated by the stakeholders particular as an output of the 1º Stakeholders workshop and workshop follow-up exercises. A common model for the systematization of the practices evaluation is defined in the Common Analytical Framework (CAF)

- **Stage 4. Comparative analysis**. The analysis entitles the use of comparative indicators, a proposal for grouping the cases under analysis, the assessment of results and finally validation with stakeholders in the 2º Stakeholders´ workshop.

- **Stage 5. Gap analysis** with regard to stakeholder's challenges and goals. Transferability analysis to other cases in the European context.

- **Stage 6. Draft guidance towards best practice in landscape and spatial plannin**g as an input to General guidelines and recommendations for policy development in the final phase of the project.

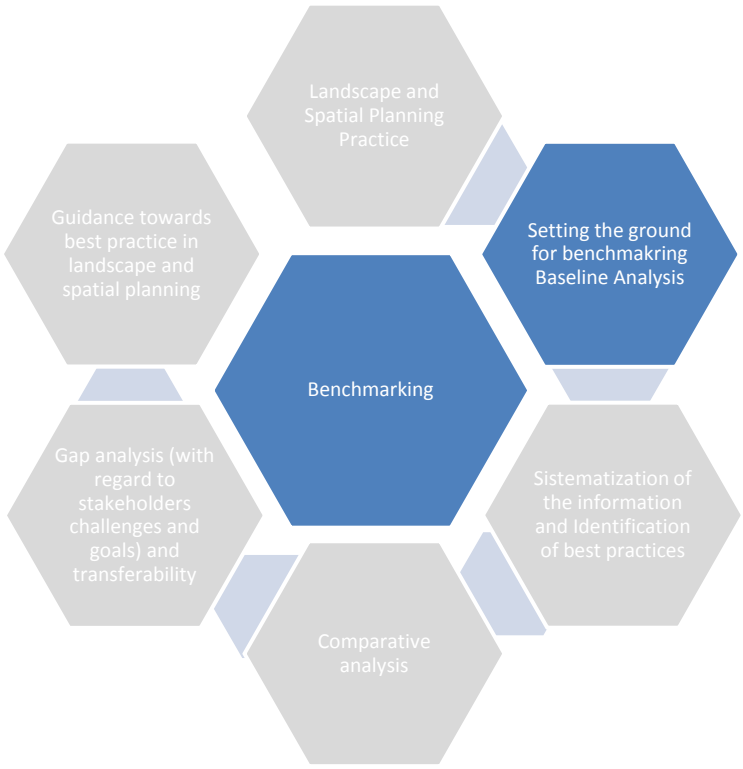
Figure 6 Stages for benchmarking methodology in Liveland project

5.1. Stage 1. Domain to benchmark

The domain to benchmark is -Landscape and Spatial Planning Practice- in six selected case studies in Europe.

- The Basque Country Landscape Catalogues and Guidelines inspired by the ELC with the aims to integrate landscape planning in other planning instruments.
- The Municipality of Offenburg has recently made a Landscape Plan and seeks to develop and protect landscapes under urban pressure. Offenburg belongs to "Eurodistrict Strasbourg/Ortenau", so there is already exchange on European scale. A new "Landschaftsplan" is nearly done.
- Midden-Delfland where a landscape development plan already exists and actions in partnership with the surrounding urbanised municipalities are currently being implemented.
- Government of Navarra preparing a new landscape plan for the region, based on European experiences. To date, many formal regulations and informal actions exist which now should be articulated and improved by the new plan. The Government of Navarra offers the landscape experience in Orgi Oak Forest
- Thy National Park Management Plan in the Nordjylland Region challenged by the question of enabling a planning process involving all relevant stakeholders in order to obtain a coherent landscape development.
- The City of Ljubljana is interested in methodologies for the identification of landscape potentials and the development of guidelines, aimed at bringing new arguments in the stakeholders´ dialogue for the development of the Ljubljana and its surroundings. European exchange of experiences is an important motivation.

5.2. Stage 2. Setting the ground for benchmarking



5.2.1. Collection of input information

The early stages of the project were devoted to the collection of in-put information for the state of the question in the participant case study areas, providing and overview of the policy contexts (European and national), the spatial planning systems, the planning practices, and also results of governmental actions and identification of primary sources of information and data sets.

This baseline analysis entitled

a) Desktop work by the research group by means of literature review and writing material
b) Stakeholders consultation

This first-hand information from those responsible for the design and implementation of plans and/or programme is remarkably important in understanding the different factors which influence their level of success or failure.

The consultation was done in two ways:

- Gathering the views of the stakeholders in isolation: Stakeholder´s consultation aimed at acquiring information about their preferences, interests, perspectives and insights in some logical way. The stakeholders were asked to respond to structured questions with regard to their understanding of the landscape concept, the different approaches to landscape planning and management within their administrations, their key territorial challenges, needs and opportunities, on top of their expectations about the project.

- A interactive and participatory process: Stakeholders´ Workshop in which the research group tried to build bridges and facilitate exchange of experiences between stakeholders

The 1º workshop with stakeholders was hold in October 2012 in Ljubljana (Slovenia). In the challenges were validated and further needs and opportunities identified in each region. From our view this are the issues generated and discussed among stakeholders in the workshop:

a. Self-assessment: identification of their success/strengths and failures/ weaknesses.
b. Identification of what they find interesting in the rest of the project cases.
c. Validation of external good practices, detailing what they are interested about.

Valuable information was also outlined with regard to the "external reference learning cases" which may provide longer traditions of including landscape plans in territorial planning.

☛ **First Stakeholder's** held in October 2012 in Ljubljana has been conceived as space for validating the in-put information for the acknowledgement of the state of the question in the participant case study regions and also an space for exchanging impressions on project development.

Key outputs of the workshop have been:

- Stakeholders´ identification of the preliminary perceived good practices and learning goals.
- Potential external reference cases to be used also in the project.

These results are key elements as the interface between the baseline analysis and the benchmarking.

a. Workshop preparation phase

Calling for a successful and fructiferous workshop the stakeholders were asked to prepare for the working sessions in advanced by undertaking three exercises:

- Exercise 1. Reflexion on landscape concept, approaches and practices in each of the participant regions. As supporting material and overview of the key landscape concepts, policies and current practices in Europe were provided.

- Exercise 2. Self-assessment of each of the cases, by means of a SWOT[142] analysis, where Strengths, Weaknesses, Opportunities and Threats are identified. The stakeholders´ were asked to elaborate a short presentation with the key outcomes of the exercise to present during the workshop.

- Exercise 3. Identification of potential learning or reference cases. The description of each of the case studies extracted from Annex V of the Inception report was provided as a working material.

[142] SWOT stands for Strengths, Weaknesses, Opportunities, Threats

b. Working sessions

With the aims of exchange impressions and stakeholders´ identification of good practices and learning goals, and for outlining next steps for project development, the workshop was designed as follows.

The workshop started with an introductory part presenting Landscape concepts, policies and current practices in EU as a starting point for participant's discussion on common denominators such terms, concepts and practice that are shared among the landscape policy makers and other stakeholders.

It then structured in two main working sessions:

- First session addressing project cases status and outlook: it starts with stakeholders´ discussion on interpretation of landscape and liveability terms, concepts and practice followed by a short presentations of Self-Assessment (SWOT), identification of Key challenges and needs in each territory and discussion on differences and commonalities between cases.

- The second working session devoted to the stakeholders identification of the perceived good practices and learning goals in other regions as well as potential external reference cases to be used also in the project.

c. Workshop follow-up

As a workshop follow-up, the stakeholders were asked to undertake the following exercises:

- Review of their self-assessment and provision of a detailed SWOT analysis. The SWOT analyses carried out by the stakeholders concerned also provided very valuable information about stakeholder's strong and weak points, facing challenges and opportunities for improvement. SWOT exercises have been summarized also in a set of tables.

- Deepen into the exercise of better defining their needs and potential responses to the light of the SWOT exercises and workshop results

- Prioritization of key learning goals from other case studies and reference cases from outside the project.

5.2.2. Characterization of the case studies: Baseline Analysis

The selected parameters aiming at responding to the project key research questions are the following:

- Description of the spatial character of the case studies

- Planning system and competences in connection with landscape and spatial planning

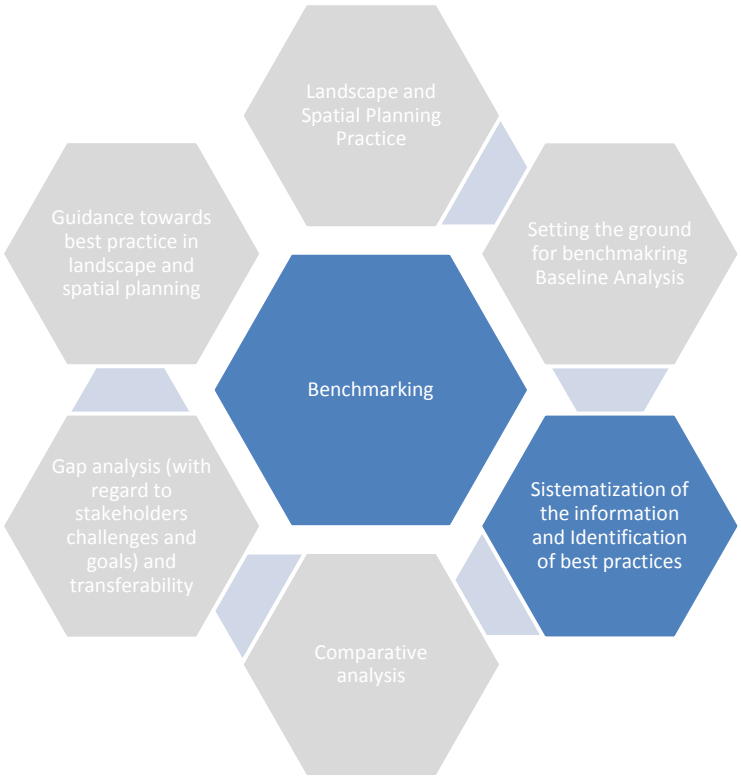
- Policy context mainly at national level and EU

- Identification of government challenges, vision and strategies

Such characterization together with the inputs of workshop has been synthesized and materialized in a standardized format in the Baseline Reports.

☛ The case studies characterization would help in recognizing certain elements whether they would be structural, inherent or circumstantial that may explain their achievements and also influence their potentials for successfully integrating landscape criteria in spatial planning.

5.3. Stage 3. Systematization of the in-put information and identification of best practices



First step for the analysis of the planning in practice has been the identification of the practices, plans and/or instruments to be assessed and potentially benchmarked in each of the project case studies.

Primarily source for the identification of practices, plans and/or instruments that could be used for benchmarking was the consultation with the project stakeholders who provided input on their needs, responses and learning goals and also the external reference cases.

The practices to be analysed could be:

a) A proper landscape planning and development system endowed with specific instruments, interconnected at the different administrative levels (landscape plan);

b) A systematic introduction of the landscape dimension in to ordinary planning at different levels (national, regional, local) supplemented by specific studies and instructions (landscape studies).
(Based on the CoE 2008 recommended approaches for the implementation of the ELC)

A systematic analysis of the practices, plans and/or instruments that will be the focus for benchmarking, in each of the project case studies was undertaken by means of the assessment of the following planning stages:

- Assessment and evaluation methods
- Planning processes and participation
- Vision and Strategies
- Actions and measures: Protection, development planning and management
- Impact measurement and monitoring
- Planning procedures and decisions

A Common Analytical Framework (CAF) is defined as a basis for the systematization of input information for benchmarking, with regard to the "Planning Practice" in each of the project case studies, and its practical application act as the interface between the Baseline Analysis and the benchmarking analysis itself

A CAF matrix has been developed which identifies different components of liveability that are closely related to landscape characteristics and moreover to landscape functions (See section 3 of the present report).

It provides a set of questions that, when applied to policy and plan analysis, produces comparable responses in a standardized manner.

The suggested questions are related to the planning practice and its contribution/ relationship with each component of liveability and related functions.

The results of the CAF questionnaire will provide information about what kind of issues characterized the best practices in each participant case study.

5.3.1. Aims of the CAF and expected results

The Common Analytical Framework contributes to the overall aim of the LIVELAND-project in several ways:

1. Identify good and best practices of knowledge based decision making for liveable landscapes in the stakeholder regions, in particular of landscape and spatial planning, and of their impact on regional development. Examples are compared where socio-economic development is grounded in landscape and has gone hand in hand with successful landscape protection and management.
2. Define criteria for the integrating of landscape into regional strategies. A benchmarking of the content, the procedures and the impact of relevant plans and policy are to be undertaken. The benchmarking (process of choosing best practice) intents to improve the processes and performances of planning in stakeholder regions.
3. Identify actions or measures in the stakeholder regions which have proven to be successful in implementing combined landscape protection and socio-economic development.

For the achievement of such goals it is important to develop a framework that can be used to assess the performance of plans and policies with respect to landscape as an asset in regional development and as a source of liveability and well-being.

Thus, the aim of the development of the CAF is to conceive of a tool to guide and support the systematic and consistent policy and plan assessment for all of the involved case study regions. This systematic approach also guarantees that scientific quality standards of research are followed while undertaking case investigations during the LIVELAND-project. Results achieved will be reliable and, at the same time, systematically coherent.

5.3.2. Methodology followed in the elaboration of the matrix

According to the overall project aim the development of the CAF started with research on concepts of liveability (see above) and on concepts of landscape (particularly those concepts that are prevalent in European policy, such as the European Landscape Convention). In addition recent scientific discourses on landscape contributions to liveability were analysed. It was important to make use of a landscape concept that is recognized throughout the stakeholders' regions and also to define a concept of liveability that is supported by the stakeholders.

After defining a common understanding of concepts of liveability and of landscape the interrelation of both was investigated by making use of a modified landscape functions concept. These interrelations are explained in the Interim Report of the LIVELAND-project.

On the basis of clearly defined concepts of liveability and landscape the contributions were examined that policy making and planning might make to creating and managing liveable landscapes. In this context a common understanding of planning is made use of. This understanding is based upon the Landscape Convention as well as on other European policies.

The systematic structure and process of planning used in this project is refers to planning stages that had been identified within the project application:

- Evaluation and analysis
- Planning process and participation
- Strategy and vision
- Actions and measures
- Monitoring
- Planning procedures and decisions

The structure of the CAF is based on these planning stages. By correlating these planning stages with liveability components and indicators the structure of the CAF-matrix is formed. The CAF-matrix can be applied to analysing different cases within the project and beyond. To this end, the matrix had to be adoptable to analyse a variety of different kinds of plans and policies. On the other hand, the CAF should be able to deliver results that can be used to produce not only qualitative but also quantitative outputs. To meet these expectations the CAF is not focused on specific types of results but on following certain standards and practices of planning for liveable landscapes. A first version of the CAF-matrix is presented in Appendix 1 of this report. First attempts to apply the matrix to the stakeholders' cases lead to suggestions for simplification. The CAF-matrix was revised accordingly.

The quantitative approach of using results obtained by applying the CAF is very useful to obtain an overview of the different cases and to compare their performance regarding liveability and landscape. Some indicators can only be applied in qualitative ways. To overcome limitation of quantitative analysis of liveability contributions of landscape additional qualitative approaches are used to try and understand how plans and policies address such issues. Interviews have thus becomes part of the common analytical

framework, CAF. They support the matrix and diagrams by providing important inputs to be considered during the benchmarking tasks. Interview results complements the baseline reports and contribute to making a comprehensive analysis of planning for liveable landscapes within the case studies.

5.3.3. Rational behind the revision of the CAF

The initial CAF version included a number of different indicators that made using the matrix cumbersome. During the first Pre-Test attempts were made to fill the CAF-matrices it was found that the number of indicators could be reduced. It was also found that some indicators should be defined more clearly and their application pointed out in a better way. To revise the CAF a reasonable choice of indicators had to be undertaken that should be reduced and clarified. The task of revising the CAF was split into four sub-tasks:

- Reduction of number of components and indicators
- Reduction of number of questions and options
- Further Refinement needs
- Presentation and usability

While the number of components, indicators and questions could be reduced, through this process, the aim of the project was focused even more than before directly on liveability effects of landscape as an asset in regional development. The steps mentioned above are explained in more detail below.

5.3.4. Reduction of number of components and indicators

The stakeholders put much effort in filling the CAF and, in the end, most questions had been responded to. After evaluating responses a number of topics were identified that apparently are not important to stakeholders and that stakeholder's plans hardly ever put the focus on. Questions relating to topics of low stakeholders relevance may be reduced in the CAF.

More particularly, it can be observed that certain components of liveability are not addressed in several plans: most prominently these are topics relating to health, security and freedom. Security issues have now been deleted from the CAF. Health issues are normally addressed indirectly, and issues relating to freedom provide the basis for the analysis of the planning process and therefore should not be deleted from the matrix. Nevertheless, the components needed more clarification.

After creating an overview of indicators that are actually being addressed in policies and plans the proposal was made to delete those topics that have not been responded to or that have no received more than four '*No / Not filled*'. Exceptions from this rule were made when it seemed reasonable to assume that it had been misinterpreted. A list of deleted components and indicators can be found in Appendix I of the present document.

Previously hidden and now definitely deleted:
Trust
Proximity to certain attractive landscape elements and parts
Access to and presence of physical activity-promoting facilities
General functionality of urban districts
Access to places for physical activities
Indicators receiving more than 4 '*No / Not filled*':
Landscape as an asset in education
Elements and symbols of touristic value
Landscape attractiveness as an asset to real estate
Attention restoration and recovery from mental fatigue
Multifunctionality (mix in land use)
Provisioning of ecosystems to prevent contamination
Disease prevention
Landscape ability to destruct wastes
Variety of land use
Indicators relating to security (in addition to those mentioned before)
Sustainable agriculture and forestry
Features of disaster protection
Sustainable spatial development
Other
public open space for social integration (included in other indicators)

Table 6 List of components and indicators deleted from the CAF

5.3.5. Reduction of number of questions and options

The first version of the CAF-matrix was found to be very complex and, with regards to the gathering of information needed to fill the matrix, too demanding. It was suggested to significantly reduce the number of components and indicators, and also to reduce the number of questions and options for responding to them. A number of different rationales exist that help to identify reasons for reducing the number of CAF questions. These include lessons learned during the pre-test, as well as some scientific and logical ways of reasoning.

A procedure following five steps was established to systematically reduce the number of questions:

1. **Some questions were eliminated since they had not been used in the original version of the CAF Matrix; in the second version such questions have been deleted.**

2. **The number of questions is reduced automatically when the number of indicators and components is reduced (see above).** As certain questions did refer to specific indicators and /or components of liveability, these questions were dropped when pertinent components or indicators were removed from the CAF-matrix.

3. **During the evaluation of using the CAF questions were identified that are difficult to answer or take much effort while trying to respond to them.** In most instances these questions and their answers are describing complex planning situations; the complexity was found difficult to normalize. Normalization goes hand in hand with significant reduction of complexity and that is inacceptable with respect to some of the questions. It was decided to discard some of these complex questions and move them to the section of qualitative analysis.

4. **Questions that cannot be used with a normalized scale should be deleted and instead be used during qualitative interviews.** One goal was to make the answers to the questions useable for a quantitative analysis (see Chapter 7). It was thus necessary to move questions that cannot be used with normalized scales to the qualitative interviews.

5. **Questions that might not give indication of a good plan are also to be deleted.** After thoroughly reviewing the CAF-matrix it appeared that some of questions do not help efforts to distinguish effects of liveability and quality of planning. Reasons are provided in Table 5

6. **Changes in and correction of errors in the former version of the CAF.** In some cases the original questions basically remained the same, but they have been re-formulated in order to make them more precise

7. **Questions that need to be added.** Some questions have been added for scientific reasons. These are in some cases substitutes for information that would have been gathered with other questions, including questions that have been deleted (see above)

All changes are listed in Table 7:

Some questions have already not used in the original version of the CAF Matrix and in a second have been note definitely deleted:	
Is the evaluation method qualitative or quantitative?	
What kind of information is included in these maps? (Are there information about natural, cultural, religious or historic Elements in the Map)	
What kind of information is included in them (land uses – actually and historic, vegetation types, landmarks – in case of landscape character areas on local level, etc.)	
Are there similar maps or surveys about special landscape character types or with singular information regarding types? (Natural factors – geology, landform, land cover etc. Or cultural/social factors – Land use, settlement, agricultural etc.)	
Are the most important factors addressed?	
Please list the named elements?	
The number of questions is reduced automatically as the number of indicators and components is reduced:	
Could the Map give any information about preferred landscapes for scientific / educational use? (Explain)	
Does a governmental program for child nature/historical education exist and are there preferred places and elements which should be used?	
Are the biological/scientific examples orientated on typical regional or general non-specific landscapes (in both cases curriculum and governmental program)	
Which kind of places and/or elements are preferred for educational reasons (historical/scientific orientated)	
From the analysis of the filled CAF there are some questions that are difficult to answer or take a lot of effort.	**Reasoning and Description**
List the objectives (Please list qualitative and quantitative objectives separately)	To answer this question takes a lot of effort and in the end the description cannot be normalized. Nevertheless the type of objectives is interesting to characterize the

	plans performance with regard to the indicator. Thus the question was changed to "Please indicate the character of the objectives of the plan or policy document" giving a multiple choice of answers (protection, development, management)
Are approaches and methods for monitoring defined? (Please describe)	The descriptive part is cancelled because it causes too much effort and the description cannot be normalized.
Are vision and strategy built upon the outcomes of the analysis? (Please explain)	The descriptive part is cancelled because it causes too much effort and the description cannot be normalized.
Questions that cannot be used with a normalized scale should be deleted and discussed for use in interviews:	**Reasoning and Description**
Please figure out a process biography and show important events (decisions, actions, participation events) on a timeline. Reconstruction of policy making procedures and governance processes	This is a very interesting aspect with regard to the process and decision making. It is therefore highly recommended to ask for this project-biography. Nevertheless there is no possibility to normalize the question.
Have the decisions made in the plan the character of being irreversible (e.g. take longer than one generation to be reversed) What are these decisions?	The second part of the question has been deleted as it is not possible to normalize the question, but it might be interesting for the questionnaire.
If there is an emphasis on one of the three, why is that?	This question is aiming at the triangle of sustainability. Thus it is important with respect to the intergenerational justice. It follows up the question asked before and makes it more precise. It is not possible to normalize the question. It should be reserved for the qualitative questionnaire.
How did the participation process influence the planning process? (Explain)	This is too complicated for normalization and should be evaluated in a qualitative way.
Questions that might not give indication of a good plan are also to be deleted. Reason is given below:	**Reasoning and Description**
Is there a Map on Elements/Symbols of Identity or Elements/Symbols of Landscape?	Within the Component "Culture" the question of maps was already asked before. So this is not necessary again.
Is there a map on landscape character?	Within the Component "Culture" the question of maps was already asked before. So this is not necessary again.
Are objectives defined selective or spatially inclusive and comprehensive?	This does not give an indication if the component of liveability is reasonably addressed. Objectives need not be defined for the whole planning areas, as there might not be need of interventions.
Does the plan deal with threats of the potential of soils to be fertile for agriculture, forestry and energy production (e.g. erosion)?	Question is too specific.

Did the planning process have any participatory elements? (e.g. information meetings, workshops, workgroups)	Double.
Are actions and measures spatially explicit?	That does not necessarily give indication about a plan or policy's quality.
Are indicators addressed?	This question is included in the question in which phases of planning indicators have been addressed
Changes and correction of errors in the former Version of the CAF:	**Reasoning and Description**
Does the evaluation method address different aspects of landscape character?	The question refers to landscape character
Which method has been employed for the evaluation? (Please evaluate method)	Question is changed to the easier question: "Is the method of assessment and evaluation described in the plan?" The description would make a plan more transparent, while there is no general idea of which methods are better than others.
Does the planning process include a participation process?	This refers to the indicator "Direct democracy / participation" (Freedom) and does not refer to the component culture.
Is participation requested and formalized?	Is changed to the question "Is participation requested by law, therefore regulated and formal procedure established?" which is more precise.
In which planning phases is especially the aspect of multifunctionality for the experience of "nature" addressed?	This is changed to the more simple question"Is multifunctionality as a factor of quality for the experience of landscape addressed?"
Does the plan define actions and measures with regard to the three dimensions of landscape planning? Please indicate!	Was changed to a multiple choice question.
Is there another (sectoral plan) that deals with the neglected topics?	Is switched from a descriptive question aiming at naming the plan to a simple Y/N one.
Questions that need to be added:	**Reasoning and Description**
Is the indicator addressed in another sectoral plan?	Many sectoral plans are limited to certain fields for legal reasons. Comprehensive plans are not made in all case study regions. It might therefore be useful to find out if the whole system of different plans might address the requested indicator in some way

Table 7 Reasoning to delete certain questions

5.3.6. Further Refinement needs

The further needs for refining the CAF mostly pertain to issues of language and formulation. Several CAF questions have been rephrased in order to become more precise and easier to communicate.

In order to provide further information more explanations have been added to several questions, components and indicators of the CAF. In some instances examples have been supplied.

5.3.7. Normalization of the CAF

One aim of revising the CAF-matrix was to make it possible to normalize all answers in order to use them in quantitative analysis. Doing this was possible for most of the CAF questions.

For this purpose a set of different scales was developed:

- **Yes / No** (Yes = 1 / No = 0)
- **Lickert 1** (5 steps: 0=not at all; 1= to a limited degree; 2= to some degree; 3=adequately; 4=to a high degree; 5= to a very high degree)
- **Lickert 2** (5 steps: 0=no; 1= for very few; 2= for some; 3=for several; 4=for most; 5= for all)
- **Summary** (summarizes the number of options that are ticked)

As previously discussed the overall goal of the Common Analytical Framework is to develop a framework that can be used to assess the performance of plans and policies with respect to landscape as an asset in regional development. Furthermore it intends to provide input to the identification of the landscape as a source of liveability and well-being which can contribute to the overall aim of the LIVELAND-project in several ways.

A large set of qualitative characteristics tend, however, to become very complex and therefore difficult to recognize similarities and differences in the regional approaches beyond the comparison of individual statements.

As a consequence a quantitative approach has been developed aiming at identifying the overarching characteristics across the regions and cases at large. This has had implications on the CAF aiming at ensure:

- Consistency ensuring the logic of the questionnaire to be evident for the partners;
- Convertibility aiming at ensuring a qualitative characteristic being convertible into one of the following:
  - A *Unidimensional scaling* method such as the Likert scale approach (for instance a scale from 1 to 5 showing a range from 1=strongly unusable to 5=strongly usable) where the output in this case would be a number between 1 and 5;
  - A *Categorical quantity* (for instance a set of categories within the same framework such as “Public involvement in planning procedure outlines □; Public involvement in drafting plans □; Public involvement in planning decisions □; Public involvement in plan revisions □”) where the output in this case would be a number between 0 and 4.
  - A *Binary quantity* with the range 0 and 1 indicating not existing and existing respectively. The difference between the binary and the categorical quantities is that any registration of a binary quantity would be independent on other quantities (eve others may be depending on the binary) while the elements in a categorical quantity are related to the same topic.
  - It has been decided to this limited set of scales in order to keep the response options both relevant and transparent for the partners.

- Completeness – In order to ensure comparativeness the body of the questionnaire should be based on components which are relevant for all cases.

5.3.8. Presentation and usability

Now, by quantitative procedures, responses can be used to generate a spider diagram that may serve as a comprehensive analysis tool. It also offers the opportunity to easily compare the performance of case studies with regard to liveable landscapes.

To make the CAF matrix easier to use the previous version was redesigned. The previous version contained all components, indicators and questions in one sheet. This sheet was split into five worksheets for each one of the five components of liveability that are now included in the CAF. The design of the matrices was also improved by using colour codes and providing a brief instruction. Questions regarding individual components and indicators have been in arranged in a hierarchical order. In many cases individual questions can be skipped if they are not applicable. E.g. if a component of liveability is generally not addressed in a policy document, the questions following down below the component do not need to be answered at all. The hierarchical order thus makes it easier and quicker to answer the matrix; the number of questions is now also dramatically reduced.
A number of different visualisations of the results have been applied.

The Spider-diagram has previously indicated to be a good way of showing similarities and differences between the cases. Each time a spider diagram is used two versions are juxtaposed in order to expose two important characteristics of the calculated data – the relative and the comparative characteristics. The following graph shows the differences between these two approaches.

In the relative distribution each region show the 100% distribution of the parameters included in the graph. The illustration on top of the below two shown spider diagrams show the relative distribution of the components for each of the six regions. All regions show the 100% distribution, and within these 100% the coverage of each of the components within the region. It becomes clear how for instance a high level of component “1 Evaluation and analysis” together with “3 Strategy and vision” are absolute dominating in Ljubljana, while the Offenburg data show that a major contribution to the result is “4 Actions and measures”.

By means of this graph it is easy to see the level of importance of each component included in the CAF.

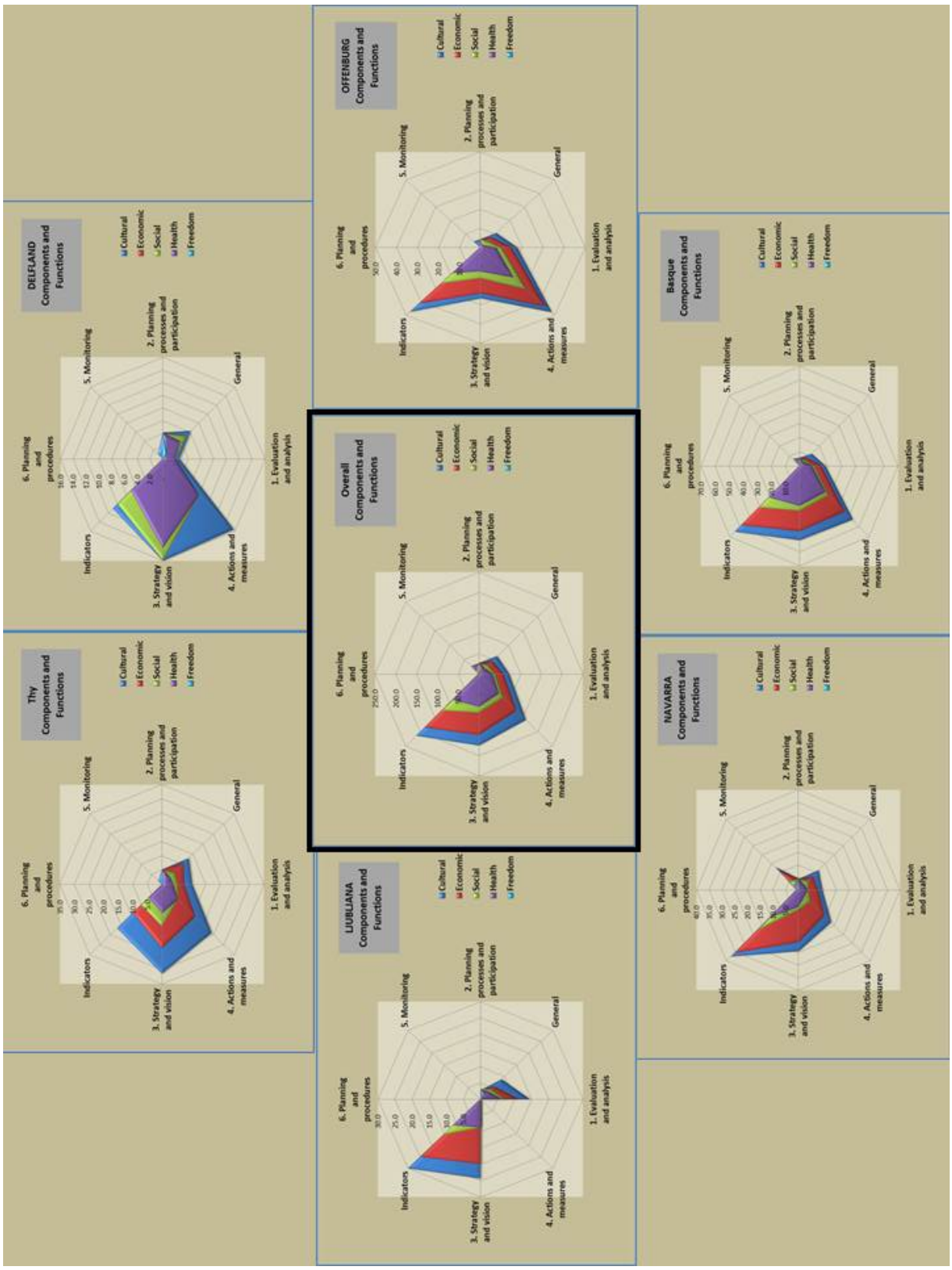
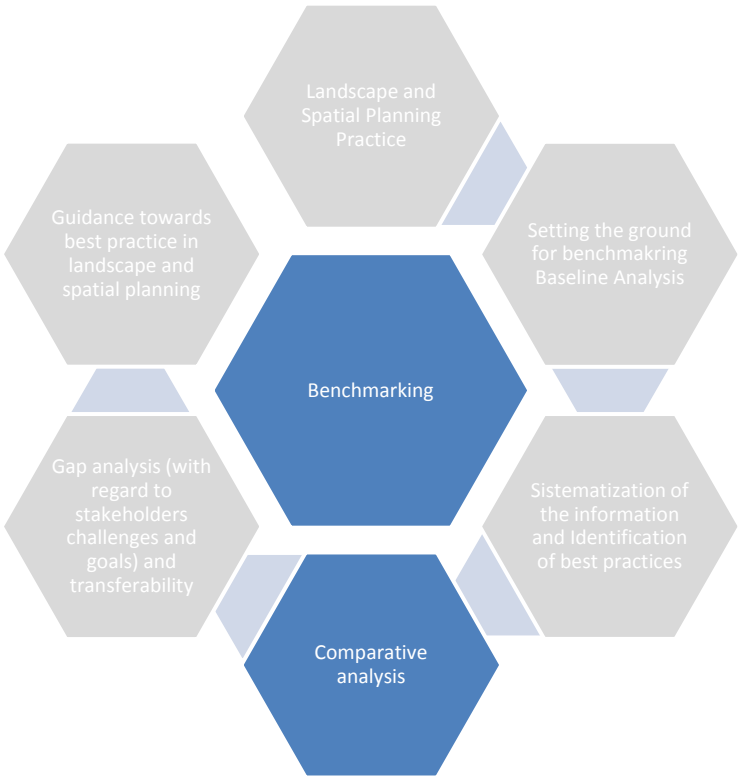


Figure 7: Illustration of the data shown combining components and functions per case study

5.4. Stage 4. Comparative analysis



The comparison has been done focusing on the following research questions:

- In view of the characterization of the case studies- spatial character, planning system & culture and planning practice-
  - Which approaches are used or perceived as desirable for the integration of landscape into spatial planning?
  - To what extent landscape concept and landscape approaches have been considered in line to liveability components?
- What is the degree of cooperation and stakeholders/actors involvement and effective participation in spatial planning and in particular in landscape protection, planning and management?
- Generally speaking, which practices are perceived as having a positive impact on the territorial development of the area? Performance- targets and actions.
- What kind of actions and measures in the planning practice have been proved successful in integrating landscape into spatial planning towards:
  - A sustainable territorial development
  - A more responsible use of resources
  - A better management of territorial potentials
- What has been the role, of the multi-scale and multi-sectoral approach to landscape in this success?
  - Which have been the implications of planning decisions made at different scales of policy making and planning, with particular attention to regional and local scales?
  - Which have been the implications of sectoral policy making and planning on regional and local territories, with particular attention to landscape?

When trying to identify communalities between cases and case study areas as well as pointing to cases which may serve as “best practices” two sides are apparent:

- **A qualitative side** where qualities of the practices in the different cases are identified and compared, but also confronting the organisation with identifying indicators that on one hand are defined through the qualities, but also convertible into quantities that can facilitate the benchmarking.
- **A quantitative side** recognizing that policy-making demands the formulation of verifiable and therefore concrete and measurable targets (Smith and Sheate, 2001; Pope et al., 2004)[143] – an issue that is fundamental to ESPON! And furthermore important when we - as stressed by Termorshuizen et al. (2007) - are recognising that landscape planning is often practised in multifunctional landscapes, and therefore need to focus on semi-natural and natural ecosystems and ecosystem mosaics and in that connection not the least include the socio-economic characteristics of the populations and communities supported by them. And therefore also challenged by the fact that this may not yet be practical enough for goal-setting in landscape planning[144], but nevertheless important to reflect on and include in the planning systems.

A number of tools may be applicable both in relation to the analysis of qualities as well as quantities. Throughout other parts of the analyses qualitative methods are applied in order to characterize the different stakeholders in relation to issues such as liveability, planning approaches and methods.

In this report a set of quantitative approaches has been applied in relation to a number of objectives. On one hand to bring forward some methodological approaches where identification and coding of qualitative characteristics can result in analytical quantities. And furthermore to promote the need of ensure compatible measures. It is in this connection important that the coding processes are parallel and identical in the cases.

The reasoning for taking this approach is basically that both quantitative and qualitative approaches individually show limitations, while used parallel adds important dimensions. A mixed method design that integrates qualitative and quantitative research enables quantitative methods that are enhanced with qualitative measures of key processes and outcomes. Qualitative methods may be providing data that can give insights into how findings work and how findings can be translated to practice. By itself, a quantitative method can identify what works, but has limited explanatory power. Qualitative designs may generate rich information, but the information about what worked is more subjective and cannot be generalized. By combining the two methods it is possible to obtain a much richer understanding. In other words, using a rigorous design the quantitative methods can tell us *what works*, while the qualitative methods can tell us *how it works*[145].

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[143] Pope, J., Annandale, D., Morrison-Saunders, A., 2004. Conceptualising sustainability assessment. Environ. Impact. Asses. Rev. 24, 595–616;

Smith, S., Sheate, W., 2001. Sustainability appraisal of English regional plans: incorporating the requirements of the EU strategic environmental assessment directive. Impact Assess. Proj. Apprais. 19, 263–276.

[144] Termorshuizen, J.W., Opdama, P. and van den Brink, A. (2007): Incorporating ecological sustainability into landscape planning. Landscape and Urban Planning 79 (2007) 374-384.

[145] Condelli, L., Wrigley, H.S. (2004): Real World Research: Combining Qualitative and Quantitative Research for Adult ESL. Paper presented at the National Research and Development Centre (NRDC) Second International Conference for Adult Literacy and Numeracy, Loughborough, England, March 25-27, 2004. For a further discussion on the issue of combining Uncovering the actual integration of qualitative and quantitative approaches in any particular study may be experienced as a considerably more complex undertaking than simply classifying the study into a particular category on the basis of a few broad dimensions or characteristics, an issue which is much more elaborated on by Bryman, A. (2012) Social Research Methods. Oxford University Press.

The objectives of this exercise are to show the potential application of a set of quantitative approaches in quantifying similarities and differences between case study areas and the conducted case studies. Three issues relevant for the benchmarking process have been identified as relevant:

1. **The socio-economic and environmental framework** which is about communalities in the overall setting of the case studies. At this point of time the task has focussed on a clustering of the case areas through a set of indicators which have been available at a proper NUTS level. As part of the case studies characterization the assessment of the Territorial Performance of the involved regions aligned with the objectives set in the Lisbon Strategy, Territorial Agenda 2020 and Europe 2020 Strategy has been considered relevant.

Several ESPON projects have attempted to assess Territorial Performance (INTERCO, TPM, ULYSSES among others) all of them capturing key policy objectives of the aim of the European Territorial Cohesion.

For Liveland project the outcomes of the INTERCO project[146] have been used, a selection of territorial performance indicators aligned with the indicators of the LISBON Strategy, Territorial Agenda 2020, EU2020 Strategy and the 5º Cohesion Report.

In order to complete the characterization of the territorial performance, it is also possible to incorporate key results from other ESPON projects, linked to Liveland project such as EU-LUPA[147] , ESPON CLIMATE[148] and ATTREG[149].

Results are addressed in chapter 6 of the present report.

2. **The conceptual interpretations** which is about turning a large set of qualitative reflections on the concept of Liveability into quantitative identifications based on a merge of the Landscape-Liveability Matrix and the Common Analytical Framework (CAF) being a basis for the systematization of input information for benchmarking, with regard to the "Planning Practice" in each of the project case studies, and with its practical application acting as the interface between the Baseline Analysis and the benchmarking analysis itself

Despite the fact that the diversity in the nature of the involved case studies is one of the most interesting and attractive aspects of the project, it is also true the cases are not directly comparable.

In order to compare the experiences it is therefore necessary to define pre-set criteria on the basis of the following principles:

- Stakeholders´ **key challenges and learning goals.** The project stakeholders already raised their interest in learning from other case studies. This will be considered at the time of compare different cases

[146] ESPON Territorial Indicators. A first selection of ESPON Territorial Indicators based on the Final Results of the ESPON INTERCO Project Working paper Version 26 June 2012.
[147] EU-LUPA European Land Use Patterns 2010-2013. ESPON Applied Research.
[148] ESPON CLIMATE Climate Change and Territorial Effects on Regions and Local Economies in Europe 2009-2011. Applied research
[149] ATTREG - Attractiveness of European Regions and Cities for Residents and Visitors 2010-2012. ESPON Applied Research

- The **practices** of making and implementing local and regional plans, which give guidance to future measures of protection, development and management of space and landscape.

Quantitative analysis and results are presented in Chapter 7

3. **The planning practice approaches** which is about generalising planning experiences into practice recommendations that enables a performance check as basis for the identification of benchmarking criteria.

In order to complete the assessment an interview was developed as a a complement to the CAF-matrix that is used as a quantitative approach to examine best practices in planning of liveable landscapes. Qualitative interviews include questions address issues that could not be answered properly in the CAF-matrix. Complimentary to the matrix, qualitative questions are designed to gather qualitative and complex information. Such information is usually to be found within the before mentioned fields of analysis, particularly 'process and participation' as well as 'procedures and decisions'. See chapter 8.

The qualitative assessment (Chapter 9) was completed by means of a comparative assessment of the landscape practices using the following criteria:

- success vs failure factors
- formal vs informal character of plans, instruments and or actions
- binding vs voluntary measures
- central vs decentralized planning systems

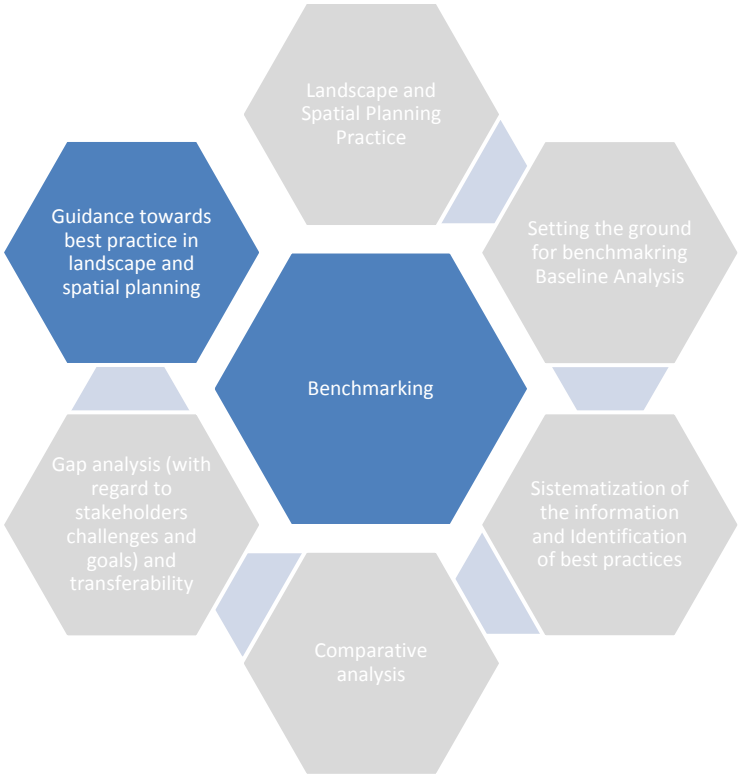
5.5. Stage 5. Gap analysis and transferability

Gap analysis with regard to stakeholder's challenges and goals, including transferability analysis to other cases in the European context. Appropriate indicators and examples of good practices that can serve a broader audience in the 'ESPON space'.

☛**Second Stakeholder's workshop** (April 2013). The workshop served as a meeting place between practitioners and the research team. The workshop itself meant to be a benchmarking exercise between the case regions and the overall insight generated by the research team. a) Examples of actions or measures which have proven successful in challenges of harmonious and sustainable territorial development, like for instance combining landscape protection and socio-economic developments will come up. b) Identification of successful measures and actions in the protection, development and management of space and landscape in the involved regions.

Workshop summary report Annex VIII of Part C Draft Final Report

5.6. Stage 6. Guidance for policy development



The aim of this final stage of the project is the delivery of relevant conclusions and recommendations for the integration of landscape into spatial planning and the use of landscape as an asset for territorial development.

Generalization of the experiences, best practices and benchmarking of content and procedures of landscape and territorial planning is being assessed as inspiration for identifying general policy messages and elaborating recommendations for future planning approaches at the level of the involved case studies.

The outcomes of the comparative assessment in previous stages, constitute the basic inputs to the findings and recommendations to diverse actors, but moreover the information related to challenges and learning goals, provided directly by the project stakeholders during the workshops

The methodology sketched for the definition of policy recommendations in the LIVELAND project consists of four phases.

PHASE I European Policy Framework

As starting point, the European Policy framework regarding landscape planning and management in the context of spatial planning and territorial development was carried out by means of the analysis of European policies and concepts

Plural project has been also reviewed as input for the contextualization of LIVELAND case study under PLUREL planning classification.

PHASE II Identification of policy priority areas: Potential and challenges in relation to integration of landscape approach, planning and management into spatial planning with liveability criteria

Inputs from systematization of information on planning practices and procedures done through CAF matrices alongside the identification of challenges and potential responses to those challenges from stakeholder's interventions in workshop sessions have served as a starting point for the identification of the policy priority areas.
This preliminary identification has been then aligned to ELC recommendations for its implementation[150].

Lessons learned from the baseline analysis of the case studies as long as the results of the benchmarking exercise led to the identification of some potential policy areas and general messages.

A prioritization exercise have been undertaken considering stakeholders inputs at different levels of planning administrations based on a preliminary selection of a set of policy areas. This exercise aimed at providing valuable information for the formulation of policy options and recommendations in the next phase.

PHASE III Structure for the configuration of policy awareness, messages and options

Policy options and key messages have been structured based in three axes;

1. By stages of the planning process, Following ELC recommendations The fundamental stages in the process leading to landscape action are:
   - knowledge of the landscapes: identification, description and assessment;
   - definition of landscape quality objectives;
   - attainment of these objectives by protection, management and planning over a period of time (exceptional actions and measures and ordinary actions and measures);
   - monitoring of changes, evaluation of the effects of policies, possible redefinition of choices.

Participation, consultation, pooling of ideas and approval (between institutions and the population, horizontal and vertical) should be organized at all stages in this process.

[150] Recommendation CM/Rec(2008)3 of the Committee of Ministers to member states on the guidelines for the implementation of the European Landscape Convention *(Adopted by the Committee of Ministers on 6 February 2008 at the 1017th meeting of the Ministers' Deputies)*

For LIVELAND purposes we have organized the planning phases, also used as components in the analysis of the case study practices and benchmarking, as follows:

- Evaluation and analysis
- Strategy and Vision.
- Planning procedures and decisions /
- Actions and Measures.
- Monitoring.

2. By planning system and culture (national context)

3. By administrative level: the diversity in the nature of the involved case studies is one of the most interesting and attractive aspects of the project, reflecting the different challenges faced at different administrative levels, competences and responsibilities in land use and obviously territorial realities.

PHASE IV Formulation of policy options and recommendations

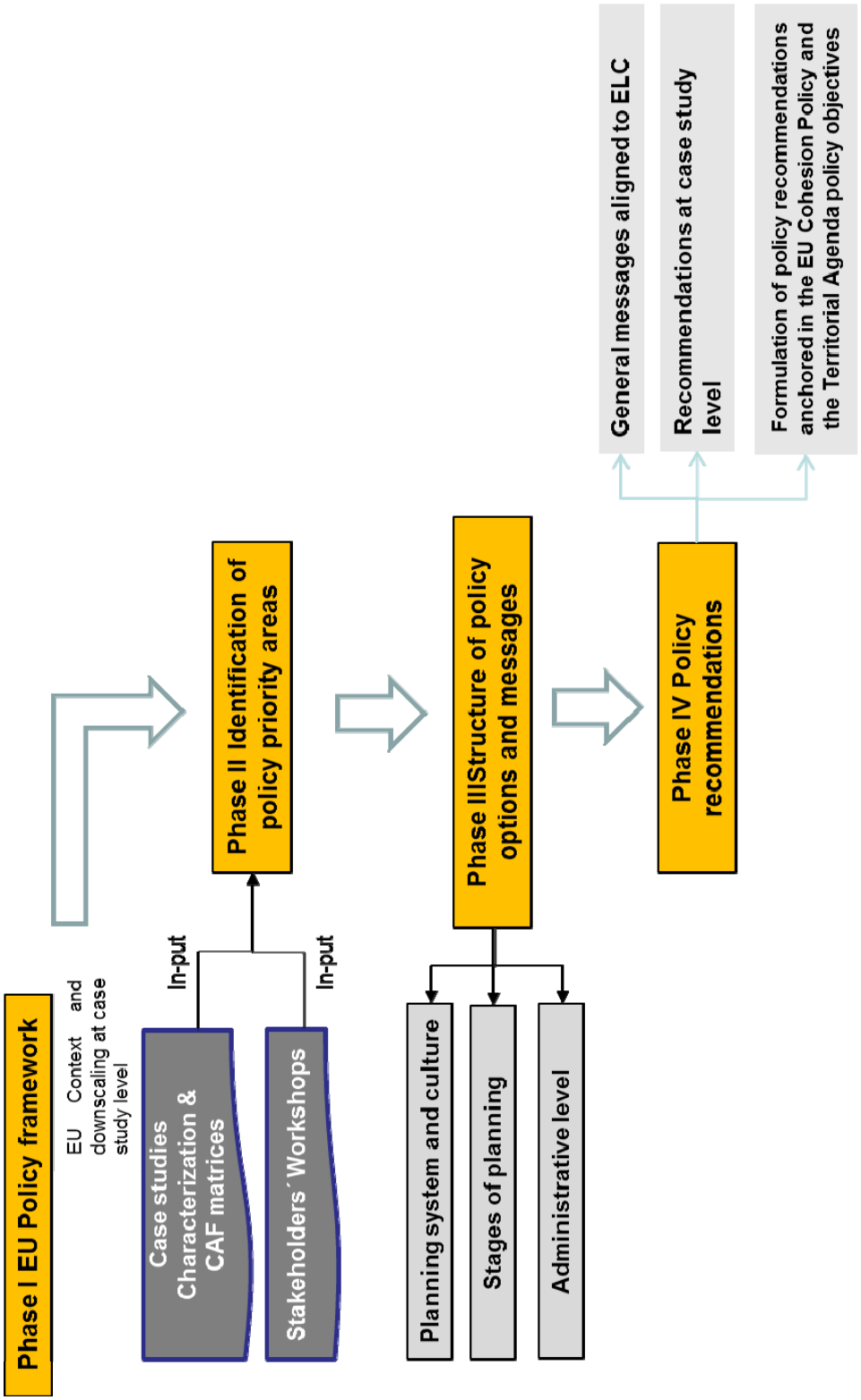
The project focuses on a better understanding of the following key policy questions:

- How landscape approach (analysis and assessment) and landscape planning could enrich and improve integrated spatial planning and urbanism in different ways:
- The evaluation of the landscape requires a global vision of the land throughout an multi- scale approach, going beyond the local interest and point of view.
- The identification of landscape objectives can be the support to motivate the improvement and development of poorer or abandoned areas.
- The assessment of the landscape can contribute to the process of making decisions about the most sustainable way to use the land.
- Improvement of governance and participation of key actors and stakeholders in the planning process
- Assess, evidence based, the consideration of landscape planning within territorial cohesion policies.

Based on evidence from the analysis undertaken, the LIVELAND project provides:

- **Awareness-raising** in form of key messages aligned to ELC
- **Indication of potential and challenges at case study level in the stakeholders areas for policy development** based on the evidences derived from the characterization, benchmarking assessment and also the inputs from the Stakeholders themselves throughout Workshops (hold in The Netherlands and Basque Country. See Annex VIII and IX of Part C Scientific Report)
- **Formulation of policy measures and recommendations** for European level to face the challenges and take advantage of the potentials, anchored in the EU Cohesion Policy and the Territorial Agenda policy objectives.

Figure 8 LIVELAND strategy for the definition of policy recommendations



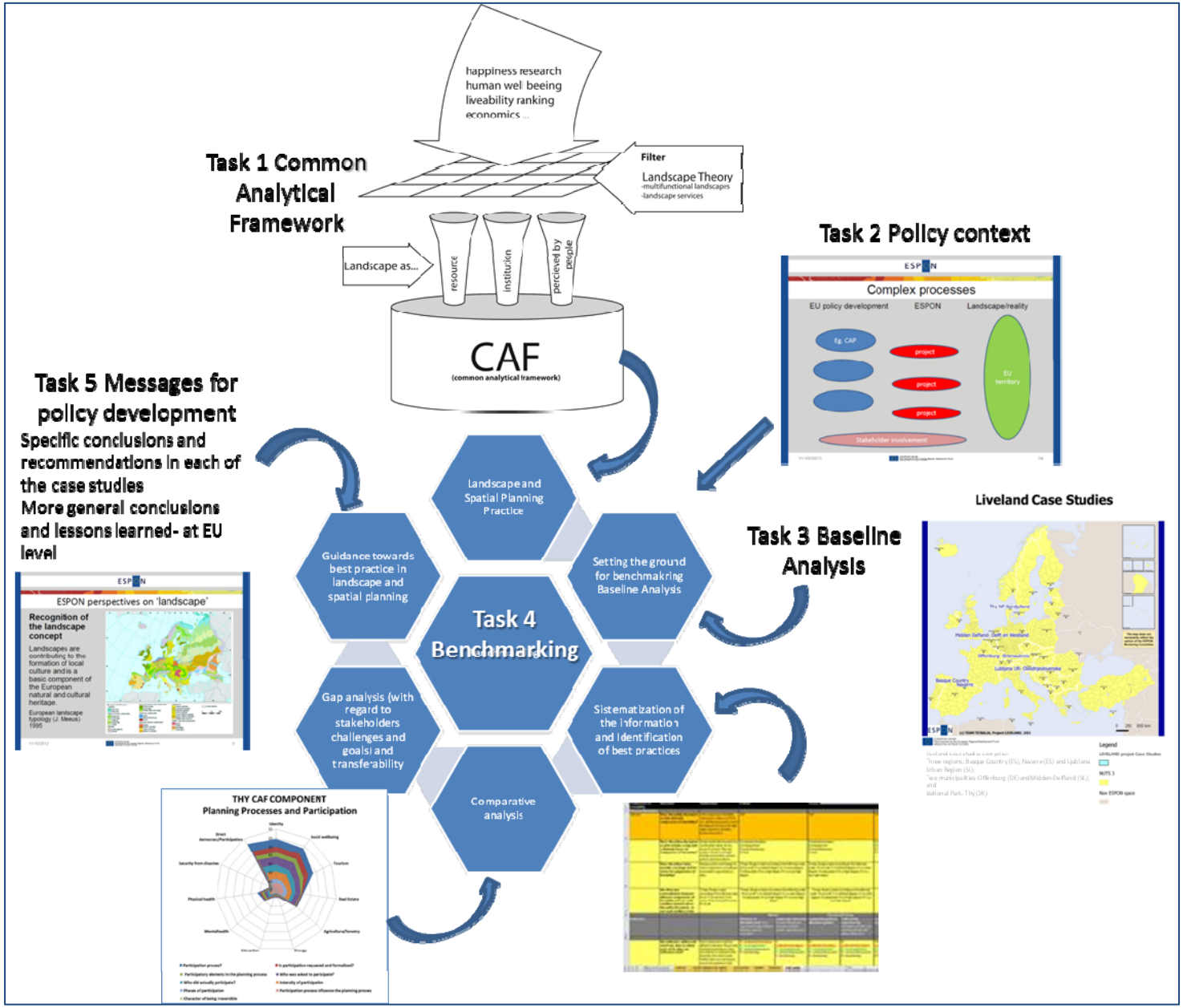


Figure 9 Flow- chart of benchmarking exercise

PART 3 Analytical Phase

6. Contextualization of the socio-economic and environmental framework of the project case studies

For better orientation within the perspective of ESPON studies, the case study areas can be located on various results of earlier ESPON mapping efforts.

Several ESPON projects have attempted to assess Territorial Performance (INTERCO, TPM, ULYSSES among others) all of them capturing key policy objectives of the aim of the European Territorial Cohesion. From the wide range of themes and indicators available we have selected those which cover sufficiently the EU2020 Strategy, the Territorial Agenda and aligned with the aims of Territorial Cohesion principles:

- Reducing territorial inequities in access to services
- Improving natural environment
- Reducing poverty and exclusion
- Increasing territorial innovation
- Enhancing territorial governance

For the evaluation of the territorial performance in the Liveland case studies, we have used the outcomes of the following ESPON projects:

- **INTERCO project**[151] which is a selection of territorial performance indicators aligned with the indicators of the LISBON Strategy, Territorial Agenda 2020, EU2020 Strategy and the 5º Cohesion Report[152].

- **ATTREG project**[153] Attractiveness of European Regions and Cities for Residents and Visitors

- **ESPON CLIMATE** [154] Territorial effects of climate change

- **EU-LUPA project**[155] Characterization of land use and land use changes in EU at regional level.

- **FOCI project**[156] Future Orientation for Cities

[151] ESPON Territorial Indicators. A first selection of ESPON Territorial Indicators based on the Final Results of the ESPON INTERCO Project Working paper Version 26 June 2012.
[152] Eurostat Cohesion Indicators (http://epp.eurostat.ec.europa.eu/portal/page/portal/cohesion_policy_indicators/cohesion_indicators)
Fifth Report on Economic, Social and Territorial Cohesion (http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion5/index_en.cfm)
ESPON Data Base 2013
http://www.espon.eu/main/Menu_Projects/Menu_ScientificPlatform/espondatabase2013.html
[153] ATTREG - Attractiveness of European Regions and Cities for Residents and Visitors 2010-2012. ESPON Applied Research
[154] ESPON CLIMATE Climate change and terrtiorial effects on regions and local economies in Europe 2009-2011. Applied research
[155] EU-LUPA European Land use patterns 2010-2013. Applied research.
[156] FOCI Future Orientations for Cities 2008-2010. ESPON Applied Research

6.1. Data background

The key question in this analysis is what characterizes the regions where the case studies are situated, and how does performance on a set of indicators make the case studies more or less comparable.

Such an activity requires a number of indicators that are quantified and comparable across Europe. Based on an analysis of a series of ESPON project a number of potential indicators were selected and organized in a total of 8 themes identified as shown table 8, and encompassing, in short, the following issues:

- Economic performance and competitiveness
- Inclusion and Quality of Life
- Environment and territorial capital
- Innovative territories
- Integrated polycentric territorial development
- Attractiveness
- Climate change vulnerability
- Land use characterization

Theme	Indicator	Geographical unit	Source	Time frame
Economic performance and competitiveness	Gross domestic product (GDP) at current market prices	NUTS 3	Eurostat	1997-2008
Economic performance and competitiveness	Regional Gross Domestic Product in Purchasing Power Standards (PPS) per inhabitant	NUTS 2	Eurostat Cohesion Indicators	2000-2009
Economic performance and competitiveness	Long term unemployment rate (>= 12 months)	NUTS 2	Eurostat	1999-2010
Inclusion and Quality of Life	People at risk of poverty or social exclusion	NUTS 2	Eurostat Cohesion Indicators	2004-2010
Environment and territorial capital	Share of Natura 2000 areas	NUTS 3	European Commission's 5th Cohesion Report	2009
Environment and territorial capital	Solar energy resources	NUTS 3		1981-1990
Environment and territorial capital	Wind energy potential	NUTS 3		2000-2005
Environment and territorial capital	Ozone concentration exceedances	NUTS 3		2008
Environment and territorial capital	Urban waste water treatment capacity	NUTS 2		2007
Environment and territorial capital	Soil sealed area per inhabitant	NUTS 3		2006
Environment and territorial capital	Soil sealed area	NUTS 3		2006
Innovative territories	Patent applications to the EPO by priority year	NUTS 3	Eurostat	2000-2009
Innovative territories	Persons aged 25-64 with tertiary education attainment by sex (%)	NUTS 3	Eurostat	2000-2010
Innovative territories	Intramural expenditures on R&D by sectors of performance (rd_e_gerdreg)	NUTS 2	Eurostat	1981-2009
Integrated polycentric territorial development	Accessibility potential by road, absolute change (in % of ESPON average for 2006)	NUTS 3	ESPON Data base 2013	2006
Integrated polycentric territorial development	Accessibility potential by rail, absolute change (in % of ESPON average for 2006)	NUTS 3	ESPON Data base 2013	2006
Integrated polycentric territorial development	Potential accessibility by air ,absolute change (in % of ESPON average for 2006)	NUTS 3	ESPON Data base 2013	2006
Attractiveness	Regional typologies by types of flows attracted	NUTS2	ESPON ATTREG project	2001-2007
Attractiveness	Regional typologies by endowment of territorial capital	NUTS2	ESPON ATTREG project	2001-2007
Attractiveness	Monuments and other tourist sights	NUTS2	ESPON ATTREG project	2001-2008
Attractiveness	Satisfied residents	NUTS2	ESPON ATTREG project	2002-2006
Attractiveness	Percentage share of Nature 2000 sites	NUTS2	ESPON ATTREG project	2010?
Attractiveness	Landscape diversity	NUTS2	ESPON ATTREG project	2010?
Climate change impacts	Aggregated potential impacts of CC	NUTS3	ESPON CLIMATE project	1961-1990/ 2071-2100 projections
Climate change adaptation capacity	Overall capacity to adapt to CC	NUTS3	ESPON CLIMATE project	2006-2010
Climate change vulnerability	Potential vulnerability to CC	NUTS3	ESPON CLIMATE project	1961-1990/ 2071-2100 projections
Land use and land use change	Prevailing characteristics of land use 1990-2006	NUTSX	ESPON EU-LUPA project	1990-2006
Land use and land use change	Amount of regional land use change 2000-2006	NUTSX	ESPON EU-LUPA project	2000-2006
Land use and land use change	Land use change typologies 1990-2006	NUTSX	ESPON EU-LUPA project	1990-2006
Land use and land use change	Hot spots of land change 1990-2006	NUTSX	ESPON EU-LUPA project	1990-2006

Table 8 Selected indicators to evaluate Territorial Performance in Liveland case studies. Own Selection

6.1.1. Economic performance and competitiveness

Source Eurostat Regional Data Base and Cohesion Indicators	Gross domestic product (GDP) at current market prices		Regional Gross Domestic Product in Purchasing Power Standards (PPS) per inhabitant	Long term unemployment rate (>= 12 months)				People at risk of poverty or social exclusion			
Case studies	**2007**	**2008**	**2009**	**2007**	**2008**	**2009**	**2010**	**2007**	**2008**	**2009**	**2010**
ES21 Basque Country	30600	31000	29700	1,52	1,54	2,69	3,44	13,8	12,2	12,7	15,5
ES211 Araba		34000									
ES212 Gipuzkoa		31600									
ES213 Bizkaia		29100									
ES22 Navarre	29500	29900	28700	0,69	0,85	1,72	3	10	9,4	9,7	9,7
ES220 Navarre	29500	29900									
SI 02 Zahodna Slovenija	20600	22000	25700	1,78	1,23	1,27	2,56		14,1	13,6	14,7
SI021 Osrednjeslovenska	24500	26000									
DE13 Freiburg	29100	29600	27900	1,64	1,21	1,29	1,33	20,6	20,1	20	19,7
DE134 Ortenaukreis	32200	32300									
NL33 Zuid-Holland	35800	36500	34400	1,35	0,99	0,95	1,35				
NL333 Delft en Westland	40000	40700									
DK05 Nordjylland	36500	37500	36300	0,9	0,63	0,83	2	19,7	19	18	17,2
DK050 Nordjylland	36500	37500									
EU-27 average	**23157,77**	**23245,54**	**23500**	**3,07**	**2,61**	**2,98**	**3,84**	**23,25**	**22,81**	**23,91**	**24,23**

Table 9 Economic performance and competitiveness in the case studies

6.1.2. Environmental and territorial capital

Source European Commission's 5th Cohesion Report	Share of Natura 2000 areas (% of total NUTs area)	Solar energy resources (kWh per year)	Wind energy potential (Number of hours per year)	Ozone concentration exceeds (Days with exceeds)	Urban waste water treatment capacity (% of generated load)	Soil sealed area per inhabitant (m2 per inhabitant)	Soil sealed area (% of total NUT area)
Case studies	**2009**	**1981-1990**	**2000-2005**	**2008**	**2007**	**2006**	**2006**
ES21 Basque Country					100		
ES211 Araba	26	1627	982	4		165	2
ES212 Gipuzkoa	20	1567	1515	3		69	2
ES213 Bizkaia	11	1539	1158	8		67	3
ES22 Navarre					100		
ES220 Navarre	24	1642	1091	0		178	1
SI 02 Zahodna Slovenija					100		
SI021 Osrednjeslovenska	22	1346	577	7		149	3
DE13 Freiburg					99		
DE134 Ortenaukreis	18	1206	402	6		204	5
NL33 Zuid-Holland					100		
NL333 Delft en Westland	3	1141	2780	2		290	40
DK05 Nordjylland					100		
DK050 Nordjylland	11	1117	3094	4		288	2
EU-27 average	**14**	**1304**	**1379**	**10**	**93**	**214**	**7**

Table 10 Environmental and territorial capital indicators

6.1.3. Territorial innovation

Source Eurostat Regional Data Base	Patent applications to the EPO by priority year (Per million of inhabitants)			Persons aged 25-64 with tertiary education attainment by sex (%)												Intramural expenditures on R&D (Euros per inhabitant)		
Case studies	**2007**	**2008**	**2009**	**2007 F**	**2007 M**	**2007 T**	**2008 F**	**2008 M**	**2008 T**	**2009 F**	**2009 M**	**2009 T**	**2010 F**	**2010 M**	**2010 T**	**2007**	**2008**	**2009**
ES21 Basque Country	66,79	56,48	34,94	40,4	44,6	42,5	40,2	44,1	42,2	43,2	44	43,6	43,6	44,6	44,1	466,5	504	485
ES211 Araba	77,33	62,47	17,32															
ES212 Gipuzkoa	86,39	80,48	50,61															
ES213 Bizkaia	46,49	40,32	28,28															
ES22 Navarre	101,9	93,42	32,39	38,4	38,2	38,2	36,4	35	35,7	38,6	35,5	36	41,6	35,6	38,6	367,5	408	435
ES220 Navarre	101,9	93,42	32,39															
SI 02 Zahodna Slovenija	69,42	74,63	16,86	30,2	24	27,1	31,9	23,4	27,6	35,1	23,5	28,3	32,7	24,4	28,5	193,1	262	278
SI021 Osrednjeslovenska	103,3	109,6	24,71															
DE13 Freiburg	488,5	426,8	251,1	19,4	31,3	25,3	20	32	25,9	21,4	33,3	27,2	20,9	32,7	26,7	503,8		476
DE134 Ortenaukreis	355,3	319,9	192,5															
NL33 Zuid-Holland	145,7	129,8	50,96	29,1	34,2	31,7	30,1	35,5	32,8	30,9	35,8	33,3	29,9	33,9	31,9	263,5e		271e
NL333 Delft en Westland	400,6	459,2	110,7															
DK05 Nordjylland	124,5	96,43	25,92	25,3	21,8	23,5	27,3	23,3	25,3	31,8	26,7	29,2	31	25,4	28,1	963		893
DK050 Nordjylland	124,5	96,43	25,92															
EU-27 average	**132,3**	**113,3**	**80,25**	**22,57**	**22,44**	**22,41**	**23,38**	**22,99**	**23,07**	**24,5**	**23,62**	**23,96**	**25,23**	**24,23**	**24,66**			

Table 11 Innovative territories

6.2. Check of data relevance

While there are good reasons for including most – if not all – of the proposed categories in the analysis, there are severe limitations in relation to include them in a quantitative analysis.

While issues such as Economic Performance, Environmental and Territorial Capital are relatively easy to deal with because there are EU decisions on both concepts and registration procedures. But issues such as Attractiveness may cause troubles in this connection.

Furthermore the question of detail of information plays an important role. There are severe limitations in ensuring consistent datasets that enables a quantitative approach. The major problem in this connection is at what NUTS level data are available. Data at NUTS3 would be preferable, but as shown in the table there are several indicators where only NUTS2 level is available. So besides requesting the indicators to be quantifiable they should also be available at the same NUTS level – in this situation therefore NUTS2.

Several of the potential indicators are available for several years. Taking advantage of this opportunity would in many cases be an advantage. But as one of the reasons for applying multivariate analysis as basis for clusters etc. is looking for impact of indicator on the variance in the dataset consecutive years of information on single variables does not provide much to the analysis. The differences between single years are limited, and “more of the same” does not provide additional information to the analysis. What is needed is a selection of indicators that generates maximum variance. Instead larger time spans between the registrations of a specific indicator enables the calculation of changes over time, which is an important contribution to the dataset.

Source Eurostat Regional Data Base and Cohesion Indicators	Gross domestic product (GDP) at current market prices		Regional Gross Domestic Product in Purchasing Power Standards (PPS) per inhabitant	Long term unemployment rate (>= 12 months)				People at risk of poverty or exclusion			
Case studies	**2007**	**2008**	**2008**	**2007**	**2008**	**2008**	**2010**	**2007**	**2008**	**2008**	
ES21 Basque Country	30600	31000	29700	1,52	1,54	2,69	3,44	13,8	12,2	12,7	
ES211 Araba		34000									
ES212 Gipuzkoa		31600									
ES213 Bizkaia		29100									
ES22 Navarre	29500	29900	28700	0,69	0,85	1,72	3	10	9,4	9,7	
ES220 Navarre	29500	29900									
SI 02 Zahodna Slovenija	20600	22000	25700	1,78	1,23	1,27	2,56		14,1	13,6	
SI021 Osrednjeslovenska	24500	26000									
DE13 Freiburg	29100	29600	27900	1,64	1,21	1,29	1,33	20,6	20,1	20	
DE134 Ortenaukreis	32200	32300									
NL33 Zuid-Holland	35800	36500	34400	1,35	0,99	0,95	1,35				
NL333 Delft en Westland	40000	40700									
DK05 Nordjylland	36500	37500	36300	0,9	0,63	0,83	2	19,7	19	18	
DK050 Nordjylland	36500	37500									
EU-27 average	23167,77	23246,64	23600	3,07	2,81	2,88	3,84	23,25	22,81	23,81	

Table 12 Overview of detail and accessibility of indicators in relation to Economic Performance and Competitiveness, Environmental and Territorial Capital, and Territorial Innovation

Source European Commission's 5th Cohesion Report	Share of Natura 2000 areas (% of total NUTs area)	Solar energy resources (kWh per year)	Wind energy potential (Number of hours per year)	Ozone concentration exceedances (Days with exceedance)	Urban waste water treatment capacity (% of generated load)	Soil sealed area per inhabitant (m2 per inhabitant)	Soil sealed area (% ot total NUT area)
Case studies	**2009**	**1981-1990**	**2000-2005**	**2008**	**2007**	**2006**	**2006**
ES21 Basque Country					100		
ES211 Araba	28	1627	982	4		165	2
ES212 Gipuzkoa	20	1567	1515	3		69	2
ES213 Bizkaia	11	1539	1158	8		67	3
ES22 Navarre					100		
ES220 Navarre	24	1642	1091	0		178	1
SI 02 Zahodna Slovenija					100		
SI021 Osrednjeslovenska	22	1348	577	7		149	3
DE13 Freiburg					99		
DE134 Ortenaukreis	18	1206	402	6		204	5
NL33 Zuid-Holland					100		
NL333 Delft en Westland	3	1141	2780	2		290	40
DK05 Nordjylland					100		
DK050 Nordjylland	11	1117	3094	4		288	2
EU-27 average	**14**	**1304**	**1379**	**10**	**93**	**214**	**7**

Table 13 Overview of detail and accessibility of indicators in relation to Environmental and Territorial Capital

	Patent applications to the EPO by priority year (Per million of inhabitants)			Persons aged 25-64 with tertiary education attainment by sex (%)												Intramural expenditures on R&D (Euros per inhabitant)		
Case studies	**2007**	**2008**	**2009**	**2007 F**	**2007 M**	**2007 T**	**2008 F**	**2008 M**	**2008 T**	**2009 F**	**2009 M**	**2009 T**	**2010 F**	**2010 M**	**2010 T**	**2007**	**2008**	**2009**
ES21 Basque Country	66,79	56,48	34,94	40,4	44,6	42,5	40,2	44,1	42,2	43,2	44	43,6	43,6	44,6	44,1	466,5	504	485
ES211 Araba	77,33	62,47	17,32															
ES212 Gipuzkoa	86,39	80,48	50,61															
ES213 Bizkaia	46,49	40,32	28,28															
ES22 Navarre	101,9	93,42	32,39	38,4	38,2	38,2	36,4	35	35,7	38,6	35,5	36	41,6	35,6	38,6	367,5	408	435
ES220 Navarre	101,9	93,42	32,39															
SI 02 Zahodna Slovenija	69,42	74,63	16,86	30,2	24	27,1	31,9	23,4	27,6	35,1	23,5	28,3	32,7	24,4	28,5	193,1	262	278
SI021 Osrednjeslovenska	103,3	109,6	24,71															
DE13 Freiburg	488,5	426,8	251,1	19,4	31,3	25,3	20	32	25,9	21,4	33,3	27,2	20,9	32,7	26,7	503,8		476
DE134 Ortenaukreis	355,3	319,9	192,5															
NL33 Zuid-Holland	145,7	129,8	50,96	29,1	34,2	31,7	30,1	35,5	32,8	30,9	35,8	33,3	29,9	33,9	31,9	263,5e		271e
NL333 Delft en Westland	400,6	459,2	110,7															
DK05 Nordjylland	124,5	96,43	25,92	25,3	21,8	23,5	27,3	23,3	25,3	31,8	26,7	29,2	31	25,4	28,1	963		893
DK050 Nordjylland	124,5	96,43	25,92															
EU-27 average	**132,3**	**113,3**	**80,25**	**22,57**	**22,44**	**22,41**	**23,38**	**22,99**	**23,07**	**24,5**	**23,62**	**23,96**	**25,23**	**24,23**	**24,66**			

Table 14 Overview of detail and accessibility of indicators in relation to Territorial Innovation.

	PRIN1
stnd_SOLAR	0,38
stnd_UNEMPCH	0,34
stnd_FEDU_10	0,33
stnd_NATUR_09	0,29
stnd_TEDU_10	0,29
stnd_UNEMP_10	0,28
stnd_GDPCH	0,08
stnd_FINCREDU	0,08
stnd_UR_WATER	0,06
stnd_OZONE	- 0,07
stnd_TINCREDU	- 0,11
stnd_GDP_09	- 0,15
stnd_WIND	- 0,17
stnd_PAT_09	- 0,19
stnd_SEAL_PCT	- 0,20
stnd_PAT_INCR	- 0,24
stnd_MINCREDU	- 0,25
stnd_SEAL_CAP	- 0,32

Figure 10: The selected indicators and their contributions to the first axis in a Principal Component Analysis.

Figure 10 to the left show the list of selected indicators and how they contribute to the first principal component as result of a Principal Component Analysis. This analysis is an appropriate approach when a large number of measures have been obtained, and there is a need to develop a smaller number of artificial variables called principal components and in the following tables identified by PRIN1, PRIN2 etc. There are just as many Principal Components as variables, but through the analysis the coordinate system is re-organized in such a way that most of the variance is identified by PRIN1, second most by PRIN2 etc. Further detail is available in **Error! Reference source not found.** And Figure 10 shows the role of the chosen indicators in describing this first Principal Component. The larger positive and negative values contributes the most to describing the variance, while the values just around 0 in the middle of the table show those indicator that contribute the least to it.

Figure 11 Matrix of correlation between the 13 selected indicators (above) and the eigenvalues of the Correlation Matrix indicating the explanation values of the 13 potential Principal Components.

The colour coding of all the mentioned tables helps interpreting the content as green colours show high positive values while red colours show high negative values.

A short conclusion of the above is that 13 indicators will be sufficient to provide a proper description of the data, and this will therefore be the basis for the following analyses.

Correlation Matrix

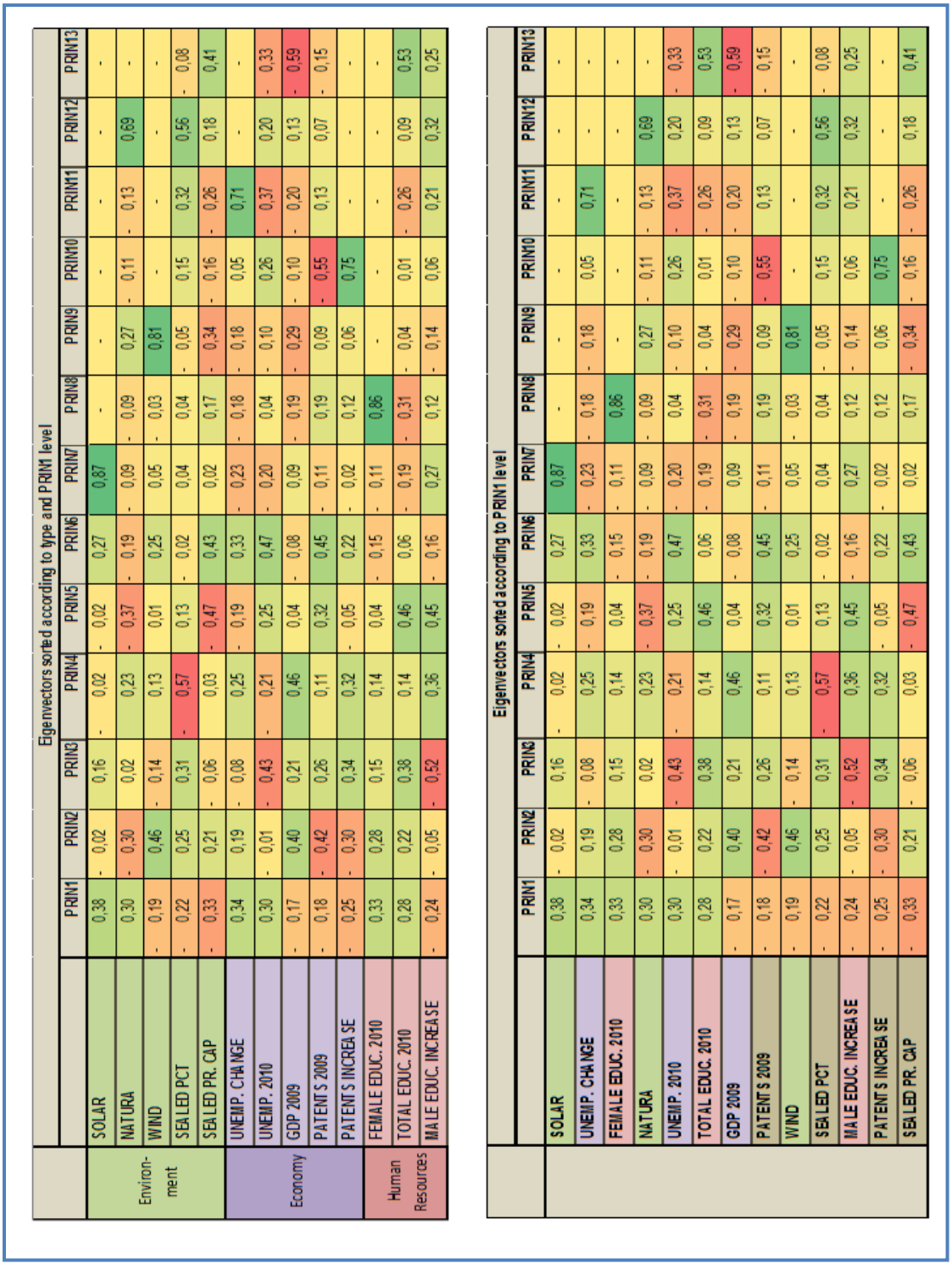
		GDP 2009	UNEMP. 2010	UNEMP. CHANGE	NATURA	SOLAR	WIND	SEALED PR. CAP	SEALED PCT	PATENTS 2009	PATENTS INCREASE	FEMALE EDUC. 2010	TOTAL EDUC. 2010	MALE EDUC. INCREASE
Economy	GDP 2009	1,00	- 0,58	- 0,03	- 0,60	- 0,40	0,82	0,60	0,39	- 0,23	0,12	0,15	0,19	0,20
	UNEMP. 2010	- 0,58	1,00	0,68	0,46	0,67	- 0,27	- 0,58	- 0,49	- 0,43	- 0,73	0,46	0,31	- 0,17
	UNEMP. CHANGE	- 0,03	0,68	1,00	0,54	0,83	- 0,04	- 0,50	- 0,52	- 0,63	- 0,67	0,89	0,72	- 0,44
Environment	NATURA	- 0,60	0,46	0,54	1,00	0,75	- 0,81	- 0,80	- 0,82	0,02	- 0,10	0,40	0,30	- 0,39
	SOLAR	- 0,40	0,67	0,83	0,75	1,00	- 0,51	- 0,80	- 0,46	- 0,30	- 0,49	0,79	0,77	- 0,73
	WIND	0,82	- 0,27	- 0,04	- 0,81	- 0,51	1,00	0,77	0,50	- 0,43	- 0,18	0,02	- 0,06	0,35
	SEALED PR. CAP	0,60	- 0,58	- 0,50	- 0,80	- 0,80	0,77	1,00	0,56	0,07	0,33	- 0,53	- 0,56	0,42
	SEALED PCT	0,39	- 0,49	- 0,52	- 0,82	- 0,46	0,50	0,56	1,00	- 0,02	0,06	- 0,23	- 0,09	- 0,15
Economy	PATENTS 2009	- 0,23	- 0,43	- 0,63	0,02	- 0,30	- 0,43	0,07	- 0,02	1,00	0,90	- 0,69	- 0,39	0,20
	PATENTS INCREASE	0,12	- 0,73	- 0,67	- 0,10	- 0,49	- 0,18	0,33	0,06	0,90	1,00	- 0,68	- 0,43	0,25
Human Resources	FEMALE EDUC. 2010	0,15	0,46	0,89	0,40	0,79	0,02	- 0,53	- 0,23	- 0,69	- 0,68	1,00	0,91	- 0,59
	TOTAL EDUC. 2010	0,19	0,31	0,72	0,30	0,77	- 0,06	- 0,56	- 0,09	- 0,39	- 0,43	0,91	1,00	- 0,64
	MALE EDUC. INCREASE	0,20	- 0,17	- 0,44	- 0,39	- 0,73	0,35	0,42	- 0,15	0,20	0,25	- 0,59	- 0,64	1,00

Eigenvalues of the Correlation Matrix

	Eigenvalue	Difference	Proportion	Cumulative
1,00	6,39	3,08	0,49	0,49
2,00	3,31	1,78	0,25	0,75
3,00	1,54	0,49	0,12	0,87
4,00	1,04	0,65	0,08	0,95
5,00	0,39	0,07	0,03	0,98
6,00	0,32	0,32	0,02	1,00
7,00	-	-	-	1,00
8,00	-	-	-	1,00
9,00	-	-	-	1,00
10,00	-	-	-	1,00
11,00	-	-	-	1,00
12,00	-	-	-	1,00
13,00	-		-	1,00

Figure 11 Matrix of correlation between the 13 selected indicators (above) and the eigenvalues of the Correlation Matrix indicating the explanation values of the 13 potential Principal

6.3. Principal Components



Eigenvectors sorted according to type and PRIN1 level

		PRIN1	PRIN2	PRIN3	PRIN4	PRIN5	PRIN6	PRIN7	PRIN8	PRIN9	PRIN10	PRIN11	PRIN12	PRIN13
Environment	SOLAR	0,38	- 0,02	0,16	- 0,02	- 0,02	0,27	0,87	-	-	-	-	-	-
	NATURA	0,30	- 0,30	0,02	0,23	- 0,37	- 0,19	- 0,09	- 0,09	0,27	- 0,11	- 0,13	0,69	-
	WIND	- 0,19	0,46	- 0,14	0,13	0,01	0,25	0,05	- 0,03	0,81	-	-	-	-
	SEALED PCT	- 0,22	0,25	0,31	- 0,57	0,13	- 0,02	0,04	0,04	- 0,05	0,15	0,32	0,56	- 0,08
	SEALED PR. CAP	- 0,33	0,21	- 0,06	0,03	- 0,47	0,43	0,02	0,17	- 0,34	- 0,16	- 0,26	0,18	0,41
Economy	UNEMP. CHANGE	0,34	0,19	- 0,08	0,25	- 0,19	0,33	- 0,23	- 0,18	- 0,18	0,05	0,71	-	-
	UNEMP. 2010	0,30	- 0,01	- 0,43	- 0,21	0,25	0,47	- 0,20	0,04	- 0,10	0,26	- 0,37	0,20	- 0,33
	GDP 2009	- 0,17	0,40	0,21	0,46	0,04	- 0,08	0,09	- 0,19	- 0,29	- 0,10	- 0,20	0,13	- 0,59
	PATENTS 2009	- 0,18	- 0,42	0,26	0,11	0,32	0,45	- 0,11	0,19	0,09	- 0,55	0,13	0,07	- 0,15
	PATENTS INCREASE	- 0,25	- 0,30	0,34	0,32	- 0,05	0,22	- 0,02	0,12	0,06	0,75	-	-	-
Human Resources	FEMALE EDUC. 2010	0,33	0,28	0,15	0,14	- 0,15	- 0,11	0,86	-	-	-	-	-	-
	TOTAL EDUC. 2010	0,28	0,22	0,38	0,14	0,46	0,06	- 0,19	- 0,31	- 0,04	0,01	- 0,26	0,09	0,53
	MALE EDUC. INCREASE	- 0,24	- 0,05	- 0,52	0,36	0,45	- 0,16	0,27	- 0,12	- 0,14	0,06	0,21	0,32	0,25

Eigenvectors sorted according to PRIN1 level

	PRIN1	PRIN2	PRIN3	PRIN4	PRIN5	PRIN6	PRIN7	PRIN8	PRIN9	PRIN10	PRIN11	PRIN12	PRIN13
SOLAR	0,38	- 0,02	0,16	- 0,02	- 0,02	0,27	0,87	-	-	-	-	-	-
UNEMP. CHANGE	0,34	0,19	- 0,08	0,25	- 0,19	0,33	- 0,23	- 0,18	- 0,18	0,05	0,71	-	-
FEMALE EDUC. 2010	0,33	0,28	0,15	0,14	0,04	- 0,15	- 0,11	0,86	-	-	-	-	-
NATURA	0,30	- 0,30	0,02	0,23	- 0,37	- 0,19	- 0,09	- 0,09	0,27	- 0,11	- 0,13	0,69	-
UNEMP. 2010	0,30	- 0,01	- 0,43	- 0,21	0,25	0,47	- 0,20	0,04	- 0,10	0,26	- 0,37	0,20	- 0,33
TOTAL EDUC. 2010	0,28	0,22	0,38	0,14	0,46	0,06	- 0,19	- 0,31	- 0,04	0,01	- 0,26	0,09	0,53
GDP 2009	- 0,17	0,40	0,21	0,46	0,04	- 0,08	0,09	- 0,19	- 0,29	- 0,10	- 0,20	0,13	- 0,59
PATENTS 2009	- 0,18	- 0,42	0,26	0,11	0,32	0,45	- 0,11	0,19	0,09	- 0,55	0,13	0,07	- 0,15
WIND	- 0,19	0,46	- 0,14	0,13	0,01	0,25	0,05	- 0,03	0,81	-	-	-	-
SEALED PCT	- 0,22	0,25	0,31	- 0,57	0,13	- 0,02	0,04	0,04	- 0,05	0,15	0,32	0,56	- 0,08
MALE EDUC. INCREASE	- 0,24	- 0,05	- 0,52	0,36	0,45	- 0,16	0,27	0,12	- 0,14	0,06	0,21	0,32	0,25
PATENTS INCREASE	- 0,25	- 0,30	0,34	0,32	- 0,05	0,22	- 0,02	0,12	0,06	0,75	-	-	-
SEALED PR. CAP	- 0,33	0,21	- 0,06	0,03	- 0,47	0,43	0,02	0,17	- 0,34	- 0,16	- 0,26	0,18	0,41

Figure 12 Contribution of the selected indicators in describing the principal components. On the table above the indicators are organized in the three main categories: Environment, Economy, and Human Resources. In the table below the indicators are sorted according to their contribution to the first principal component, with largest positive contribution on the top, and with the largest negative contribution in the bottom.

And the main point in this analysis is that the major part – 49% to be exact - of the variance in the data is described through the first Principal Component, while 25% is described by PRIN2 etc., as shown on the illustration showing the Eigenvalues of the Correlation Matrix.

And within the Principal Component number one the environmental indicators on Solar energy availability and the NATURA land areas available in the regions contribute – together with Unemployment Change and Female Education rate in 2010 the most with positive values and therefore positively correlated to this component while Sealed areas per capita, Patent Increase,, and Male Educational Increase are contributing with the highest negative values, and therefore negatively correlated.

6.4. Clustering

The purpose of the clustering analysis is to identify which regions are most alike when it comes to the 13 identified indicators. And in this analysis two approaches have been made.

In one series of analyses which are shown on Figure 13 the four components have been clustered individually, and the graph show the "Cluster Tree" showing how the process of clustering has progressed from no clusters at the bottom and to one cluster at the top. Moving upwards when reading the graphs it is possible to see in which order the clusters have been generated. The lower level of clustering, the higher level of similarity has been found. In addition to the case study regions data on EU27 has been added in order to see which regions are closest to the EU27 general situation, and which regions are deviating the most.

The main analysis has been conducted with what is characterised as the composite clustering containing all four components, and the result is shown on Figure 14.

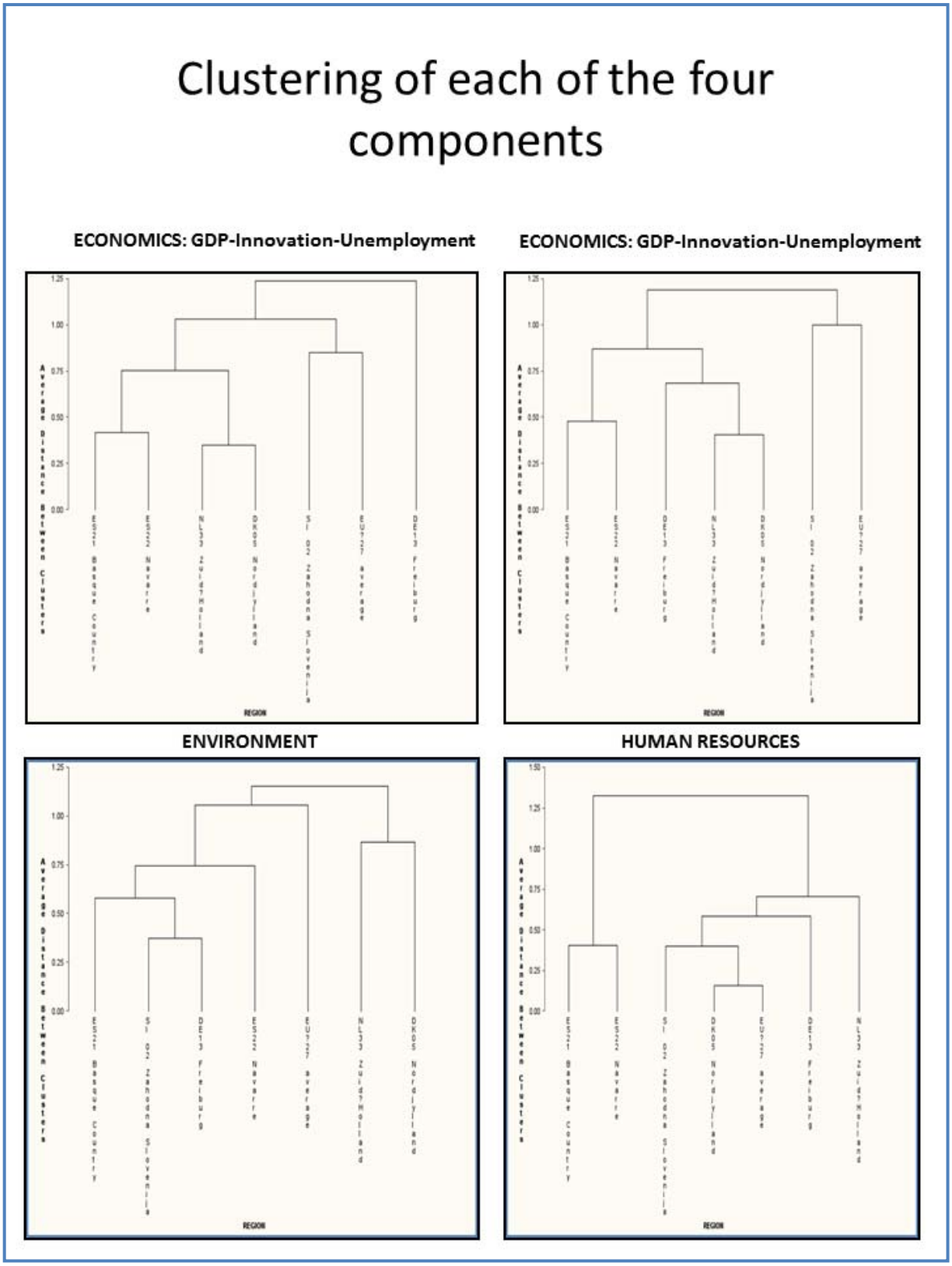


Figure 13 Individual clustering exercise per each of the four components

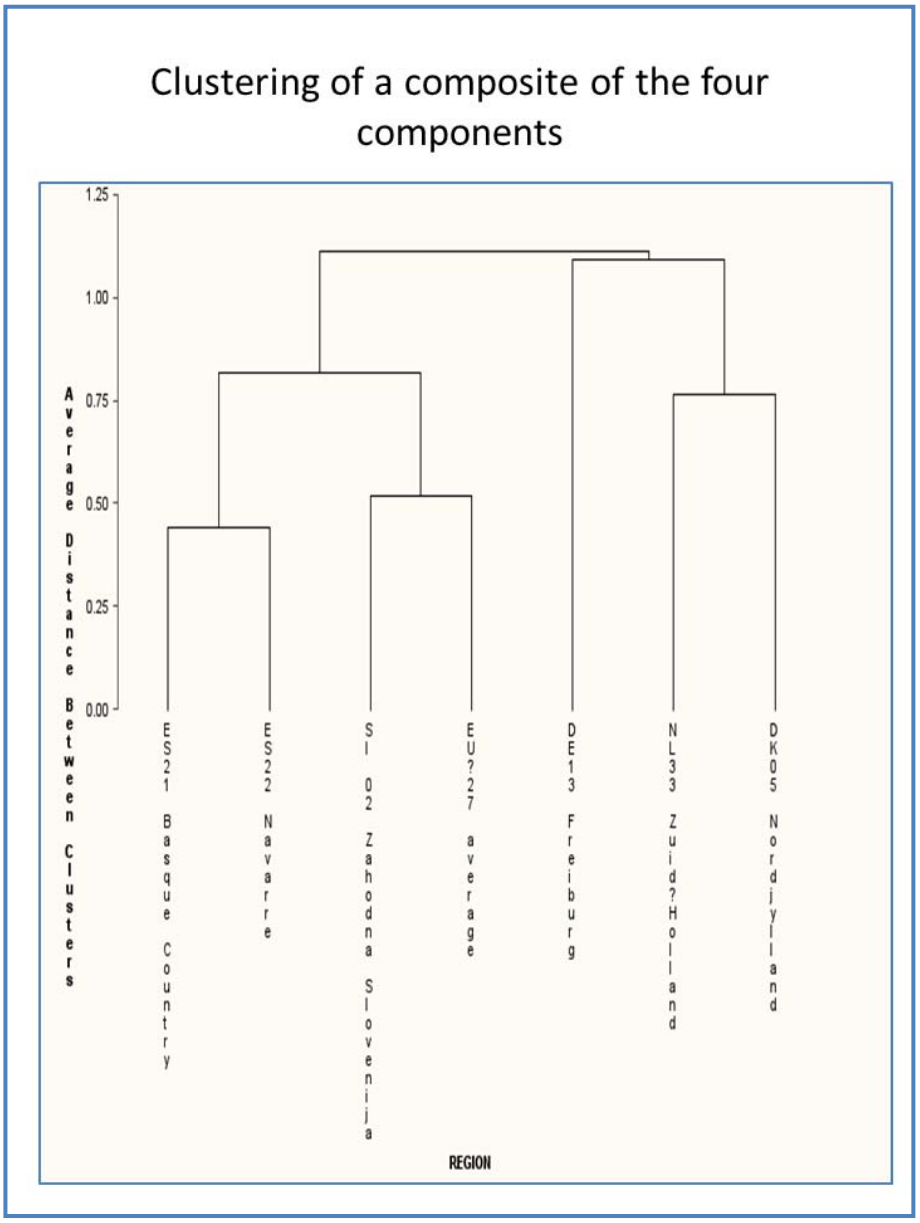


Figure 14 Clustering based on a composite of all the indicator categories

The reading of the figure is identical with what has been described previously. Moving from the bottom of the cluster tree it is shown that the first regions to combine are the Basque Country and Navarre. In a next step Slovenia combines with the EU27 average. And a third step combines Zuid Holland and Nordjylland. Freiburg is the region that is the last to enter into any of the generated clusters, showing that Freiburg is the region that – when taking all indicators into account – is the one that deviate the most from the other regions.

Finally Figure 15 on next page show results from all the clustering which have taken place – by individual indicator categories and by the composite of all 13 chosen indicators.

FOUR CLUSTERS		THREE CLUSTERS		TWO CLUSTERS	
ECONOMICS: GDP-INNOV-UNEMPLOYMENT					
1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra
2	NL33 Zuid Holland DK05 Nordjylland		NL33 Zuid Holland DK05 Nordjylland		NL33 Zuid Holland DK05 Nordjylland
3	SL02 Zahodna Slovenija	2	SL02 Zahodna Slovenija		SL02 Zahodna Slovenija
4	DE13 Freiburg	3	DE13 Freiburg	2	DE13 Freiburg
ECONOMICS: GDP-UNEMPLOYMENT					
1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra
2	NL33 Zuid Holland DK05 Nordjylland	2	DE13 Freiburg NL33 Zuid Holland DK05 Nordjylland		NL33 Zuid Holland DK05 Nordjylland
3	DE13 Freiburg				DE13 Freiburg
4	SL02 Zahodna Slovenija	3	SL02 Zahodna Slovenija	2	SL02 Zahodna Slovenija
ENVIRONMENT: NATURE- URBANIZATION					
1	ES21 Basque Country	1	ES21 Basque Country DE13 Freiburg SL02 Zahodna Slovenija	1	ES21 Basque Country DE13 Freiburg SL02 Zahodna Slovenija
2	DE13 Freiburg SL02 Zahodna Slovenija				
3	ES22 Navarra	2	ES22 Navarra		ES22 Navarra
4	NL33 Zuid Holland DK05 Nordjylland	3	NL33 Zuid Holland DK05 Nordjylland	2	NL33 Zuid Holland DK05 Nordjylland
HUMAN RESOURCES: EDUCATION					
1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra
2	SL02 Zahodna Slovenija DK05 Nordjylland	2	SL02 Zahodna Slovenija DK05 Nordjylland	2	SL02 Zahodna Slovenija DK05 Nordjylland
3	DE13 Freiburg		DE13 Freiburg		DE13 Freiburg
4	NL33 Zuid Holland	3	NL33 Zuid Holland		NL33 Zuid Holland
COMPOSITE: ECONOMIC, ENVIRONMENT, HUMAN RESOURCES					
1	ES21 Basque Country ES22 Navarra	1	ES21 Basque Country ES22 Navarra SL02 Zahodna Slovenija	1	ES21 Basque Country ES22 Navarra SL02 Zahodna Slovenija
2	NL33 Zuid Holland DK05 Nordjylland	2	NL33 Zuid Holland DK05 Nordjylland	2	NL33 Zuid Holland DK05 Nordjylland DE13 Freiburg
3	SL02 Zahodna Slovenija				
4	DE13 Freiburg	3	DE13 Freiburg		

Figure 15: Results of the clustering procedures: From top to bottom according to indicator choice, and from left to right according to choice of number of clusters from four to two.

6.4.1. Conclusions on performance evaluation

Going through the different clustering on Figure 15 which has been based on the trees on figures 13 and 14 it is quite clear how consistent the similarities between the regions are maintained more or less independent of which variables are included in the clustering. Going from four down to two clusters it is apparent how the clusters basically consist of the same group of regions. At the same time it shows that the differences between the clusters indicate variations between them that may become useful when results from the analyses should be extrapolated to a general EU27 setting. In this connection the inclusion of the EU27 average data comes in handy because they help to show the variations in the included regions.

The indicators selected to the assessment of territorial performance in the Liveland case study are derived mainly from other ESPON projects. As a result, a set of indicators and maps allow us to have a view at a regional level on how several landscape functions are performing: land use, diversity, etc. although they are not suitable to compare landscape practices or even differences on landscape at different regions.

However, Indicators for landscape policies evaluation would be more useful were they suited to compare qualitative and strategic aspects of landscape:

- To inform about landscape characteristics and its functions: productive, biodiversity generation, people's health, etc.
- To inform on the long term view of a specific matter: conservation, education, research, etc.

Although the 8 selected themes have been incorporated into the characterization of the project case studies (see Baseline Analysis), it was not possible to provide specific variables to measure and compare any of the aspects mentioned above.

6.5. Connection to ESPON projects

In chapter 4 of the present report was review the ESPON role alongside the different ESPON approaches in relation to landscape concept, from pre-ESPON projects, to the early attempts and across the evolution into land use and landscape approaches.

Several ESPON projects were already reviewed in chapter 4.

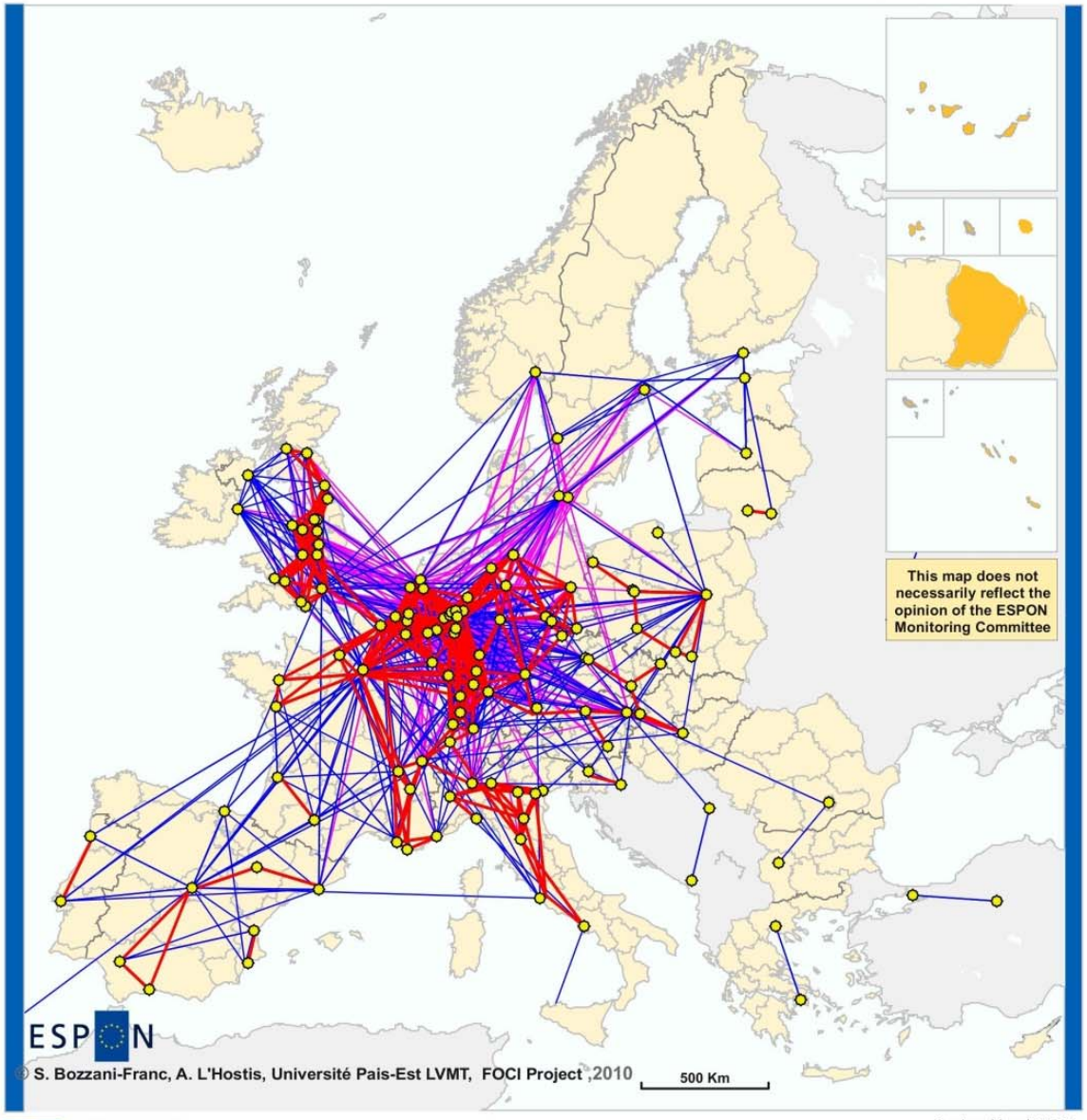
In the present one, a contextualization of the LIVELAND case studies to ESPON projects addressing landscape in a relatively direct or indirect way is presented now.

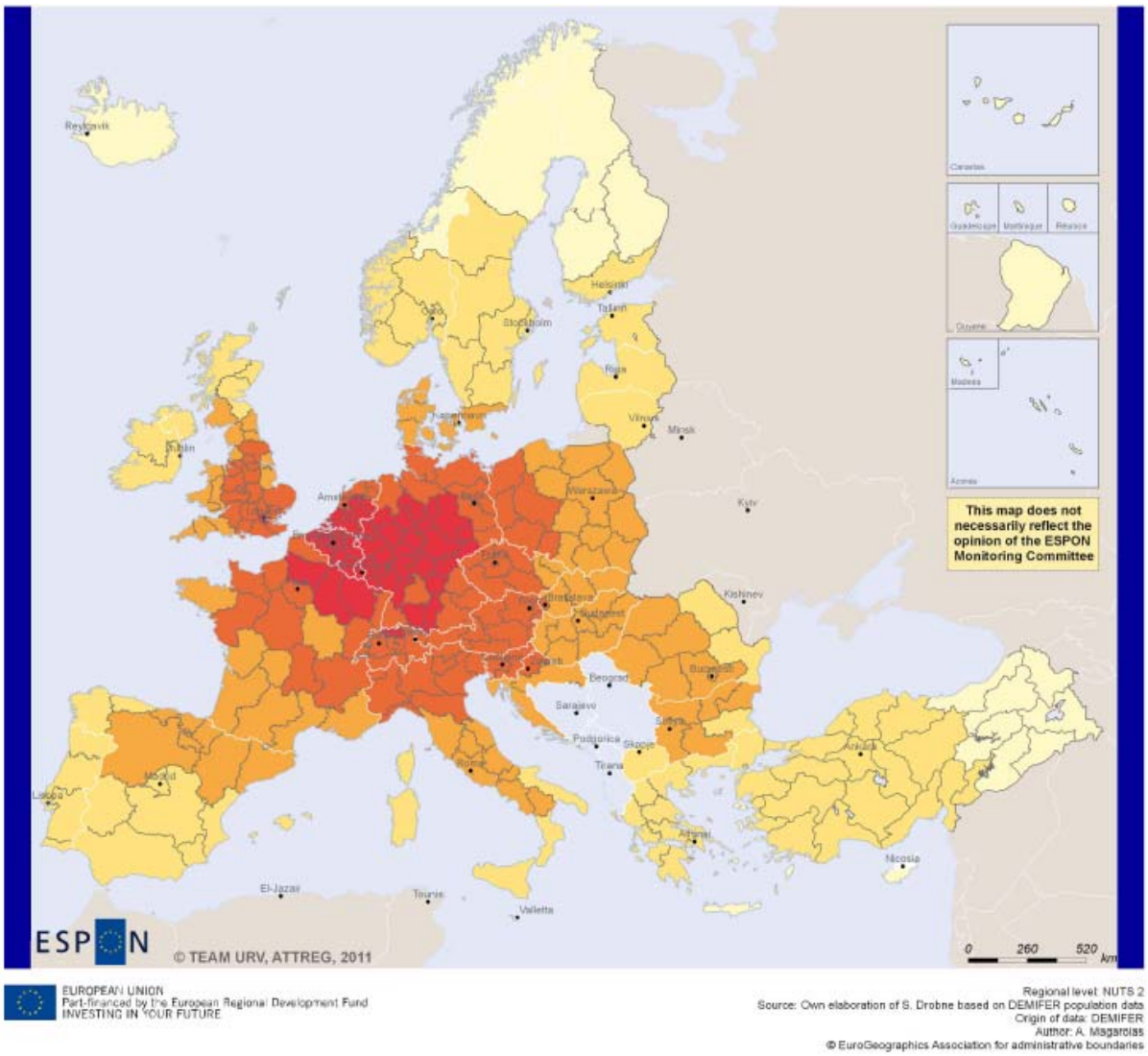
The ESPON projects selected provide information at NUTS2 and NUTS3 level, which is an scale that does not reflect the territorial reality of the case studies whatsoever, particularly for Offenburg Municipality, Ljubljana Urban Region and Midden-Delfland.

A downscaling would be definitive required to more accurate contextualization also of the landscape practices analysed in Navarra and Basque Country regions.

6.5.1. Integrated polycentric territorial development

Map 8 City network for one-day business trips, 2009. FOCI project, 2010. ESPON applied research.

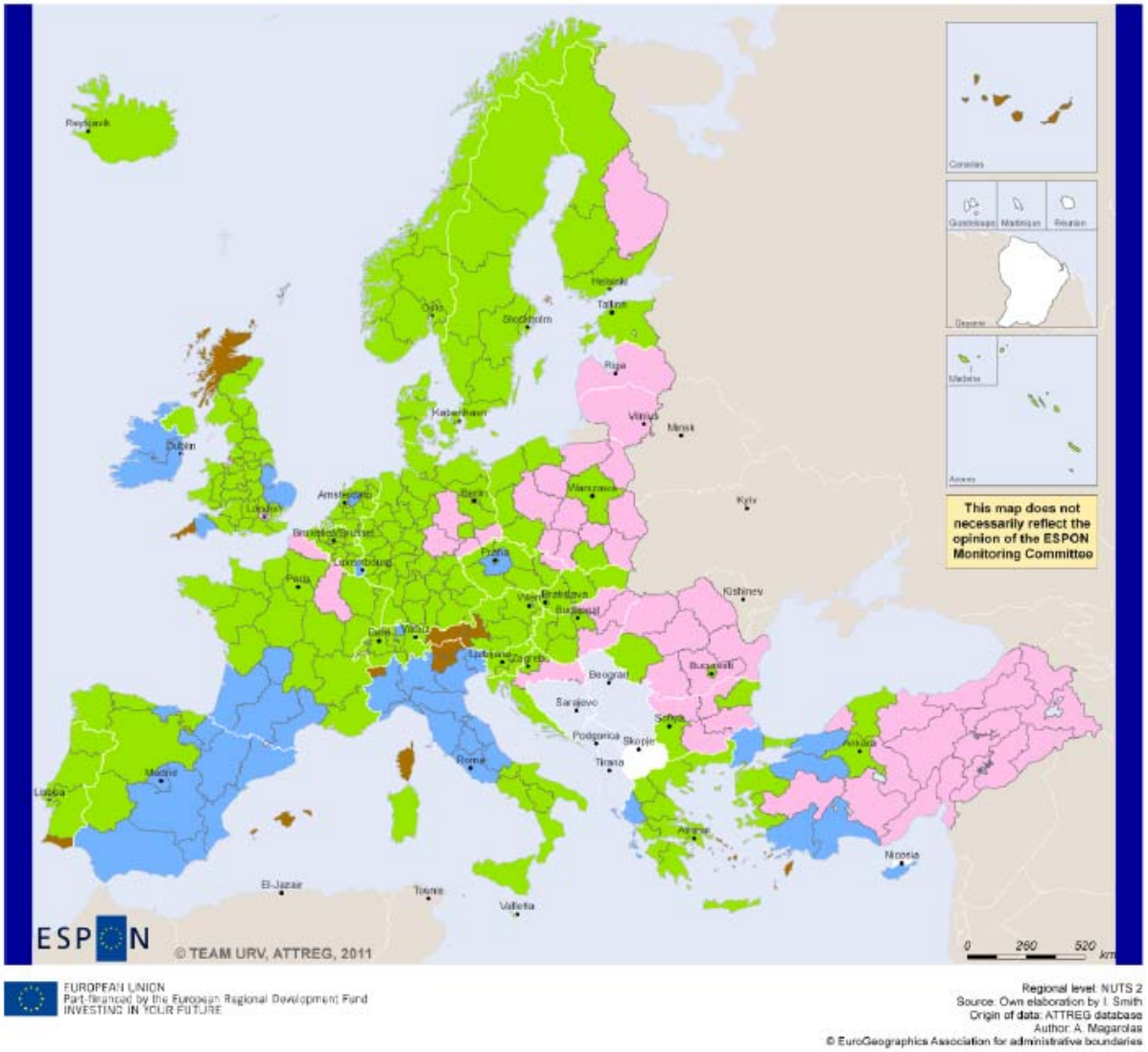




Map 9 Accessibility (road and ferry networks) 2001-05. ATTREG project Interim Repot, 2011. ESPON applied research

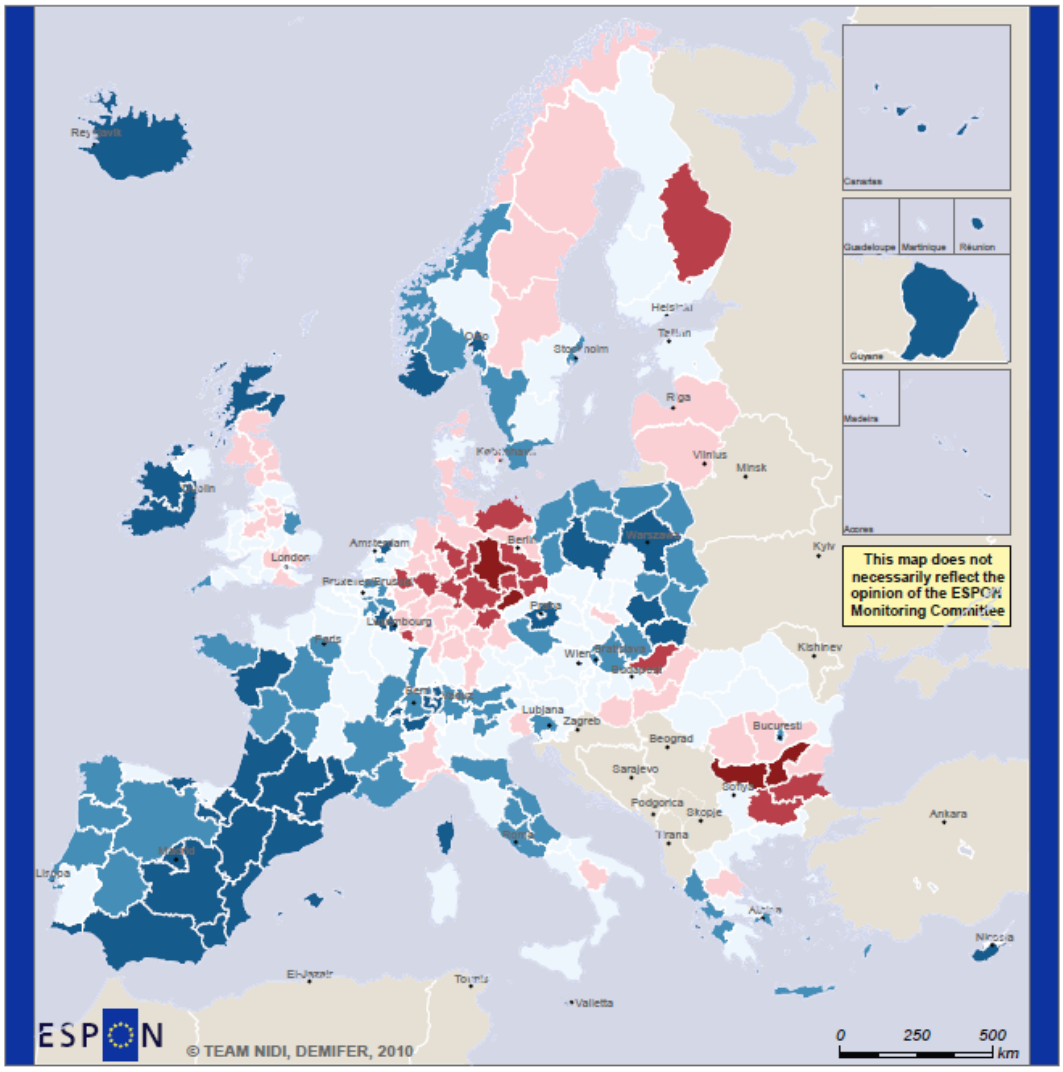
Case Study	NUTS3 Code	Observations
Basque Country	ES211 ES212 ES213	Medium
Navarra	ES220	Medium
Offenburg	DE134	Medium-High
Midden Delfland	NL333	High
THY NP	DK050	Medium
Ljubljana UR	SI021	Medium-High

6.5.2. Attractiveness



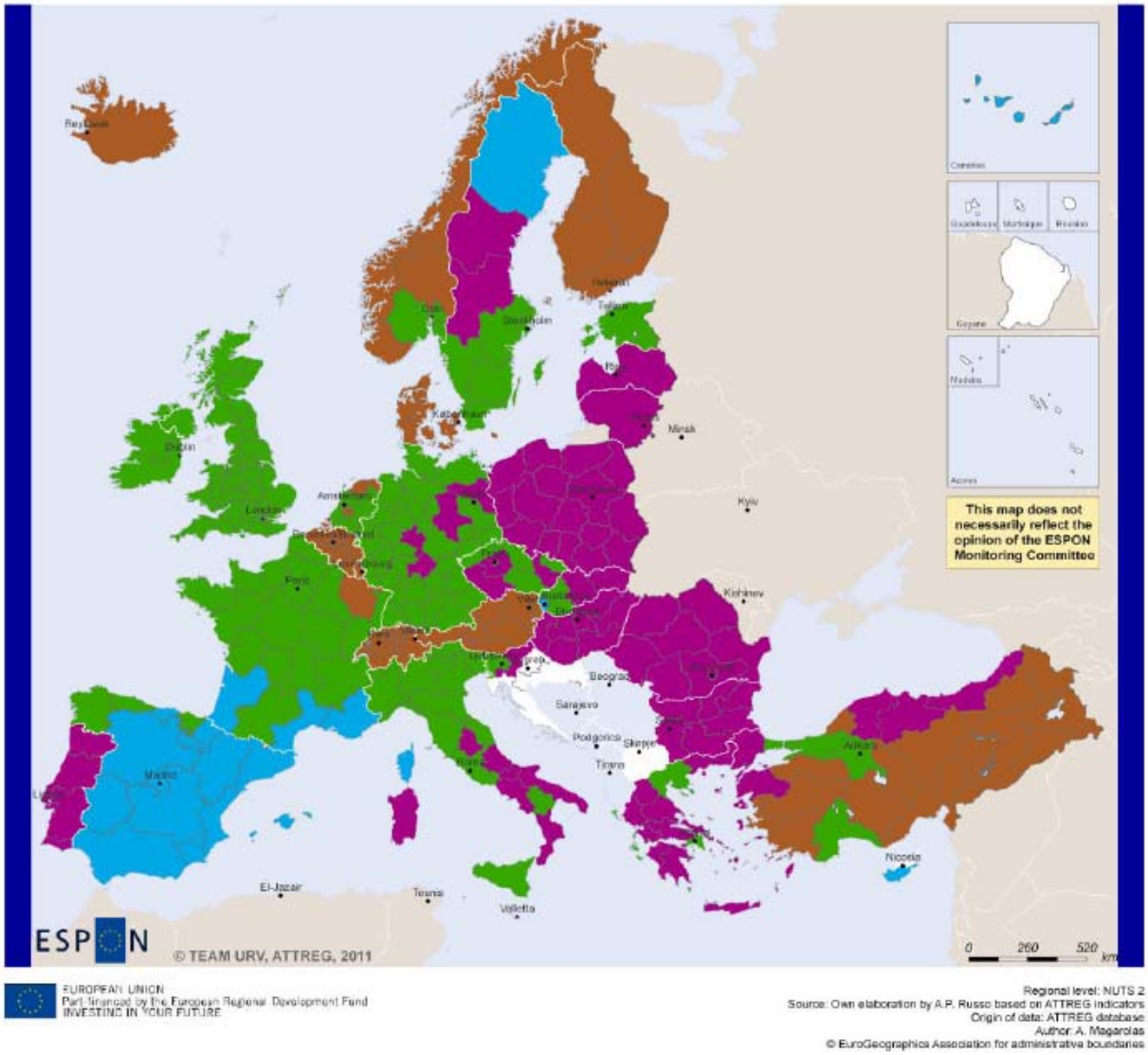
Map 10 Regional typology by types of flows attracted. ATTREG Project. 2011. Final report. ESPON applied research.

Case Study	NUTS3 Code	Observations
Basque Country	ES211/ES212/ES213	Class 2
Navarra	ES220	Class 3
Offenburg	DE134	Class 2
Midden Delfland	NL333	Class 2
THY NP	DK050	Class 2
Ljubljana UR	SI021	Class 2



Map 11 Change in working agepopulation 2000-2007 (Map 20 from 1st ESPON 2013 Synthesis Report, 2010)

Offenburg	0 – 0.5
Navarra	1.0 – 4.0
Basque Country	0 – 0.5
Midden-Delfland	0 – 0.5
Thy	-0.5 - 0
Ljubljana Urban Region	1.0 – 4.0



Map 12 Regional typology by endowments of territorial capital. ATTREG project, 2011. Final Report. ESPON applied research

The synthetic typology provides an insight of what the most attractive regions for specific audiences could be. The four clusters of regions obtained, mapped in Map 5, could be characterized in the following general terms:

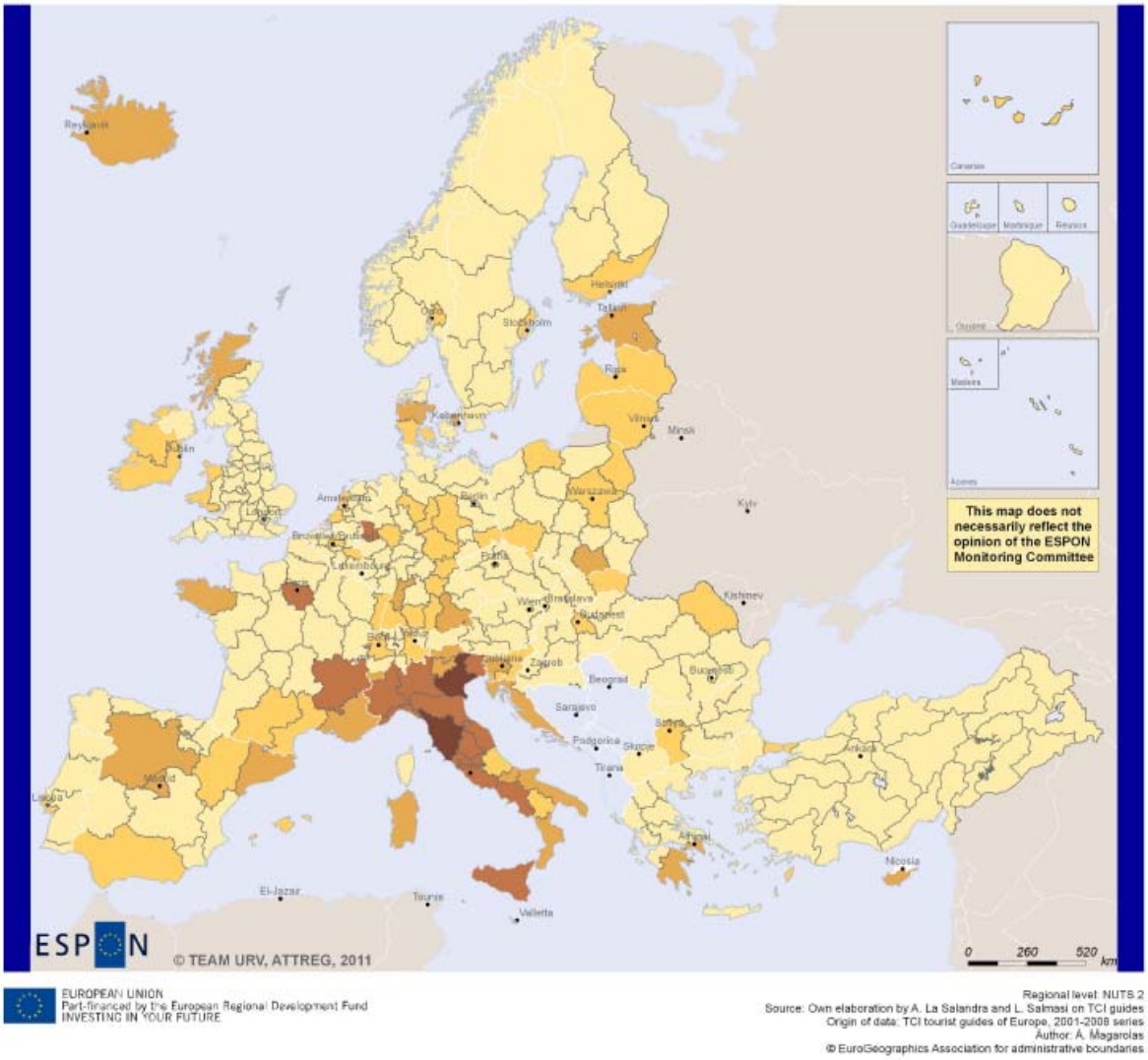
Class 1, coloured blue in the map, includes regions that are typical tourist destinations in Spain (in fact, stretching almost to the whole Spanish country), the South and Southwest of France, and Cyprus, plus the odd Bratislava capital region and the North of Sweden. Their potential attractiveness is mostly linked to the high provision of environmental capital that they offer, as well as good endowments of anthropic elements and economic assets. This should be a magnet for a certain type of mobility that is mostly appreciative of good environmental conditions (like that of retired workers), though the lower than average provisions of other categories of territorial capital could downplay this advantage.

Class 2, in violet, includes regions in south-central and insular Italy, the whole country of Portugal, almost all of Greece, the North coast of Turkey, plus whole countries (Bulgaria, Romania, Hungary, Latvia, Lithuania) and many other regions in eastern and north-eastern Europe, like large parts of Poland, some Eastern and central regions of Germany, and Central Sweden. Compared with those of Class 1, these regions also offer high levels (though lesser) of environmental amenities but are modestly endowed in all other types of territorial capital, which to some extent may downplay their attractiveness at least for a structural work-related mobility. It could be argued that they need to reinforce these aspects.

Class 3, in brown, picks regions or the totality of "small" countries (at least in population terms) characterised by a welfare system (Austria, Switzerland, Belgium, Denmark, Finland, Iceland, Belgium, North-eastern France, regions in Holland and large parts of Norway, plus large part of inland and coastal Turkey. These countries are characterised by a dynamic socio-economic environment, possibly the result of effective public spending in services of general interest, which may result in a high likeliness to attract work-motivated migrants and especially young starters.

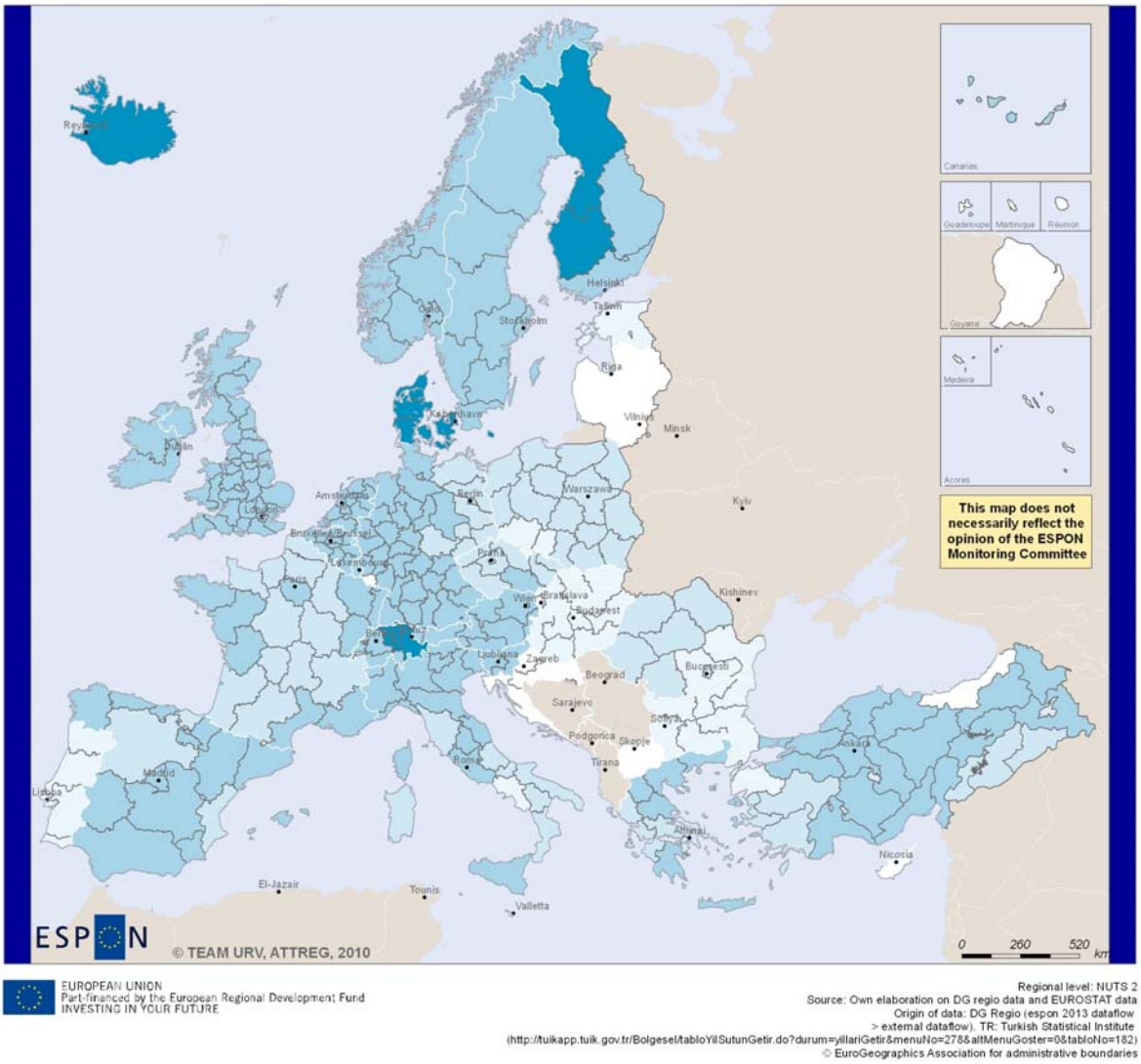
Class 4, coloured green, includes a mix of "urban Europe" – most metropolitan areas and national capitals are featured here – and regions of the "industrial belt" of Europe. These areas score moderately well economically and in terms of physical infrastructure and other anthropic elements, resulting potentially attractive for younger and mid-career workers, though they may exhibit signs of congestion in the provision of public services and a possible stratification in their in their social mix, and possibly as a result of development having taken place, are less attractive from the environmental point of view.

Case Study	NUTS3 Code	Observations
Basque Country	ES211/ES212/ES213	Class 4
Navarra	ES220	Class 1
Offenburg	DE134	Class 4
Midden Delfland	NL333	Class 4
THY NP	DK050	Class 3
Ljubljana UR	SI021	Class 4



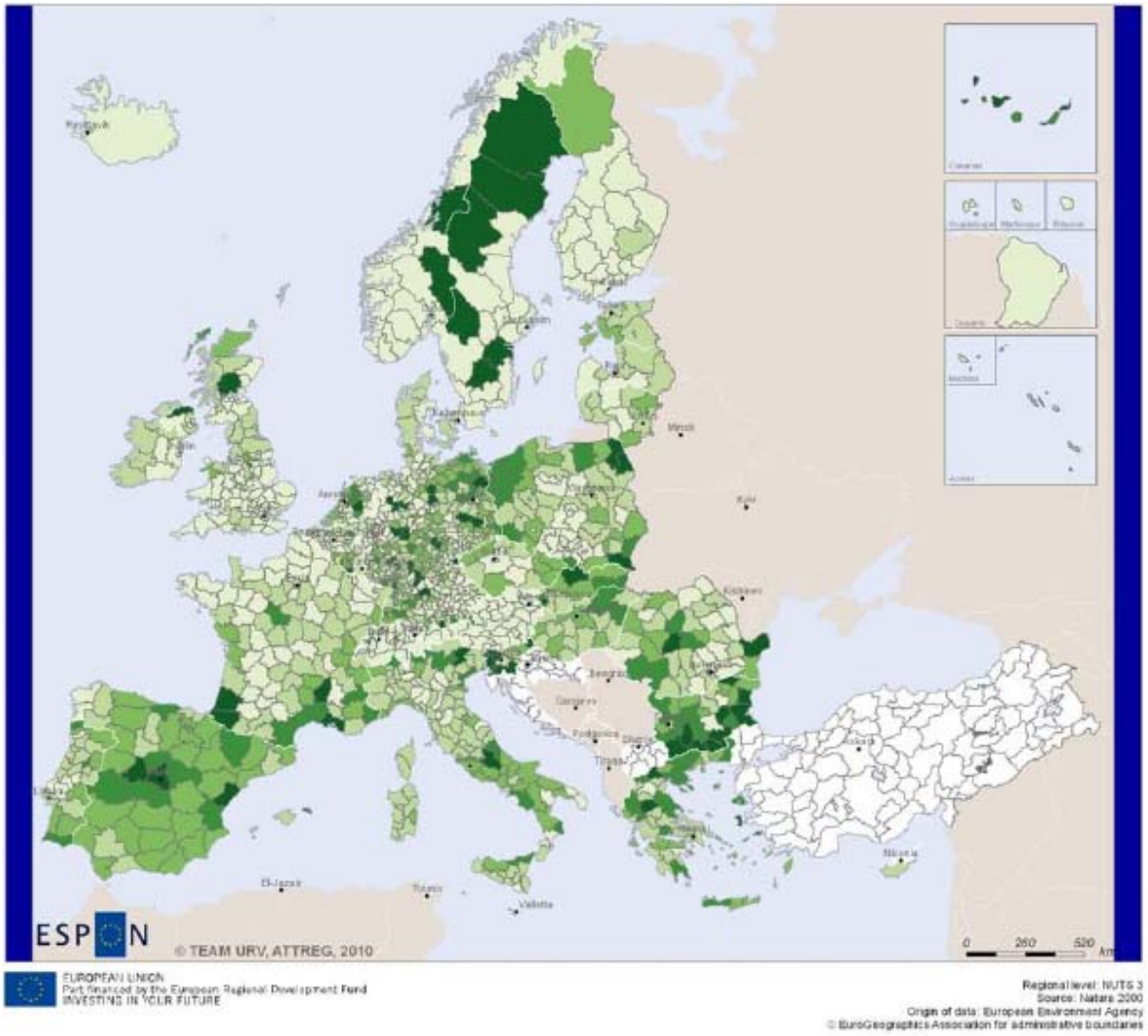
Map 13 Monuments and other touristic sights. ATTREG project. Interim Report, 2011. ESPON applied research

Case Study	NUTS3 Code	Observations
Basque Country	ES211/ES212/ES213	Very low 0.00-1.04
Navarra	ES220	Very low 0.00-1.04
Offenburg	DE134	Very low 0.0-1.04
Midden Delfland	NL333	Low 1.05-2.08
THY NP	DK050	Very low 0.00-1.04
Ljubljana UR	SI021	Medium 2.09-4.15



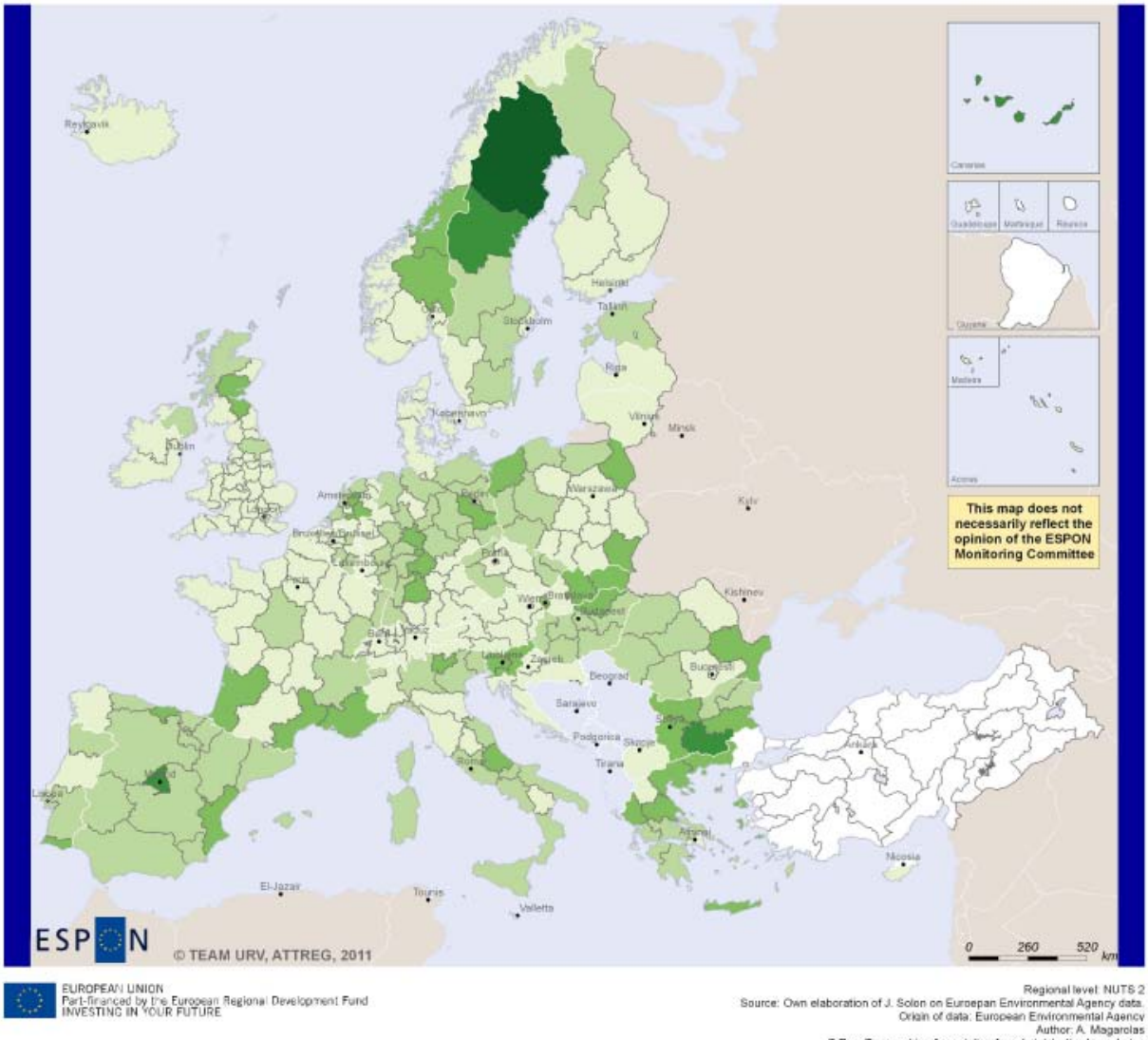
Map 14 Satisfied residents 2002-2006. ATTREG project. Interim report, 2011. ESPON applied research

Case Study	NUTS3 Code	Observations
Basque Country	ES211/ES212/ES213	23.69%-38.67%
Navarra	ES220	38.68%-53.67%
Offenburg	DE134	38.68%-53.67%
Midden Delfland	NL333	53.68%-68.66%
THY NP	DK050	68.67%-83.65%
Ljubljana UR	SI021	38.68%-53.67%



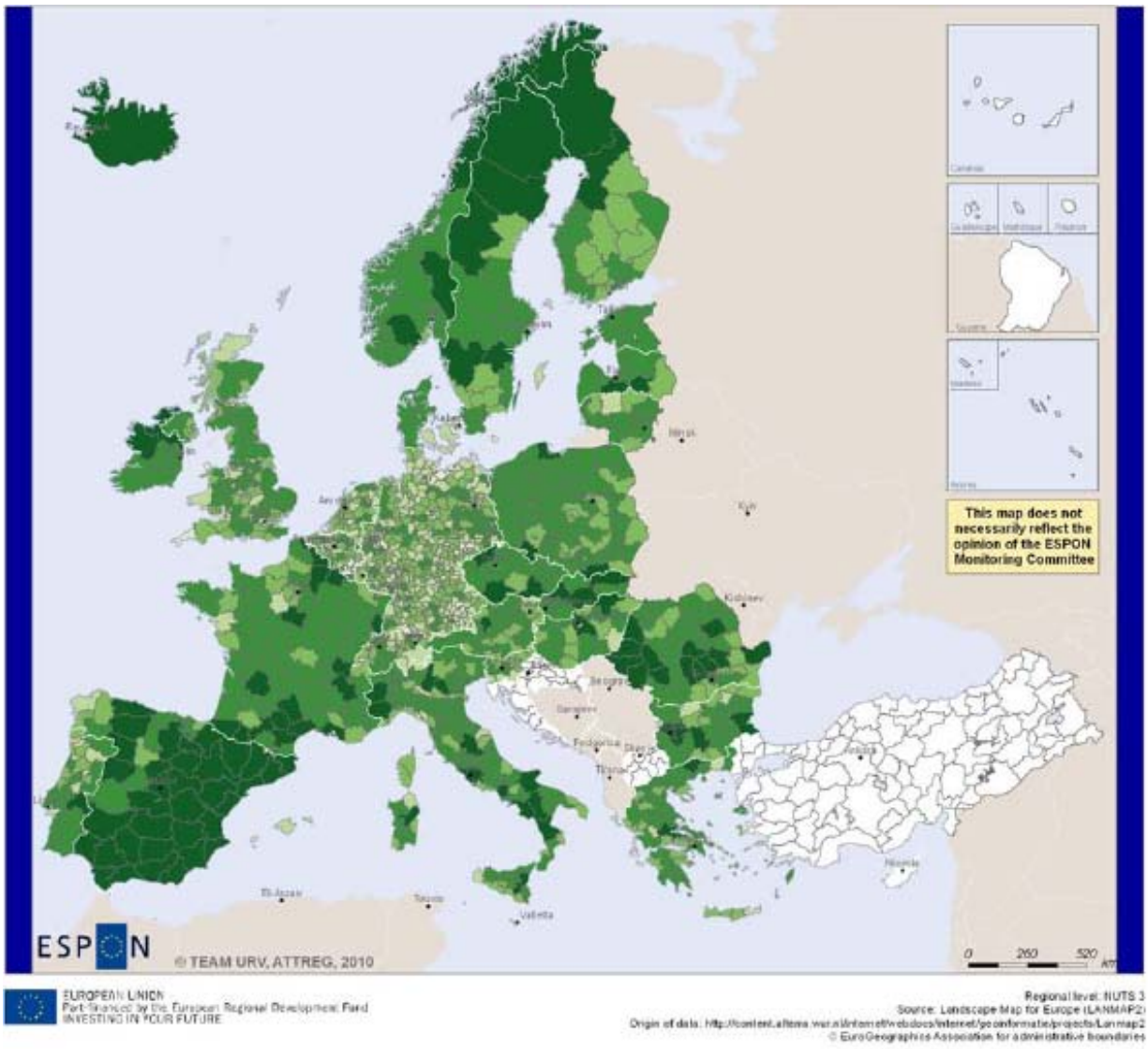
Map 15 Percentage share of Natura 2000 sites. ATTREG project. Interim Report, 2010. Annex Br1. ESPON applied research.

Case Study	NUTS3 Code	Observations
Basque Country	ES211/ES212/ES213	Low 10.1-25
Navarra	ES220	Medium 25.1-40
Offenburg	DE134	Low 10.1-25
Midden Delfland	NL333	Medium-high 40.1-60
THY NP	DK050	Low 10.1-25
Ljubljana UR	SI021	Low 10.1-25



Map 16 Quality landscape based on Natura 2000. ATTREG project. Interim report, 2011. ESPON applied researdch

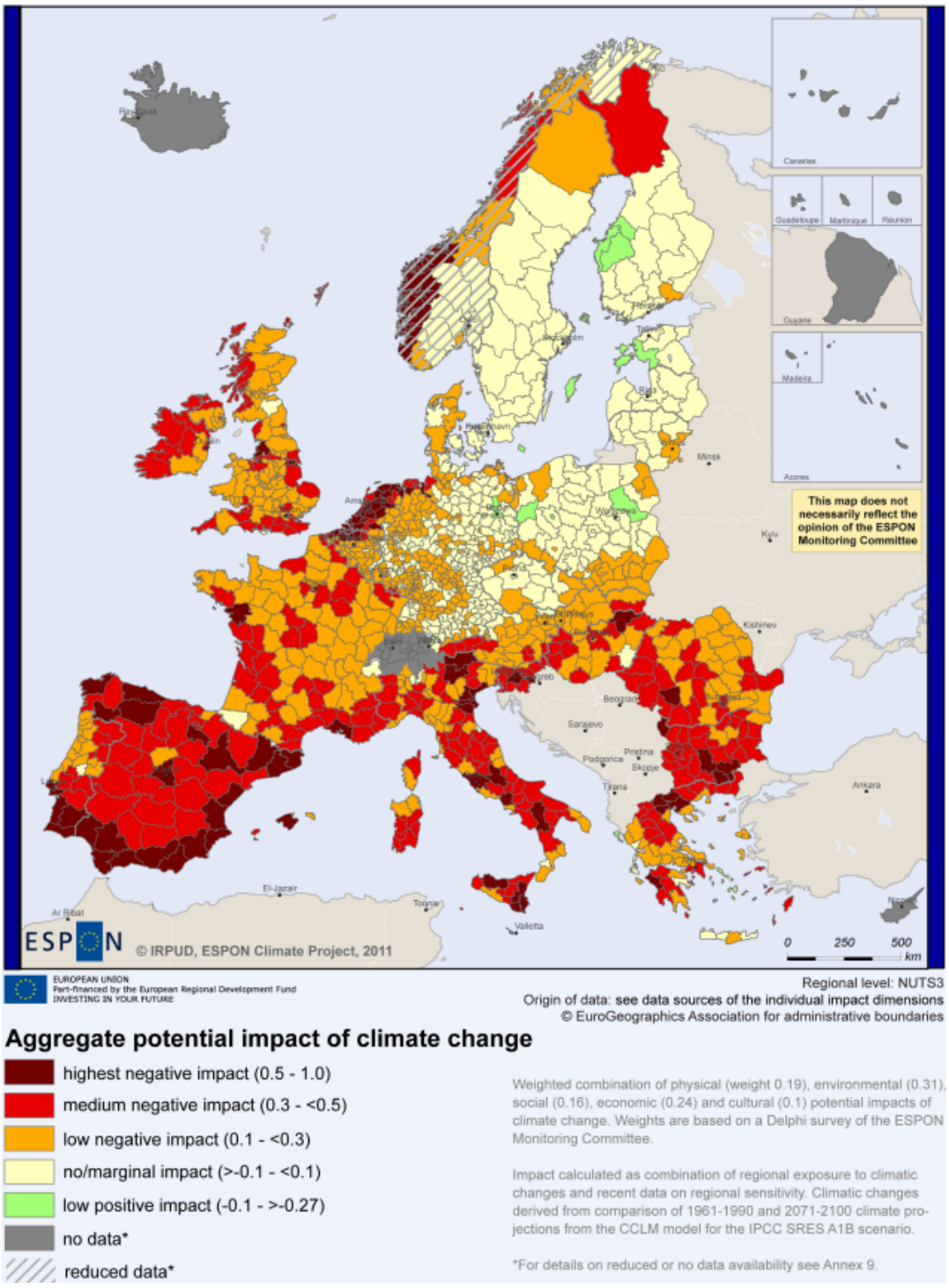
Case Study	NUTS3 Code	Observations
Basque Country	ES211/ES212/ES213	20.01%-40.00%
Navarra	ES220	20.01%-40.00%
Offenburg	DE134	40.01%-60%
Midden Delfland	NL333	40.01%-60%
THY NP	DK050	0.00%-20.00%
Ljubljana UR	SI021	40.01%-60%



Map 17 Landscape diversity. ATTREG project. Interim report, 2010. Annex Br1. ESPON applied research.

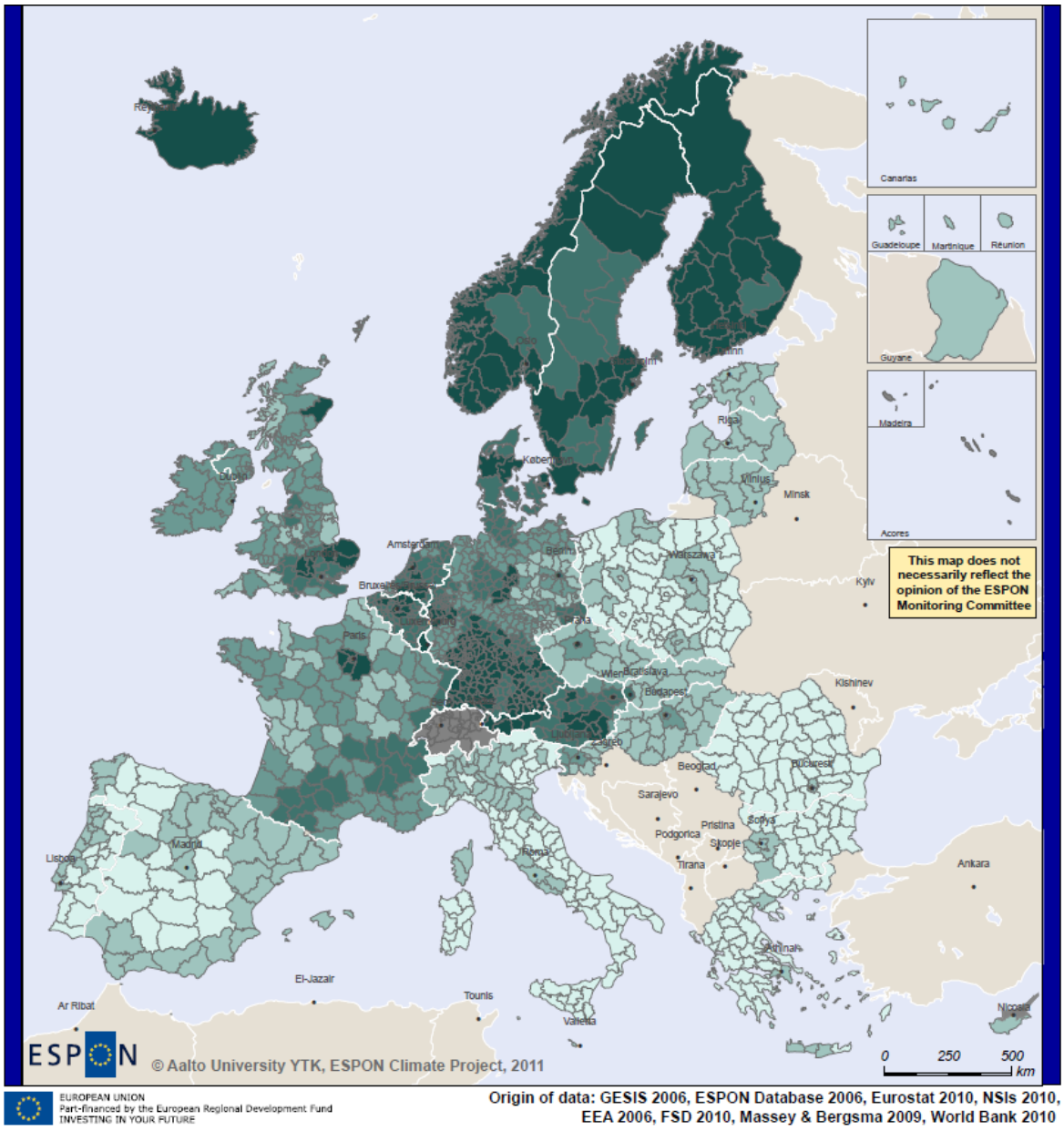
Case Study	NUTS3 Code	Observations
Basque Country	ES211/ES212/ES213	Medium-high
Navarra	ES220	Very high
Offenburg	DE134	Medium
Midden Delfland	NL333	Low
THY NP	DK050	High
Ljubljana UR	SI021	Medium

6.5.3. Climate change



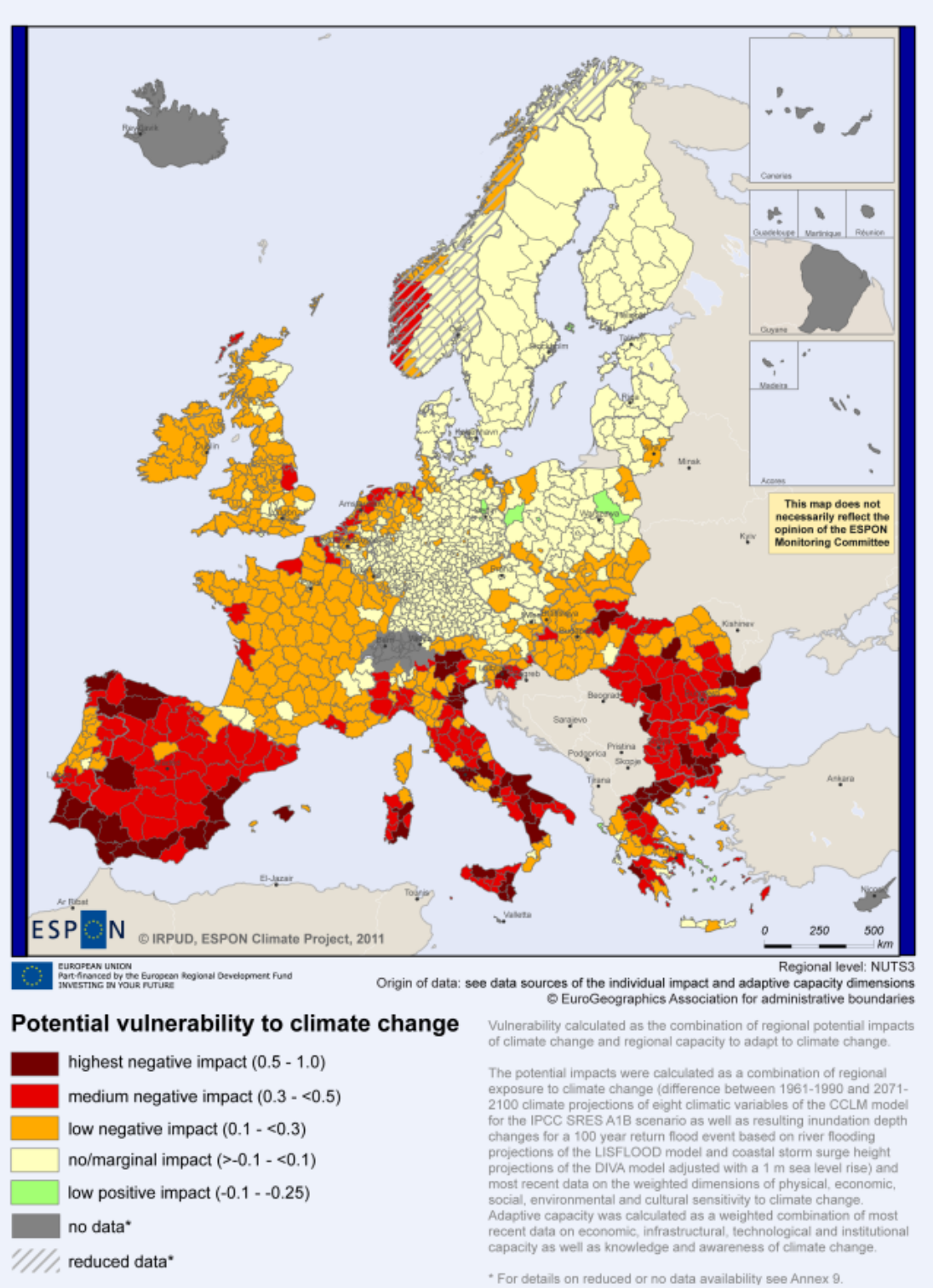
Map 18 Aggregate potential impact of climate change. ESPON CLIMATE project, 2011. ESPON applied research.

Case Study	NUTS3 Code	Observations
Basque Country	ES211/ES212/ES213	Medium
Navarra	ES220	Medium
Offenburg	DE134	Low
Midden Delfland	NL333	Highest
THY NP	DK050	Low
Ljubljana UR	SI021	Medium-high



Map 19 Overall capacity to adapt to climate change. ESPON CLIMATE project, 2011. ESPON applied research.

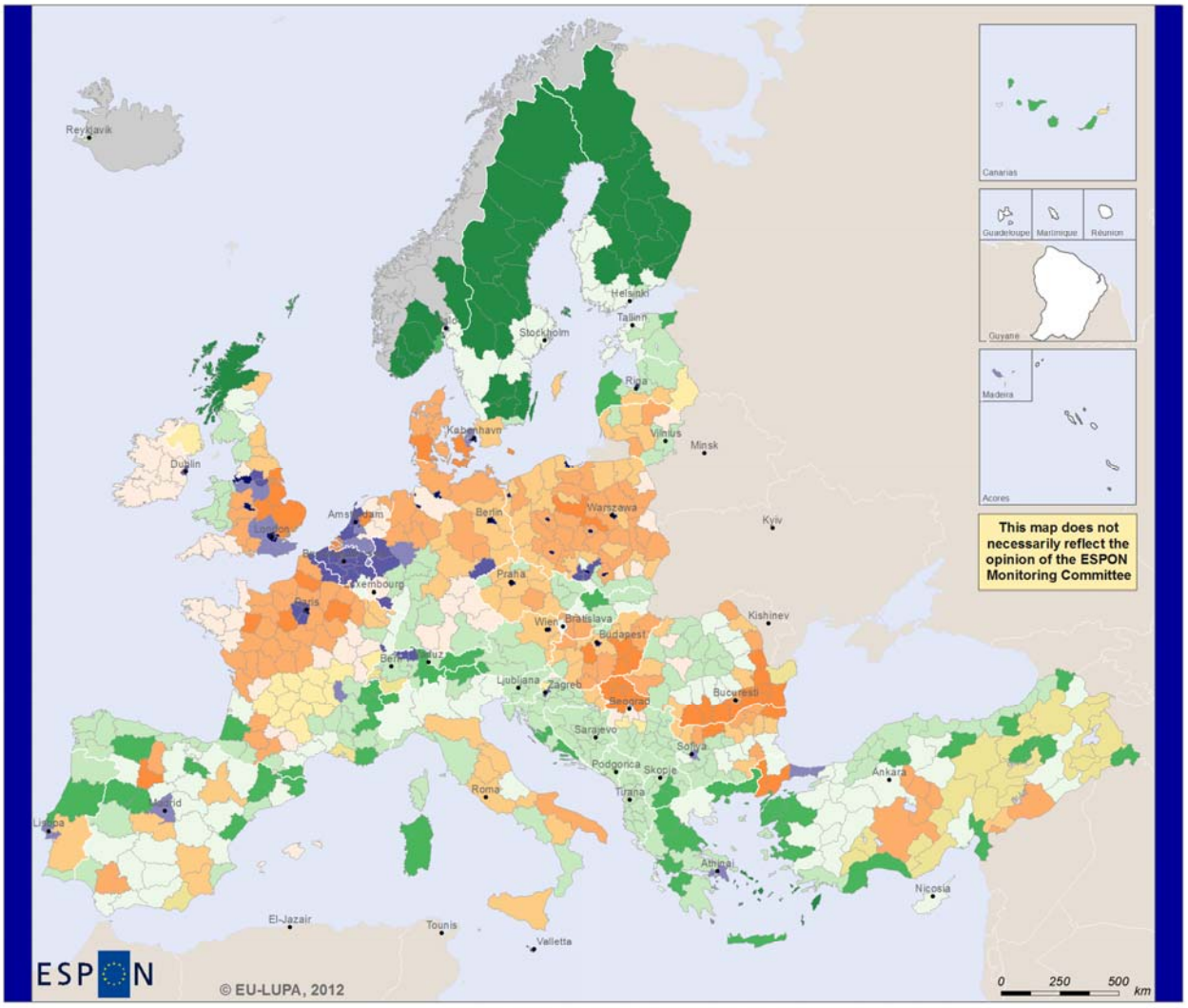
Basque Country and Navarra show low capacity whereas the rest of the cases show high and very high adaptation capacity to climate change



Map 20 Potential vulnerability to climate change. ESPON CLIMATE project, 2011. ESPON applied research.

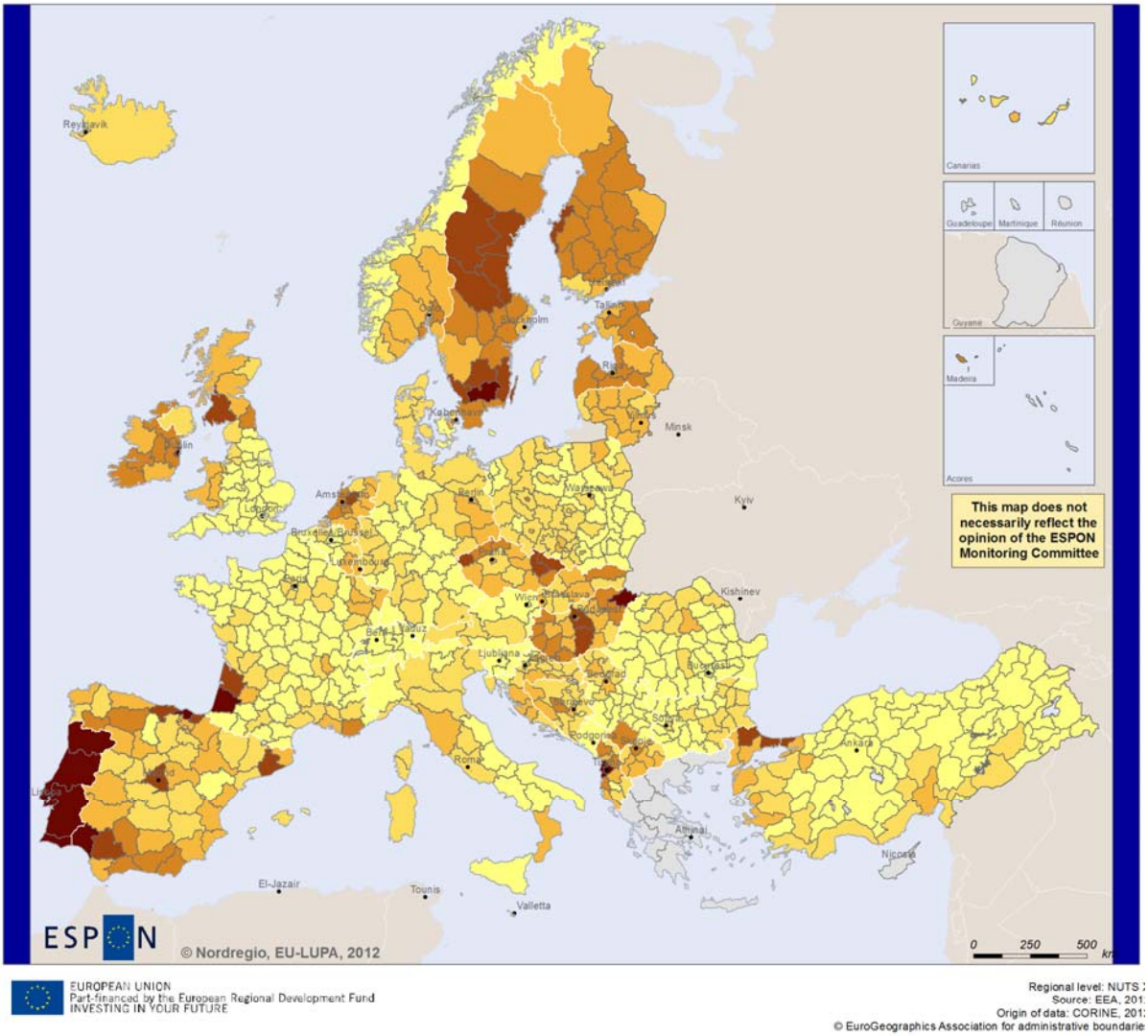
Case Study	NUTS3 Code	Observations
Basque Country	ES211/ES212/ES213	Medium-low
Navarra	ES220	Low
Offenburg	DE134	No/marginal
Midden Delfland	NL333	Medium
THY NP	DK050	No/marginal
Ljubljana UR	SI021	Medium-high

6.5.4. Land use characterization



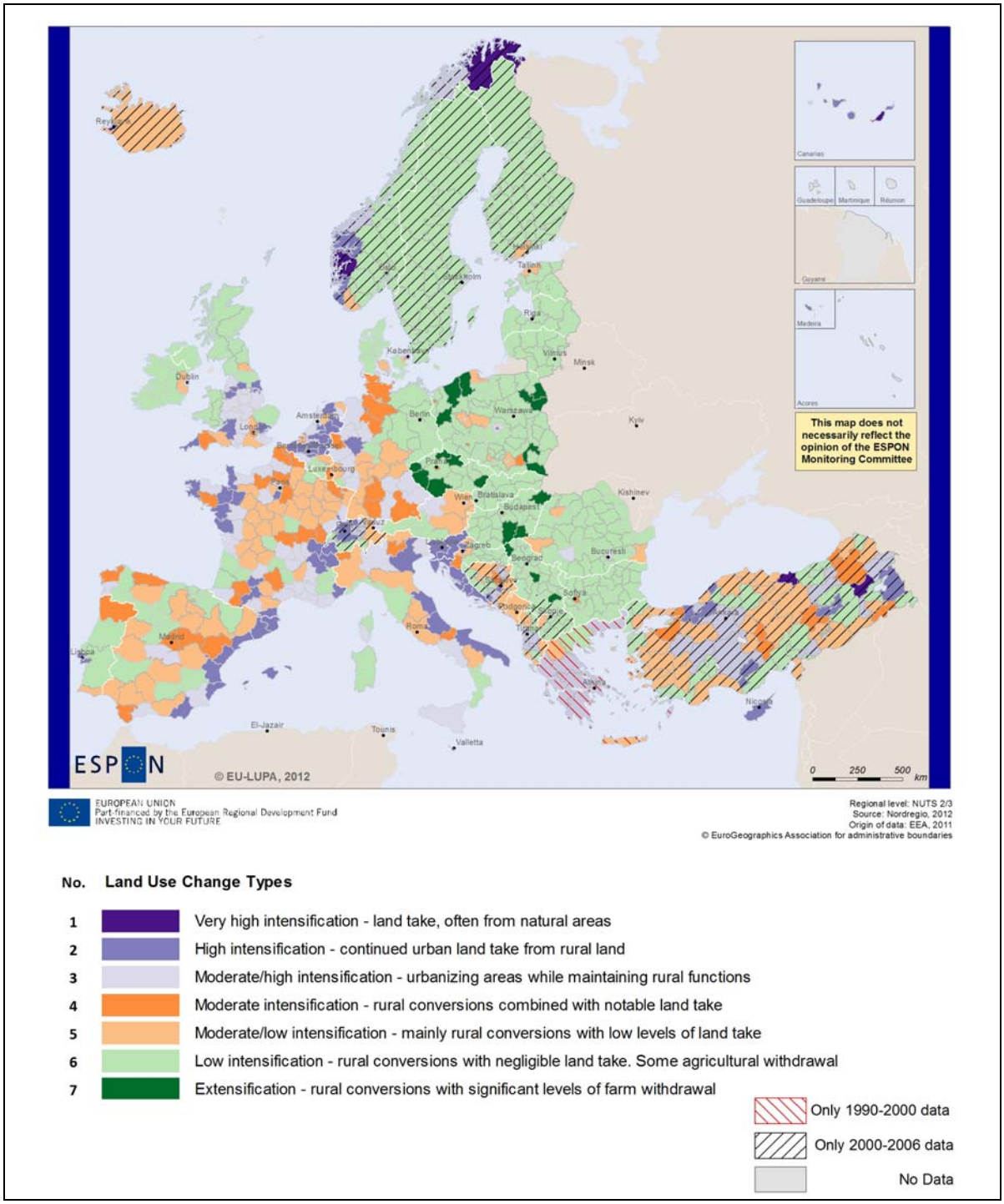
Map 21 Prevailing characteristics of land use 1990-2006. EU-LUPA project, 2012. Final Report. ESPON applied research

Case Study	NUTS3 Code	Observations
Basque Country	ES211/ES212/ES213	Diverse rural forest
Navarra	ES220	Diverse in rural areas
Offenburg	DE134	Diverse rural forest
Midden Delfland	NL333	Suburban peri-urban
THY NP	DK050	Arable land in peri-urban and rural areas
Ljubljana UR	SI021	Diverse rural forest



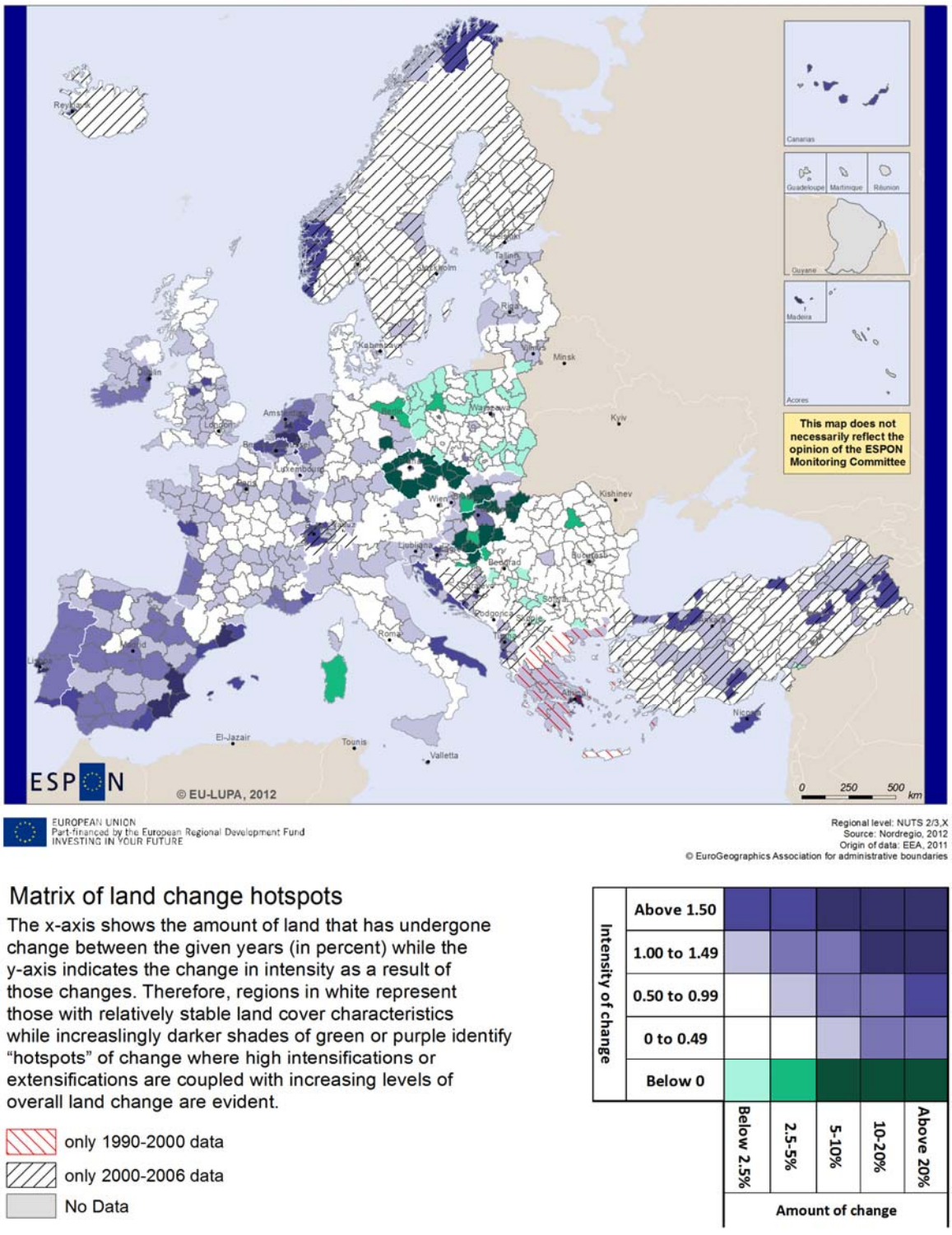
Map 22 Amount of regional land change 2000-2006. EU-LUPA project, 2012. Final report. ESPON applied research.

Case Study	NUTS3 Code	Observations
Basque Country	ES211/ES212/ES213	5.95%-12.51%/3.31%-5.91%/1.20%-20.09%
Navarra	ES220	1.20%-20.09%
Offenburg	DE134	0.51%-1.19%
Midden Delfland	NL333	3.31%-5.91%
THY NP	DK050	1.20%-20.09%
Ljubljana UR	SI021	0%-0.50%



Map 23 Land use change typology. EU-LUPA project, 2011. Final report. ESPON applied research.

Case Study	NUTS3 Code	Observations
Basque Country	ES211/ES212/ES213	Low intensification
Navarra	ES220	Low intensification
Offenburg	DE134	Moderate intensification
Midden Delfland	NL333	Moderate-high intensification
THY NP	DK050	Low intensification
Ljubljana UR	SI021	High intensification



Map 24 Hotspots of land change 1990-2006. EU-LUPA project, 2012. Final report. ESPON applied research.

Hot spots within liveland case studies could be only identified partly in the Basque Country (Bizkaia and Gipuzkua) and Midden-Delfland where both the amount of land use changes and the intensity of such changes are high.

Besides processes similar to the above described, where a clear divide between latifundios (dominating in the south) and minifundios (dominating in the north) both have been characterized by low productivity the membership of EU has had some of the same land use consequences as in Portugal. Intensification due to structural changes in land ownership has been an important factor, and this combined with the CAP accounts for much of the intensification taking place in rural areas. As emphasized by Molina (2002, p2), however, "Land tenure is, after decentralization, the second most important supporting/impeding factor for National/Regional Forest Programmes in the Mediterranean regions". In the case of rural Spain the changes can be illustrated through the example of the Dehesas, a traditional, low-input, extensive agroforestry system (Meeus 1995, here from Plieninger and Schaar, 2008) combining forestry with extensive livestock grazing and farming. Low productivity and low intensity has been an easy target for intensification where the most influential force being the Common Agricultural Policy, which supported the production of cereals and cattle, sheep, and goat husbandry in the dehesas. Again, this is an important process adding to explaining the changes in intensification.

On the Iberian Peninsula, but definitely also in other parts of Southern Europe, a starting point characterized by very low land use intensities in rural areas and farming practices more related to subsistence and local markets than to European and World Market conditions have been an obvious starting point for a process of land use intensification in rural areas that took off before 1990, peaked in the period 1990 to 2000, and now being more or less "normalized" except for regions in Portugal where intensification of rural areas are still ongoing. And instead of rural intensification related to rural activities many of former rural areas – especially in coastal areas – are exposed to a new category of intensification related to urban sprawl.

In contrast to the situation on the Iberian Peninsula, the immediate effects of the inclusion of East-Central European countries - previously part of the "East Block" mostly characterized by state and cooperative ownerships - are reflected through a drastic decline in intensity over substantial areas in the period from 1990 to 2000. In contrary to the situation in Spain and Portugal the basic land reforms distributing former estate land to small and medium scale farming had taken place pre Second World War, and in many cases during the 19th century. The structural changes connected to the post WW2 reforms in ownership instead resulted in the establishing of state farms and cooperatives. It had some immediate consequences in relation to both intensity and productivity, and was paralleled by regional policies in relation to rural areas due to the state interests in maintain a high level of production to serve the requests from the Soviet Union through COMECON. And as a consequence transfer payments and subsidies enabled intensities and productivities that were unrelated to market conditions. So the development from 1990 and onwards abandoning the former state and cooperative ownerships forms has had some immediate consequences in relation to intensity. On one hand that many of the new private farms were small and did not have the necessary means to ensure a high intensity in land use. And on the other hand that the larger farms with intensification potentials in many cases involved foreign investments which did not necessarily lead to intensifications. The situation in Poland being different in this respect because of a dominance of private land use activities,

and as a consequence effects as described above only relating to the relatively smaller areas owned by cooperatives and a few state holdings as well.

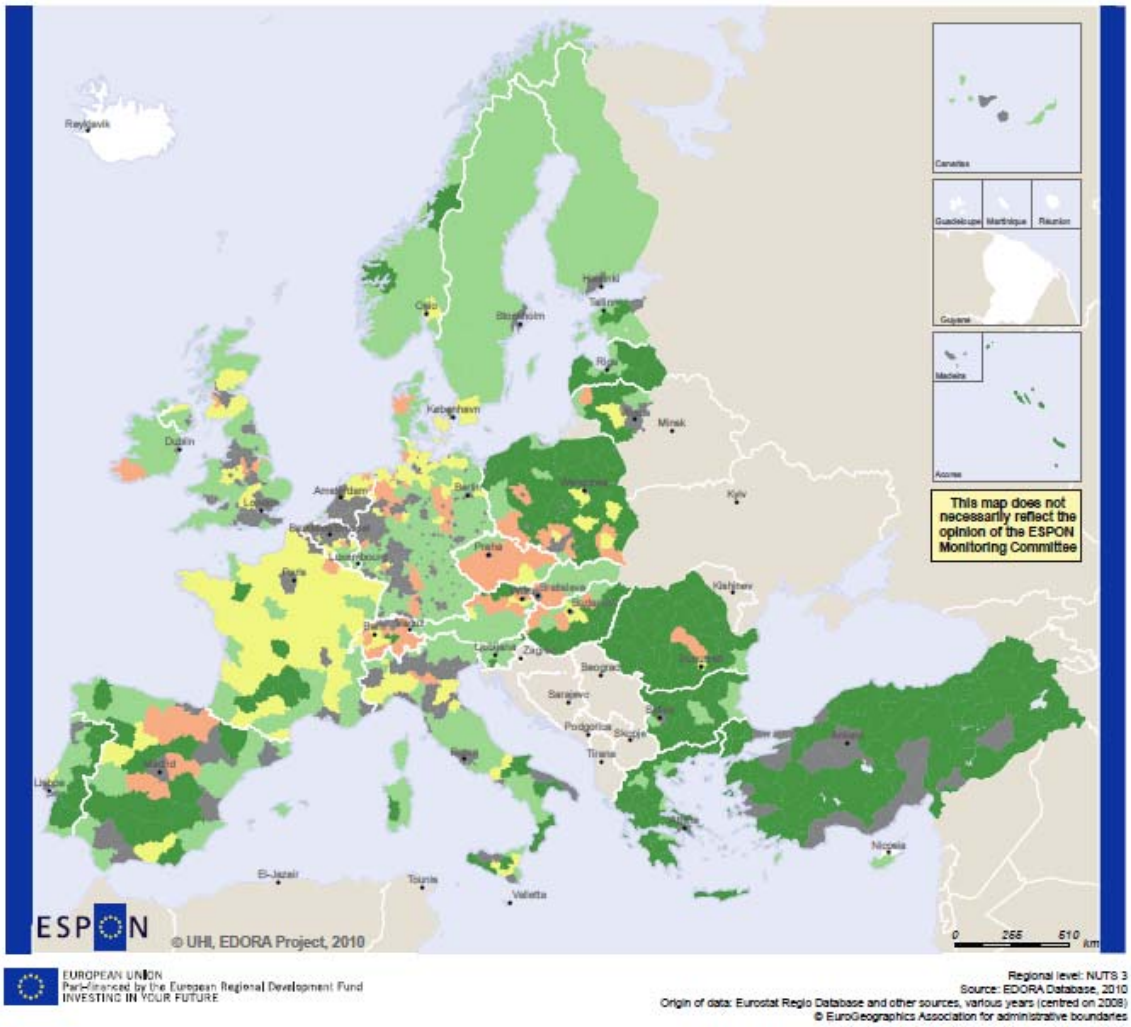
The situation in Poland was, however also affected through the lack of funding for investments in many of the small farms functioning more as subsistence bases for a still older population – a situation that can be found in rural areas, not the least in regions remote to the capital regions or in mountainous areas in most of the former "East Block". And several of the regions where this has been the dominating characteristic has continued being regions of decreasing intensity through the 2000-2006 period as well. One important element in this connection has in Poland been the small size of a substantial part of the already private farms. The advantage in other parts of East-central Europe has been that in the aftermath of the first round of extensification the new private farms were able to establish themselves not as subsistence activities but as professional and capital intensive farms on previous state or cooperative owned large scale farms. And similar situations have appeared in relation to other types of land use.

Ireland being a "hotspot" for IT development during the 1990's had some spin-off in relation to increased intensification of activities related to land use. Partly because the attraction of labour force away from direct land use to industrial activities required adjustment in land related activities requiring technology to replace the missing workforce. With a partly collapse of the IT-adventure after 2000 the process described above came to a halt, and the shift is apparent when comparing the 1990-2000 and the 2000-2006 situations.

While missing data for Sweden, Finland and Norway for the period 1990-2000 does not allow a comparison between the two periods, an important issue of the effects of increasing activities related to resource extraction, especially in relation to oil and gas development, is very apparent for the 2000-2006 period shown for Norway. While fisheries used to be a mainstay for coastal communities in Norway the picture today is a high degree of dependency on the sea, but in relation to energy resource extraction. This leads to the inclusion of large areas for on-shore production facilities, but requires at the same time related economic activities – processing, investigation, planning, education etc., which shows through inclusion of still larger areas for housing.

European tourism is an activity requiring still larger areas, and the development of the Spanish coastline illustrates that it is not only a question of short term changes, but seems to have been a consistent development process throughout the whole period from 1990 to 2006.

As a conclusion it could be argued that the map of "hotspots" represents a generalization of land changes which are based on absolute changes in land use. This is advantageous because there is no chance that it "misrepresents" certain land change phenomenon taking place in the regions. At the same time, it lacks in terms of characterizing the underlying processes that are actually the result of these intensifications, extensifications and/or high amounts of overall land change (i.e. the changing social and economic activities that take place as a result of such changes).



Map 25 Structural types of rural areas, 2006 (Map 18 from 1st ESPON 2013 Synthesis Report, 2010)

Offenburg	Consumption countryside
Navarra	Diversified (strong secondary sector)
Basque Country	Predominantly urban region
Midden-Delfland	Predominantly urban region
Thy	Consumption countryside
Ljubljana Urban Region	Consumption countryside

7. Common Analytical Framework and assessment of liveability in the practices under study

In Part 2 of the present report the methodology behind the CAF and the process followed in its elaboration was already presented.

The present chapter is devoted to the implementation of the CAF for the analysis of the landscape practices offered by LIVELAND stakeholders for evaluation and benchmarking according to the 'planning cycle' of making, implementing, evaluating and renewing a plan or program.

Application of the CAF: contribution to "liveability" components):

1. Assessment and evaluation methods Analysis or "study" of space or landscape with methods like assessment, characterisation, quantitative analysis of developments in the past, scenarios of future developments, etc. In most cases such preparatory studies are made by 'planning' experts, which can be engaged within the government or hired in from an external specialist agency.
2. Planning processes and participation "Processes" of informal preparation of the 'plan', including consultations of stakeholders / interest groups, citizens (by public meetings) and also politicians.
3. Vision and Strategies"Vision" and strategy of a plan or program: identification of spatial and landscape challenges, description of objectives and measurable targets (for a certain period). Targets can often be described in terms of protection of valuable areas (designation), desired future developments (designation of new functions) and management of certain special or public areas.
4. Actions and measures: "Actions" and measures of the government, included in an implementation program or 'list of actions'.

    - Protection
    - Development planning
    - Management

5. Impact measurement and monitoring "Monitoring" indicators and programs for evaluation of the impacts of the actions and measures. Evaluations are often prepared by specialists (internal or external) , but in most cases also approved by politicians.
6. Planning procedures and decisions "Procedures" to take formal decisions on the (draft) plan, including formal participation and juridical procedures. Final decisions are taken by governance politicians and (in most cases) approved by politicians in controlling parliaments.

    As outlined in the introduction to the benchmarking a Common Analytical Framework (CAF) has been defined as a basis for the systematization of input information for benchmarking, with regard to the "Planning Practice" in each of the project case studies, and its practical application act as the interface between the Baseline Analysis and the benchmarking analysis itself Through the CAF different components of liveability has been defined which are closely related to landscape characteristics and moreover to landscape functions.

7.1. Quantification of the Common Analytical Framework

As previously discussed the overall goal of the Common Analytical Framework is to develop a framework that can be used to assess the performance of plans and policies with respect to landscape as an asset in regional development. Furthermore it intends to provide input to the identification of the landscape as a source of liveability and well-being which can contribute to the overall aim of the LIVELAND-project in several ways.

The qualitative approach to the CAF aims at:

- Identify good and best practices of knowledge based decision making for liveable landscapes in the stakeholder regions, in particular of landscape and spatial planning, and of their impact on regional development.
- Define criteria for the integrating of landscape and regional strategies.
- Identify actions or measures in the stakeholder regions which have proven to be successful in implementing combined landscape protection and socio-economic development.

A large set of qualitative characteristics tend, however, to become very complex and therefore difficult to recognize similarities and differences in the regional approaches beyond the comparison of individual statements.

As a consequence a quantitative approach has been developed aiming at identifying the overarching characteristics across the regions and cases at large. This has had implications on the CAF aiming at ensure:

- Consistency ensuring the logic of the questionnaire to be evident for the partners;
- Convertibility aiming at ensuring a qualitative characteristic being convertible into one of the following:
  - A *Unidimensional scaling* method such as the Likert scale approach (for instance a scale from 1 to 5 showing a range from 1=strongly unusable to 5=strongly usable) where the output in this case would be a number between 1 and 5;
  - A Categorical quantity (for instance a set of categories within the same framework such as “Public involvement in planning procedure outlines □; Public involvement in drafting plans □; Public involvement in planning decisions □; Public involvement in plan revisions □”) where the output in this case would be a number between 0 and 4.
  - A Binary quantity with the range 0 and 1 indicating not existing and existing respectively. The difference between the binary and the categorical quantities is that any registration of a binary quantity would be independent on other quantities (eve others may be depending on the binary) while the elements in a categorical quantity are related to the same topic.
  - It has been decided to this limited set of scales in order to keep the response options both relevant and transparent for the partners.
- Completeness – In order to ensure comparativeness the body of the questionnaire should be based on components which are relevant for all cases.

7.2. The two dimensions: Functions and Components

As a means of providing overview to the analysis the CAF has been structured in two dimensions: the functions, and the components.

The *functions* are defined through specific qualities of landscapes related to different types of human activities. Out of a large set of functions a selection has been made representing the most common issues taken forward by the stakeholders. And of course related to which functions could be converted into quantitative measures. This list includes the following functions:

1. Cultural,
2. Social,
3. Economic,
4. Health, and
5. Freedom.

The *components* are related to what policy making and planning are requesting in order to move towards the creation and management of livable landscapes. The systematic structure in relation to the quantification refers to parts of the planning stages that had been identified within the project application:

1. **Evaluation and analysis**
2. Planning process and participation
3. **Strategy and vision**
4. **Actions and measures**
5. **Monitoring**
6. Planning procedures and decisions

The categories shown in bold have all been convertible into coherent sets of quantitative categories, and appear therefore directly in the list of components throughout the analyses. It does not leave out the two planning components, but in order to include them in the analysis issues from the planning processes, planning procedures, questions regarding participation and decision making have been included through **a general category** and **a set of indicators** which goes across the 6 components outlined above.

7.3. Coding and ensuring comparability of the data

The coding of the data is a simple consequence of the choice of type of quantity, i.e. whether it is based on a One-dimensional scaling, a Categorical quantity or a Binary quantity. These categories provide inherited skewed data because when adding up a number of variables following a Likert scale from 1 to 5, a number of categorical quantities each with for example 3 tick-boxes and a number of binary data only giving the option of 0 or 1 as values will automatically put more weight to the Likert values compared to the binary data.

To avoid this it may be possible to provide individual weights to the three categories, or to enable the same weight to all three categories. As the individual weighting may become an issue at a later point of time it has been decided to provide the same weight to all three categories. And in order to simplify the procedure the interval has been set from 0 to 1.

It means that such normalization would include the binary data without any changes, i.e. still being either 0 or 1.

For the categorical quantities two tick-boxes gives three options. If no box is ticked the value would be set to 0. One box generates the value 0.5 while both boxes ticked would result in the value 1. Normalizing the categorical data simply means dividing 1 with the number of options.

And more or less the same procedure is used in normalizing one-dimensional scaling. Most easy if the starting value is 0 because the conversion would be dividing 1 with the maximum value times the selected value. And if the scale has another offset than 0 the normalization should be regulated accordingly.

As appendix to this report the data generated out of the responses to the CAF questionnaires have been attached. The 7518 cells of the spreadsheet (21 columns and 358 rows) require a little explanation in order to interpret correctly (See figures 16 and 17)

The left part of the table is used for identifying the different variables which has been the outcome of the conversion of the CAF questionnaire into a dataset.

- First column show the variable name used for the row in the table. The name is unique and enables a retrieval of it through the analysis.
- Second column show which component is covered by the variable.
- Third column show which function is covered by the variable.
- Fourth column provide more detailed definition of the variable.
- Fifth column show what may be the subcategory within the definition of the variable.

VARIABLES		DATA DEFINITIONS			DATA CHARACTERISTICS			RAW DATA						OBS	NORMALIZED DATA					
		Theme	Definition	Subcategory				Thy	Ljubljana	Delftland	Basque	Offenburg	Navarra		Thy	Ljubljana	Delftland	Basque	Offenburg	Navarra
VARIABLE	COMPONENT	THEME	DEFINIT	SUBCAT	TYPE	MIN	MAX	THY	LJUBL	DELFL	BASQ	OFF	NAVAR	CROSS	THY-N	LJUBL-N	DELFL-N	BASQ-N	OFF-N	NAVAR-N
CLT_01	General	Culture	Deal with liveability?	NONE	VAL_0_1	0	1	1	1	1	1	1	1	6	1,00	1,00	1,00	1,00	1,00	1,00
CLT_02	General	Culture	Map on liveability components?	Evaluation/strategy/actio	CATEGORY	0	4	1	2	1	3	2	2	6	0,25	0,50	0,25	0,75	0,50	0,50
CLT_03	General	Culture	Strategy on liveability?	5 levels	LIKERT	0	5	4	2	5	5	3	3	6	0,80	0,40	1,00	1,00	0,60	0,60
CLT_04	General	Culture	Contradictions between components and policy?	5 levels	LIKERT	0	5	3	3	0	2	2	1	6	0,60	0,60	-	0,40	0,40	0,20
CLT_50	4-Overall Action	Culture	Propose actions/measures to liveability?	5 levels	LIKERT	0	5	4	0	5	5	5	4	6	0,80	-	1,00	1,00	1,00	0,80
CLT_70	5-Overall Monitoring	Culture	Monitoring a part of the plan?	5 levels	LIKERT	0	5			0	1	0	4	4			-	0,20	-	0,80
CLT_A_10	Indicators	Elements of ID	Indicators addressed?	How many?	CATEGORY	0	4	3	2	2	3	0	4	6	0,75	0,50	0,50	0,75	-	1,00
CLT_A_10_1	Indicators	Elements of ID	Evaluation/analysis?	Evaluation/analysis?	VAL_0_1	0	1	1	1	1	1		1	5	1,00	1,00	1,00	1,00		1,00
CLT_A_10_2	Indicators	Elements of ID	Strategy/vision?	Strategy/vision?	VAL_0_1	0	1	1	1	0	0		1	5	1,00	1,00	-	-		1,00
CLT_A_10_3	Indicators	Elements of ID	Actions/Measures?	Actions/Measures?	VAL_0_1	0	1	1	0	1	1		1	5	1,00	-	1,00	1,00		1,00
CLT_A_10_4	Indicators	Elements of ID	Monitoring?	Monitoring?	VAL_0_1	0	1	0	0	0	1		1	5	-	-	-	1,00		1,00
CLT_A_20	1. Eval. And analysis	Elements of ID	Methods described on state of landscape?	5 levels	LIKERT	0	5	2	3	1	5		1	5	0,40	0,60	0,20	1,00		0,20
CLT_A_21	1. Eval. And analysis	Elements of ID	Methods employed on landscape?	Selective/Spatially inclusiv	CATEGORY	0	2	1	1	0	1		1	5	0,50	0,50	-	0,50		0,50
CLT_A_40	3. Strategy and vision	Elements of ID	Expose visions and strategies based on experiences?	5 levels	LIKERT	0	5	5	1		3		2	4	1,00	0,20		0,60		0,40
CLT_A_41	3. Strategy and vision	Elements of ID	Visions and strategies to territorial protection?	Challenges/Objectives/Tar	CATEGORY	0	3	2	2		2		1	4	0,67	0,67		0,67		0,33
CLT_A_42	3. Strategy and vision	Elements of ID	Well defined and strategies well defined?	Qualitative/Quantitative	CATEGORY	0	2	2	1		1		2	4	1,00	0,50		0,50		1,00
CLT_A_43	3. Strategy and vision	Elements of ID	The character of the objectives	Protection/development/n	CATEGORY	0	3	3	2		3		2	4	1,00	0,67		1,00		0,67
CLT_A_44	3. Strategy and vision	Elements of ID	Timeline for objectives and targets?	5 levels	LIKERT	0	5	4	0		2		4	4	0,80	-		0,40		0,80
CLT_A_60	4. Actions and measures	Elements of ID	Actions/Measures from landscape planning?	Protection/development/n	CATEGORY	0	3	3	0	1	3		2	5	1,00	-	0,33	1,00		0,67
CLT_A_61	4. Actions and measures	Elements of ID	Comply with vision and strategies?	5 levels	LIKERT	0	5	4		5	3		2	4	0,80		1,00	0,60		0,40
CLT_A_62	4. Actions and measures	Elements of ID	Alligned with challenges, objectives and targets?	5 levels	LIKERT	0	5	4		5	4		4	4	0,80		1,00	0,80		0,80
CLT_A_63	4. Actions and measures	Elements of ID	What kind of actions and measures?	Formal/informal	CATEGORY	0	2	2	0	2	2		2	5	1,00	-	1,00	1,00		1,00
CLT_A_80	5. Monitoring	Elements of ID	Defined approaches and methods for monitoring?	5 levels	LIKERT	0	5				0	5	4	3				-	1,00	0,80
CLT_A_81	5. Monitoring	Elements of ID	Monitoring visions and strategy?	5 levels	LIKERT	0	5				2	0	4	3				0,40	-	0,80
CLT_B_10	Indicators	Landscape Character	Indicators addressed?	How many?	CATEGORY	0	4	4	2	2	3	3	1	6	1,00	0,50	0,50	0,75	0,75	0,25
CLT_B_10_1	Indicators	Landscape Character	Evaluation/analysis?	Evaluation/analysis?	VAL_0_1	0	1	1	1	1	1	1	1	6	1,00	1,00	1,00	1,00	1,00	1,00
CLT_B_10_2	Indicators	Landscape Character	Strategy/vision?	Strategy/vision?	VAL_0_1	0	1	1	1	0	0	1	0	6	1,00	1,00	-	-	1,00	-
CLT_B_10_3	Indicators	Landscape Character	Actions/Measures?	Actions/Measures?	VAL_0_1	0	1	1	0	1	1	1	0	6	1,00	-	1,00	1,00	1,00	-
CLT_B_10_4	Indicators	Landscape Character	Monitoring?	Monitoring?	VAL_0_1	0	1	0	0	0	1	0	0	6	-	-	-	1,00	-	-
CLT_B_20	1. Eval. And analysis	Landscape Character	Methods described on state of landscape?	5 levels	LIKERT	0	5	2	3	2	5	2	1	6	0,40	0,60	0,40	1,00	0,40	0,20
CLT_B_21	1. Eval. And analysis	Landscape Character	Methods employed on landscape?	Selective/Spatially inclusiv	CATEGORY	0	2	1	1	0	1	1	1	6	0,50	0,50	-	0,50	0,50	0,50
CLT_B_22	1. Eval. And analysis	Landscape Character	Addressing different Functions of landscape?	Historic/cultural/uniquene	CATEGORY	0	5	3	3	3	5	3	1	6	0,60	0,60	0,60	1,00	0,60	0,20
CLT_B_40	3. Strategy and vision	Landscape Character	Expose visions and strategies based on experiences?	5 levels	LIKERT	0	5	5	1		4	4		4	1,00	0,20		0,80	0,80	
CLT_B_41	3. Strategy and vision	Landscape Character	Visions and strategies to territorial protection?	Challenges/Objectives/Tar	CATEGORY	0	3	2	2		2	3		4	0,67	0,67		0,67	1,00	
CLT_B_42	3. Strategy and vision	Landscape Character	Well defined and strategies well defined?	Qualitative/Quantitative	CATEGORY	0	2	2	1		1	1		4	1,00	0,50		0,50	0,50	
CLT_B_43	3. Strategy and vision	Landscape Character	The character of the objectives	Protection/development/n	CATEGORY	0	3	3	2		3	3		4	1,00	0,67		1,00	1,00	
CLT_B_44	3. Strategy and vision	Landscape Character	Timeline for objectives and targets?	5 levels	LIKERT	0	5	4	0		2	0		4	0,80	-		0,40	-	
CLT_B_60	4. Actions and measures	Landscape Character	Actions/Measures from landscape planning?	Protection/development/n	CATEGORY	0	3	3	0	1	3	3		5	1,00	-	0,33	1,00	1,00	
CLT_B_61	4. Actions and measures	Landscape Character	Comply with vision and strategies?	5 levels	LIKERT	0	5	4		5	3	4		4	0,80		1,00	0,60	0,80	
CLT_B_62	4. Actions and measures	Landscape Character	Alligned with challenges, objectives and targets?	5 levels	LIKERT	0	5	4		5	4	4		4	0,80		1,00	0,80	0,80	
CLT_B_63	4. Actions and measures	Landscape Character	What kind of actions and measures?	Formal/informal	CATEGORY	0	2	2	0	2	2	1		5	1,00	-	1,00	1,00	0,50	
CLT_B_80	5. Monitoring	Landscape Character	Defined approaches and methods for monitoring?	5 levels	LIKERT	0	5				0		3	2				-		0,60
CLT_B_81	5. Monitoring	Landscape Character	Monitoring visions and strategy?	5 levels	LIKERT	0	5				2		3	2				0,40		0,60
SOC_01	General	Social relations and capital	Deal with liveability?	NONE	VAL_0_1	0	1	0	0	0	1	1	1	6	-	-	-	1,00	1,00	1,00
SOC_02	General	Social relations and capital	Map on liveability components?	Evaluation/strategy/actio	CATEGORY	0	2				0	2	2	3				-	1,00	1,00
SOC_03	General	Social relations and capital	Strategy on liveability?	5 levels	LIKERT	0	5				1	5	3	3				0,20	1,00	0,60
SOC_04	General	Social relations and capital	Contradictions between components and policy?	5 levels	LIKERT	0	5				0	2		2				-	0,40	

Figure 16: Excerpt from the 7518 cells containing the quantification of the CAF questionnaire.

VARIABLES		DATA DEFINITIONS		
		Theme	Definition	Subcategory
VARIABLE	COMPONENT	THEME	DEFINIT	SUBCAT
CLT_01	General	Culture	Deal with liveability?	NONE
CLT_02	General	Culture	Map on liveability components?	Evaluation/strategy/actior
CLT_03	General	Culture	Strategy on liveability?	5 levels
CLT_04	General	Culture	Contradictions between components and policy?	5 levels
CLT_50	4-Overall Action	Culture	Propose actions/measures to liveability?	5 levels
CLT_70	5-Overall Monitoring	Culture	Monitoring a part of the plan?	5 levels
CLT_A_10	Indicators	Elements of ID	Indicators addressed?	How many?
CLT_A_10_1	Indicators	Elements of ID	Evaluation/analysis?	Evaluation/analysis?
CLT_A_10_2	Indicators	Elements of ID	Strategy/vision?	Strategy/vision?
CLT_A_10_3	Indicators	Elements of ID	Actions/Measures?	Actions/Measures?
CLT_A_10_4	Indicators	Elements of ID	Monitoring?	Monitoring?
CLT_A_20	1. Eval. And analysis	Elements of ID	Methods described on state of landscape?	5 levels
CLT_A_21	1. Eval. And analysis	Elements of ID	Methods employed on landscape?	Selective/Spatially inclusiv
CLT_A_40	3. Strategy and vision	Elements of ID	Expose visions and strategies based on experiences?	5 levels
CLT_A_41	3. Strategy and vision	Elements of ID	Visions and strategies to territorial protection?	Challenges/Objectives/Tar

Figure 17: upper left hand corner of the spreadsheet

DATA CHARACTERISTICS			RAW DATA						OBS	NORMALIZED DATA					
			Thy	Ljubljana	Delftland	Basque	Offenburg	Navarra		Thy	Ljubljana	Delftland	Basque	Offenburg	Navarra
TYPE	MIN	MAX	THY	LJUBL	DELFL	BASQ	OFF	NAVAR	CROSS	THY-N	LJUBL-N	DELFL-N	BASQ-N	OFF-N	NAVAR-N
VAL_0_1	0	1	1	1	1	1	1	1	6	1,00	1,00	1,00	1,00	1,00	1,00
CATEGORY	0	4	1	2	1	3	2	2	6	0,25	0,50	0,25	0,75	0,50	0,50
LIKERT	0	5	4	2	5	5	3	3	6	0,80	0,40	1,00	1,00	0,60	0,60
LIKERT	0	5	3	3	0	2	2	1	6	0,60	0,60	-	0,40	0,40	0,20
LIKERT	0	5	4	0	5	5	5	4	6	0,80	-	1,00	1,00	1,00	0,80
LIKERT	0	5			0	1	0	4	4			-	0,20	-	0,80
CATEGORY	0	4	3	2	2	3	0	4	6	0,75	0,50	0,50	0,75	-	1,00
VAL_0_1	0	1	1	1	1	1		1	5	1,00	1,00	1,00	1,00		1,00
VAL_0_1	0	1	1	1	0	0		1	5	1,00	1,00	-	-		1,00
VAL_0_1	0	1	1	0	1	1		1	5	1,00	-	1,00	1,00		1,00
VAL_0_1	0	1	0	0	0	1		1	5	-	-	-	1,00		1,00
LIKERT	0	5	2	3	1	5		1	5	0,40	0,60	0,20	1,00		0,20
CATEGORY	0	2	1	1	0	1		1	5	0,50	0,50	-	0,50		0,50
LIKERT	0	5	5	1		3		2	4	1,00	0,20		0,60		0,40
CATEGORY	0	3	2	2		2		1	4	0,67	0,67		0,67		0,33

Figure 18: Upper right hand corner of the spreadsheet

The right hand side of the spread sheet is devoted to the generated data and its definitions.

- The first three columns are showing which type of data is represented in the row
  - There are three possible options. Either binary noted as val_0_1, a set of categories, or data scaled by a Likert scale.
  - The Type is then followed by Min and Max columns showing the interval within the data is situated.
- The next six columns show the raw data based on the CAF questionnaire responses for each of the case areas.
- The following column identifies how many of the six cases have responded to the question represented in the row.
- Finally the last six columns show the normalized data for each of the case areas, by applying the normalization procedure as explained above.

In most cases the analyses are based on the normalized data, but as also explained above the inclusion of the Max and Min values enable an option of putting different weights on the different variables.

7.4. Showing results

A number of different visualisations of the results have been applied.

The Spider-diagram has previously indicated to be a good way of showing similarities and differences between the cases. Each time a spider diagram is used two versions are juxtaposed in order to expose two important characteristics of the calculated data – the relative and the comparative characteristics. The following graph shows the differences between these two approaches.

In the relative distribution each region show the 100% distribution of the parameters included in the graph. The illustration on top of the below two shown spider diagrams show the relative distribution of the components for each of the six regions. All regions show the 100% distribution, and within these 100% the coverage of each of the components within the region. It becomes clear how for instance a high level of component “1 Evaluation and analysis” together with “3 Strategy and vision” are absolute dominating in Ljubljana, while the Offenburg data show that a major contribution to the result is “4 Actions and measures”.

By means of this graph it is easy to see the level of importance of each component included in the CAF.

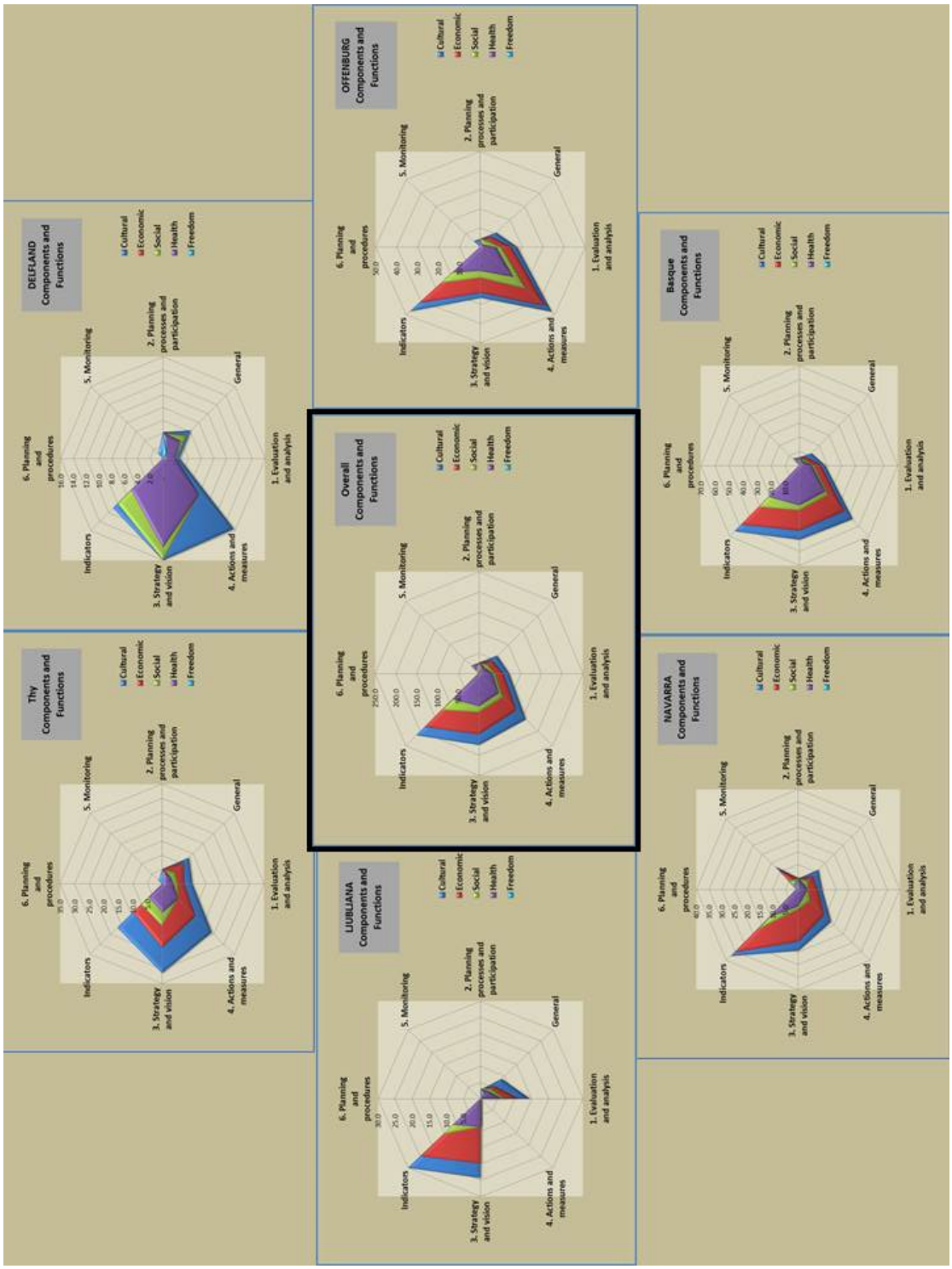


Figure 19: Overview of the components and the functions in all case studies

This is followed by a series of graphs showing how each of the functions is distributed in relation to components. And the next series of graphs are showing how the components are distributed in relation to functions.

7.4.1. Overall distribution of components and functions

The graph below show the overall characteristics of the distribution of the responses to the CAF questionnaire in relation to the 6 components which constitutes the main content of one of the two issues determining the CAF. In the spider graph the data for each of the regions sums up to 100% and the graph show how much of this is related to each of the six components.

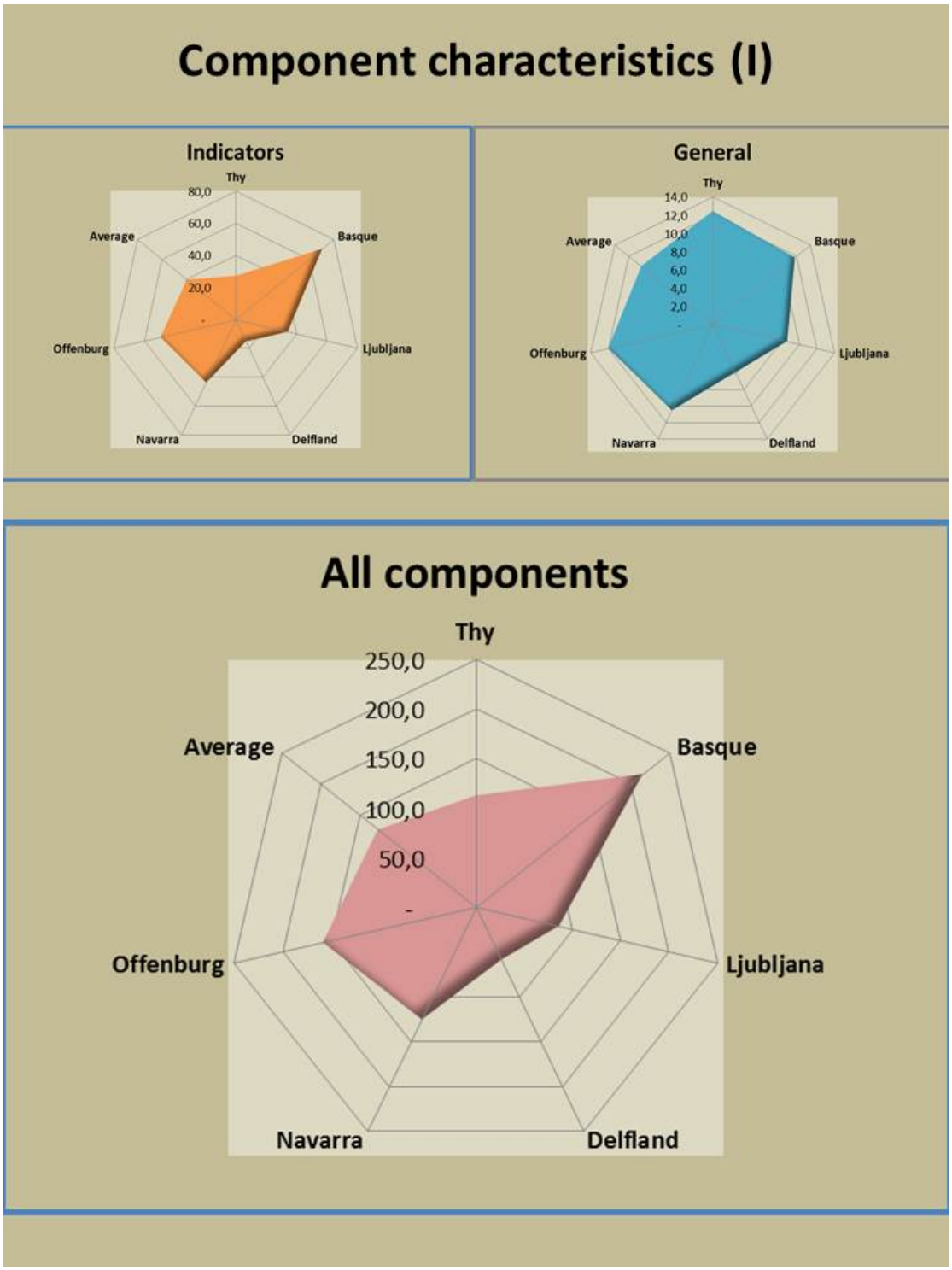


Figure 20: The six cases as described by the six CAF components.

It is quite [illegible] fferences between the cases. The major differences are seen in relation to 4. Actions and measures,

dominated by Basque Country and Offenburg; 5. Monitoring dominated by Navarra; and 6. Planning and Procedures dominated by Thy NP. And the major deviator is Ljubljana with a structure determined by only two of the six components.

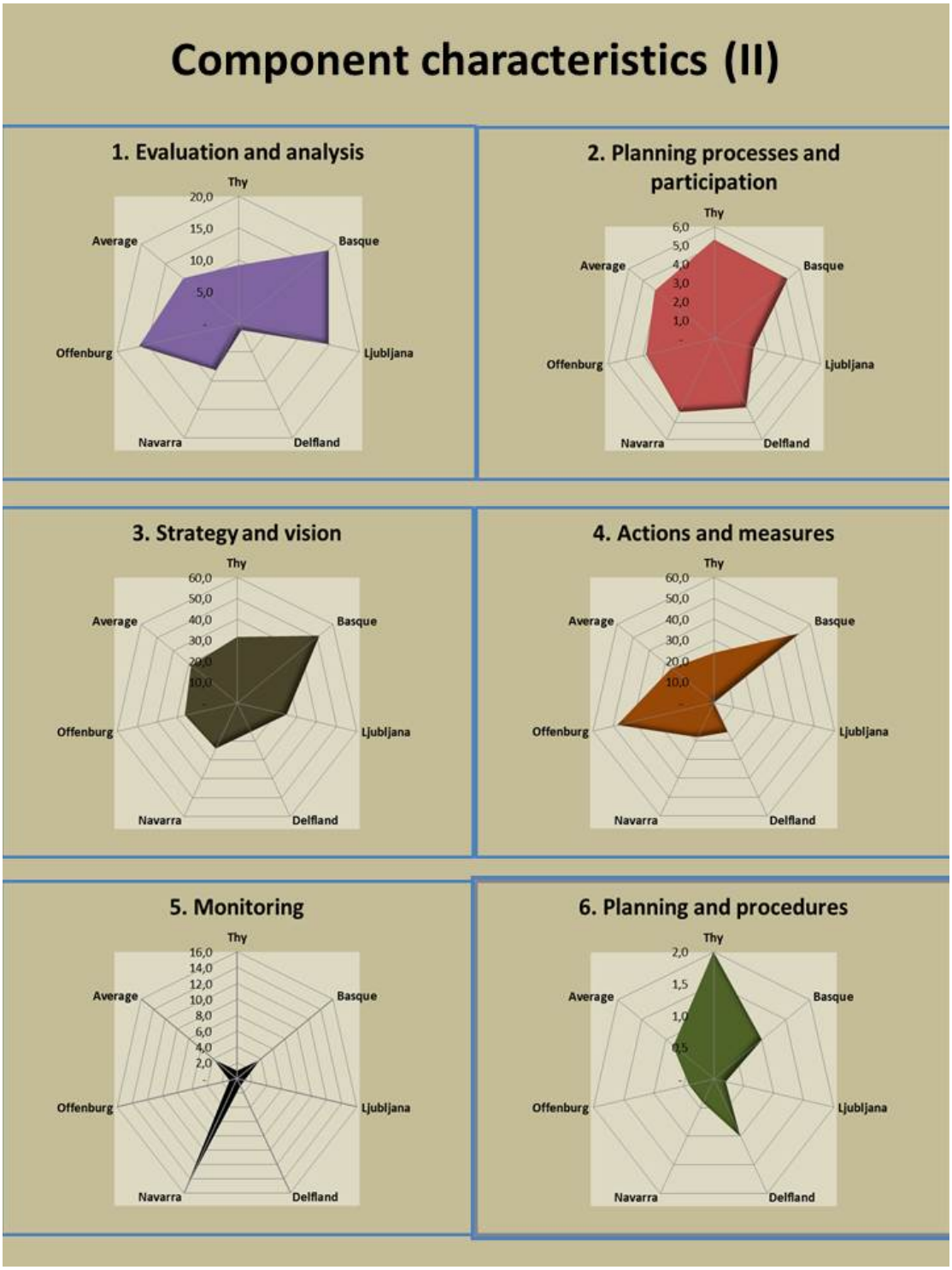


Figure 21 Components per case study

A much more equal situation is showing when turning to the five functions. In this graph the method is the same, i.e. the data distribution for each of the graphs sums up to 100%, and how large a share of this determined by each of the five functions is shown through the situation in the spider diagram.

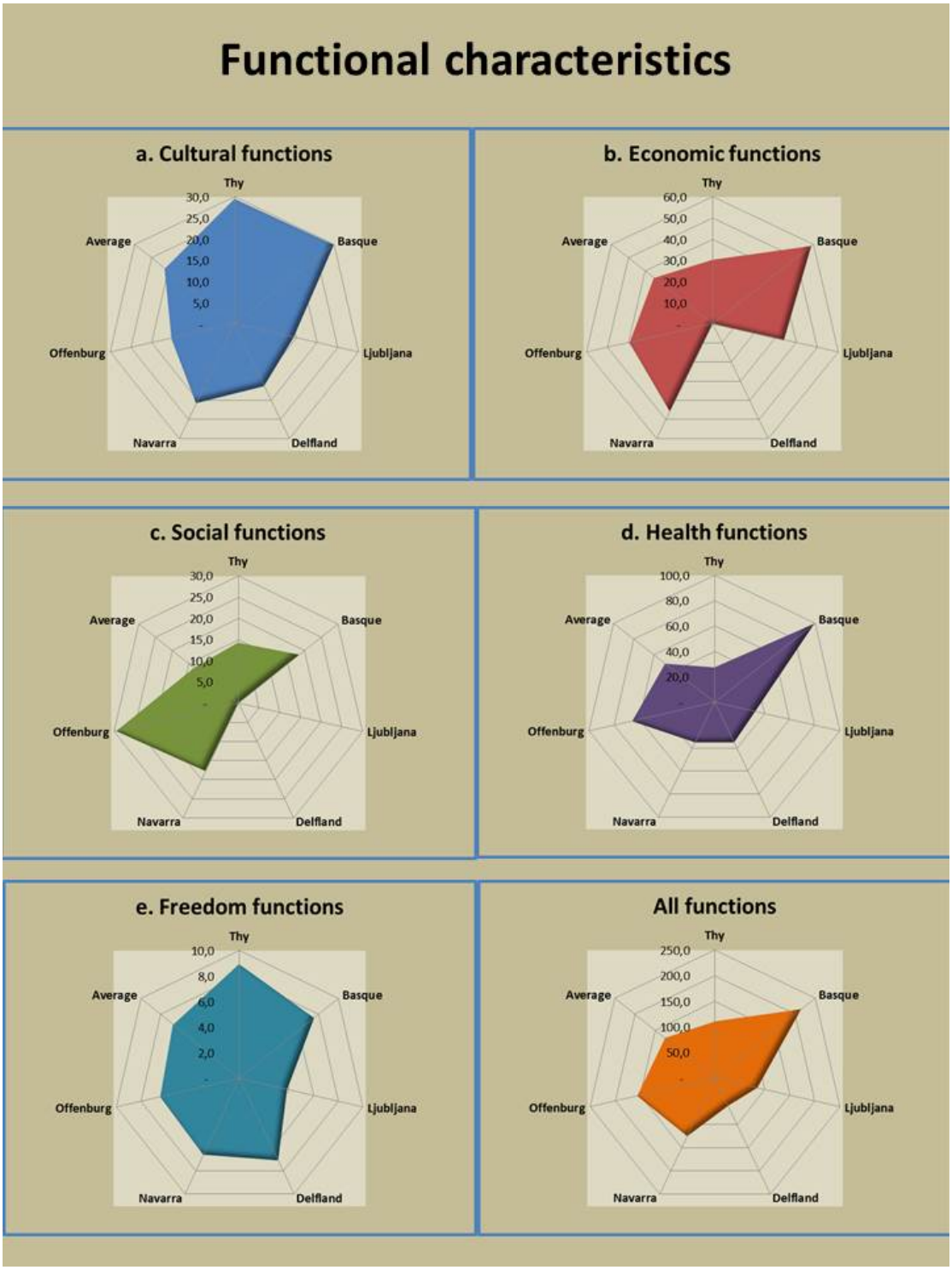


Figure 22: The six cases as described by the five functions.

There are two marked deviators from the general pattern – Offenburg with Social function being a major element, and Basque Country with Culture, Health and Economy being the most dominant functions. Also remarkably important are Culture and Freedom functions in

Thy case study. For the other regions the distribution is more even between the function, and in this case Navarra show the most even distribution between the functions – as it did as well in relation to the distribution of the components.

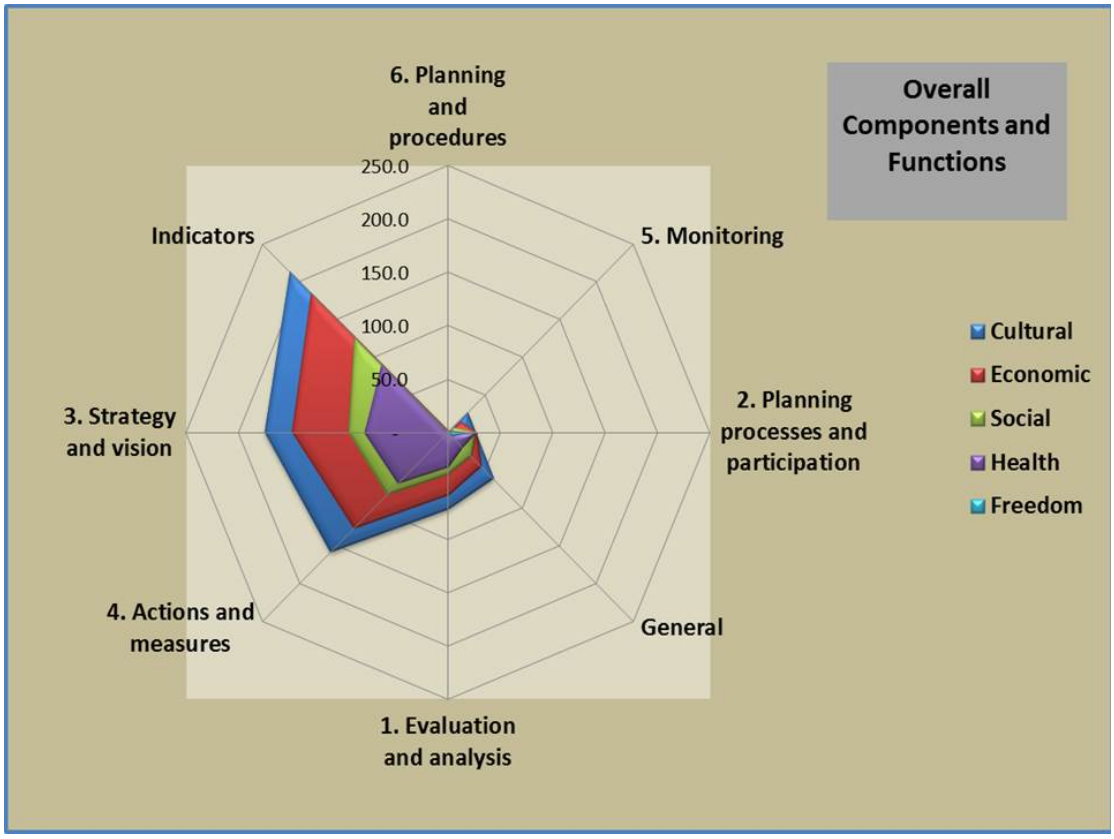


Figure 23 Overall distribution of components and functions

First of all it shows that both the relative and the comparative distribution have importance when interpreting the results. Especially the Monitoring and Planning and procedures components show how the distribution of several functions tends to become invisible when only looking at the comparative distribution.

Furthermore the graphs show that there are limitations to how many categories can be distinguished as separate entities when working with details in relation to both functions and components.

In relation to the latter observation it becomes however also quite obvious that single functions and components may become indicative for specific CAF characteristics, and that a task of importance may be to determine which indicators would be most useful in describing the variations between the cases.

This becomes even more obvious in the following analysis where the parameters are switched. While the above focus has been on the role of the different functions in explaining the variations in the components the next set of graphs are focusing on how much the different components contributes to explaining the differences in functional characteristics of the case regions.

7.4.2. Component characteristics

In order to get more information in relation to interpreting the dataset the components are dissected further by means of a series of graphs.

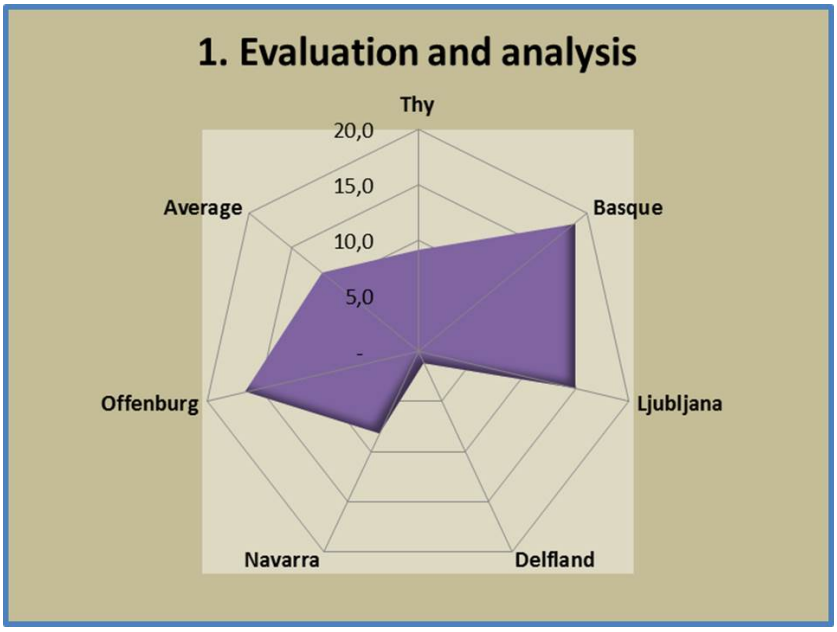


Figure 24 Component 1 Evaluation and Analysis per case study and average

Evaluation and analysis is particularly relevant in Basque Country and Offenburg being testimonial in Midden Delfland. In the case of Basque Country the practice under evaluation has a strong weight on landscape characterization through the catalogue as an instrument of evaluation instrument.

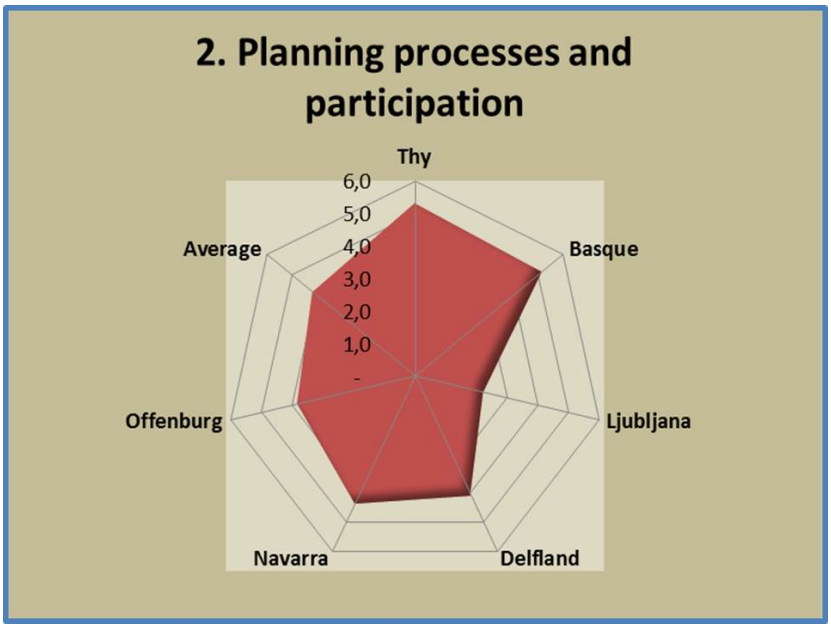


Figure 25 Component 2 Planning process and participation per case study and average

Apart from Ljubljana UR, all cases present an even contribution to Planning process and participation close to the average being the strongest Thy NP practice.

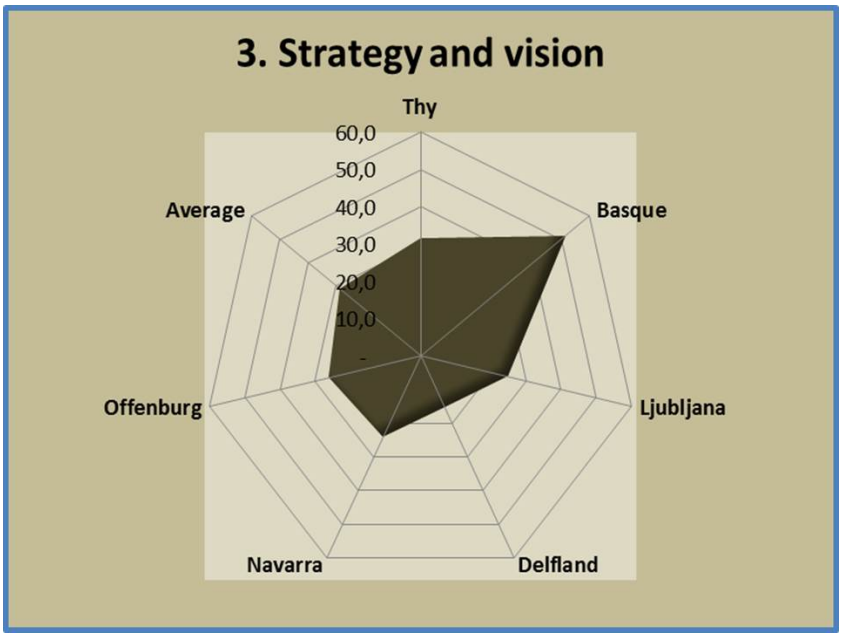


Figure 26 Component 3 Strategy and Vision per case study and average

Strategy and vision is particularly relevant in the Basque case study. It would be expected a more visible contribution from Midden-Delfland which appears quite discreetly in the graph. Even contribution from the rest of the cases analyzed.

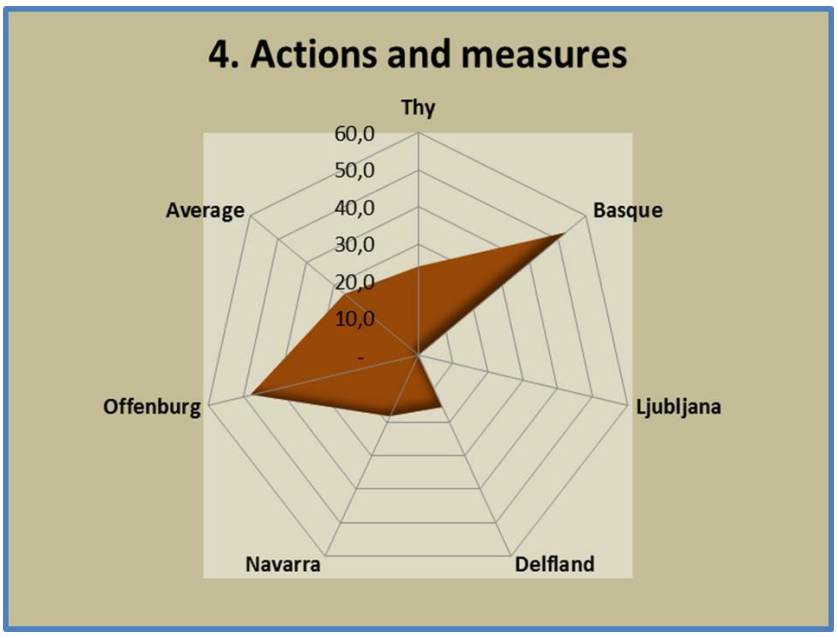


Figure 27 Component 4 Actions and measures per case study and average

Basque Country and Offenburg show the greater contribution with regard to Actions and measures, followed Navarra. When reading this graph it is important to bear in mind that Basque country has not implemented yet any of the actions presented in the practice analyzed, whereas landscape actions and measures have been already included in Offenburg Land Use Plan. Ljubljana UR is again the major deviator.

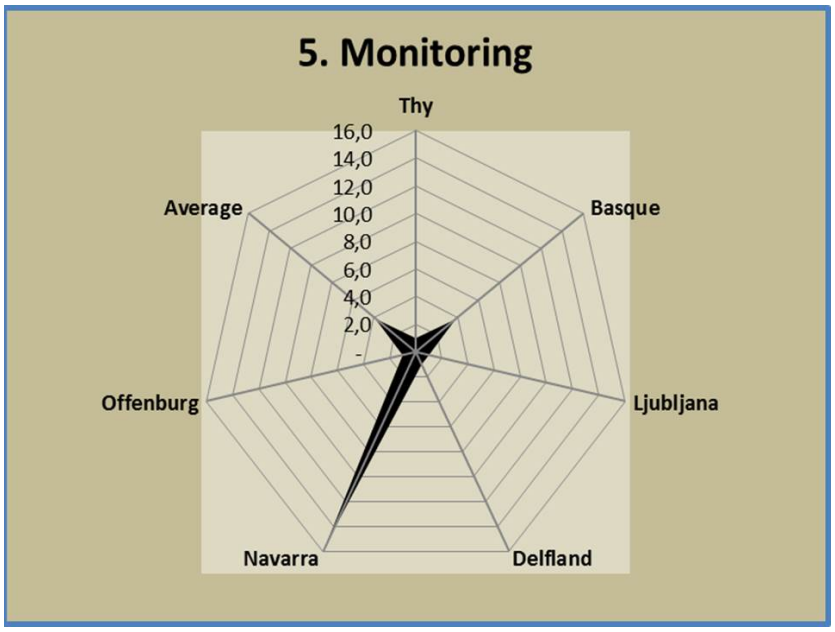


Figure 28 Component 5 Monitoring per case study and average

With regard to monitoring is clearly dominated by Navarra which is the only case study which has really developed an index for monitoring spatial planning and landscape. From the reading of this graph it is evident that Monitoring is a challenge and a component to be strength in all practices analyzed in the CAF.

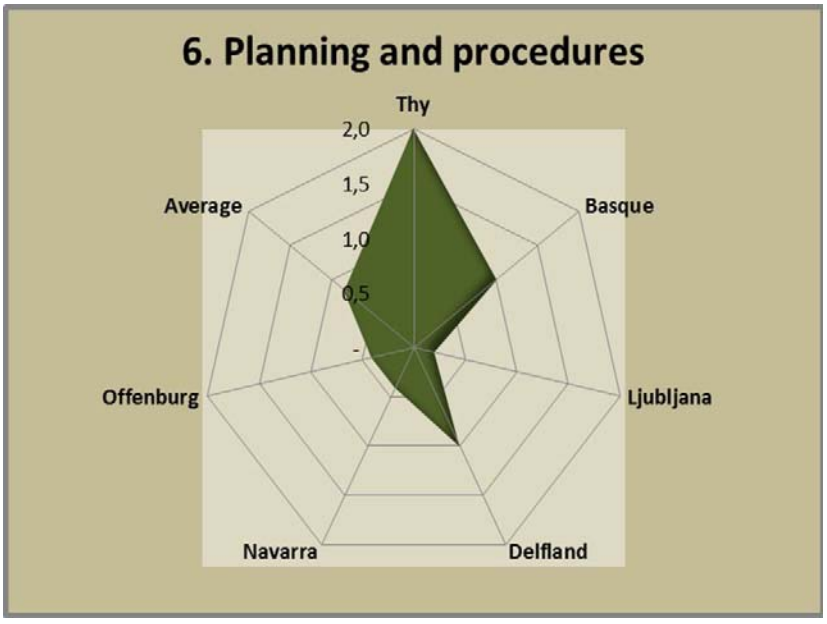


Figure 29 Component 6 Planning and procedures per case study and average

Thy NP clearly dominates this component followed by Midden-Delfland. Since both cases are Landscape Plans it would be also expected a greater contribution from Offenburg, being the other Landscape Plan evaluated.

7.4.3. Functional characteristics

In order to get more information in relation to interpreting the dataset the functions are dissected further by means of a series of graphs.

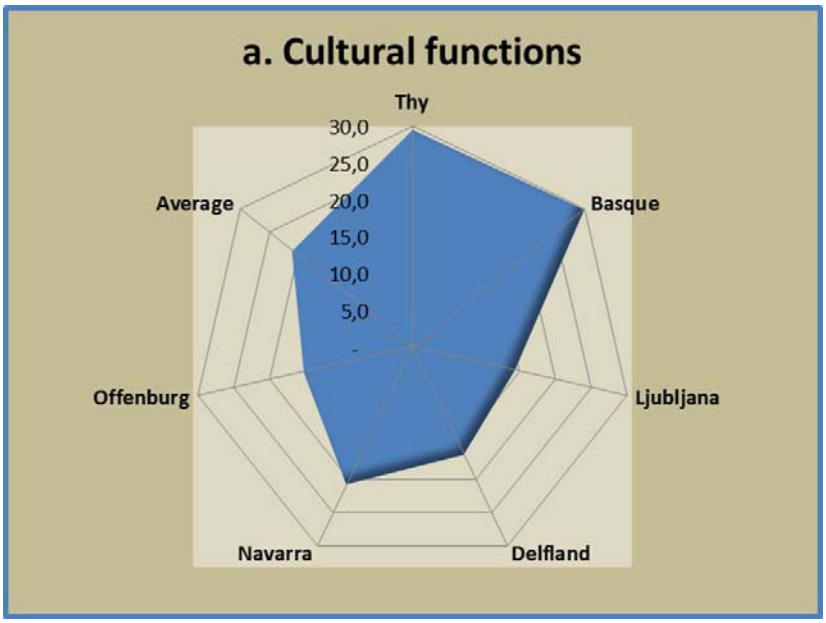


Figure 30 Cultural functions per case study and average

Although there is a quite uniform distribution, Thy and Basque Country show the greater contribution with regard to Cultural functions, followed closely by Navarra. In those cases the question of identity has been proved very relevant at the time of evaluate landscape and define planning and management objectives.

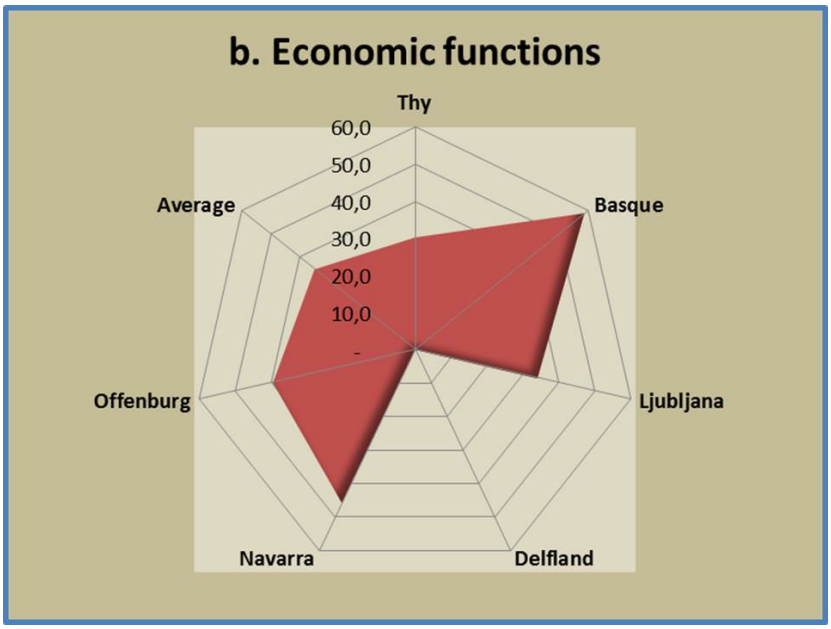


Figure 31 Economic functions per case study and average

Economic functions are irrelevant in Midden-Delfland, revealing a lack of information in this plan. Basque Country and Navarra show the major contribution to this function, revealing the consideration of multifunctional approach to landscape in the cases.

As expected Offenburg also show a relevant contribution to economic function.

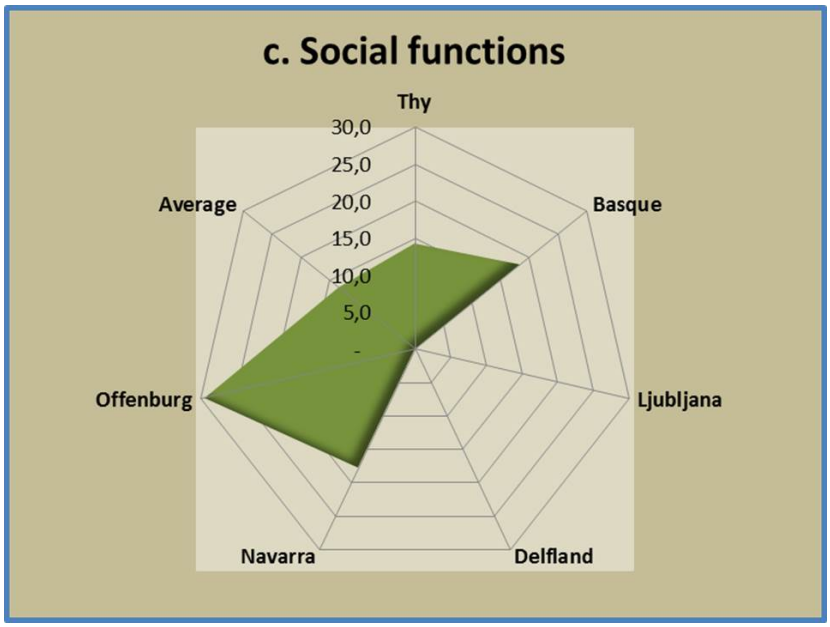


Figure 32 Social functions per case study and average

Social functions are dominant in Offenburg followed by Navarra and Basque Country. The lack of information from Thy, Ljubljana and Midden- Delftland are obvious in relation to the social functions. Unexpected lack of contribution from Midden-Delfland to this function, although several activities in connection to environmental education, nature observation, nature enjoyment, and so on and so forth have been planned in the Landscape Plan.

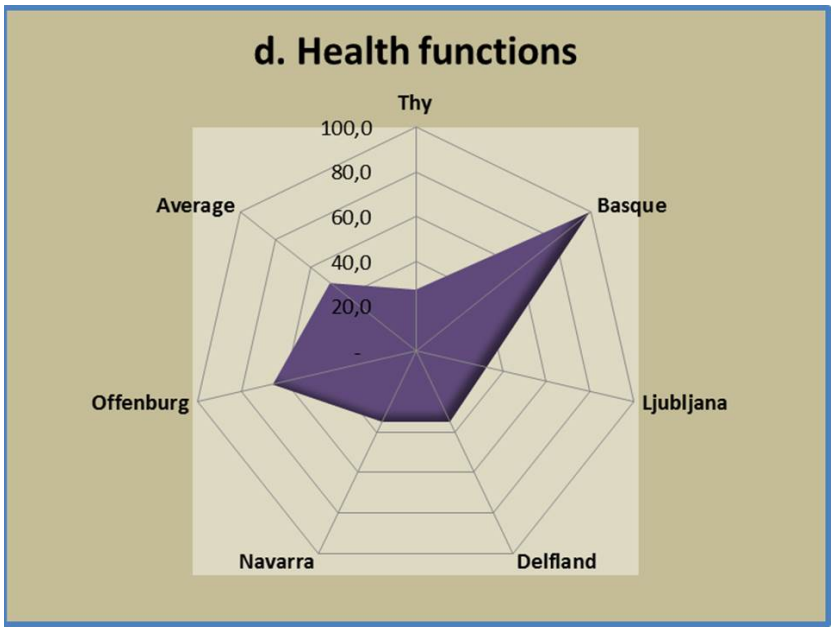


Figure 33 Health functions per case study and average

Health functions are shown for all case regions, but with marked difference in representation. Basque Country clearly dominates the contribution to Health functions followed by Offenburg.

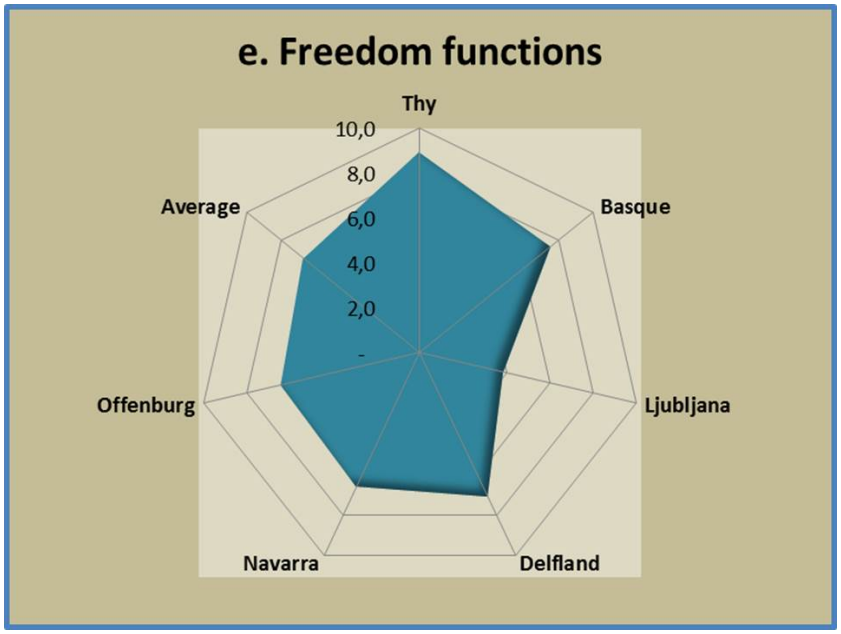


Figure 34 Freedom functions per case study and average

Freedom functions show a very regular pattern.

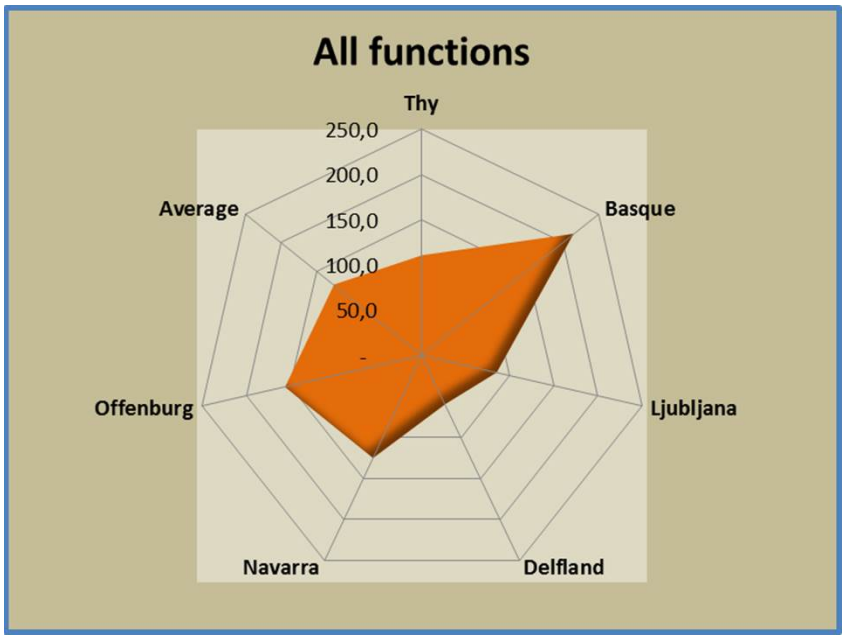


Figure 35 Overall distribution of the functions in case studies

Also here the question of the number of functions and categories represented in each of the case regions become important. Basque Country and Offenburg show the largest number of functions (5) while Delftland is down to the lowest number (3). In the distribution of functions the comparative division is clearly the most important because it show a very distinct difference in characteristics between Navarra, Offenburg, the Basque country and to some extend also Thy on one side, each with around 15-20% of the total variation represented, while both Ljubljana and Delftland are down to around 10% representation.

Extensive variations in representation become even more marked when looking into the different functions. Most marked shown by the cultural, health and social functions where Thy, Midden Delfland and the Basque Country show representations of around 25% each and thereby cover half of the variation, while the other case regions are down to 10% and below.

7.4.4. Analytical use of quantitative functional and component characteristics

There are a lot of information more or less hidden in the qualitative approach to the CAF which becomes more obvious when quantified, and in this connection the graphs enables the identifying and describing some important detail that might otherwise be overlooked.

The approach should, however, also be used carefully and not attempting to dig into detail that may not be substantiated in adequate numbers.

Among the graphs presented in the previous sections it is obviously the more overarching presentations that should be considered within an analytical framework. The graphs showing the distribution of components and functions figure 23 together with figures 21 and 22, are in this connection obvious choice.

7.5. Multivariate analyses

A way of finding trends and characteristics out of a complex set of quantitative data is to apply different types of multivariate approaches. Some principles have already been presented in the first chapters, so at this point of time the focus will be on the results.

7.5.1. Interpreting 3 dimensions

The starting point for this analysis is the normalized dataset, and on figure 36 on next page the results have been color coded as this gives a good indication of the variation in the data. And structuring the data in individual matrices for each case region, each matrix with functions across and components top-down provide an immediate overview of communalities and differences between the datasets.

By adding the color-coding the datasets become 3-dimensional which further add to the possibility of overviewing the complexity and thereby starting interpreting the results.

Components and Functions as raw data and normalized data

Raw data

Components / Functions

Thy	Cultural	Social	Economic	Health	Freedom
General	8	0	7	5	0
1. Eval.	9	0	13	31	0
3. Strategy	32	0	32	32	2
4. Actions	30	0	31	28	0
5. Monitor	0	0	0	0	5
Indicators	7	0	6	6	31
Ljubljana	Cultural	Social	Economic	Health	Freedom
General	7	0	8	4	0
1. Eval.	11	0	22	8	0
3. Strategy	12	0	33	29	0
4. Actions	0	0	0	0	0
5. Monitor	0	0	0	0	1
Indicators	4	0	10	12	13
Delftland	Cultural	Social	Economic	Health	Freedom
General	6	0	0	8	0
1. Eval.	6	0	0	15	0
3. Strategy	0	0	0	60	0
4. Actions	31	0	0	40	0
5. Monitor	0	0	0	0	5
Indicators	4	0	0	8	25
Basque	Cultural	Social	Economic	Health	Freedom
General	10	2	10	5	0
1. Eval.	17	5	16	8	0
3. Strategy	23	10	43	0	0
4. Actions	29	12	61	13	0
5. Monitor	5	8	8	0	0
Indicators	6	13	15	10	0
Offenburg	Cultural	Social	Economic	Health	Freedom
General	7	10	6	6	0
1. Eval.	6	10	18	23	0
3. Strategy	11	12	17	39	0
4. Actions	17	31	52	80	0
5. Monitor	5	0	0	0	2
Indicators	3	12	9	19	24
Navarra	Cultural	Social	Economic	Health	Freedom
General	6	6	4	4	0
1. Eval.	5	3	13	19	0
3. Strategy	11	7	39	25	0
4. Actions	14	15	28	12	0
5. Monitor	18	16	33	17	0
Indicators	5	10	10	13	25

Normalized data

Components / Functions

Thy	Cultural	Social	Economic	Health	Freedom
General	1,7	-	1,4	1,0	-
1. Eval.	2,4	-	3,2	8,6	-
3. Strategy	8,9	-	8,8	9,1	0,4
4. Actions	8,0	-	8,2	7,6	-
5. Monitor	-	-	-	-	1,0
Indicators	1,8	-	1,5	1,5	6,5
Ljubljana	Cultural	Social	Economic	Health	Freedom
General	1,5	-	1,9	0,9	-
1. Eval.	2,8	-	5,6	2,2	-
3. Strategy	4,1	-	10,6	8,7	-
4. Actions	-	-	-	-	-
5. Monitor	-	-	-	-	0,2
Indicators	1,0	-	3,0	3,0	2,7
Delftland	Cultural	Social	Economic	Health	Freedom
General	1,3	-	-	1,7	-
1. Eval.	1,2	-	-	3,8	-
3. Strategy	-	-	-	15,3	-
4. Actions	7,7	-	-	8,0	-
5. Monitor	-	-	-	-	1,0
Indicators	1,0	-	-	2,0	5,3
Basque	Cultural	Social	Economic	Health	Freedom
General	2,2	1,2	2,4	1,1	-
1. Eval.	4,0	1,3	4,4	2,5	-
3. Strategy	6,5	3,2	13,3	-	-
4. Actions	7,8	3,1	16,3	3,5	-
5. Monitor	1,0	1,6	1,6	-	-
Indicators	1,5	2,8	4,3	2,5	-
Offenburg	Cultural	Social	Economic	Health	Freedom
General	1,5	3,4	1,5	1,3	-
1. Eval.	1,5	2,6	4,5	6,2	-
3. Strategy	3,3	4,0	5,5	11,5	-
4. Actions	4,1	8,1	13,0	21,2	-
5. Monitor	1,0	-	-	-	0,4
Indicators	0,8	2,7	2,5	5,0	5,0
Navarra	Cultural	Social	Economic	Health	Freedom
General	1,3	2,6	1,2	1,0	-
1. Eval.	1,6	0,6	3,5	5,3	-
3. Strategy	3,2	1,4	11,5	6,6	-
4. Actions	3,7	3,0	7,8	3,4	-
5. Monitor	3,6	3,2	6,6	3,4	-
Indicators	1,3	2,2	2,5	3,3	5,2

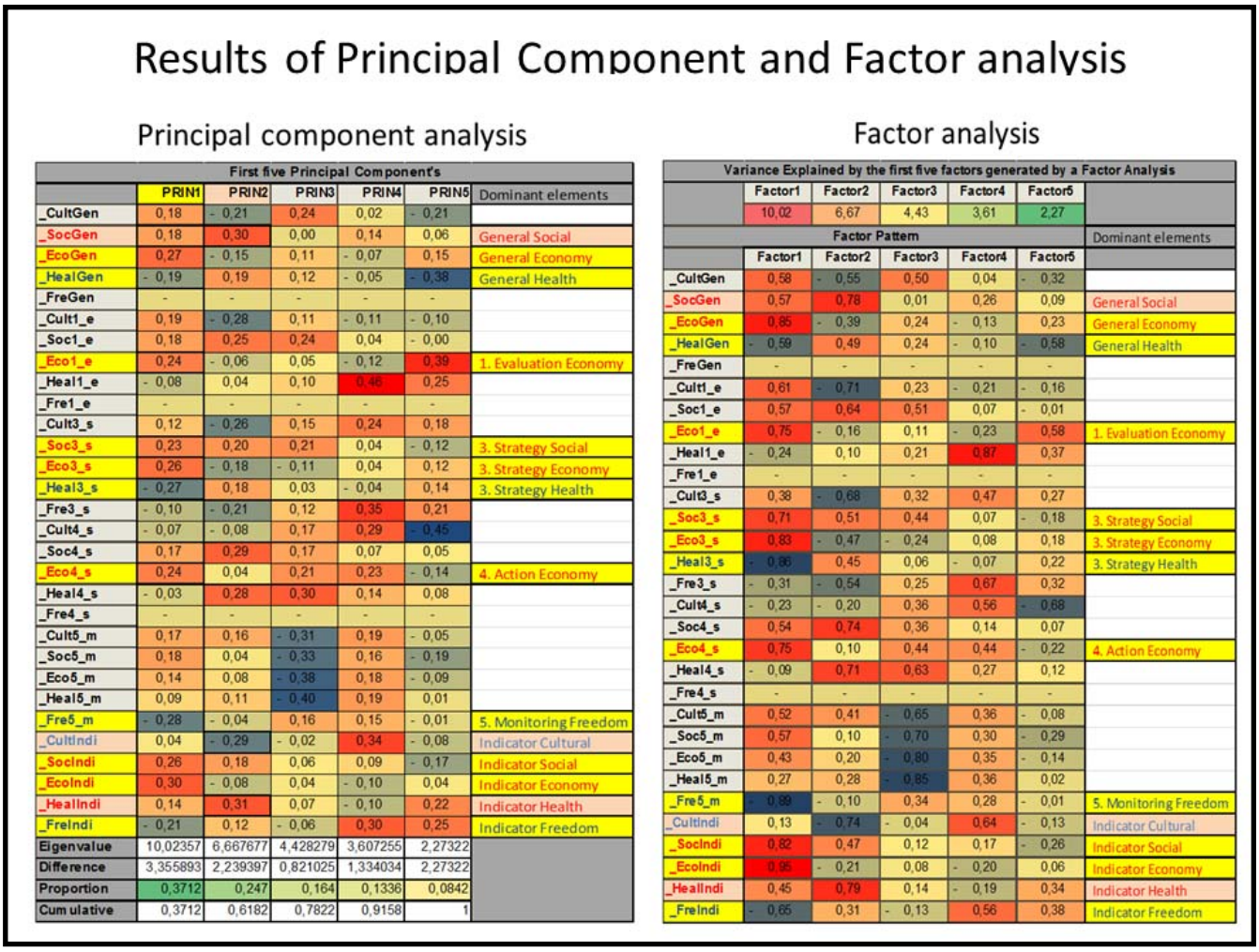
Figure 36: The raw and normalized data structured as a set of matrices, one for each case region with functions across and components top-down. The matrices have been color-coded according to values, from green=0 over yellow to red colour used for the high values.

The complexity of the dataset goes however way beyond three dimensions. Each field in the matrix constitutes a dimension, so with six components time five functions it generates a total of 30 dimensions.

7.5.2. Generalizing 30 dimensions

Two obvious approaches to apply in this complexity would be the Principal Component Analysis (PCA) and the Factor Analysis (FA). Both approaches are based on almost the same procedures of calculations, aiming at analyzing groups of correlated variables in order to reduce their complexity. Principal components analysis is used to find optimal ways of combining variables into a small number of subsets, while factor analysis are used to identify the structure underlying such variables and to estimate scores to measure latent factors

themselves. In PCA the components are linear combinations that maximize the total variance while in FA the factors are linear combinations that maximize the shared portion of the variance.



Results of Principal Component and Factor analysis

Principal component analysis

First five Principal Component's

	PRIN1	PRIN2	PRIN3	PRIN4	PRIN5	Dominant elements
_CultGen	0,18	- 0,21	0,24	0,02	- 0,21	
_SocGen	0,18	0,30	0,00	0,14	0,06	General Social
_EcoGen	0,27	- 0,15	0,11	- 0,07	0,15	General Economy
_HealGen	- 0,19	0,19	0,12	- 0,05	- 0,38	General Health
_FreGen	-	-	-	-	-	
_Cult1_e	0,19	- 0,28	0,11	- 0,11	- 0,10	
_Soc1_e	0,18	0,25	0,24	0,04	- 0,00	
_Eco1_e	0,24	- 0,06	0,05	- 0,12	0,39	1. Evaluation Economy
_Heal1_e	- 0,08	0,04	0,10	0,46	0,25	
_Fre1_e	-	-	-	-	-	
_Cult3_s	0,12	- 0,26	0,15	0,24	0,18	
_Soc3_s	0,23	0,20	0,21	0,04	- 0,12	3. Strategy Social
_Eco3_s	0,26	- 0,18	- 0,11	0,04	0,12	3. Strategy Economy
_Heal3_s	- 0,27	0,18	0,03	- 0,04	0,14	3. Strategy Health
_Fre3_s	- 0,10	- 0,21	0,12	0,35	0,21	
_Cult4_s	- 0,07	- 0,08	0,17	0,29	0,45	
_Soc4_s	0,17	0,29	0,17	0,07	0,05	
_Eco4_s	0,24	0,04	0,21	0,23	- 0,14	4. Action Economy
_Heal4_s	- 0,03	0,28	0,30	0,14	0,08	
_Fre4_s	-	-	-	-	-	
_Cult5_m	0,17	0,16	- 0,31	0,19	- 0,05	
_Soc5_m	0,18	0,04	- 0,33	0,16	- 0,19	
_Eco5_m	0,14	0,08	- 0,38	0,18	- 0,09	
_Heal5_m	0,09	0,11	- 0,40	0,19	0,01	
_Fre5_m	- 0,28	- 0,04	0,16	0,15	- 0,01	5. Monitoring Freedom
_CultIndi	0,04	- 0,29	- 0,02	0,34	- 0,08	Indicator Cultural
_SocIndi	0,26	0,18	0,06	0,09	- 0,17	Indicator Social
_EcoIndi	0,30	- 0,08	0,04	- 0,10	0,04	Indicator Economy
_HealIndi	0,14	0,31	0,07	- 0,10	0,22	Indicator Health
_FreIndi	- 0,21	0,12	- 0,06	0,30	0,25	Indicator Freedom
Eigenvalue	10,02357	6,667677	4,428279	3,607255	2,27322	
Difference	3,355893	2,239397	0,821025	1,334034	2,27322	
Proportion	0,3712	0,247	0,164	0,1336	0,0842	
Cumulative	0,3712	0,6182	0,7822	0,9158	1	

Factor analysis

Variance Explained by the first five factors generated by a Factor Analysis

	Factor1	Factor2	Factor3	Factor4	Factor5	
	10,02	6,67	4,43	3,61	2,27	
	Factor Pattern					Dominant elements
	Factor1	Factor2	Factor3	Factor4	Factor5	
_CultGen	0,58	- 0,55	0,50	0,04	- 0,32	
_SocGen	0,57	0,78	0,01	0,26	0,09	General Social
_EcoGen	0,85	- 0,39	0,24	- 0,13	0,23	General Economy
_HealGen	- 0,59	0,49	0,24	- 0,10	- 0,58	General Health
_FreGen	-	-	-	-	-	
_Cult1_e	0,61	- 0,71	0,23	- 0,21	- 0,16	
_Soc1_e	0,57	0,64	0,51	0,07	- 0,01	
_Eco1_e	0,75	- 0,16	0,11	- 0,23	0,58	1. Evaluation Economy
_Heal1_e	- 0,24	0,10	0,21	0,87	0,37	
_Fre1_e	-	-	-	-	-	
_Cult3_s	0,38	- 0,68	0,32	0,47	0,27	
_Soc3_s	0,71	0,51	0,44	0,07	- 0,18	3. Strategy Social
_Eco3_s	0,83	- 0,47	- 0,24	0,08	0,18	3. Strategy Economy
_Heal3_s	- 0,86	0,45	0,06	- 0,07	0,22	3. Strategy Health
_Fre3_s	- 0,31	- 0,54	0,25	0,67	0,32	
_Cult4_s	- 0,23	- 0,20	0,36	0,56	- 0,68	
_Soc4_s	0,54	0,74	0,36	0,14	0,07	
_Eco4_s	0,75	0,10	0,44	0,44	- 0,22	4. Action Economy
_Heal4_s	- 0,09	0,71	0,63	0,27	0,12	
_Fre4_s	-	-	-	-	-	
_Cult5_m	0,52	0,41	- 0,65	0,36	- 0,08	
_Soc5_m	0,57	0,10	- 0,70	0,30	- 0,29	
_Eco5_m	0,43	0,20	- 0,80	0,35	- 0,14	
_Heal5_m	0,27	0,28	- 0,85	0,36	0,02	
_Fre5_m	- 0,89	- 0,10	0,34	0,28	- 0,01	5. Monitoring Freedom
_CultIndi	0,13	- 0,74	- 0,04	0,64	- 0,13	Indicator Cultural
_SocIndi	0,82	0,47	0,12	0,17	- 0,26	Indicator Social
_EcoIndi	0,95	- 0,21	0,08	- 0,20	0,06	Indicator Economy
_HealIndi	0,45	0,79	0,14	- 0,19	0,34	Indicator Health
_FreIndi	- 0,65	0,31	- 0,13	0,56	0,38	Indicator Freedom

Figure 37: Output from the Principal Component Analysis (to the left) and the Factor Analysis (to the right).

In both the principal component analysis and the factor analysis the original 30 dimension dataset is converted into new datasets, still with 30 dimensions, but in the PCA organized so that the largest amount of variance is described in the first dimension, the second largest amount in the second dimension, etc. In the FI the goal is to ensure that that the factors explain the covariance or correlations among the variables. As the objective in this case is the former, i.e. try to collect as much as possible of the variance in the first principal component, second most in the second principal component etc. the focus in the following is on the principal components.

The critical issue in this context is what is shown in the PCA table in figure 37 in the row called Eigenvalue (four rows from the bottom). The rows identify how much of the variance is to be found in the first Principal Component (PRIN1), how much in the second, the third etc. In this case only the first five components/factors have been shown, but it becomes obvious why only maintaining these five columns. In the second lowest row in the PCA results the row Proportion show how large a percentage of the total variance is included in each of the Principal components, and in the row below the Cumulative sum of proportions are shown. And it show that all variance in the dataset is described in the first five

components, with 37.12% by the first component, 24.7% in the second component etc. So by means of the two first components a total of 61.82% of all variance has been described and by component number 5 a total of 100% has been explained.

By squaring the number in the PCA column it is shown how much each variable contributes to the total result. So by selecting a combination of the highest positive and lowest negative values it is possible to generate a result where selection of variables are able to describe a relatively high proportion of the total variance in the material.

The selected variables have been marked with differing colors, and a combination of the highest values from PCA1 and those values from PCA2 with contributions surpassing any contributions from PCA1 a selection of variables describing a third or more of the variance in the material has been identified. And going across the five components those selected turns out to describe more than 50% of the variance.

7.5.3. Dominant functions and components

The selected variables have been color coded in the left hand side of the tables, but furthermore shown in fuller names on the right hand side. And as shown a total of 14 variables which is less than half of them have been identified as major contributors to the analysis, while the remaining contributes with much less little or none to the variations identified in the CAF.

Figure 33 on next page show the normalized dataset organized in matrix form, but now with all variables determined as major contributors to the data analysis emphasized with blue colors for those selected from Component1 / Factor1 and with beige those selected from Component2 / Factor2.

Statistically these 14 variables are those which are explaining more than half of the variance and thereby determining most of the similarities and variations in the results of the conversion of the qualitative CAF information into the quantitative CAF dataset.

What is important to remember when interpreting the results, however, is the fact that correlation between some components may be shadowing over lower level of correlation between other components. It may be seen odd that the cultural functions even well represented throughout all case regions connections between for instance health and economic characteristics may be very dominant.

Furthermore it is interesting to see how indicators are playing an important role in the results.

Marking of dominant components

Components	Normalized data					
	Elements dominating first/second axis/component in multivariat analysis					
	Thy	Cultural	Social	Economic	Health	Freedom
	General	1,7	-	1,4	1,0	-
	1. Eval.	2,4	-	3,2	8,6	-
	3. Strategy	8,9	-	8,8	9,1	0,4
	4. Actions	8,0	-	8,2	7,6	-
	5. Monitor	-	-	-	-	1,0
	Indicators	1,8	-	1,5	1,5	6,5
	Ljubljana	Cultural	Social	Economic	Health	Freedom
	General	1,5	-	1,9	0,9	-
	1. Eval.	2,8	-	5,6	2,2	-
	3. Strategy	4,1	-	10,6	8,7	-
	4. Actions	-	-	-	-	-
	5. Monitor	-	-	-	-	0,2
	Indicators	1,0	-	3,0	3,0	2,7
	Delftland	Cultural	Social	Economic	Health	Freedom
	General	1,3	-	-	1,7	-
	1. Eval.	1,2	-	-	3,8	-
	3. Strategy	-	-	-	15,3	-
	4. Actions	7,7	-	-	8,0	-
	5. Monitor	-	-	-	-	1,0
	Indicators	1,0	-	-	2,0	5,3
	Basque	Cultural	Social	Economic	Health	Freedom
	General	2,2	1,2	2,4	1,1	-
	1. Eval.	4,0	1,3	4,4	2,5	-
	3. Strategy	6,5	3,2	13,3	-	-
	4. Actions	7,8	3,1	16,3	3,5	-
	5. Monitor	1,0	1,6	1,6	-	-
	Indicators	1,5	2,8	4,3	2,5	-
	Offenburg	Cultural	Social	Economic	Health	Freedom
	General	1,5	3,4	1,5	1,3	-
	1. Eval.	1,5	2,6	4,5	6,2	-
	3. Strategy	3,3	4,0	5,5	11,5	-
	4. Actions	4,1	8,1	13,0	21,2	-
	5. Monitor	1,0	-	-	-	0,4
	Indicators	0,8	2,7	2,5	5,0	5,0
	Navarra	Cultural	Social	Economic	Health	Freedom
	General	1,3	2,6	1,2	1,0	-
	1. Eval.	1,6	0,6	3,5	5,3	-
	3. Strategy	3,2	1,4	11,5	6,6	-
	4. Actions	3,7	3,0	7,8	3,4	-
	5. Monitor	3,6	3,2	6,6	3,4	-
	Indicators	1,3	2,2	2,5	3,3	5,2

Figure 38: Dominant component determined through the multivariate analyses connected to the Principal Components and the Factors

Out of the total 14 variables five are related to Indicator components and another five are related to Economic functions. Component 3 Strategy is represented through three variables. Figure 38 thereby provide a suggestion of which functions and components are important to look further into in order to get a helpful analysis of the qualitative characteristics of the CAF.

7.5.4. Similarities and differences between cases

The final part of the quantitative analysis is related to the question of similarities and differences between the six cases in their responses to the CAF questionnaire.

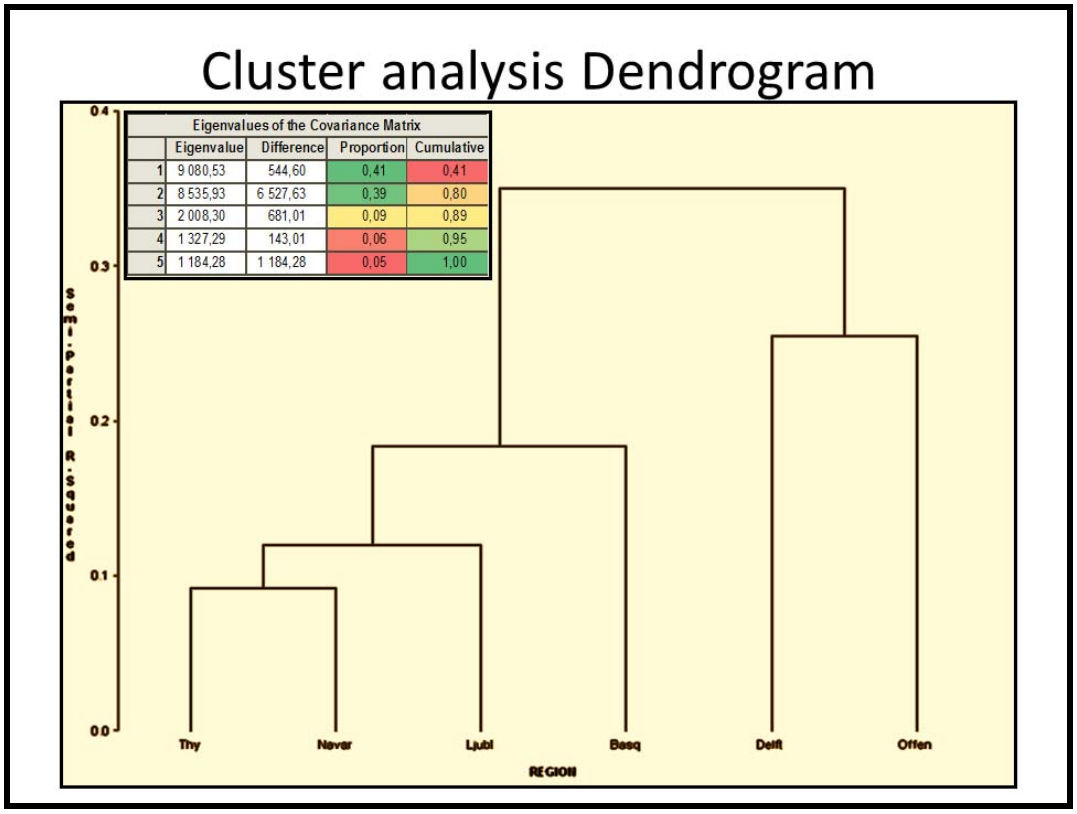


Figure 39: Cluster analysis dendrogram showing the level of similarity between the cases in relation to responses to the CAF.

The comparison has been conducted by means of a cluster analysis, an analysis where the distances between the cases are determined in the multi-dimensional space determined by the variables included in the CAF analysis. In figure 39 the result of the clustering is shown graphically by means of a dendrogram as well as through the calculation of the changes in eigenvalues when the clustering procedure moves forward.

Method wise the software starts with the six cases searching for the two cases looking most alike and combining these data as a first cluster, and continues to look for similarities, now based on the remaining four and the cluster. Each time clusters are generated the change in Eigenvalue is registered, and the process continues until the final situation where all six cases are considered being one cluster.

As shown by the dendrogram the first cases combined are Thy and Navarra. Then Ljubljana is added, and in the next step the Basque region. In the second to the last step Delftland and Offenburg are combined, and then all cases are finally combined.

The distance shown graphically illustrates the level of “look-alike”ness. For instance the distance between the cluster established through combining Thy and Navarra and the following inclusion of Ljubljana in the cluster is very short, while the distance to include the Basque region is somewhat larger.

A quick overlooking of the result show that while Offenburg and Delftland are singled out as a distinct group, the other case regions are stepwise merged into a cluster, with Thy and Navarra showing most resemblance and then including Ljubljana and later on the Basque region before merged with the Offenburg-Delftland group.

7.5.5. Basis for similarity

Interesting in this connection is how this clustering compare to the general clustering conducted in relation to the major socio-economic and environmental conditions discussed in chapter 3 in relation to the socio-economic and environmental framework – basically by asking to what extend the regional similarities and differences shown through the CAF with its emphasis on practices in relation to landscape planning can be ascribed to differences and similarities in the general characteristics of the socio-economic and environmental framework.

There are obvious similarities but also differences when comparing figure 42 with figure 17 In relation to many components used in the general clustering the Dutch and the German regions and cases often end up in the same clusters, just as the two cases from Spain ends up in the same clusters. And obviously because the two sets of clusters are characterised by a lot of similarities in relation to socio-economic and landscape planning experiences and practices.

The two “odd regions out” are obviously Thy and Ljubljana. These regions end up in different combinations in figure 17 Thy mostly in combination with Germany and The Netherlands due to some of the same reasons as the Dutch and the German cases are clustered together, namely a number of similarities in relation both socio-economic and landscape planning experiences and practices. With references back to figure 17Ljubljana is mostly singled out when more than 2 clusters are generated. This does not, however, explain its position in the case study clustering procedure.

8. Qualitative assessment of planning approaches: interpretation by stakeholders

The qualitative assessment was undertaken by means of an interview that was developed as a complement to the CAF-matrix that is used as a quantitative approach to examine best practices in planning of liveable landscapes. Qualitative interviews include questions address issues that could not be answered properly in the CAF-matrix. Complimentary to the matrix, qualitative questions are designed to gather qualitative and complex information. Such information is usually to be found within the before mentioned fields of analysis, particularly 'process and participation' as well as 'procedures and decisions'. Several reasons led to the decision to complement the CAF with another qualitative approach:

- During all phases of this research it became apparent that some qualitative information is rather difficult to investigate, mainly because pertinent processes and procedures are normally not documented well or reflected on inside of planning or policy documents.
- Moreover it was found that participation models and decision making procedures have a high influence on liveability of landscape and the valorisation of landscape as such an asset.
- Lastly it became apparent that the procedures, decisions, participation and the whole planning process are too complex to examine by using a simple matrix

Within the qualitative interview there are references to the CAF matrix that has to be filled before the interviews can be conducted. As an interviewee a person is chosen that is responsible for the plan within the stakeholders' organisation.

The questionnaire includes the following questions:

Procedures and decisions

- **Why has the process being started?** What has been the reason for starting a planning process? Has there been a certain event, a legal requirement, etc.?
- **Who did actually start the process?** Which parts of society did the initiative come from? Processes can be started by different persons or groups (e.g. politicians, administration or public). However the initiative might have been taken by a certain social group.
- **Who drives the process?** Besides the group or person that starts the process there might be other persons or groups who ran the process and participated as a leader in the whole or long periods of the process. Often processes are very much depending on these persons or groups. These people might be e.g. from administration, professionals especially hired to guide the process (moderator), laymen ...
- **What have been the overall aims?** Are these aims still relevant, has the character of the plan changed during the process? The overall aim is normally related to the question, why a process was started, nevertheless aims might change eventually.
- **Please figure out a process biography and show important events (decisions, actions, participation events) on a timeline**. The aim of this question is to get am more clear insight on policy making procedures and governance processes that led to the plan as it looks like today. Stakeholder and TPG should make use of a timeline where the important and interesting events are drawn on. Also they should use a legend to show what type of event happened and indicate interrelations between certain events. In preparation the most important events mentioned in the CAF (sheet

freedom, line 52) should be put on the timeline. Also a legend (Figure 5) should be prepared.

- **Have the decisions made in the plan the character of being irreversible (**e.g. take longer than one generation to be reversed)? What are these decisions? The question has already been asked in the CAF-Matrix (sheet freedom, line 31 & 32) but without the additional question of what these have been, only an example should be given. If within the CAF it has been indicated that the decisions taken are irreversible this question should be used to find out more about these irreversible decisions.
- **Imagine the triangle of sustainability; in the CAF you have indicated that there is an emphasis on one or two of the aspects of sustainability** (sheet freedom, line 16). What are the reasons for that? This question is aiming at the triangle of sustainability with respect to the intergenerational justice. When asking the question it should also be taken into account that it was already asked if another plan is dealing with the topic (sheet freedom, line 17-18).

Process and Participation

- **Which parts of society did the participants come from?** It is wished that a variety of social groups takes part in a participation process as it is important to include as much of the society as possible.

- **Are there some (obvious) stakeholders that have not been part of the process?** If so, why? No one should be excluded from a process but it might be reasonable to focus on certain social groups, e.g. if planning a playground one might focus on children and parents rather than elderly people.

- **How did the participation process influence the planning process?** Some facts about the participation processes have already been collected in the CAF, but finding out what the impact of the participation process was is hardly possible. To discuss this question it makes sense to also make use of the project biography.

Others

- **What is the professional background and expertise of the team responsible for developing the policy document/plan/instrument?** Have been or are there landscape planning experts involved? Especially when landscape as a source of liveability is addressed experts in landscape should have been part of the team.

- **What has been the funding model?** Financial support makes a difference: both in developing the plans but most important in the implementation of the actions designed in the plans.

  The output of the interview is expected to be highly complex as the questions are. Thus the analysis has to follow the method of a 'qualitative content analysis'. In comparison to the performance reflected in the CAF matrices it is also possible to examine best practices in the field of procedures, decisions, participation and the whole planning process.

Full questionnaires from Basque Country, Navarra, Midden-Delfland and Offenburg available in Appendix II of the present report

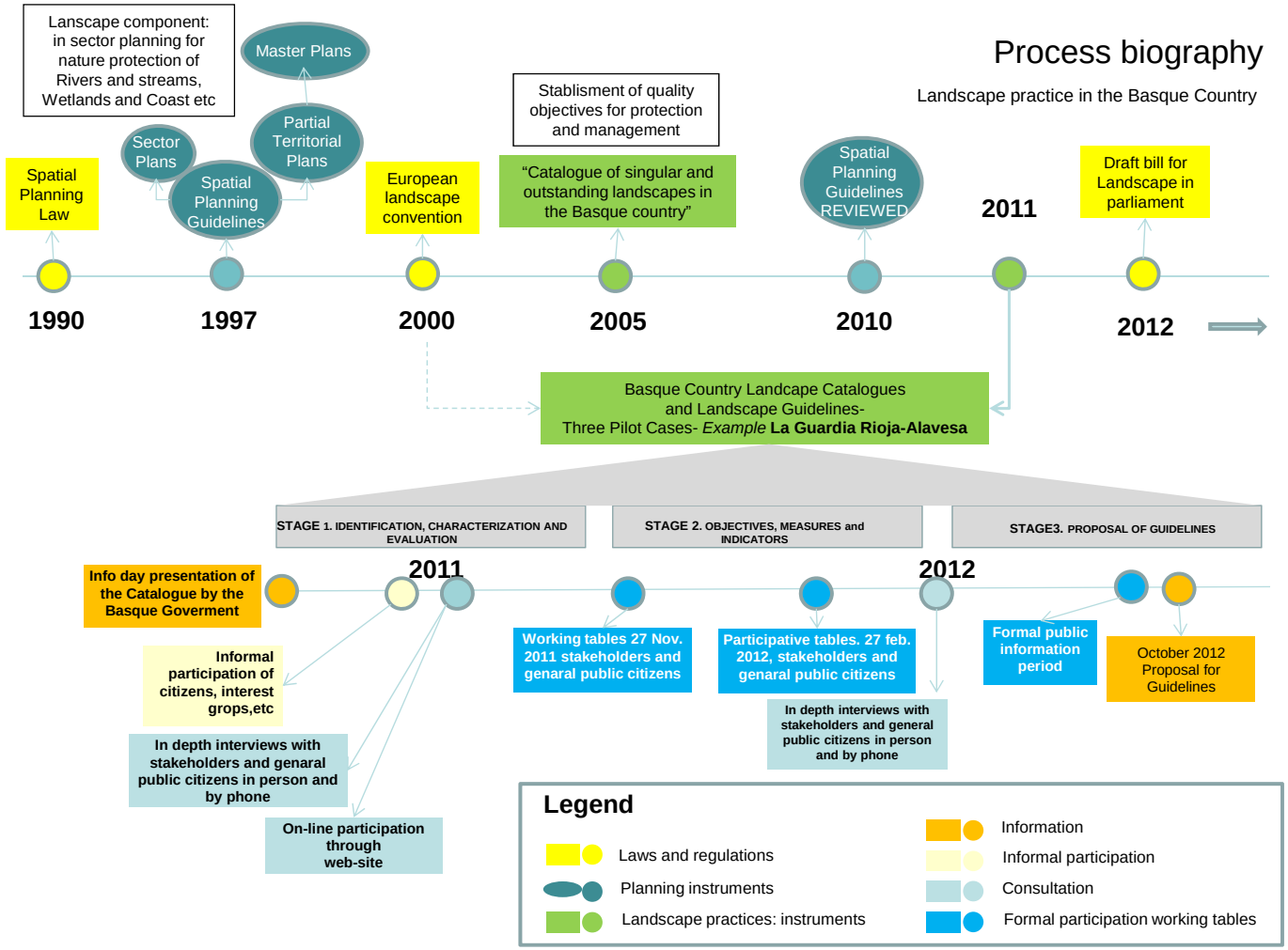


Figure 40 Example of a process biography: landscape policy in the Basque Country, Tecnalia 2013.

PART 4 Synthesis Phase

9. Integrated interpretation of qualitative and quantitative analysis

Although the governance level, planning culture, approaches to landscape planning and other factors differ across the stakeholder cases, they are dealing with a number of common problems, and some of the experiences may provide good input to improvements.

In view of the characterization of the case studies- spatial character, planning system & culture and planning practice- together with the application of the CAF the following research questions have been addressed:

To what extent landscape concept and landscape approaches have been considered in line to liveability components?

Which approaches, practices and actions are perceived as desirable for the integration of landscape into spatial planning?

What is the degree of cooperation and stakeholders/actors involvement and effective participation in spatial planning and in particular in landscape protection, planning and management?

What has been the role, of the multi-scale and multi-sectoral approach to landscape in this success?

Which have been the implications of planning decisions made at different scales of policy making and planning, with particular attention to regional and local scales?

Which have been the implications of sectoral policy making and planning on regional and local territories, with particular attention to landscape?

9.1. Contextualization of the planning systems

According to PLUREL project Liveland case studies could be characterized as follows:

Control mechanisms from supra-local levels of the planning system	Most important supra-local level (from land-use change perspective	Local level	Value
c) Strong, controlled spatial policies	Large (>1M)	any	**7**
	Medium-sized (0,5-1M)	any	**6**
	Small (<0,5M)	any	**5**
B) Medium level of control	Large (>1M)	Large (>30)	**6**
		Medium-sized (10-30)	**5**
		Small (<10)	**4**
	Medium-sized (0,5-1M)	Large (>30)	**5**
		Medium-sized (10-30)	**4**
		Small (<10)	**3**
	Large	Large (>30)	**4**
		Medium-sized (10-30)	**3**
		Small (<10)	**2**
A) Week level of control	Any	Large (>30)	**3**
		Medium-sized (10-30)	**2**
		Small (<10)	**1**

Case study	V	Interpretation
Basque Country and Navarra (Spain)	4	Medium level of control mechanisms from supra local level of the planning system
Midden Delfland (The Netherlands)	6	Strong, controlled spatial policies **from supra-local levels of the planning system**
Offenburg (Germany)	5	Medium to high level of control mechanisms from supra local level of the planning system
Llubljana Urban Region (Slovenia)	2	Weak level of control mechanisms from supra local level of the planning system
Thy NP (Denmark)	6	Strong, controlled spatial policies **from supra-local levels of the planning system**

Table 15 Reviewing data provided by PLUREL project [157] a contextualization of the Liveland case studies by means of their planning systems and governance structures

[157] Deliverable report 2.2.1 National spatial planning policies and governance typology Ivan Tosics, Hanna Szemzo, Dora Illes, Antal Gertheis (Metropolitan Research Institute, Hungary) Konstantinos Lalenis, Dimitris Kalergis (University of Thessaly, Greece)

Potential control resulting from the national government and planning systems

The results show a high diversity of government and planning systems in the EU countries from the perspective of land-use change. Regarding the potential control resulting from the national government and planning systems, Northern European countries (e.g. Denmark, the UK and the Netherlands) to show higher levels mostly because of their consolidated local government systems, while Southern European countries showing a higher potential (such as Cyprus, Greece or Portugal) have more fragmented local government systems, but stronger control by supra-local levels. Most new member states show a weak control potential, with the notable exemptions of Lithuania (where the tradition of strong planning is based on the presence of the former Western Soviet planning institutions) and Bulgaria (with a consolidated local government system).

The results show different values regarding the potential control resulting from the national government and planning systems. However, these values don't show the real strength of the public control over land-use change, as in practice these powers can be effectuated in different ways. Because of this, these values should be seen as a potential resulting from the government and planning systems. A weak potential control is hard to overcome even if the willingness is given, while a high potential may or may not be used entirely, depending on the intentions of the public bodies in power.

Two dimensions analyzed: the functioning of the government system (fragmented/ consolidated) and the planning policy system (strong/ week control through regional/ national level)

Instruments with effect on the peri-urban land uses, e.g intergovernmental financial transfers, public subsidies, taxation tools, service pricing, tools for regulate development processes will be included.

These instruments are of key importance to:

a) indirectly influence the functioning of the functional urban area, i.e. the mobility of people, investments, services between urban and peri-urban areas and

b) directly regulate the change towards more intensive land use, e.g. residential, commercial, industrial, office through re-zoning regulations; and influencing the level of development in already established areas through regulating the conditions of building permissions.

9.1.1. Central vs decentralized planning systems

Practice under analysis	Planning system
Midden Delfland Practice: Making and executing the local landscape plan "Perspective 2025" **The Netherlands**	The tradition of Dutch planning is based on decentralization, participation and consultations. Since 2010 a strong policy of decentralization on national level exists, in which many responsibilities on space, nature and landscape is transferred from nation to regional governments. The national government made strong budget cuts for these policies
Municipality of Offenburg Practice: Making and executing Local Landscape Plan **Germany**	The tradition of German planning is based on hierarchical steering Regarding the type of governmental instruments (Regulations, Finances, Cooperation and Communication) the regulative power of the Land Use Plan is high. The Landscape plan has character of programming and cooperation and binds only the administrations. A municipality has a weak position regarding finances. For spatial developments and for nature management the municipality is dependent on higher governments and private investors.
THY NP Practice: Implementation of the National Park Plan (NPP), which was approved in April 2010. **Denmark**	Centralized planning system where the authorities responsible for spatial planning are at local level the municipalities and at national level the Ministry of Environment. National Parks designated in cooperation between local, regional and state actors.
Navarra Practice: Orgi oak Forest. Protected Landscape of Basaburua and Ultzama Valleys **Basque Country Practice:** "Landscape Catalogue and Guidelines in La Guardia Rioja Alavesa" **Spain**	Decentralized system with a Top-down approach from regional to local level. National level does not have competences for spatial planning.
Ljubljana Urban Region Practice: "Expert basis for preparation of Regional Spatial Plan: for Ljubljana Urban Region: landscape items and process of preparing the study" **Slovenia***	Spatial plans are made only by national government and municipalities. A regional or subregional administrative scale does not exist

Table 16 Central versus decentralized planning systems in the case study countries

**At regional level the Regional Development Agencies work on preparation and management of Regional Development Programs, which have a sectoral focus. Following project ideas were identified by stakeholders and municipalities: Regional housing policy, Comprehensive renovation of the old village center, Comprehensive renovation of residential neighborhood, Comprehensive renovation of a single-family houses area, and two pilot projects: Eco village and Eco neighborhood, and Model case of supply center in the settlement of municipal significance. They act as a service agency and have no enforcement capacity. The regional development projects have no counterpart in regional spatial planning. Recent legislation is encouraging municipalities to engage in 'regional projects' and for this purpose regional analysis of spatial potentials are needed. For this purpose the Spatial Planning Directorate prepared guidance for all regions for the first time in year 2013.*

Spatial planning system in Slovenia is mainly top-down oriented: the municipalities must follow the national spatial plan strategy and national sectorial policies, as for instance agricultural or infrastructural. There seems to be a preference to use juridical instruments.

Regarding financial instruments, the national government is limited to realize nationally important projects and investments while local authorities stimulate spatial development and management and realize locally important projects alone and in public private partnerships.

The active participation of the interested stakeholders (in particular the local public) would enable them to have a stronger and more creative influence on important spatial decisions. Basic instrument for the 'productive protection' of the landscape would be a balance in spatial interests and appropriate land use. Moreover stakeholders should be involved in a new program of activities as well. Landscape planning could thus be the creative fusion of development needs with protection mechanisms that produces a quality landscape.

9.2. Outcomes of benchmarking through the CAF

The landscape planning elements are implemented to a various extent in all 5 stakeholder cases but the concept of landscape varies quite extensively, as do the involvement of the public in the plan processes. In all stakeholder cases, the protection and conservation of valuable and 'aesthetically pleasing' landscapes are at the forefront while multifunctional land use and the issue of liveability in regard to landscape planning are addressed to a smaller extent.

The Landscape Plans in Offenburg, Midden-Delfland and Thy NP, are not legally binding. The landscape policy practices (not study cases) in Navarra, Basque Country and Ljubljana Urban Region are referred as studies and guidelines and are currently in the study stage/phase.

LANDSCAPE PLANS

In the **Netherlands** an integrated landscape approach (as spatial quality) has since long been integrated in the spatial planning on all levels. Landscape (as natural and cultural value and as 'local identity') is often a spatial designation on sub-regional and local maps. Development of a local Landscape Plan is voluntary for the municipalities in the Netherlands. Spatial plans on regional and local level are obligatory. The planning culture in Netherlands is mixed top-down and bottom-up . In implementation programs forms of Public-private Partnership are widely used.

Central in the 'good practice' of the municipality of Midden-Delfland (MD) is the making of the Local Landscape Plan (LLP), which has been worked out in cooperation with other municipalities, the waterboard and the region over 3 years period.

Main goal of LLP is creating a 'green garden' in an urbanized area. LLP focuses on the development, rather than protection, and sees actions as ‘physical measures’. Monitoring is not an item in the LLP. The objectives of the LLP are not translated into measurable targets in words, but directly carried on to concrete measures, which are located on the synthesis map. So the ‘perspective 2025’ is an ‘action plan’, which includes an overview or synthesis map, ‘principles of design’ of future spatial developments and additional maps with ‘networks’ of ecology, water, public transport, walking, cycling and horse-riding. The LLP binds the involved governments, but no private actors. .

Accessibility is an important goal in the LLP but social relations is not a goal of spatial/landscape policy in the Netherlands. Economic goals are not seen as part of liveability or high quality landscape in the LLP. Tourism is not included as a goal. Agriculture is not seen as only production of food, but also as manager of landscape and nature (especially meadow birds). So continuity of dairy is a goal and a part of a multi-functional concept. Availability of water is part of (higher level) water policy, but not of the LLP. Integration of sustainable energy production is an item of landscape planning in the Netherlands, but not in MD.

Some of the health components indicated in the CAF are part of the LLP (physical outdoor activity, availability of public open spaces, nearby parks,) while others are the subjects of other policies (street connectivity, sound level, traffic safety, production of healthy food, surface water bodies and groundwater). In the MD there are spatial conflicts between ‘soft’ functions as 'recreational areas' (parks), accessible cultural landscape (multifunctional agriculture), ‘slow’ connections (walking & cycling roads) and ‘economic’ functions, like rural dwelling (villas), industrial horticulture, , and high speed infrastructure. LLP delivers choices and solutions for these conflicts.

The objectives with regard to health components are well defined, but not in a classical quantitative sense. Most of them are directly worked out in detailed maps (a map can be seen as quantitative, measurable description of objectives), design principles (guidelines) and examples.

MD municipality has particularly good skills in involvement of private stakeholders in management of the landscape, which is among the success factors. During the preparation of the LLP 64 stakeholders (organisations, NGO, authorities) were involved. One starting point was ‘drawing exercises’ – how could this area develop? The discussion addressed a broad scale at first and continued with zooming into the ‘polder’ scale (19 sub-areas)– where most stakeholders felt comfortable and officials felt workable. Here a so called ‘kitchen table approach’ was used, when the private actors were visited at their homes to continue the discussion on the agreed principles. Through such an approach a social connection to the LLP emerged (a feeling of ownership) and it helped to raise awareness of the landscape issues.

MD municipality has conviction in being successful in steering towards a multifunctional, agricultural landscapes and spatial quality. The factors that contributed to success are the existence of a strong vision (already before the LLP) and a legitimate and feasible plan. Moreover, the drive among politicians, as well as a cooperative implementation organisation was identified as success factors.

At the same time, a lack of financial resources has been a limiting factor, which is a similar problem for most of the stakeholder cases. It has been concluded that an intensive multi stakeholders approach is a very solid ground for a LLP, but it takes time, effort and money.

time, effort and money.

To what extent landscape concept and landscape approaches have been considered in line to liveability components?

The analysis through CAF reveals that Midden Delfland lack information in relation to 1. Evaluation and Analysis, 4. Strategy and vision and 5. monitoring. Shows high contribution to 2. Planning process and participation and dominates 6. Planning and procedures.

Quite strong contribution to freedom functions.

In **Germany** all plans on space and landscape are legally organised and binding for other governments (hierarchal order, top-down). Landscape planning has a long tradition on local and sub-regional level. In practice exists also a bottom-up influence: local plans are used to renew a sub-regional plan, but this is a voluntary action.

The 'Landscape Plans' have own (multi) sectoral goals (they are 'autonomous') and are also connected to spatial plans on the same scale. Since spatial and environmental planning competences are decentralised, every federal Region ('State or Land') has developed a specific version of Landscape Planning.

The (interlocal) landscape plan for Offenburg and surrounding municipalities was developed alongside the local Land-use Plan (this spatial plan binds private parties: citizens, farmers and developers). The LLP of **Offenburg** is multi-sectoral and delivers a map with designations of nature, landscape and recreation on rather detailed scale. The landscape plan is problem oriented and is able to address very specific issues. e.g. a strategy to handle illegal leisure-time-building (allotment gardens) in agricultural areas.

The Landscape plan of Offenburg delivers the basis for how to compensate impacts of urbanisation on the landscape. The Landscape plan provides some ideas on how to deal with sensible landscapes. It has a special part with guidelines for allotment gardens. According to the conviction of Offenburg, among the key factors to success is the sufficient and up-to-date database at detailed scale; early communication with land-use planners and nature protection organisations, which enabled to integrate the important contents of the landscape planning into the land-use plan in a very early state, and thinking about conceptions for dealing with problematic issues. Moreover, the availability of an adequate level of structural and financial support for high quality planning should not be underestimated.

The municipality is equipped with good instruments for planning and creating conceptions for landscape management, which is also supported by a strong planning culture in Germany in general.

Good experience exists in Offenburg regarding the information and developing new tools for monitoring and measuring the progress in achieving the target.

The bottom-up approach has been considered a successful factor in Dutch and German cases, providing a feedback to sub-regional level.

To what extent landscape concept and landscape approaches have been considered in line to liveability components?

The analysis through CAF reveals that Offenburg dominates component 1. Evaluation and analysis and 4. Actions and measures, followed by 2. Planning processes and participation. It lacks information in relation to 5. Monitoring.

Particularly relevant the contribution to Social functions followed Health and Freedom functions.

In ***Denmark***, the landscape is recognized by law with the ratification of the ELC in 2000. There is no specific national landscape policy but the concept of landscape is included in spatial planning, both a national and local level. The municipal plans cover both built-up and open land; hereby also taking landscape into consideration, particularly by using the tool of the LCA.

Implementation of the National Park Plan (NPP), which was approved in April 2010.
No legally binding, however there are binding measures related to nature protection and voluntary measures related to land use management, multifunctional landscape initiatives

To what extent landscape concept and landscape approaches have been considered in line to liveability components?

The analysis through CAF reveals that Thy NP contributes strongly to 2. Planning process and participation, also relevant contribution to 6. Planning and procedures.

Thy NP shows strong contribution to Cultural functions and Freedom.

LANDSCAPE STUDIES AND GUIDELINES TO BE INTEGRATED INTO SUBREGIONAL SPATIAL PLANS

In **Spain**, landscape protection is addressed in the Land law/Law on space at the national level. ELC was ratified in 2007. The autonomous communities of Navarra and the Basque Country are in the process of including landscape management in spatial policy. Catalunya, Galizia and Valencia have already finalized this process.

The **Basque** government gives guidelines on the content and function of sector planning and territorial planning. There are several documents, plans and strategies which already consider landscape to some extent, but the common indicators are lacking and there is not much tradition yet. Landscape has been traditionally approached from the point of view of sectoral nature policy and specific conservation plans. When it comes to the urban areas, the concept of landscape has long been associated only with the protection of buildings or areas that have an architectural or historical interest. The stakeholder involvement in planning processes needs to be strengthened. The Basque Country is revising its Spatial Planning Guidelines and a proposal for a Landscape Law is under development inspired by the ELC with the aims to integrate landscape planning in other planning instruments. Among the main regulation instruments are certain restrictions, informal incentives and Strategic Environmental Assessment SEA obligation.

Landscape catalogues represent a strong instrument for integrating landscape in spatial planning. The latter analyses and evaluates landscapes in each of the functional areas and

defines quality objectives. Three pilot 'Landscape Catalogues' are being developed in three functional areas, one in each province of the Basque country.

The landscape catalogues signals some contradiction between landscape quality and economic development in some economic sectors, such renewal energy and agriculture. In addition, the monitoring indicators for 'culture' component are not really developed but the need for a monitoring plan was named and some indicators were suggested. The objectives that relate to visions and strategies are mainly qualitative. The objectives will later be translated into actions and measures, although the timeline for meeting the objectives has not been set at the stage of analysing this practice. Monitoring of measures for the components of liveability is not addressed or poorly developed and the approaches and methods for monitoring are not defined today.

Uncertainty in planning, integrative vision and stakeholder involvement are among the weaknesses. Although the Basque Country already has high quality territorial data, it is in a need for an updated data and more developed territorial indicators. Similarly to other stakeholder cases, balancing between nature preservation and socioeconomic development represents a challenge.

Although there is a regional competence in landscape (local at the urban level), the capacity to legislate and to define strategies is not materialized sufficiently in landscape. Actually one could speak of a landscape of fragmented protected landscapes.

To what extent landscape concept and landscape approaches have been considered in line to liveability components?

The analysis through CAF reveals that Basque Country particularly contributes to 1. Evaluation and Analysis, 3 Strategy and Vision and 4 Actions and Measures.

Cultural, economic and health functions are those in which the Basque Country shows the highest contribution.

LANDSCAPE INTEGRATION INTO SPATIAL PLANNING STRATEGY

Although there is a regional competence in landscape (local at the urban level), the capacity to legislate and to define strategies is not materialized sufficiently in landscape. Actually one could speak of a landscape of fragmented protected landscapes. Navarra has not had any procedures for landscape evaluation, and general training for managers of protected landscapes and other stakeholders has been lacking. Sectoral policies includes landscape word, but do not include a concept such as landscape.

Administrative issues and competences are divided over several levels which hampers the implementation of a comprehensive approach to landscape. There is no holistic vision for landscape management and the social and identity dimensions of landscape have not been taken into consideration. There is a lack of indicators measuring landscape dynamics related to a comprehensive landscape management. Further, there has not been any public participation. However, the participation system exists along the plan design: public hearings, period for stakeholder pleas.

Besides the already mentioned weaknesses, a strong territorial governance system is a relative strength of the region, in addition to the abundance of documents and source data for landscape analysis (water, geology, climate, fauna, vegetation, etc).

The up-coming Landscape Plan for Navarra is meant to address some of these problems, and the ratification of the ELC is seen as an opportunity for the region.

To what extent landscape concept and landscape approaches have been considered in line to liveability components?

The analysis through CAF reveals that Navarra is remarkably strong in 5. Monitoring, followed by 2 Planning process and participation.

Economic and cultural functions are well represented followed by freedom.

REGIONAL DEVELOPMENT PLAN: LANDSCAPE AS A CHALLENGE

Slovenia ratified the ELC in 2003 and the landscape is recognized at national level in several acts within the Slovenian legislation and also in the Spatial Development Strategy of Slovenia. The policies on nature and (cultural) landscape are sectoral organised and embedded in various legal frameworks. There are management plans on protected areas, but no local landscape plans. The planning culture is referred to as consultative. Among the main regulatory instruments are the voluntary governance agreements.

There exist no regional government, nor spatial planning on that scale. One of the challenges of the city of **Ljubljana** is integrating the landscape in a regional spatial plan, which does not exist until now.

The regional development plan of Ljubljana Urban Region does not include actions and monitoring for any of the components of liveability. The strategy for the culture and economics components are provided to some degree and the objectives are mainly qualitative. Social relations/capital component is not addressed in the plan. Although participation is addressed in the plan, it has not been implemented yet. Consultation was used as the main tools.

The national planning culture in Slovenia, in the last two decades, has gone in direction of deregulation, loosening and weakening the planning rules and routines. The overall political orientation gave priority to the free market initiative and private ownership.. In line with numerous new legislation acts for different overlapping area, from water management to nature protection for example, spatial planning became slow and unpredictable so its role was greatly reduced.

To what extent landscape concept and landscape approaches have been considered in line to liveability components?

The analysis through CAF reveals that Ljubljana Urban Region shows a lack of information in most of the components particularly in 4. Actions and measures and 6. Planning and procedures. It only contributes quite modestly to 1. Evaluation and Analysis.

In relation to the landscape functions the contribution is only slightly relevant to Economic functions.

9.3. Success of landscape approaches, planning practices and planning measures

In order to indicate which approaches, practices and actions are perceived as desirable for the integration of landscape into spatial planning, we have started by identifying those factors that lead to success and the ones recognized as failures or constraints by the stakeholders themselves.

FACTORS THAT LEAD TO SUCCESS

- **Mature spatial planning system and well developed planning systems allows better integration of landscape concept and approaches**

  This means that such integration could be materialized in form of particular instruments for landscape planning and management as is the case in Midden-Delfland, Offenburg and Thy NP or by means of the integration of landscape objectives, guidelines, actions and measures within existing spatial planning and/or land use planning instruments.

  The catalogues characterize the landscape units with a multi-scales and multi-sectoral approach. The characterization is per se transdisciplinar. The objectives defined, also go beyond, on one hand the local scale, on the other a unique activity. This is only possible when different perspectives from administrations at different levels, general public (citizens) and other stakeholders (private sectors, NGOs, etc) are considered.

  In Navarra the intervention is framed in the regional environmental legislation over Natural Spaces of Navarre, which is only capable to intervene with regard to construction investments when ecosystem management is involved. An example of such maturity is exemplified by the change of the local policy in environmental management of a communal mount in Orgi in order to destine it to public use, conservation of nature, and environmental education for the whole of society.

  In Offenburg the policy filed of nature and landscape has own instruments but main regulative power to implement the landscape plan lies within the comprehensive Land Use Plan. Landscape and Land Use Plan have been developed in parallel.

  In MD top-down encourage from National interest in protection of green spaces

- **Strong and comprehensive methodology for landscape evaluation within the landscape practices as a precondition of success**

  Proficiency landscape and spatial planning expert group in charge of the elaboration of the practices, together with quality supporting material and cartography

  Robust and comprehensive approach to landscape guarantees rational prioritization of actions and measures.

  In the elaboration of the catalogue in the Basque Country is worth mentioning the definition of tangible objectives for each of the landscape units. Each objective is identified considering public perception and interests and it will be later translated into specific actions and in terms incorporated: a) as guidelines in the spatial comprehensive plans b) special actions – interventions in areas of special interest.

The model of Orgi in Navarra is an example of sustainable management, of analysis, and environmental protection that may be extrapolated to other zones of interest.

In Offenburg a natural science based approach is used in landscape characterization and evaluation towards planning and management. Very relevant is the inclusion of cultural aspects and identity.

In Midden- Delfland making of a local landscape plan for a small area- surface 6.500 ha (65 km2)

- Midden-Delfland is not an agricultural community, as an island surrounded by high density cities, but the inhabitants are integrated in the urban network, in a physical, social and mental way.
- The landscape is not static, but dynamic. There are always developments. The question is not how to stop them, but how can we use them in our mutual benefit.

Ljubljana Urban Region has its diverse landscape character as a key element for success but also a challenge in spatial planning terms.

- **Early participation and consultation**

In Midden-Delfland strong participatory process lead by external bureau- Bosch Slabers

In Thy National Park a successful participatory process was established: with 400 participants in the first meeting, the process was loosely steered by the steering group, and the stakeholders were divided into four thematic groups: Natural values, Cultural values, Business and Recreation. An example of the success of bringing the local stakeholders together was that a possible conflict between interests in agriculture and nature was solved by the stakeholders themselves. The Extent/border of national park was agreed upon by the citizens (nature group and business group). One precondition was that there can't be implemented additional restrictions on the agricultural land compared to areas outside the National Park boundary.

Very important in the case of the catalogues in the Basque Country the consideration of objective component of landscape- expression of territorial system alongside the subjective component- Perception

In Navarra Implication of a local public entity in the management of a protected space shared by the Regional Government and other public institutions; town council of the valley, Cederna-Garalur Association…etc.

- **Cooperation and coordination – gobernance**

In Midden-Delfland the collaboration between different municipalities in the design of the plan later materialized in the cooperation for its execution, is patent.

In Offenburg the collaboration between different municipalities in administrative cooperation, which form a functional coherent area of spatial planning, represent a big factor for success.

Navarra experience was selected in the Best Practices Competition (Dubai in 2006), and listed as GOOD. http://www.unhabitat.org/bp/bp.list.details.aspx?bp_id=1744 The Orgi oak forest is an example of Natural Recreation Zone, included in a bigger Protected Landscape Area under protection by Regional Law 9/1996 on Natural Reserves of Navarre, which shows actions on Landscape protection and management where a protected area and an economic activity coexist. http://www.bosque-orgi.com/

- **Financing**

Finances are always short and getting funding is considered one of the big contains in the implementation of actions.

However is also true that for spatial developments and for nature management local administrations are dependent on higher governments and private investors.

In Midden Delfland support of national government is crucial in the implementation of activities.

In the case of Orgi ARN in Navarra, management and maintenance, is almost 100% funded through an agreement signed between the Government of Navarre and Lizaso Council (Local Authority equivalent to NUT6). These activities are performed by a local company (five employees) contracted by public tender until 2017. Other activities and investments are often financed by sponsorships or European initiatives or financial institutions. These projects may be new construction projects, environmental volunteering, case studies, etc. In this way were funded, for example, path for blind persons for some campaigns with students from universities of Navarre. Among these entities are Cederna-Garalur Association for Rural Development (LEADER manager), the Regional Tourist Consortium Plazaola, IMSERSO ONCE Foundation, ONCE-Navarra (Spanish National Blind Organization), Caja Navarra Foundation.

- **Multi-scale and multi-sectoral approach to landscape**

In Midden-delfland an intensive multi stakeholder approach represents an effective way to create a common vision. But that takes time, patience and effort, qualified people and a design process of zoom-in and zoom-out. The design principals are working very well in the daily practice of the officials, especially related to private developers.

One of the most interesting things about national parks in Denmark is that it is neither a top-down or bottom-up process: the Ministry prepared the legal framework (the Act on NP) that made it possible for the local level to take the initiative to establishing the NP – which ultimately had to be approved by the Minister and thus you can argue that the NPP was mandated to finalize this process. However there was no requirement from the Ministry that a NP should be set up at all. They have, however, since received their own budget for running the NP (i.e. the Ministry obviously supports the establishment of NPs in Denmark).

NPP is a working/activity plan – which is to be carried out by cooperation (on a voluntary basis) with the municipal, the national (environmental) authorities, and other public and private actors.

FAILURE FACTORS OR CONSTRAINTS

- **Landscape concept**
  - Still biased consideration of landscape in spatial planning mostly from the point of view of conservation and aligned with sector policy (protection of rivers, coastline management, renewal energy, agro-forest). This is still the case in Navarra, Basque country and LUR. The Landscape practices in Navarra and Basque Country case studies are now overcoming such constraint.
  - RDA LUR recognizes its landscape as underused development opportunity. Further efforts must be done to promote this potential. The strength of its identity should be further activated.
  - In THY NP It is stated in the law that the minister can only establish a national park if there has been a public survey of the interest for the park. When the local hear the word 'national park' they are skeptic because they think 'preservation'. So one first step was making them think differently about the concept of a national park.
- **Administrative and institutional constrains**
  - Political rhythms, changes in parliament composition and resources, might delay the process
  - In Navarra and Basque Country administrative complexity and division of competencies at different levels unable the implementation of a comprehensive approach to landscape
  - Complexity of political networks and the length of the decision making process in Midden Delfland alongside decentralization process
- **Participation and consultation**
  - Participation time consuming and expensive process
  - Participatory culture seems to be underdeveloped still in Slovenia
  - Limited public involvement in the early stages of planning, rather late public participation in the decision making
  - Price of high level of participation; time consuming; maybe not all groups are represented; how much should the process be steered?
  - Full participation process is needed when you're making the plan and thus need the input.
  - Balancing nature protection and the wishes of different visitors.
- Regarding the **type of governmental instruments** in MD (Regulations, finances, cooperation, communication) a municipality has a week position regarding finances. For spatial developments and for agrarian nature management the municipality is dependent on higher governments and private investors.
- **Implementation:**
  - It is a challenge in all case studies.

9.3.1. Formal vs informal character of plans, instruments or actions

The ELC makes reference to the Legal recognition of landscape: "Each Party undertakes: a. to recognizes landscapes in law as an essential component of people's surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity;" (Article 5 of the European Landscape Convention – General measures)

The legal recognition of landscape implies rights and responsibilities on the part of all institutions and citizens of Europe towards their physical surroundings. The landscape in which they live is the result of many change-producing actions resulting from the activity of various stakeholders in territorial processes in highly varied ways and on differing scales of time and space. Such activities may be the outcome of action by public authorities in establishing a large-scale infrastructure or of individual action in a restricted space.

Practice	Character of plan, instrument or action
Midden Delfland Practice: Making and executing the local landscape plan "Perspective 2025"	The Local Landscape Plan is a formal instrument.
Municipality of Offenburg Practice: Making and executing Local Landscape Plan	The Steering power of Offenburg is based on the formal and informal strength of the land use plan, which was developed in cooperation with landscape planning. Landscape Plans are the basis for the SEA of the Spatial Plans (as well as for the EIA for project)
THY NP Practice: Implementation of the National Park Plan (NPP), which was approved in April 2010.	Formal character of the instrument
Navarra Practice: Orgi oak Forest. Protected Landscape of Basaburua and Ultzama Valleys	Landscape management practice with a formal character.
Basque Country Practice: "Landscape Catalogue and Guidelines in La Guardia Rioja Alavesa"	Formal instrument recognized under the Draft bill law for Landscape protection, planning and management (now in parliament under debate- the future of the law is uncertain. However, the Catalogues and Guidelines are not a Landscape Plan per se.
Ljubljana Urban Region Practice: "Expert basis for preparation of Regional Spatial Plan: for Ljubljana Urban Region: landscape items and process of preparing the study"*	RDA LUR) is an informal, voluntary cooperation of 26 municipalities, with the central city of Ljubljana as chairman. RDA LUR is acting as a legitimate regional organization at the level of the region

Table 17 Formal versus informal character of plans, instruments and actions

**RDA LUR (as cooperation) has no formal competences on spatial and landscape development (these are in hands of the municipalities), but it can propose joint documents and projects, that can be accepted and implemented by the municipalities. The study (which includes landscape items) was prepared with the ambition to support the preparation of Regional Spatial Plan, but this was not accepted by the assembly of mayors of the involved municipalities.*

The organization of RDA LUR is based on an agreement / contract of the municipalities, which imposes the agency to develop partnerships between public and private sectors at the local, regional, national and international levels for implementation of development initiatives and the strengthening of balanced regional development, to promote the overall development of the region, to prepare and implement the regional and other development programs and to obtain domestic and foreign sources of funding. For the RDA LUR work app. 10 professional officers in the field of regional and spatial development.

9.3.2. Degree of stakeholder cooperation and involvement and effective participation

Degree of stakeholder cooperation and involvement and effective participation in spatial planning and in particular in landscape protection, planning and management?

In Offenburg the process was started by the municipality when it was also decided to do the land use plan. It seemed to be important to do both plans in parallel because they are very closely related.

The process was mainly driven by the municipalities' department for environment and department for urban planning and the companies (HHP / Vögele & Gerhard) that have been hired for the plans. Within the association of administrations the municipality of Offenburg takes over the planning tasks for the other municipalities.

A similar process occurred in **Midden-Delfland** where the process started by the Municipality. An intensive multi stakeholder approach is an effective way to create a common vision. But that takes time, patience and effort, qualified people and a design process of zoom-in and zoom-out. Multiscale cooperation between the municipality and South Holland province was also remarkably important in this process

The procedure of publication of the draft Landscape Plan and the handling of formal opinions took relative little time. Only some details were changed. There came some alternative proposals about luxury residences, horse riding enterprises and horticulture glasshouses in open landscape, but these were all rejected. The final decisions in the Councils of Towns and Water board were not controversial, because many politicians were involved in the informal consultations.

Navarra established for the practice under analysis a participatory process aligned with Local Agenda 21 well established in the region. Processes focus to some affected groups as farmers and others for specific variants in education, environmental, school and volunteering.

In the case of the **Basque Country** the territorial component is embedded the Basque Environmental Strategy for Sustainable Development, towards sustainable territorial development and management.

Agenda21 also calls for mechanisms aiming to promote a constructive and productive dialogue between the full ranges of stakeholders towards sustainability. The current urbanizing trend needs tools to improve the process and to avoid its negative impacts. As urban development is common to most European cities, urban sprawl and its impacts should receive specific attention. Common understanding of logical configuration of territories in interaction with urban and rural processes from a social, economic and environmental

perspective seems to be crucial to achieve a new sustainable balance between cities and countryside.

Which have been the implications of planning decisions made at different scales of policy making and planning, with particular attention to regional and local scales?

In Offenburg different groups of society have been integrated in the participation process. Of course not everybody could participate in the same way and some did not make use of the opportunity. But some groups can be identified that did. The elected officials of the municipalities as well as the members of the municipalities' councils and the members of the councils of the single villages did follow the process in almost all stages although it is not legally binding to integrate the villages' council. Besides that the approved environmental organizations as well as other groups dealing with environmental protection have been consulted at certain points of the process. Moreover other administrations have been participating e.g. administration for agriculture (most conflicts occurred), higher nature conservation administration, administration for soil and water. Finally of course at certain points of time public in general was invited to participate.

Participation of course had an influence on the planning process and its outcomes. But from today's point of view it is hard to figure out the exact inputs that later were found in the plans documents. Throughout a constant communication process with the participants not many conflicts of occurred and consensus was easy to find. So for example the environmental organizations mostly were very satisfied with the outcomes and steps in between. It is remarkable that the influence on the plan could not be specified in detail but the planners learned how to do a participation process. Especially the planners adapted to the problems of laymen and expert communication. For example the legal requirements had to be explained in a way laymen are able to understand. Therefore it is not surprising that the main concerns were not about the plan itself but about the implementation of the plans actions and measures.

In **Midden-Delfland** effective participation influences the process in several ways: Much influence via informal consultations; little via formal participation. During 1 ½ year (Nov 2007 to April 2009) diverse actors were involved in the preparation of the Landscape Plan: stakeholders, interest organisations, citizens, farmers and local politicians, also from the surrounding cities. These were informal consultations in diverse working forms (see time line).

In **Navarra** having a top-down approach to spatial planning, also landscape planning and management has a vision and strategy at regional level.

In **Basque Country** public participation is a key issue in the elaboration of the Catalogues and Guidelines. Landscape perception is subjective and therefore the participation of citizens and all agents and stakeholders involved in landscape is remarkably important.
Therefore, during the elaboration process of the Catalogues and Guidelines has been crucial:

- Involvement and team work of citizens and administrations- practitioners
- The administration boosting public participation and public involvement

- Keep participation active in time that would in term lead to awareness and socialization of landscapes values.

The public participation aimed at:

- Allowing people and citizens and also their social agents to express their opinions and PERCEPTIONS of landscape
- Increasing the efficiency in the decision making, resulting from reflections close to the people and taking consensual decisions
- Increasing the sense of involvement and co-responsibility in monitoring and compliance with the decisions on landscape

Which have been the implications of sectoral policy making and planning on regional and local territories, with particular attention to landscape?

As the **Offenburg** landscape plan is a sectoral plan for nature conservations, environment and landscape there are certain groups of stakeholders that have not been invited as their field of interest is not met by a landscape plan.

The landscape plan is a sectoral plan of nature conservation (legal obligation). Thus its focus is on the environmental aspects. Other plans are comprehensive (land use plan / regional development plan) and integrate aims of different sectoral plans.

For example the social organization and administration are not directly addressed as they do not see that landscape is in their responsibility as well. Another example would be economics. They did only participate as long as agriculture as one branch of economy is concerned. Nevertheless it is important to mention that no one was not allowed to participate or actively excluded from participation.

In **Navarra** although the definition is not approved or ratified by an administrative procedure, consensus does exist among the different departments of the Government of Navarra and sectoral policies.

Although the **Basque Country** has a solid territorial management tradition and recognized planning system, consolidated in the ´90 with a regional Law on Spatial Planning, landscape was approached from the point of view of sector policy and specific conservation action plans, although several experiences existed that somehow dealt with landscape protection mainly. The revision of the Regional Spatial Guidelines in 2010 incorporated a particular chapter devoted to landscape as a key value for territorial development also representing the identity of the Basque country and the Basque culture meant also a milestone for the initiative. So it could be said that the regional administration start the process, influenced by the initiatives that were taking place all around Europe.

10. Key messages, options and recommendations for policy development

From our scientific approach in this project, we assume that landscape and territory are two different concepts and two inseparable facts but definitively not synonyms which are important to distinguish and be able to relate. This is remarkably important at the time of approaching the policy question.

Policies related to landscape, spatial planning and land use planning, share many communalities, but they mainly converge to the extent they are able to contribute to the quality of life of the people living in the territory and its sustainable development.

The synergies between the policies related to landscape and the ones related to territorial development are evident, working in both directions:

A. On the one hand landscape- *"could enrich and improve integrated spatial planning and urbanism in different ways, and be seen and used as an asset for harmonious territorial development and for smart, sustainable economic development"*- since**:**

- The classification of the landscape requires a global vision of the territory throughout a multi- scale approach, going beyond the merely local interests and points of view.
- Landscape planning could contribute to the process of making decisions about the most sustainable way to use the territory.
  - Improving governance and facilitating participation of key actors and stakeholders in the planning process
  - Facilitating also public participation in different stages of the planning process-landscape is easy to "read" and "understand"
  - Incorporating landscape as a territorial asset and capital, a key element for territorial development within cohesion policy principles
- The identification of landscape objectives can enhance the improvement and development of both poor or abandoned areas, and landscapes of outstanding beauty.

B. On the other hand, spatial planning (and land use planning) could provide the instruments for contributing to the preservation and management of traditional landscapes and/or allowing the construction of new ones, on the basis that all interventions in the territory will have an effect on landscape, transforming it, preserving it or degrading it.

Based on what we have learned so far from the literature, the analysis of the landscape practices in the project case studies, alongside discussions and reflections with stakeholders the present chapter is presenting the following project results:

- Outline of landscape policy making in the project case studies
- Selection of policy priority areas and key messages for policy development
- Policy options and recommendations in each case study
- Key policy messages and awareness rising for relevant European entities (EC and CoE) and ESPON

10.1. State of practice from the policies perspective

While landscape as a territorial concern of its own is gradually creeping into the policies at European and EU level as well as gaining increasing attention in the conducted ESPON

research projects, another important threshold for the realization of the concept as a planning issue is whether it is being implemented in the national and regional planning acts and processes.

Thus, as a primary exploration of this, the plan processes in the 5 case countries[158] have been reviewed for landscape planning elements based on the four main elements highlighted in the ELC:

- Whether landscape is recognized in law;
- If specific landscape policies are developed (aimed at landscape protection, management and through specific measures);
- If landscape is integrated into regional and municipal/town planning polices; and
- If procedures for public and stakeholder participation in landscape relevant policies are established.

As illustration of good practices, examples of impact on regional development where socio-economic development has gone hand in hand with successful landscape protection and management should be taken forward by means of an overview of the current practice of landscape policy making, examples of implementation of European landscape policy in the national regulations, the identification of terms, concepts and practice shared among the landscape policy makers, and finally the identification of concepts related to practices and procedures constituting the local, national and regional planning and management in each of the stakeholder-countries.

Finally, it will also be sought to identify whether or not there is a common definition of landscape; if the practical use of 'landscape' recognizes all type of landscape (natural, rural, peri-urban and urban) or only some of them, and if the concept of attractiveness is addressed in relation to the use of the concept of landscape. Already here it can be emphasized that in most national policies a pre-understanding of what the landscape concept includes and what is understood by attractiveness seems to be inherent and embedded in the national discourse, and therefore difficult to specify in detail across the discourses. Such a situation can be illustrated in relation to the CAP reforms where Potter and Tilzey emphasize: "The recent history of reform of the Common Agricultural Policy (CAP) and wider rural policy reform in the European Union (EU) … suggests that the European policy stance is one of partial resistance to unfettered liberalization, policy-makers apparently having embarked on an attempt to combine elements of the neoliberal programme with continued commitment to state assistance in various forms. This sets the frame for the regulation of an increasingly bimodal agricultural industry, in which spaces for post-productivism and rural development are being defined and defended in public interest and public good terms but where there are few opportunities to question the enforced

[158] Due to the autonomous status of the two Spanish case studies, it would be more precise to talk about the 5 countries and respectively 6 regions.

segregation and commodification of rural space and environmental provision that this implies" [159].

The initial findings of the level of implementation of the concept of landscape in national and regional planning are listed in the following with an overall aim of identifying the current formal practices of integration and operationalization of landscape and spatial planning in the planning systems of the five Liveland countries.

The current structure has been chosen in order to promote the option of comparing similarities and differences for each of the involved countries.

Denmark: The current practice of landscape policy making

The Danish planning system is characterised as the 'Comprehensive integrated approach'[160] where the public sector activities are coordinated in a formal hierarchy of plans from the national to the local level. More specifically, the plan system falls under the sub-category of the 'Nordic' approach where the local authorities carry out the major part of the planning activities but in shared responsibility with the national level.

At national level the Ministry of the Environment has the overall responsibility for physical – and thus landscape – planning in Denmark. Although no comprehensive national plan is developed, the national planning can affect the local planning through national plan reports (*Landsplanredegørelser*), national planning directives (*Landsplan-direktiver*), guidelines in the form of national preconditions for municipal planning (the so-called *Statslige Udmeldinger*, which is the state's coordinated statements for each plan revision) and so-called direct interventions in individual municipalities' planning, for example through government vetoes[161].

After each election, the new Minister of the Environment advances a National Plan Report (*Landsplanredegørelse*) regarding the national development to the Danish Parliament (*Folketinget*). The report is discussed in the Parliament's Planning Committee and is circulated to the municipalities. Following government decision the National Plan Report is then the basis for planning directions at both national and municipal level in the coming term[162].

The national planning directives are the instrument by which the Ministry of the Environment can supplement the National Plan Report and set binding restrictions for the content of the municipal planning. They can be of either enabling commanding, or prohibitive nature, and can – depending on their content and aim – be either of either

[159] Burgess, J. 1987, "Landscapes in the living-room: television and landscape research", Landscape Research, vol. 12, no. 3, pp. 1-7.

Potter, C., Tilzey, M. (2005): Agricultural policy discourses in the European post-Fordist transition: neoliberalism, neomercantilism and multifunctionality Prog Hum Geogr October 2005 vol. 29 no. 5 581-600

[160] Tosics, 2010

[161] Miljøministeriet, 2007b

[162] Miljøministeriet, 2007b

modest or wide-ranging extent. Among the topics that have been addressed in recent directives are the designation of new home in coastal zones; alignment of gas and power lines, location of national testing stations for wind turbines, designation of areas for relief centers, and rules for planning in the metropolitan area.

The Ministry of Environment also publishes an overview of the coordinated national interests (*Oversigt over statslige interesser i kommuneplanlægningen*) with binding conditions for municipal planning. In the following revisions of the municipal plans, the municipalities must take these into account.

With regards to landscape planning, a recent addition to the national plan instruments is the Act on National Parks (*Lov om nationalparker*) from June 2007, which gives the Minister the opportunity to create national parks in Denmark. The regulations (through an executive order) may limit the municipalities' competence to plan within the national park area, but the establishment of a national park is followed by a national park plan (*Nationalparkplan*), which must not be in conflict with the regional development plan, municipal plans or local plans.

In 2007, the administrative units of Denmark were restructured, reducing the number of municipalities from 271 to 98 municipalities and replacing the former 14 counties with five administrative regions. The reform also had consequences for the planning system, and the division of responsibilities between the local, regional and national level[163]. The physical planning which is/was primarily carried out at the municipal level obtained an even stronger status while the regional level was stripped of its planning obligations which were transferred partly to the national but first and foremost to the municipal level. Since 2007, only the local and national levels have the competence for implementing physical planning. The regions are, however, responsible for the regional growth, in that they must prepare the Regional Development Plan (RDP).

The municipalities are responsible for planning in both urban and rural areas. According to the Planning Act each municipality is obliged to establish and maintain its municipal plan, and for a period of 12 years state its overall objectives and guidelines for the development of the individual municipality.

Every four year, the Municipal Council presents a strategy for the municipal planning – the Plan Strategy – a document that also constitutes the formal decision for necessary revisions of the municipal plan. The municipal plan provides the framework for the preparation of local plans and for the processing of the concrete administration of the countryside and applications for building permits. Although the municipalities hold the main responsibility for planning, the Minister of Environment is obliged to oppose a proposal for a municipal plan if it is not in accordance with the general interest. In everyday practice the power of the Minister of Environment are exercised by the Nature Agency.

Implementation of European landscape policy

[163] Miljøministeriet, 2007b

Denmark was active in the development of the European Landscape Convention (ELC) and was one of the countries that signed the ELC when it was first presented in Florence October 2000. The ELC was officially ratified with government approval in 2004, and the notes following the ratification stresses that Denmark already lived up to the major part of the ELC's obligations. Thus no major projects or initiatives would be taken as a result of the ratification. The ELC was however communicated to the actors responsible for the landscape interest; in 2004 this was the counties, today this is the municipalities.

Since no specific follow-up strategy for the Danish landscapes has been developed as a concrete response to the ELC, it may seem that the ELC has received little attention in Denmark. However, in recent years the focus on landscape aspects in Danish planning has been enhanced and several measures that are in line with the ELC have been implemented. This has just not been with specific reference to the ELC wherefore the effect of ELC might be overlooked.

Particularly two sub elements of the ELC have been further developed in Danish Planning since the ratification of the ELC. One thing is the emphasis on recognition of the landscape perception of the general public and the needs and wishes for the development of landscape to be included in landscape planning. This public involvement can assist in legitimizing and qualifying the decision criteria, e.g. by contributing with knowledge on landscape identity, the recreational use of landscape and the attachment between people and landscape. Generally, public participation has become a very strong element in recent Danish planning. A central element of the Planning Act is that the citizens must be involved in the planning process before the plan is adopted. The planning act stipulates in detail when stakeholders should be involved and also when this should be done by public consultations or if larger debate and explanation processes are needed. The stated public involvement is a minimum requirements and the planning authority has the power to decide whether more material for consultations should be prepared or if public meetings and working groups would be beneficial for the success of the planning process and the plan.

The issues of the ELC that has gained most attention in Danish landscape planning is Article 6C, Identification and Assessment. In 2007, the Ministry of the Environment drafted a Danish version of the English Landscape Character Assessment (LCA). The LCA is a planning tool that maps, describes and assesses the open land/ countryside in characteristic landscape areas and based on these descriptions and assessments strategic objectives, actions and initiatives are implemented in the municipal planning and result in the designation of valuable landscapes[164].

The adapted Danish version of the LCA method was originally developed for and tested at the regional level since it was intended for use by the previous 14 Danish counties. However, the administrative reform in 2007 resulted in the abolishment of the counties, and countryside planning is now carried out by municipal authorities. Hence, the Danish version of LCA was transformed so that it could comply with the new conditions at the municipality

[164] Steffensen, 2010

level. The development of LCA and the guidelines for execution were finalized in 2007[165], and the method has now been tested in several municipalities and in the designated areas for the five future national parks. The designation of the first five Danish national parks, in the spring of 2008, was a further incentive for the implementation of landscape assessment[166].

The Ministry of the Environment recommends that all municipalities use LCA when updating and adjusting the regional designated valuable landscapes to the municipal scale, and analysis shows that the use of LCA is a great improvement to existing methods of designating regionally valuable landscapes. The method includes all landscapes and not just selected hotspots and it deals with almost all phases of landscape planning from the landscape analysis to the implementation of goals and strategies in the municipal plan. However, the ELC is not a document which advocates conservation in that the objective of the ELC is not to freeze the landscape as it once was, but rather to control the ever-ongoing process of change as it embraces all the values inherited in the landscape and highlights these. Thus another, parallel, example of Danish planning developing in line with the ELC is the development of a more holistic approach to spatial planning as expressed by the Danish Ministry of the Environment in its 'Introduction to spatial planning in Denmark'[167].

Concepts in local, national and regional planning

With the strong planning culture and integrated systematic approach, there is in general very good coherence between the measures taken at national level and the implementation of these at municipal level.

The new measure of the Landscape Character Assessment Method has raised the understanding of landscape as a planning entity that is valuable to emphasise in both in the plan process and for the final outcome of the individual plans. Furthermore, the inclusion of the Landscape Character Assessment in the preparatory work for the plan development intensifies a holistic rather than sectoral approach to planning.

As also stressed in the above, public involvement in the plan process is a strong element in the Danish planning system – from municipal level through to the plans and strategies developed by the national entities.

Shared terms, concepts and practices

As mentioned already, according to the Ministry of the Environment the Danish practices for landscape planning were already at line with the priorities of the European Landscape Convention when it was ratified.

The concept of landscape is included in several plan policies, both a national and local level. Impacts for the landscape should be taken into account when planning for e.g. new infrastructure, but the policies also include landscape perspectives in terms of protection of

[165] Danish Ministry of the Environment, 2007a

[166] Caspersen, 2009

[167] Danish Ministry of the Environment, 2007b

valuable landscapes, maintenance of the cultural landscape and more loosely on the development potential of landscapes.

The concept of landscape is thus not limited to the protection of valuable landscape, although this is one element. The role of landscape for recreation is to some extent included and particularly the role of attractive landscapes for development potentials is addressed – however not very explicitly.

Public participation plays a central role in the Danish planning procedures and is included in legislation both at national and local level and is also a central part of the planning practices at the local level.

The Netherlands: current practice of spatial and landscape policy

Until around 2010 the Netherlands had a comprehensive planning system, with coordinating policies (on Finances, Space, Environment etc.) and implementing sector policies (investment programs on Housing, Traffic, Nature, Water etc.). Recently big changes in national macro-policies have taken place: budget cuts (with Finances as only remaining coordinating policy), pragmatic sector policies (downgrading of political 'weak' sectors), deregulation and decentralisation. This resulted in 'weakening' of spatial policy (deregulation) and cancelling of landscape policy (decentralisation).

Spatial planning has a tradition of around 50 years. Despite weakening of the national spatial strategy (no more national targets on urbanisation and protected areas, like 'National Landscapes', in the 'Vision on space' 2012), the spatial policies stay strong on sub-regional (provincial) and local level. Most of the obligatory spatial plans (from provinces and municipalities) are now in their 5th generation of revising.

'Structural visions' (or 'strategies') on future spatial developments are obliged on national, regional and local scale (law on space 2008), because they are basis for regulations and physical developments on project level (see table 18). Such vision-plans are 'form free', so each province (region) and municipality has its own 'school' or methodology. The regulative part (guidelines) of such plans should be based on the vision. Municipalities should make a 'land use plan' (plan of local designations), which is a rather strong instrument of regulation of spatial developments, because it binds private actors.

A 'Landscape Plan' is not obliged in the Netherlands, but a voluntary instrument of municipalities, often in cooperation with others. In practice it is an 'action plan' on the measures in green space in the coming 10 years (see table 18). From the 1980's till 2010 the preparation of a landscape plan was subsidized by the national government. The subsidy was linked with obligations, like execution by a landscape architect and approval by the local parliament(s). Since 2010 all subsidies were cut.

Last but not least for all physical projects (small or big scale) it is obliged in the NL to make a 'development' or 'blue print plan', with which the project exactly is described. A developer always needs a permit of a government.

	Vision Space	Action Landscape	Regulation Space	Development Space	Management Nature
National	Obliged		Obliged		
Regional	Obliged		Obliged		Obliged
Local	Obliged	Voluntary	Obliged		
Project				Obliged	

Table 18 Kind of plans on space and landscape and governmental layers

Explanation of table 18:

- Vision = desired future development, goals, targets
- Action = strategy using rules, finances, agreements and communications
- Development = physical operation, project with buildings or change of land use (realisation by 'blue print plan')
- Management = daily physical measures (no big changes)

Another question (next to the obliged character of documents) is the binding power of plans. In the Dutch law on spatial planning (2008) only the local land use plan (and the development plan in its consequences) is binding for private developers, farmers and citizens. The regulations and guidelines on national or regional scale are only binding for other (lower) governments.

Implementation of European landscape policy

The Netherlands have signed the European Landscape Convention, but did not translate it in a national landscape law. Dutch politicians in 2005 assumed that 'landscape' is sufficient integrated in existing nature, landscape and spatial policies. In 2013 some experts think the cancelling of national landscape programs ('visions', designations and investments) were political easy, because of absence of juridical recognition. They doubt if the NL satisfy now the obligations of the ELC. [168]

Landscape policy (as spatial quality and protection of high value areas) is since long integrated in the spatial planning on all levels. Landscape (as natural and cultural value and as 'local identity') is often a spatial designation on spatial policy maps. Dutch spatial planning has a long tradition of multi-functional designations, as for instance 'agriculture with natural and visual values'. The 'function map' of the region South Holland mentions 'agrarian landscapes', which means not only production, but also 'free time landscape'.

Nature policy is sectoral organized. The Dutch nature law is strictly focused on protected areas and the implementation of sectoral conservation policies and nature management. Nature reserves are designated by a regional government and it is obliged to make an nature management plan.

Since 2010 does exist a strong policy of decentralisation on national level, in which many responsibilities on space, nature and landscape are transferred from national to regional governments. The national government made strong budget cuts for these policies.

[168] Dessing & Pedroli (2013) Voldoet NL nog wel aan de Europese Landschapsconventie? Landschap 1 / 2013

Planning culture and participation

The tradition of Dutch planning is based on decentralisation, participation and consultations. Not only interest groups, but also citizens on different levels are involved in the making of regional and local visions and also of concrete master plans of projects. A weakness of this approach is the complexity of political networks and the long during process of decision making. It often happens that earlier decisions were revised. Further the technical solutions of long lasting conflicts on spatial claims (in a densely populated country) were getting pricier. Since a few years the new law on spatial planning gave more power to 'higher' governments to realise their projects of 'important interest', also against the interests of 'lower' governments and citizens. Further the definition of 'interest' of private groups and their possibilities to make juridical objections, were restricted.

MD has a recent experience with the increased power of higher governments. Just after the finish of the Landscape Plan, the national government took a decision on a new motorway, after a complicated discussion of 40 (!) years. Despite of national goals of protecting open space, it was decided that the high way will be constructed, with rather complicated technics. The realisation of this 'big project' and the compensation of this operation with respect to natural, recreational and agrarian values is now the dominant executional task for the municipality of MD.

Regarding the type of governmental instruments (Regulations, Finances, Cooperation and Communication) a municipality has a weak position regarding finances. For spatial developments and for nature management the municipality is dependent on higher governments and private investors. But the regulative power of the land use plan is high and has a 'higher status' as the landscape plan.

Concepts in local and (sub)regional planning

In the planning practice in the Netherlands the key words Nature and Landscape are often mentioned together, as the 'green space' or country side. Especially in the region of South Holland it is related to urbanisation concepts (urban-rural partnership, 'metropolitan parks' and 'green buffer zones') and the city borders. The policy fields of nature and landscape are often summarised as the 'ecological string of sustainability'.

'Nature' is a strongly organised 'sector policy', with officials and big NGOs. There exist several private nature organisations on conservation and management. Nature or 'Ecological Main Structure' as planning designation is seen as protected area, where the land is often in ownership of the government or a specialised nature organisation. Management of such areas is strictly regulated.

'Landscape' has multiple interpretations in the Dutch professional debate, as 'space' (related to spatial quality), as design or architecture, as cultural and historical values and as (technical) landscape development. (For many technical infrastructure, as high ways and water canals, a landscape design is made.) Dominant in the practice of Midden Delfland is the interpretation as spatial quality and as landscape 'view' and design. In this line often a more 'offensive' strategy on high value landscapes is set out, as the concept of 'conversation through development'[169].

[169] Roetemeijer, 2005

The Netherlands (especially the densely populated region of South Holland) has a long tradition of spatial planning in town and country side. With the term 'spatial quality' is distinguished between functional value (for use or economy), future value (long term interests) and 'liveability' as visual quality, recreational value and cultural identity.

Liveability is more diffuse term, related to the relation of an individual with his environment. The spatial planning concentrates on physical aspects, but also social and ecological items are often mentioned. In the Dutch policy practice is often pointed on social and recreational values, meaning 'public spaces' (like urban squares, parks and recreation areas) should be 'nice' and enjoyable for everybody.

Germany: The current practice of landscape policy making

With the strong decentralisation of planning and most pertinent responsibilities allocated at the regional states, there is little country-wide territorial planning. This chapter will address both the general German planning framework and the policies and practises that are more specific of the case study region of Offenburg.

Germany is a federal republic with a federal government (*Bundesregierung*) and 16 regional state governments (*Länderregierungen*). There are different administrative divisions at the regional and state levels, such as regional cooperation bodies (*Landschaftsverbände*) and administrative sub-regions (*Regierungsbezirke*) of the regional states (*Länder)*. The administrative regions are tasked by the regional state to implement state decisions; they act as extension of state ministries. At local level there are municipalities and, for planning and some other purposes, some of them have formed municipal cooperation bodies. County (*Kreise*) administrations are sandwiched between Regional Administration and municipalities; these are charged with state and municipal functions[170].

Each of the federal states has the main responsibility for spatial development in Germany and, for this purpose, specifies and applies the Federal Building Act (*Baugesetzbuch*) and the Federal Spatial Planning Act (*Raumordnungsgesetz*). The Federal Government and its administrations do provide country-wide policy documents of spatial relevance, such as transportation plans (*Bundesverkehrswegeplan*), and these are also specified at state and regional level. Furthermore, each federal state must formulate policies on territorial development; normally they have the character of rather wide-ranging principles and guidelines. These main policy guidelines on spatial development are formulated on a standing conference with the responsible ministers who are co-ordinating state efforts with federal and international development objectives.

The regional states are responsible for spatial development in their state area and each of them is drafting regional development policy plans, which the ministries and their sub-regional administrative bodies implement[171]. The most recent spatial planning policy is presented in the latest federal planning policy document, *Concepts and Strategies for Spatial Planning in* Germany[172]. The document defines three main areas of visions (*Leitbilder*) for

[170] Newman/ Thornley, 1996

[171] Newman/Thornley, 1996

[172] BMVBS, 2006

spatial planning and policies: 1) growth and innovation, 2) ensuring services of public interest, 3) conservation of resources, shaping of cultural landscape. The third area of spatial vision puts the emphasis on cultural landscape and highlights the importance of different types of landscapes within the German territory. According to national policy Federal Government and Federal States should "ensur[e] that the distinctive characteristics of cultural landscapes, which have evolved over long periods of time, are preserved and this should include their cultural and natural heritage." The policy also outlines four types of areas that should serve as an initial guide for preserving cultural landscapes:

- urban areas such as historic town and city centres, urban landscapes, intermediate or conversion landscapes;
- semi-urban areas such as networked, densified and mixed urban regions with landscape areas that have been designed and enhanced;
- rural areas such as agricultural and energy producing areas or pasture land and wilderness areas;
- cross-cutting, and in some cases, linked-up areas such as coastal zones, river catchment areas and woodland or historic cultural landscapes[173].

The policy also underlines that the planning of open space should be developed towards a more active form of cultural planning with the purpose of integrating the concept into regional development and strategies.

Implementation of European landscape policy

Germany has neither signed nor ratified the European Landscape Convention, a decision which can partly be subscribed to the federal and constitutional structure of the country. In order for Germany to ratify international treaties relating to culture and environment the federal government and the *Länder together* first need to agree on all details. Only then may a responsible part of the federal administration act on behalf of the country and support international efforts such as those in the fields of nature conservation and landscape management (this all takes time and might explain, at least partly, why Germany is usually late in implementing EU Directives).

However, Germany has a strong tradition in landscape planning with a focus on nature conservation and especially protection, preservation and management of landscapes. Beside the federal legislation on urban planning and spatial planning act, the German Federal Agency for Nature Conservation (*Bundesamt für Naturschutz, BfN*) is the main federal agency for national nature conservation and landscape management. The agency advises the German Environment Ministry (BMU) and the Federal Government on issues relating to national and international nature conservation and landscape management. BfN Agency is also partly responsible for the German Federal Nature Conservation Act *(Bundesnaturschutzgesetz),* which is the statutory basis for landscape planning in Germany. This is the main act defining general tasks and the elements of landscape planning in at

[173] BMVBS, 2006

regional and local level. The act was adopted for the first time in 1976 and has since then established a legal basis for protection of nature and landscape. The act has continuously been amended and the latest version was adopted in 2009. The hesitation in relation to the responsibility of BfN uttered above has to do with that The Nature conservation act has to be implemented by the federal states. They have the competence to change and specify parts of the act by making their own State Nature Act. The BfN is managing only some issues addressed in the act, especially by Research and creation of guidelines, etc.

One important principle in the Act is that landscape planning must take place at all administrative levels, including both the local and the regional level. The making of landscape plans is obligatory, meaning that local authorities must produce landscape plans (*Kommunale Landschaftspläne*). Landscape structure plans can as well be adopted at district or county level (*Regierungsbezirk, Landkreis)* or planning region (*Planungsregion*), as well as landscape programmes at regional state level (*Länder – Landschaftsprogramm*). The regional level (*Länder*) has larger flexibility to shape relevant regional procedures and binding force (BFN, 2010).

The Federal Nature Conservation Act outlines that all administrative levels involved in the landscape planning should make important long-term contributions to the conservation of natural resources. The act as well outlines what the plans should include (BfN, 2009):

1) the existing and anticipated status of nature and landscapes
2) the objectives and principles of nature conservation and landscape management detailed for the planning area in question
3) an assessment of the existing and anticipated status of nature and landscapes on the basis of these objectives and principles, including any resultant conflicts
4) the requirements and measures
   a) to avoid, reduce or eliminate adverse effects upon nature and landscapes,
   b) to protect, conserve and develop certain parts of nature and landscapes within the meaning of Section 4, as well as of biotopes and biotic communities of wild species of fauna and flora,
   c) in areas which, by virtue of their status, location or natural opportunities for development are particularly well-suited to future nature conservation and landscape management measures or to the development of habitat network systems,
   d) to develop and protect the European ecological network “Natura 2000”,
   e) to protect, improve the quality of and regenerate soils, water bodies, air and climate,
   f) to conserve and develop the diversity, unique character and beauty of nature and landscapes, also as a place for human enjoyment and recreation. When drafting landscape plans, consideration must be given to their usability in regional plans and physical development plans.

g) Conserving and developing open spaces in settled and non-settled areas

The act provides in this sense a comprehensive overview of the main elements of landscape planning in Germany and the main basis for implementing the landscape planning on regional and national level. In that sense it supposed to guide and steer regional and local landscape planning. However, the regional states have a number of possibilities to form their own regional landscape planning[174].

Concepts in local, regional and national planning

The landscape concept and planning system both have strong traditions in Germany, and local and regional landscape planning are considerably developed. As mentioned earlier landscape policy making is regulated by law and is done at national, regional and local levels.

Ideally, the landscape planning process is initiated in parallel to land-use planning, with the purpose of integrating landscape policy provisions into local spatial planning. This was for instance the ambition in Offenburg; however the parallel plan making was not possible in the end. Concerning the interaction between local and regional landscape planning, the regional comprehensive plans are supposed to influence essential landscapes policy issues into the local plan. A typical example (e.g. in the Offenburg case) may be that much of the municipal territory is designated to accommodate regional green corridors (*Regionale Grünzüge*) or green belts (*Grünzäsur*). All of the regional plans are legally binding for administrative purposes and have to be taken into consideration in municipal planning. In this context the planning system has a top-down approach: the plan at higher level is legally binding for the lower one. The local land use plan is binding for private developers.

The case-study region of Offenburg has developed a systematic landscape structure including both the local land use plan, local landscape plan (as developed by an association of four municipalities and their administrations; lead by the City of Offenburg), landscape framework plan (Region Southern Upper-Rhine), regional plan, and the Federal State Development Programme.

There are different issues concerning landscape which are to be considered: Landscape in ecological terms, Landscape in its beauty and variety and Landscape as cultural heritage. This issue correlates with the figure below, which is taken from the draft of the report of the landscape plan Offenburg concerning the progress of landscape planning in general.

Biotope types area-covering (this information already existed charged by the city of Offenburg to get a conception of habitat connectivity Change of cultural landscape and settlement development (since 1850) Landscape structure Scenery	Soil giving potential sites for particular plants Soil giving potential to buffer contaminates Soil giving potential as water reservoir Potential of natural recharge of ground water body Natural protection of ground water by

[174] BFN, 2010

Cultural goods - lots of ancient forms of cultivation (e.g. wooded meadow valleys, watering grassland, dry stone walls around vineyards) Cultural goods – historical, archaeological and natural landmarks Recreation areas Soil types Richness of soil for agriculture	soil cover Quality of flowing waters and lakes Protection areas for drinking water Courses and barriers of air exchange Areas and objects of nature conservancy (protected by law) Burden of landscape and nature by use (e.g. noise beside roads, emission, visual burden by high voltage lines)

Table 19 Topics included in Offenburg Landscape Plan

For this, landscape in the Offenburg region was divided into characteristic units matching with priorities and appropriate scenarios to get a number of guidelines for the future. Based on the guidelines and the results of the analysis, there was developed a catalogue of concrete measures (*Action program*), focused on protection of nature, improvement of natural balance, development of open space structure, perception of landscape, and recreation.

Shared terms, concepts and practices

Germany has not ratified the ELC, and although landscape planning is seemingly strong in Germany, the social dimensions of landscape emphasized by the ELC are not recognised. However, the Federal Nature Conservation Act recognises other issues of the ELC, such as landscape protection and management, as well as implementation of landscape policy in spatial planning practice.

Due to the fact that all policy plans is legally organised and binding within administrative limits (hierarchal order, top-down) most landscape planning is well-development on local and regional level. The local landscape policies must consider the regional landscapes plans as well as the national guidelines for landscape, but the regional states have some possibilities to shape regional policy and form their own development direction.

Procedures for public participation are addressed in the German planning acts, but there is no strong tradition for public participation in German landscape planning, and therefore no extra measures are taken to implement this aspect in the planning processes.

Slovenia: Current practice of landscape policy making

According to ESPON 2.3.2., the plan system in Slovenia can be classified as comprehensive integrated approach, where planning is based on strong traditions, with a strong legal framework and a clear decision-making distribution[175].

The ministry responsible for environment in Slovenia is also responsible for spatial development at the national level. The Ministry of Environment and Spatial Planning (new ministry as of 2012; also new responsibilities?) is also responsible for monitoring the

[175] Tosics, 2010

implementation of the Spatial Development Strategy of Slovenia which is the main policy document guiding the Slovenian spatial planning at national and lower levels. Relevant ministries shall cooperate with the ministry responsible for spatial planning when regulations and documents related to spatial planning are prepared[176].

Further, the Ministry is responsible for coordinating activities related to spatial planning as well as monitoring the situation in spatial planning in Slovenia and supervising the legality of spatial planning on municipal level. The implementation of the guidelines set in the Spatial Development Strategy will be ensured in programmes on both national and local level and the Spatial Development Strategy is legally binding. The spatial planning stakeholders shall take into consideration the Spatial Planning Act and the Spatial Strategy when preparing development policies, programmes and strategies. (Ministry of the Environment, Spatial Planning and Energy, 2004)

According to the Spatial Planning Act, the state determines the overall references and guidelines for spatial planning at all levels but municipalities have the responsibility to determine the guidelines for spatial development at local level. They determine the use of space and the conditions for interventions in space. Municipalities are also responsible for planning spatial arrangements of local importance while the state is responsible for spatial arrangements of national importance[177]. Landscape planning at the implementation level is included in the Construction Act that describes the types of plans concerning landscape (conceptual landscape design plan and detailed landscape plans)[178].

There are no regional plans in practice and spatial planning is implemented at national and municipal or local level and local government have different competences in relation to spatial planning. Municipalities produce Municipal Spatial Plans in consultation with citizens, NGOs and other users and the municipal planning is supervised by national authorities.

Implementation of European landscape policy

Slovenia signed the European Landscape Convention in 2001 and ratified it in 2003. According to the Ministry of Environment and Spatial Planning (2010), Slovenia already complied with the provisions of the Convention and already before the Convention had measures in place concerning the landscape protection, management and planning.

The Ministry responsible for spatial planning is responsible for the implementation of the European Landscape Convention in Slovenia. In 2010, it produced a document on the implementation of the European Landscape Policy in Slovenia stating the most important policies and laws concerning landscape. The Ministry cooperates with other relevant ministries when plans and programmes concerning landscape protection and development are prepared and informs ministries concerning the Convention. According to the Ministry of the Environment and Spatial Planning, better inter-ministerial coordination and systematic

[176] Ministry of the Environment, Spatial Planning and Energy, 2004

[177] Spatial Planning Act, 2007

[178] The Ministry of the Environment and Spatial Planning, 2010

landscape management is however needed and more attention should be devoted to including landscape in different plans and policies[179].

There are no independent documents on landscape planning in Slovenia but Slovenia has an operational landscape plan on national level. In Slovenian legislation landscape is included in the Spatial Planning Act, the Nature Conservation Act, the Cultural Heritage Protection Act, the Construction Act and the Environmental Protection Act[180].

The Spatial Planning Act defines landscape as "a space characterized by the prevailing presence of natural components" influenced by both natural and human factors. In the law it is among other things stated that guidelines for development in landscapes must be included in municipal strategic plans. The Act further includes a principle of publicity implying that national and municipal bodies must allow the interests of individuals and groups to be expressed when spatial planning documents are drafted or adopted[181].

In the Nature Conservation Act, landscape is defined as a spatially defined part of nature and landscape is considered as a natural value. The Cultural Heritage Act defines cultural landscape as an immovable heritage and as an open space use and development of which is mainly determined by human operation and activities[182]. Landscape is also included in the relevant policies such as the Spatial Management Policy (2001), the Spatial Development Strategy of Slovenia (2004) and the Spatial Order of Slovenia (2004). The Spatial Management Policy emphasizes the preservation of the specific features of rural landscape including agricultural areas and cultural landscapes. Attention is also given to degraded landscapes. The Spatial Development Strategy includes landscape as one of the three integrated systems of spatial development policy. Preserving and developing recognizable features of an area is one of the main objectives of the strategy[183].

Further, the Spatial Order of Slovenia states that landscape planning should ensure cultural heritage protection and preservation of outstanding landscapes while considering the actual use of the landscape and its potential for economic and social benefits. Landscape is also one of the factors that are taken into consideration in the procedures of environmental impact assessment which are defined in the Environmental Protection Act. Further, the Rural Development Programme of the Republic of Slovenia includes preservation of agricultural landscape. (The Ministry of Environment and Spatial Planning, 2010)

Concepts in local, regional and national planning

Even though regional spatial plans are mentioned in Slovenian law, in practice the regions have not established spatial plans and plans are drawn up only at national and local level.

[179] The Ministry of the Environment and Spatial Planning, 2010

[180] The Ministry of the Environment and Spatial Planning, 2010

[181] Spatial Planning Act, 2007

[182] The Ministry of Environment and Spatial Planning, 2010

[183] The Ministry of Environment and Spatial Planning, 2010

Measures related to planning can however be included in Regional Development Programmes. The Regional Development Programme of the Ljubljana Urban Region includes measures related to spatial planning and landscape. Landscape issues are present in the programme especially in connection to territories of protected natural and cultural heritage where for example management plans for smaller protected areas are to be drawn up.

Both urban and rural areas are mentioned in the Regional Development Programme of Ljubljana Urban Region and the focus is on preservation, protection and maintenance but also their importance in relation to tourism and new business ideas is mentioned. When it comes to landscape protection and spatial planning in general, the consistency of the objectives of the programme with national strategies is also outlined in the programme[184].

The importance of public participation is recognised in national level legislation and policy documents. The Spatial Management Strategy of Slovenia states that public participation is of key importance for quality and effective planning. It is further stated that the significance of e.g. spatial management and landscape design needs to be popularised[185].

Shared terms, concepts and practices

As mentioned according to the Ministry of the Environment and Spatial Planning, Slovenian practices were already at in line with the priorities of the European Landscape Convention when it was ratified by Slovenia. On national level, landscape is included in several Acts within the Slovenian legislation and also in the most important spatial development document the Spatial Development Strategy of Slovenia[186].

In Slovenian policy documents and legislation however the focus seems to be on protection and reservation of natural and cultural landscape even though for example the Spatial Development Strategy of Slovenia mentions also modernization and renewal of landscapes[187].

Public participation is included in Slovenian legislation and participation in the preparation of spatial document procedures and management of natural resources takes place through public exhibition and public hearing.

Spain: The current practice of landscape policy making

With Spain's unique administrative structure of 17 Autonomous Communities and their strong role in setting the planning framework, this chapter will address both the general Spanish planning framework and the policies and practices more specifically of the case regions of Navarra and the Basque Country.

The national level administration provides the general framework for the planning system and sets policies that are to be implemented by the lower level (autonomous communities,

[184] Regional Development Agency of the Ljubljana Region, 2007

[185] The Ministry of Environment, Spatial Planning and Energy, 2001

[186] Ministry of the Environment and Spatial Planning, 2010

[187] Ministry of the Environment, Spatial Planning and Energy, 2004

provinces and municipalities). Different kinds of plans and their contents are identified in law and several other national laws may also influence land use concerning e.g. coastal land or nature conservation. The Spanish constitution of 1978 attributes regions (autonomous communities) full authority to legislate for, regulate and execute spatial development. The 17 autonomous communities have passed laws concerning the spatial management which has resulted in a wide variety of practices and concepts. In some regions, both spatial and urban planning is integrated in legislation and some regions also include nature resource management in addition to spatial and urban management. However, there is a urban land-use law that is binding to all regions[188].

Spatial planning in Spain is supra-municipal and horizontal. The planning system is based on hierarchical plans where regional plans determine the development on regional level but are developed further in sub-regional plans. No national plan has been drawn up in Spain. All the regions however do not have regional plans either and also the sub-regional plans differ between regions based on their individual legislation. Specific sectoral plans influencing land use are further drawn up in several regions concerning for example transport, agriculture or natural or cultural environment. As some regions still do not have supra-municipal regional or sub-regional plans, urban plans may still be the main planning instruments in those regions.

Municipal government have the competence for urban plans and most actual planning decisions are made on local level while taking into consideration the guidelines established on regional and national level. Municipalities produce their own more detailed plans and in general, those plans are below the regional and sub-regional plans and should be sent to regional bodies that make sure that they comply with the regional level targets. The specific tasks of each municipality depend of their size. On intermediary level between the local level and the level of autonomous communities is the provincial level that is responsible for e.g. coordination of municipal services and development and administration of the province. The intermediary level has no specific tasks in relation to spatial planning as such[189].

Further, natural resources management plans manage the development of national parks, nature parks and resources. The status of the natural resources plans is set in the state level Nature Conservation Act. The natural resources management plans are above all the other level plans and are legally binding. They promote the application of measures for the conservation and reservation and improvement of natural resources and also orient sectoral policies and economic and social activities. Also Strategic Environmental Impact Assessments and Carrying Capacity Assessments are based on the Spanish national law. Protection of landscape with historical, cultural and/or archaeological significance is included in the assessments[190].

[188] Manteiga/Sunyer, 2008; Oxley et Al., 2009; Suàrez de Vivero/Atmane, 2011; Tosics, 2010

[189] Manteiga/Sunyer, 2008; Oxley et Al., 2009; Suàrez de Vivero/Atmane, 2011; Tosics, 2010

[190] Manteiga/Sunyer, 2008; Suàrez de Vivero/ Atmane, 2011

In 2007, a new national level Land Law was introduced emphasizing sustainable values considering land as a scarce resource to be protected. It considers land to comprise of rural and built up land. There is a focus on environmental protection and it is stated that competent authorities shall not take into consideration third party interest but shall only take into account the public interest and the environmental protection principles. It also states that authorities must provide a balance between rural and urbanized land and ensure transparent planning processes. Landscape protection is included in the law together with preservation of flora and fauna[191].

The national level administration is further responsible for a number of issues influencing spatial planning such as setting the bases and coordination of economic activities and balancing and harmonizing the development between regions. It is also responsible for e.g. seaports and airports of general interest, interregional highways and public works of general or interregional interest as well as basic legislation including nature conservation[192].

Basque Country

Some Spanish regions have higher level of independency than others and for example Catalonia and the Basque Country have bigger independency in policy than others. In Basque, the Basque Regional Department is responsible for spatial planning but based on legislation the municipalities also have some possibilities to stimulate the socio-economic and spatial development. The planning system in Basque is considered well-developed and well-functioning[193].

Navarra

In Navarra in addition to the actual plans, also the Regional Strategy has an important role and it functions as a strategic spatial planning instrument that is without legal status but all other spatial planning instruments should use as a reference. Regional Spatial Planning Programme in turn does have a binding status and they set the basic requirement for planning of each territory from a subregional perspective concerning natural and cultural heritage, urban and economic system and infrastructure. Spatial Master Plans and Supramunicipal Impact Sectorial Projects and Plans are other planning instruments complying with the Regional Spatial Planning Programme[194].

Implementation of European landscape policy

Spain ratified the European Landscape Convention in 2007 but as the autonomous communities have the entire responsibility for spatial management, this chapter will introduce some examples of implementation of landscape policy on regional level by the autonomous communities. As the regions are autonomous, the extent that European landscape policy is implemented varies. Some of the autonomous communities have

[191] Molnar, 2007

[192] Manteiga/Sunyer, 2008; Suàrez de Vivero/Atmane, 2011

[193] Garcia/Feliu, 2012

[194] Munarriz et Al., 2007

introduced legislation in relation to landscape, for example Catalonia introduced a law on landscape protection, planning and management in 2005 and Valencia set up a law on spatial planning and landscape protection in 2004. Catalonia was also the first to sign the European Landscape Convention and has been one of the forerunners in Europe in relation to landscape management. Its Landscape Act includes several instruments for implementation such as landscape catalogues identifying types of landscape, landscape impact and integration study and report and landscape charters for harmonising strategies between public and private actors. Catalonia has also introduced a funding instrument allocating funds to activities that improve and preserve the landscape[195].

Basque Country

The autonomous community of Navarra and the Basque country are currently developing their landscape management. In Basque, a new Landscape Law will be introduced as a follow up of the Basque Country signing the European Landscape Convention in 2009. The new Landscape Law is inspired by the European Landscape Convention and it will give landscape a role as a legal entity and integrate landscape into planning instruments. Earlier there has not been any landscape analysis conducted in the region but a new landscape catalogue defining areas with different landscapes will be built up. Also the Spatial Planning Guidelines of Basque Country are under revision[196].

Navarra

In Navarra, there is no landscape law but landscape is included in the Regional Law of Spatial Planning, the Regional Law of Cultural Heritage and the Regional Law on Natural Reserves. A new Landscape Plan will be introduced in Navarra and the aim is that it will provide methods and techniques for assessment, evaluation and management of landscape at several territorial scales[197].

Concepts in local, national and regional planning

In the Spanish Land Law, landscape protection is included and the focus is on reservation and protection of landscape and environment[198]. On the level of the autonomous communities, the extents of which strategies comply with the national level goal of landscape protection stated in the law vary between regions. Some regions such as Catalonia and Valencia have developed specific laws concerning landscape while several regions have not taken such measures.

Shared terms, concepts and practices

As the extent that landscape is included in practices across Spain varies, it is not possible to in general analyse if there are incongruences between the current practice and the EU

[195] Suàrez de Vivero/Atmane, 2011, and The Landscape Observatory, 2010

[196] Garcia/Feliu, 2012

[197] Marcén/Araujo, 2012

[198] Molnar, 2007

policy. Here some examples will however be introduced from different autonomous communities.

Especially the autonomous community of Catalonia has been active in implementing landscape policy in line with the European Landscape Convention and setting up legislation and policy for integrating landscape in different sectors. It has established a Landscape Observatory that is an advisory body for the Government of Catalonia in landscape matters. Catalonia has also been aiming at pioneering at developing public participation in landscape management[199].

On the other hand for example the autonomous community of Navarra has not had any procedures of landscape evaluation and training for managers of protected landscapes and other stakeholders has been lacking. There has not been a holistic vision for landscape management and the social and identity dimension of landscape has not been taken into consideration. Further, there has not been coordination between instruments and agents and public participation has not been developed. The up-coming Landscape Plan for Navarra is meant to respond to some of these problems and ratification of the European Landscape Convention is seen as an opportunity for the region[200]. In Basque Country, landscape is recognised as an essential element of quality of life and several steps has been taken in connection to protection and management of landscape even though some procedures are still missing and for example the stakeholder involvement in planning processes need to be strengthened[201].

10.2. Summing up the state of practice

The ELC states clearly that the convention should be implemented "in conformity with its constitutional principles and administrative arrangements" (Article 4) and this is clearly reflected in how landscape planning is carried out in the 5 case study countries.

In Denmark, Netherlands and Slovenia where planning is carried out in an integrative but top-down hierarchical manner, the development of landscape policies are primarily a task for the national level, while the strong regional actors in Germany and Spain are the ones with the primary initiative for setting the landscape planning framework here.

It is also clear that while landscape planning is addressed (to at least some degree) in all 5 countries, the concept of landscape varies quite extensively, as do the involvement of the public in the plan processes. A first conclusion across the national practises is, that the emphasis on protection and conservation of valuable and 'aesthetically pleasing' landscapes are at the forefront while multifunctional land use and the issue of liveability in regard to landscape planning is hardly addressed at all. Table 10 below summarises this initial information on the state of practice in the five case study countries.

[199] The Landscape Observatory, 2010

[200] Marcén/Araujo, 2012

[201] Garcia/Feliu, 2012

Looking into the state of practice in the five case studies regions it becomes clear that while landscape planning is addressed (to at least some degree) in the case study countries, the concept of landscape varies quite extensively, as do the involvement of the public in the plan processes.

A first conclusion across the national practises show that the emphasis on protection and conservation of valuable and 'aesthetically pleasing' landscapes are at the forefront while multifunctional land use and the issue of livability in regard to landscape planning is hardly addressed at all.

onsible try	National Policy on landscape?	Regional and local landscape plans?	Public participation	Themes / Spatial Elements
y of the nment	*Not a specific landscape plan but landscape is part of the national plan reports and the national binding restrictions*	*No specific landscape plans but the municipal plans are to cover both built-up and open land; hereby also taking landscape into consideration, particularly by using the tool of the LCA.*	*Yes, both legally binding, and in tradition and practice.*	*Ideally the Landscape Character Assessment is to cover all types of landscape, but in the planning policies there is some emphasis on the attractive landscape.*
	No national landscape policy since 2010. No more protected landscapes and financial programs. On-going attention on spatial quality	*Local landscape plan (Voluntary)*	*Overall regulation on public participation, but tendencies of centralization and restriction of interested parties*	*Sectoral, nature conservation, spatial quality, deregulation and decentralization*
l Ministry nment, rvation and r Safety	*No (currently, the BfN is investigating the needs for national landscape policy making to comply with international statutes and strategies).*	*Regional landscape Plan (Binding, except for individual people)* *Local landscape plan (binding as integrated into local plans and ordinances)*	*Yes (mostly limited to what is legally prescribed)*	*Strong focus on nature conservation. In some instances additional emphasis is on cultural heritage and, more recently, on landscape energy potentials.*
012, the y of ucture and Planning e Ministry culture and nment.	*Slovenia has prepared a specific document on the Implementation of ELC. Landscape included in relevant policies such as Spatial Management Policy (2001), the Spatial Development Strategy (2004) & the Spatial Order of Slovenia (2004)*	*No regional and local landscape plans*	*Yes, the importance of participation is stated in national level legislation and in national policy documents.*	*Focus on protection and reservation of natural and cultural landscapes.*

Spain	*The national level land law includes landscape protection.* *The national Nature Conservation Act includes natural resource management and natural resources management.* *Ratified ELC in 2007* *The autonomous community of Navarra recognises landscape in several acts and the Basque Country developed a bill of Landscape Law and several instruments for landscape planning which will be eventually integrated into the spatial planning system*	*No key institution or key planning agency at national level, the autonomous regions have the full competence* *Only the Ministry of Education, Culture and Sports deals with the Cultural Landscapes and Heritage*	*No; but the autonomous communities have full authority to legislate for, regulate and execute spatial planning. Some of the autonomous communities include landscape management (e.g. Catalonia). The autonomous community of Navarra and the Basque Country are in the process of including landscape management in policy.* *National Plans for the protection of cultural landscapes*	*Especially the autonomous community of Catalonia has been active in landscape planning.* *In Navarra, a landscape plan will be drawn up.* *Galicia has a Law for the protection of Landscape Ley 7/2008* *The Basque Country has presented a Landscape Law in parliament that is being under approval.* *National level natural resources management plans (binding) manage the development of national parks and nature parks and natural resources. They all above all the other plans on different levels and legally binding.*	*Spain recognizes public participation through formalised measures such as public debate and hearings, and also through principles such as the right of citizens to access information and for the government to provide it.* *Navarra states explicitly that planning should be democratic.* *In the Basque country stakeholder involvement in the planning processes still needs to be strengthened.*	*Consideration of all types of landscapes* *Traditionally focus on cultural landscapes and protection of natural areas* *At present the Basque country "Focus not only in protection of natural landscapes, but also in recovering deprived areas".* *Navarra has focused on the protection and preservation of various soil types or specific areas, lacking specific guidelines regarding the landscape as a result of their own Spatial Strategy of Navarre (2005).*

Table 20 Preliminary findings on the state of practice in the five study countries

10.3. Policy priority areas and general messages

Considering the ELC landscape policy principles and recommendations for its implementation[202] as a starting point, we have use the qualitative interpretation of the analysis of practices and reflections being developed in chapters 7 and 8 of the Part C Scientific report, and we have worked in the identification of meaningful common messages in all case studies and come up with a selection of priority areas for policy development and general messages.

ELC General Principles

A. Consider the territory as a whole: The convention applies to the entire territory and covers natural, rural, urban and peri-urban areas. It includes land, inland water and marine areas. It concerns landscapes that may be considered outstanding as well as every day and degraded landscapes.

B. Recognise the fundamental role of knowledge: The identification, description and assessment of landscapes constitute the preliminary phase of any landscape policy. This involves an analysis of morphological, archaeological, historical, cultural and natural characteristics and their interrelations, as well as an analysis of changes. The perception of landscape by the public should also be analysed from the viewpoint of both its historical development and its recent significance.

C. Promote awareness: Active public involvement means that specialised knowledge should be accessible to all, that is, it should be easily available, structured and presented in a way understandable even by non-specialists.

D. Define landscape strategies: Each administrative level (national, regional and local) should draw up specific and/or sectoral landscape strategies within the limits of its competences. These are based on the resources and institutions which, when co-ordinated in terms of space and time, allow policy implementation to be programmed. The various strategies should be linked by landscape quality objectives.

E. Integrate the landscape dimension in territorial policies: The landscape dimension should be included in the preparation of all spatial management policies, both general and sectoral, in order to lead to higher-quality protection, management or planning proposals.

F. Integrate landscape into sectoral policies: Landscape should be fully taken into account via appropriate procedures allowing systematic inclusion of the landscape dimension in all policies that influence the quality of a territory. Integration concerns both the various administrative bodies and departments on the same level (horizontal integration) and the various administrative bodies belonging to different levels (vertical integration).

G. Make use of public participation: All action taken to define, implement and monitor landscape policies should be preceded and accompanied by procedures for participation by members of the public and other relevant stakeholders, with the aim of enabling them to play an active role in formulating, implementing and monitoring landscape quality objectives.

[202] Recommendation CM/Rec(2008)3 of the Committee of Ministers to member states on the guidelines for the implementation of the European Landscape Convention *(Adopted by the Committee of Ministers on 6 February 2008 at the 1017th meeting of the Ministers' Deputies)*

H. Achieve landscape quality objectives*:* Every planning action or project should comply with landscape quality objectives. It should in particular improve landscape quality, or at least not bring about a decline. The effects of projects, whatever their scale, on landscape should therefore be evaluated and rules and instruments corresponding to those effects defined. Each planning action or project should not only match, but also be appropriate to the features of the places.

I. Develop mutual assistance and exchange of information: Information exchange, the circulation of theoretical, methodological and empirical ideas between landscape specialists and learning from these experiences are of fundamental importance in ensuring the social and territorial relevance of the European Landscape Convention and in achieving its objectives.

Par I.3 addresses the legal recognition of landscape

"Each Party undertakes: a. to recognise landscapes in law as an essential component of people's surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity;" (Article 5 of the European Landscape Convention – General measures)

Part I.4 of the ELC relates to Landscape policies

"For the purposes of the convention: … b.. 'Landscape policy' means an expression by the competent public authorities of general principles, strategies and guidelines that permit the taking of specific measures aimed at the protection, management and planning of landscapes;" (Article 1 of the European Landscape Convention – Definitions)

From the operational viewpoint, the convention presupposes:

– the drawing up of specific landscape policies and concurrently the systematic inclusion of the landscape dimension in all sectoral policies that have a direct or indirect influence on changes to the territory. Landscape is therefore not additional to other themes but is an integral part of them;
– a transition from a policy based only on protecting a territory's features and parts recognised as outstanding to a policy based on the quality of all living surroundings, whether outstanding, every day or degraded;
– a definition of and experience with new forms of collaboration between the various bodies and the various levels of administration;
– a new approach to observing and interpreting landscape, which should henceforth:
  - view the territory as a whole (and no longer just identify places to be protected);
  - include and combine several approaches simultaneously, linking ecological, archaeological, historical, cultural, perceptive and economic approaches;
  - incorporate social and economic aspects.

In Part I.5 the convention gives definition of actions on Landscape: protection, management and planning.

Landscape action is a combination of protection, management and planning conducted over one and the same territory: certain parts and features can be protected, others, particularly processes, should be managed and still others should be intentionally adapted.

The concept of **protection i**ncludes the idea that landscape is subject to changes which, within certain limits, have to be accepted. Protective measures, which are currently being widely trialled, should not be designed to stop time or to restore natural or human-influenced

characteristics that no longer exist; however, they may guide changes in sites in order to pass on their specific, material and immaterial features to future generations. A landscape's characteristics depend on economic, social, ecological, cultural and historical factors, the origin of which often lies outside the sites concerned. Landscape protection should find the ways and means of acting, at an appropriate level, not only on the characteristics present at sites but also on external factors. *(Article 1 of the European Landscape Convention – Definitions)*

Management of landscape is a continuing action aimed at influencing activities liable to modify landscape. It can be seen as a form of adaptive planning which itself evolves as societies transform their way of life, their development and surroundings. It can also be seen as a territorial project, which takes account of new social aspirations, anticipated changes in biophysical and cultural characteristics and access to natural resources. *(Article 1 of the European Landscape Convention – Definitions)*

Landscape planning may be regarded in the same way as a territorial project and concerns forms of change that can anticipate new social needs by taking account of ongoing developments. It should also be consistent with sustainable development and allow for the ecological and economic processes that may occur in the medium and long terms. Planning also covers the rehabilitation of degraded land (mines, quarries, landfills, wasteland, etc.) so that they meet the stipulated landscape quality objectives.

Part II.3. Provides inputs on the methods of implementation

"E. Implementation
To put landscape policies into effect, each Party undertakes to introduce instruments aimed at protecting, managing and/or planning the landscape." (Article 6 of the European Landscape Convention – Specific measures)

The means of implementing landscape policies or introducing the landscape dimension into sectoral policies may be either regulatory or voluntary. New methods of implementation could also be used. The choice of method can depend on the local situation, which will vary even within the same country.

Implementation of landscape policies or of policies to introduce the landscape dimension into sectoral policies may combine these different means according to the ends in view, the specific characteristics of the territory, the population and administrative organisation concerned, and so on. This applies to all landscape situations and all activities that shape them. Implementation may be included in general and sectoral instruments at the different administrative, programming and spatial-planning levels; it may provide for land acquisition by the competent authorities.

Part II.3.1. Regulatory implementation

Regulatory implementation depends on the legislation that exists and the type of objective; that is, it depends on the desired outcome in terms of protection, management or planning. Measures may be included in spatial-planning documents or provide for specific instruments.

– Inclusion of objectives in a protection policy: measures should ensure the conservation and upkeep of significant or characteristic aspects of a landscape; protection should be accompanied by a phased management plan. Existing specific legislation could be used or new legislation could be drawn up.
– Inclusion of objectives in a management policy: measures may provide for the upkeep of existing landscape structures (some of these may be acquired by the competent authority).

– Inclusion of objectives in a planning policy: the measures may provide for planning schemes or for appropriate new facilities. Financial provisions for financing the proposed actions and/or technical and operational aids may be laid down.

Part II.3.2. Voluntary implementation

Voluntary implementation is based on agreements, charters, quality labels or contracts between the authorities and relevant stakeholders. It may involve financial provisions for funding the proposed actions and/or technical and operational assistance, for example:

– in the case of a protection policy: agreements providing for the upkeep of a landscape. It may be appropriate for compensation to be awarded to those adversely affected by the impact of a landscape-friendly measure;
– in the case of a management policy: agreements or contracts providing for the upkeep of existing landscape structures. If necessary, funding equivalent to the cost of upkeep may be granted (for example, upkeep of hedges, canals, paths, etc.);
– in the case of a planning policy: agreements or contracts providing for the creation of new structures or facilities with appropriate financing. These new structures or facilities should blend in with the existing landscape, that is, they should comply with defined landscape quality objectives.

Part II 3. 3 Instruments for landscape policies

To implement landscape policies, a general planning and development process should be introduced: this should use specific instruments and provide for the landscape dimension to be included in sectoral instruments. It should be based both on general principles at national level, even if decentralisation is anticipated, and on the linkage of competences at several levels and several types of implementation instruments. Instruments are already being put to use in several countries and each of them can be a model for either the creation of new instruments or the improvement of existing ones.

The main categories of instruments are:

– Landscape planning: landscape study plans included in spatial planning;
– Inclusion of the landscape in sectoral policies and instruments;
– Shared charters, contracts, strategic plans;
– Impact and landscape studies;
– Evaluations of the effects of operations on landscape not subject to an impact study;
– Protected sites and landscapes;
– Relationship between landscape and regulations concerning the cultural and historic heritage;
– Landscape observatories, centres and institutes;
– Reports on the state of the landscape and landscape policies;

After a selection of preliminary set of policy messages a prioritization exercise was undertaken by stakeholders at the different levels of planning administrations and competences.

The tables on the following pages show a battery of policy general messages prioritized by stakeholders that have been structured according to the stages of a planning process. Comments on the links with the ELC recommendations for its implementation have been also included. The messages are conceived as potential and challenges in relation to integration of landscape approach, planning and management into spatial planning with liveability criteria.

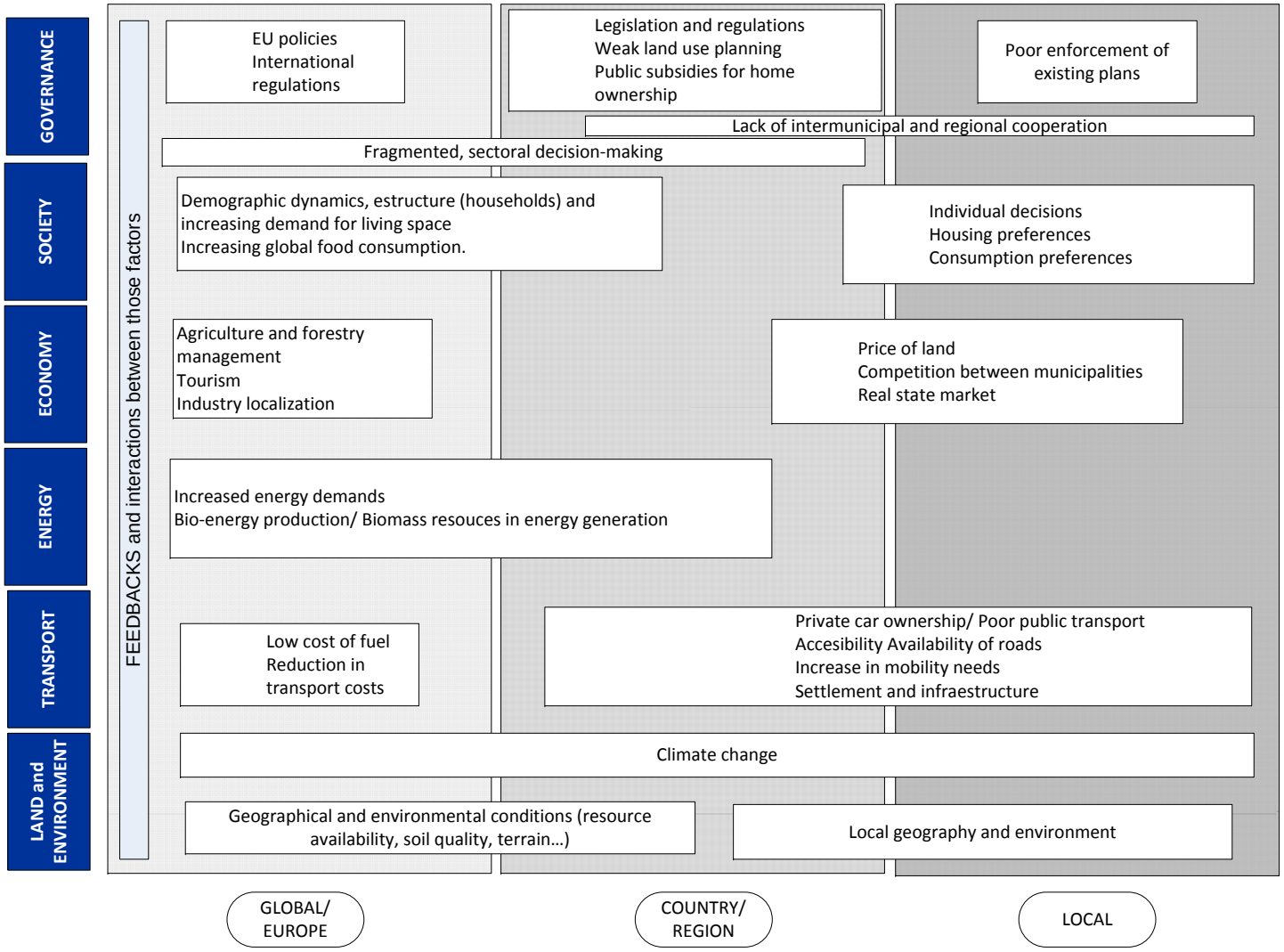


Figure 41 Relations between drivers of change at different territorial levels potentially affecting landscape protection and management. Tecnalia own elboration

Evaluation and analysis	Total %			Local %			Regional %			Comments
	L	M	H	L	M	H	L	M	H	
Concentrate in local intrinsic features: key topics, conflicts, problems and also potentials. The identification, description and assessment of landscapes constitute the preliminary phase of any landscape policy. This involves an analysis of morphological, archaeological, historical, cultural and natural characteristics and their interrelations, as well as an analysis of changes. The perception of landscape by the public should also be analysed from the viewpoint of both its historical development and its recent significance.	0	20	80	0	0	100	0	33,3	33	*ELC Part 1 General Principles B- Recognizes the fundamental role of knowledge, This is particularly important for local administrative levels but also relevant at supra-local ones*
"**Multifunctionality of landscapes**" it reflects richness but also certain complexity that has to be considered: Prioritization of landscape functions: since multifunctionality is not always compatible with natural values protection/conservation Prioritization of land uses aiming at avoiding conflicts	0	20	80	0	33	67	0	0	67	
Expertise of the team developing the landscape plan or practice matters	20	20	60	0	0	100	33	33,3	0	
Measurable goals and targets for evaluation of landscape and landscape "quality"	0	40	60	0	33	67	0	33,3	33	
Investments in relevant data is important not only quality but relevance of the information is crucial particularly downscaling (at local level) still needed. Should be use documentation, knowledge and resources to start the political landscape design without creating uniform standards and procedures in all EU administrations: observatories, catalogues, surveys, etc.	20	60	20	33	33	33	0	66,7	0	*ELC Part 1 General Principles I. Develop mutual assistance and exchange of information*
Data management Use of decision support systems through GIS data management and visualization. Information exchange, the circulation of theoretical, methodological and empirical ideas between landscape specialists and learning from these experiences are of fundamental importance in ensuring the social and territorial relevance of the European Landscape Convention and in achieving its objectives.	0	60	40	0	67	33	0	33,3	33	*ELC Part 1 General Principles I. Develop mutual assistance and exchange of information*
Include biodiversity as a key aspect of liveable landscapes	0	60	40	0	67	33	0	33,3	33	
Include accessibility as a key aspect of liveable landscapes	20	40	40	0	33	67	33	33,3	0	

Planning process and participation	Total %			Local %			Regional %			Comments
	L	M	H	L	M	H	L	M	H	
Public participation and consultation at the early stages of decision making is required for successful planning and acceptance of measures although as shown by the experiences in THY NP and Midden- Delfland This promotes ownership of plan and encourage peoples feeling of “togetherness” / helping to make a plan. "Landscape" makes more understandable (is "read" and "understood" better) the planning discipline, in its political dimension but also scientific- technical and administrative.	0	20	80	0	0	100	0	33,3	33	*G. Make use of public participation* All action taken to define, implement and monitor landscape policies should be preceded and accompanied by procedures for participation by members of the public and other relevant stakeholders, with the aim of enabling them to play an active role in formulating, implementing and monitoring landscape quality objectives.
However, “relevant public participation process are needed, considering: -Avoiding false expectation to participants -Sensitive management of the participatory processes -Time consuming and expensive consuming great amount of resources	0	40	60	0	0	100	0	66,7	0	ELC Part 2.2. Participation, consultation, pooling of ideas and approval (between institutions and the population, horizontal and vertical) should be organised at all stages in this process
Awareness rising and sensibilization : to society in general and also within the administration	0	60	40	0	67	0	0	0	67	*ELC Part 1 General Principles C. Promote awareness* Active public involvement means that specialised knowledge should be accessible to all, that is, it should be easily available, structured and presented in a way understandable even by non-specialists.
Better coordination of formal/ institutional and social participation for improved and shared ownership	0	60	40	0	67	33	0	33,3	33	

Strategy and Vision	Total %			Local %			Regional %			Comments
	L	M	H	L	M	H	L	M	H	
Vision on liveable landscapes: the ELC recognizes 3 elements that should be balanced: protection, development and management	0	20	80	0	0	100	0	33,3	33	*ELC Part 1 General Principles D. Define landscape strategies* Each administrative level (national, regional and local) should draw up specific and/or sectoral landscape strategies within the limits of its competences. The various strategies should be linked by landscape quality objectives.
Territorial Potential: Include identity from specific types of land use: landscape character	0	20	80	0	0	67	0	0	67	
Improve relation and connection between city and country side: •The urban-rural relationship is an issue of extraordinary importance for a territorial strategy towards cohesion too. •Particularly relevant in peri-urban areas •Identify potential for regeneration of deprived areas	0	80	20	0	67	0	0	66,7	0	
Perception on people and social vision in the configuration of the strategy and vision is remarkably important.	0	60	40	0	67	0	0	33,3	33	
Strengthen a multi-scale approach but also multi-sectoral approach in the configuration of the strategy and vision- The landscape does not respond to administrative boundaries. It is possible contributing to manage effectively natural resources and facilitating collaboration among local entities that could help reform local map.	50	40	40	0	0	0	0	33,3	33	*ELC Part I"Each Party shall implement this convention, in particular Articles 5 and 6, according to its own division of powers, in conformity with its constitutional principles and administrative arrangements,*

										and respecting the principle of subsidiarity, taking into account the European Charter of Local Self-government. Without derogating from the provisions of this convention, each Party shall harmonise the implementation of this Convention with its own policies." (Article 4 of the European Landscape Convention – Division of responsibilities)
Actions and Measures (implementation)	Total %			Local %			Regional %			**Comments**
	L	M	H	L	M	H	L	M	H	
Responsible land use management Cooperation between Land Use Planning and Spatial Planning	0	20	80	0	0	67	0	0	67	
Take the ELC implementation options as a reference Every planning action or project should comply with landscape quality objectives. It should in particular improve landscape quality, or at least not bring about a decline. The effects of projects, whatever their scale, on landscape should therefore be evaluated and rules and instruments corresponding to those effects defined. Each planning action or project should not only match, but also be appropriate to the features of the places.	0	80	20	0	67	0	0	66,7	0	*ELC Part 1 General Principles* *H Achieve landscape quality objectives* *ELC Part 1.5 Landscape Actions* *Landscape action is a combination of protection, management and planning conducted over one and the same territory: certain parts and features can be protected, others, particularly processes, should be managed and still others should be intentionally adapted.*

Flexibility of the instruments : multi-scale and multi-sectoral cooperation is essential for implementation of actions and measures	0	40	60	0	0	67	0	33,3	33	
Specific options towards "informal" implementation of actions and measures Land stewardship Territorial contracts, Offsets and compensation Others	20	20	60	0	0	67	33	0	33	*ELC Part II 3. 3 Instruments for landscape policies*
Financial support makes a difference: both in developing the plans but most important in the implementation of the actions designed in the plans Therefore prioritization of actions are remarkably important. -	0	60	40	0	67	0	0	33,3	33	
The consideration of the landscape as a "public space" should not limit the ability of governments to finance their maintenance, especially in the case of unique landmarks with large crowds.										
Export tools from urban management to spatial planning and management	40	40	20	0	0	0	33	100	33	
Planning procedures and decisions	Total %			Local %			Regional %			**Comments**
	L	**M**	**H**	**L**	**M**	**H**	**L**	**M**	**H**	
Landscape should as far as possible be integrated in present spatial planning instruments in order to avoid burdens and barriers in the planning system. - Incorporating landscape criteria could facilitate coordination among the relevant sectoral policies and spatial planning	0	20	80	0	0	67	0	0	67	*ELC Part 1 General Principles* *E. Integrate the landscape dimension in territorial policies* The landscape dimension should be included in the preparation of all spatial management policies, both general and sectoral, in order to lead to higher-quality protection, management or planning proposals. *F. Integrate landscape into sectoral policies* Landscape should be fully taken

										into account via appropriate procedures allowing systematic inclusion of the landscape dimension in all policies that influence the quality of a territory. Integration concerns both the various administrative bodies and departments on the same level (horizontal integration) and the various administrative bodies belonging to different levels (vertical integration).
Planning procedures and decisions	Total %			Local %			Regional %			**Comments**
	L	M	H	L	M	H	L	M	H	
Combination of top-down and bottom-up approaches as the most successful option towards multi-scale approach to landscape	0	20	80	0	0	100	0	33,3	33	
Better coordination of timeframes: This could be remarkably important, considering political cycles and duration of mandates	0	40	60	0	0	67	0	33,3	33	Iinstitutions when co-ordinated in terms of space and time, allow policy implementation to be programmed
Avoid additional administrative borders in the planning systems Existing instruments are flexible enough to be able to include landscape perspective without necessarily involved a lot of extra procedures and administrative requirements- time and resources consuming	0	40	60	0	67	0	0	0	67	
Boosting coordination among administrations: **•Formal commissions** **•Informal practices**	0	40	60	0	0	67	0	33,3	33	

Planning procedures and decisions	Total %			Local %			Regional %			Comments
	L	M	H	L	M	H	L	M	H	
Informal practices:										
Collaboration between different municipalities in administrative cooperation, conforming a functional coherent area of spatial planning present in Midden-Delfland as well as Offenburg case studies	0	40	60	0	0	0	0	33,3	33	
Landscape Plans could become the basis for the **Strategic Environmental Assessment** of the planning instruments (at regional and/or local scale, (as well as for the EIA for project)	20	40	40	0	0	0	0	33,3	33	
Formal Commissions: •Navarra has particular spaces such the brand new Landscape Commission: Set the appropriate methodology for the implementation of the landscape in Navarra in line with the CEP (European Landscape Convention) •In the Basque Country the COPV Committee of Spatial Planning is perceived as a key instrument for the coordination between different administrations in the area of spatial planning (including coast) and urbanism) in the Basque Country.	20	40	40	0	0	0	0	33,3	33	

10.4. Individual messages per case study

In a second step, once general policy messages were highlighted, individual messages and recommendations to professionals in the stakeholder territories were elaborated aiming at improving their processes and performance of landscape and territorial planning.

The challenge of implementing policies for "liveable landscapes" is to find the right equilibrium between protection and development and to apply forms of "adapted" economic development.

Conclusions of the reading of the CAF matrices provided very useful information related to the successful factors and also weakness in the practices analysed Reflection on the whys and whens of the success and failures contribute to the definition of policy options, recommendations and policy needs in each case study.

Moreover out of the CAF analysis it was possible to identify which aspects of the practices reflect specific issues which could be transferable to other scales or territorial realities and which could not.

10.4.1. Policy Recommendations – Case Study Offenburg

Introduction

The outcomes of Benchmarking through the Common Analytical Framework (CAF) are generally perceived as being helpful to figure out recommendations for the policy on the local level. Especially we are happy to see a comparable good performance of the Offenburg landscape plan. Nevertheless there is a variety of opportunities for improvement.

Learning goals

Offenburg municipality at the beginning of the project has figured out some learning goals that are worth mentioning before dealing with recommendations:

Prioritizing key learning goals, it has to be pointed out, that the main learning goal for Offenburg refers to supplying landscape issues with other spatial and topical requirements under economic pressure.

- **Planning procedures and decisions:** How can authority be added to landscape issues and landscape planning?
- **Specific actions:** How can the implementation of measures are managed, at a time, when the planning and therefore the legal obligation are done?
- **Evaluation / Monitoring:** What are the benchmarks for successful planning and implementation and how can we get acceptance for them?

Policy recommendations

The CAF-Analysis showed a weakness in the field of the implementation of measures as well as the monitoring there which has been predictable when the learning goals have to be taken into account. Moreover it showed that the case studies of Midden Delftland and Offenburg are in a similar situation according to ESPON-indicators. Although in reality there is a big difference in spatial structure and landscape, it seems that learning from Midden Delftland might be very interesting in general.

1. A system for **monitoring and evaluation** of planning outcomes as well as measures and actions is nearly complexly missing[203]. Procedures for that have not been developed so far. Navarra case study in this performs very well but it can be argued, that the highly standardized system might not be adoptable for the local scale and general situation in Offenburg.
2. In close relation to the before mentioned recommendation, it seems of high importance to really conduct the plan, which is the preposition for monitoring and evaluation. In Offenburg there is no legal obligation of the **implementation of proposed actions and measures**. Those are mostly conducted with the use of finances from the impact mitigation regulation (naturschutzfachliche Eingriffsregelung). To strengthen the implementation public-private-partnership seems as well as awareness raising and voluntary work might be some opportunities that have been shown by different case studies (especially Midden Delftland)
3. Concerning the question of **strengthen the political power of landscape** in procedures and decision making Midden Delftland might be a good example, as landscape is seen as a anthropocentric issues, more than being an issue of nature protection. Nature protection and liveability are closely related though. Of course one step towards that direction would be the ratification and conduction of the European Landscape convention, but that is not to be decided on local level.
4. One of Offenburg's strengths is the availability of data on landscape e.g. land use data, protected areas, water etc. The data has been widely updated for the plan and would be a good basis for the before mentioned monitoring and evaluation. To make this possible **landscape data should be revised constantly**.
5. **Public involvement** is a contribution to freedom and therefore to liveability. Thus strengthening public involvement is important to raise awareness for landscape as well as the acceptance of the plan, actions and measures. Good examples of public involvement come from Midden Delftland and especially from Thy.

[203] A framework of monitoring is given in the LP Under chapter 6 "Forcast of environmental impact of the LP". Under 6.3 "measures for surveillance / monitoring" it is stated that German law on 'environmental impact' obliges municipalities to make environmental observations. In this case: a) state of implementation of the LP and b) accounting / balancing of landscape changes. Under a) a systematic documentation of all measures is needed (the measures in the 'tables' should further filled in) and under b) a list of indicators is given, related to the goals of the LP. A report on the 'state of landscape' should be made every 5 years. But the municipality has work to do (after the LP) regarding a detailed 'implementation plan' and a detailed 'system of landscape reports'

10.4.2. Policy Recommendations – Case Study Navarra

Introduction

LIVELAND provides a method for using the CAF to analyze a hypothetical full case policy **landscape at different scales** (regional, sub regional and local). In Navarre, the first application of the CAF was to analyze the position of our practices regarding the European Landscape Convention (ELC) regionally and subsequently applied to cases of Orgi oak forest and Arga River Park (See Annex III Navarra Baseline Report).

Learning goals

After participating in the project LIVELAND **from the Government of Navarra as lessons learned include:**

- **In Navarre there are sufficient scientific studies** and materials to address landscape policies according to the guidelines of the CEP in the components related to "Strategy and Vision" and analysis. Navarre should take advantage of these studies and use them efficiently with an adequate methodology.

- **In Navarre legal tools are available** to protect and effectively manage certain landscapes. Planning for the "protection" and performance in landscapes is accompanied by concrete management actions, but not in all the components and functions of the landscape.

- **CAF analysis shows that the experiences of Navarre are homogeneous** and balanced in different components: evaluation and analysis, strategy and vision, actions and measures and monitoring. Navarre has appropriate ways of participation under applicable regional law.

- However, **there are no criteria and evaluation of the quality of the landscape** according to the CEP: "social vision of the landscape".

- **Landscapes have a holistic approach** that combines natural and anthropological aspects (social, economic, cultural) that give the character itself and different identity to each of them.

Policy recommendations

Following the learning of both the methodology and the project LiveLand in general and shared case studies from the internal perspective of Navarre, **the Government of Navarre suggests the following related items:**

1. **Planning procedures and decisions / freedom.** Navarre should take advantage of the operating consultative and participatory **Social Council of Land Policy (CSPT)** to incorporate the criteria of the CEP to policy planning and sectoral policies with different instruments through participation.

2. **Landscape commission results**. Interesting to meet, disseminate and implement the findings and recommendations of CSPT and in particular Landscape Specific Commission formalized by the CSPT in June of 2013 which aims to "implement the landscape in Navarre under the CEP" with four lines of action 1) CEP Contents 2) Framework and Methodology 3) Landscapes and Legislation 4) Conclusions of Liveland.

    - *Liveland case to apply: Basque Country, analysis on alternatives to implement the legal framework.*

3. **Strategy and vision.** The Future Landscape Plan or Strategy of Navarre will set the framework for the incorporation of criteria, determinations and guidelines for landscape and for each spatial scale and tools available today (Laws of Land Management, Natural Areas, Heritage Cultural and others with impact on the landscape).

4. **Planning procedures and decisions / freedom.** The CSPT council will provide the Government of Navarre guidance on methodologies adapted to Navarre for the perception and evaluation of the quality of the landscape.

    - *Liveland case to apply: Midden Delfland and Thy.*

5. **Evaluation and analysis / components.** Use scientific materials available at universities, research centers and groups linked to the study of the environment.

    - *Liveland case to apply: Offenburg.*

6. **ELC requirements.** To adapt the plans and projects to ELC requirements should be programmed actions in all analyzed components of Liveland (Culture and Heritage , Social Relations and Capital territorial , Economic , Health and Freedom) regardless of the planning legal instrument that is used (Laws Management of Natural Areas and Cultural Heritage) with an integral and holistic vision of landscape.

7. **Landscape and sectoral legislation**. It will be studied what criteria and landscape guidelines should be incorporated into sectoral regional legislation, and in particular into the legislation on spatial planning and land use planning - LFOTU and what should be incorporated into a specific Act or Regulation. The future Landscape plan or strategy of Navarre will focus in this regard.

10.4.3. Policy Recommendations – Case Study Basque Country

Introduction

Due to the territorial reality of the Basque Country, being such a dense populated area is to find a balance between nature preservation and socioeconomic development since landscape constitutes a fundamental pillar in the Basque culture and identify.

The key territorial challenges that the Basque country is currently facing and that are also common in the practice under consideration in Laguardia could be summarized as follows:

- Simplification and uniformity of certain areas which result in the degradation of the landscape and the risk of identity loss, mainly as a consequence of disorganized industrialization, the transport infrastructures and main modes of transportation.
- Concerning the urban areas, the concept of landscape is generally associated with the protection of buildings or areas that have an architectural or historical interest.
- Maintenance of cultural landscapes particularly associated to certain traditional agricultural practices.

Learning goals

Key interest of the Basque Government for leading the Liveland project is eventually the identification of criteria for effective integration of landscape into other planning instruments.

- **Planning culture:** Institutionalize landscape approach into the spatial planning system.

- **Planning procedures and decisions:**
  - Good governance and regional boost
  - Operativeness of the landscape concept into the spatial planning system
  - Strenghen public participation
  - Relation between sector policy and landscape planning and management

- **Assessment and evaluation methods:** development of specific indicators for analyzing landscape towards liveability

- **Vision and Strategies:** Economic development aligned with landscape protection, planning and management

Policy recommendations

The Basque Government considering results from Liveland analysis and exchange of experience with other stakeholders has defined the following policy recommendations

1. **Awareness rising - Planning culture:** There is a need for institutionalize and operationalize landscape concept and approach into the spatial planning culture and planning system in place, aiming at reducing particular interests or competences and boost a holistic approach to the territory. This will require awareness rising within the administration with competences in landscape. The visibility of Landscape Catalogues and Guidelines developed in the 3 pilot areas to date is remarkably important in that connection.

2. **Improve institutional coordination- planning in practice:** A well know challenge in almost all regions at EU level is the need for improved institutional coordination, together with the strengthen stakeholder's involvement in the planning process.

3. **Management of rural areas near densely populated metropolitan areas:** Integration between different public administrations and sectorial policies is seen crucial to define activities to preserve the landscape, and recognize their value in these particular areas. There is a need for a co-participation between private and public stakeholders. The consideration of the landscape dimension in the rural spaces is seen crucial considering that land use planning competences relay on local authorities. The processes of intensification agriculture intensification, land abandonment or diffuse urbanization, apart from being contradictory are common challenges in rural areas that should be overcome. This means that the articulation between local authorities with competences in land use planning a regional scale is seen crucial for successful sustainable management of the territory. The revision of the Spatial Guideline of the Basque Country already highlight this issue and incorporate landscape as a relevant topic, although there is still a need for implementation of actions and evaluation of effectiveness.

   Liveland case to apply: Midden Delfland

4. **Multiscale approach to landscape and spatial planning.** The Basque Country recognizes the importance of the multiscale approach to landscape and spatial planning. Considering the three levels of planning existing in the Basque Country 3 regional, subregional and local , the scale that is consider more appropriate for boosting the process towards the integration of landscape into territorial development is the regional and subregional.

5. **Methodologies of landscape evaluation.** The landscape practices in the Basque Country for the assessment and evaluation of landscape already have a comprehensive approach supported in a deep analysis of a wide range of territorial elements including references to subjective evaluation and perception that can condition the decisions and proposals regarding landscape

planning. However there is still a need for the development of indicators for impact measurement: recreation of open spaces, protection of nature qualities, remediation or improvement of natural balance.

Liveland case to apply: Navarra

6. **Planning processes and participation:** although the public participation process in spatial planning is well developed in the Basque Country, there is still a need for a more interactive and participative process; institutions and stakeholders working together with professionals

Liveland case to apply: Midden-Delfland and THY NP

7. **Planning procedures & decisions:** The Basque Country is determined to integrate landscape into spatial planning by means of the materialization of the Landscape Guidelines, so current planning instruments are seen as the tool for the protection, development and management of landscape and nature, and there is no need to create a new instrument for landscape planning. The formulation of landscape quality objectives as well as guidelines for protection, planning and management and its integration into spatial planning and land use planning instruments constitutes the basis to give normative dimension to such objectives and actions.

8. **Actions and measures.** There is a need for instruments for attract public investments to overcome the challenge of getting a real implementation of the actions and measures proposed throughout the planning.

10.4.4. Policy Recommendations – Case Study Midden Delfland

Introduction

Before developing recommendations, the context of practice in MD should be lined out. The municipality is an executional government. The province has more power to develop new strategies and instruments. At the moment in the Netherlands the dominant power of spatial and landscape policy comes from the national government. The main political trends are: deregulation, decentralisation and fusion of spatial and environmental policies. The PSH has chosen to follow these trends. The provincial environmental competences (including enforcement and nature protection) is decentralised to 'regional execution agencies', which are cooperation's of around 10 municipalities. (Such 'regions' between province and municipality are no governmental layer, but content related alliances.) The provincial spatial policy trend can be described as: fewer rules on designations (especially on urban enlargements) and more voluntary inspirations on spatial quality. The emphasis on quality (visual landscape) will be pushed forward, integrated in spatial planning, but gets a more open-ended character.

Given this context it could be stated that the classical Landscape Plan (as subsidised voluntary instrument of municipalities to come to a program of actions) has no future in the planning practices of PSH and MD. Cooperation and programming will be done with other, more integrated instruments.

Learning goals

The municipality of Midden Delfland (MD) and the Province of South Holland (PSH, as co-stakeholder) defined as key learning goals:

- From vision to measures: how can landscape quality be improved?
- Planning procedures: how to improve cooperation between public institutions and organize commitment?
- Impact measurement: how to organize monitoring?

MD focused on learning from the landscape planning in Offenburg.

Recommendations on landscape planning

1. The CAF analysis shows a strong 'systematic planning process' (ELC), especially from vision (tasks as physical developments) to measures (detailed guidance) to implementation strategy (as multi-level government). Some weak points (compared to Offenburg and ..?) are the broadness of the analysis (focus on visual quality, delimiting other environmental items) and the monitoring and evaluation phase of planning.

2. Suggestion, in line with the provincial guidelines on spatial quality (see learning case), could be to develop a *municipal 'guidance'* for spatial developments, which are more detailed as the provincial 'inspirations' and are the frame work for 'good consultations' between municipal licensing authorities and developers. In the green space of MD such guidance could focus on rural space / green infrastructure and city borders.)

3. Second recommendation is that the existing execution organisation 'Hof van Delfland' (as mulitilevel organisation, including private stakeholders) should be continued and get a broader task: not only programming of spatial developments, but also of management of nature and landscape, including the new rural development program (as frame work for EU subsidies).

4. Recommendation nr. 3 says that the Landscape Plan (decided in 2010) and the Execution Plan Hof van Delfland should be evaluated the next years (for instance in 2015) by an independent monitoring institute (for instance the National Environmental Bureau). Such an evaluation should take into account the goals on landscape, nature, water, soils, recreation, connections, etc. The analysis could be done on a broader scope as the landscape quality as such. An inspiration could be the monitoring indicators of Landscape Plan Offenburg.

5. Last recommendation is that this 'broad' evaluation could be the starting point of an analysis of 'space, landscape and environment' and development of tasks and measures for the next 10 years. This new planning process could be done by the new 'environmental execution agency', which includes the area of Hof van Delfland. Good example for such 'Environmental Plan' could be the method of analysis of Landscape Plan Offenburg: landscape, cultural elements, human well-being (leisure), soils, water, air, biodiversity and pollution / environmental stress. One of the items that could be included is the noise nuisance for recreants, coming from the motor ways.

10.4.5. Policy Recommendations – Case Study THY NP

Introduction

Parallel to the key challenge for the implementation of policies for "liveable landscapes", a key challenge for Thy is to balance protection and development of the landscape of the National Park, i.e. conserving/preserving a relatively unspoilt landscape while also applying various forms of recreational activities and general economic development in the area. Furthermore, the public participation requirements – both legally in the Danish planning system but also as a way to build ownership and diminish future (land use) conflicts – are adding extra levels to the above balance in that the planners and managers will have to prioritise between the interests of various stakeholders.

Learning goals

At the outset of the Liveland project, Thy National Park identified a number of issues that highlights the delicate balance of interests:

General planning

- What are the challenges and advantages of combining the formal municipal and regional plans with more voluntary/indicative plans and guidelines for the inclusion of landscape in land use and municipal/regional planning?
- How should land use/landscape changes that are located outside of the area in question but which have great impact on the land use/functionality/attractiveness of the area be dealt with?
- Is it possible to quantify the impact of the new plans?

Stakeholder participation

- How to manage the situation when there are various groups that have interest in/strong opinions on the landscape/land use changes, including local actors as well as regional/national administrations and national/international interest organizations:
    - Who has the right to decide on the landscape?
    - And how should discrepancies between differing opinions in this respect handled?
- In this respect a key issue would be to decide on how to determine who we are planning for, and thus who are to be involved in the planning process:
    - The local actors?
    - The stakeholders?
    - The 'public good'?
    - Whoever shows an interest?

  Should all inputs and interests be treated equally, i.e. with the same 'weight'?
- Is it possible to measure the impact of involving the stakeholders and public in the planning process?

Of these issues the stakeholders were particularly interested in:

- How to manage multifunctional land use which includes for instance tourism, recreation, economic development and nature protection?
- How to effectively monitor the plan goals and eventually how to evaluate the plan?

Policy recommendations

1. Multifunctional land use is a key feature of the Thy National Park in that only by focusing on this aspect does Thy National Park become more than just an enclosure for preserving the landscape. Balancing protection and use of landscape is already a key issue in the NPP, and this builds upon intensive cooperation and continuous dialogue between various actors, which is essential for avoiding possible conflicts among different interest groups. With the National park moving from its start-up phase to the progression in a long-term time perspective, it is important to consider how **continuation of this dialogue** can be ensured, both with regard to the time and resources needed but also in which form a decent level of commitment from the external actors can be expected.
2. **Prioritisation** of the activities in the NPP could be improved. Such a prioritization would also pinpoint to which parts of the plan the monitoring of progress should be focused.
3. **Monitoring and evaluation** can be improved. A first step is to think about what should be monitored: plan implementation; achievement of goals; activities; landscape changes? This has to be very concrete in order to be able to set up measures for how to monitor and evaluate.

10.4.6. Policy Recommendations – Case Study Ljubljana Urban Region

Introduction

Ljubljana urban region decided to search for the opportunities that are supposed to be hidden in its less apparent landscapes. Leaving aside the ones that are being already part of higher recognition and public interest, Ljubljana urban region decided to raise question about the future development of one less exposed but rather characteristic Slovenian landscape.

Learning goals

RDA LUR has figured out the following learning goals at the beginning of the project:

- **Integration of the landscape plan in the regional spatial plan:** What should be the role of landscape plan within spatial plan and how should it be presented?
- They were interested in the methodology for identification of landscape potentials and in guidance on how to integrate the arguments (which are in favour of the protection of the landscape) in the stakeholder dialogue on development in the region.
- **Participatory process:** How to drive a participatory process towards the development of common vision of all stakeholders?
- Stakeholder was wondering how to bring participatory process to the point that the plan would be acceptable for all.
- **Branding of the region:** How to promote proper branding of the region?
- **Local production:** How to promote local production?
- They were interested in the practices or solution on how to stimulate the production and marketing of local products, especially food products.

Policy recommendations

The absence of planning at regional level in Slovenia becomes to be an obstacle in the frame of sustainable development model that is searching for **development opportunities** in the exact areas of higher landscape value since most of them are divided among more than one local municipality. While Slovenia ratified European Landscape Convention and people would declare the highly value the landscape in practice there are numerous gaps from planning level to management and supervision of change.

1. In this circumstances Ljubljana urban region is recognising its landscape as underused development opportunity and further efforts must be done to **promote this potential and effectively, more productively communicate** this vision with local community, residents and other specific stakeholders.
2. With current legislation and governance model, best solution would be to start a process of cooperation that would lead to the preparation of **informal spatial development programme and plan** which would engage local stakeholders from the early beginning and would reach the agreement by participation. Opportunities that lie in the landscape are strategically important for further development of the region and the strength of its identity so further attempts to activate them are necessary.
3. The active **participation of the interested stakeholders** (in particular the local public) in formal procedures would enable them to have a stronger and more creative influence on important spatial decisions. Basic instrument for the productive protection of the landscape would be not only to balance spatial interests and appropriate land use but to involve new programme, stakeholder and activity as well. It is only fair to point out from the early start of the process that landscape based development in Ljubljana urban region is competed with the huge potentials of the country's central urban area. Thereby the motivation must be strongly supported by common vision built in an open participatory procedure.
4. Landscape planning could thus be the creative fusion of development needs with protection mechanisms into a functional and harmonious urban and natural environment that produces a quality landscape.

10.5. Key policy messages and awareness rising for relevant European entities (EC and CoE) and ESPON

It has been already argued in previous chapters, that EU is involved in an on-going process of including the landscape as an important and multi-faceted resource in their strategy towards a sustainable development.

It has been concluded that such a process implies the need for including the landscape as an important concept in both planning and practice. This, however, does not imply that the policy context operates with any precise definition.

The following are policy responses to land take at EU level

- Cohesion Policy (2014-2020) – thematic objective: environmental protection and resource efficiency. Funds flow to infrastructure developments (e.g. in 2000-2006 period – 5100 km road built, 8400 km rail built, etc.)
- Roadmap on Resource Efficient Europe – milestone: no net land-take by 2050.
- Priority 6 of the new common strategic framework 2014-2020 "Protect environment and promote efficiency in the use of resources" establishes orientations for the implementation of FEDER and FEADER in landscape[204]
- Territorial Agenda 2020 - changes in land use (urbanisation, mass tourism, etc.) threaten landscapes and lead to fragmentation of natural habitats and ecological corridors.
- Rural Development Policy (towards 2020) - priorities include restoring, preserving, and enhancing ecosystems e.g. N2000, *landscapes,* soil management, etc.
- The Common Transport Policy - development of transport services must take account of their possible effects on the environment.
- European Spatial Development Perspective (ESDP) - advocates the development of a sustainable, polycentric and balanced urban system with compact cities.
- Leipzig Charter of Sustainable European Cities – compact settlement structure as especially sustainable.

Besides parallel to the EU development at has been also exposed in chapter 4 of the present report how ESPON program is evolving into recognizing how landscapes as potential multifunctional entities are important contributors to the objectives of territorial cohesion.

As a preamble to the discussions in relation to the European Landscape Convention in 2000 the Pan-European Biological and Landscape Diversity Strategy[205] Landscape is recognized as an active part in the spatial development:

- [204] SWD(2012)61 final – Part II annexes

[205] Council of Europe (1996): Pan-European Biological and Landscape Diversity Strategy. Nature and Environment, No. 74, Council of Europe Press

""*Spatial impact" or "regionally significant" in this context means that Community measures modify the spatial structure and potentials in the economy and society thereby altering land use patterns and landscapes."* (p 13).

Could it be possible from the outcomes of the Liveland research to extract some messages for rising awareness on relevant aspects challenges and opportunities to EU (DG Regio mainly), the CoE and national authorities for strengthening the consideration of landscape in territorial policies towards sustainable development?

Reinforce the relations between environmental policies and territorial development through landscape policies

At European scale there is still a need to strengthen the relations between environmental policies and territorial development and eventually spatial planning. Special attention could be placed to landscape as a way to do so:

- The consideration of the territorial impact of the environmental planning is crucial in that connection: planning and management of protected areas, water resources, soil erosion, location of hazardous and highly pollutant activities and so on and so forth having a close link to effects in landscape

  In some countries (in Spain for instance) a great example of this could be the Natura 2000 network which could be seen as a multifunctional European territorial structure, representing a wide sequence of natural landscape at European level. Natural Parks could play the same role in other countries as it is the case in Germany

Landscape as key territorial value for territorial development in areas of special characteristics

Several European documents of territorial development have identified areas with special characteristics such as urban / metropolitan regions, sparsely populated regions remote regions, regions in industrial transition; cross-border regions; mountainous regions; islands; coastal regions.

For these areas of special character explicit measures of territorial development have been proposed mainly highlighting the significance of their local resources as key potential for their territorial endogenous development. However the major emphasis is placed in the evolution of socioeconomic performance of such territories and less on landscapes, only including collaterally their cultural landscapes

Strengthen the role of landscape in the urban-rural relationship

The European development perspective (ESDP, 1999) and Territorial Agenda (2010) have as one of the main objectives towards the reinforcement of territorial cohesion in Europe:

- Development of a balanced and polycentric urban system and a new urban-rural relationship;
- Strengthen polycentric development and Innovation throughout networking of cities and regions.
- Alongside the design of new forms of partnerships and territorial governance between rural and urban areas.

The emphasis this time is placed in the urban-rural relationship and polycentrism opposite to concentration of the urban phenomena as a key objective of territorial development.

But little is said about landscape, even though the morphology of the European cities and the urban landscape constitute its heritage and eventually its territorial potential.

Multifunctionality of landscape

The expression "multifunctional landscapes" refers to areas serving different functions and combining a variety of qualities, i.e. that different material, mental, and social processes in nature and society take place simultaneously in any given landscape and interact accordingly. Multi-functionality in landscape, therefore, means the co-existence of ecological, economic, cultural, historical, and aesthetic functions. Thus, landscape multi-functionality is not necessarily synonymous with multiple land uses.

Different land uses can be a criterion for multi-functionality in landscapes, but even a single land use can involve numerous functions. Paracchini et al. (2011)[206] therefore emphasizes that the concept of multifunctional land use provides a favourable approach based on the recognition of that in order to maximize the benefits obtained from a given parcel of land, a more equitable balance of the competing economic, environmental and social demands on land is more sustainable in the long-term than an unbalanced system based on individual sector based rationale.

Considering the previous, there is a need for development of methods where the question of harmonious and disharmonious functionalities could be a way of improving the planning process.

Liveable landscapes as a response to degradation and social exclusion

Spatial planning as administrative discipline could provide tools and criteria to better reconcile the different landscape functions. Eventually this would mean sustainable territorial development considering socio-cultural, environmental and economic dimensions.

In that connection the implementation of landscape policies with such principles at local scale could be of great value in order to reduce degradation, improve the situation of deprived areas and contribute to social inclusion and cohesion. Some examples:

- Improving landscape quality in peri-urban areas densely populated
- Prioritizing action in highly deprived spaces (abandoned industrial areas, contaminated land sites, old landfills, etc) recovering their natural conditions and attributing to them public and social uses
- Landscape management, particularly it functions related to health and culture, alongside the public-private cooperation, could contribute to creation of Jobs in deprived areas, favouring social integration and cohesion.
- Landscape contribution to health through **Recreation** is understood as favouring integration and social cohesion. Landscape is an important resource for recreation and includes activities like hiking, biking, playing etc. but also relates to experiences.
- Recreation functions offer the opportunity for people to meet with each other and get into contact without regard to status and economic situation it therefore:
    - reduces inequality

[206] Paracchini, M.L., Pacini, C., Laurence, M., Jones, M., Pérez-Soba, M. (2011): An aggregation framework to link indicators associated with multifunctional land use to the stakeholder evaluation of policy options. Ecological Indicators. Vol. 11, Issue 1, January 2011. P 71-80. Elsevier

- helps to build bonding and bridging capital
- to build trust between members of the community and build mutual trust in neigh borough

- Promotion of social integration
  - (High quantity[207] and quality[208]) parks (that provide sufficient level of safety, are attractive and serve multiple purpose[209])
  - Community gardens / allotment gardens
  - Reduce conflicts within society that are a serious threat to security

- Besides landscape contributes also to security and disturbance prevention and such functions could be used and maintained by planning for improving the situation of degraded areas and areas of social exclusion particularly in urban areas.

We recalled the following landscape characteristics already showed on chapter 3, which are important for health promotion within planning and can be addressed in plans on regional as well as local scale.[210],

Physical health	**Physical outdoor activity in cities (daily life)** • Access and presence of physical activity promoting facilities • General functionality of urban districts (e.g. sidewalks traffic regulation, bicycle and walking paths)
	Physical outdoor activity in cities (leisure time) • Multifunctionality • Street connectivity • Traffic safety (e.g. pedestrian zones) • Landscape perceived as pleasant / Aesthetically appealing landscapes • Nearby parks, playgrounds and sports fields (high quality) • Access to places for physical activities (high quality)
	Physical outdoor activity outside cities • Aesthetically appealing rural green landscapes (e.g. forests)
	Production of healthy food (organic food production) • Fertile soils (see economics / work) • Availability of fresh and clean water (see economics / work) • Variety of land use
	Access to clean fresh water • Surface water bodies • Groundwater
	Living in an healthy environment • Provisioning of ecosystems to prevent contaminations • Diseases prevention • Landscape ability to destruct wastes
Mental health	**Attention restoration and recovery from mental fatigue** • Natural landscapes such as beaches, waters, forests, parks, mountains • Availability of public open spaces used for public entertainment and sports
	Recovery from stress • Landscape perceived as pleasant / Aesthetically appealing landscapes • Easy access to green areas with lower sound levels from road traffic

[207] Finke (2009)

[208] Körner, Nagel and Bellin-Harder (2009)

[209] Abraham, Sommerhalder and Abel (2010); Körner, Nagel and Bellin-Harder (2009)

[210] Abraham, Sommerhalder and Abel (2010)

	The benefits to health when the "soundscape" is consistent with the visual and related pleasant aspects of landscape, are connected with two variables: • Increase the level of well-being and environmental comfort in the area contributing to a more rewarding sensorial experience to the user/visitor/. It is related to the improvement in perceived health too. • Increase the restoring capacity of the area, and therefore the capacity for restore from stress of the people visiting/enjoying/living there. People could better recover from stress, due to daily, in coherent places- sound-views-other stimuli.
	Positive emotions • Landscape perceived as pleasant / Aesthetically appealing landscapes • Open and accessible forests

Incorporation of landscape principles into the Common Agricultural Policy (CAP)

The argument of the CAP being one of the European policies with greater impact on landscape is far for being new and the impacts of the CAP have been study in several projects, also efforts to overcome the undesirable effects of the CAP have been implemented. The CAP materializes its impact on landscape mainly through the homogenization and banalization of traditional agricultural landscapes.

It is suggested to stimulating a deep debate on this pattern of land use change globally affecting Europe and reflecting on the need for the development of an action principle for the systematic incorporation of landscape approach towards rural diversification and preservation of cultural heritage in areas affected by the (CAP)

Development of landscape quality objectives and criteria for action in relation to European infrastructures

The impact on landscape from the large European infrastructure has not been evaluated beyond the normative on Environmental Impact Assessment and Strategic Impact Assessment. Two main criteria are suggested:

- Creativity and adaptation to inherent local characteristics of the territory in each intervention

- Recognizing the value of landscapes at local and regional level that such infrastructures must cross, minimizing the impact and even contributing to its enhancement and management

Inventory of Landscapes of general interest

It is suggested that instruments for spatial planning and territorial development (strategies, policies, programs and plans) at national and regional level identify and delimitate landscapes considered of general interest due to their relevance, singularity, vulnerability, provision of irreplaceable functions and services. For its preservation, planning and management is remarkably important to define specific norms, whether it would be through regulation or through not binding recommendations depending on the planning context and country.

Landscape key issue for territorial development in cross-border areas

Cross-border regions could frequently present "natural landscape units" which could lay in different planning cultures, planning systems and rely on different scales of planning competence and responsibilities. This could be translated in incoherent evolution of landscapes in those areas with unwanted impacts also in terms of territorial cohesion.

That is why is suggested a particular attention to cross border areas in that connection.

The ESPON project LP3LP is addressing a cross-border European landscape with high importance within its polycentric metropolitan context. In this project, ESPON studies and results are used to place this region in a European context, to identify the potential effects of EU policies and to take stock of the unique territorial potentials of this region.

More research is needed for detecting territories with complementary potential matters towards sustainable land use

Sustainable land use: means using and manage land assets in a way that benefits the local and regional economy, without compromising biodiversity and ecosystem services, working to sustain the land for future generations. **Sustainable land use** implies a balanced consideration of the range of social, economic, and environmental goods and services provided by the land uses in a certain region/landscape (Wiggering et al., 2006; Pérez-Soba et al., 2008). It also implies a careful consideration of long term attributes of resilience and robustness that are to maintain underlying ecosystem processes.

More research is needed to detect territories with complementary potentials, often neighboring, which can join forces and explore their comparative advantages together creating additional development potential.

There is obviously a **need of developing tools which enables the inclusion of differences in relation to both intensity and diversity of the use of landscapes** in order to become an asset in regional development towards sustainability. Such tools – both quantitative (intensity) and qualitative (functionality) - are needed in order to enable the analysis of questions relating to balances between landscape protection and social welfare combined with different types of economic development.

Governance

Considering the political, technical and administrative dimensions of Landscape management, it could be argued that they perfectly fit into the governance principles, above all:

- subsidiarity and participation (social vision of landscape),
- openness and liability (administrative coordination and effective articulation and management of competences)
- efficiency and coherency (organization with respect to the different polices and administrative levels from local to European) [211]

[211] COMISIÓN EUROPEA: "La gobernanza Europea. Un libro blanco" COM (2001) 428 final

11. Identification of knowledge gaps and recommendations to future ESPON research

In chapter 4.2 of the present report ESPON approaches to landscape concept were reviewed from the very early stages and ESPON attempts of addressing landscape elements to ESPON evolution into land use and landscape approaches materialized among others by EU-LUPA project[212].

For better orientation within the perspective of ESPON studies, the case study areas can be located on various results of earlier ESPON mapping efforts.

For the evaluation of the territorial performance in the Liveland case studies, we have used the outcomes of the following ESPON projects:

- **INTERCO project**[213] which is a selection of territorial performance indicators aligned with the indicators of the LISBON Strategy, Territorial Agenda 2020, EU2020 Strategy and the 5º Cohesion Report[214].
- **ATTREG project**[215] Attractiveness of European Regions and Cities for Residents and Visitors
- **ESPON CLIMATE** [216] Territorial effects of climate change
- **EU-LUPA project**[217] Characterization of land use and land use changes in EU at regional level.
- **FOCI project**[218] Future Orientation for Cities

The selected indicators have been organized in 8 themes as follows:

- Economic performance and competitiveness
- Inclusion and Quality of Life
- Environment and territorial capital
- Innovative territories
- Integrated polycentric territorial development
- Attractiveness
- Climate change vulnerability
- Land use characterization

However none of this studies and indicators could be finally used to assess liveable landscapes and how landscape evaluation, planning and management could become a key value for territorial development.

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[212] EU-LUPA European Land use patterns 2010-2013. Applied Research

[213] ESPON Territorial Indicators. A first selection of ESPON Territorial Indicators based on the Final Results of the ESPON INTERCO Project Working paper Version 26 June 2012.

[214] Eurostat Cohesion Indicators (http://epp.eurostat.ec.europa.eu/portal/page/portal/cohesion_policy_indicators/cohesion_indicators)
Fifth Report on Economic, Social and Territorial Cohesion (http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion5/index_en.cfm)
ESPON Data Base 2013
http://www.espon.eu/main/Menu_Projects/Menu_ScientificPlatform/espondatabase2013.html

[215] ATTREG - Attractiveness of European Regions and Cities for Residents and Visitors 2010-2012. ESPON Applied Research

[216] ESPON CLIMATE Climate change and terrtiorial effects on regions and local economies in Europe 2009-2011. Applied research

[217] EU-LUPA European Land use patterns 2010-2013. Applied research.

[218] FOCI Future Orientations for Cities 2008-2010. ESPON Applied Research

Now the debate is:

- How Liveland results could influence and contribute to ESPON data base?
- Which are the knowledge gaps and future needs?
- Are there future links between a potential continuation of the project "LIVELAND (II)" and ESPON?
- ESPON must be further investigating to correlate the objectives of the 2020 strategy with its spatial materialization through multi-scale and multi-functional landscapes.

REGIONAL AND LANDSCAPE PRACTICE INDICATORS

Two levels of analysis might be considered with regard to the definition of landscape indicators: 1) "regional" indicators and 2) "landscape practice" indicators. This approach is derived from the perspectives already discussed during the project development, top-down and bottom-up respectively, usually used in spatial planning and landscape practice.

The indicators selected to the assessment of territorial performance in the Liveland case study are derived from other ESPON projects. As a result, a set of indicators and maps allow us to have a view at a regional level on how several landscape functions are performing: land use, diversity, etc. although they are not suitable to compare landscape practices or even differences on landscape at different regions.

However, Indicators for landscape policies evaluation would be more useful were they suited to compare qualitative and strategic aspects of landscape:

- To inform about landscape characteristics and its functions: productive, biodiversity generation, people's health, etc.
- To inform on the long term view of a specific matter: conservation, education, research, etc.

Although the 8 selected themes have been incorporated into the characterization of the project case studies (see Baseline Analysis), it was not possible to provide specific variables to measure and compare any of the aspects mentioned above.

The following table shows the relation between indicators used in the CAF and CAF components and functions that could make the basis for the definition of **"landscape practice" indicators.**

	General	1. evaluation and analysis	2. Planning processes and participation	3 Strategy and Vision	4, Actions and measures:	5, Monitoring:	6. Planning procedures and decisions	RELATION
CULTURE	1	3		3	2	1	1	0 - Unrelated
SOCIAL		2		1	2	1		1 - Low
ECONOMICS		3		2	3	1		2 - Middle
HEALTH		3		2	2	1		3 - High
FREEDOM	1	1	2				3	

Table 21 Relation between indicators, components and functions used in the CAF

Data introduced in the CAF matrix show the existence of phenomena that must be followed up with indicators further than component "1. evaluation and analysis". At least the phenomena evaluated with a high relationship between landscape components and functions should have follow up indicators that might be proposed in the frame of a further research.

Another different issue is the fact that components such as "3. Strategy and Vision" may provide **"landscape practices"** indicators related to the own objectives of each practice: conservation, education, production. The same with regard to indicators about quality in decision making and the contribution of a practice to citizens (freedom). These ideas might be analyzed in further detail in another research project.

As a final remark, the "5. Monitoring" component might evaluate indicators of the first component "1 Evaluation and analysis" and the **"landscape practice"** as a whole.

CHARACTERISTICS OF INDICATORS TO BE PROPOSED

This aspect might be deepen analyzed in ESPON future research on landscape matters. The same Liveland analysis methodology (clustering and principal components) might be applied to the variables that would be proposed to highlight the 8 themes in landscape practices.

Moreover, to transform these variables into indicators, a possibility is select indicators that comply with the following characteristics:

1. Related to the strategic view component of the case studies proposed in conservation, education and research.
2. Related to the landscape functions already analyzed: culture, social, economic, health, freedom.
3. Flexible enough to be grouped by scale: case study, local, regional, national, etc.
4. Georeferenced by point, line or polygon.
5. Able to measure change.
6. Able to measure the quality of the administrative procedure used and comparable with regard to other regions.
7. Homogeneous and from European sources (EUROSTAT, INSPIRE, etc.)

As an example, the indicators available in the different information systems of Navarra, including NASUVINSA-OTN's, could be **related to the different landscape functions in the CAF.** The proposed indicators could be used to measure components "1. analysis" and "6 monitoring", as shown in the table below.

	General	1. evaluation and analysis	2. Planning processes and participation	3 Strategy and Vision	4, Actions and measures:	5, Monitoring:	6. Planning procedures and decisions	RELATION
CULTURE		9				9		nº ind
SOCIAL		2 ,3 ,4, 10				2, 3, 4, 10		
ECONOMICS		1, 6 , 7				1, 6, 7		
HEALTH		5 , 8				5, 8		
FREEDOM								

1. Built areas on highly valued farming lands
2. Land use change by landscape units
3. Alteration of urban boundaries (urban development)
4. Urban compactness
5. Population exponed to noise
6. Cattle density
7. Organic farming
8. Paths of natural and cultural interest
9. Assets of cultural interest
10. Landscape complexity

12.Next steps

Apply Liveland methodology to other European territories at different scales

The application of the CAF matrix for the evaluation of landscapes practices in terms of liveability would be very interesting in order to provide more insights on best practices and policy options.

Interactive design of the CAF-matrix

To improve the usability of the CAF-matrix it might be beneficial to make use of interactive functionalities of the Excel software. This tool would increase the usability of the table as it leads to avoidance of extra work. Questions could be masked as long as they are not needed. Additionally, all answers could be checked for logic and consistency where possible.

Consider Biodiversity

In the present version of the CAF biodiversity is not a prominent aspect although many topics that relate to biodiversity are addressed. It is often argued that biodiversity is contributing to liveability in one way or another. For example the 2020 European biodiversity strategy states:
"Its deterioration and loss jeopardises the provision of these services: we lose species and habitats and the wealth and employment we derive from nature, and endanger our own wellbeing."[219]

The link between liveability and biodiversity seems obvious regarding activities that directly relate to biodiversity, e.g. watching birds as a kind of leisure-time activity. Still, it would be an inacceptable generalisation to state that every aspect of biodiversity is enhancing liveability. For example, exposing people to a high variety of pathogens would not be considered a welcome contribution to liveability while, at the same time, it contributes to high biodiversity. It cannot be ignored that there are strong interrelationships in multiple dimensions between biodiversity and liveability; this needs to be highlighted in future revisions of the CAF-matrix. At least this will also contribute to the argumentation of landscape as an asset in liveability.

Components of liveability that are not addressed within the revised CAF

Initial attempts to fill the CAF-matrix showed that a number of components of liveability that are related to landscape are not regularly addressed in official landscape plans and policies. For practical reasons 'security' is no longer part of the revised CAF. For other components the number of indicators was reduced (see Chap. 5.3).

Nevertheless, these components and indicators are still important to characterize liveability of landscape as an asset in regional development. Dropping them in the revised CAF should not be misunderstood as these components being less important than others.

Moreover, the fact that particular landscape assets are not regularly addressed in official policy documents points to the high potential of yet unexplored realms of liveability that landscape offers as an asset to be included in planning and regional development. As a first outcome of the analysis it can be stated that most of the plans and policies recognize liveability benefits in all of their dimensions. But only a small part of them is currently addressed. There is still much potential for improvement - even more than the results of the benchmarking task might indicate at first glance.

[219] European Comission (2011: 1)

Criteria for landscape policy implementation

Further research work is required for the elaboration of a set criteria for the the selection of the policy interventions and criteria for implementation with regard to sustainable, responsible,effient land use and land use management.

This could be materialized in a target analysis, under priority 2 in the next ESPON programme.

The transferability assessment and guidance for policy development will be addressed as a final stage of the project, generalizing the experiences, best practices and benchmarking of content and procedures of landscape and territorial planning and their impact on sustainable development as inspiration for future planning approaches (systems, planning and cultures).

Development of indicators

The follow up of landscape policies needs two types of indicators for different scales: regional and landscape practice. Liveland has already focused in the regional scale as it has been already exposed.

Liveland project has developed a methodology for evaluation of liveability of landscape practices and on top of that, the TPG has acquired enough experience in order to establish in the near future a set of indicators useful for both landscape views “top-down” and “bottom-up”.

The set of proposed indicators must be homogeneous for the whole Europe, both in the form of measurement as in the interpretation of results.

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Appendix 1: CAF matrix data

VARIABLES		DATA DEFINITIONS			DATA CHARACTERISTICS			RAW DATA						OBS	NORMALIZED DATA					
		Theme	Definition	Subcategory				Thy	Ljubljana	Delftland	Basque	Offenburg	Navarra		Thy	Ljubljana	Delftland	Basque	Offenburg	Navarra
VARIABLE	COMPONENT	THEME	DEFINIT	SUBCAT	TYPE	MIN	MAX	THY	LJUBL	DELFL	BASQ	OFF	NAVAR	CROSS	THY-N	LJUBL-N	DELFL-N	BASQ-N	OFF-N	NAVAR-N
CLT_01	General	Culture	Deal with liveability?	NONE	VAL_0_1	0	1	1	1	1	1	1	1	6	1,00	1,00	1,00	1,00	1,00	1,00
CLT_02	General	Culture	Map on liveability components?	Evaluation/strategy/action/other	CATEGORY	0	4	1	2	1	3	2	2	6	0,25	0,50	0,25	0,75	0,50	0,50
CLT_03	General	Culture	Strategy on liveability?	5 levels	LIKERT	0	5	4	2	5	5	3	3	6	0,80	0,40	1,00	1,00	0,60	0,60
CLT_04	General	Culture	Contradictions between components and policy?	5 levels	LIKERT	0	5	3	3	0	2	2	1	6	0,60	0,60	-	0,40	0,40	0,20
CLT_50	4-Overall Action	Culture	Propose actions/measures to liveability?	5 levels	LIKERT	0	5	4	0	5	5	5	4	6	0,80	-	1,00	1,00	1,00	0,80
CLT_70	5-Overall Monitoring	Culture	Monitoring a part of the plan?	5 levels	LIKERT	0	5			0	1	0	4	4			-	0,20	-	0,80
CLT_A_10	Indicators	Elements of ID	Indicators addressed?	How many?	CATEGORY	0	4	3	2	2	3	0	4	6	0,75	0,50	0,50	0,75	-	1,00
CLT_A_10_1	Indicators	Elements of ID	Evaluation/analysis?	Evaluation/analysis?	VAL_0_1	0	1	1	1	1	1		1	5	1,00	1,00	1,00	1,00		1,00
CLT_A_10_2	Indicators	Elements of ID	Strategy/vision?	Strategy/vision?	VAL_0_1	0	1	1	1	0	0		1	5	1,00	1,00	-	-		1,00
CLT_A_10_3	Indicators	Elements of ID	Actions/Measures?	Actions/Measures?	VAL_0_1	0	1	1	0	1	1		1	5	1,00	-	1,00	1,00		1,00
CLT_A_10_4	Indicators	Elements of ID	Monitoring?	Monitoring?	VAL_0_1	0	1	0	0	0	1		1	5	-	-	-	1,00		1,00
CLT_A_20	1. Eval. And analysis	Elements of ID	Methods described on state of landscape?	5 levels	LIKERT	0	5	2	3	1	5		1	5	0,40	0,60	0,20	1,00		0,20
CLT_A_21	1. Eval. And analysis	Elements of ID	Methods employed on landscape?	Selective/Spatially inclusive/comprehensi	CATEGORY	0	2	1	1	0	1		1	5	0,50	0,50	-	0,50		0,50
CLT_A_40	3. Strategy and vision	Elements of ID	Expose visions and strategies based on experiences?	5 levels	LIKERT	0	5	5	1		3		2	4	1,00	0,20		0,60		0,40
CLT_A_41	3. Strategy and vision	Elements of ID	Visions and strategies to territorial protection?	Challenges/Objectives/Targets	CATEGORY	0	3	2	2		2		1	4	0,67	0,67		0,67		0,33
CLT_A_42	3. Strategy and vision	Elements of ID	Well defined and strategies well defined?	Qualitative/Quantitative	CATEGORY	0	2	2	1		1		2	4	1,00	0,50		0,50		1,00
CLT_A_43	3. Strategy and vision	Elements of ID	The character of the objectives	Protection/development/management	CATEGORY	0	3	3	2		3		2	4	1,00	0,67		1,00		0,67
CLT_A_44	3. Strategy and vision	Elements of ID	Timeline for objectives and targets?	5 levels	LIKERT	0	5	4	0		2		4	4	0,80	-		0,40		0,80
CLT_A_60	4. Actions and measures	Elements of ID	Actions/Measures from landscape planning?	Protection/development/management	CATEGORY	0	3	3	0	1	3		2	5	1,00	-	0,33	1,00		0,67
CLT_A_61	4. Actions and measures	Elements of ID	Comply with vision and strategies?	5 levels	LIKERT	0	5	4		5	3		2	4	0,80		1,00	0,60		0,40
CLT_A_62	4. Actions and measures	Elements of ID	Alligned with challenges, objectives and targets?	5 levels	LIKERT	0	5	4		5	4		4	4	0,80		1,00	0,80		0,80
CLT_A_63	4. Actions and measures	Elements of ID	What kind of actions and measures?	Formal/informal	CATEGORY	0	2	2	0	2	2		2	5	1,00	-	1,00	1,00		1,00
CLT_A_80	5. Monitoring	Elements of ID	Defined approaches and methods for monitoring?	5 levels	LIKERT	0	5				0	5	4	3				-	1,00	0,80
CLT_A_81	5. Monitoring	Elements of ID	Monitoring visions and strategy?	5 levels	LIKERT	0	5				2	0	4	3				0,40	-	0,80
CLT_B_10	Indicators	Landscape Character	Indicators addressed?	How many?	CATEGORY	0	4	4	2	2	3	3	1	6	1,00	0,50	0,50	0,75	0,75	0,25
CLT_B_10_1	Indicators	Landscape Character	Evaluation/analysis?	Evaluation/analysis?	VAL_0_1	0	1	1	1	1	1	1	1	6	1,00	1,00	1,00	1,00	1,00	1,00
CLT_B_10_2	Indicators	Landscape Character	Strategy/vision?	Strategy/vision?	VAL_0_1	0	1	1	1	0	0	1	0	6	1,00	1,00	-	-	1,00	-
CLT_B_10_3	Indicators	Landscape Character	Actions/Measures?	Actions/Measures?	VAL_0_1	0	1	1	0	1	1	1	0	6	1,00	-	1,00	1,00	1,00	-
CLT_B_10_4	Indicators	Landscape Character	Monitoring?	Monitoring?	VAL_0_1	0	1	0	0	0	1	0	0	6	-	-	-	1,00	-	-
CLT_B_20	1. Eval. And analysis	Landscape Character	Methods described on state of landscape?	5 levels	LIKERT	0	5	2	3	2	5	2	1	6	0,40	0,60	0,40	1,00	0,40	0,20
CLT_B_21	1. Eval. And analysis	Landscape Character	Methods employed on landscape?	Selective/Spatially inclusive/comprehensi	CATEGORY	0	2	1	1	0	1	1	1	6	0,50	0,50	-	0,50	0,50	0,50
CLT_B_22	1. Eval. And analysis	Landscape Character	Addressing different Functions of landscape?	Historic/cultural/uniqueness/public/other	CATEGORY	0	5	3	3	3	5	3	1	6	0,60	0,60	0,60	1,00	0,60	0,20
CLT_B_40	3. Strategy and vision	Landscape Character	Expose visions and strategies based on experiences?	5 levels	LIKERT	0	5	5	1		4	4		4	1,00	0,20		0,80	0,80	
CLT_B_41	3. Strategy and vision	Landscape Character	Visions and strategies to territorial protection?	Challenges/Objectives/Targets	CATEGORY	0	3	2	2		2	3		4	0,67	0,67		0,67	1,00	
CLT_B_42	3. Strategy and vision	Landscape Character	Well defined and strategies well defined?	Qualitative/Quantitative	CATEGORY	0	2	2	1		1	1		4	1,00	0,50		0,50	0,50	
CLT_B_43	3. Strategy and vision	Landscape Character	The character of the objectives	Protection/development/management	CATEGORY	0	3	3	2		3	3		4	1,00	0,67		1,00	1,00	
CLT_B_44	3. Strategy and vision	Landscape Character	Timeline for objectives and targets?	5 levels	LIKERT	0	5	4	0		2	0		4	0,80	-		0,40	-	
CLT_B_60	4. Actions and measures	Landscape Character	Actions/Measures from landscape planning?	Protection/development/management	CATEGORY	0	3	3	0	1	3	3		5	1,00	-	0,33	1,00	1,00	
CLT_B_61	4. Actions and measures	Landscape Character	Comply with vision and strategies?	5 levels	LIKERT	0	5	4		5	3	4		4	0,80		1,00	0,60	0,80	
CLT_B_62	4. Actions and measures	Landscape Character	Alligned with challenges, objectives and targets?	5 levels	LIKERT	0	5	4		5	4	4		4	0,80		1,00	0,80	0,80	
CLT_B_63	4. Actions and measures	Landscape Character	What kind of actions and measures?	Formal/informal	CATEGORY	0	2	2	0	2	2	1		5	1,00	-	1,00	1,00	0,50	
CLT_B_80	5. Monitoring	Landscape Character	Defined approaches and methods for monitoring?	5 levels	LIKERT	0	5				0		3	2				-		0,60
CLT_B_81	5. Monitoring	Landscape Character	Monitoring visions and strategy?	5 levels	LIKERT	0	5				2		3	2				0,40		0,60

Appendix 2: Qualitative Interviews

Basque Country

Introduction

This document provides additional qualitative information about the practice put forward by the Basque Government to complement the information on liveability already included in the CAF matrix. The practice analysed is **Landscape Catalogue of Laguardia Rioja Alavesa.**

1. Background, PROCESS and Decisions timeline

Previous experiences…

Although the Basque country has a solid territorial management tradition and recognized planning system, consolidated in the ´90 with a regional Law on Spatial Planning, landscape was approached from the point of view of sector policy and specific conservation action plans, although several experiences existed that somehow dealt with landscape protection mainly.

Catalogue of outstanding and singular landscapes in the Basque Country 2005

Inspired by the European Landscape Convention, the first attempt to create an instrument for protection, management and planning of landscape in the Basque Country, was in 2005 with "Catalogue of outstanding and singular landscapes in the Basque Country". [220] This first catalogue identified delimitated and evaluated the most valuable landscapes in the Basque Country and formulated guidelines for their conservation, protection and management. The elaboration of the Catalogue of outstanding and singular landscapes responded to one of the main goals of the Basque Strategy for Sustainable Development 2002-2020. Although planning and management were specifically named as key objectives of this catalogue, it was still biased towards protection and restoration of landscapes characterized by its singularity and outstanding quality.

Revision of the Regional Spatial Guidelines 2010

The revision of the Regional Spatial Guidelines in 2010 incorporated a particular chapter devoted to landscape as a key value for territorial development also representing the identity of the Basque country and the Basque culture meant also a milestone for the initiative. So it could be said that the regional administration start the process, influenced by the initiatives that were taking place all around Europe.

Draft bill of Basque Country Landscape law 2010

But the definite starting point of the practice under evaluation was the draft bill of Landscape, which is the reference framework for the definition and implementation of landscape policies.

The draft bill landscape law, currently in parliament pending for approval, is highly inspired for the European Landscape Convention (ELC 2000). The Basque Government adhesion to the ELC was in 2009. The draft bill recognizes several instruments for landscape evaluation, planning and management:

[220] http://www.ingurumena.ejgv.euskadi.net/r49-3074/es/contenidos/informacion/paisaje/es_1094/catalogo.html

Landscape planning and instruments

LANDSCAPE LAW (currently under approval)	
What is	**Reference framework for the definition and implementation of landscape policies**
What for	**Legal recognition of landscape and the instruments for its planning and management**
INSTRUMENTS	**For Landscape protection, management and planning:** ■ **CATÁLOGUES: Analyze and evalúate landscapes in each of the functional areas and define quality objectives.** ■ **GUIDELINES: Legally incorporate the landscape quality objectives into territorial planning.** ■ **ACTION PLANS: For implementation of specific measures.** ■ **STUDIES OF LANDSCAPE INTEGRATION**
	For organization and awareness: ■ **Landscape Observatory.** ■ **Awareness raising mechanisms and the integration of landscape in educational programmes.**

The draft bill of Landscape Law identifies the Landscape Catalogues and Guidelines instruments for landscape evaluation, planning and management. And these are the practices that the Basque Government put forward to be analysed in Liveland

Who drives the process?

The administration responsible for launching the Landscape Catalogues and Guidelines is the Department of Environment and Territorial Policy (Spatial Planning) of the Basque Government also for its elaboration and implementation.

Three pilot experiences were launched at the same time in 2010; one in each of the Basque Provinces, representing three different territorial realities. For Liveland purposes remember that we are focusing on one of the three pilot experiences which is the Landscape **Catalogue of Laguardia Rioja Alavesa.**

The diagram in next page tries to describe the process biography with regard to the evolution of landscape policies in the Basque Country from the 90´to the present, with a particular focus on the instrument being analysed in the project.

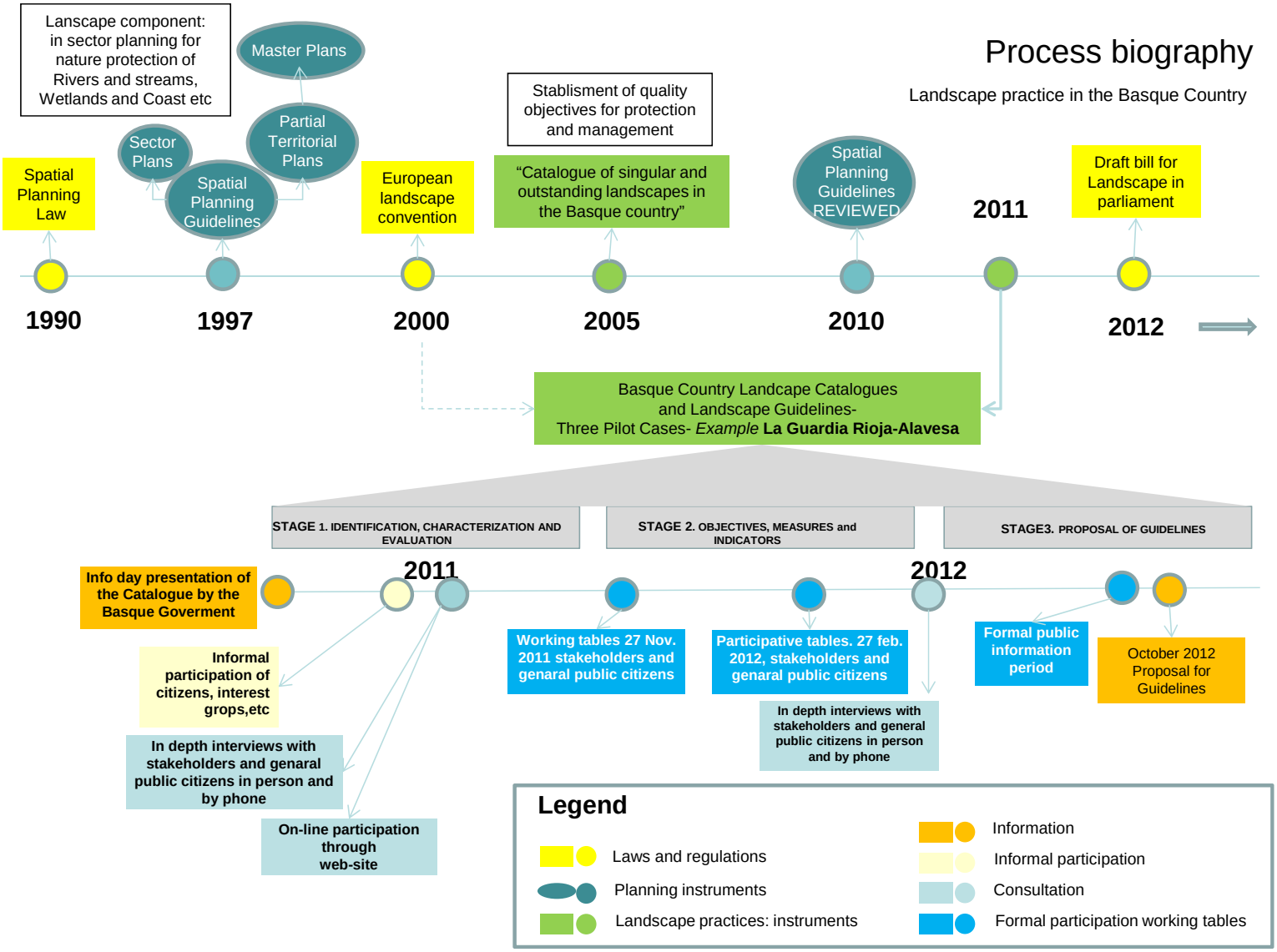


Figure 42 Process biography landscape policy in the Basque Country and focus on the Landscape Catalogue of Laguardia.

Stages in the elaboration process:

Stage I Landscape Characterization and evaluation – October- December 2011

Phase I Landscape characterization: in order to acknowledge people's values respect their own landscapes, interpret the dynamics and processes that have intervene and are currently influencing landscape transformation. So this phase implies a strong participatory /consultation process in order to acquire knowledge on people´s perception and views.

Phase 2 Landscape Evaluation: in order to identify strengths and threats in landscape and potential measures to adopt. In this phase is very important the role of local agents operating in the area

Stage II landscape quality objectives, measures and indicators – January- March 2012

Phase 3 Define quality objectives. The objectives will constitute the basis for future public policies on landscape protection, planning and management. Therefore this phase will imply the involvement of landscape agents identified in previous phase

Phase 4 Proposal of actions and measures

Phase 5 Indicators for protection, management and planning

Stage III Proposal of landscape Guidelines- 2º semester 2012

Phase 6 Elaboration of Landscape Guidelines

This phase requires a formal public information period. Depending on the development of the regulatory development the incorporation of the landscape guidelines into the spatial planning instruments (Territorial Partial Plans) should follow the participatory process established for the approval of such plans, including the Strategic Environmental Assessment

.

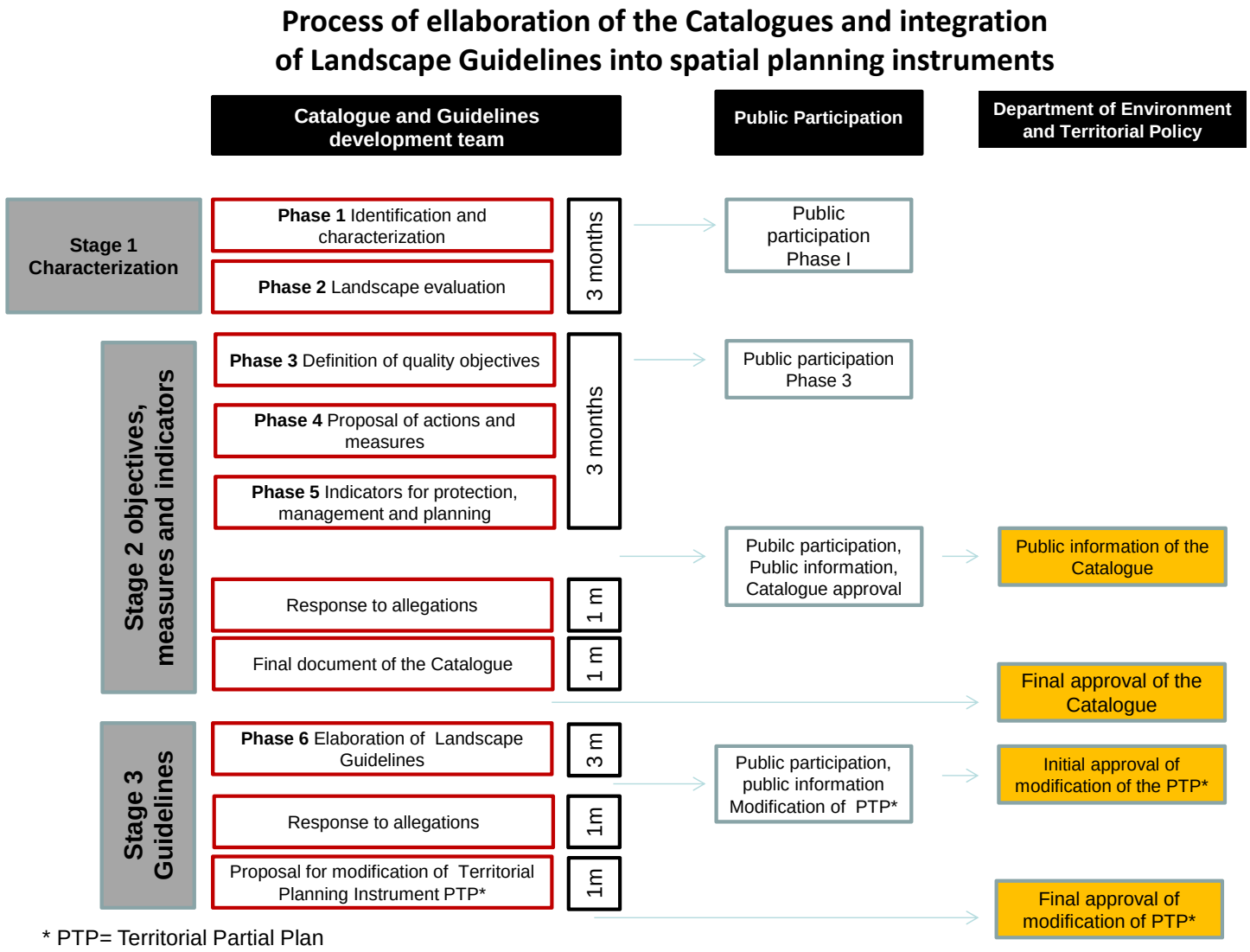


Figure 43 Process of elaboration of the Catalogues and integration of Landscape Guidelines into spatial planning instruments.

2. Sustainability policies in the Basque county: INTERGENERATIONAL JUSTICE

In the Basque Country, in January 2001, the Basque Government expressed its intention to establish the basis for a new model of development with the signing of the Commitment to Sustainability in the Basque Country by all members of the executive. This commitment follows the harmonisation of different regional aspects regarding economic development, social cohesion and the protection of the environment as its main objective. The Basque Environmental Sustainability Strategy is established as the main political instrument in relation to the sustainable development also to improve the quality of life of the Basque citizens. Besides, other policies, programmes and plans has been promoted from this regional government in order to reinforce other important aspects relating to economic and social sustainability such as health, social cohesion, transport, energy, science and technology, etc.

Article 6 of the *General Environment Protection Act* of the Basque Country (Act 3/98) states *"that the environment police of the Basque Autonomous Community shall be set forth in an Environmental Framework Programme with a four year term, which shall be approved by the Government and subsequently put before the Basque Parliament"*.
In compliance with this mandate, the Basque Cabinet approved the Basque Environmental Strategy for Sustainable Development (2002-2020)[221] and the III Environmental Framework Programme (2011-2014), in the context of a long-term strategic view in line with the undertaking made at the Earth Summit in Rio de Janeiro in 1992 to draw up strategies for sustainable development in each territory.
The Basque Environmental Strategy for Sustainable Development sets five environmental goals and five necessary conditions to be given priority by the Basque public authorities. These goals and conditions were established to be consistent with those in the EU Strategy for Sustainable Development and the Sixth Environment Action Programme of the European Community.
The five environment Goals of the Basque Environmental Strategy for Sustainable Development are the following:

1. To ensure clean and healthy air, water and soil.
2. Responsible management of natural resources and waste.
3. Protection of nature and biodiversity: a unique asset to be fostered.
4. Balance between territories and mobility: a common approach.
5. Limiting effects on climate change.

The necessary conditions to be successful on the implementation of the strategy are:

1. Integrating environmental variables into other policies.
2. Improvements in current legislation and its application.
3. Encourage the market to act in an environmentally-friendly way.
4. Enable the public, the authorities and businesses, making them jointly responsible, and modify their behaviour in favour of sustainability.
5. Research, technological development and innovation in environmental matters.

[221] Sustainable development Strategy EcoEuskadi 2020

http://www.ecoeuskadi2020.net/

The territorial component is embedded the Basque Environmental Strategy for Sustainable Development, towards sustainable territorial development and management.
Agenda21 also calls for mechanisms aiming to promote a constructive and productive dialogue between the full ranges of stakeholders towards sustainability. The current urbanizing trend needs tools to improve the process and to avoid its negative impacts. As urban development is common to most European cities, urban sprawl and its impacts should receive specific attention. Common understanding of logical configuration of territories in interaction with urban and rural processes from a social, economic and environmental perspective seems to be crucial to achieve a new sustainable balance between cities and countryside.

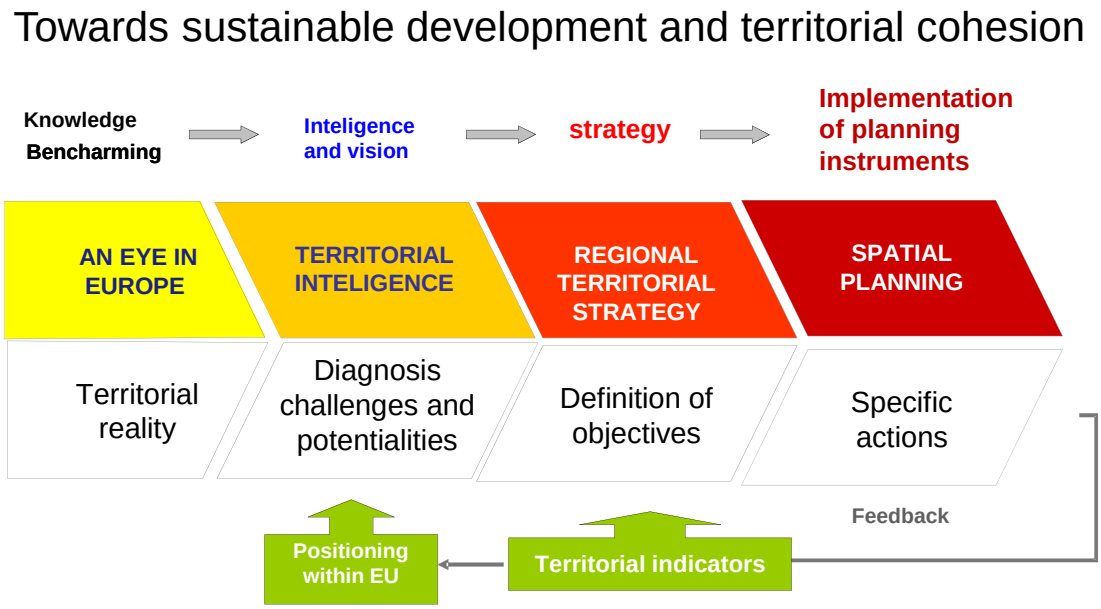


Figure 44 Sequence from the territorial analysis to the definition of specific actions for spatial planning towards sustainable territorial planning and management. Own elaboration. Tecnalia 2013.

3. Participation

Public participation in decision making with regard to policies, plan and programmes with territorial impact is materialized by means of the Strategic Environmental Assessment procedures (SEA). Public participation is required by law only for the approval of land use plans / master plans at local level.
However, access to information in relation to environmental issues is recognized by law in different norms:

- Instrument of Ratification of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, done at Aarhus (Denmark), June 25, 1998.
- Law 27/2006, of 18 July, which regulates the rights of access to information, public participation and access to justice in environmental matters (includes Directives 2003/4/EC and 2003/35 / EC).
- Law 3/1998, of February 27, general environmental protection of the Basque Country

Public participation in the practice under analysis

Public participation is a key issue in the elaboration of the Catalogues and Guidelines. Landscape perception is subjective and therefore the participation of citizens and all agents and stakeholders involved in landscape is remarkably important.
Therefore, during the elaboration process of the Catalogues and Guidelines has been crucial:

- Involvement and team work of citizens and administrations- practitioners
- The administration boosting public participation and public involvement
- Keep participation active in time that would in term lead to awareness and socialization of landscapes values.

The public participation aimed at:

- Allowing people and citizens and also their social agents to express their opinions and PERCEPTIONS of landscape
- Increasing the efficiency in the decision making, resulting from reflections close to the people and taking consensual decisions
- Increasing the sense of involvement and co-responsibility in monitoring and compliance with the decisions on landscape

Several instruments were setting for public participation:
Instruments oriented to know people´s view on the initiative of the Catalogues and Directives

- Web site www.euskadi.net/paisaia
- Facebook
- Email paisaia@ej-gv.es

Instruments for the participation on the process of the Catalogues and Guidelines in the Pilot areas.

- Interviews with local agents: face interviews and also electronic
- Working tables with local agents and general public- citizens

Which parts of society did the participants come from? Interviews were performed by three means:

- **Presence:** local agents met in the building of La Cuadrilla (Laguardia)
- ***Phone***: local agents are interviewed by telephone who could not attend to the event.
- **Online**: The survey was sent by email to other agents who could not attend for the two previous tracks

The interviews addressed people and agents from the functional area, living, working and or using the landscape on a regular basis. The interviews allowed to complete and refine the analysis developed, and was used to make an assessment of the landscape units.
Two working tables with the assistance of two different sort of agents :

- **Administration** 43 agents, with representatives from all municipalities
- **Citizens** 25 agents, including a historian and NGOs etc

Also the working tables focused on people and local agents, living, working and or using the landscape on a regular basis.

How did the participation process influence the planning process?

Participation has taken place in several moments on the process biography (See figure 2 on page 5) with influence in the planning process per se particularly in two moments:

- For the final approval of the Catalogue
- At the time of modifying the Territorial Partial Plan of Laguardia, in order to include the Landscape Guidelines

4. TECHNICAL TEAM AND FINANCE

Although the administration responsible for launching the Landscape Catalogues and Guidelines is the Department of Environment and Territorial Policy (Spatial Planning) of the Basque Government also for its elaboration and implementation, part of the technical services have been externalized. . Part of the technical assistance has been subcontracted to external consultancies in the three catalogues under development.

In particular, the Catalogue of Laguardia has been elaborated by MELISSA CONSULTORÍA E INGENIERÍA AMBIENTAL S.L, in close and continuous collaboration with the practitioners in the department of Spatial Planning.

Professional background

Considering the terms of reference and specifications defined by the Department of Environment and Territorial Policy, the team responsible for developing the instruments should be a multidisciplinary team with the following profiles:

- Architect, Civil Engineer -both with proven expertise in spatial planning and urbanism-, Geographer specialized in landscape, Biologist, Agricultural Engineer and a technician in Environmental Sciences.

At present we only have information on the budget devoted in developing the Catalogues, but not for the implementation of the actions.

The elaboration of the Catalogue of Laguardia costs 114.000 euros, being the whole budget for the elaboration of the 3 Pilot Catalogues for the region 348.100 euros.

Elena Lete 27th June 2013

Midden Delfland

Introduction

This document provides additional qualitative information about the practice put forward by the Midden Delfland to complement the information on liveability already included in the CAF matrix. The practice analysed is **Landscape Plan**

1. Background, PROCESS and Decisions timeline

Municipality MD had the ambition to build a program of actions on 'landscape quality', after making'Vision 2025' together with other local government. No obligations to make a landscape plan. But stimulation came by subsidy from national government.

Processes can be started by different persons or groups. (e.g. politicians, administration, public). However the initiative might have been taken by a certain social group. Municipality MD.

Who drives the process?

Besides the group or person that starts the process there might be other persons or groups who ran the process and participated as a leader in the whole or long periods of the process. Often processes are very much depending on these persons or groups. These people might be e.g. from administration, professionals especially hired to guide the process (moderator), laymen …Project group & steering group in leadership of MD.

What have been the overall aims?

Challenges

1. How to improve spatial quality?
2. How to improve the relation and connection between city and countryside?
3. How to facilitate the dairy sector in its role as manager of the landscape?
1. How to work together with stakeholders and citizens to create support?
2. How to organise and/or improve cooperation between relevant public institutions?

The activities around the ('inter-local') Landscape Plan; in the time line of making of "Perspective MD 2025" is as follows:

- Start (problem statement, work plan) Oct 2006
- Contract with adviser Jan 2007
- Identification of ideas Nov 2007

Consultation of citizens, stakeholders and politicians in "cafés" in 5 places; also in surrounding cities.

- Scenarios of future developments June 2008
- Conference with stakeholders, experts and politicians.
- Char coal sketch Sep 2008

Consultation of stakeholders and experts in a "design table".

- Refinement per landscape unit (19 'polders') Winter 2008/09

Consultation of experts, stakeholders, citizens and farmers in “design tables” and “kitchen table meetings”.

- Draft Landscape Plan, incl. refinements per polder Apr 2009

Conference with stakeholders, experts and politicians.

- Publication and formal participation Summer 2009
- Reaction on opinions and final Landscape Plan Winter 2009
- Decision in local parliaments Spring 2010

2. Sustainability policies in the Basque county: INTERGENERATIONAL JUSTICE

All decisions about physical developments have a time horizon of 10 years and longer.
‘Intergenerational justice’ has been no item for the municipality.

The concept of sustainability (as balance in Planet, People and Profit) is well known in professional and political circles in MD. But the municipality has no formal policy (and also little instruments) in this broad field. Related items in MD are: ‘Citta Slow’, sustainable building techniques, sustainable energy and sustainable undertaking.

(Citta Slow is an international network of small municipalities, with the aim of preservation of own identity and heritage values, quality of life, hospitality and regional products.)
In MD the Landscape Plan is not related to Environmental policy, but to Spatial Policy.
Who did actually start the process? Which parts of society did the initiative come from? Processes can be started by different persons or groups. (e.g. politicians, administration, public). However the initiative might have been taken by a certain social group.

3. Participation

See time line: all social groups. The start with cafes was open. In the elaborations per small units (polder) especially farmer were invited ’on the ‘kitchen table’.

No one was excluded from a process but it might be reasonable to focus on certain social groups

Participation influence the planning process much influence via informal consultations; little via formal participation.

During 1 ½ year (Nov 2007 to April 2009) diverse actors were involved in the preparation of the Landscape Plan: stakeholders, interest organisations, citizens, farmers and local politicians, also from the surrounding cities. These were informal consultations in diverse working forms (see time line).

The procedure of publication of the draft Landscape Plan and the handling of formal opinions took relative little time. Only some details were changed. There came some alternative proposals about luxury residences, horse riding enterprises and horticulture glasshouses in open landscape, but these were all rejected.

The final decisions in the Councils of Towns and Waterboard were not controversial, because many politicians were involved in the informal consultations.

Lesson learned:

- An intensive multi stakeholder approach is an effective way to create a common vision. But that takes time, patience and effort, qualified people and a design process of zoom-in and zoom-out.

4. TECHNICAL TEAM AND FINANCE

Officials with expertise on spatial planning. Adviser: landscape architecture.

Funding model: Subsidy for making the Landscape Plan. Implementation has its own sources, mainly from the region (province).

3 years after the finalisation of the Landscape Plan most of the envisaged measures are 'on the way'. The network of recreational connections on water and in 'slow roads' are in realisation within the implementation organisation 'Court of Delfland'. The design principals are an instrument in the daily practice of the officials of the local governments.

Over all one can say that finances are a problem and causing some delay, but the common vision (goals and elaborations per polder) is clear and all governments are working together in the same direction.

Kees Boks 3rd July 2013

Navarra

Introduction

This document is the answer to questions sent in the email on 7th of June in "Qualitative_questionnaire.docx" report. Some of them are already incorporated into the CAF matrix so are not repeated unless necessary.

1. Background, PROCESS and Decisions timeline

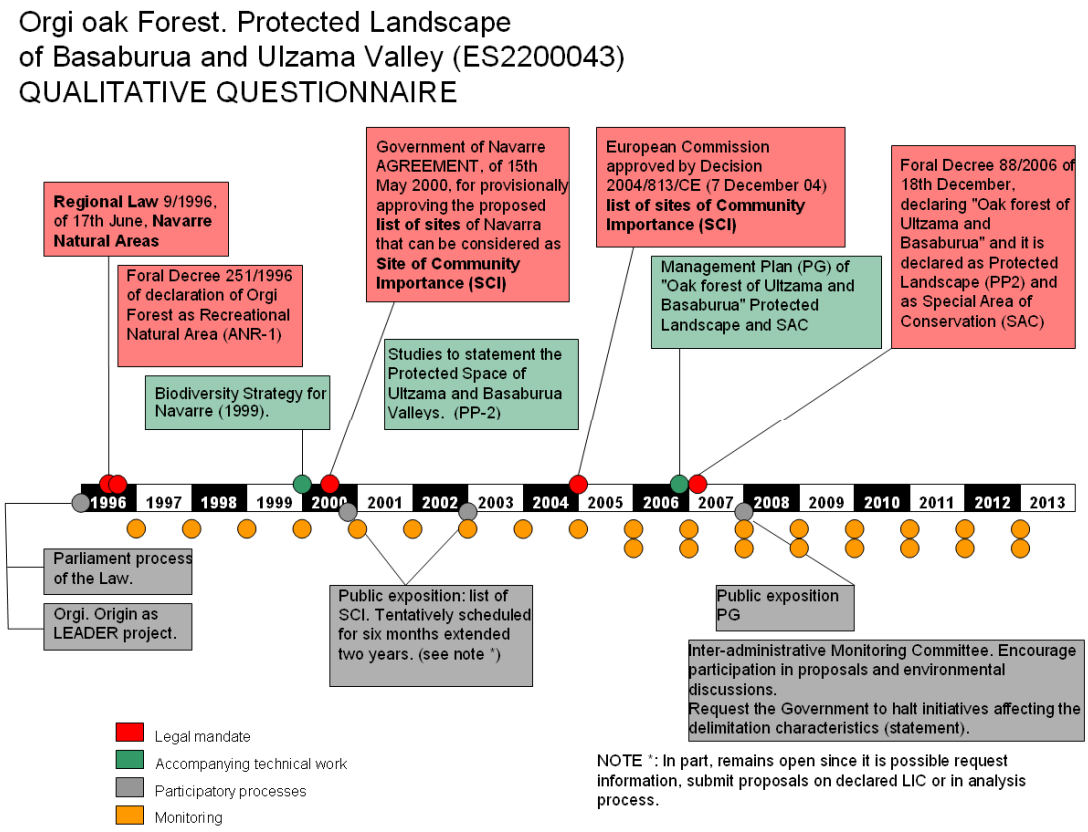


Figure 45 Process biography Navarra

2.Sustainability policies in Navarra: INTERGENERATIONAL JUSTICE

From the OTN we consider important contribute to the general debate about **CAF-concept discipline of Spatial Planning.** It is their relationship and impact on sustainable territorial development, which is the purpose that Article 2 of the LFOTU is set for the procedures of the Government of Navarra on Spatial Planning. From a conceptual point of view the content of sustainable territorial development is analogous to **territorial cohesion** used by the European Union.

We analyze the performances by its effect on the following six topics or strategic aspects:

1. The smart and sustainable growth **(competitiveness).**
2. Building an inclusive Europe (social cohesion).
3. Protection of Natural Resources and Environment (conservation).

4. A new urban-rural relationship in globalization (polycentrism).
5. Intelligent management of natural and cultural heritage (identity).
6. Equivalent access to infrastructure and knowledge (accessibility).

These six concepts are rooted in the European Spatial Development and the Sustainable Development Strategy (EU and UN documentation). And so they have understood our LFOTU and especially Territorial Strategy of Navarre (ETN, 2005). So we claimed from the beginning to keep the "thread" in the documentation Liveland.

The graphic is two overlapping triangles, similar to provide by the "Integrated strategy for territorial cohesion" (ESPON, 2006), and these six concepts should guide the decision making in planning and implementation of spatial planning and land use tools.

"Integrated Strategy for territorial cohesion" (ESPON, 2006)

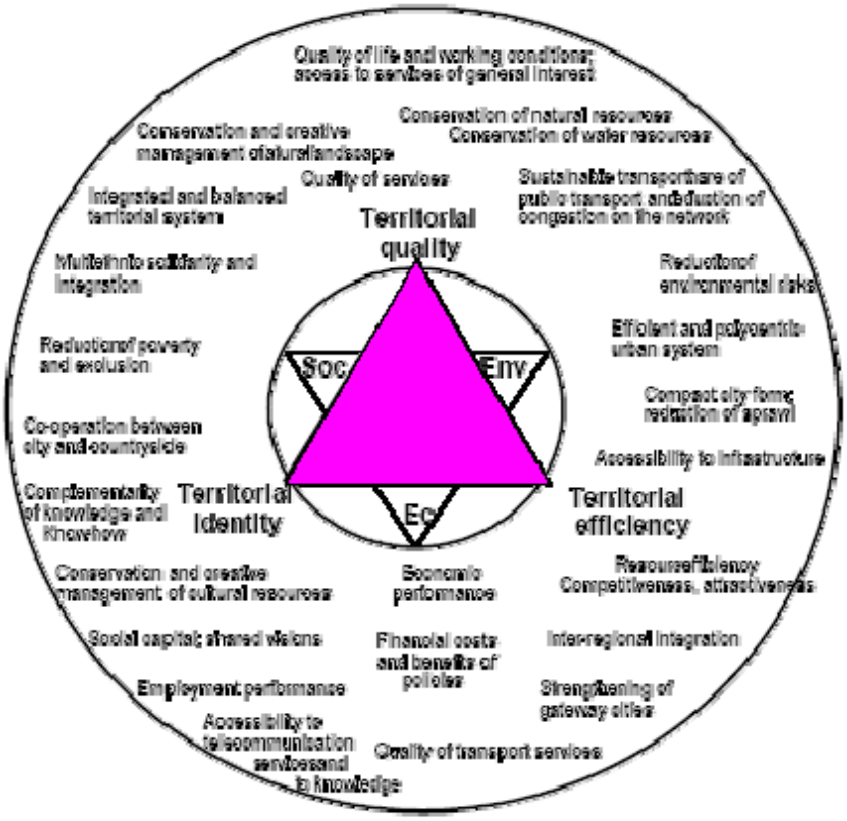


Figure 46 Integrated Strategy for Territorial Cohesion (ESPON 2006)

From the OTN bring our definition of the concept of Sustainable Territorial Development: Fair generational transmission of the set of processes that ensure the correct processing of the physical elements of geographical space through the relationships between the elements of the system and the territorial structure. (See POT Glossary, Spatial Planning Plans of Navarra).
In the definition it is recognized the heritage character of the territorial system and, consequently, their formal or morphological representation: the landscape.
Although the definition is not approved or ratified by an administrative procedure, exists consensus among the different departments of the Government of Navarra and sectoral

policies. Examples are the six criteria that guide the "Navarra Forest Plan" of execution in practice of landscape selected as the case study of Navarre: (http://www.navarra.es/home_es/Gobierno+de+Navarra/Organigrama/Los+departamentos/Desarrollo+Rural+Industria+Empleo+y+Medio+Ambiente/Acciones/Planes+especificos/Acciones+medio+ambiente/Conservacion+de+la+biodiversidad/Plan+Forestal.htm)

• Intergenerational equilibrium: future generations can also enjoy the mountains.

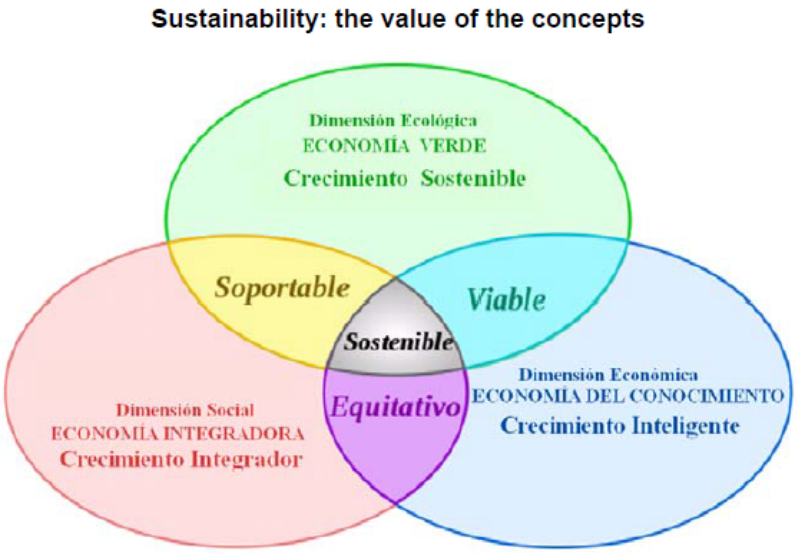
• Intragenerational balance: development from its own resources; society access to forest goods and services, and support to holders by keeping social and ecological functions.

• Multiple use, rational and integral management of all forest functions: biological, environmental, economic and social.

• Increased efficiency, - economic growth based on: efficient use of existing forest resources, and developing new resources.

• Integration of forests and society to establish a deep and respectful relationship between them.

• Subsidiarity: Local authorities should act as protagonists.



SOURCE: Transformed from an original licensed creative Commons including the three strategic objectives of the Europe 2020 strategy

Figure 47 Sustainability: the value of the concepts. Adapted from Europe 2020 Strategy

Figure 48 Sustainable Territorial Development in Stpatial Planning Instruments

3 Participation

In other documents have been described the participation process requirements of a spatial or urban planning project according to LFOTU and administrative procedures. In this section we provide some concrete environmental links and describe its significance for Local Agenda 21 in the valleys affected by the protected landscape.

- In Navarre, all plans and projects have certain participatory processes in your procedure for approval. Recently legislation have been approved "Foral Law 11/2012, of transparency and open government" that regulates in more detail.
o (http://www.lexnavarra.navarra.es/detalle.asp?r=26314)
- Also undergo environmental integration processes also have specific procedures for participation (Regional Law 4/2005, Environmental Protection Intervention, LFIPA).
o http://www.lexnavarra.navarra.es/detalle.asp?r=4047)
- Ultima memoria Estado del medio ambiente: noviembre de 2012
o http://www.navarra.es/home_es/Temas/Medio+Ambiente/Informe+de+estado/
- Espacios naturales (Biodiversidad)
o http://www.navarra.es/NR/rdonlyres/168DA8BF-F652-40C0-8330-87CBF919EFC5/0/1espacios_naturales_protegidos.pdf
- Foros de participación publica en materia de medio ambiente
o http://www.navarra.es/NR/rdonlyres/36E2E691-E84C-4D58-B3EA-8D58376FAD31/0/foros_participacion_publica.pdf
- Voluntariado ambiental
o http://www.navarra.es/NR/rdonlyres/FC028BCD-5E95-4A21-9619-72F4824441BE/0/voluntariado_ambiental.pdf

Local Agenda 21: Valles subcantábricos de Navarra. It is one of the AL21 drafted with more intense participatory processes. Processes focus to some affected groups as farmers and others for specific variants in education, environmental, school and volunteering. The Local Action Plan (PAL) is running and local authorities make annual monitoring (which also indicates the degree of coordination, since it is a single agenda that affects several

municipalities). Actively participate in the Red NELS: Navarre local authorities towards sustainability.

http://www.cfnavarra.es/MedioAmbiente/agenda/Municipios/Valles_SC/inici.htm

4. TECHNICAL TEAM AND FINANCE

By the Government of Navarra, competent in the LIC management, no specific budgeted for each of them exists. The Environment Department performs management activities, maintenance and improvement described in each of the approved Management Plans. The information is accessible via internet and it is showed in the public accounting reports and in the State of the environment reports in Navarre and executed activities.

In the case of Orgi ARN, management and maintenance, is almost 100% funded through an agreement signed between the Government of Navarra and Lizaso Council (Local Authority equivalent to NUT6). These activities are performed by a local company (five employees) contracted by public tender until 2017.

Other activities and investments are often financed by sponsorships or European initiatives or financial institutions. These projects may be new construction projects, environmental volunteering, case studies, etc. In this way were funded, for example, path for blind persons for some campaigns with students from universities of Navarre.

Among these entities are Cederna-Garalur Association for Rural Development (LEADER manager), the Regional Tourist Consortium Plazaola, IMSERSO ONCE Foundation, ONCE Navarra (Spanish National Blind Organization), Caja Navarra Foundation.

Finally note that forests and natural environments are freely in Navarra therefore cannot give the exact figure of visitors. This applies to Protected Landscape of Oak wood of Basaburua and Ultzama. In addition to the activities related to wood, there are only control and regulation in certain activities such as hunting, fishing and mushrooming. In Orgi there is a control related to secure parking and the number of people accessing with a motor vehicle. The mean annual visitors are around 40,000 people.

Management and Maintenance Expenses (ARN Orgi)

Año	Ejecución total	GdN
2001	55.283	100%
2002	57.015	100%
2003	74.367	95'7%
2004	73.000	88'9%
2005	73.001	94'1%
2006	76.000	95'4%
2007	76.000	95'4%
2008	80.000	95'6%
2009	80.001	97'1%
2010	80.001	97'1%
2011	76.000	100%
2012	50.492	100%

Jose Antonio Marcen 26th June 2013

Offenburg

The Qualitative questionnaire is an addition to the qualitative CAF-Matrix that was filled beforehand. Nevertheless it is thought to make use of some of the information that was given by filling the CAF Matrix. The main scope of the questionnaire is the analysis of the planning process and decision making that within the CAF was to be found in the category of freedom. Thus it builds mainly on that section of the CAF.

1 Background, PROCESS and Decisions timeline

Why has the process being started? What has been the reason for starting a planning process? Has there been a certain event, a legal requirement, ...?

In 2006 it was recognized that the existing land use plan was out of date. Thus it was decided to do realignment for the whole territory of the association of administration. In parallel it was recognized that the landscape plan from 1988 as well was outdated. This was especially true for the legal requirements that had changed eventually and thus were no longer met by the plan. Also the methodologies for analysis have changed a lot over time.

Who drives the process?

The process was mainly driven by the municipalities' department for environment and department for urban planning and the companies (HHP / Vögele & Gerhard) that have been hired for the plans. Within the association of administrations the municipality of Offenburg takes over the planning tasks for the other municipalities.

What have been the overall aims? Are these aims still relevant, has the character of the plan changed during the process?

The aims of a landscape plan are defined by the nature conservation law. Nevertheless it offers the opportunity to deal with additional topics or to put an emphasis on one or the other. One of the mayor aims of a landscape plan is to deliver professional database on nature, environment and landscape for the planning process of the land use plan. Moreover landscape planning had the chance to influence the land use plan by evaluating different development perspectives for the municipalities with respect to nature, environment and landscape to better integrate landscape planning into the comprehensive land use plan. Also the landscape plans scope was extended to be able to serve as the mayor source for the strategic environmental assessment that had to be conducted on the land use plan. The landscape plan also integrates different professional concepts for the territory that have been created eventually but have not been integrated in a landscape development perspective before e.g. habitat-connectivity-concept. Lastly the landscape plan should serve as an instrument to guide the money and measures from the impact regulation under nature conservation law. One special aim that occurred within the process was to elaborate a concept for the development of allotment gardens. The topic got more and more important during the process and thus the planning company had to detail on that topic.

Process biography

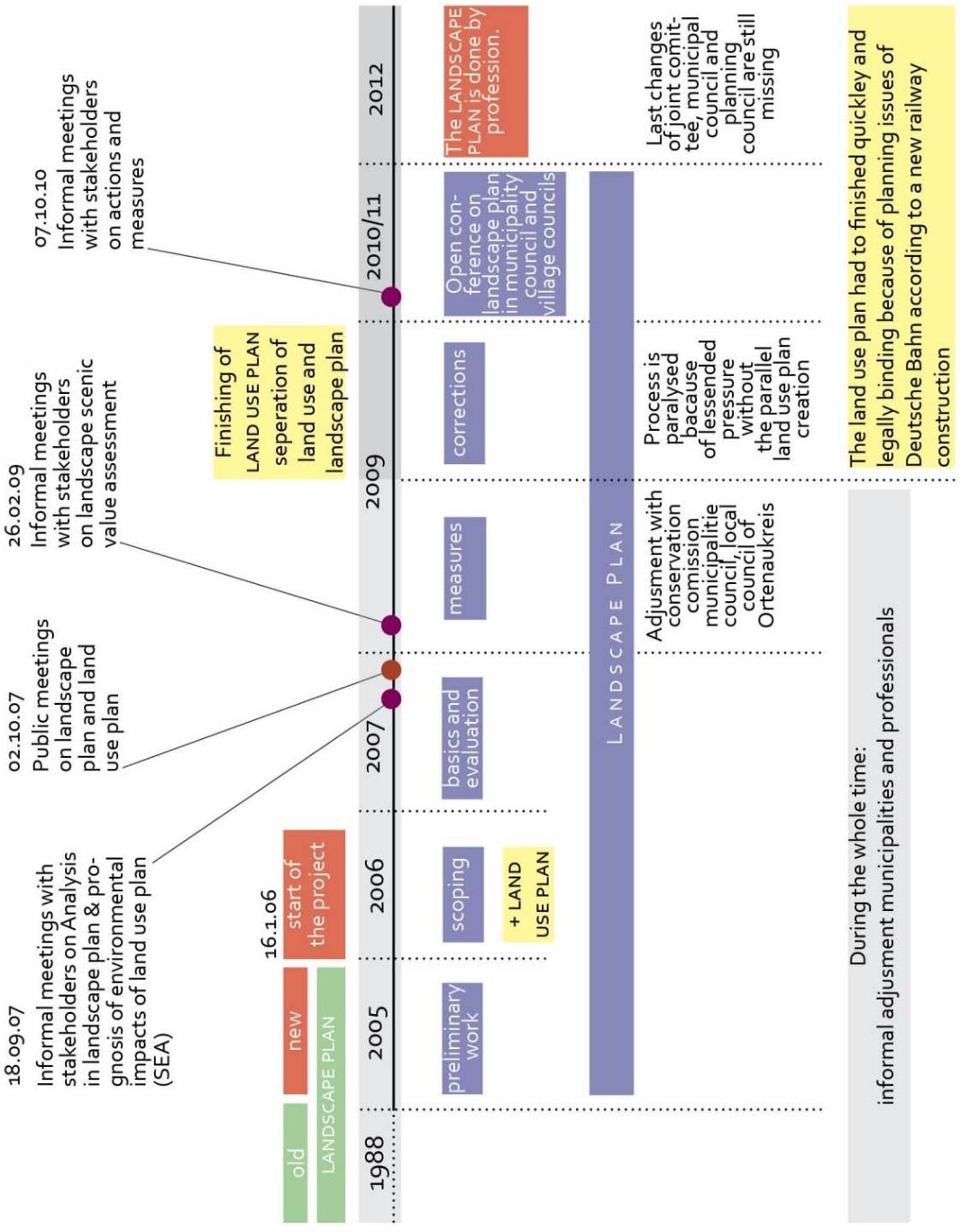


Figure 49 Process biography in Offenburg

2 Sustainability policies in Navarra: INTERGENERATIONAL JUSTICE

Have the decisions made in the plan the character of being irreversible (e.g. take longer than one generation to be reversed

None is marked in the CAF, thus there are no decisions that can be explained.

Triangle of sustainbiliby

The landscape plan is a sectoral plan of nature conservation (legal obligation). Thus its focus is on the environmental aspects. Other plans are comprehensive (land use plan / regional development plan) and integrate aims of different sectoral plans.

3 Participation

There have different groups of society been integrated in the participation process. Of course not everybody could participate in the same way and some did not make use of the opportunity. But some groups can be identified that did. The elected officials of the municipalities as well as the members of the municipalities' councils and the members of the councils of the single villages did follow the process in almost all stages although it is not legally binding to integrate the villages' council. Besides that the approved environmental organizations as well as other groups dealing with environmental protection have been consulted at certain points of the process. Moreover other administrations have been participating e.g. administration for agriculture (most conflicts occurred), higher nature conservation administration, administration for soil and water. Finally of course at certain points of time public in general was invited to participate.

For example the social organization and administration are not directly addressed as they do not see that landscape is in their responsibility as well. Another example would be economics. They did only participate as long as agriculture as one branch of economy is concerned. Nevertheless it is important to mention that no one was not allowed to participate or actively excluded from participation.

Participation of course had an influence on the planning process and its outcomes. But from today's point of view it is hard to figure out the exact inputs that later were found in the plans documents. Throughout a constant communication process with the participants not many conflicts of occurred and consensus was easy to find. So for example the environmental organizations mostly were very satisfied with the outcomes and steps in between. It is remarkable that the influence on the plan could not be specified in detail but the planners learned how to do a participation process. Especially the planners adapted to the problems of laymen and expert communication. For example the legal requirements had to be explained in a way laymen are able to understand. Therefore it is not surprising that the main concerns were not about the plan itself but about the implementation of the plans actions and measures.

4. TECHNICAL TEAM AND FINANCE

Within association of administration landscape planners work sometimes together with urban planners. HHP is the company that actually did the plan. The staffs involved have a professional education in landscape planning as well.

The development of the plan was funded by the municipalities that are part of the association of administrations as it is a municipal obligation to do a landscape plan. The implementation of actions and measures is partly also directly funded by the municipalities other funding comes from impact regulation. Impacts in landscape and nature caused by any kind of project have to be regulated. There are different possibilities to do so. The first is to implement measures for regulation e.g. planting a hedge. The types of measures that can be done are defined in the landscape plan. Second, a “eco-account” is developed and it is possible to buy a stake of that to do the regulation. The “eco-account” consists of actions and measures that the municipality has prepared beforehand to improve landscape and nature and that now can be sold to people responsible for an impact. Third it is possible to pay for impacts on nature and landscape, the fee is calculated based on a legal ordinance. The two last mentioned opportunities are especially suitable as regulation for settlement development in open space based on the town and planning Code.

Sabine Gust 15th July 2013

Appendix 3 Components of liveability

Component of liveability	Landscape contribution	Description of landscape feature relevant for contribution / Questions for analysis	Scale / Answer options	Landscape function	Category of analysis[222]	Planning level[223]
Health[224]	General Questions					
	General:	Does the plan deal with health?	Y / N		all	
		Is there a map on health? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐others	multiple choice		all	
	Evaluation method:	Is the evaluation methods for health selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	
	Strategy and vision:	Does the plan provide a strategy and vision for health?	Y / N			
	Actions and measures:	Does the plan propose any actions or measures with regard to health?	Y / N		4	
		Are actions and measures regarding health spatially explicit?	Y / N		4	
	Monitoring:	Is monitoring of measures for health a part of the plan?	Y / N		5	
		Is an approach or method of monitoring defined?	Y / N		5	
	Planning procedures and decisions:	Are there conflicts of the health with another component of liveability regarding vision and strategy or actions and measures?	Y / N		3	
	Recovery from stress Positive emotions Physical outdoor	Landscape perceived as pleasant / Aesthetically appealing landscapes , i.e. landscape contains visual stimuli such as moderate complexity and richness of natural elements like waters or vegetation (Landscape attractiveness beautiful scenic landscapes) These features are relevant for several contributions of landscape to mental and physical health.		Aesthetic functions		

[222] 1 = Methodologies for the evaluation of landscape (1a = Landscape or spatial structures and appearances; 1b = Functional features; 1c = Values or qualities; 1d = Future developments and scenarios; 1e = Drivers of change in functions and values); 2 = Planning processes & participation (2a = Planning and planning processes at different administrative levels; 2b = Planning and planning processes in different sector settings; 2c = Planning and decision taking procedures); 3 = Planning procedures & decisions; 4 = Actions and measures of local / regional government; 5 = Impact measurement: monitoring indicators and systems.

[223] reg = regional level; loc = local level (combination possible)

[224] The list presented by Abraham, Sommerhalder and Abel (2010: 62–63) is the basis of our framework questions regarding health and social capital.

	activity in cities (Leisure time) Physical outdoor activity outside cities	One could state that landscape that is perceived as pleasant or is aesthetically appealing in general promotes health. Studies by KÖRNER, NAGEL & BELLIN HARDER[225] point out that there are hints that especially landscape that come close to an arcadia landscape idol are promoting health. To find out on this participatory method might have to applied, too.				
		Are landscape perceived as pleasant / aesthetically appealing landscapes promoting human health addressed?	Y / N		all	reg loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	reg loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	reg loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Does the evaluation method have any participatory elements	*Y / N*		*1*	*reg loc*
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	reg loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	reg loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	reg loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	reg loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	reg loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	reg loc
		Are actions and measures spatially explicit?	Y / N		4	reg loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	reg loc

[225] Körner, Nagel and Bellin-Harder (2009); Körner, Nagel and Bellin-Hader (2008)

		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	reg loc
Mental health	Attention restoration and recovery from mental fatigue	"Natural" landscapes such as beaches, waters, forests, parks, mountains Has an analysis been conducted to identify landscape structures that might contribute to metal health? (Landscape structures that are perceived as being "natural") Studies have shown that arcadia landscape (hills, groves, water, etc.) might best contribute to health.[226] Here are mostly features questioned that are outside settlement areas.		Aesthetic functions, Recreation		reg loc
		Are "natural" landscapes promoting human health addressed?	Y / N		all	reg loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	reg loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	reg loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	reg loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	reg loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	reg loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	reg loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	reg loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	reg loc
		Are actions and measures spatially explicit?	Y / N		4	reg loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	reg loc

[226] Körner, Nagel and Bellin-Harder (2009); Körner, Nagel and Bellin-Hader (2008)

		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	reg loc
		Availability of public open spaces used for public entertainment and sports Besides the "natural" landscape features, landscape related "man made" facilities for human health are important. These include sports facilities as well as other landscape related elements. The quality design and equipment is of high relevance for this.		Recreation		reg loc
		Are "man made" landscape features promoting human health addressed?	Y / N		all	reg loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	reg loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	reg loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are the most important factors addressed? *☐accessibility ☐attractiveness (high quality of design) ☐equipment ☐safety*	*multiple choice*		*1*	*reg loc*
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	reg loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	reg loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	reg loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	reg loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	reg loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	reg loc
		Are actions and measures spatially explicit?	Y / N		4	reg loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	reg loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	reg loc

	Recovery from stress	Easy access to green areas with lower sound levels from road traffic Access to these areas is highly important for daily recovery from stress.		Recreation		loc
		Has the access to green areas been addressed? (especially with low sound level from traffic)	Y / N		all	loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc
		Which method has been employed for the evaluation? (E.g. attraction zones, counting visitors etc. Please evaluate method)	Description		1	loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc
		Are actions and measures spatially explicit?	Y / N		4	loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc
	Positive emotions	Open and accessible forests The forest is one of the most cherished landscape features for leisure time; it is a symbol for recreation in “nature” and causes positive emotions.		Recreation		reg loc
		Is it legal to enter private or public forests?	Y / N		-	reg loc
		Are forest’s contributions to recreational landscape functions addressed?	Y / N		all	reg loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	reg loc

		Which method has been employed for the evaluation? (Experts evaluation, surveys etc. Please evaluate method)	Description		1	reg loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	reg loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	reg loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	reg loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	reg loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	reg loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	reg loc
		Are actions and measures spatially explicit?	Y / N		4	reg loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	reg loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	reg loc
Physical health	Physical outdoor activity in cities (Daily life)	Access to and presence of physical activity-promoting facilities		Recreation		loc
		Is access to and presence of physical activity-promoting facilities addressed?	Y / N		all	loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc
		Is the evaluation method qualitative or quantitative?	multiple		1	loc

		☐qualitative ☐quantitative ☐both	choice			
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc
		Are actions and measures spatially explicit?	Y / N		4	loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc
		General functionality of urban districts. Is the district equipped with feature of general functionality(e.g., sidewalks, traffic regulation, bicycle and walking paths) it is much easier to make use of open space				
		Is General functionality of urban districts addressed?	Y / N		all	reg loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	reg loc
		Which method has been employed for the evaluation? (Presence and distribution, condition of facilities, etc. Please evaluate method)	Description		1	reg loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	reg loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	reg loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	reg loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	reg loc

		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	reg loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	reg loc
		Are actions and measures spatially explicit?	Y / N		4	reg loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	reg loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	reg loc
	Physical outdoor activity in cities (Leisure time)	Multifunctionality A mix in land use is offering a variety of opportunities for outdoor activities.				reg loc
		Is land-use mix (spatial structure) addressed?	Y / N		all	reg loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	reg loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	reg loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	reg loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	reg loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	reg loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	reg loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	reg loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	reg loc
		Are actions and measures spatially explicit?	Y / N		4	reg

						loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	reg loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	reg loc
		Street connectivity is important for the access to recreation within settlements. If people are not able to reach important facilities or places within a certain walking time, the positive effect of those is reduced.				reg loc
		Is street connectivity addressed?	Y / N		all	reg loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	reg loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	reg loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	reg loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	reg loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	reg loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	reg loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	reg loc
		Are actions and measures spatially explicit?	Y / N		4	reg loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	reg loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	reg loc
		Traffic safety is related to the connectivity of streets but with a focus on the use of the				

		infrastructure for recreational purpose (e.g. walking in pedestrian zones or biking in the streets)				
		Is traffic safety addressed?	Y / N		all	loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc
		Are actions and measures spatially explicit?	Y / N		4	loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc
		Nearby parks, playgrounds and sport fields. Different from street connectivity nearby also refers to the distance two aspect are important: the overall distance and the possibility to see green spaces within cities				loc
		Is proximity of parks, playgrounds and sport fields addressed?	Y / N		all	loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc

		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	
		Are actions and measures spatially explicit?	Y / N		4	
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	
		Access to places for physical activities. The places for physical activities, especially in cities have to be open for everyone (e.g. free of charge, available for disabled people).				
		Is Access to places for physical activities addressed?	Y / N		all	
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	
		Are actions and measures spatially explicit?	Y / N		4	
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	

	Production of healthy food	Soil Fertility. See Economics / work				
		Availability of fresh and clean water for growing plants. See Economics / work				
		Mixture of land use A mixture of land uses is a contribution to healthy food production, as it is contributing to risk management in agriculture. The risk of total crop loss is reduced.		Biological pest control, Pollination		
		Is mixture of land use with regard to production of healthy food addressed?	Y / N		all	
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	
		Are actions and measures spatially explicit?	Y / N		4	
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	
	Access to clean water	Surface water bodies Storage capacities for fresh water are highly important as source of healthy life.				
		Are surface waters with regard to human health addressed?	Y / N		all	
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	
		Is the evaluation methods selective or spatially inclusive and comprehensive	multiple		1	reg

		☐selective ☐spatially inclusive / comprehensive	choice			loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	
		Are actions and measures spatially explicit?	Y / N		4	
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	
		Groundwater Storage capacities for fresh water are highly important as source of healthy life.		Water supply		
		Is groundwater with regard to human health addressed?	Y / N		all	
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N		4	

			Description			
		Are actions and measures spatially explicit?	Y / N		4	
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	
	Living in an healthy environment	Provisioning of ecosystems to prevent contamination Landscape provides functions in waste treatment and water purification (water supply) that humans make use of.		Waste treatment, Water supply, biological pest control		
		Is the ability of landscape to prevent contaminations as well as waste treatment functions addressed?	Y / N		all	
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	
		Are actions and measures spatially explicit?	Y / N		4	
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	
		Disease prevention. Landscape provides functions in controlling spreading of disease (biological pest control).				

		Are “natural” landscapes promoting human health addressed?	Y / N		all	
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	
		Are actions and measures spatially explicit?	Y / N		4	
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	
		Landscape ability to destruct wastes Waste especially of organic origin is destructed by landscape functions. Humans make extensive use of the waste treatment functions of landscape.				
		Is Landscape’s ability to destruct wastes addressed?	Y / N		all	
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	
		Are objectives within the vision / strategy defined quantitative or qualitative?	multiple		-	

		☐qualitative ☐quantitative ☐both	choice			
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	
		Are actions and measures spatially explicit?	Y / N		4	
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	

Component of liveability	Landscape contribution	Description of landscape feature relevant for contribution / Questions for analysis	Scale / Answer options	Landscape function	Category of analysis[227]	Planning level[228]
Security						
Security from disasters	General questions			Disturbance prevention		
	General:	Does the plan deal with security from disasters?	Y / N		all	
		Is there a map on security from disasters? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐others	multiple choice		all	
	Evaluation method:	Is the evaluation methods for security selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	
	Strategy and vision:	Does the plan provide a strategy and vision for security ?	Y / N		-	
	Actions and measures:	Does the plan propose any actions or measures with regard to security ?	Y / N		4	
		Are actions and measures regarding security spatially explicit?	Y / N		4	
	Monitoring:	Is monitoring of measures for security a part of the plan?	Y / N		5	
		Is an approach or method of monitoring defined?	Y / N		5	
	Planning procedures and decisions:	Are there conflicts of the security with another component of liveability regarding vision and strategy or actions and measures?	Y / N Description		3	
		Spatial development is one of the mayor driving forces in flood risk management (e.g. floodplain development). It is mostly addressed in spatial plans but also sectoral plan might give important advises for spatial development especially with regard to disaster prevention. The spatial development should be planned to conform best to the naturally available prevention functions. For example settlements should not be developed within the floodplain)		Disturbance prevention		reg loc
		Is sustainable spatial development as an asset in disaster prevention addressed?	Y / N		all	reg

[227] 1 = Methodologies for the evaluation of landscape (1a = Landscape or spatial structures and appearances; 1b = Functional features; 1c = Values or qualities; 1d = Future developments and scenarios; 1e = Drivers of change in functions and values); 2 = Planning processes & participation (2a = Planning and planning processes at different administrative levels; 2b = Planning and planning processes in different sector settings; 2c = Planning and decision taking procedures); 3 = Planning procedures & decisions; 4 = Actions and measures of local / regional government; 5 = Impact measurement: monitoring indicators and systems.

[228] reg = regional level; loc = local level (combination possible)

						loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	reg loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	reg loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	reg loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	reg loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	reg loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	reg loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive (e.g. on catchment level)	multiple choice		-	reg loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	reg loc
		Are actions and measures spatially explicit?	Y / N		4	reg loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	reg loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	reg loc
	Disaster prevention	Variety of land use. Highly structured and diverse landscapes are in general more resistant against any kind of natural and manmade disasters.		Disturbance prevention		reg loc
		Is the landscape spatial structure with focus on disaster prevention addressed?	Y / N		all	reg loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	reg loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	reg loc
		Is the evaluation methods selective or spatially inclusive and comprehensive	multiple		1	reg

		☐selective ☐spatially inclusive / comprehensive	choice			loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	reg loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	reg loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	reg loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	reg loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	reg loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	reg loc
		Are actions and measures spatially explicit?	Y / N		4	reg loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	reg loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	reg loc
		Sustainable agriculture and forestry. Certain practices of agriculture and forestry help to retain water prevent storm damage and fire. These practices can be addressed in landscape plans as well as in other sectoral plans (agriculture and forestry) and comprehensive plans.		Disturbance prevention		reg loc
		Is sustainable agriculture and forestry as an asset in disaster prevention addressed?	Y / N		all	reg loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	reg loc
		Which method has been employed for the evaluation? (e.g. runoff calculation) (Please evaluate method)	Description		1	reg loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	reg loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	reg loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	reg loc

		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	reg loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	reg loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	reg loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	reg loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	reg loc
		Are actions and measures spatially explicit?	Y / N		4	reg loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	reg loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	reg loc
	Disaster protection	Features of disaster protection. Landscape offers facilities for protection against disasters. These are generally products of culture and nature. (e.g. Polder-landscapes)		Disturbance prevention		loc
		Has spatial structure been addressed with regard to disaster prevention?	Y / N		all	loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N		4	loc

			Description			
		Are actions and measures spatially explicit?	Y / N		4	loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc

Component of liveability	Landscape contribution	Description of landscape feature relevant for contribution / Questions for analysis	Scale / Answer options	Landscape function	Category of analysis[229]	Planning level[230]
Social relations / capital[231]	General Questions					
	General:	Does the plan deal with social relations / capital?	Y / N		all	
		Is there a map on social relations / capital? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐others	multiple choice		all	
	Evaluation method:	Is the evaluation methods for social relations / capital selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	
	Strategy and vision:	Does the plan provide a strategy and vision for social relations / capital?	Y / N		-	
	Actions and measures:	Does the plan propose any actions or measures with regard to social relations / capital?	Y / N		4	
		Are actions and measures regarding social relations / capital spatially explicit?	Y / N		4	
	Monitoring	Is monitoring of measures for social relations / capital a part of the plan?	Y / N		5	
		Is an approach or method of monitoring defined?	Y / N		5	
	Planning procedures and decisions:	Are there conflicts of the social relations / capital with another component of liveability regarding vision and strategy or actions and measures?	Y / N Description		3	
Social well-being	Social integration	Parks are one of the most important aspects of social integration if they are of high quality, easy accessible, attractive and perceived as safe		recreation function		
		Are parks as potential for social integration addressed?	Y / N		all	loc
		In which parts of the plan is the topic addressed?	multiple		all	loc

[229] 1 = Methodologies for the evaluation of landscape (1a = Landscape or spatial structures and appearances; 1b = Functional features; 1c = Values or qualities; 1d = Future developments and scenarios; 1e = Drivers of change in functions and values); 2 = Planning processes & participation (2a = Planning and planning processes at different administrative levels; 2b = Planning and planning processes in different sector settings; 2c = Planning and decision taking procedures); 3 = Planning procedures & decisions; 4 = Actions and measures of local / regional government; 5 = Impact measurement: monitoring indicators and systems.

[230] reg = regional level; loc = local level (combination possible)

[231] The list presented by Abraham, Sommerhalder and Abel (2010: 62–63) is the basis of our framework questions regarding health and social capital.

		☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	choice			
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc
		Is the evaluation method selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc
		Are the most important factors addressed? *☐accessibility ☐attractiveness (high quality of design) ☐equipment ☐safety*	*multiple choice*		*1*	*loc*
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc
		Are actions and measures spatially explicit?	Y / N		4	loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc
		Community gardens / allotment gardens are known to be most important for the lower class people including for example unemployed, migrants etc. The gardens are an important meeting point, giving appreciation of live and are refuge from daily life.				
		Are community gardens and allotment gardens as potential for social integration addressed?	Y / N		all	loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc
		Are the special needs of the user groups (see above) respected within the phases of planning? *☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring*	*multiple choice*		*all*	*loc*
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N		-	loc

			Description			
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc
		Are actions and measures spatially explicit?	Y / N		4	loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc
	Collectively experiencing landscape	"Wild nature" (as perceived by people) People like to experience "nature" in groups or pairs. "Nature" in this context is understood in a trivial not scientific meaning that addresses parts of space that show a high amount of natural elements such as forests, grasslands, and diverse agricultural areas. Multifunctionality is an important aspect. Multifunctional landscapes integrate more than one use and led people experience landscape in many different ways within the same space.				loc reg
		Is "wild nature" as the basis of a collective experience addressed?	Y / N		all	loc reg
		Is landscape accessible for everyone or are therer legal obstacles?	*Y / N*		*all*	*loc reg*
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc reg
		In which planning phases is especially the aspect of multifunctionality for the experience of "nature" addressed? *☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring*	*Y /N*		*all*	loc reg
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc reg
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc reg
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc reg
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc reg

		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc reg
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc reg
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc reg
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc reg
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc reg
		Are actions and measures spatially explicit?	Y / N		4	loc reg
		Are approaches and methods for monitoring defined (e.g. observation methods, surveys)? (Please describe)	Y / N Description		5	loc reg
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc reg
	Trust	Neighbourhood structures that have the potential to built trust between people within a community (e.g. small green structures, meeting points, front gardens etc.)		Recreation		loc
		Is mutual trust within neighbourhoods as basis for social integration addressed?	Y / N		all	loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc
		Which method has been employed for the evaluation? (Please evaluate method)[232]	Description		1	loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc
		Are objectives within the vision / strategy defined quantitative or qualitative (e.g. enhancing green structures, reducing traffic in residential streets)? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc

[232] Hersperger, Langhamer and Dalang (2012)

		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc
		Are actions and measures spatially explicit?	Y / N		4	loc

Component of liveability	Landscape contribution	Description of landscape feature relevant for contribution / Questions for analysis	Scale / Answer options	Landscape function	Category of analysis[233]	Planning level[234]
Culture	General questions					
	General:	Does the plan deal with culture?	Y / N		all	
		Is there a map on culture? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐others	multiple choice		all	
	Evaluation method:	Is the evaluation methods for culture selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	
	Strategy and vision:	Does the plan provide a strategy and vision for culture?	Y / N		-	
	Actions and measures:	Does the plan propose any actions or measures with regard to culture?	Y / N		4	
		Are actions and measures regarding culture spatially explicit?	Y / N		4	
	Monitoring:	Is monitoring of measures for culture a part of the plan?	Y / N		5	
		Is an approach or method of monitoring defined?	Y / N		5	
	Planning procedures and decisions:	Are there conflicts of the culture with another component of liveability regarding vision and strategy or actions and measures?	Y / N Description		3	
Identity	Building community identity	Elements of Identification ("Symbols") Certain elements of landscape tend to be highly important for identification of identification building. These might be objects that belong to the history of the landscape; these might be found in historic maps or cadastre of historic elements. Other can only be found if local people are involved, because these elements can only be found by those who are part of the community identifying with these elements		aesthetic functions cultural & artistic functions Spiritual and historic functions		loc

[233] 1 = Methodologies for the evaluation of landscape (1a = Landscape or spatial structures and appearances; 1b = Functional features; 1c = Values or qualities; 1d = Future developments and scenarios; 1e = Drivers of change in functions and values); 2 = Planning processes & participation (2a = Planning and planning processes at different administrative levels; 2b = Planning and planning processes in different sector settings; 2c = Planning and decision taking procedures); 3 = Planning procedures & decisions; 4 = Actions and measures of local / regional government; 5 = Impact measurement: monitoring indicators and systems.

[234] reg = regional level; loc = local level (combination possible)

		Are elements of identification addressed?	Y / N		all	loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc
		Which method has been employed for the evaluation? (Desk study, participative Method, etc.) (Please evaluate method)	Description		1	loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc
		Does the evaluation method address different aspects of landscape character? *☐historic relevance ☐cultural relevance ☐uniqueness ☐public perception ☐others*	*multiple choice*		*1*	*loc*
		Is there a Map on Elements/Symbols of Identity or Elements/Symbols of Landscape?	*Y / N*		*1*	*loc*
		What kind of information is included in these maps? (Are there information about natural, cultural, religious or historic Elements in the Map)	*Description*		*1*	*loc*
		Does the evaluation include a participation process?	*Y / N*			*loc*
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc
		Are actions and measures spatially explicit?	Y / N		4	loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc
		Landscape character is what makes it possible to distinguish landscapes from each other. Character is addressing the composition of landscape elements and types to a structure that is recognizable as unique. It therefore is intersubjective but highly depends on the perspective of the people. There might be landscape characters on regional as well as on local scales				loc reg
		Is the landscape character addressed?	Y / N		all	loc reg
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc reg

		Which method has been employed for the evaluation? (e.g. Swanwick[235]) (Please evaluate method)	Description		1	loc reg
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc reg
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc reg
		Does the evaluation include a participation process?	*Y / N*			*loc reg*
		Is there a map on landscape character (e.g. by Swanwick[236])	*Y/N*			*loc reg*
		What kind of information is included in them (land uses – actually and historic, vegetation types, landmarks – in case of landscape character areas on local level, etc.)	*Description*			*loc reg*
		Are there similar maps or surveys about special landscape character types or with singular information regarding types? (Natural factors – geology, landform, land cover etc. Or cultural/social factors – Land use, settlement, agricultural etc.)[237]	*Description*			*loc reg*
		Are the information actual or older than five years[238]	Yes/No			loc reg
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc reg
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc reg
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc reg
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc reg
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc reg
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc reg

[235] Swanwick (2002: 9)

[236] Description of landscape character type and area Swanwick 2002 #597: 9 /nopar}

[237] Flow diagram of Landscape Character Assessment methodology Swanwick (2002: 13)

[238] Hage and Bachmann (2012)

		Are actions and measures spatially explicit?	Y / N		4	loc reg
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc reg
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc reg
		Do these information include the relationship of human being to landscape	Yes/No			loc reg
		Are these information nationwide available	Yes/No			loc reg
Education	Landscape as an asset in education	Landscape as an asset in education. Landscape can be a source for science and education. For LIVELAND especially the aspect of education is important. Landscape can be viewed as source for ecological or biological education as well as for political, geographical or historical information.		Scientific & educational functions		
		Is landscape as an asset in education addressed?	Y / N		all	loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc
		Could the Map give any information about preferred landscapes for scientific/educational use? (Explain)	*Y/N Description*		*1*	*loc*
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc
		Are actions and measures spatially explicit?	Y / N		4	loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N		5	loc

			Description			
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc
		Does a curriculum for scholars exist, which gives preferred examples for educational excursions (for historical or scientific education)	*Yes/No*		-	*reg*
		Does a governmental program for child nature/historical education exist and are there preferred places and elements which should be used?	*Yes/No*		-	*reg*
		Are the biological/scientific examples orientated on typical regional or general non-specific landscapes (in both cases curriculum and governmental program)	*Description*		-	*reg*
		Which kind of places and/or elements are preferred for educational reasons (historical/scientific orientated)	*Description*		-	*reg*

Component of liveability	Landscape contribution	Description of landscape feature relevant for contribution / Questions for analysis	Scale / Answer options	Landscape function	Category of analysis[239]	Planning level[240]
Economics / work	General Questions					
	General:	Does the plan deal with economics / work?	Y / N		all	
		Is there a map on economics / work? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐others	multiple choice		all	
		Does the plan moderate different interest with regard to landscape or does it put unequal emphasis on one or the other? Why is there an emphasis on a special economic interest / are there other sectoral plans putting emphasis on different economic branches? (Please explain)	*Y / N*		*all*	
	Evaluation method:	Is the evaluation methods for economics / work selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	
	Strategy and vision:	Does the plan provide a strategy and vision for economics / work?	Y / N		-	
	Actions and measures:	Does the plan propose any actions or measures with regard to economics / work?	Y / N		4	
		Are actions and measures regarding economics / work spatially explicit?	Y / N		4	
	Monitoring:	Is monitoring of measures for economics / work a part of the plan?	Y / N		5	
		Is an approach or method of monitoring defined?	Y / N		5	
	Planning procedures and decisions:	Are there conflicts of the economics / work with another component of liveability regarding vision and strategy or actions and measures?	Y / N Description		3	
Tourism	Landscape as touristic destination	Landscape attractiveness in general as an asset in tourism (Scenic value) Landscapes that are evaluated as attractive by public (especially tourists) are an important asset in tourist marketing (evaluation of the attractiveness might be done by estimating travel costs)		Recreation, Spiritual & historic		loc reg

[239] 1 = Methodologies for the evaluation of landscape (1a = Landscape or spatial structures and appearances; 1b = Functional features; 1c = Values or qualities; 1d = Future developments and scenarios; 1e = Drivers of change in functions and values); 2 = Planning processes & participation (2a = Planning and planning processes at different administrative levels; 2b = Planning and planning processes in different sector settings; 2c = Planning and decision taking procedures); 3 = Planning procedures & decisions; 4 = Actions and measures of local / regional government; 5 = Impact measurement: monitoring indicators and systems.

[240] reg = regional level; loc = local level (combination possible)

		and a factor of economics (employment and value creation)		functions, Cultural & artistic functions		
		Is landscape attractiveness for touristic purpose addressed?	Y / N		all	loc reg
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc reg
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc reg
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc reg
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc reg
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc reg
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc reg
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc reg
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc reg
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc reg
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc reg
		Are actions and measures spatially explicit?	Y / N		4	loc reg
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc reg
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc reg
		Elements and symbols of touristic meaning are important symbols of whole touristic regions. These are single extraordinary elements and objects with outstanding value for tourism. (e.g. Ayres Rock, Castle 'Neuschwanstein', Dubrovnik historic centre)				loc
		Are landscape elements and symbols for touristic purpose addressed?	Y / N		all	loc

		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc
		Are actions and measures spatially explicit?	Y / N		4	loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc
		Touristic and recreational infrastructure (facilities, elements, paths, etc.) Besides the extraordinary elements and a general attractiveness a good touristic and recreational infrastructure is important. This makes sure that people are able to reach the destination and it makes sure that tourists are able to explore the region.				loc reg
		Is touristic and recreational infrastructure addressed?	Y / N		all	loc reg
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc reg
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc reg
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc reg
		Does the evaluation method include macro and micro infrastructure with touristic meaning?	*Y/N*			*loc*
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc reg

		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc reg
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc reg
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc reg
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc reg
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc reg
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc reg
		Are actions and measures spatially explicit?	Y / N		4	loc reg
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc reg
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc reg
Real estate	Landscape as asset in real estate	Landscape attractiveness as an asset in real estate (scenic value) Real estate will benefit from general attractive landscapes (scenic value). Living in beautiful landscapes is more expensive than in less attractive areas.		Aesthetic Functions		reg loc
		Is landscape attractiveness as asset in real estate addressed?	Y / N		all	loc reg
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc reg
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc reg
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc reg
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc reg
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc reg
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc reg

		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc reg
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc reg
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc reg
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc reg
		Are actions and measures spatially explicit?	Y / N		4	loc reg
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc reg
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc reg
		Proximity to certain attractive landscape elements and parts. Certain landscape elements might be very important for the value of real estate. Symbols that are addressed within this question might differ from those that are addressed in the touristic section. Examples are the Zurich lake, View on Hercules statue in Kassel. Important for this question is that the feature has a name and is recognized as unique. It is not just any lake, but it is the Zurich lake.				loc
		Is proximity to attractive landscape elements and parts as asset in real estate addressed?	Y / N		all	loc
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc
		Please list the named elements?	*Description*		*1*	*loc*
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc

		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc
		Are actions and measures spatially explicit?	Y / N		4	loc
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc
Agriculture / forestry	Production of food / wood	Fertile soils are the source for agricultural value creation as well as for successful forestry. They have to be maintained.		Soil formation, Soil retention, Nutrient regulation,		loc reg
		Is soil fertility as for agriculture addressed?	Y / N		all	loc reg
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc reg
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc reg
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc reg
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc reg
		Does the evaluation method deal with threats of the potential of agricultural soils to be fertile (e.g. erosion)?	*Y / N*		*1*	*loc reg*
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc reg
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc reg
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc reg
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc reg
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc reg
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc reg

		Are actions and measures spatially explicit?	Y / N		4	loc reg
		Are any measures for sustainable soil treatment proposed?	*Y / N*		*4*	*loc reg*
		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc reg
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc reg
		Availability of fresh and clean water for growing crops / wood. Agricultural and silvicultural value generation is highly depending on availability of water. In many ways it is important that in this question the availability for agriculture is important. That means that there are different requirements than for water for drinking.		Water supply		loc reg
		Is the availability of water for agriculture addressed?	Y / N		all	loc reg
		In which parts of the plan is the topic addressed? ☐evaluation / analysis ☐strategy / vision ☐actions / measures ☐monitoring	multiple choice		all	loc reg
		Which method has been employed for the evaluation? (Please evaluate method)	Description		1	loc reg
		Is the evaluation methods selective or spatially inclusive and comprehensive ☐selective ☐spatially inclusive / comprehensive	multiple choice		1	loc reg
		Is the evaluation method qualitative or quantitative? ☐qualitative ☐quantitative ☐both	multiple choice		1	loc reg
		Are vision and strategy built upon the outcomes of the analysis? (Please explain)	Y / N Description		-	loc reg
		Are objectives within the vision / strategy defined quantitative or qualitative? ☐qualitative ☐quantitative ☐both	multiple choice		-	loc reg
		List the objectives (Please list qualitative and quantitative objectives separately)	Description		-	loc reg
		Is there a schedule or timetable for the achievements of objectives defined?	Y / N		-	loc reg
		Are objectives defined selective or spatially inclusive and comprehensive? ☐selective ☐spatially inclusive / comprehensive	multiple choice		-	loc reg
		Do actions and measures comply with vision and strategy? (Please explain)	Y / N Description		4	loc reg
		Are actions and measures spatially explicit?	Y / N		4	loc reg

		Are approaches and methods for monitoring defined? (Please describe)	Y / N Description		5	loc reg
		Does monitoring refer to objectives within the visions and strategy?	Y / N		5	loc reg

Component of liveability	Landscape contribution	Description of landscape feature relevant for contribution / Questions for analysis	Scale / Answer options	Landscape function	Category of analysis[241]	Planning level[242]
Freedom						
Direct democracy / participation	Direct democracy / participation	The opportunity to take part in the development of a region and its landscape is an important component of liveability. Therefore the amount of direct democracy / participation within the planning process as well as in decision making are important indicators for the contribution of plans to liveability		none	2	loc
		Did the planning process have any participatory elements? (e.g. information meetings, workshops, workgroups)	Y / N	-	2/3	loc reg
		Please figure out a process biography[243] and show important events (decisions, actions, participation events) on a timeline.	Description	-	2/3	loc reg
		Who was asked to participate? (Please indicate and give detailed explanation) ☐public ☐stakeholders ☐other legal organisations ☐others:	multiple choice Description	-	2/3	loc reg
		Who did actually participate? ☐public ☐stakeholders ☐other legal organisations ☐others:	multiple choice Description	-	2/3	loc reg
		Rate the intensity of participation on Arnstein's[244] Ladder of participation? ☐citizen control ☐delegated power ☐partnership ☐placation ☐consultation ☐informing ☐therapy ☐manipulation	multiple choice	-	2/3	loc reg
		In which phases of the plan did participation take place?	multiple	all	2/3	loc

[241] 1 = Methodologies for the evaluation of landscape (1a = Landscape or spatial structures and appearances; 1b = Functional features; 1c = Values or qualities; 1d = Future developments and scenarios; 1e = Drivers of change in functions and values); 2 = Planning processes & participation (2a = Planning and planning processes at different administrative levels; 2b = Planning and planning processes in different sector settings; 2c = Planning and decision taking procedures); 3 = Planning procedures & decisions; 4 = Actions and measures of local / regional government; 5 = Impact measurement: monitoring indicators and systems.

[242] reg = regional level; loc = local level (combination possible)

[243] Säck da Silva (2009: 126)

[244] Arnstein (1969)

		☐scoping ☐evaluation / analysis ☐ vision / strategy ☐actions / measures ☐monitoring	choice			reg
		Did participation have an impact on decision making?	Y /N	-	2/3	loc reg
		How did the participation process influence the planning process? (Explain)	description	-	2/3	loc reg
	Sustainability / Intergenerational justice	Sustainability and intergenerational justice are important contributions to liveability of future generations. The freedom of these generations should not be constrained by irreversible current decision making.				
		Have the decisions made in the plan the character of being irreversible (e.g. take longer than one generation to be reversed) What are these decisions	Y / N Description		2/3	lo reg
		By estimation, does the plan include all three basics of sustainability in equal importance?	Y / N		2/3	reg loc
		If there is an emphasis on one of the three, why is that?	Description		2/3	reg loc
		Is there another (sectoral plan) that deals with the neglected topics?	Description		2/3	reg loc

Table 22 Overview of application of liveability and landscape function in the analysis of stakeholder planning documents.

List of Annexes

Annex I Baseline Analysis Synthesis Report

Annex II Individual case study report Offenburg

Annex III Individual case study report Navarra

Annex VI Individual case study report Basque Country

Annex V Individual case study report Midden Delfland

Annex VI Individual case study report Thy National Park

Annex VII Individual case study report Ljubljana Urban Region

Annex VIII Second Stakeholders workshop report

Annex IX Third Stakeholders workshop report

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ISBN

ESPON

LIVELAND
Liveable Landscapes: a key value for sustainable territorial development

Targeted Analysis 2013/2/22

Baseline Synthesis Report

Version 07 February 2014

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

This report presents the final results a Targeted Analysis 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.

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1 Methodology of Baseline Analysis

1.1 Liveland methodology

The project LIVELAND explores the concept of liveability and how it can be applied to policy making for liveable landscapes. LIVELAND, as a targeted analysis project, constitutes a practice oriented analysis about landscape planning and territorial development in some European planning systems. Six regions and localities are involved in the project: Basque Country Region (ES), Navarre Region (ES), Ljubljana Urban Region (SI), Offenburg Municipality (D), Midden-Delfland Municipality (NL) and Thy National Park Agency (DK).

This Synthesis Report gives an overview of the 'good practices' the six Stakeholders in the LIVELAND project have put forward. The baseline analysis constitutes the input for the benchmarking, the cornerstone of this project. Figure 1 below shows the 6 stages of the benchmarking. The Baseline Analysis is meant to set the grounds for the benchmarking exercise, based on the regional/local interpretation of the national spatial and landscape planning practice as identified in task 2.1. The Baseline analysis gives a characterization of the case practices with the planning system, the challenges of the case and the description of the planning practice regarding the process and the content of the study or plan.

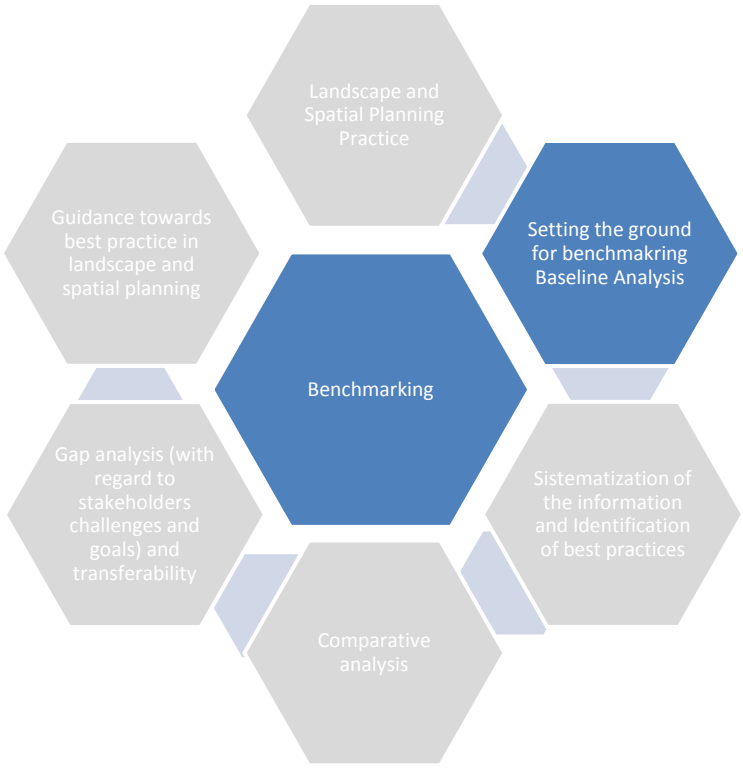


Figure 1 Benchmarking stages in Liveland aligned to baseline analysis

The benchmarking methodology leads to recommendations for policy development (guidance), presented as recommendations in the Scientific Report.

The results of the baseline analysis, as description of the selected actions of the Stakeholders, are presented as individual reports of each of the cases, published as annexes of the Scientific Report.

This Synthesis Report gives an overview of the 'good practices' and first comparisons and policy oriented observations about the six cases.

1.2 Gathering input information

The collection of input information for the baseline analysis was done in three ways:

a) desk study by the research group through literature review and document analysis regarding the 'good practice';
b) consultation of the Stakeholders in individual contacts (responsible officials, as well experts who did studies and specialist analyses) and
c) workshops in which Stakeholders in an interactive way presented their practice and exchanged their experiences.

The views of the Stakeholders, who had been responsible for ordering and implementing the study or plan in the practice cases, were gathered in interviews with involved researchers. Via structured questions insights were gained about their understanding of landscape concepts and approaches to landscape protection, planning and management within their administration or professional context.

An important source of information was a workshop with Stakeholders in which challenges and further needs regarding the LIVELAND project were validated. The Stakeholders made a self-assessment (by means of a SWOT analysis[1]) and formulated learning goals and reference cases, as external practices that could be inspiring. (An overview of learning goals is given in tables per Stakeholder in ***Appendix 3 of this Synthesis Report***.)

1.3 Landscape approach and landscape policy

All Stakeholders consulted in the LIVELAND project support the approach of the European Landscape Convention and consider 'landscape' as a comprehensive concept, directly related to the theme of quality of the area where people live. Landscape policy (as governmental principles, strategies and guidelines) is seen as an integrative approach, which should be included in territorial (spatial) and sectoral (departmental) policies.

The European Landscape Convention contains some general principles on landscape policy and planning. The Council of Europe has further defined these in the form of recommendations for the implementation of the European Landscape Convention (2008), to "achieve a balanced and harmonious relationship between social needs, economic activity and the environment". In the appendix to these recommendations about instruments it is stated that landscape issues should be approached through a '*systematic landscape planning process*', which could take form as:

- A proper landscape planning and development system (landscape *plan*)
- A systematic introduction of the landscape dimension into ordinary planning, supplemented by specific landscape *studies*.

[1] SWOT stands for Strengths, Weaknesses, Opportunities and Threats

In the LIVELAND project a '*systematic landscape planning process*' is interpreted as a planning cycle with the stages: analysis – vision & strategy – actions & measures - monitoring & evaluation – new analysis etc. In the baseline analysis the principles of landscape policy (as mentioned in the European Landscape Convention) are described under 'context' (position and competences of the actor regarding landscape) and 'planning system' (kind of plans on space, landscape and sectors) of the practices.

The LIVELAND project focusses on two levels in planning systems.

1. The regional governments of Basque Country and Navarre are implementing actions on landscape policy themselves and have also competences to change their planning system. In the following this is called *'landscape policy'* on regional level, described under Practice A) Landscape policies at regional level (chapters 4 and 5).

2. Local governments have no competences in matters of the planning system and are focussed on *'landscape planning'*. This is described in Practice B) Landscape planning at inter-local level (Chapters 5 and 6).

1.4 Landscape policy at regional level

In Basque Country and Navarre the regional governments have clear competences in matters of spatial planning and landscape policy. Both regions are currently developing a landscape policy, by integrating landscape in the spatial policy and introducing the instrument of the landscape plan. In chapter 4 these actions are described. Part of the learning demand at this level is therefore related to planning systems, because the existing planning system will have to be adapted to the new policies.

1.5 Landscape planning at inter-local level

The stakeholders in the LIVELAND project have differences in status (governments and agencies) and scale of working (from regional to local), but all have put forward practices of comparable scale: an ***area of inter-local scale***, which was defined from the content of the landscape planning.

These practices are rather diverse: Carrying out studies (designing visions) developing guidelines on spatial policies; the making of a regulation on protection of landscape, the making and implementing of landscape plans (vision and program of actions) and the making of a management plan (on nature).

	Vision	***Regulation***	***Action***	***Develp.***	***Management***
Basque Country	Study Catalogue	Guideline Landscape			
Navarre		Protected Landscape			
Ljubljana Urban Region	Study Region				
Offenburg	Landscape Plan		Landscape Plan		
Midden Delfland	Landscape Plan		Landscape Plan		
Thy National Park					Management Plan

Table 1 Practices and instruments applied in the various case study areas

The local governments (municipalities) Offenburg and Midden-Delfland implement landscape policy within the context of regulations of higher governments. In both cases the Local Landscape Plan has primarily the character of an action plan, agreed between the municipality and other involved authorities. Parts of the landscape plan are translated in the Land Use Plan (regulative), as a binding document for private actors in the municipality.

The inter-local agency Thy National Park implements national landscape policy (nature protection) by coordinating the management (daily maintenance) in a protected area. The agency is obliged to make a management plan.

In Slovenia spatial and landscape policy only exists on national level. There is no layer of regional governments. Because of the bottom-up need of regional plans, the cooperation body of municipalities of the Ljubljana Urban Region initiated a study on a Regional Spatial Plan, which includes a vision on landscape.

The regional governments of Basque Country and Navarre have chosen to present actions on landscape study and landscape protection.

These practices are summarised in chapter 7.

1.6 Description of practices

The description of each of the practices follows selected parameters, aiming at responding to the project key research questions:

- Introduction of practice and actor
- Policy context (key concepts, planning system and planning culture)
- Spatial and landscape character of the area
- Challenges and ambitions
- Planning process and decision making
- Content of the practice and stage in planning cycle

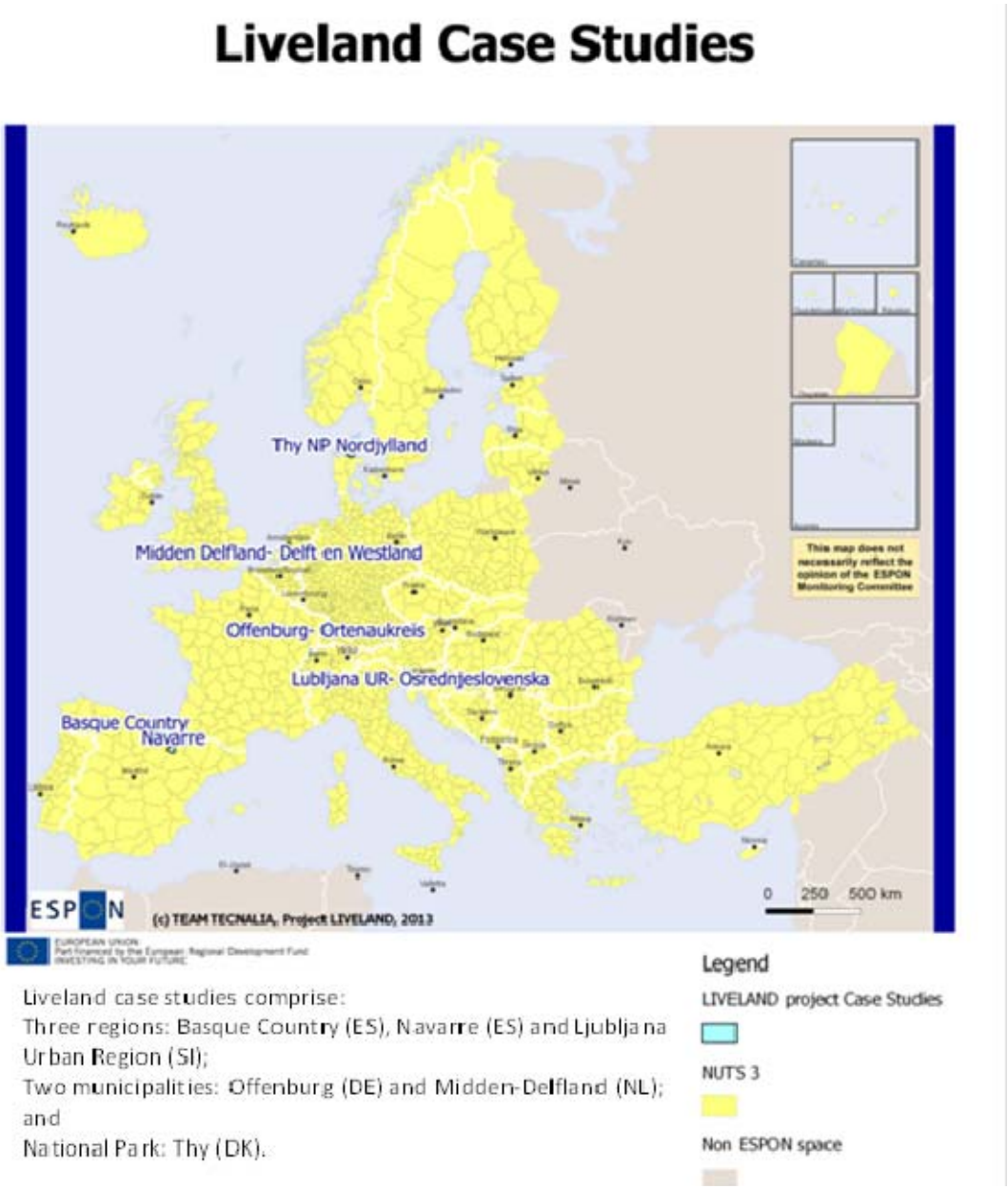
See appendix 1 of this Synthesis Report.

Results of the description are presented in a standardized format of individual baseline reports (see Annexes II to VII of the Draft Final Scientific Report).

2 Case studies in Liveland

2.1 Distribution over Europe of the Cases

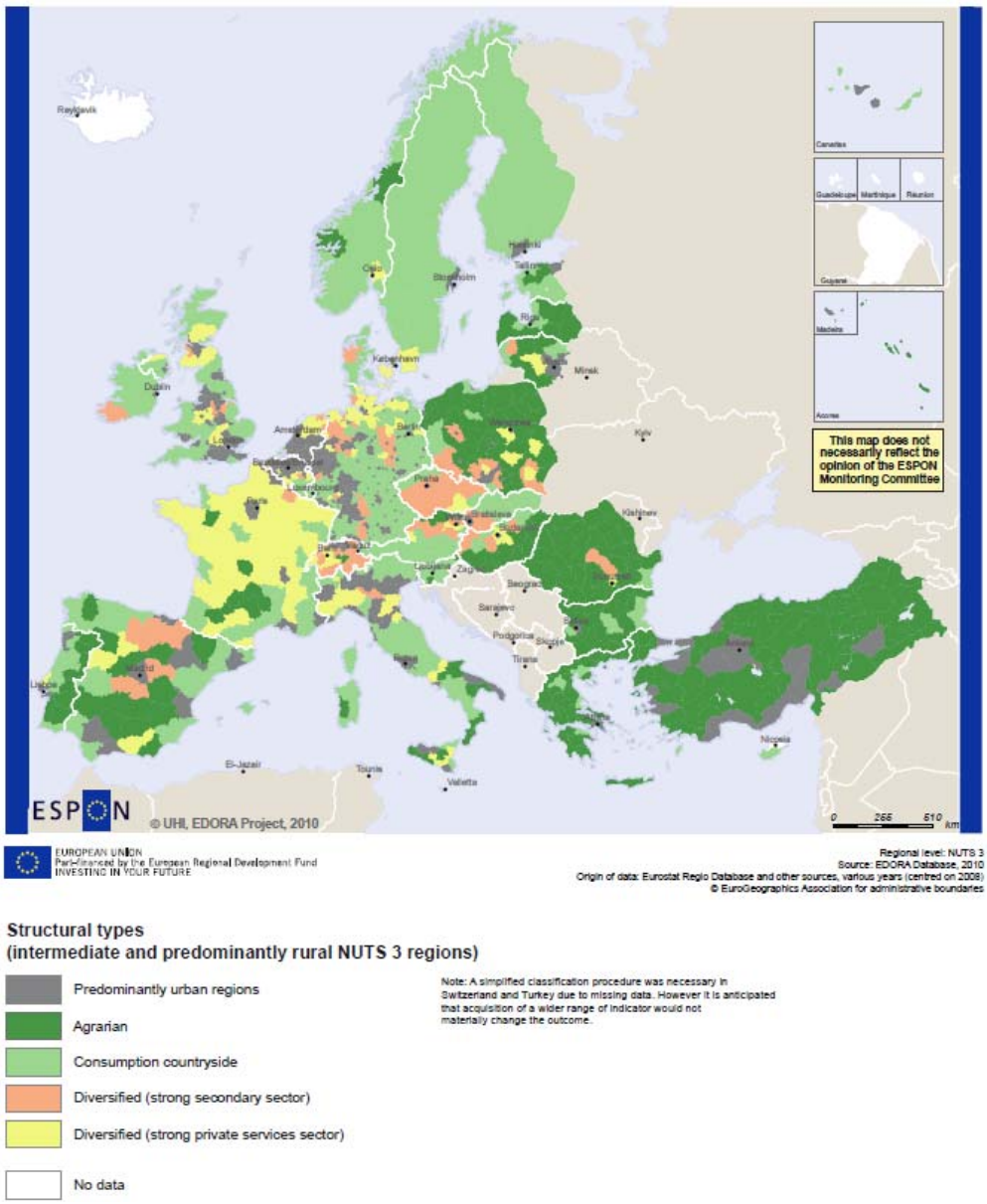
The six Liveland Case Studies each represent a different planning culture and different levels of competences and territorial scales of landscape policy making, as is described below, and in the appendices to this report. They have been selected on the basis of pragmatic criteria of data availability and distribution North – South, and new – old EU member states. The geographical distribution is illustrated in Map 1.



Map 1 Distribution of the case study areas over Europe (indicated are the relevant NUTS3)

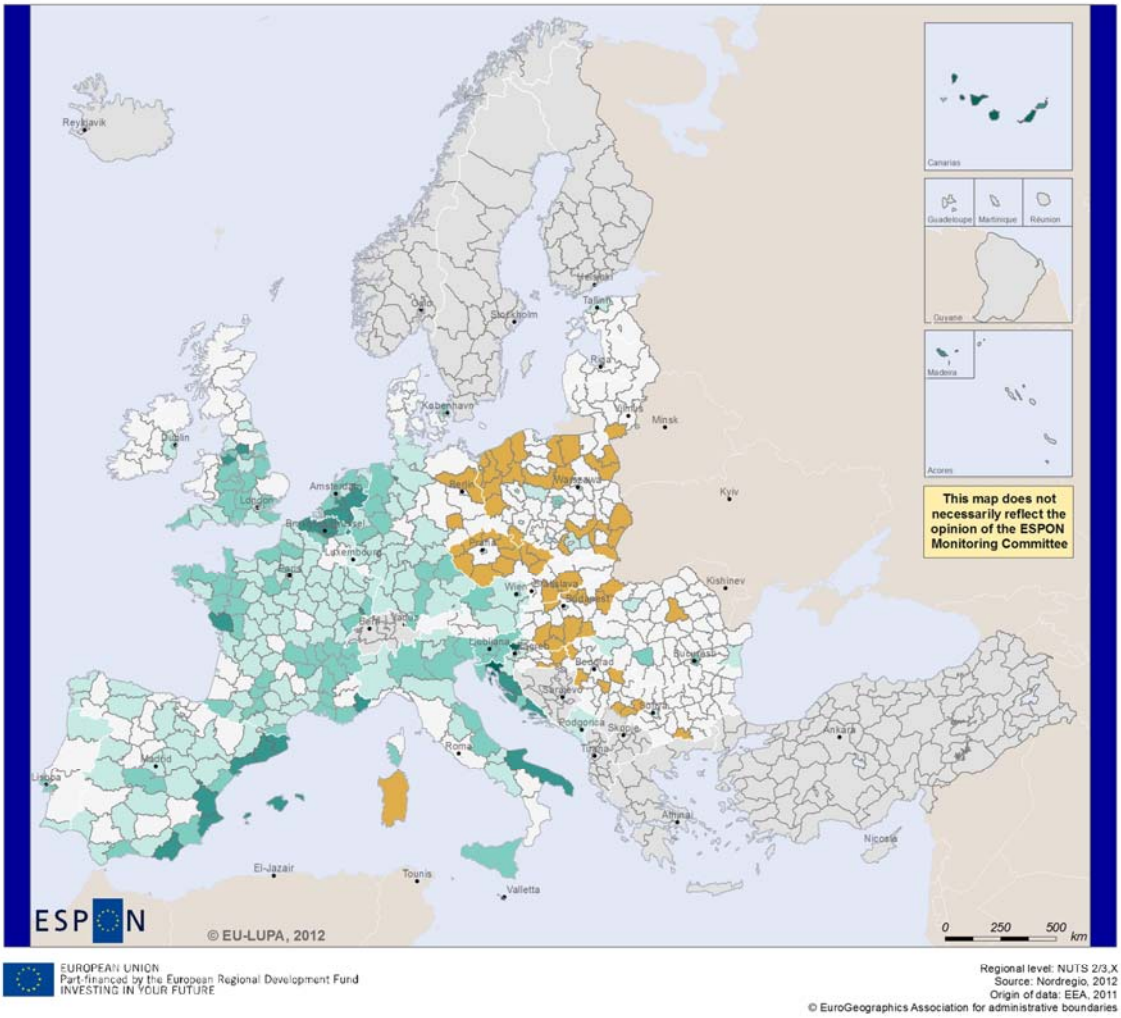
2.2 The European context of the practices

For better orientation within the perspective of ESPON studies, the case study areas can be located on various results of earlier ESPON mapping efforts.



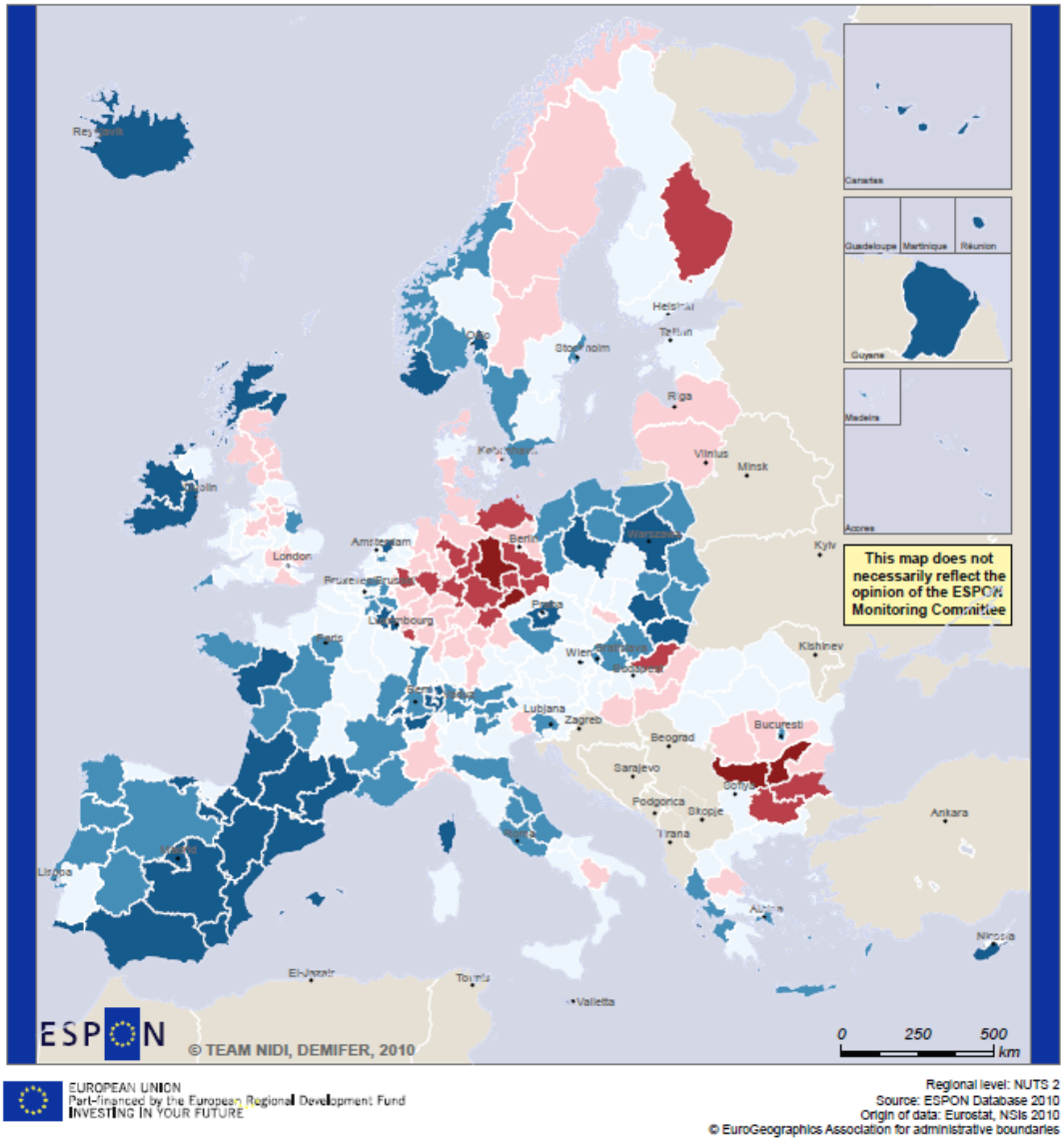
Map 2 Structural types of rural areas, 2006. Map 18 from 1st ESPON 2013 Synthesis Report, 2010

Offenburg	Consumption countryside
Navarra	Diversified (strong secondary sector)
Basque Country	Predominantly urban region
Midden-Delfland	Predominantly urban region
Thy	Consumption countryside
Ljubljana Urban Region	Consumption countryside



Map 3 Land use intensity change 1990-2006 EU-LUPA Final Report, 2012

Offenburg	Medium intensification
Navarra	Low intensification
Basque Country	Low intensification
Midden-Delfland	High intensification
Thy	Low intensification
Ljubljana Urban Region	Medium-high intensification



Map 4 Change in working age population, 2000-2007 (Map 20 from 1st ESPON 2013 Synthesis Report, 2010

Offenburg	0 – 0.5
Navarra	1.0 – 4.0
Basque Country	0 – 0.5
Midden-Delfland	0 – 0.5
Thy	-0.5 - 0
Ljubljana Urban Region	1.0 – 4.0

3 The national policy context

3.1 Landscape policy

Landscape policies and planning systems vary considerably between the practice cases.

The most strict landscape planning regulations are valid in **Germany** in the federal legislation on Nature & Landscape, with a special possibility to develop formal, legally binding autonomous landscape plans with an own planning cycle. However, local implementation may still vary, as our case Offenburg demonstrates: State ('landscape programme'), Region ('landscape framework plan') and Municipality ('landscape plan') can interact in various ways.

Although also in the **Netherlands** landscape planning used to be organised well in the framework of spatial planning, recently landscape policy at national level has almost entirely been abandoned. However, the planning system leaves ample room for initiatives from lower public authorities like provinces and municipalities. Our case of the municipality of Midden-Delfland shows for example of a very well developed landscape plan, politically approved and binding. Also here a proper planning cycle is adopted for the landscape plan, while the associated actions are partly implemented through spatial planning regulations, partly through adoption of other sector policies, such as nature, recreation and culture.

In **Spain** landscape policies are the competence of the regions. Both in Basque Country and in Navarra active development of strategies and policies is being promoted for landscape, e.g. through special landscape studies, partly as a component in Spatial Planning Law and a proposed Landscape Law (Basque Country) or as a component in the Regional Law on Natural Resources (Navarra). These Laws cover landscape aspects in terms of vision at a higher spatial scale level.

In **Slovenia** the spatial planning and landscape planning is strongly oriented on heritage. The Nature protection Act (1993, 2003) includes a definition of the landscape in the context of nature conservation, whereas the importance of landscape diversity for the biodiversity is highlighted. The Culture Heritage Conservation Act (1999) defines the cultural landscape which might be valued for its heritage aspects.

In **Denmark** the case is a National Park, Thy. The National Park Plan is based on the Danish Act on National Parks, under the competence of the Ministry of the Environment and the Municipality. Landscape aspects can be taken on board as long as the municipality, voluntary agreements with landowners and cooperation with the public do not object.

Although all countries concerned – except for Germany – ratified the European Landscape Convention, in formal terms this has had limited consequences for the spatial planning system in the countries (see also chapter 3.1 of the Draft Final Report Scientific Report).

Table 2 gives an overview of the characteristics of the landscape policy as relevant for the different case studies.

The concept of Landscape in planning	Recognition of Landscape in Law	Responsible ministry	National Policy on landscape?	Regional and local landscape plans?	Public participation	Themes / Spatial Elements
Denmark	*Yes, at national level Ratified ELC in 2000*	*Ministry of the Environment*	*Not a specific landscape plan but landscape is part of the national plan reports and the national binding restrictions*	*No specific landscape plans but the municipal plans are to cover both built-up and open land; hereby also taking landscape into consideration, particularly by using the tool of the LCA.*	*Yes, both legally binding, and in tradition and practice.*	*Ideally the Landscape Character Assessment is to cover all types of landscape, but in the planning policies there is some emphasis on the attractive landscape.*
Netherlands	*landscape is mentioned as a category in various laws*	*none*	*no*	*Regional Landscape plan (Not binding)* *Interlocal Lanscape plan (Voluntary) – Local landscape plan (Voluntary)*	*Yes.*	*Focus on reserve, managed and strengthened the landscape - preservation through development*
Germany	*Landscape is mentioned but no definition of landscape is provided.*	*Federal Ministry for the Environment, Nature Conservation and Nuclear Safety*	*No (currently, the BfN is investigating the needs for national landscape policy making to comply with international statutes and strategies).*	*Regional landscape Plan (Binding, except for individual people)* *Local landscape plan (binding as integrated into local plans and ordinances)*	*Yes (mostly limited to what is legally prescribed)*	*Strong focus on nature conservation. In some instances additional emphasis is on cultural heritage and, more recently, on landscape energy potentials.*
Slovenia	*Yes, at national level mainly in Spatial Planning Act, Nature Conservation Act, Cultural Heritage Act & Construction Act* *Ratified ELC in 2003*	*As of 2012, the Ministry of Infrastructure and Spatial Planning and the Ministry of Agriculture and Environment.*	*Slovenia has prepared a specific document on the Implementation of ELC. Landscape included in relevant policies such as Spatial Management Policy (2001), the Spatial Development Strategy (2004) & the Spatial Order of Slovenia (2004)*	*No regional and local landscape plans*	*Yes, the importance of participation is stated in national level legislation and in national policy documents.*	*Focus on protection and reservation of natural and cultural landscapes.*
Spain	*The national level land law includes landscape protection.*	*No key institution or key planning agency at national*	*No; but the autonomous communities have full authority to legislate for, regu-*	*Especially the autonomous community of Catalonia has been active in*	*Spain recognizes public participation through formalised measures*	*Consideration of all tyes of landscapes*

	The national Nature Conservation Act includes natural resource management and natural resources management. *Ratified ELC in 2007* *The autonomous community of Navarra recognises landscape in several acts and the Basque Country a new Landscape Law will be introduced.*	*level, the autonomous regions have the full competence* *Only the Ministry of Education, Culture and Sports deals with the Cultural Landscapes and Heritage*	*late and execute spatial planning. Some of the autonomous communities include landscape management (e.g. Catalonia). The autonomous community of Navarra and the Basque Country are in the process of including landscape management in policy.* *National Plans for the protection of cultural landscapes*	*landscape planning.* *In Navarra, a landscape plan will be drawn up.* *Galicia has a Law for the protection of Landscape Ley 7/2008* *The Basque Country has presented a Landscape Law in parliament that is being under approval.* *National level natural resources management plans (binding) manage the development of national parks and nature parks and natural resources. They all above all the other plans on different levels and legally binding.*	*such as public debate and hearings, and also through principles such as the right of citizens to access information and for the government to provide it.* *Navarra states explicitly that planning should be democratic.* *In the Basque country stakeholder involvement in the planning processes still needs to be strengthened.*	*Traditionally focus on cultural landscapes and protection of natural areas* *At present the Basque country "Focus not only in protection of natural landscapes, but also in recovering deprived areas".* *Navarra has focused on the protection and preservation of various soil types or specific areas, lacking specific guidelines regarding the landscape as a result of their own Spatial Strategy of Navarre (2005).*

Table 2 Characteristics of the landscape policy in force for the difference case studies

3.2 Planning system (competences in territorial planning and landscape policy)

	Characterization of the Spatial Planning System									
	Planning System	Planning culture	Laws and regulations				Competences			
			National	Regional	Subregional	Local	National	Regional	Subregional	Local
BASQUE COUNTRY	decentralized	top-down	No spatial planning at National level National Plans for the protection of cultural landscapes	Basque Law in Spatial Planning 4/1990 DOT Spatial Planning Guidelines Draft bill Landscape law in parliament	DOT Spatial Planning Guidelines applied to Territorial and Sector Plans Law in Landscape will apply to the whole region	Spatial planning guidelines provide determinations- binding content of the Master Plans	Ministry of Education, Culture and Sports deals with the Cultural Landscapes and Heritage	Basque Government Spatial Planning Guidelines and approval of Sectoral Plans	Basque Government and Provinces – Integrated spatial plans in functional areas	Municipalities development of Master Plans
NAVARRA	centralized	top-down	No spatial planning at National level National Plans for the protection of cultural landscapes	Laws on Spatial planning Regional Law 35/2002, of Spatial Planning, Regional Law 14/2005 cultural landscape, Regional Law 9/1996 on natural reserves	N/A	Master Plans	Ministry of Education, Culture and Sports deals with the Cultural Landscapes and Heritage	Navarre Government Rural Landscape, environmental units, land use	Land use	Municipalities
LJUBLJANA URBAN REGION	centralized	mixed	Regional Spatial Plan, made by Regional Development Agency (national body)	N/A	N/A	Local Spatial Planning	Regional Spatial Plan	N/A	informal	informal
OFFENBURG MUNICIPALITY	decentralized	top-down	National law on nature and landscape	Comprehensive and environmental planning	Binding plans if approved by competent authority	Binding plans if approved by competent authority	None	Land Baden-Württemberg	Region Südlicher Oberrhein	Offenburg Municipality

MIDDEN DELFLAND	decentralized	mixed cooperative at subregional level	None	N/A	Regulation space by province (binds local governments) (voluntary action for cooperation)	Midden Delfland land use plan	None	N/A	Province South Holland	Midden Delfland Municipal Spatial Plan (binds private sectors)
THY NATIONAL PARK	centralized	cooperative	National Law on national Parks (NP) Law on Planning and EU Directives	N/A	None	Municipal Plan and Local Plan	National initiative of NP (protected area)	N/A	North Denmark Region	Thisted Municipality NP Board implements the NPP (management & projects)

Table 3 Characterisation of the spatial planning system valid for the case studies considered.

4 Practice A) Landscape policies at regional level

Basque Country has ratified the European Landscape Convention in 2009. In the year 2010 a proposal for a Landscape Law was launched, which until now (2013) is still in the parliament pending for approval. This law, inspired by the European Landscape Convention, aims at giving landscape a legal recognition and integrating landscape into planning instruments. The draft bill mentions the following instruments:

- Catalogues to analyse landscapes in sub-regional spatial planning areas and to define quality objectives;
- Guidelines to legally incorporate landscape quality objectives into planning;
- Action Plans for implementation of specific measures in specific areas; and
- Studies of Integration related to projects and activities that will potentially have a significant impact on landscape.

Currently the government of Basque Country is considering not to issue a separate landscape law, but to integrate the landscape concept and the associated instruments in the (existing) spatial planning law.

The **Navarre** regional government has ratified the European Landscape Convention in 2008 and recently has expressed the intention to develop a Landscape Strategy (as a vision plan) at regional level. This strategy will provide methods and techniques for assessment, development and management of landscape at several territorial scales. Criteria and guidelines for landscape quality (especially 'landmarks') and 'social themes' (like health and leisure) will be elaborated.

The vision on landscape of Navarre, in the practice of spatial planning, is holistic and comes very close to the vision of the European Landscape Convention. Landscape is seen as the cultural (including heritage) and visual expression of sustainable territorial development. The laws on Protected Landscapes (2005) and Natural Reserves (1996) are older than the ratification of the European Landscape Convention, but they are coincident with its proposals.

5 Learning on landscape policy

5.1 Learning goals Basque Country & Navarre

The stakeholders from Basque Country have indicated the wish to learn about integration of landscape in spatial planning and other (sectoral) planning actions.

Basque Country and Navarre both are interested in cooperation and coordination of different administrations / departments to reach a comprehensive approach.

Navarre is interested in implementation of guidelines for spatial quality.

5.2 Comparisons and observations

Integration in ordinary planning

Regions in Spain like Basque Country, Navarre and Catalunya follow a comparable line in introducing landscape in ordinary planning. These regions focus on spatial planning, but also develop landscape approaches for sectoral policies, like nature conservation and infrastructure. They are busy making Catalogues (inspired by the English methodology of Landscape Character Assessment) and Guidelines for spatial plans at sub-regional level. There are some differences in speed and political priority, in which these documents are made. It seems that Catalunya (see Appendix 2) is front runner. Exchange of experiences between Spanish regions on the content and practicability of such Guidelines is already taking place between regional landscape professionals regarding methodologies, which are highly recommended.

Coordination of departments

When landscape policy is not seen as sectoral, but as a comprehensive and coordinating policy field, then the cooperation with and support of other departments is crucial. It is a question of planning culture whether cooperation between departments is readily accepted. If policy making is seen as a 'battle field', in which the department rules that has most budget or highest political respect, than cooperation is more difficult. At a time of economic crisis there is less priority for a landscape approach in several European countries. Officials who prepare landscape policy, cannot change such planning culture in their work environment. But they could try to get influence via a pro-active and collegial attitude and could try to have constructive consultations with other departments. A good example is the landscape policy in Switzerland, where officials of the national landscape department made a 'landscape vision', together with other departments (2003). Goals of landscape policy were formulated, targeted to all relevant polices, like water and agriculture. Such way of working could be inspiration for officials in Spanish regions.

System of landscape plans

The Spanish regions have the intention to develop 'landscape plans': Basque Country seems to interpret such plans as project plans for physical developments at the sub-regional scale; Navarra develops a 'strategy' at regional scale.

A suggestion to officials, who prepare landscape policy in those regions, could be to look at examples in countries that have an 'established system of landscape plans' like Germany and the Netherlands.

Again Switzerland could serve as a reference case for a landscape plan at the *scale of the 'region'*. The national landscape plan of Switzerland (at a comparable scale as Navarre or Basque Country) has the character of a 'vision': it contains abstract goals / targets and indicators for monitoring. Main function is to sketch a 'picture' of the desirable future and to deliver a frame work for assessment of developments.

A landscape plan at the scale of the sub-region in other countries (Germany, The Netherlands) is interpreted as an 'action program' of physical planning developments. No separated project plans, but a coordinated and prioritized program for around 10 years, for which the (cooperating) municipalities have the function of producer or stage manager. A suggestion for Basque Country and Navarre is to investigate whether 'their' municipalities have competences and expertise to fulfill such a programming and executing function. If the answer is yes, then such a landscape plans could become an instrument and mandate of municipalities. Then the choice is whether such plan figure should become obligatory (like in Germany) or voluntary (like in the Netherlands).

Of course the municipalities would need the financial and executive backing of higher governments (like regions), especially on 'big projects' of landscape rehabilitation. But municipalities could play an important programmatic role and could involve private partners.

Detailed guidelines on quality

The region of Basque Country has a pilot for guidelines on landscape quality for some areas at sub-regional scale. A first comparison between these guidelines and the learning case of South Holland (NL) shows that the Dutch 'guidelines for spatial quality' are much more detailed and much more illustrated with maps, sketches and 'photo-designs'. Also the 'steering philosophy' seems to be different. South Holland has regulation on *spatial designations* / functions (they are rules for the municipalities), but the 'quality instructions' have character of *inspirations* and are open ended (municipalities are free to follow these or not).

Planning culture

Of course the cooperation between 'higher' and 'executive' governments has also aspects of planning culture. The case of Midden-Delfland with a 'multi-level' implementation organisation could be a learning case for Basque Country and Navarre.

Most important aspect of planning culture is the participation of NGOs and public into the preparation of plans. This will be treated in the following practices of sub-regional landscape planning.

6 Practice B) Landscape planning at inter-local level

The stakeholders in the Liveland project have chosen following 'good practices' of landscape planning:

1. Basque Country Regional Government (Department of Environment and Territorial Policy) presented the making of a "Landscape Catalogue" (a study to analyse landscape and define quality objectives) and the related "Landscape Guidelines" (on objectives) for the planning area Laguardia (inter-local scale).

2. Navarre Regional Government (Department of Environment) presented the protection (designation and regulation) of the "Orgi Oak Forest" and of the "Natural Recreation Zone" in the rural Basabura Valley.

3. Ljubljana Urban Region (Regional Development Agency) put forward the making of the "Expert Basis for Regional Spatial Plan" (study) for the Lubljana urban area.

4. Offenburg Local Government (Municipal Service) presented the making and implementing of the "Landscape Plan" (action plan on nature and landscape) for the area of Offenburg and surrounding rural municipalities.

5. Midden Delfland Local Government (Municipal Service) put forward the making and implementing of the "Landscape Plan" (action plan on landscape) for the open space of Midden Delfland and surrounding urban municipalities.

6. Thy National Park (Agency of a foundation) put forward the making and implementing of the "Plan" (work plan on management of nature and cultural landscape) in the National Park area (inter-local scale).

6.1 Summary Basque Country: Study Laguardia

Central in the 'good practice' of the region of Basque Country (BC) is the making of a study on Catalogue and Guidelines in the sub-regional area of Laguardia, which has been prepared in the years between 2011 and 2012. The landscape Catalogues and Guidelines are the operational materialization of the Basque Government commitment with the ELC and its desire of integration of landscape consideration into spatial planning.

In the BC the concept of 'landscape' (as integrating approach) is rather new. The government, inspired by the ELC, aims at giving 'landscape' legal recognition and integrating landscape in the already existing planning instruments within the successful and stable spatial planning system. The study on Laguardia, entrusted by the Department of Environment and Territorial Policy, is one of the three pilot cases being undertaken nowadays in the Basque Country. The idea is that all the 15 planning areas in the Basque Country develop their Landscape Catalogues and Guidelines. But this will be done in several stages.

The main ambition of the study is the filling-in of methodologies (from analysis to action) and the development of instruments, to influence other governments and private stakeholders.

Landscape **CATALOGUES**: Analyze and evaluate landscapes in each of the Functional Areas and define quality objectives. The identification of many landscape qualities on maps is bundled in Landscape Units, which have a certain character distinguished to others. The evaluation of landscape values results in a map with Areas of Special Interest, which is the basis for further policy development. Special Interest can cover high identity value as well problems because of degradation. Related to the geographical information, next phase is elaboration of objectives and measures. The objectives represent principles of conservation (for the whole area), protection of certain landscapes and creation of new landscapes.

Landscape **GUIDELINES**: Legally incorporate the landscape quality objectives into territorial planning. Regarding actions is distinguished between direct rules indirect rules and recommendation. Most actions are related to Areas of Specific Interest and cover countryside (vineyards, orchards) and built-up areas (historical sites). Derived from the Guidelines there are two mechanisms of measures implementation:

Landscape ACTION PLANS: For implementation of specific measures in specific areas that may require special attention due to its vulnerability. The study on Laguardia made proposals for several of such plans, some on specific landscape units (like a river valley) and some for a big area (like a network of scenic routes).

STUDIES OF LANDSCAPE INTEGRATION: related to projects and activities that will potentially have a significant impact on landscape

The process of public participation has been quite ambitious and challenging. Several forms of informal participation focused to stakeholders, different actors and general public were used like interviews (also on E-mail), workshops / round tables and social media.

6.2 Summary Navarre: Protected area Orgi

The case of Navarre Region is a Protected Landscape including the Natural Recreation Aea of the Orgi Oak Forest under regional law on Natural Reserves (1996). Its vision and strategy and is mainly related to natural character and biodiversity protection. Educational and recreational component is added in the enclave of Orgi oak.

In its execution and implementation process has been public participation processes as befits environmental and territorial procedures established by law in Navarre. Plans of use and management of natural reserves of Navarre are considered planning instruments at subregional level.

The character of the protected area is "countryside" and is determined by human use in the past: is a mosaic of oak forest and pastures of traditional uses (livestock and agriculture). Focus of protection is on nature and biodiversity values. One of its peculiarities is the presence of a type of oak that can live in the waterlogged soils at the bottom of the valley, the English oak, many of which are a hundred and even two hundred years old. Those primitive oak groves were spread over the humid valleys of northern Navarre. Since recent times, the action of man has made them disappear, converting the land into agricultural terrain and prairies.

An important goal of Navarre is ‘multifunctionality’ and compatibility of strict nature protection (European importance and EU Natura 2000 network) and recreational use as Golf Course.

17 years of functioning (1996/2013) have taken place with the experience of public use of nature, Orgi has received 650,000 visitors who are satisfied with the space. Monitoring annual report of indicators exist. In the case of Orgi is monitoring the indicators of participation, volunteerism and environmental education.

ACHIEVED RESULTS

- Establishment of a local management organisation shared by the Regional Government and public institutions, private organisations, etc.
- Change of the local policy on environmental management in direction of public use, conservation of nature, and environmental education.
- Creation of local employment, to develop the plans and programs of Orgi.
- Preparation of environmental volunteer programs.
- Through the steering of the type of visitors to the space, and attitudes of these, the environmental impact on the space has been diminished.
- Adapt a natural space for persons with different types of incapacities.
- Create a meeting place between different social groups , urban and rural, facilitating the integration of other cultures and creating access, without exclusions, to nature.
- Management of a protected area, through economic austerity and with rustic criteria.

6.3 Summary Ljubljana: Study Regional Spatial Plan

The Ljubljana Urban Region in Slovenia is an informal, voluntary cooperation of 26 municipalities, chaired by with the central city of Ljubljana. The study and development of a Regional Spatial Plan was commissioned by the Regional Development Agency, which is a national agency. The 'expert basis' for this Plan was prepared between 2008 and 2009. The comprehensive study addresses all relevant spatial issues (environment, demography, settlements, infrastructure etc.) and gives special attention to natural resources and landscapes, in particular the less recognized ones.

The Ljubljana Urban Region is inspired by the European Landscape Convention and searches development potentials in landscapes, going further than only protection as Landscape Park, which exists since long in national policy.

In the study 3 scenarios of general spatial developments are presented, assuming different future changes: gradual change, high ambition on quality of life and adoption to climate change. The outcomes of these scenarios were translated into spatial concepts and guidelines for landscape development. It contains guidelines for protected areas (concept of protection through use, professional management), forestry (sustainable management) and agriculture (organic production and urban-rural partnership).

A second ambition is the active participation of the interested stakeholders (in particular the local public), which would enable them to have a stronger and more creative influence on important spatial decisions. Basic instrument for the 'productive protection' of the landscape would be a balance in spatial interests and appropriate land use. The plans indicates that more stakeholders should be involved in a new program of activities as well. Landscape planning could thus be the creative fusion of development needs with protection mechanisms, that produces a high quality landscape around the Slovenian capital.

The results of the study in the years after 2009 were not adopted by the political decision makers in the cooperation of the Ljubljana Urban Region. So until now (2013) no further activities are under way for the implementation of a Regional Spatial Plan.

6.4 Summary Offenburg: Landscape Plan

Central in the 'good practice' of the municipality of Offenburg is the development of the Local Landscape Plan (LLP), which has been prepared in cooperation with surrounding municipalities in the years between 2006 and 2013. LLP and Land Use Plan are prepared in parallel, linked processes.

In Germany 'landscape' is since long linked with spatial planning. Landscape is seen as part of nature policy, where 'nature' is the overarching concept. The country has a tradition of comprehensive planning, including an elaborate system of plans on all levels. The drawing up of landscape and spatial plans is obligatory. A municipality is an executing government, with strong instruments for (detailed) steering of spatial developments. The LLP binds the involved governments; the local spatial plan binds private actors.

Main ambition of the LLP Offenburg is protection and improvement of biodiversity, natural resources and beauty, subsidiary to national law. Handling of spatial conflicts and deciding on future spatial developments (conforming to higher order plans) are the main functions of the plan. Goals are related to protection, development and restoration. These goals are detailed for nature, landscape and environment and represented on maps in a detailed way.

The LLP delivers a program of actions of governments, mainly as 'physical measures'. The program contains 3 items: green spaces and recreation, natural household and protected areas. A large amount of 'tables with measures' are delivered, which contain short descriptions of concrete physical developments.

Another challenge in Offenburg was the cooperation between governments, officials as well as politicians. Participation of private stakeholders in the planning process took place, but in an extensive way. There was informal input from experts from NGOs.

Implementation of the LLP has started via the Land Use Plan and related permits.

Implementation of 'autonomous' projects, regarding nature, landscape and recreation seems rather weak, probably because of lack of financing. There is no cooperative execution organisation.

6.5 Summary Midden Delfland: Landscape Plan

Central in the 'good practice' of the municipality of Midden-Delfland (MD) is the making and executing of the Local Landscape Plan (LLP), which has been prepared in cooperation with other governments in the years between 2007 and 2009. This plan is now implemented in an execution organisation, which includes a bigger area of green spaces.

In the Netherlands 'landscape' (as spatial quality) has since long been integrated in the spatial planning on all levels. The country has a broad set of plans on space, but recently only on regional and local level. A LLP is a voluntary instrument of the municipalities. Spatial plans on regional and local level are obligatory. A municipality is an executing government, with strong instruments for (detailed) steering of spatial developments. The LLP binds the involved governments; the local spatial plan binds private actors.

Main ambition of LLP is creating a 'green space' in an urbanized area of very high density. Goals are related to the relation (partnership) between city and countryside and to management of landscape by agriculture (dairy sector).

In MD there are spatial conflicts between such components as recreational areas (parks) and agrarian landscape (accessible cultural landscape) versus other functions, like spread dwelling (which should be an exception outside urban areas) and industrial agriculture (horticulture). Choices have been made in earlier spatial plans (called 'visions'); the LLP makes an operationalization.

The LLP focuses not on designations, but on development and management of landscape. It defines actions of governments, mainly as 'physical measures'. The objectives of the LLP are not translated into measurable targets in words, but directly carried on to concrete measures, mainly described on maps. So the 'Perspective 2025' is an action plan, which includes an overview on a synthesis map, 'principles of design' (guidelines) of future spatial developments and additional maps with networks of ecology, water, public transport and 'slow roads'.

During the process of making the LLP stakeholders and the officials of the municipalities felt the need of a more detailed approach, which resulted in a elaboration of smaller landscape units (19 polders). For each polder a map was made which showed the existing qualities and another map showed the desired development direction. This approach was crucial for the success of the LLP. The 'elaboration per polder' includes maps with description of character and designation of nature, recreation, demolition of glass houses and new dwellings. These detailed guidelines should be useful in the practical execution of the plan, especially in permits for private initiatives of developments.

Another challenge of MD municipality was the participation and involvement of private stakeholders in the planning process. During the preparation of the LLP many and diverse stakeholders (organisations and individuals, also from surrounding cities) were involved. Many working forms were used, like 'cafés', 'design tables' and 'kitchen table talks'. ie..

In the implementation of the LLP a lack of financial resources (because of national budget cuts) has been a limiting factor. But in the execution organisation, together with other governments, a solution will be found.

6.6 Summary Thy: Management Plan

The Governmental foundation y for the maintenance of the National Park (NP) Thy prepared a Management Plan in 2009 and 2010. This foundation has no formal power, but the task to coordinate the management of the protected area and to be mediator between the different stakeholders and authorities. The NP was established in 2007 by the Danish ministry of Environment, after a pre-study in which all stakeholders and authorities in the designated area were involved and came to a local agreement. The decision making process on the goals and zoning of the NP was a combination of bottom-up negotiations and top-down legal approval.

The NP Management Plan is a work plan on the activities and of the NP Governmental foundation. It is based on voluntary cooperation with the land owners (Danish Nature Agency and local farmers). The goal is to protect and develop the nature (dunes, heath and forests) and the landscape (historic sites). Further to develop outdoor activities and tourism in a sustainable way and to promote education.

The measures of management are targeted to reach a balance of protection and use for recreation, business and fishing. One of the instruments is the zoning of different types of protection. The NP Governmental foundation made an evaluation of the Management Plan.

7 Learning on landscape planning

Following text gives first comparisons and observations about the six practices of sub-regional planning, also looking at the learning goals and the reference cases in appendix 2.

7.1 Learning on inter-local studies

In both regions around Ljubljana and Gothenburg (region of Götaland) studies have been made on future spatial developments, including all functions like working, housing, recreation and infrastructure. Landscape was only one of the items. Common goal in both cases was the building of policies on a higher scale (around a central city) and the promotion of cooperation between municipalities. It is remarkable that the study for LUR was not accepted for common planning. Probably main challenge is to create common interests between the central city and the surrounding rural communities. This problem is seen in many cases of spatial planning in Europe. Gothenburg could be a learning case for Ljubljana. But more examples of voluntary cooperation could be found, i.e. the 'metropole region' of the German cities of Cologne and Bonn. [Website]

7.2 Learning on local landscape plans

Comparing the Landscape Plans of Midden Delfland (MD) and Offenburg it is obvious that there is much resemblance in quality goals and in planning culture. Some first observations can be made:

- There are big differences in analysis, where the inventory and analysis in Offenburg is much broader (including environmental items like soil, water and air pollution) and detailed compared to MD. Also the methodology in Offenburg is more explicit.

- The description of goals is not very different. Offenburg is a little more focused on nature protection.

- Regarding physical measures and guidelines for future developments, the 'design principles' in MD are much more detailed as the 'tables with measures' in Offenburg. The elaborations per landscape unit ('polder') in MD are not only very detailed on developments, but also much more illustrated.

- Further differences on monitoring can be seen. The plan of MD mentions only short the 'guardianship' of quality and the execution plan includes a program of actions. The LLP Offenburg gives a framework of around 30 monitoring indicators and 'measure units'. The reporting on the 'state of landscape' of Offenburg seems to be more elaborated.

- Biggest difference appears in the execution of measures. Where Offenburg seems to stand alone in implementation, MD takes part in an execution organisation and cooperates with other authorities. Especially the 'autonomous' landscape actions as public service, like construction of recreational connections, seems to have better chances in MD.

The officials of the municipalities and even more the experts who make such 'action programs' could organise a much 'deeper' learning process (about methodology of analysis and strategies of steering) if they would take more time for detailed presentations, critical review and mutual exchange of opinions.

7.3 Learning on landscape guidelines

As stated before (in chapter 5 about regional landscape policy) the regional policy makers of Basque Country, Navarre, Catalunia and South Holland could learn from each other.

Assuming that municipalities have much more influence on spatial and landscape developments, a suggestion to regional governments could be to create effective 'indirect' strategies of steering of improvement towards 'quality' landscapes. In a planning culture of not only top-down rules, but also multi-level cooperation and good consultations, it could be possible to develop an effective and detailed steering of quality developments.

7.4 Learning on nature protection

Several Stakeholders in LIVELAND (Navarre, Thy, Ljubljana) are seeking new strategies of protection, combined with adopted use (recreation, sustainable exploitation of natural resources). The combination of biodiversity and production ('green economy' and tourism) should be carefully investigated. Zoning of recreational use is a broad applied practice in Europe and seems to be a mature technique. In Management Plans a precise balancing of interests and effective measures should be implemented. Regarding 'green economy' or sustainable exploitation, more learning could be organised, not only with National Parks, but especially with 'soft protected' areas like Biosphere Reserves. [website IUCN]

7.5 Learning on participation

Comparing the processes of making studies, plans or guidelines, it is obvious that some Stakeholders search for participation going further as the formal 'good governance'. Especially BC and MD have created informal participation (creative working forms), have involved not-organised citizens and used ICT techniques and social media. It seems there is a mature technique for participation with guidance for process.

8 Appendix 1: Format of Baseline Analysis Reports

1. Introduction

The practice: making and implementing a study, policy document, plan

The actor (stakeholder in Liveland)

Back ground and context

2. Planning system and culture

Interpretation of key concepts

Planning system

Planning culture

3. Geographic description of the practice case area

4. Challenges and ambitions of practice case

Content

Processes

5.Description of the planning practice

5.1 Planning process and decision making

Time line of the planning process

Participation

Procedures and decisions

5.2 Content of the planning practice

Analysis

Vision and objectives

Actions and measures envisaged

Implementation strategy

Actions and measures implemented

Monitoring and evaluation

6.Links to European context

7. Summary of the practice

9 Appendix 2 External Reference cases

The reference cases are described according to the following structure:

a) Location (including location map);

b) Reason for inclusion as a reference case;

c) General geographical and demographical information;

d) Characterization of landscape or spatial planning approach;

e) Headlines of the landscape or spatial plan, and current status (methodology, instruments and planning culture);

f) Short history of the development stages of the plan;

g) Crucial success factors of the landscape or spatial policy;

h) Stakeholders who identified this reference case

9.1 Reference Case Province South Holland

1. Location

The Province of South Holland is one of the 12 regional governments in the Netherlands. It is part of the "Randstad" in the West of the NL, and includes the urban agglomerates of Rotterdam and The Hague.

2. Reasons for inclusion as a reference case

- Long tradition in spatial planning and in application of instruments contributing to environmental quality and liveability.
- Large experience in landscape planning.
- Urban–rural relationships in densely urbanised / metropolitan area.
- Vivid practice in involving stakeholders and inhabitants in spatial planning procedures

3. General geographical and demographical information

The area of the PSH consists of a metropolitan area in the Delta of the Rhine and Meuse rivers, with big conurbations, one of the largest sea harbours in the world and two big rural areas called the Green Heart and the Delta. The PSH has a surface of 2800 km^2, around 3.5 million inhabitants and a population density of 800 inh/km^2.

4. Characterisation of landscape or spatial planning approach

The PSH has a tradition of spatial planning of around 50 years. Main challenge is the 'steering' of the urbanisation. Landscape is seen as 'green space'. One of the five main tasks of the Spatial Vision (the formal spatial plan) is a 'vital, diverse and attractive landscape'. Recreational space near urban areas is seen as an important contribution to a high quality and liveable environment of citizens.

The instruments of spatial planning are a map with spatial **functions** (like urban area, agrarian landscape and natural area), a map with spatial **qualities** (like distinguished river area or characteristic work area) and a **regulation on space**. The key elements of the function map and regulation (i.e. the borders or 'red lines' for urbanisation) are binding for local spatial plans of municipalities.
Next to binding instruments the PSH has new **quality guidelines** for the rural areas. These 'area profiles' are based on the provincial map with spatial qualities. They are a source of inspiration for local governments and private developers. The guidelines are given in a report, which contains instructions and examples on several aspects of spatial quality, usable for development and management of space. As example a summary is given of the area profile of Midden-Delfland.

Map 5 Quality map (above), area profile (mid) and landscape plan (under)

5. Headlines of the landscape or spatial plan, and current status (methodology, instruments and planning culture)

The report on quality guidelines for Midden-Delfland (a 'green' 'buffer zone' between Rotterdam and The Hague) contains an explanation of the guidelines, a historical analysis of the area and a concrete description of the legend of the provincial quality map. The 'quality instructions' (analysis and ambitions) consist of a bundle of maps, sketches and photos. Here one example is given: quality of leisure landscape.

Inspirations for '*diverse and conjoined free time landscape*'. The area of Midden-Delfland is very close to densely urbanised areas. That is why the entire area, with all rural functions, is seen as leisure landscape. A network of walking and cycling paths link the different rural and urban zones. By this way the agricultural landscape is unlocked for recreationists. Only the natural areas are relatively inaccessible (until now). Near the urban borders specialised recreational areas form an 'artificial' landscape. The ambition is to create more possibilities to enjoy the agrarian and natural landscapes. This includes new walking paths, also in some nature reserves. Near the city borders new attractive elements (i.e. allotments gardens, plantation, recreational 'portals') should be created.

Map 6 *Quality map or 'area profile' on leisure landscape*

Legend includes:

- Network of cycling and walking routes
- Waterways
- Artificial (recreation) landscapes
- Enjoyable (leisure) landscapes (whole rural area)
- Nature areas

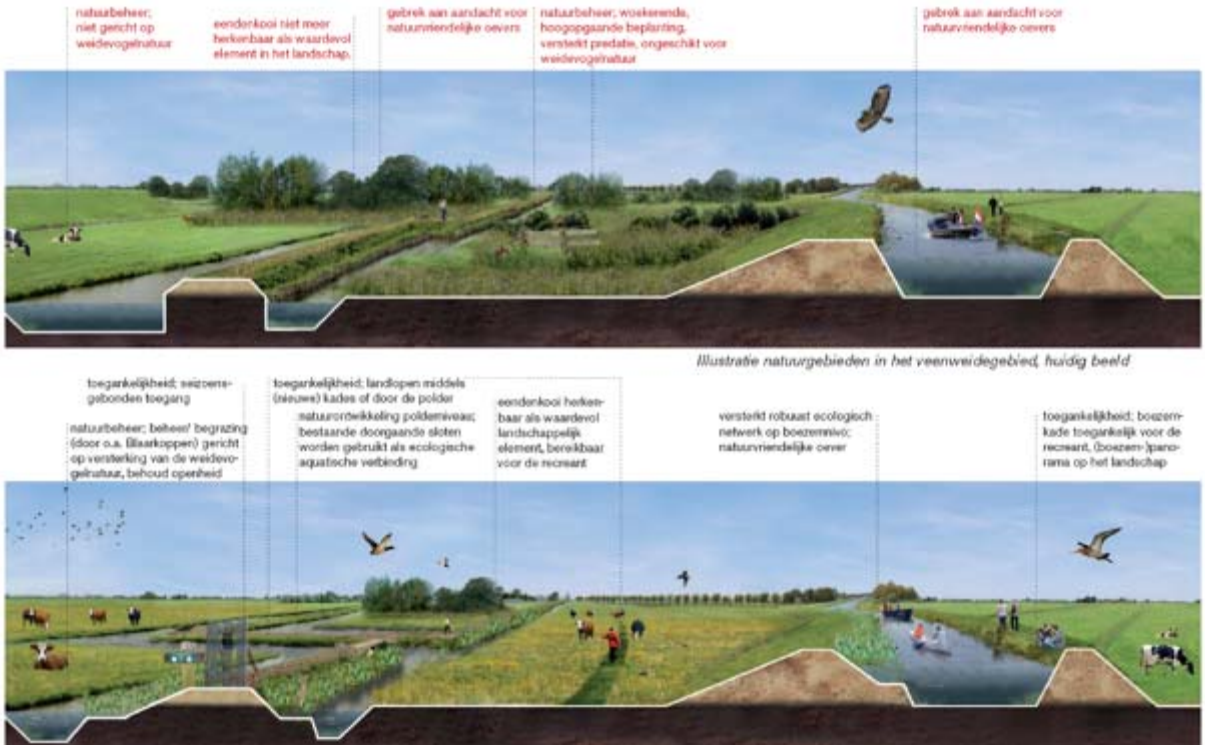


Figure 2 *'Photodesign' on enjoyable nature area in peat meadows (above: problems; under: ambition or desirable future)*

6. Short history of the development stages of the plan

The report of the 'area profile' was made by a commercial office of landscape architects. There was a group of accompaniment with local governments (including the big cities) and local NGOs for nature , recreation and agriculture. The report was finished in March 2012 and the making of the study took around three years. The document was approved by the government of the province and published on the website.
http://www.zuid-holland.nl/documenten/opendocument.htm?llpos=333876127&llvol=0

7. Crucial success factors of the landscape or spatial policy

The PSH considered that the 'classical' planning instrument of regulation (prescription and prohibition) of spatial functions is not enough to reach a 'good' spatial quality. Therefor these guidelines as 'inspiration' are developed. Because the guidelines are very new (around 6 months), it is not possible to investigate the success of this policy.

9.2 Reference Case Catalunya

1. *Location*

Catalonia or *Catalunya* in Catalan s an autonomous region in Nort-Eastern Spain, bordering France in the Pyrenees.

2. *Reason for inclusion as a reference case*

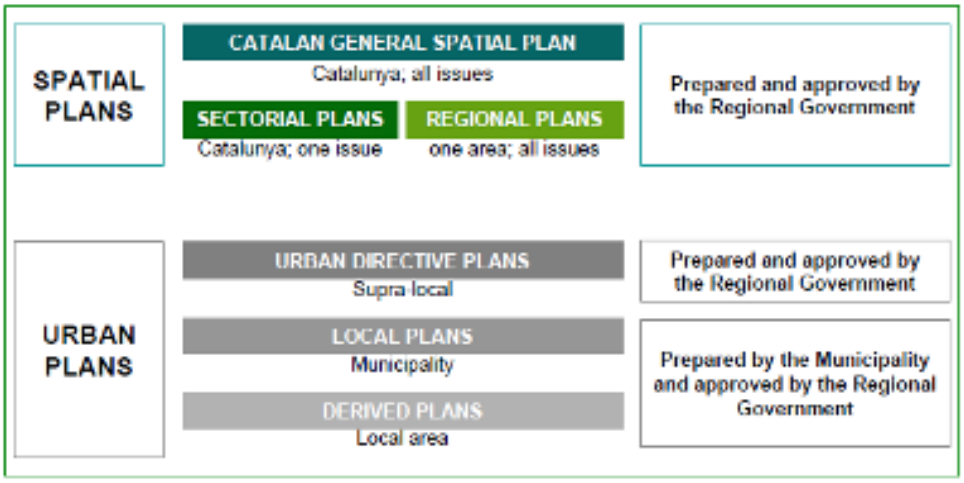
Ample experience with spatial planning and landscape management, among other things exemplified by the Catalan Landscape Observatory.

Map 7 Location map of Catalonia

3. *General geographical and demographical information*

Catalunya has a surface of about 32,000 km^2 and a population of 7.5 million people. It is characterised by a strong diversity in landscape and land use, ranging from the tourist resorts on the coast to the high mountains of the Pyrenees. Most of the inhabitants live in Barcelona and Girona. Population has grown strongly in the last 60 years. Moreover there is an increase in foreign inhabitants

4. *Characterisation of landscape or spatial planning approach*



Headlines of the landscape or spatial plan, and current status (methodology, instruments and planning culture)

- Open spaces are considered an asset in spatial planning
- 71.2% of Catalan territory is safeguarded from urbanisation
- New urban development to be realised adjacent to existing conurbations

5. *Short history of the development stages of the plan*

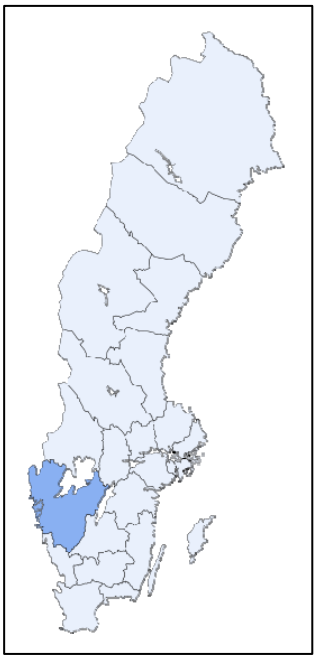
A study of the existing and potential planning structure of the Region was made by a working group established by the regional government. Subsequently, local govern-

ments and local NGOs for nature, recreation and agriculture were involved. The document was approved by the regional government after four years.

6. Crucial success factors of the landscape or spatial policy

- intensive consultation phase leads to high commitment of both civil society and public authorities
- clear division of responsibilities for spatial planning instruments at various governance levels enhances implementation

9.3 Reference Case Västra Götaland



Map 8 Location of Västra Götaland County in Sweden

1. Location

Västra Götaland County (Swedish: *Västra Götalands län*) is a county or *län* on the western coast of Sweden.

2. Reason for inclusion as a reference case

Acknowledged example of good practice in spatial planning and landscape management at regional level, and recent experiment of new governance styles in Sweden (see e.g. PLUREL, 2010).

3. General geographical and demographical information

The county is the second largest (in terms of population) of Sweden's counties and is subdivided into 49 municipalities (kommuner). Its population of 1,590,000 amounts to 17% of Sweden's population. The capital and governmental seat of Västra Götaland County is Gothenburg.

4. Characterisation of landscape or spatial planning approach

According to ESPON 2.3.2, the style of planning in Sweden is classified as a mix of comprehensive integrated approach and regional economic approach. In the second half of the 1990s, a pilot project was launched to identify new local government areas in Västra Götaland. The main objective was to encourage greater democratic participation at local level, but beyond the narrow municipal level. The pilot continued until 2010. The region has set up a directly elected regional council. It continues to manage medical and health services, but also has full responsibility for regional development policies, which had been the task of the County Administrative Board before.

5. Headlines of the landscape or spatial plan, and current status (methodology, instruments and planning culture)

According to the Swedish Planning and Building Act (PBA) the production of a national plan is not obligatory. However, there are national level policy statements

referring to areas and issues of national significance. These statements provide guidance.

As regards regional level the Act provides for a regional plan to be carried out on a voluntary basis. If matters concerning the use of land and water areas in several municipalities require joint study and coordination, the government may appoint a regional planning body which will be responsible for regional planning in the specified municipalities. However, it will not be established if the municipalities affected are generally opposed to it. The planning body can work out and adopt a formal plan for a region. This plan has no legally binding status but would serve as a basis for decisions concerning the lower-level plans. It may also suggest principles for the use of land and water areas. The plan needs no higher approval, but the government can annul it if the national interests are not taken into consideration. So far, the instruments of regional physical planning have not been much used. Currently, regional planning only exists in the Stockholm and Göteborg areas. In Stockholm the County Council has a special obligation to act as a regional planning body. However, physical plans at the regional level result basically from sectoral planning, e.g. plans for road network, traffic, spatial distribution of school facilities, hospitals etc.

According to the PBA, every municipality should elaborate an extensive comprehensive plan for its territory. This plan guides decisions on land and water use. The plan is not binding for either public or private sector activities. It should however, be taken into consideration in the processes of decision-making on the use of water and land. Municipalities are also responsible for detailed development plans exerting more detailed control on land use and development. The detailed development plan has a strong legal status and determines more or less the right of building development in individual blocks and wider areas.

6. Short history of the development stages of the plan

No information available

7. Crucial success factors of the landscape or spatial policy

Normally the municipalities alone decide if and how an area shall be planned and developed, and their plans need no approval from any higher level. However, the County Administrative Board can annul their plans in specific cases (national interest as described in the Naturresurslag, or a regulation concerning several municipalities not taken into consideration). In practice it rather influences the plans by consultations before being adopted by the municipalities. On the other hand, physical planning on the regional level and a strong cooperation culture are crucial succes factors.

9.4 Reference Case England

1. Location

England is a country that is part of the United Kingdom. Most of England comprises the central and southern part of the island of Great Britain in the North Atlantic. The country also includes over 100 smaller islands.

2. Reason for inclusion as a reference case

Landscape character assessment approach and well-elaborated multi-level spatial planning system.

3. General geographical and demographical information

In geological terms, the Pennines, known as the "backbone of England", are the oldest range of mountains in the country. Their geological composition includes, among others, sandstone and limestone, and also coal. There are karst landscapes in calcite areas such as parts of Yorkshire and Derbyshire. The Pennine landscape is high moorland in upland areas, indented by fertile valleys of the region's rivers. They contain three national parks, the Yorkshire Dales, Northumberland, and the Peak District. The English Lowlands are to the south of the Pennines, consisting of green rolling hills, including the Cotswold Hills, Chiltern Hills, North and South Downs—where they meet the sea they form white rock exposures such as the cliffs of Dover. The granite Southwest Peninsula in the West Country includes upland moorland, such as Dartmoor and Exmoor, and enjoys a mild climate; both are national parks.

4. Characterisation of landscape or spatial planning approach

The style of spatial planning that exists in the UK can be categorised, following the example adopted in the ESPON 1.1.1 project, as belonging, together with Ireland, to the British style. The British legal style evolved from English Common Law and the principle of precedent. This system is based on the accumulation of case law over time. Another key distinction between the British/Irish system and the rest of Europe relates to the powers given to local government. One author describes the administrative system in Britain as a dual system in which central government sets legal and functional constraints for local authorities and then plays a supervisory role.

5. Headlines of the landscape or spatial plan, and current status (methodology, instruments and planning culture)

Local and county level

The Local Development Framework is the local planning policy instrument through the UK. This is the primary source of policy when decisions are made on development proposals. The development plan may comprise a number of different documents depending on progress in preparing plans.

All non-metropolitan district councils in England have an obligation to prepare one district-wide local development framework. Authority-wide local plans have a 10-year horizon, or longer for conservation, land protection policies and long-term phased development. The plan must be in general conformity with the structure plan and national and regional guidance. It is the primary consideration in the control of development. Local plans set out detailed policies and proposals allocating for specific purposes, together with general policies which are used to guide development control.

National guidance on landscape

England has a tradition of planning policy 'guidances', which have no binding character. One of these is the Landscape Character Assessment (LCA) which is a national method (developed by the Countryside Agency) for describing an area in a systematic way for identifying the features that give the locality its 'sense of place' and pinpointing what makes it different from its neighbouring areas. These 'national landscape character types' (on a map for England and Scotland) should be translated in a 'local typology' (made by local experts) and used by local authorities for preparing (the motification of) a Local Development Framework. Only after acceptance in a local plan, the inventory and analysis get its 'teeth' and legally binding.

There is a practical guide to LCA for England and Scotland from 2002, which frequently used in the UK and also international. The successor of the Countryside Agency, called Natural England, prepared an update of the LCA methodology. But this (until now) is not accepted by the English government.

6. Short history of the development stages of the plan

England has a long history of spatial planning, based on an iterative planning cycle. Spatial plans at the county (15 years) and municipal (10 years) governance levels are regularly revised in a consultative way.

7. Crucial success factors of the landscape or spatial policy

- well-developed multi-level spatial planning and governance system
- clear possibilities for public consultation and participation
- well-defined system of landscape characterisation and monitoring

8. Overview of Dartmoor Natural Park

Dartmoor covers an area of 954 km^2 in south Devon, England. Among the specific features are the exposed granite hilltops, known as tors, as well as numerous bogs. Today, the landscape is being used for multifunctional purposes – water supply, mineral extraction (china clay mining), farming and even military training (about 11% of the territory). Dartmoor is sparsely populated – it is a home to about 35 000 people.
Dartmoor received a status of the National Park (NP) in 1951. It was amongst the first five NPs to be designated in England and Wales.

Planning and management of Dartmoor
Dartmoor was established during a top-down process and was managed by the Devon County Council until 1995. The Environmental Act (1995) laid the foundation for establishing of the free-standing Authority for Dartmoor, which took over the administration and management of the National Park from 1997. The NP is not state-owned; it has various landowners, both public bodies and private individuals.

Today, the Dartmoor National Park Authority (DNPA) is the sole local planning authority for land within the NP and is responsible for decision-making on all planning applications within

its area. Among the main responsibilities of the DNPA is developing and monitoring the implementation of a National Park Management Plan and granting planning permission.

Balancing use and protection

Much of the open moor is being held under common rights. Public can walk freely on about 47,000 hectares (48%) of open land, some of which is fully open for camping, bicycling and other activities. On approximately 7,000 ha applies the right of access on foot, with some limitations, such as camping. About 1/3 of the land in the NP is protected for its wildlife or geological value, known as Special Areas of Conservation (SACs) (27%) and nationally valuable sites (31% together with SACs), known as Sites of Special Scientific Importance (SSSIs).

For combining different conflicting interests and balancing use and protection, the recreational areas are divided into 'areas of heavy recreation use', 'areas for exploration and tranquility', 'quiet areas', 'areas of opportunity', 'linking town and country'. In the most heavily used sites the management plans are developed in partnership with landowners and commoners.

Linking economic development with protection of the NP and achieving the right balance are also considered highly important within the NP planning. In case of emerging conflicts, the conservation purpose is given a higher priority.

No concerns were raised about the need to regulate or manage the *visitors'* access to the NP and no absolute limit for a number of visitors was established. On the contrary, 'improving accessibility and widening participation' is among the key themes in the Recreation and Access Strategy, particularly for people with special needs and health problems.

The concerns were raised with regard to an increased use of motorized vehicles. Among the proposed measures in the current NP Management Plan is to reduce the percentage of visitors who arrive by and travel around the National Park by car. However, no concrete actions have been elaborated yet.

Evaluation and monitoring

Evaluation of the progress in realizing the Management Plan is done through monitoring the progress towards achieving the visions and ambitions and monitoring the delivery of the Action Plan. The State of the Park report is a baseline for monitoring the progress of the Management Plan, which contains quantitative data on the 'state' of Dartmoor National Park and describes the change and trends. It is planned to be published regularly, the latest version is from 2010.
When it comes to monitoring visitors and other activities, the following data is being collected in the Dartmoor NP:

- Annual number of visitors to information centres operated by DNPA;
- Percentage of hits on different areas of the DNPA web site are monitored monthly. The proportion of hits to the 'visiting' area of the web site.
- Total annual attendance of guided walks led by DNPA
- Total annual attendance on education events
- organised by DNPA
- Percentage of DNPA organised educational events by type (foreign, primary, secondary, higher education, outreach, special needs, youth oranizations, adult learning,
- Number of events considered through DNPA
- organised events system and the number of participants in events

- Total length of promoted long distance walking
- routes
- Total area of land open to public access
- % length of Public Rights of Way which are 'easy to use'
- Number of passengers using Dartmoor bus
- services annually
- Number of people using monitored footpaths (path counters)
- The use of moorland car parks, monthly (automatic car park counters)
- Annual number of tourist visitors to Dartmoor
- Annual number of staying visitors to Dartmoor
- Total annual visitor spend

The main tool used for monitoring the *number of people* visiting the National Park and their expenditure is the statistical model **STEAM** (2009). STEAM stands for the Scarborough Tourism Economic Activity Monitor and it is widely used by a number of NPs across the U.K. In 2005 Dartmoor National Park Authority commissioned the owners of STEAM (Global Tourism Solutions: GTS) to undertake a baseline survey of Dartmoor National Park for the year 2003.

STEAM

STEAM is a spreadsheet model, which relies on a range of local inputs which may vary from area to area. The more data input that can be provided locally the more consistent is the output. While the traditional measurement of tourism activity is from the demand side (e.g. visitor surveys), STEAM measures the tourism activities from the supply side, which is usually less time-consuming and less costly. STEAM is not designed to provide a precise and accurate measurement of tourism activities, but rather to indicate and monitor the trends. The confidence level of the model is within the ranges of plus or minus 10% in respect of the yearly outputs and plus or minus 5% in respect of trend.
Data used as an input to STEAM for the Dartmoor report included:

- A detailed list of local accommodation providers
- Information on occupancy percentages
- Bed stock for each accommodation type
- Tariff rates
- Attendance at major visitor attractions
- Visitor numbers to tourist information centres
- Local traffic monitoring data

The STEAM report in Dartmoor includes:

- Analysis by sector of expenditure
- Revenue by category of expenditure
- Tourist/visitor days (total number of tourists/visitors multiplied by the average length of stay)
- Tourist numbers
- Sectors in which employment is supported

STEAM provides measurement of day visitors which are staying away from home and visiting the area. Leisure day visitors to Dartmoor arriving from their own home outside of the area fall outside this definition. In order to get total tourist numbers STEAM output is supplemented with a survey of leisure day visitors.

9.5 Reference Case Switzerland

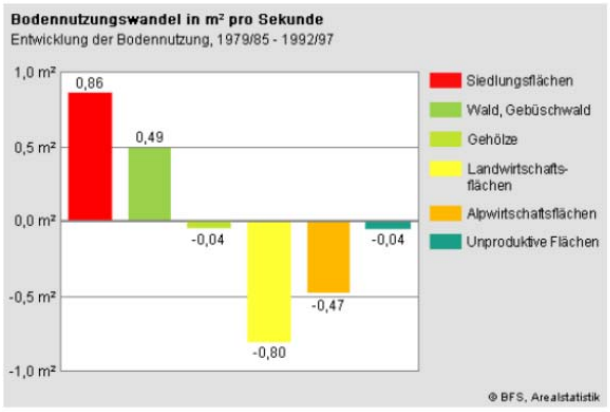
1. *Location (including location map)*

Switzerland (the Swiss Confederation) is a federal republic consisting of 26 cantons, with Bern as the seat of the federal authorities.

2. *Reason for inclusion as a reference case*

In Switzerland the fragmentation of landscape and the abandonment of rural land is a problem. In the densely populated 'lowlands' much formerly agricultural land is used for urbanisation. In the mountains much agriculture (adopted alpine land use) is replaced by woodland.

Change of land use in Switzerland (m2/sec)

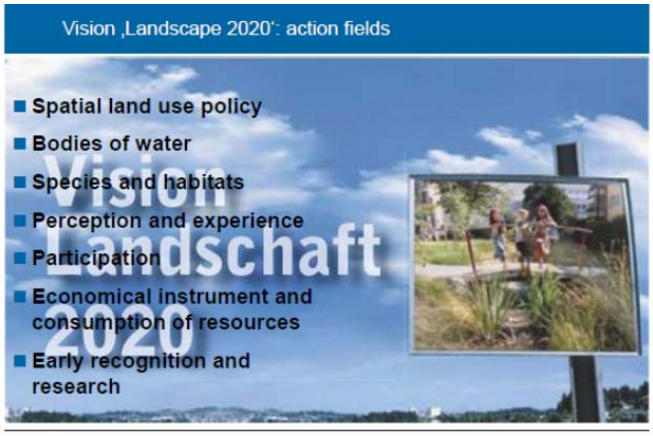


(Source: LABES, Bern,2010)

Unplanned spatial development and protection of heritage and identity of landscapes is therefore an important political issue. There is a bottom-up landscape initiative.

3. *General geographical and demographical information*

Switzerland is a landlocked country geographically divided between the Alps, the Swiss Plateau and the Jura, spanning an area of 41,285 km2. While the Alps occupy the greater part of the territory, the Swiss population of approximately 8 million people is concentrated mostly on the Plateau, where the largest cities are to be found.



4. *Characterisation of landscape planning approach*

Since 2003 exist a national landscape policy, inspired by the European Landscape Convention and based on an integrated and multisectoral vision ('Landschaftskonzept'), also related to sustainable and harmonious development.

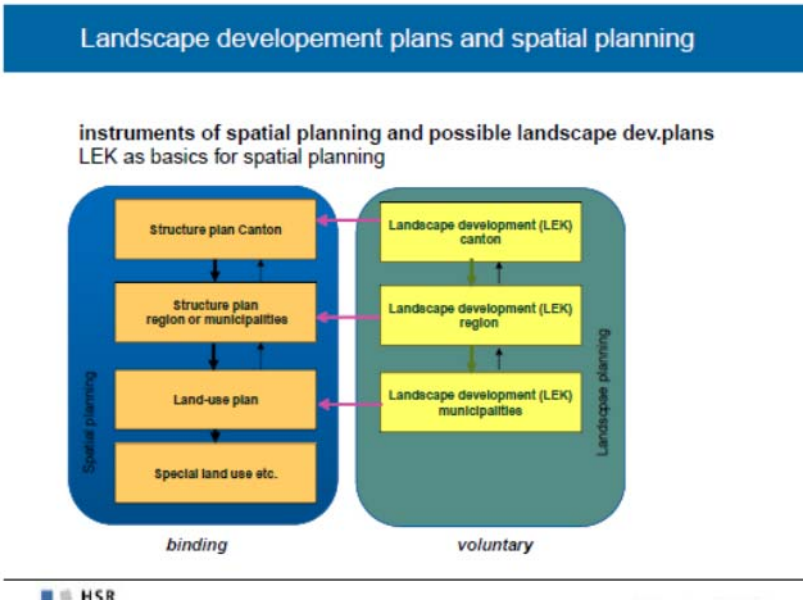
This vision 'Landscape 2020' aims to cooperate with spatial planning and to stimulate regional governments (Cantons) to develop 'Regional Parks' and voluntary landscape studies and plans, which should be integrated in obligated and binding spatial plans.

Action fields of the national government are:

- Sustainable land use policy e.g. 'green metropoles' (green in and around cities), adopted land use in agriculture and forestry
- Natural and clean waterbodies
- Green network of nature areas
- Diverse landscapes to be experienced by people
- Participation
- Sustainable use of economic resources
- Early recognition and research of landscape development

Headlines of the landscape or spatial plan, and current status (methodology, instruments and planning culture)

The system of landscape and spatial plans looks like the planning system in Germany, but it differs at the point that landscape plans are voluntary in Switzerland.



5. Short history of the development stages of the plan

The European Landscape Convention has inspired to a multisectoral and integrated development of the landscape planning system.

6. Crucial success factors of the landscape or spatial policy

- strongly embedded in the federal structure of the country with large autonomy of the Cantons over their own spatial planning
- strong appeal on local/regional identity and heritage values

9.6 Reference case: Fulufjället National Park Sweden

9. Location

Fulufjället National Park (NP) was established in 2002. It is located near the border to Norway.

10. Reason for inclusion as a reference case

Good experience with integrated planning, in proper subsidiarity with higher order planning procedures.

11. General geographical and demographical information

The size of the NP is around 38,400 hectares of which approximately 58% consists of wilderness area. Unique to Sweden is that the mountain area (made of sandstone) is not grazed by reindeers and therefore it has special vegetation.
There are no permanent residents within the national park area, but there are several villages in the immediate surroundings of the park.

12. Characterisation of landscape or spatial planning approach

Classical nature protection approach. NPs are strictly protected areas.
Recreation and education are goals, but nature prevails.

13. Headlines of the landscape or spatial plan, and current status (methodology, instruments and planning culture)

The Swedish Environmental Protection Agency and the local government made a management plan for the NP. The main aim is to protect the area with special vegetation and high natural values. Also to preserve the cultural historical values. Further to give opportunities for visitors to experience the quiet and untouched nature of the park. Zoning is used as the main instrument to combine conflicting interest. Specific to Fulufjället NP is the division of the national park area into four “experience zones”. This measure provides possibilities to protect the nature in vulnerable areas and give possibilities for recreational activities and improved accessibility in other areas. The management plan uses the concept of “recreational carrying capacity” to define the amount and type of activities that the park can bear, without unacceptable changes taking place in the physical environment or in the visitors’ experiences. The plan states that this capacity was high at the date of establishment of the NP, so more visitors can be received. Further the concept of “limits of acceptable change” has been introduced. Here one looks not only look at the consequences of too many visitors on nature and landscape, but also at the ways in which overcrowding influences the visitors’ experiences. However no absolute limit for a number of visitors has been set for the NP.

10 Appendix 3 Overview tables on learning goals

OFFENBURG Municipality	Internal good practice						Learning Goals	External reference cases	Learning Goals
	BC	*MD*	*OFF*	*THY*	*LJU*	NV			
Planning culture									
1.Methodologies of assessment/ analysis of landscape									
2. Planning system and competences with regard to landscape		x					Integration of landscape issues into spatial planning on regional and local level How can landscape planning and land-use planning better be integrated? How do sectoral planners work together not against each other?		
a) Planning processes & participation									
b)Planning procedures & decisions		x					How landscape issues and landscape planning can be better integrated in spatial planning, or how landscape issues could in another way get a higher influence on landscape planning (e.g. informal plans and action		
3. Challenges, vision & Strategy		x					Keeping open space in a highly agglomerated surrounding. Awareness rising within public for raising acceptance of specific measures How to work with strong economic growth? (Pressure on open space) How can this be done? Which strategy?		
4. Specific actions and measures (formal and informal)		x					Therefore the question of how the implementation measures and actions can be managed exceeding the limits of legal obligations? For a successful implementation of landscape related measures and actions, public acceptance seems to be of high importance. Any landscape related measures are depending on the public willingness to support or at least accept the measures conducted by the landscape administration. So besides the question of implementation in general, the question of awareness raising and public acceptance is highly interesting.		
5. Impact measurement				x			How can specific goals be developed and established in the plan? Which are the benchmarks? The evaluation and monitoring can only be conducted successfully if a benchmarking system is available.		

NAVARRE	Internal good practice						Learning Goals	External reference cases	Learning Goals
	BC	*MD*	*OFF*	*THY*	*LJU*	NV			
Planning culture	X						Treatment of territorial and sectoral scales	England and Scotland	Holistic vision of landscape.
		X	X	X			Tradition in making plans	English heritage	Developing specific measures to promote the historical aspects of landscape
					X		Role of national level and the integral vision from national to local.		
1.Methodologies of assessment/ analysis of landscape	X						Mapping/ cartography, landscape catalogues, and experience in guidelines Territorial scales and proceduresto incorporate yet the landscape guidelines in every instrument of spatial planning)		
		X					Guidelines		
2. Planning system and competences with regard to landscape					x		Coordination of different policies and actions of ministries with competences. Comprehensive approach to landscape. Incorporate the vision of the landscape in the system of territorial governance, culture and general education of citizens, and the management of other policies.	Switzerland	Coordination of different policies and actions of ministries with competences. Comprehensive approach to landscape. Incorporate the vision of the landscape in the system of territorial governance, culture and general education of citizens, and the management of other policies.
		X					Integration of landscape issues into spatial planning on regional and local level How do sectoral planners work together not against each other?	England and Scotland	References to Landscape Character Assessment in Planning Policy Guidance
		X	X	X			Particularly results on bottom-up approach		
a) Planning processes & participation		X					Relation between rural and metropolitan areas, Management and concrete guidelines	Catalonia	Landscape Observatory of Catalunya (mechanisms of participation and monitoring)
b)Planning procedures & decisions		X			X		Outlook of strategy with regard the steps to follow		
3. Challenges, vision & Strategy		X					Implementation of e.g. “guidelines of spatial quality”. How these can made accepted within public and therefore conducted?	France	Usefulness of landscape as a resource (territorial asset)
4. Specific actions and measures (formal and informal)		X						Galizia	Incorporating landscape guidelines to planning tools
5. Impact measurement									

BASQUE COUNTRY	Internal good practice						Learning Goals	External reference cases	Learning Goals
	BC	*MD*	*OFF*	*THY*	*LJU*	NV			
Planning culture		x					Institutionalise Landscape approach to the spatial planning system. Integration between different public administrations and sectorial policies. Key activities to preserve the landscape, and recognize their value Rural areas near densely populated metropolitan areas.	England and Scotland	Holistic vision of landscape.
1.Methodologies of assessment/ analysis of landscape		x					Spatial planning map and image plan (municipalities) in two different scales. Reach a "maturity" in the municipalities, so that they would be able to put some territorial rules by themselves.		
						x	Data: opportunity for exploring a series of indicators to monitor landscape development.		
				x			Nature conservation areas		
					x		3 levels of planning, national, regional and local: need of regional boost.		
			x				Comprehensive analysis of a wide range of territorial elements and references that take part in the assessment of landscape		
2. Planning system and competences with regard to landscape		x					Co-participation between public stakeholders. Reduce particular interests or competences` importance, and boost a holistic approach to the territory.	England and Scotland	References to Landscape Character Assessment in Planning Policy Guidance
a) Planning processes & participation		x					Development plan: Start planning from spatial quality.		
		x					Interactive and participative process; institutions and stakeholders working together with professionals	Catalonia	Landscape Observatory of Catalonia (mechanisms of participation and monitoring)
				x			Decentralized management with a board which prepares a plan for the park development		
					x		Basis for regional spatial plan which includes a general landscape plan, but it is not officially accepted		

			x				The shown interest in getting the awareness of the population for the need for a sustainable development.		
b)Planning procedures & decisions		x					Guidelines for spatial quality, made by the municipalities, local governments working together. Municipalities own planning tool. Different stages (their scales) of planning are well linked. Operative Planning and strategic content (not only legal).		
	X					x	Law-basis to implement landscape strategies.		
				x			National plan which defines areas to be protected, where to locate recreation and how to manage agriculture and forestry		
			x				The decision of achieving the reconciliation between economic development and preservation of natural resources		
3. Challenges, vision & Strategy		x	x	x					
4. Specific actions and measures (formal and informal)	x	x	x	x	x	x	Need of learning from other experiences and create “nets of knowledge”.	Galicia	Incorporating landscape guidelines to planning tools
5. Impact measurement			x				Need of measure indicators: recreation of open spaces, protection of nature qualities, remediation or improvement of natural balance.		

MIDDEN DELFLAND	Internal good practice						Learning Goals	External reference cases	Learning Goals
	BC	*MD*	*OFF*	*THY*	*LJU*	NV			
Planning culture				X			Strong planning culture.		
			X				Strong planning culture. How to organize financial support for high quality planning? What arguments can be used in discussions about budget cuts?		
	x						How can Midden-Delfland further improve the support and relationship of citizens and countryside?		
					x		Bottom up commitment for regional scale of planning. How can Midden-Delfland and South Holland further improve multi-scale cooperation? How to organize regional commitment and cooperation (without the formal structure of a region!) between municipalities?		
1.Methodologies of assessment/ analysis of landscape	x						Landscape catalogues and regional guidelines. Can these indicators be used in the definitions of 'spatial quality' of South Holland?		
						x	European Spatial Development Perspective Integration with heritage How integrate these goals on subregional scale		
2. Planning system and competences with regard to landscape	x					x	Socioeconomic instruments made suitable for landscape planning Inspiration for new socioeconomic instruments for the quality development of Midden-Delfland? Which elements of these plans are applicable for Midden-Delfland? Inspiration for better integration in the Midden-Delfland case?	Catalonia Germany : Frankfurt, Ruhrgebiet Italië: Milano	How to protect surrounding agricultural area's from urban development Landscape development and open spaces in urban areas
					x		Cooperation city of Ljubljana with surrounding municipalities How effective is the informal interaction between Ljubljana and the smaller surrounding municipalities? What's the most effective mix and why?		
			x				High integration of landscape plan and land use plan		
a) Planning processes & par-	x	x	x	x	x	x	Long term cooperation in multilevel planning. How to get and keep		

ticipation	x	x	x	x	x	x	commitment for long term goals during the process of implementation? (without participants withdrawing from the shared responsibility) speed in procedures and making decisions		
b)Planning procedures & decisions	x	x	x	x	x	x	What is needed in the process and procedure to make good and democratic decision as quick as possible? More freedom, less rules and still good spatial and landscape quality in an urban area: what are key elements for success?		
3. Challenges, vision & Strategy				x			How to attract private investors, but protect the quality of the landscape		
	x						How have Mungia and Lekeitio the implemented key elements of Citta slow in their local land use plans?		
	x				x	x	How can N2000 rules be an advantage for finding new socio-economic carriers of the landscape?		
4. Specific actions and measures (formal and informal)			x				Offenburg (challenge): how to mobilize actors to implement measures?	Plurel- research programme: assessment and development of instruments peri-urban areas: (especially Montpellier land policy)	Which instruments are successful in developing the quality of the peri-urban area's
5. Impact measurement			x				Offenburg (challenge): implementation and performance of monitoring		

THY NATIONAL PARK	Internal good practice						Learning Goals	External reference cases	Learning Goals
	BC	*MD*	*OFF*	*THY*	*LJU*	NV			
Planning culture		X					How to motivate local micro-actors, e.g. for maintaining cultural landscape types (dunes, farming)?		
					X		Strategies for utilising local (micro-) actors in the maintenance/development of attractive/desired landscape types.		
1.Methodologies of assessment/ analysis of landscape									
2. Planning system and competences with regard to landscape								Fulufjället, SE	How to balance protection and other uses of landscape, e.g. recreation/tourism? How to measure the upper and lower limit on each function? Can this be estimated in advance?
a) Planning processes & participation		x					Tools and ideas for improving public involvement. How to achieve/maintain a high level of public participation?	Exmoor/Dartmoor NP, UK	How to balance various stakeholders' differing views and demands for the same area? How to make the most ‚fair'decision in regard to the needed compromise? How to avoid that one particular voice is being taken to represent the opinion of the quiet masses?
b)Planning procedures & decisions		x					Tools for managing multifunctional landscapes.		
						x	Navarra's competences on landscape management.		
3. Challenges, vision & Strategy									
4. Specific actions and measures (formal and informal)					x		Strategies on the utilisation of the surrounding landscape as an economic driver and actions for involving other municipalities		
		x					Work on producing printed material		
			x				Measures for how to make their citizens respect plans		
	x						How to do good communication/ branding/ promotion of plans, regions, strategies and visions/goals		
5. Impact measurement			x				Tools for monitoring: how to measure progress (of e.g. strategies)?		

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ESPON

LIVELAND
Liveable Landscapes: a key value for sustainable territorial development

Targeted Analysis 2013/2/22

Baseline Report Practice Offenburg

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INVESTING IN YOUR FUTURE

This report presents the final results a Targeted Analysis conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

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1

1 Introduction

1.1 The practice

The municipality of Offenburg put forward the making and executing of the local landscape plan “Landschaftsplan VG Offenburg” as good practice in the framework of the Liveland project.

Offenburg, together with near municipalities, was project leader of the making of the local Landscape Plan in the years between 2005 and 2009. The municipalities worked in an administrative cooperation (“Verwaltungsgemeinschaft”), which form a functional coherent area of spatial planning. The involved town councils will decide on the plan in 2013.

The document was written by the bureau of spatial and environmental development “Hage + Hoppenstedt Partner (HHP)”.

Main ambition of the planning practice is to respond to recent spatial developments and to juridical changes, to revise the valid Landscape Plan, dating from 1988.

The landscape plan of Offenburg is multisectoral as it deals with many different landscape related topics. These different topics are analysed sectoral e.g. water, soil, recreation. Then aims for the different topics are developed in another step the aims of different topics are aligned and measures corresponding to these aligned aims are developed. There are three types of aims:

- protection,
- restoration and
- development.

All of those are presence in every topic. Aims are developed for subparts of the whole area. These are displayed and named on p. 102 and have been created by objectives of spatial structure and characteristics.

We are looking at the aims for "landscape" (“Landschaft” pp. 102-105) which is a very important aspect for Offenburg as well as the Liveland project, as it includes recreation and scenic value. Certain issues are repeated within the aims for landscape. These are:

- keeping open spaces free from any build development (settlement, infrastructure)
- Developing and saving the traditional landscape character (small structures, extensive land use / agriculture)
- Saving traditional settlement structures and types of building
- Creating a network of green open spaces (Aligned with regional structure)
- Saving the forests

For other topics aims are developed in a similar way. All of them lead to a vision for the subparts of the territory that have a certain motto. (p 127) and a short statement on the planned overall development within this part of the territory.

Afterwards concrete measures to achieve the aims that have been mentioned before are developed. Measure often serves more than one sectoral aim so there are three concepts of measures in this plan:

- Open space structure and experience of landscape
- Ecological balance
- Nature- and landscape protection

Each measure concept is displayed in four maps showing different parts of the territory (as a matter of scale the territory was divided into four parts)

For Liveland and Offenburg again here the concept for open space structure and landscape experience seems most important. Here also another separated part of the LLP comes into play: A concept dealing with small gardens and allotment gardens within the open spaces was developed especially for this urgent problem of the municipality. the mayor solutions and measures are displayed in the maps. It is an important contribution to raising the open space quality and keeping open spaces free from build-up structure as well as to preserve the landscape character.

The main conceptual aspects for open spaces and landscape experience are displayed in Figure 22 p. 138. Measures are explained starting at page 138. and are shown in the maps (Measure concepts "Handlungsprogramm"). In the maps places where certain measures might be taken are marked within the maps, nevertheless the explanation in the texts leave space for interpretation. Therefore it is not possible to directly describe concrete measures and actions (e.g. "a tree was planted", "an illegal garden was disturbed").

1.2 The actor

The municipality of Offenburg is a medium sized town in the rather high urbanized valley of the Rhine in the South-West of Germany. It has a surface of 80 km2 and a population of 60.000 people.

The municipality has competences on spatial developments (in town and country side), which regulations can bind the owners of land and buildings. The policy field of nature and landscape has own instruments, but main regulative power to implement the Landscape Plan lies within the comprehensive Land Use Plan.

In the municipal government of Offenburg are two aldermen responsible for spatial and landscape planning. In the administration of Offenburg work around 5 officials in this field of spatial planning and 2 in the field of nature and landscape policy. The making of the Landscape Plan was accompanied by a team from all involved municipalities.

1.3 Back ground and context

Central in the ‘good practice’ of the municipality of Offenburg is the making of a local Landscape Plan. The municipality worked together with the near, rural municipalities, so in fact the Plan is ‘inter-local’

The Landscape Plan was prepared parallel to the working process on the Land Use Plan of the same area. So the content of both plans could be adjusted and integrated.

The area of the Landscape Plan has an surface of 16.000 ha (160 km2) and a population of 80.000 inhabitants. The population density in the area amounts about 500 inhabitants / km².

The wider area of Offenburg (the German southern Rhine valley) in the next years is expected to have an on-going growth of population, infrastructure (high ways) and economy. Following 'higher' spatial policy documents, the area of Offenburg will need to designate new land for residential and industrial functions, but also 'green' and nature areas, to reach a harmonious spatial and sustainable urban development.

In Germany 'Landscape Plans' are part of the statutory territorial planning system. The wise management of natural resources and cultural landscapes is one of the four main purposes of spatial planning according to official German development policy (the other three being economic development, public services and living conditions, and the coordination of different interests). Landscape planning is thus a major pillar of territorial policy making. 'Landscape Plans' are prepared for purposes of state, regional and local policy making regarding nature and landscape. Since both comprehensive and environmental planning is the responsibility not of national but of state administrations, every federal State ('Land') has developed a specific version of 'Landscape Planning'. While some States adopted a system where comprehensive and landscape plans are prepared as integrated policy documents (mainly at regional and less at municipal level) others decided to keep comprehensive territorial planning documents separate from sectorial contributions; including policy regarding the protection and management of nature and landscape. The dual "job" of needing to be, at the same time, both comprehensive and sectoral (or rather: multi-sectoral), existed from the very beginning when official landscape planning was introduced in the 1970s. This dual character has led to conflicts which this paper will point out and briefly discuss. The municipal Landscape Plan ('Landschaftsplan') . of the City of Offenburg is taken as an example to illustrate how official landscape policy making is conducted in the State of 'Baden-Württemberg'. Offenburg is part of one of the four administrative 'Regions' of that State; in this case it is the region 'Südlicher Oberrhein' with the city of Freiburg acting as administrative capital. The reasons for selecting Offenburg are (1) that this city has recently drawn up a new municipal 'Landschaftsplan' and (2) that this landscape plan is considered to be representative of current forms of landscape planning. Unlike earlier forms of landscape planning that were quite ridged in their application of rules, planners have begun to adopt a modular approach that allows planning to respond to the special needs of municipalities regarding the development of their particular landscape.

2 Planning system and culture

2.1 Interpretation of key concepts

There are different issues concerning landscape, which are considered in the practice of Offenburg:

Landscape in ecological terms is composed of natural elements, which are to be determined, evaluated and which are to be protected or improved in their quality for ecological stability ensuring healthy environment for the people. Such as:

- Species and habitats, biological diversity;
- Soil in its several functions e.g. water reservoir, protection of ground-water, richness and fertility for agricultural use, protection of rare types of soil;
- Water as ground water and as surface water (lakes, rivers, creeks, ditches);
- Climate and air quality.
- Landscape in its beauty and variety
- for the benefit of residents,
- as recreational area and
- as place of identification / homeland.

Landscape as cultural heritage is a result of specialized and adapted forms of cultivation (which refers to long experience, developed with a sense for local conditions, derived from needs of sustainability in former times).

Liveable landscapes are those landscapes that offer a high quality of life to people living in the area. Liveability is not only provided by beauty of landscape but is related to a variety of all fields of human living including the basic needs as well as additional aspects that make a good life like culture and identity. In the landscape plan of Offenburg liveability is addressed in many ways but the emphasis is on the preservation of the basic functions in ecological terms. A sustainable use of ecological functions will guarantee a high quality of life for current and coming generations. Second emphasis is on the beauty and variety of landscape as a product of nature und culture. A mayor issue is to keep landscape as part of the identity of the municipality and its citizens. People have to get the opportunity to observe the development of their own culture in the landscape. This is offering identity and social cohesion.

Nature and landscape

Germany has a long tradition of protection of nature and landscape. In fact ‘nature policy (or ‘nature protection’ as part of environmental policy) is the over-arching concept, which is formalized in the German nature legislation.

Nature is defined as bio-diversity and natural resource. The law sets as goal for nature: “biological diversity and functioning of ecosystems and their services, regenerative capacity of the natural resources and their sustained availability for human use”.

Goals regarding Landscape are defined as: “the diversity, characteristic features and beauty of nature and landscapes, as well as their intrinsic value for human recreation”. Terms as

'beauty' and 'intrinsic values' can be interpreted as wider than only ecosystems and related to cultural and social values.

The Landscape Plan defines natural resources as soil (reservoir, fertility), water (ground water, surface water), climate and air quality.

It is the task of Landscape Plans to set out and define the requirements and measures of nature protection and wise landscape management. Statutory landscape planning might not be considered strictly sectoral, but rather multi-sectoral: nature, landscape and recreation. With this scope landscape planning must consider all landscapes: urban areas, countryside, recreation areas, agricultural areas, etc.

Still this concept of 'nature policy' seems not to be contrary to the definition of landscape of the European Landscape Convention (ELC), as "an area as perceived by people" that applies to "the entire territory". The reason that the German national government did not sign the ELC, reasoning is that the ELC does not contribute to nature conservation. The difference between the German landscape concept employed in the nature conservation law and the ELC is that the first mentioned is mostly based on natural science (biology etc.) while the ELC is about culture and perception moreover it strengthens constructivist theories.

Spatial policy

Germany has also a long tradition in spatial policy. It is an integrating policy with the aim to weigh and coordinate all claims on space.

Liveability is mentioned in spatial / environmental policy connected wellbeing. A major issue is to ensure equal living conditions all over the country.

The municipality of Offenburg states that liveability is not only provided by beauty of landscape, but is related to a variety of all factors of human living, including the basic needs as well as additional aspects that make a 'good life', like culture and identity.

2.2 Planning system

As one of the big European nations Germany, as federal republic, has an administrative system in 4 layers of government and political control. So the administrative level of 'region' has 2 levels (as in Spain): Region 1 is called State ("Land") and Region 2 is called "Kreis". Smaller nations as Denmark and Netherlands have 3 layer and have (in rough lines) the same scale as a German State.

	Nation	Region 1	Region 2	Local
Germany	Federation	State	Region ("Kreis")	Municipality
Spain	Democratic kingdom	Autonomous region	Subregion	Municipality

Table 1 ***Governmental layers in 2 big nations***

Germany has a system of 2 parallel strings of planning of space and landscape, see figure 2. On all administrative levels it is obliged to have a systematic planning process. The State, Region and Municipality have 'autonomous' landscape plans, which are interconnected to similar spatial plans, but have own procedures and specific instruments.

The planning system is complex because it is also related to environmental impact assessment of physical plans and projects (SEA and EIA; see figure 2). The Landscape Plan delivers the basic information of expected impacts of the Spatial Plan (especially preferred developments).

Figure 1 System of spatial and landscape planning in Germany The German Fed*eral Agency for Nature Conservation BfN*

Through mechanisms of integration landscape plans become part of comprehensive and strategic territorial policy making. All these plans are politically relevant policy documents, that become administratively binding (for 'lower' governments and partly for developers and citizens) after they have been voted on in a parliament.

Regarding the recommendations of the Council of Europe for the implementation of the ELC (2008), Germany has a landscape policy (since long) within a comprehensive planning system with specific instruments at different levels. Because of this tradition it is not necessary to introduce the landscape dimension in the spatial planning.

Because of decentralization each German State has its own law on nature and landscape. Figure 3 gives an overview of Landscape and Spatial Plans in the State where Offenburg is located.

The legal hierarchy of the plans is top-down: a plan of higher level is binding for the lower government. Only the local land use plan is binding private actors.

Last but not least for all physical projects (small or big scale) it is obliged in Germany to make a 'master plan', with which the project exactly is described. A developer always needs a permit of a local or an higher government.

Figure 4 gives the same overview as above but also includes a characterization of the plans as vision, action / strategy, regulation, development / project and management. Spatial plans in Germany include always a vision. Often parts of spatial plans (especially on local

scale) have character of regulation. Landscape plans have more character of an action program. All these kind of plans are obliged, meaning the governments have to make and modify them, based on national or State law.

It is obliged to make development or 'blue print' plans for concrete physical projects.
In protected nature areas it is obliged to make a management plan.

	Vision Space	Action Landscape	Regulation Space	Development Space	Management Nature
National	Obliged		Obliged		
Regional 1	Obliged	Obliged	Obliged		
Regional 2	Obliged	Obliged	Obliged		Obliged
Local	Obliged	Obliged	Obliged		
Project				Obliged	

Table 2 ***Kind of plans on space and landscape and governmental layers***

Explanation of figure 4:

- Vision = desired future development, goals, targets
- Action = strategy using rules, finances, agreements and communications
- Development = physical operation, project with buildings or change of land use (realisation by 'blue print plan')
- Management = daily physical measures (no big changes)

The first generations of regional and local landscape plans have been adopted nearly everywhere in Germany. A new generation of landscape plans is on the way, not everywhere, but where development is leading to considerable environmental changes.
In addition, landscape plans are needed because of formal reasons, particularly when environmental impacts of certain planned developments (like building projects) are 'high' and compensation for such impacts is required. Currently the updating of existing landscape policy documents arises from initiatives to exploit landscape potentials of renewable energies including wind, water and solar power generation.

2.3 Planning culture

The basic planning cycle of preparing plans and implementing policies, with the stages "analysis – objectives – actions – evaluation – new objectives" is broadly accepted in the planning practice in Germany.

However the tradition of German planning is based on hierarchical steering.

The legal hierarchy of the plans is top-down: a plan of higher level is binding for the lower government. The local land use plan is binding for the municipality, but not for private actors.

Landscape planning in Offenburg is integrated in the administrative department of urban planning. (Stabsstelle Stadtplanung). The department of urban planning is after internal reorganization in the last year now directly subordinated to the City Councillor for Building and Construction, who is under authority of the mayor.

Besides that the planning department's (see Figure 7) finance situation (especially with respect to a detailed database of landscape data is quite good, but future shortcuts can be expected at any time. Financial uncertainty is quite high. Now that the plan is finished maintenance of related issues does not seem to be of high importance especially in politics.

The "steering power" of Offenburg is based on the formal and informal strength of the land-use plan, which was developed in good cooperation with landscape planning. Even though there are clear statements concerning the impacts on landscape and nature by e.g. certain building projects, it is still a concurrent situation with other stakeholders. Decisions in the end are made by local politics. So it is very important, to explain possible impacts in a transparent process.

Benefits for landscape, which are financed by the public in the end, are in concurrence to private demands on natural resources and space and therefore private benefits.

Cooperation with local initiatives refer e.g. to protection, restoration and maintenance of meadows with fruit trees of ancient fruit varieties, which are typical elements of the historic cultural landscape around Offenburg. The municipality tries to resettle those types of cultivation by implementation as compensatory measures. The main problem consists of permanent care and interest in non-industrial fruit harvesting by farmers. In Offenburg, there exists a small private initiative of farmers and environmentalists, who care about such trees and merchandizing of the natural fruit juice (even in supermarkets of the region) by having created a special label with the guarantee of high quality.

Regarding the type of governmental instruments (Regulations, Finances, Cooperation and Communication) the regulative power of the Land Use Plan is high. The Landscape plan has character of programming and cooperation and binds only the administrations. A municipality has a weak position regarding finances. For spatial developments and for nature management the municipality is dependent on higher governments and private investors.

Official landscape planning in Germany is organised according to statutes set out in the federal legislation on 'nature & landscape' ("Bundesnaturschutzgesetz"; in short: BNatSchG). This national legislation provides the framework for the States to issue equivalent acts. According to most of the state legislation on nature & landscape, landscape planning must consider all landscapes (including urban areas, countryside, recreation areas, agricultural areas, etc.) and also all of the territory in question (state, region or a municipal area). It is the task of Landscape Plans to set out and define the requirements and measures of nature protection and landscape management for the territory (area) concerned (Other examples of sectorial policy documents that include landscape issues are official 'Forest Management Plans' and 'Water Basin Management Plans'). Landscape Plans serve to implement the aims and principles of nature conservation and landscape management in all policy, plans and administrative procedures that may concern or impact nature and landscape in the planning area. Thus, statutory landscape planning might not be considered strictly sectoral but rather multi-sectoral; methodologically speaking this type of landscape planning draws from different fields of knowledge, particularly from the fields of social sciences, the natural sciences and engineering.

Through mechanisms of integration landscape plans become part of comprehensive and strategic territorial policy making (including procedures for Strategic Environmental Assessment). There is no landscape planning at national level; since Germany must implement several international environmental and cultural policy and directives (such as the Convention on Biological Diversity and the Flora, Fauna & Habitat Directive, and several others) options for national nature and landscape policy making are currently under investigation. Thus, to date, the highest administrative level of Landscape Planning is the one that serves to consider nature and landscape policy issues at State level (such as 'landscape programmes or 'Landes-Landschaftsprogramm'), followed by regional ('landscape framework plan' or 'Landschafts-Rahmenplan') and municipal landscape plans ('Landschaftsplan'). All of these plans

are politically relevant policy documents that become administratively binding after they have been voted on in a State, regional or municipal parliament (either as integral part of comprehensive plans or as special sectoral plans). In cases where these documents are not voted on they maintain their role as source of information on the state of nature and landscape, and also regarding the aims and objectives regarding nature and landscape management (including protection). The only form of landscape planning that becomes legally binding for everyone is the so called "Grünordnungsplan"; this is a sectoral plan that becomes part of local development planning and ordinances.

The first generations of regional and local landscape plans have been prepared and adopted nearly everywhere in Germany. New generations of landscape plans are on the way, not in all of the country, but where development is leading to considerable environmental changes. At the regional level only few landscape plans are currently in the processes of preparation and adoption (for example for the Bavarian region 'Donau-Wald'; see: www.hswt.de). Local landscape plans are prepared when the need arises. This might be the case when, after an election, a new political situation and a new administration is in place with a mayor who is eager to start a new process of municipal policy making. The existing land-use policy might be re-evaluated and new plans be drawn up. In addition, landscape plans are needed because of formal reasons, particularly when environmental effects of certain planned investment projects are such that they qualify as legally defined 'impacts'; compensation for such impacts is required, either by way of nature development, landscape restoration or by payments. Currently a series of updating of existing landscape policy documents arises from initiatives to exploit landscape potentials of renewable energies including wind, water and solar power generation. Some regions are also experiencing large scale bio-fuel cultivations. Another reason for current landscape planning relates to the (legally defined) need to implement European networks such as TRANSNET (transportation, energy) and the NATURA 2000 policy of the European Union where ecological (habitat) corridors at national and regional scales are created or improved.

In view of their value and as factors supporting human life, considering also the needs of future generations, nature and landscape, both inside and outside the areas of human settlement, shall be protected, wisely managed and developed and, where necessary restored; in order to safeguard the long term.

1. Functioning of ecosystems and their services,
2. Regenerative capacity of the natural resources and their sustained availability for human use,
3. Fauna and flora, including their natural habitats and sites,
4. The diversity, characteristic features and beauty of nature and landscapes, as well as their intrinsic value for human recreation.

General aims for nature and landscape management provided by federal law, the BNatSchG (translation by author)

Territorial policy aims regarding nature and landscape management are defined by applying the general aims provided by the 'BNatSchG' (Fig. 1) and by specifying these aims in the form of regional and local environmental and landscape quality objectives. While the general aims provided by law are fixed, regional and local policy aims must be defined on the basis of expert proposals and public discussions. For this purpose, Landscape Plans are required (by the BNatSchG) to contain information on the existing and anticipated status of nature and landscapes. Typically, and traditionally, landscape planning considers natural and landscape assets pertaining to geology/soil and water, climate and air, flora/fauna and their habitat, and to visual landscape quality and landscape based recreation. With current modular ap-

proaches additional aspects might be included, such as landscape character and cultural heritage.

The information needed, in individual cases of landscape planning, to assess ecosystem and landscape services will be adjusted depending on regional and local specifies. For example, where policy related to flood management in riparian plains need to be updated, hydrological information will be relevant, while air flow data are collected for urban areas that are located in valley basins prone to smog. In order to adjust landscape planning to individual regional and local needs, the planning method usually applied is kept flexible, following the modular approach. Consultation requirements are not specified in the BNatSchG and Landscape Planning will follow procedures set out for comprehensive territorial planning. These include consultations between different administrations and non-governmental agencies and organisations; they also include formal public consultations. To go beyond these minimum requirements planners and policy makers may decide to involve the public in additional and, in most cases, more informal consultations.

The legal hierarchy of the plans is top-down: a plan of higher level is binding for the lower government. Only the local land use plan is binding for private actors. (In practice exists also a bottom-up influence: new local plans are used to renew a regional plan, but is this a voluntary action?)

So there are three levels of plans which give a legally binding to the lower level government. First there is the Federal State Development Plan (Landesentwicklungsplan) which takes care of the primary aims of spatial and landscape planning according the federal states and national law. It`s done by the departments of the federal state. Its aims are more generalized and provide orientation for plans on lower level which are more specific and detailed.
In Offenburg the regional spatial plan of “Südlicher Oberrhein” includes important legal requirements for the local landscape plan. These requirements are related to the legally binding requirements of the federal state plan of Baden Württemberg, so called Federal State Development Plan (Landesentwicklungsplan).

The second level is separated into the Regional/Spatial Plan (Regionalplan – RP) and the landscape framework plan (Landschaftsrahmenplan – LRP). Both substantiate the federal state development plan but only the regional plan is legally binding. The Landscape Framework Plan can only be legally binding when measures and actions are transferred into the spatial Plan. The spatial plan includes nature protection measures as well as the spatial planning aims according to the different planning issues, like settlement areas, traffic, water protection, resources etc. Both plans are constructed by regional associations.
On the third level the local land use plan and the landscape plan are done, both to elaborate on detailed questions of spatial and landscape planning on local level. This includes for example the concrete protection and development measures of nature conservation (landscape plan) and settlement areas for spatial planning. They include the status quo as well as future development proposals for the different areas. Both are elaborate by the local government or in case of Offenburg by an association of administrations including the 4 surrounding municipalities.

Landscape planning in Offenburg makes use of a modular system and the process is still going on. The modular system includes six planning phases which are based on the legal requirements and also provide the possibility to take care of individual needs of the municipalities. While the planning professionals work through these phases, creating aims and concepts, the municipality gets the chance to bring up their needs in scenarios and alternatives.

Figure 2 Spatial and landscape planning system in Germany

The six Phases are:

Orientation: At first the legal requirements and aims and also the specific situation and planning aims of the community are getting defined. Available data is getting collected and analysed to have an overview for the following steps.

1. Analysis: Collected content from the orientation is getting analysed regarding the national nature conservation law. So there is an outcome with defined legal requirements in relation to ecosystem and landscape.
2. Conceptual aims: According to the analytical work in the steps before, a conceptual aim for conservation, care and development of nature and objects of protection is built from the perspective of the profession.
3. Alternatives, general orientation, and comparison of spatial aims: In addition to the conceptual aims of the profession the municipality gets involved with its own development aims for specific municipality areas. Scenarios and alternatives are created to see where conflicts with the designated common development and the own territory could take place. These identified conflicts can be considered in the next step while creating the operation program.
4. Operation program: The operation program is constructed from the outcome of conceptual aims and the general orientation. It defines the measures for the landscape development
5. Observation: At this point the conversion of the measures are getting observed and documented. It`s an important step for the municipality, because of their possibility to see how the realised measures in their territory develops. Through the documentation it could be seen if the landscape plan regulates the development in their territory into the right direction. Also the sensibility for the landscape plan development measures more present.

In case of Offenburg the modular system made it possible to work on specific topics that are interesting for the municipality especially on allotment gardens.

The landscape plan is the main planning instrument of nature conservation, landscape management and planning for recreational uses at the local level. It presents a conception for the long-term development of Offenburg's landscape and nature. Because of the relation to the Land Use Plan, it has to be renewed every 10-15 years, parallel to the renewal of the Land Use Plan. The landscape plan for Offenburg has been developed alongside the local land-use plan.

The local landscape plan of Offenburg delivers a map with designations of nature, landscape and recreation on rather detailed scale.

The measure-plans as part of the LP show the proposed development of landscape with regard to the natural regime, landscape protection and open space structure.

Sectoral issues are analysed in sectoral plans. Each plan is dealing with one landscape factor, like climate, water, soil etc. There are several sectoral plans included.

The legal hierarchy of the plans is top-down: a plan of higher level is binding for the lower government. The local land use plan is binding for the municipality, but not for private actors.

Landscape planning in Offenburg is integrated in the administrative department of urban planning. (Stabsstelle Stadtplanung). The department of urban planning is after internal reorganization in the last year now directly subordinated to the City Councilor for Building and Construction, who is directly under authority of the mayor.

Besides that the planning department's (see Figure below) financel situation (especially with respect to a detailed database of landscape data is quite good, but future shortcuts can be expected at any time. Financial uncertainty is quite high. Now that the plan is finished maintenance of related issues does not seem to be of high importance especially in politics.

The "steering power" of Offenburg is based on the formal and informal strength of the landuse plan, which was developed in good cooperation with landscape planning. Even though there are clear statements concerning the impacts on landscape and nature by e.g. certain building projects, it is still a concurrent situation with other stakeholders. Decisions in the end are made by local politics. So it is very important, to explain possible impacts in a transparent process.

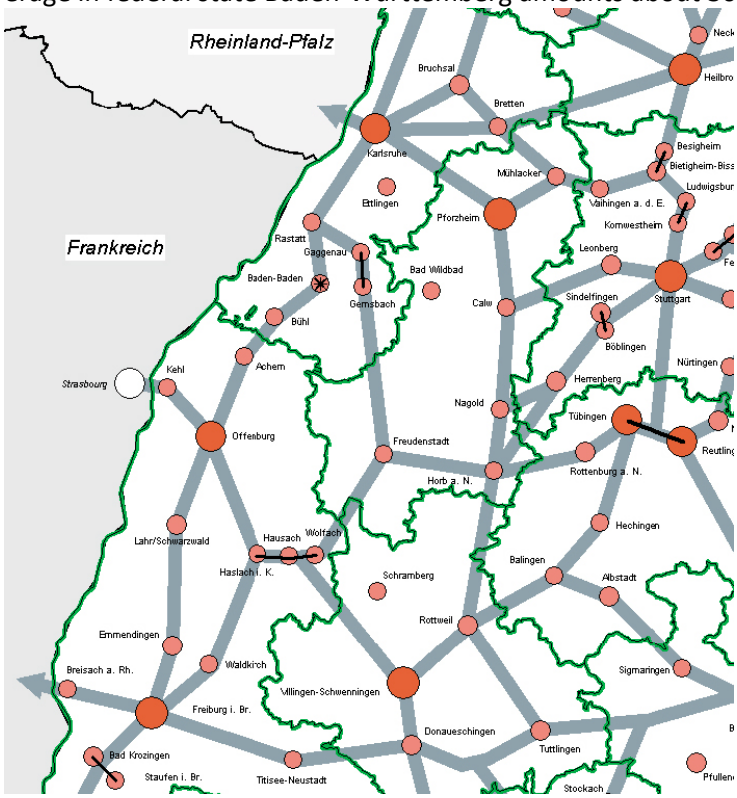
Benefits for landscape, which are financed by the public in the end, are standing in concurrence to private demands on natural resources and space and therefore private benefits.

Cooperation with local initiatives refer e.g. to protection and return of meadows with fruit trees of ancient fruit varieties, which are typical elements of the historic cultural landscape around Offenburg. The municipality tries to resettle those types of cultivation by implementation as compensatory measures. The main problem consists of permanent care and interest in non-industrial fruit harvesting by farmers. In Offenburg, there exists a small private initiative of farmers and environmentalists, who care about such trees and merchandizing of the natural fruit juice (even in supermarkets of the region) by having created a special label with the guarantee of high quality.

3 Geographic description of practice case area

The city of Offenburg is located in the southwest of Germany between Karlsruhe and Freiburg, very close to the French border, just 20 km to the southeast of Strasbourg and also not far from Switzerland, 125 km north of Basel.

Situated in the Federal State of Baden-Württemberg and the region (Kreis) Südlicher Oberrhein, it is the "regional centre" for services and commerce of the rural district Ortenaukreis. The city of Offenburg has eleven districts with about 60.000 inhabitants and stretches over an area of 8.000ha (= 80 Km2). The population density is about 750 inhabitants / km2. (Average in federal state Baden-Württemberg amounts about 301 inhabitants / km2).



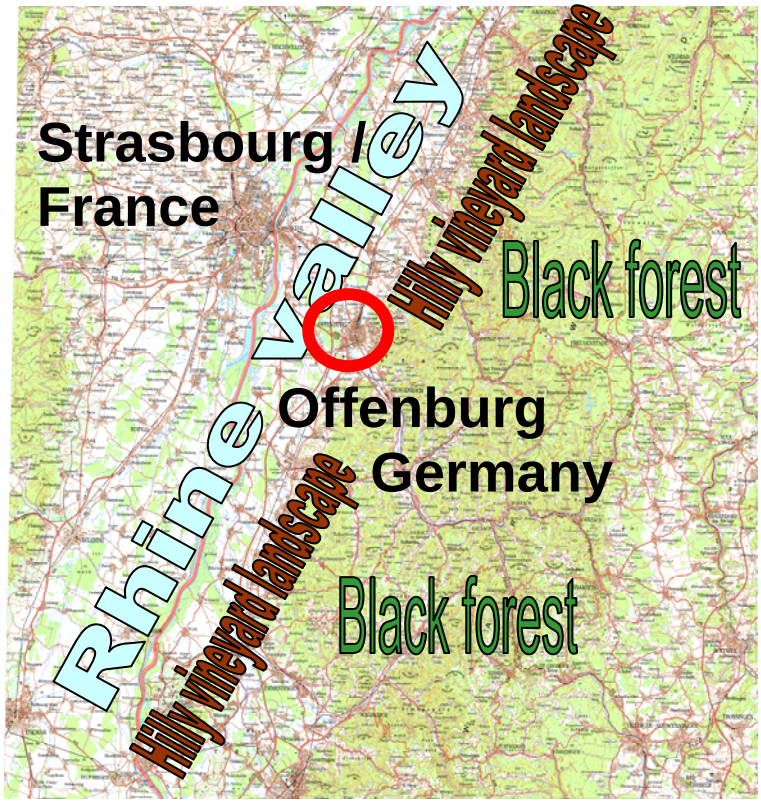
Map 1 Map of central cities and structures (taken from: Federal State Development Plan / Landesentwicklungsplan 2002)

The planning association responsible for Landscape Plan includes in addition to the eleven districts of the city of Offenburg as mentioned above, four surrounding municipalities (Durbach, Schutterwald, Ortenberg and Hohberg). The planning area covers 16.000 ha (=160 Km2) and has 80.000 inhabitants. The population density in the planning association's territory amounts about 500 inhabitants / km2.

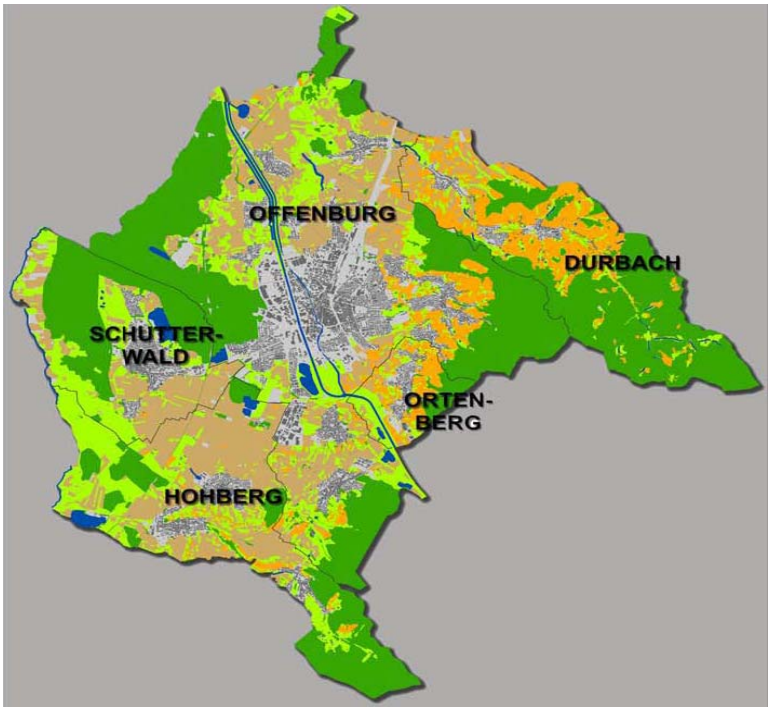
The territory of the planning association covers various landscapes, coming out of the rhine valley in the west (142 m above sea level) over the hilly vineyard landscape very near in the east of Offenburg, to the western edge of the black forest mountain area east of Offenburg, going up to 690 m above sea level on the Offenburg territory (Fig. 2).

The regional and the landscape framework plan are responsibility of the regional association 'Südlicher Oberrhein'. The region 'Südlicher Oberrhein' includes the whole administrative district of 'Ortenaukreis', which includes Offenburg and its surrounding municipalities and three other administrative districts.

The economic importance of the region and the expected growth of economy and population put substantial pressures on urban development, traffic infrastructure and the landscape identity in particular.



Map 2 Overview on natural regions



Map 3 Association of administrations Offenburg“: City of Offenburg with eleven component localities and four surrounding municipalities (Durbach, Schutterwald, Ortenberg, Hohberg)

4 Challenges and ambitions of practice case

The motivation for making the Landscape Plan and the main ambitions of Offenburg are derived from the policy document and from the SWOT in the Liveland project.

Challenges regarding content of planning

Recent developments in space and landscape and changes in the policy context lead to the task of linked preparation of Landscape Plan and Land Use Plan:

- parallel work on both plans;
- linking of items and methods of environmental impact assessment;
- linking of procedures of decision taking.

The spatial items and challenges were defined for both plans. For instance for the urban area of the city Offenburg:

- development of urban areas for infrastructure, industry and dwelling;
- protection and strengthening of the 'green ring' and the 'green fingers' in and around Offenburg;
- design of the border between city and countryside;
- redevelopment of brownfields;
- design and improvement of central watercourses through the city;
- protection of valuable agrarian soils;
- extensification of agricultural use towards ecological improvement.

Different interests on space are increasingly conflicting with each other. The Land Use Plan is the comprehensive plan that has to integrate all conflicting issues. Landscape planning delivers the values on nature and landscape and the impacts of planned developments. This is important information for local politicians for concrete decisions about new spatial developments.

Challenges regarding processes of planning

The process of making a Landscape plan relies on good cooperation between regional and local planning authorities. With respect to the regional spatial planning, collaboration during the last years was quite successful. The regional spatial plan (Regionaler Raumordnungsplan) that the "Regionalverband Südlicher Oberrhein" (regional planning authority) is responsible for, already integrates important landscape issues in its plan. These designations were not perceived as restriction for landscape planning on municipal scale, but turned out to be a benefit for argumentation during the planning process.

Not only during the landscape and land-use planning process there are permanent consultations between urban planning and landscape planning sectors within the municipality of Of-

fenburg. Though, the other smaller municipalities of the association don't have special departments, Offenburg has the function of being office of coordination and through having professional competence, in giving support to landscape planning and land-use planning for the whole association.

Land-use planning and landscape planning of the association where done simultaneous during most of the process. Based on good communication between the planning offices, one charged with the land-use plan and the other charged with the landscape plan, important contents of the landscape planning where integrated into the land-use plan in a very early state.

The following figure (Fig. 5) shows on the left side map, developed by the landscape planner, areas (yellow) and important corridors (blue and green), where landscape issues should be of high priority. This was taken early as a working basis for the land-use planning:
Due to the parallelism of the planning processes, landscape planning got much more attention through the process of the land-use planning, than without. With the required steps of the planning process and reconciliation for the environmental review for the land-use planning, it was possible to communicate important landscape issues. So also in an early state of the process, specialized sectors of administration e.g. nature conservation authority of the rural district (Ortenaukreis) had to be consulted.

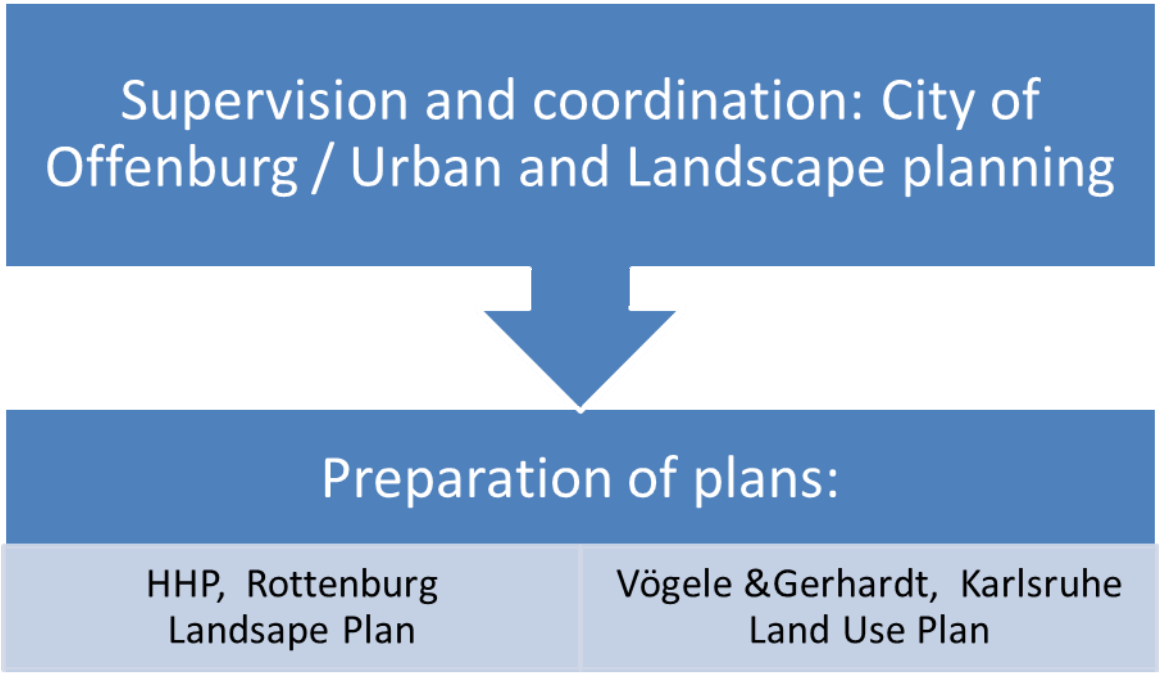


Figure 3 Coordination of landscape plan and land use plan

5 Description of the planning practice

5.1 Planning process and decision making

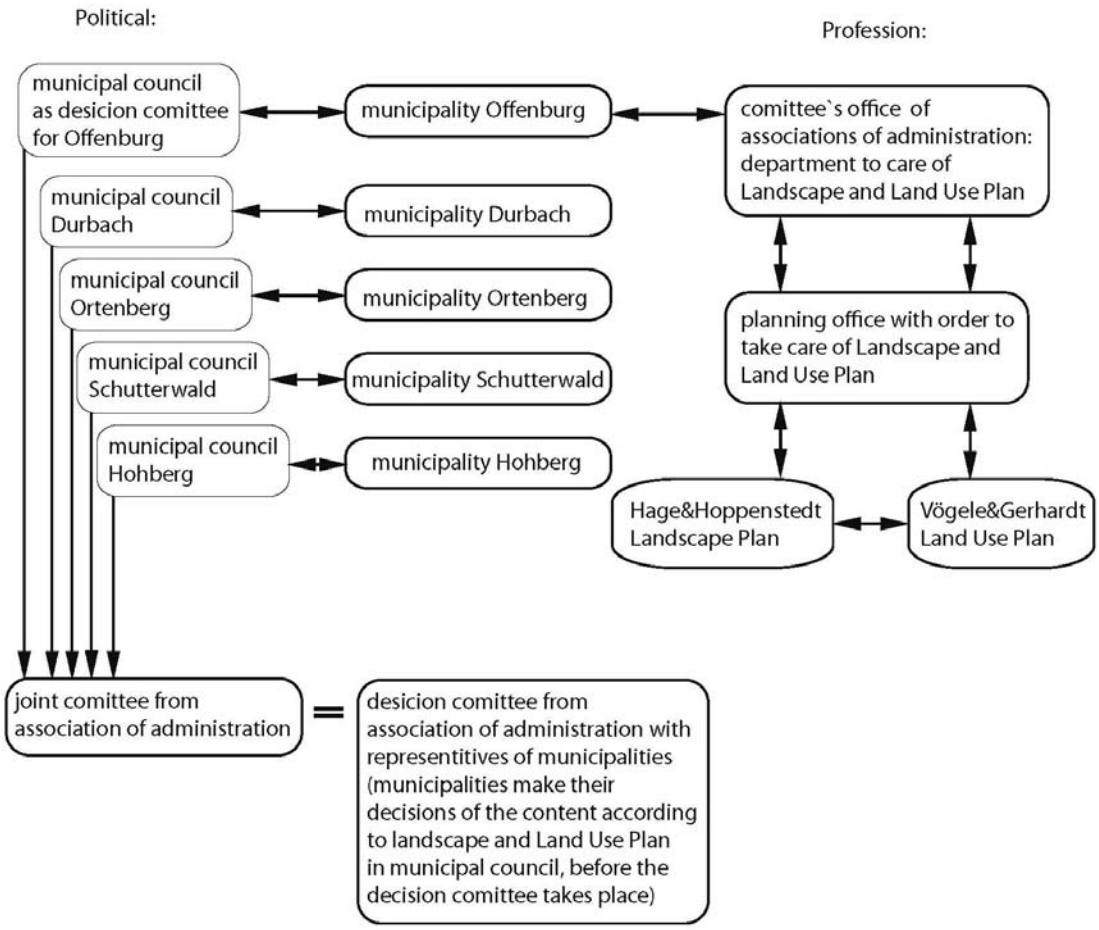


Figure 4 ***Structure of planning department***

Procedures of formal decision taking

The landscape plan and land use plan were prepared in parallel until 2009 including a participatory process. Then in the end of 2009 the land use plan was accepted and became legally binding.

The Landscape Plan is already finished from perspective of the profession. The last modifications are integrated by the planning department and could now be finished and finalized. Because of other high priority development plans, the decision probably will take place in 2013. So the Landscape Plan is not legal now but already provides the planning department a recent source for decision making and public communication.

5.1.1 Time line of the planning process

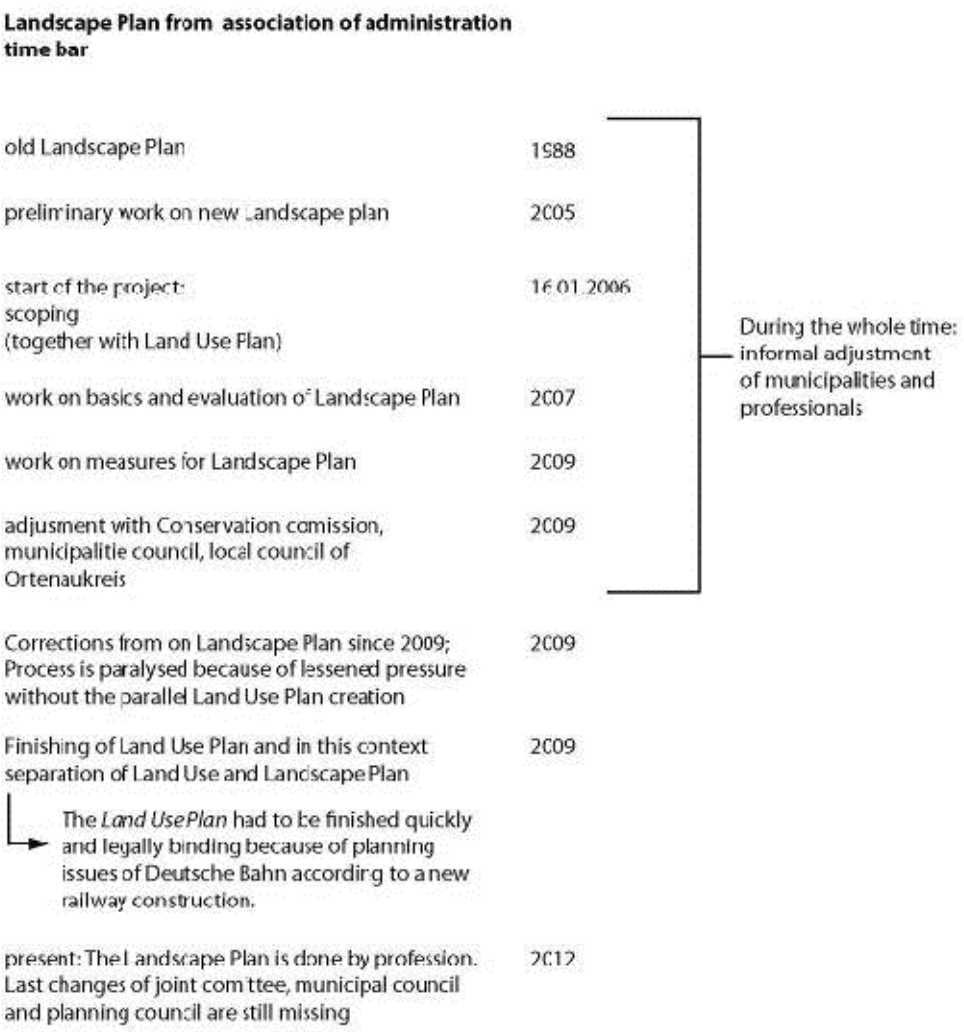


Figure 5 ***Time line of making of the Landscape Plan***

Process of preparing

Involvement of all municipalities with mayors, municipal councils, Citizens, also including 11 local representatives of the districts of Offenburg; planning departments of Offenburg; Planning departments of rural district Ortenau; Representatives of environmental groups get three times informed. (This takes place separated from the frequently meetings with the environmental groups)

5.1.2 Participation

There have different groups of society been integrated in the participation process. Of course not everybody could participate in the same way and some did not make use of the opportunity. But some groups can be identified that did. The elected officials of the municipalities as well as the members of the municipalities' councils and the members of the councils of the single villages did follow the process in almost all stages although it is not legally binding to integrate the villages' council. Besides that the approved environmental organizations as well as other groups dealing with environmental protection have been consulted at certain points of the process. Moreover other administrations have been participating e.g. administration for agriculture (most conflicts occurred), higher nature conservation administration, administration for soil and water. Finally of course at certain points of time public in general was invited to participate.

As a landscape plan is a sectoral plan for nature conservations, environment and landscape there are certain groups of stakeholders that have not been invited as their field of interest is not met by a landscape plan. For example the social organization and administration are not directly addressed as they do not see that landscape is in their responsibility as well. Another example would be economics. They did only participate as long as agriculture as one branch of economy is concerned. Nevertheless it is important to mention that no one was not allowed to participate or actively excluded from participation.

Participation of course had an influence on the planning process and its outcomes. But from today's point of view it is hard to figure out the exact inputs that later were found in the plans documents. Throughout a constant communication process with the participants not many conflicts of occurred and consensus was easy to find. So for example the environmental organizations mostly were very satisfied with the outcomes and steps in between. It is remarkable that the influence on the plan could not be specified in detail but the planners learned how to do a participation process. Especially the planners adapted to the problems of laymen and expert communication. For example the legal requirements had to be explained in a way laymen are able to understand. Therefore it is not surprising that the main concerns were not about the plan itself but about the implementation of the plans actions and measures.

5.1.3 Procedures and decisions

The landscape plan and land use plan were prepared in parallel until 2009 including a participatory process. Then in the end of 2009 the Land Use Plan was accepted and became legally binding.

The Landscape Plan is finished from perspective of the officials. It provides already information for the daily work around spatial policy.

Because of other high priority policy documents, the decision by politicians will probably take place in 2013.

The figure next page shows the process biography.

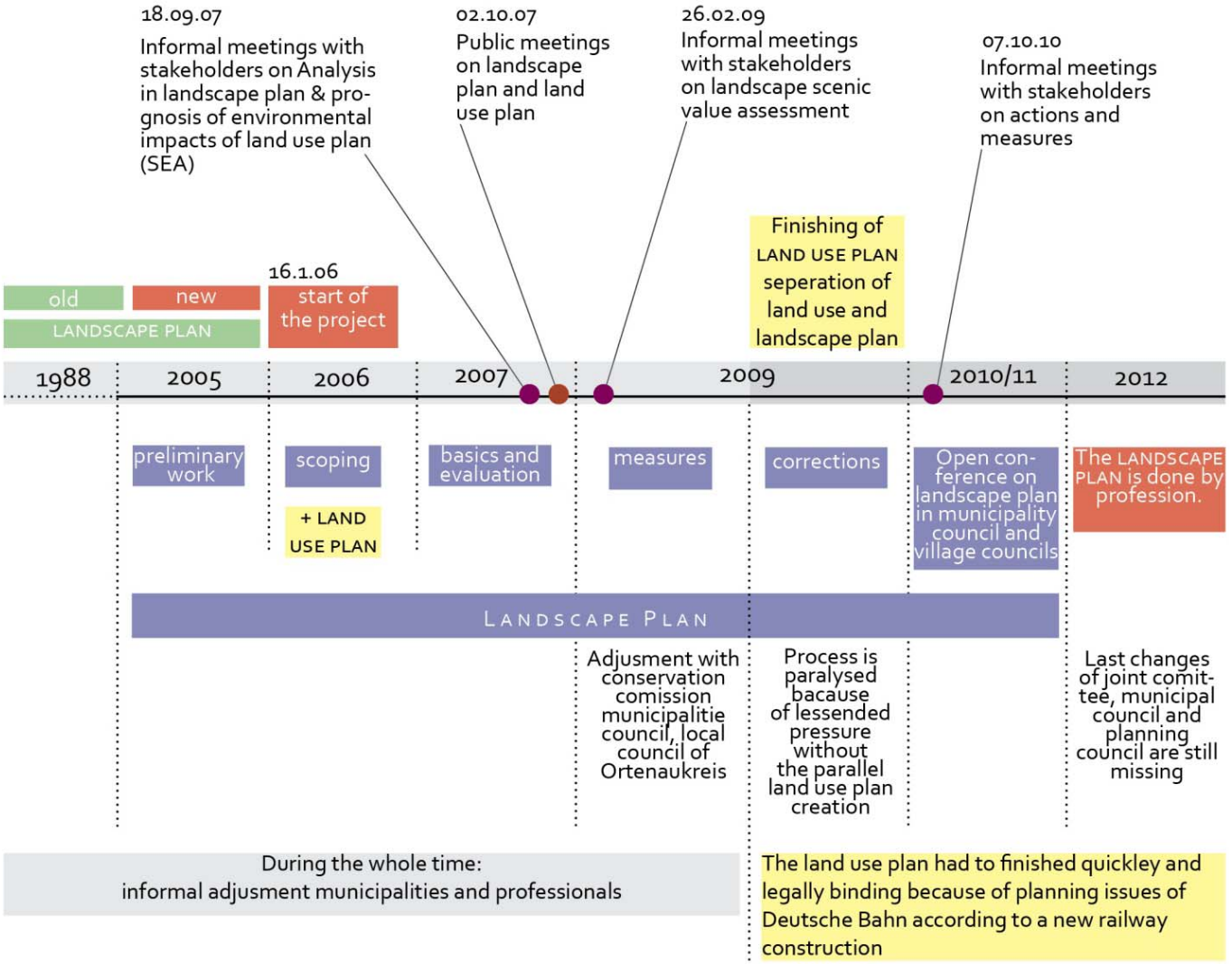


Figure 6 Process biography Landscape Plan in Offenburg

5.2 Content of the planning practice

Landscape planning in Offenburg makes use of a modular system with six planning steps (forming a planning cycle):

1) Orientation: the legal requirements and aims and also the specific situation and planning aims of the municipality were defined. Available data were collected and analysed, to have an overview for following steps.

2) Analysis: analysis regarding the national nature conservation law to define requirements in relation to ecosystems and landscape.

3) Conceptual aims: conceptual aims for protection, management / maintenance and development of nature and landscape were built.

4) General orientation of spatial developments: scenarios and alternatives for development aims for specific areas are created and conflicts were analysed.

5) Operational program: the outcomes of conceptual aims and general orientation were translated to measures for nature and landscape development.

6) Observation: the implementation of measures will be observed and documented.

The local Landscape Plan of Offenburg, as report of around 220 pages, delivers:

- A description and assessment of environment and landscape;
- Goals on nature protection, landscape management and recreation provision (including a map with rather detailed goal setting);
- Actions / measures bundled in 3 programs:
    - Spatial structure for open space and landscape experience;
    - Natural household (natural resources and ecological regulation);
    - Protection of nature and landscape (valuable areas);
- Guidelines for the Land Use Plan;
- Forecast of the impacts of the Landscape plan on the environment.

Sectoral issues are analysed in sectoral plans and maps, dealing with landscape factors, like climate, water, soil, etc. The appendix of the Landscape Plan contains several sectoral plans.

5.2.1 Analysis

In the analytical part of the Landscape Plan a lot of information is gathered. The data base in the landscape plan Offenburg includes maps scaled 1:25.000 with the following topics (selection):

- Biotope types (habitat connectivity)
- Cultural landscape and settlement development (since 1850)
- Landscape structure

- Scenery
- Cultural goods: decline of ancient forms of cultivation (e.g. wooded meadow valleys, wet grassland, dry stone walls around vineyards)
- Cultural goods: historical, archaeological and natural landmarks
- Recreational areas
- Soil types
- Richness of soil for agriculture and particular plants
- Ecological services of soils (buffer contaminates, recharge ground water)
- Quality of flowing waters and lakes
- Protection areas for drinking water
- Courses and barriers of air exchange
- Areas and objects of nature conservancy (protected by law)
- Burden of landscape and nature by use (e.g. noise beside roads, immission, visual burden by high voltage lines)

5.2.2 Vision and objectives

Goals are formulated as 3 directions of future development over 10 – 15 years:

- Protection or safeguarding of natural and cultural values, which are little disturbed or of high quality;

- Development or improvement of values, which have potential of higher future quality;

- Restoration of natural household, by reducing environmental stress and taking measures of regeneration of natural values.

These goals are coupled with a map with 7 'partial areas' or 'landscape units', which have a specific landscape character.

In this way a very detailed list of goals (directions) is given for following maps:

- Landscape (structure, view and land use)
- Soils
- Ground water
- Surface water
- Air and climate
- Nature and biodiversity

By combination of these maps an overview map is constructed with 7 landscape units. For each unit a "Leitbild", perspective or 'model' is given, with following key words (selection):

- City of Offenburg and low land (nr 5): "City, countryside and river". Riverbed of Kinzig as central axis of leisure area; good accessible recreation areas of diverse intensity and isolated nature areas.

- Mountain area (nr 1): "Black forest idyll". Big natural forest areas and historical settlements.

- Vineyard hills (nr 4): "Water and wine". Historical settlements with vineyard hills and creeks, with touristical attractiveness.

The vision on spatial structuring of green spaces, landscape experience and recreational services is illustrated in Fig …

Here a big 'green ring' around the central city, a zoning of recreational areas and relations between settlements and landscape are illustrated.

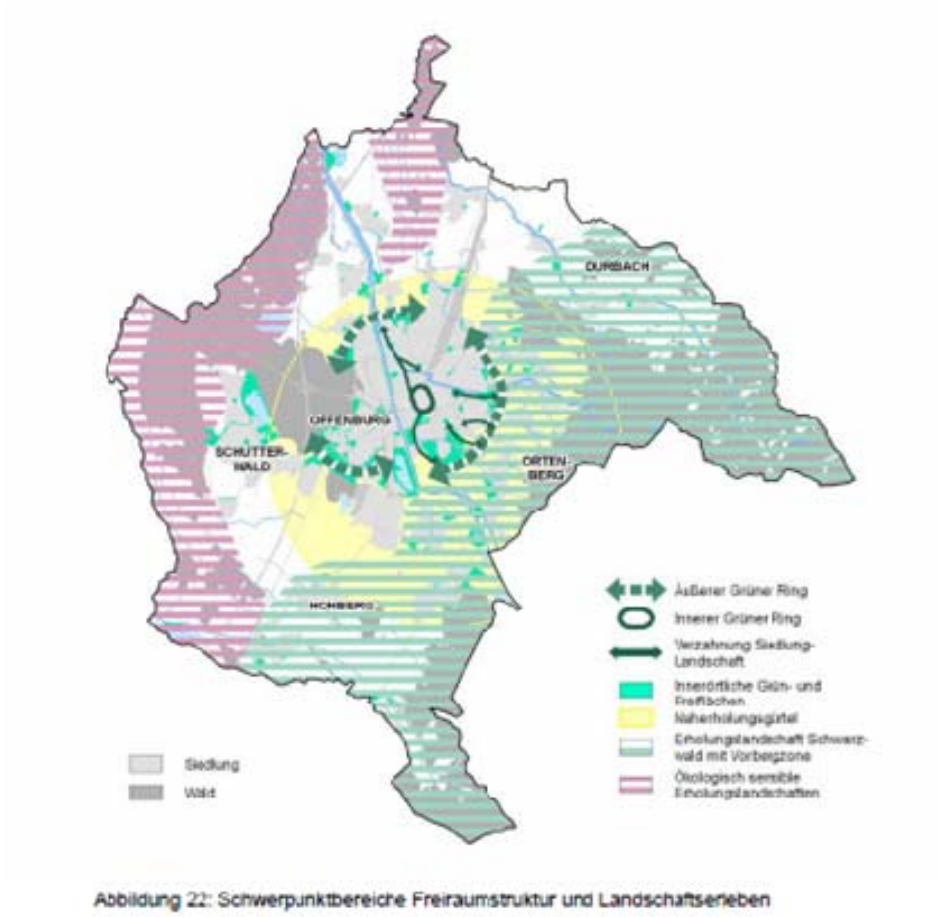


Abbildung 22: Schwerpunktbereiche Freiraumstruktur und Landschaftserleben

Map 4 *Structure of green space and landscape experience*

5.2.3 Actions and measures envisaged

Based on the guidelines and the results of the analysis, there was developed a catalogue of concrete measures, which are taken together in multisectoral maps in scale 1:10.000 (same as land-use plan):

- Protection of nature
  - protection areas regarding water-, geology-, landscape- and bird protection
  - depend on european or national law
  - compensation areas
- Remediation, improvement of natural balance
  - information on areas which have to be protected developed and improved (like green-, woodland or water)
  - fruit-tree meadows in context to the cultural landscapeimprovement of soil characteristics for the growing of cultural plants
  - improvement of open green space for climate reasons

- Development, protection and improvement of open space structure, perception of landscape, recreation
  - walking paths
  - recreational facilities
  - priority areas for allotment gardens
  - cultural used landscapes
  - integration of settlement boundaries into surrounding landscape
  - connections between open green spaces
  - historical used forests

The landscape plan is problem oriented and is able to address very specific issues. e.g. conception to handle illegal leisure-time-building in scenic landscapes. But there is a lack of employees in the administration to implement the plans.

The Protection of nature map handles with protection areas regarding water-, geology-, and landscape- and bird protection. It delivers information to their priority or about the future development or improvement depending on European or national law.

The map for remediation and improvement of natural balance give information on areas which have to be protected developed and improved to strengthen the natural balance sustainably. These areas also including, besides the development and protection of green-, woodland or water, for example fruit-tree meadows, in context to the cultural use in the past or improvement of soil characteristics for the growing of cultural plants.

The Development, protection and improvement map of open space etc. includes concrete areas with measures for several issues. The recreation regarding theme for example goes in detail especially on the development and protection of infrastructure of recreational facilities (Bath, Parks), paths inside, outside and nearby residential areas for several recreational uses, like walks in closing time, cycling or simply hiking. There are also priority areas like for allotment gardens or recommendations on measures for strengthen of recreational forests. The cultural related themes in this map are close to the development and protection of cultural used landscapes (like for winegrowing, fruit tree meadows or historical forest management). Also the integration of settlement boundary into the surrounding landscape is a special issue marked on special areas with high deficits regarding this theme of integration and connections between open green spaces are mentioned. So this map has a wide range of issues to handle with.

A very special issue within the landscape plan based on the modular method is a special plan on allotment gardens. Measures and actions as well as a structure for further development are presented here.

Picture 1 Small allotment gardens within open landscape are a considerable threat to landscape

5.2.4 Actions and measures implemented

Though not decided yet on the Landscape Plan, parts of it are executed via the Land Use Plan and by daily spatial policy.

Implementation has started on protection, restoration and maintenance of fruit-tree meadows and ancient fruit varieties. The municipality tries to resettle those types of cultivation as compensatory measures. But this depends on private initiatives, such as a small group of farmers and environmentalists, who care about such trees. They care for marketing of the local fruit juice (even in supermarkets of the region) and have created a special label.

5.2.5 Monitoring and evaluation

The evaluation and monitoring can only be conducted successfully if a benchmarking system is available. This system has to provide measurement and scales of target achievement of measures and actions. Moreover measures and action should be evaluated not only by the question if it was conducted but also by the question if the goals where reached through this.

The landscape plan Offenburg recommends periodical documentation of the implementation of the measures, particularly regarding the suggestions for potential ecological compensation areas. So far, this is a quantitative approach, but yet it doesn't cover quality benchmarking for the development of landscape and nature.

On this subject, Offenburg is interested in learning from other study cases.

6 Links to ESPON studies

How can the practice in Offenburg (especially the goals and the measures in the Landscape Plan) be related and compared to the outcomes of Espon studies?

Economic performance
The practice of Offenburg is not related to economic performance.

Quality of life
In the Landscape Plan the term liveability is not used. But concepts like landscape as source of experiences and leisure can be interpreted as liveability.

The municipality of Offenburg states that liveability is related to a variety of factors of human living, including basic needs as well as culture and identity.

Environment
The Landscape Plan includes also environmental factors like water, soil and air.

Innovation
The practice of Offenburg is not related to economic innovation.

Polycentric development
The practice of Offenburg is strongly related to 'harmonious development' with the vision on spatial structuring of green spaces and urban settlements. Also the linked preparation of Landscape Plan and Land Use Plan can be interpreted as working on harmonious development.

Attractiveness
The green space of Offenburg is not primarily intended to attract tourists, but to deliver recreation value for all inhabitants of the planning area.

Climate change

Adaptation to climate change is not mentioned as goal in the Landscape Plan.

Land use

Land use change is part of the analysis in the Landscape Plan of Offenburg.

7 Links to European policy principles

How can the practice in Offenburg (especially the challenges regarding content of planning) be related to principles and goals of European policy?

Europe 2020

The practice of Offenburg has no links to the EU strategy 'Europe 2020', which focuses on employment, innovation (in world market perspective) and climate change.

Spatial Development Perspective (SDP)

The practice of Offenburg has strong links to the EU SDP, especially the goal of 'polycentric and balanced spatial development'.

The Landscape Plan can be seen as 'urban-rural partnership', especially the measures on green spaces and recreational areas in and around the city, including measures of visual landscape quality.

Further the Landscape Plan (especially the 3 programs of measures) is an example of 'wise management of natural and cultural heritage'.

8 Summary

Central in the 'good practice' of the municipality of Offenburg is the making of the Local Landscape Plan (LLP), which has been prepared in cooperation with surrounding municipalities in the years between 2006 and 2013. LLP and Land Use Plan are prepared in parallel, linked processes.

In Germany 'landscape' is since long linked with spatial planning. Landscape is seen as part of nature policy, where 'nature' is the overarching concept. The country has a tradition of comprehensive planning and a broad set of plans on all levels. The making of landscape and spatial plans is obliged. A municipality is an executing government, with strong instruments for (detailed) steering of spatial developments. The LLP binds the involved governments; the local spatial plan binds private actors.

Main ambition of LLP Offenburg is protection and improvement of biodiversity, natural resources and beauty, following national law. Handling of spatial conflicts and making of choices in future spatial developments (guided by higher plans) are the main functions of the plan. Goals are related to protection, development and restoration. These goals are broad worked out (for nature, landscape and environment) and put on maps in a detailed way.

The LLP delivers a program of actions of governments, mainly as 'physical measures'. The program contains 3 items: green spaces and recreation, natural household and protected areas. A big amount of 'tables with measures' are delivered, which contain short descriptions of concrete physical developments.

Another challenge of Offenburg was the cooperation between governments, officials as well as politicians. Participation of private stakeholders in the planning process took place, but in an extensive way. There was informal input from experts from NGOs.

Implementation of the LLP has started via the Land Use Plan and related permits.

Implementation of 'autonomous' projects, regarding nature, landscape and recreation seems rather weak, probably because of lack of financing. There is no cooperative execution organisation.

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

LIVELAND
Liveable Landscapes: a key value for sustainable territorial development

Targeted Analysis 2013/2/22

Baseline Report Practice Case Navarre

Version 07 February 2014

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

This report presents the final results a Targeted Analysis 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.

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This basic report exists only in an electronic version.

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1 Introduction

1.1 The practice: policy document, plan

In the Foral Community of Navarre[1] there is no landscape law but landscape is included in the Regional Law of Spatial Planning, Subregional Planning (POT), the Regional Law of Cultural Heritage and the Regional Law on Natural Reserves, documents where public participation is implemented. A new Landscape Plan or Lanscape Strategy will be introduced in Navarre and the aim is that it will provide methods and techniques for assessment, evaluation and management of landscape at several territorial scales. The up-coming Landscape Plan or Strategy for Navarre is meant to respond to some of these problems and ratification of the European Landscape Convention (ELC) is seen as an opportunity for the region.

Navarre presents this case study in the frame of Liveland Project:

- **ORGI OAK FOREST**. **Protected Landscape of the Basaburua and Ultzama Valleys:** Landscape under protection by Regional Law 9/1996 on Natural Reserves of Navarre. This case study is used as a base of comparison by the other Liveland partners through the **CAF Matrix.**

  Besides, as a complement, in section 10 there is a reference to another case: ARGA RIVERSIDE PARK*: managing a river environment applying Navarre Regional Law 35/2002, of Spatial Planning (LFOTU). This case is included as an* ***example similar to those of other members of Liveland, as it develops in an urban environment.***

  The case of Arga complements Orgi for Oak Forest*, more related to the regulatory framework because Arga case provides specific actions with respect to the functions of Landscape set out in the CEP and Liveland.*

For the integration of landscape into regional planning instruments, Navarre has legal framework development as its own **Law 35/2002 on Spatial Planning and Urbanism (LFOTU)** (See section 2), in line with the European Spatial Development Perspective (ESDP). It provides, in general, a mature and consolidated "territorial governance system" with some regional (ETN) and sub regional (POT) planning instruments.

The **Territorial Strategy of Navarre (ETN, 2005)** is a Regional Spatial Strategy for Navarre and an ambitious attempt to apply the principles of the European Spatial Development Perspective. The five **Subregional Spatial Plans (POT)** includes guidelines related to landscape. In addition, the **Plans with supra local Influence (PSIS)** aim the planning and management of actions whose impact transcends the municipalities in which they are emplaced and include topics as Landscape. Besides, the **Territorial Observatory of Navarre** (**OTN)** is in charge of the **indicators** and the **follow-up system** of the ETN, POT and PSIS.

http://www.nasuvinsa.es/es/planificacion-y-evaluacion-territorial / http://siun.navarra.es/

1.2 The actors

Navarre Government as the supervising organism of the regional spatial plans as well as the only stakeholder in environmental matters: Protected Landscape of Ultzama and Basaburua,

[1] The oficial name in Spanish is “Comunidad Foral de Navarra”, in English “Foral Community of Navarre”. The “Foral” means the Autonomous Act of Navarre (1841 and 1982). http://www.navarra.es/home_en/Navarra/Asi+es+Navarra/Autogobierno/Los+Fueros.htm

and the management of other figures of protection according to Regional Law 9/1996 on Natural Reserves of Navarre (Department of Rural Development, Environment and Local Government).

Department of Public Works, with competences in Territorial planning gives guidelines for the content and function of sector planning and territorial planning. It defines also a spatial structure or 'model' of the whole territory, including functions as main cities, main infrastructure and protected nature parks.

1.3 Back ground and context

COMPETENCES ON SPACE AND LANDSCAPE

Navarre government has competences in land use management through the spatial planning legislation and other sectoral policies that allow configuring different levels of action: landscape restoration after infrastructure development, declaration of natural protected areas, cultural heritage, forest management, etc.

The local governments have competences and responsibilities on space, water (consumption and sanitation) and landscape, within its territorial boundaries. It has as well an optional tool to regulated landscape.

In the case - **Protected Landscape of the Basaburua and Ultzama Valleys and Orgi oak Forest** - the intervention is framed in the regional environmental legislation over Natural Spaces of Navarre, which is only capable to intervene with regard to construction investments when ecosystem management is involved. Although this case is described with a high level of detail in the CAF sections, in this chapter a comparison will be established in order to understand the territorial governance system of Navarre and the differences to intervene using one or another sectoral legislation: Environmental or Spatial Planning (moreover, it could be possible to intervene on landscape matters using the Cultural Heritage legislation).

2 Planning system and culture

2.1 Interpretation of key concepts

LEGAL COMPETENCE

While the national level provides the general framework for the planning system, the 17 **autonomous communities as Navarre have full authority to legislate** for, regulate and execute spatial development, and thus current practices for landscape planning varies widely across Spain.

LANDSCAPE AND SPACE

The vision on landscape of the region of Navarre, in the practice of spatial planning, is holistic and comes very close to the vision of the ELC. Landscape is seen as cultural (including heritage) and visual expression of sustainable territorial development. The laws on Protected Landscapes and Natural Reserves are older as the ELC, but they are coincident with its proposals.

SECTOR LEGISLATION FOR LANDSCAPE PROTECTION

There are some Instruments that provide protection and sectoral policies that have a specific purpose and regulated administrative procedures:

- **Cultural Landscape** (Regional Law 14/2005 of Cultural Heritage of Navarre). Natural area, ethnologic landmark, group of constructions or infrastructures related to ways of life, culture and traditional activities of Navarre's people. It is an instrument for the protection of an enclosed environment and the management of its elements that define the character of "cultural landscape".
    - Cultural landscape of bird hunting posts in Etxalar.
- **Landscape protection** (Regional Law 9/1996 on Natural Reserves of Navarre). Protected landscapes are those specific places of the natural environment that are worth a special protection due to its natural, aesthetic and cultural values.
    - PP1 - Protected landscape of the Valdorba mountainous area. http://www.biodiversidad.navarra.es/Lugar.aspx?id=169
    - PP2 - Protected landscape of the Basaburua and Ultzama oak groves. http://www.biodiversidad.navarra.es/Lugar.aspx?id=47 http://www.bosque-orgi.com/

- **Landscape Special Plan developing a Local Master Plan** (Regional Law 35/2002, of Spatial Planning, LFOTU). The Special Plan manages landscape elements through a regulation adopted by the municipal assembly. There are examples of urban and high production gardens, orchards, or construction elements that include the entire territory of a municipality:
    - Protected landscape of the Egües Valley (urban landscape).

Notice that the LFOTU only allows a planning of works and investments that acts on the territory with an integral character. The other two laws actually allow landscape protection and performance in the field which are competent: environmental restoration, ecosystem management, rehabilitation or restoration of heritage, etc. And, in many cases, especially, in rehabilitation or works, should be supervised by the Department of Public Works.

Spatial policy of the region of Navarre is based on a third law on Spatial Planning and Urbanism (LFOTU,2002) and defined as integration of sectoral policies, like economy, infrastructure and nature. Specifically, Article 27.1 of LFOTU, defined the territorial policy as "the set of explicitly formulated criteria, standards and plans to guide and regulate the proceedings and settlements on the territory, depending on the goal of achieving an appropriate balance between territory, environment, population, activities, services and infrastructure ".

LIVEABILITY

In spatial policies the notion of liveability is related to the definition of "territorial structure" and is interpreted as "rational and balanced territorial development, structure the territory by establishing infrastructure and connections communication, and insert the balanced and sustainable development of its different parts in a coordinated and harmonious that affects all the best development of the Autonomous Community[2].

To achieve the objectives of the LFOTU, the law raises the importance of collaboration between all levels of government and policies, especially between the Administration of the Autonomous Community and local authorities, and the equally citizen participation.

Coordination between sectoral policies and administrations can implement specific plans regarding renewable energy and energy efficiency, forest plans, Rural Development Plan or

[2] LFOTU, article 27.2

Plan Moderna (as a strategy for a new productive system for Navarre) and in which In the 'liveability' is related with the regulatory, cultural and productive functions of landscape[3].

- **Regulatory:** to define guidelines for the future sectoral development like agro environmental subsidies, infrastructures, proximity services, promoting employment and public administration reform and the regulatory framework.
- **Productive:** use of natural resources to generate economic activities and employment in sectors such as green economy, health, education, safety…
- **Cultural:** biodiversity protection, cultural identity (and training of landscape stakeholders.

2.2 Planning system

ELC AND RECOMMENDATIONS COE

The concept of landscape, in line with the ELC, is already integrated in the spatial planning at regional level, but there are lacks in the planning practice: social themes of landscape (like health and leisure), landscape quality criteria and definition and management of landmarks are not implemented yet. Also need to establish criteria for landscape quality and "social and shared vision of the landscape".

For implementation of the ELC Navarre will introduce a regional Landscape Plan or Strategy, (as a vision plan) with the aim to provide methods and techniques for assessment, development, management and evaluation of landscape at several territorial scales. The aim will be to incorporate guidelines, criteria and, if possible, determinations of landscape in different planning instruments and other sectoral policy conditions in geographic space.

SPATIAL PLANS (ACTORS, SCALES, FORMAL CHARACTER)

The government of Navarre has **two levels: the Regional Government and the Local Government or municipality.** Both levels have parliaments, elected assemblies and regulatory capacity and skills in their areas.

For the integration of landscape into regional planning instruments, Navarre has, as a legal framework for development (regional competition and regulatory scope) its own Law 35/2002 on Spatial Planning and Urbanism (LFOTU). The discipline of spatial planning provides the holistic view that the European Landscape Convention (ELC) gives on landscape. From the perspective of the spatial planning exposed in the LFOTU, is possible to apply the landscape character to the whole regional territory.

With this premise, therefore, from Navarre **is not considered necessary to implement a new landscape law** because the instruments adopted so far provide sufficient guidance to address the matter. Even the five territorial spatial plans of Navarre or **subregional spatial plans (POT)** also contribute, as described in the following sections, units of analysis (Environmental Units) and elements of landscape management, undeveloped land categories (SNU) and management criteria.

The spatial instruments of Navarre are related closely to the landscapes. However, the character of an area depends largely on the scale in which you work. In the future Landscape of Navarre Plan (LNP) or Landscape of Navarre Strategy is expected to work in regional and subregional scales with available tools like the Atlas of the landscapes of Spain,

[3] http://www.modernanavarra.com/en/

environmental units, environmental conservation system, and undeveloped land categories (SNU), etc.

The POT define the character[4] as a quality space or a set of them, distinguished by the way they relate to the territory or attempt to print a special characterization to a strategic or conceptual axis.

Spatial instruments incorporate the provisions set by the environmental policy and the network of protected areas, which use and management plans are also considered planning instruments (LFOTU, Article 28).

The system of spatial planning has three spatial scales (regional, subregional and local) and four instruments:

- **The Regional Territorial Strategy (ETN, 2005)** gives a spatial structure of the whole territory (on map) and includes functions as main cities, main infrastructure and regional nature parks. It is an attempt to apply the principles of the European Spatial Development Perspective (1999). It was designed with a time horizon of 25 years and main goals are to provide guidelines from the territorial management:
    - The economic and social cohesion, the rational use of natural resources and cultural heritage.
    - Integrate co-ordinately European policies. Cooperating with the EU and neighbourhood regions.
    - To facilitate the co-ordinately design of sectoral policies with government of Navarre.

  ETN provides guidance on the future performance of the landscape, and concretely guideline number 72. *Develop a policy to protect and enhance the landscapes of Navarra*, among others related to the protection and management of heritage, biodiversity, etc.

- **The Subregional Spatial Plans (POT, see map 1),** in 5 areas with comparable characteristics, 2011) deliver more concrete proposals and directives. These plans include directives for the management of natural and cultural heritage and "to protect and enhance landscapes". In the POT are specific proposals for action in landscaping materials: treatment wetlands, greenways, heritage recovery, expanding river parks, etc. To begin execution, there are guidelines on the landscape in a specific annex to the POT: Natural Heritage Annex: PN9 – Landscape.
  These guidelines are binding for sectoral agencies and local governments related with the Management of Land Not to Be Urbanized (SNU). They are made by the Regional Government (approved in 2011) and serve as reference framework for sectoral policies and local plans. They have no set timeframe but establish mechanisms for monitoring and updating.

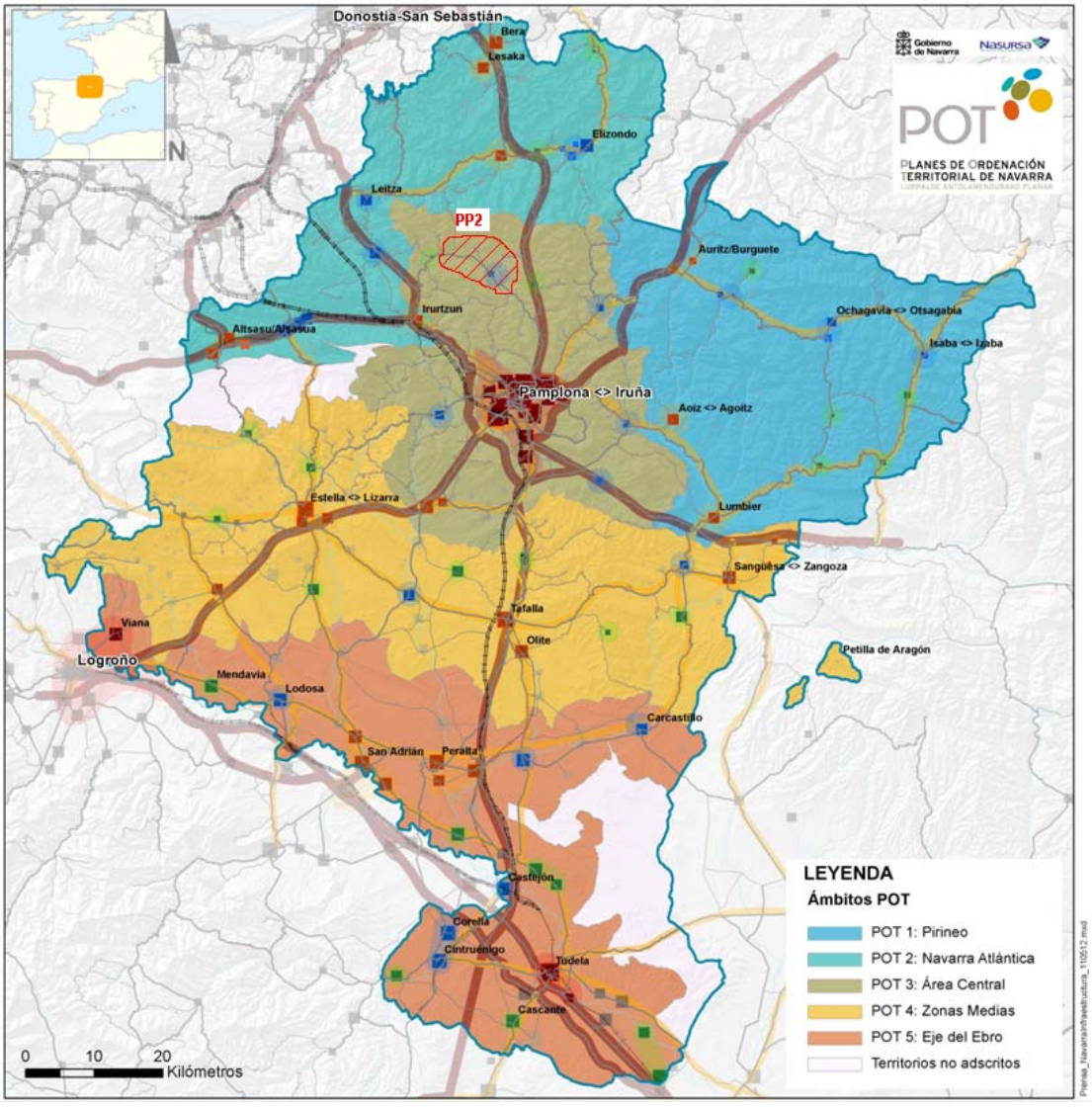
- **The Territorial Action Plans (PDAT)**, there are none approved yet), for the development of POT have suitable characteristics, for example, as a Landscape Plan because PDAT:
    - Should develop POT Landscape regulation, establishing regulatory rules and management of Landscape uses.
    - Can incorporate specific tools to set the values participation and "social vision of landscapes"

[4] See http://siun.navarra.es/contenidos/inst_ot.aspx

- PDAT should establish specific land reserves for certain projections and actuations, and
- Must have a specific schedule in eight years for the execution of actions.

- **The Sectoral Plan of Supramunicipal Scope (PSIS)** is other instrument, between the subregional and local level, an instrument of territorial planning for actions in areas bigger than a single municipality. Promotion can be public or private. Always have an Economic Viability Plan for the operation and commitment of the promoters of fulfilling the obligations arising from the execution.

Map 1: The 5 Subregional Spatial Plans: POT 1 – Pyrenean, POT 2 – Atlantic, POT 3 - Central Area; POT 4 - Middle Areas and POT 5 - Ebro Axis. POT 3 includes: Orgi oak Forest and ---- Protected Landscape of the Basaburua and Ultzama Valleys



URBAN PLAN

The municipalities (272 local units NUT's 5) and cities make urban master plans.

The Local General Plan (PGM) or Master Plan is the basic instrument of a municipality for urban planning. Sustainable Territorial Development (STD) understands the whole process of transformation of the physical elements of geographical space through the relationships

between system elements and territorial structure. The landscapes are its cultural and artistic expression. The heritage character, i.e. the need to pass to the next generation contributes to defining sustainability.

- The Municipal General Plan (PGM) is the basic instrument of a municipality for urban planning. It gives regulations and guidelines for land use and physical developments. It is needed for private developers.
- The PGM must cover the entire municipal territory in order to determine the Urban Land (SU), Land Not to Be Urbanized (SNU) or residual where possible raise new urban development.
- The first document of a PGM is the Strategy and Land Occupancy Model (EMOT) to be consistent with the determinations of the POT, set priorities for the use of space and resources and establish participated procedures. It is a strategic vision of the organization of the structural elements of the municipal territory.
- After the EMOT, it is drawn the Municipal Urban Plan (PUM) which establish basic determinations about land-use for the entire municipal administrative, the detailed arrangement of the basic urban uses, the characteristics of the facilities, infrastructure, urban roads and transport etc.
- The PGM is developed, consistently and in a concrete way, through specific instruments that have the characteristics of "action Plan" or "development Plan" as appropriate. The municipality also can define rules with the character of "regulatory" on system uses, activities, duties and related taxes.

TABLE 1. KIND OF PLANS ON SPACE AND LANDSCAPE AND GOVERNMENTAL LAYERS

	Vision	Action	Regulation	Development	Management
National					
Regional	Voluntary		Compulsory		Voluntary
Local	Voluntary	Compulsory	Compulsory	Compulsory	Compulsory
Project				Compulsory	

Table 1. Kind of plans on space and landscape and governmental layers

- Vision = desired future, goals
- Action / strategy = rules, finances, agreements, communications
- Regulation: Establishment of standards about physical planning and resources: agro-environment payments, taxes...
- Development = actions of physical operations, project with buildings or change of land use (realisation by blue print plan
- Management = daily physical measures (no big changes)

2.3 Planning culture

HISTORY OF LANDSCAPE CONCEPT IN SPATIAL POLICY

Landscape (both in the ETN and the Economic Strategy) is seen as transversal driver towards a green economy as it may plan, manage and optimize the productive aspects of landscape as well as it eases the understanding of the territory and the regional identity.

The Government of Navarre considers that landscape might be a resource to be used in socioeconomic development as well as territorial cohesion strategies according to the quality of life ("liveability") that it provides to citizens.

Navarre has traditionally used its landscapes as a brand image, its rivers or its environmental excellence as well; actually the current tourism campaign 2013 incorporates "scenic

routes". Landscapes are, as society, dynamic and subjects to change. Currently the focus is put into protecting this brand at the same time that the relations with the different sectors that support it are respected (including the citizens' interests): use of natural resources, protection of biodiversity, cultural identity (rural and urban), green activities and employment generation.

It is relevant to point out that there is a lack of training procedures to reach the managers of protected landscapes (due to the three laws' structure), citizens, and other stakeholders involved with landscape: farmers, foresters, architects, infrastructure engineers and, as a specificity in Navarre, energy brokers.

Landscape as 'territorial capital' is the result of several tangible and intangible components (people, activities, landscapes, heritage, expertise, communication, external relations, etc..) and represents the set of elements available to the territory. In some aspects can be an active and in others, cause of difficulties, but they are not an inventory, but the specific finding that can be highlighted.

GOOD GOVERNANCE (PARTICIPATION, DEMOCRATIC DECISIONS)

Citizen participation in the processes related to the spatial and urban plan had a very formal nature and generally related to the analysis of proposals with a very high degree of design plans and projects. Natural Areas Law, the European directive of water and AL21 were incorporated (such as ELP, but not yet implemented in Navarre) public participation from the beginning of projects.

At present the culture of participation is very established between citizens and even regulated for regional administration procedures, although it remains to incorporate specific processes as, in our case, the "participated vision of landscapes and evaluation of the quality of landscapes". Also participatory experience in the POT has facilitated the management of the planning instruments.

2.4 Documentation available for using in action on landscapes

There are five Spatial Plans at subregional level (POT) (Map 1). They establish the basic elements for the organization and articulation of the territory (MDTR):

1. Natural and Cultural Heritage
2. Urban and Economic System
3. Infrastructures and sustainable mobility
4. Spatial Cooperation and Coordination

The POTs define the physical and functional structure of the territory and by application of Guideline 72 of the ETN they "develop a policy to protect and enhance the landscapes of Navarre". They have a more pronounced normative and binding character than the Landscape Plan (PPN). They establish the need of the elaboration of a Landscape Plan of Navarre.

The Territorial Spatial Plans **(POT) includes a Landscape ANNEX** and have defined **Environmental Units** that are used to establish uses of **land not to be urbanized (SNU)** as well as landscape classes in order to define singular elements (natural and cultural landscapes). Territorial Spatial Plans include elements related with landscape protection. These elements make up a synthesis document and are valid in order to be included in the foreseen Navarre Landscape Plan.

→**Environmental Units:** used to evaluate the whole territory and assign different classes that will be used as a basis for the non-urbanized land management.

→**Files for the management of land not to be urbanized**: they define prohibited, authorized or to be authorized uses.

→**Classes and groups of landscape**: used to define remarkable and natural landscapes at the regional level those are not protected by sectoral law.

http://www.nasuvinsa.es/es/planes-de-ordenacion-territorial-de-navarra

2.4.1 MANAGEMENT FILES OF SNU (Land Not To Be Urbanized)

In correlation with the Territorial Development Model (MDT) established in spatial instruments are identified, defined and delimited **Environmental Units (UA),** which are land areas grouped as "homogeneous management units"[5] that combine environmental and differentiated production systems. Each of these units carries out one or several functions in the environment, has similar capabilities of use and potential risks relatively homogeneous to affront disturbances more or less in an analogous way. Each unit integrates **structural and functional approaches** related to the natural, ecological environment, hydrological, landscape aspects, etc.

Environmental Units (UA) are not a category of ground-level management. They are a methodological tool for analysis and diagnosis territorial defined for the objectives and the working scale of POT and give the keys to justify the proposed rules.

http://siun.navarra.es/contenidos/inst_ot.aspx
http://siun.navarra.es/Instrumento.aspx?id=104423 (POT 1)

But beyond these spatial units of analysis, the POTs bring, besides a number of **management files of SNU (Not To Be Urbanized Land).** That is, most of the territory of Navarre and therefore also of its landscapes. In these units the sub-categories of SNU defined by landscape criteria and the rest have elements to manage the appropriate cards and affect the types of land uses, buildings, procedures, etc. The files of management are POT documentation that must be consulted and includes compulsory regulations, to design urban planning and sectoral plans.

The following table (see below Table 2) summarizes these sub-categories. They are technical and legal link between the physical reality of the territory (morphology, function, and character of the spaces) use in spatial planning and the different tools that can be used for the protection and management of the landscape (see 2.1.). **Hence its importance as a guide for future landscape plan/strategy of Navarre. The SNU management cards are essential** for landscape management practices because they incorporate to SNU the protected categories for environmental legislation and other natural hazards affected or those interested in protecting them. **Table 2** shows the set of categories of SNU, nominally related to the landscape or some of the functions set out in LiveLand.

[5] The"homogeneous management units" are a method used in studies of essential physical environment across spatial planning in Spain. In the case of POT they have been used to describe the management functions for the entire territory of Navarre.

Table 2 - Main characteristics of areas LAND NOT TO BE URBANIZED as defined by the POTs of Navarre. Source: Compilation Observatorio Territorial de Navarra (OTN)

CATEGORY: LAND NOT TO BE URBANIZED (SNU) BY PROTECTION (SNUPrt)						
CODE	PN2 - ENVIRONMENTAL UNITS	POT 1	POT 2	POT 3	POT 4	POT 5
1 – BECAUSE OF THE TERRITORIAL DEVELOPMENT MODEL (MDT) ADOPTED IN POT: SPECIAL PROTECTION AREAS (LFOTU, article 94.1.b) → ANNEX PN3 : MANAGEMENT FILES						
SNUPartA	**SUB- CATEGORY: SNU BY ENVIRONMENTAL VALUE**					
SNUPartA: VEI	VEGETATIÓN OF SPECIAL INTEREST	■	■	■	■	■
SNUPartA: AEIF	AREAS OF SPECIAL INTEREST FOR WILDLIFE. STEPPE ZONES				■	■
SNUPartA: CT	TERRITORIAL CONNECTIVITY	■	■	■	■	■
SNUPartA: LEIG	PLACES OF SPECIAL GEOLOGICAL INTEREST	■	■	■	■	■
SNUPartA: H	WETLANDS	■	■	■	■	
SNUPartA: ZF	RIVERBANKS AND RIVERBEDS SYSTEM	■	■	■	■	■
SNUPartEN	**SUB- CATEGORY: SNU BY VALUE FOR NATURAL EXPLOI-TATION**					
SNUPartEN:SECA	SOILS OF HIGH AGROLOGICAL CAPACITY				■	■
SNUPartP	**SUB- CATEGORY: SNU BY LANDSCAPE VALUE**					
SNUPartP:PS	SINGULAR LANDSCAPE	■	■	■	■	■
SNUPartP:PN	NATURAL LANDSCAPE	■	■	■	■	■
SNUPartCu	**SUB- CATEGORY: SNU BY VALUE FOR NATURAL EXPLOI-TATION**					
SNUPartcU:CH	HISTORICAL WAY	■	■	■	■	■
2. – SNU FOR PROTECTION BY NATURAL RISKS (LFOTU, article 94.1.c) → ANNEX PN4 : MANAGEMENT FILES						
SNUPartR	**SUB- CATEGORY: SNU BY PREVENTION OF RISK**					
SNUPartR:ZI	FLOOD AREAS	■	■	■	■	■
SNUPartR:MM	AREAS OF RISK BY MASS MOVEMENT, FALL BLOCK AND SLIDES					■
3. – SNU FOR PROTECTION BY SECTORAL LAWS (LFOTU, article 94.1.a) → ANNEX PN6 : MANAGEMENT FILES						
SNUPartA	**SUB- CATEGORY: SNU BY ENVIRONMENTAL VALUE**					
SNUPartA:ENP	NATURAL PROTECTED AREAS	■	■	■	■	■
SNUPartA:HP	PROTECTED WETLANDS			■	■	■
SNUPartEN	**SUB- CATEGORY: SNU BY VALUE FOR NATURAL EXPLOI-TATION**					
SNUPartEN:MUP	"PUBLIC UTILITY WOODLAND"	■	■	■	■	■
SNUPartEN:R	IRRIGATION			■	■	■
SNUPartR	**SUB- CATEGORY: SNU BY CULTURAL VALUE**					
SNUPartR:CS	SAINT JAMES WAY			■	■	■
SNUPartR:VP	CATTLE RAILS	■	■	■	■	■
SNUPartCu:VV	GREEN WAY – Former railway routes		■	■		■

2.4.2 MAP AND CATALOG OF INTERESTING LANDSCAPES.

POTs include in Annex of **Natural Heritage "PN9 - Landscape"** a number of key elements in the development of the Landscape Plan (PPN). The work of cataloging of the main types, groups, components and elements of landscape are similarly described as the "landscape catalogs" established in the Catalan experience or the Basque Country.

http://siun.navarra.es/Instrumento.aspx?id=104424

In addition, POTs include **management criteria** in those soils categorized for its landscape value (including those already mentioned by sectoral legislation) and general criteria for the protection of urban landscapes. They have a first approximation to the content of the studies and projects with an impact on the landscape and landscape integration criteria.

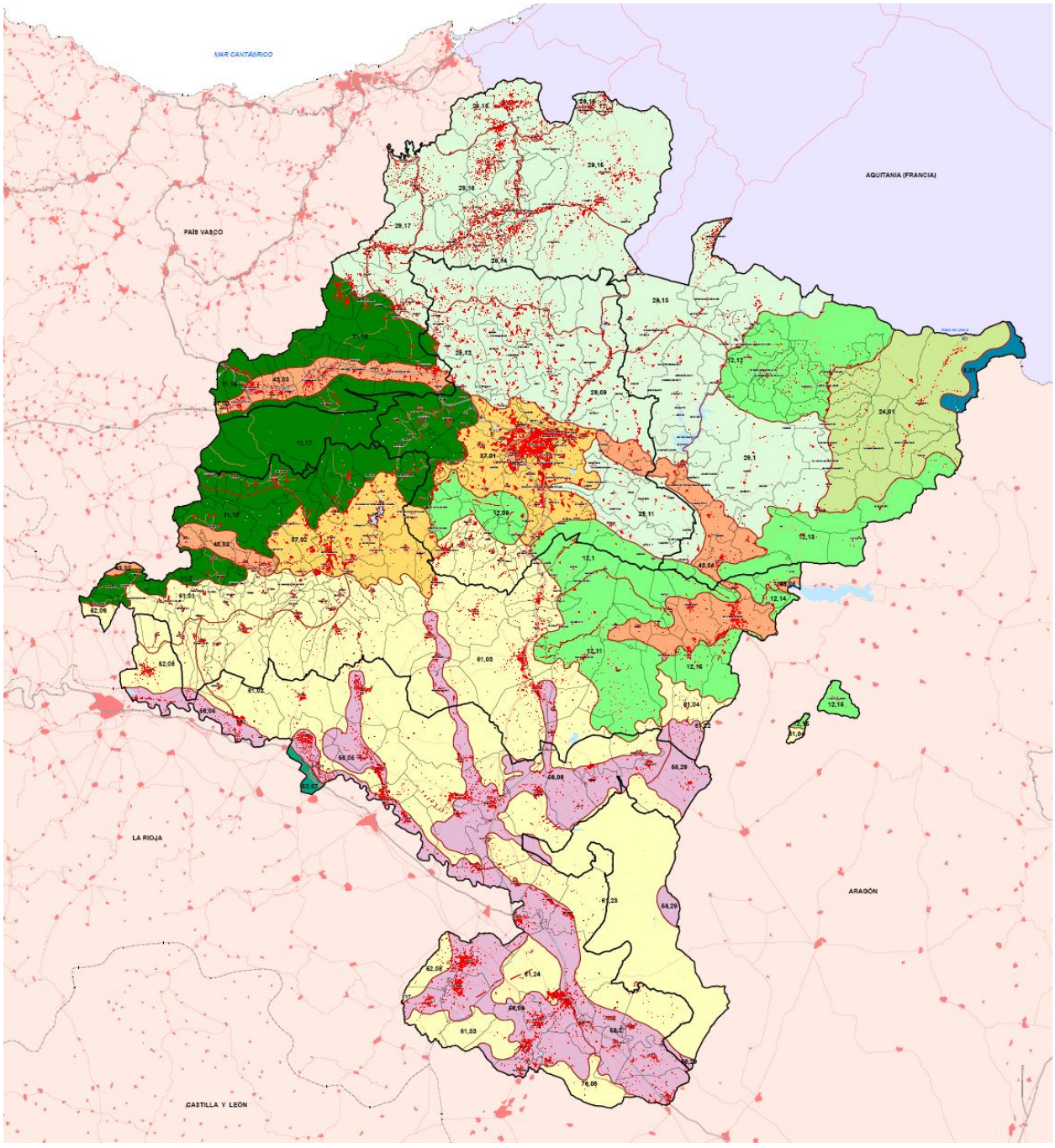
The **maps 2** (below) describe the **types from the Atlas of Landscapes of Spain** that POT s use as the basis for cataloging landscapes. Each unit describes specific elements and landscape components following a group of natural landscapes, agricultural humanized landscapes, forest landscapes, cityscapes, landscapes of water. Landscape types are specified in landscape units that relate to the environmental and land units of Not To Be Urbanized Land (SNU).

Due to its characteristics of specific regulation in Not To Be Urbanized Land (SNU) in **map 3** (below) the landscapes of interest of Navarre are grouped as **"landmarks landscapes", "unique landscape" "Cultural landscapes" and "areas of scenic interest** for their interest in land use". The map does not represent the degraded landscapes, which are not identified spatially.

Finally it should be noted that the spatial instruments have **monitoring procedures** that are coordinated and have been legally in charge to Territorial Observatory of Navarre (OTN): ETN memories, reports of life of the instruments, the indicator system POT, etc.

As a final remark, the **OTN indicator system** presents 20 indicators highly related with landscape policy that would be used in order to monitoring landscape. For instance, alteration of use in protected areas, urban borders, etc.

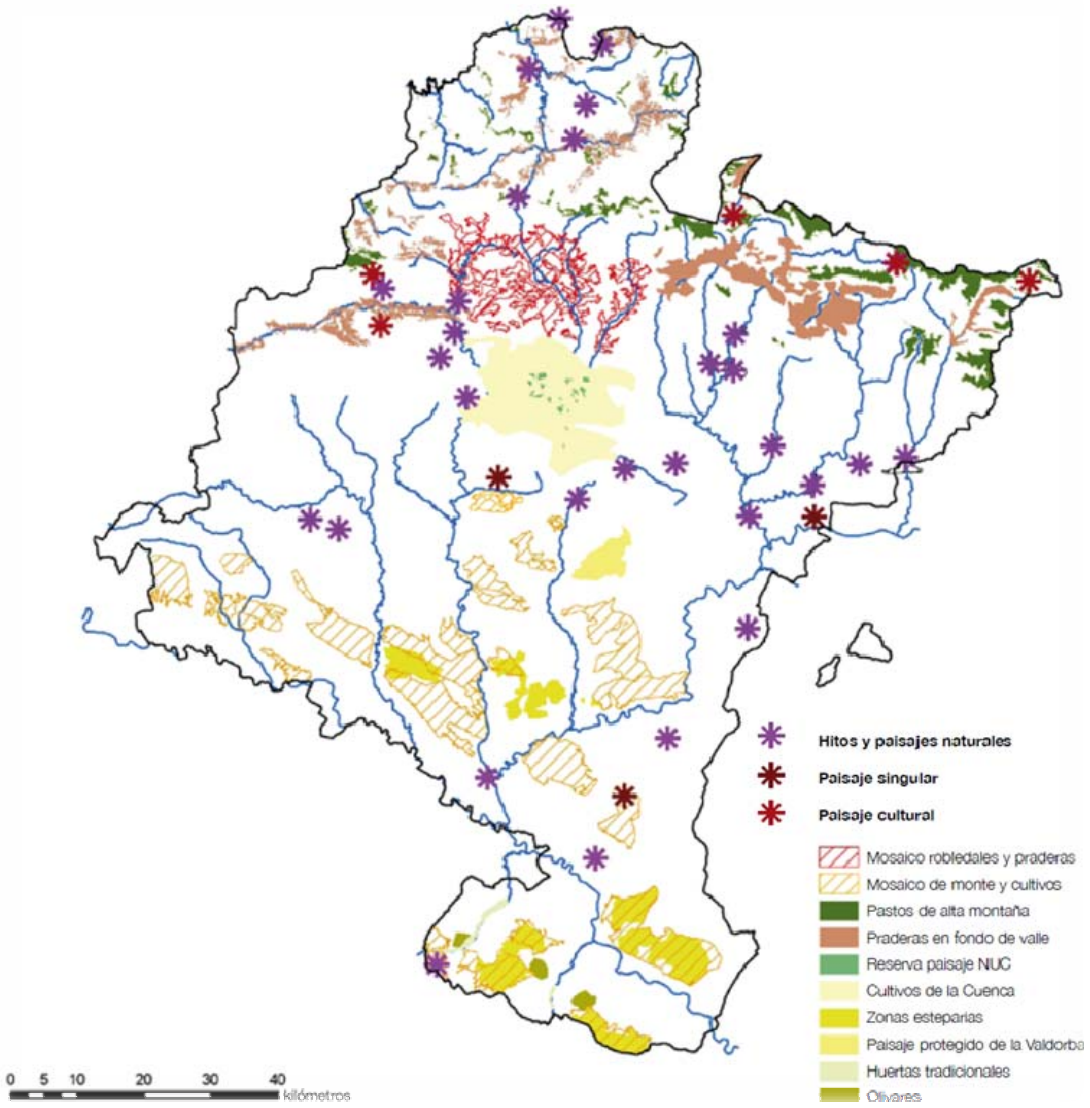
Map 2 - Map of Landscape types



0, Embalse
3, Macizos montañosos pirenaicos occidentales
11, Sierras Parameras orientales de la C.Cantábrica y de los M. Navarros
12, Sierras Pirenaicas. Sierras Medias
24, Sierras y valles Pirenaicos Occidentales
29, Montes y Valles Vascos,del Condado de Treviño,del Pirineo Navarro
37, Depresiones vascas, navarras y de la coordillera Cantábrica
43, Corredores cantábrico - Pirenaicos
52, Campiñas de la Depresión del Ebro
56, Vegas y Riegos del Ebro
61, Planos y Glacis de la Depresión del Ebro

0. Reservoir water
3. Western Pyrenees mountain massifs
11. Eastern mountain chains
12. Pyrenean mountain chains.
24. Mountain chains and western Pyrenean Valleys
29. Basque mountains and valleys
37. Basque and Navarre Depressions
43. Runners Cantabrian Pyrenees
52. Ebro River countryside
56. Meadows and Ebro Irrigation
61. Ebro Glacis and plains

Map 3 - Landscapes of interest of Navarre



LEGEND

1. Mosaic Oak forests and grasslands
2. Mosaic of forest and crops
3. High Mountain Pastures
4. Valley bottom grasslands
5. Landscape Reserve
6. Crops
7. Steppe zones
8. Protected Landscape Valdorba
9. Traditional orchards
10. Olive groves

3 Geographic description of the practice case area and land use character

3.1 Context and Land use character

The Navarre Region is situated in Northern Spain and covers three different biogeographical regions: Alpine, Atlantic and Mediterranean, which has led to a rich landscape and ecological diversity. Navarre has 640.000 inhabitants and a surface of 10420 km². Its average population density is 60 inh/km².

To the North, the Navarre of the rural **mountain houses** "caseríos" is made of a mountainous landscape with isolated houses, traditionally dedicated to self-sufficient farming. To the South and East of the Pyrenees the population gathers in small hamlets or villages: the Navarre of **the villages** ("aldeas"). To the Southernmost part of Navarre there is a predominant intensive exploitation of croplands as well as traditional irrigated crops along the river banks: the Navarre of **the small towns** ("pueblos").

Concluding some **characteristics of the current changes of the land use:**

- **The rural depopulation** that affects the symbiosis between cattle paths and physical conditions of landscape: fences and walls, terraces, extensive farming, forest management, etc.
- **The distribution of linear infrastructure corridors** that are concentrated in determined areas but uncoordinated with regard to landscape: railway, motorways, electricity network, water channels and so on.
- **The Navarre Canal of water** that will transform an important amount of croplands towards intensive farming.
- **The use of greenhouses** in traditionally irrigated areas.
- **The transformation pressure in peri-urban areas** related to the legal fact that an area must be fully urbanized even when buildings are not yet in construction.
- **Local plans before POT were in force foreseen all uses** in the municipality, mostly over sizing the needs of residential, industrial and other uses.
- Despite the proper distribution of **LIC** and their corresponding **PORN** and **PRUG,** most of them **do not consider landscape criteria.**
- **Existing sectoral legislation has sometimes originated the destruction of landscapes or landmarks.** For instance, land re-allotment processes or the lack of interest in the traditional architecture in villages and small towns in Navarre.

3.2 Protected Landscape of Basaburua and Ultzama Valleys and Orgi Oak Forest.

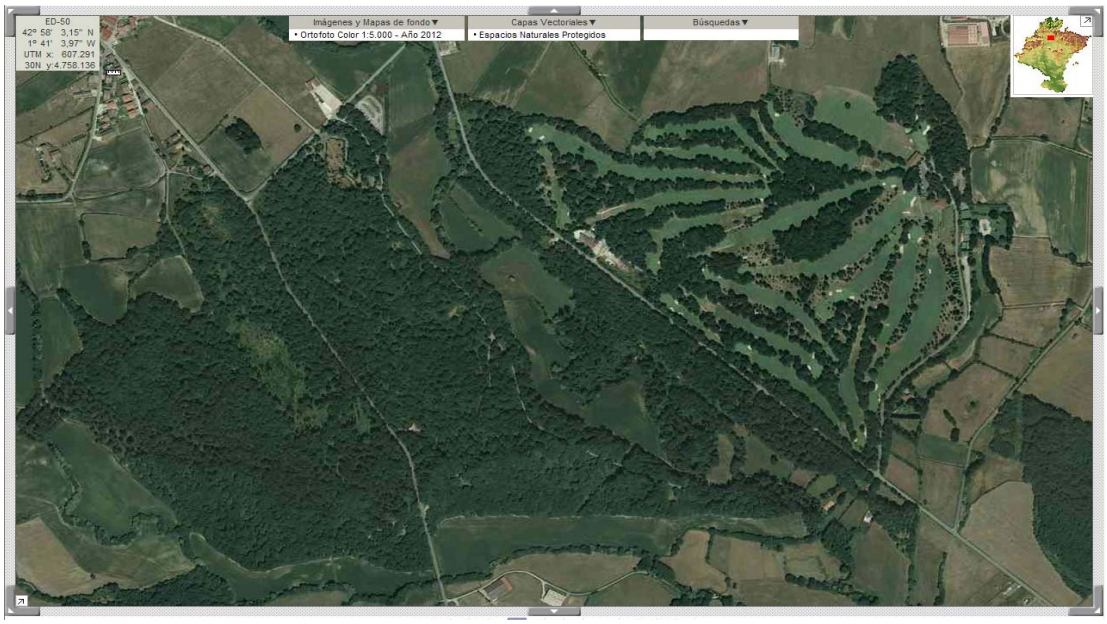
The Protected Landscape of the Basaburua and Ultzama Valleys and Orgi oak forest are two examples of figures under **protection** by Regional Law 9/1996 on Natural Reserves of Navarre. The Basaburua and Ultzama oak forests are incorporated in the Natura 2000 network as Sites of Community Importance (ES2200043)[6] . As seen in the following figures Protected Landscape incorporates the Natural Recreation Zone, **which shows actions on Landscape protection and management** where a protected area and an economic activity (a golf course) coexist. http://www.bosque-orgi.com/
http://www.turismo.navarra.es/eng/organice-viaje/recurso.aspx?o=3058&

[6] Directiva europea 92/43/CEE para hábitat de interés comunitario código 9160 y hábitat de interés prioritario Código 91EO.

http://www.turismo.navarra.es/esp/organice-viaje/recurso/relacionado/3212/

Experience selected in the Best Practices Competition (Dubai in 2006), and listed as GOOD.
http://www.unhabitat.org/bp/bp.list.details.aspx?bp_id=1744

Figure 1 - Multifunctionality and compatibility of uses between Orgi Forest (ARN1) and the Golf Course included in the Site of Community Importance (SCI) and Special Area of Conservation (SAC): Protected Landscape of Basaburua and Ultzama Valleys



As shown in the image, **a golf course and a Natural Recreation Zone (ARN1) (included in a bigger Landscape protected area) and coexist** in a space that reaches 4 km². This reflects land use management and spatial planning and landscape policy of the Government of Navarre through their respective laws of Spatial Planning and Natural Reserves.

Because of the uniqueness gained in environmental education and citizen participation in its most comprehensive sense, **the analysis is focused on the Orgi Forest** (ARN1) and its Use and Management Plan (PRUG) of the natural recreational area which is the necessary tool for managing all natural area previously established.

Figure 2 - Protected Landscape of Basaburua and Ultzama Valleys

In the Valley of Ultzama with a **Landscape of Tiled Oakland and prairies in Bottom of Valleys** is placed in a communal mount, the **Orgi forest** that is a **"millennial puddle oak grove flatland" of 80 hectares** of area, the last testimony of an original landscape of great environmental interest to preserve.

After centuries of exploitation, the Orgi Forest is undergoing a process of natural regeneration. It has been protected by the figure of **Natural Recreation Zone (1996)** and included as **Protected Landscape by Law 9/1996**, so that the conservation of the forest can be rationalized with public use in order to make Environmental Education and informal Recreation compatible in nature with Conservation of the oak grove's wildlife.

One of its peculiarities is the presence of a type of oak that can live in the waterlogged soils at the bottom of the valley, the **Quercus robur, or English oak**, many of which are a hundred and even two hundred years old. Those primitive oak groves were spread over the humid valleys of northern Navarre. Since then until very recent times, the action of man has made them disappear, **converting them into agricultural terrain and prairies**.

The forest is demarcated into three zones: the **welcome area, the rambling zone and the conservation area**, which cannot be accessed by the general public as it is in the process of natural regeneration.

The tracks allow to enjoy the different **nuances of this singular landscape**: *The labyrinth* the wood via miniatures; *the road* shows the different ages of the forest, *the path* takes to the wettest area of the wood - but without getting feet wet, and forest clearings where can be found the moor and grassland. In summer, this enclave becomes a **natural open-air stage** for shows and events within the ***Cultur* program**.

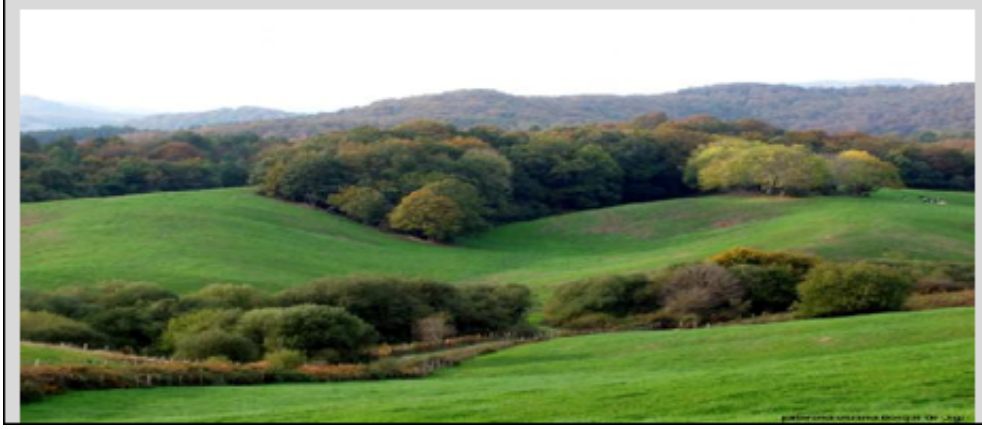
GOLF COURSE OF ULTZAMA (1965)

The idea of creating a golf club in the Ultzama valley originated in 1963 and was established in an oak wood on land belonging to the municipalities of Guerendiain and Eltso. The project was supported by various families, who leased their land to the valley for a period of 100 years. The clubhouse is regarded as one of the most attractive in Spain. In its 50 years of history, the Ultzama Golf Club has hosted major national and international events, one of the most notable being the Women's European Golf Championship in 2004, which ended with the triumph of the young golfer Carlota Ciganda descendent of Ultzama Valley.

Figure 3 – Golf course of Ultzama

ORGI OAK FOREST. PROTECTED LANDSCAPE

ORGI
LIZASO · ULTZAMA



4 Challenges and ambitions of practice case

4.1 LANDSCAPE STRATEGY AS INTEGRATING INSTRUMENT

The Government of Navarre is especially interested in the specification of the envisaged results concerning **"the guidelines for the elaboration of landscape plans and their implementation"** that will be used for the design of the landscape plan of Navarre.

At the request of the guideline 72 of the Territorial Strategy of Navarre (ETN) which refers to the need to "develop a policy to protect and enhance the landscapes of Navarre", **the Subregional Spatial Planning Plans (POT, 2011), propose the development of a Landscape Plan** and discuss the creation of specific legislation on the subject, what motivated participation in Liveland.

At present the Government of Navarre studies the benefits of a plan or strategy. In June 2013 **has created a Landscape Specific Commission** - with the participation of independent experts, responsible for the government and universities, within the Social Council of Land Policy (CSPT), an advisory and participatory board with agents linked to spatial planning.

The Landscape Committee will provide the Government of Navarra their views on the plan / strategy, its scope, the proposed methodology to conduct and criteria to guide the determination of overall management of the landscapes of Navarre.

In terms of timing, the work of the Specific Committee must be obtained in June 2014. Later from 2015, the Government of Navarra will decide the opportunity to develop the Plan / Strategy Navarra together with other private bodies (specialists and universities), and design the appropriate participatory process.

In general, at this moment, the **needs of Navarre in relation to the theme of landscape are:**

- Identify those relevant sites which must be requested as unique protection.
- Establish criteria to ensure extensive protection and not a reductionist view.
- To identify places and environments, due to a serious deterioration of natural values and features of its historical humanization should be restored landscape.

The future Landscape Plan/Strategy that Navarre is demanding should contain the definition of landscape quality objectives for the protection, management and planning landscape as the European Landscape Convention advised. The participated vision that citizens have of landscape should be promoted from this phase of work.

With existing documentation, it will be necessary to **develop a catalogue of landscapes** (natural and cultural or humanized), identifying landscape units, elements and significant milestones from the already landscape identified in the Spanish Atlas. In addition there should be a value analysis, possibilities and opportunities, characteristics, status, threats and pressure transforming them.

Finally it will be necessary to **establish criteria and measures related to landscape**, which should be adopted by the plans, programs and interventions with a territorial impact, to develop landscape integration criteria established in the POT for studies on the incidence of plans and projects in the landscape.

The future Landscape Plan of Navarre must provide landscape guidelines for incorporating landscape criteria related to the ELC in the "protected landscapes" declared and in the network of protected areas and update Uses and Management Plans for each protected enclave. It is an opportunity that the guidelines to be requested by environmental participatory organs, such as the Patronage of the Natural Park or the Environment Council of Navarre.

4.2 REGULATIONS FOR PROTECTED LANDSCAPE OAK FOREST

The Ultzama and Basaburua Protected Landscape contributes to biodiversity conservation and must contribute as well as to the improvement of the living conditions of the population in those areas (socioeconomic tier of Liveland). Although the compatibility of uses (golf course, primary sector, forest, etc.) comes from old, with several actions to improve environmental conditions with cattle breeders (manure control) as well as to endorse local employment, it is considered that Liveland may provide a comprehensive vision of landscape according to ELC: vision and more holistic or comprehensive strategy, regulate other functions in the Management Plan (health, economic activities, etc.), incorporate in sectoral policies management guidelines of protected landscapes.

It is a challenge that will be dealt with the elaboration of the Plan or Strategy of Navarre Landscape, same as with the Valdorba Valley Protected Landscape (Code PP1, mountainous area in transition to Mediterranean landscape) and other landscaped areas of interest included or not in figures on environmental protection.

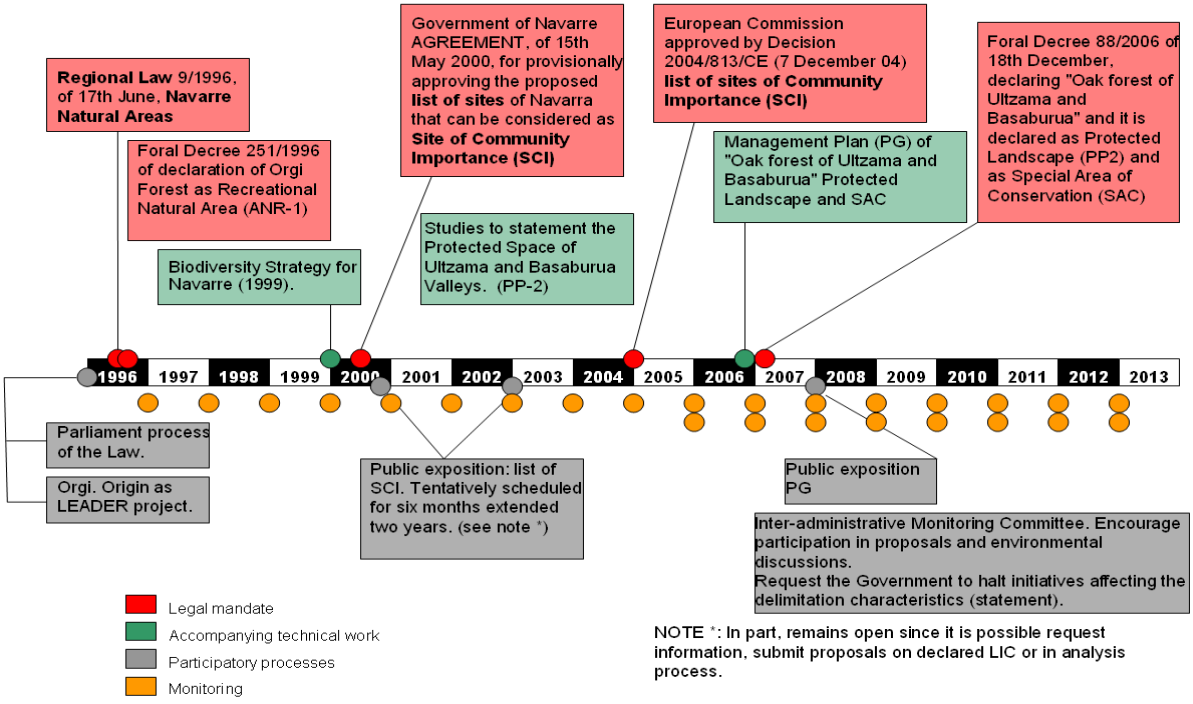
5 Description of planning practice protection regulation

5.1 Planning process and decision Making

5.1.1 TIME LINE AND PLANNING PROCESS

Figure 4 shows graphically the temporal process administrative and legal practice. They are two different legal acts, one related to the "Oak forest Orgi" (ANR-1) and one with the attractive Ultzama and Basaburua oak forest (PP-2). There is a time lag between the two events. Processes overlapped protection statement following the regional law of protected areas (1996) with the establishment of the Natura 2000 network and Sites of Community Importance, which provisional list was approved by Decision 2004/813/EC. **In section 5.1.2 briefly describes the scope of both legal acts.**

Figure 4 – DECISSIONS TIMELINE.- OAK FOREST (ANR-1) and (PP-2)



The following processes have required participation process:

1987- Accord between the Council of Lizaso and the Government of Navarre for preserving the Orgi oak grove as a **natural space of interest** for the community.

1995- The Council of Lizaso with the support of the Plazaola Tourism Consortium, the Cederna-Garalur Association, the Department of Tourism, and the Town Council of the valley of Ultzama, provides impulse for carrying out in Orgi a pilot project of conservation of nature, recreational use, and environmental education.

1996- Regional Law 9/1996 on Natural Reserves of Navarre. **Protected Landscape**

1996- The Department of the Environment of the Government of Navarre declares the legal protection of the Orgi Oak Grove, as **Natural Recreational Area**.

1999 - Biodiversity Strategy for Navarre (1999).

2000 - Government of Navarre AGREEMENT (15.May), for provisionally approving the proposed list of sites of Navarre that can be considered as Site of Community Importance (SCI). Delimitation and Studies to statement Protected Space of Ultzama and Basaburua Valleys.

2006 - Foral Decree 88/2006 of 18th December, declaring "Oak forest of Ultzama and Basaburua" and it is declared as Protected Landscape and as Special Area of Conservation (SAC) the Site of Community Importance (SCI) and is approved the Management Plan (PRUG). (BON nº 9, 19th January 2007).

1996/2013- 17 years of functioning have taken place **with** the pilot experience of public use of nature, Orgi has received **650,000 visitors who are satisfied** with the space. Monitoring annual report of indicators exist. In the case of Orgi is monitoring the indicators of participation, volunteerism and environmental education.

CONTENT OF THE PLANNING PRACTICE

PROTECTED LANDSCAPE. ORGI OAK FOREST. NAVARRE. PLANNING SYSTEM
1. REGIONAL LEGISLATION IN SPATIAL PLANNING
• NAVARRE LAW 35/2002 ON SPATIAL PLANNING AND URBANISM (LFOTU)
3. LANDSCAPE AND INSTRUMENTS OF SPATIAL PLANNING IN NAVARRE
• SUBREGIONAL SPATIAL PLAN (POT)
4. ENVIRONMENTAL UNITS (UA)
• UA8 - TILED OAKLAND AND PRAIRIES IN BOTTOM OF VALLEYS
5. MANAGEMENT OF SNU (LAND NOT TO BE URBANIZED)
• SNU BY ENVIRONMENTAL VALUE; NATURAL PROTECTED AREAS
6. LANDSCAPE PROTECTION INSTRUMENTS BY SECTOR POLICIES
• REGIONAL LAW 9/1996 ON NATURAL RESERVES OF NAVARRE Foral Decree 251/1996, declaration of Orgi Forest as Recreational Natural Area (ANR-1) Foral Decree 88/2006 declaring "Oak forest of Ultzama and Basaburua" and it is declared as Protected Landscape (PP2) and as Special Area of Conservation (SAC)
7. MAP AND CATALOG OF INTERESTING LANDSCAPES.
• TYPE: 29. BASQUE MOUNTAINS AND VALLEYS • UNIT: 29.14. MOUNTAINS AND VALLEYS OF ULTZAMA AND BASABURUA

5.1.2 PROTECTED AREAS. PROCEDURES AND DECISIONS

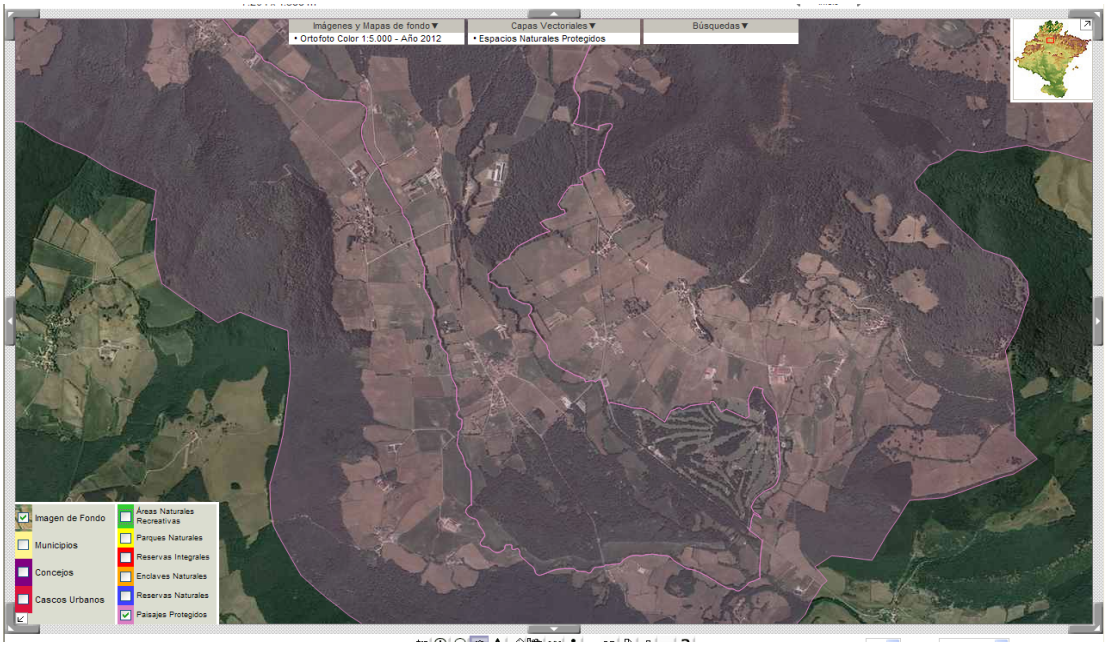
Related to legal protection: PROTECTED **LANDSCAPE AND ORGI OAK FOREST BY LAW (1996).**

The Foral Decree 88/2006 declaring "Oak forest of Ultzama and Basaburua" and it is declared as Protected Landscape (PP2) and as Special Area of Conservation (SAC) (http://www.navarra.es/home_es/Actualidad/BON/Boletines/2007/9/Anuncio-24/)

It defines and characterizes the park approving the functions of its Steering Committee and Management Plan that establishes management guidelines, and regulatory actions. The management objectives are natural values (plants, wildlife, water and character of "countryside") and Monitoring Plan includes actions to be undertaken in the year of adoption of PP2 and the six years following the declaration (2007-2013).

More information: http://www.biodiversidad.navarra.es/Lugar.aspx?id=47

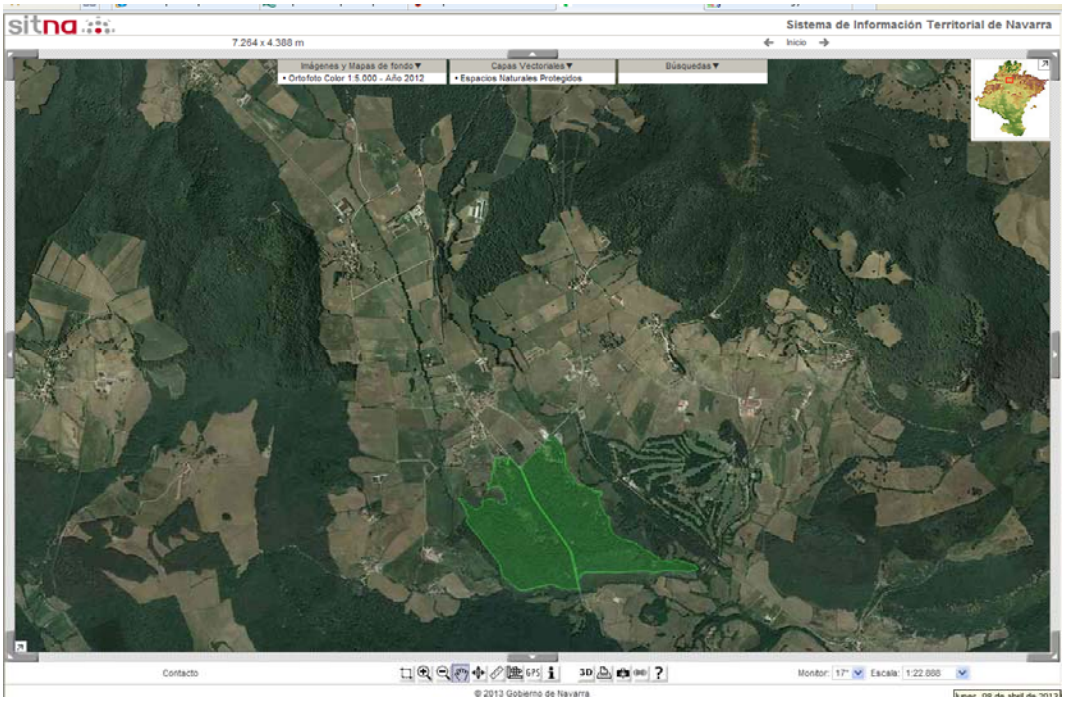
Figure 5 - Protected Landscape PP2 oak forests of Ultzama and Basaburua (see table 2: SNU)



The Foral Decree 251/1996, declaration of Orgi Forest as Recreational Natural Area (ANR-1) (http://www.navarra.es/home_es/Actualidad/BON/Boletines/1996/86/Anuncio-3/)

It sets the definition and characteristics of the recreational area. The annex contains the Use and Management Plan which sets out the general guidelines for management and generally prohibited supported or promoted activities, defining specific areas (conservation area of extensive and intensive use). It establishes that the monitoring committee is involving the Regional Government - Environment as a substantive body and local authorities.
More information: http://www.biodiversidad.navarra.es/Lugar.aspx?id=170

Figure 6 - Natural Recreation Zone ANR-1



5.2 Description of planning practice Management Plan Oak Forest

As mentioned above, the legal acts which establish the Protected Landscape (PP1) and Orgi Recreational Area (AR1) have annexed its management plan. Spatially one contains the other, so that the nature and geographical elements are practically the same.

5.2.1 ANALYSIS

The character is "countryside" and is determined by environmental and human use: is a mosaic of oak forest and pastures of traditional uses (livestock and agricultural). However, in its statement of "protected" have become more important environmental values.

The valley bottoms are intensively used by humans and their activities. With increasing altitude and slope forests are densified to acquire cultural significance identity besides being a source of resources for its proper operation. Water feature in this area takes on special significance (see environmental units explained in 2.4.1).

5.2.2 VISION AND OBJECTIVES

The document "Management Plan" of SCI ES2200043 "Oak forest of Ultzama and Basaburua" "includes general and operational objectives, measures that are intended to carry out and the guidelines and regulations that are specific application in space." **The objectives are related to:**

- Maintain the conservation status of **natural habitats** of interest for conservation.
- Manage adequately **oak forest**, floristic and structural diversity, improve their conservation status and reduce fragmentation levels.
- Achieve good ecological and chemical status of **rivers and wetlands network** (defined in WFD , 2000/60/EC) , through the increase in the quality of its waters, vegetation recovery riparian and removing obstacles , developing a diverse ecological functionality .
- Increase **structural diversity of countryside landscape** as a mosaic of habitats.
- Achieve a model of farming and **ranching compatible** with environmental conservation.
- Management of **specific wildlife species:** bats, agile frog and its habitat, and habitat mink , red kite, the bird communities of the countryside and others.
- **Information and awareness.** Ensure the dissemination of information on the natural values of the place, as well as proposed conservation guidelines.
- **Public Use.** Reconciling public use management with the conservation of the values of the Place.

5.2.3 ACTIONS AND MEASURES ENVISAGED

Related to Management:

The monitoring plan has been monitored and presents performance indicators of the actions related to the conservation objectives (see "Monitoring Plan" downloadable from the web). Possibly the most significant document is the "Public Use model" that regulates the compatibility of conservation values with the demand for certain agricultural uses, livestock, collection of mushrooms and forest, etc.. Besides it is being used in spatial planning by local authorities and agents in development.

For each of the objectives set out concrete actions for action which are summarized in the following **types of actions:**

1. Analysis, research and inventory of the flora and fauna.
2. Monitoring the size of populations.
3. Application of appropriate management measures according to studies (1 and 2).
4. Experiencing models and forest management agreements with local entities.
5. Recovery wet areas and rivers.
6. Management of the cultural elements of the countryside hedges, walls, cutting lawns, waste management, treatment, infrastructure (electricity and roads).
7. Slurry treatment (highlight the accomplishment with the participation of farmers)
8. Development of Public Manual (script development outlined in manual "Management Plan")

Actions and Measures Implemented

- Participation. The process has included high participation in the design and has focused on public use (satisfaction surveys), and also for dynamic and annual programming. Development of activities and projects of a social and volunteer nature are encouraged.
- Management. Use and Management Plan with Action Programs and implication of a Local Entity.
- Collaboration. Allows coordination between municipalities and agents.
- Agreements with organizations and social groups to promote activities.
- Education and awareness. Environmental Education and informal Recreation compatible in nature with Conservation of the oak grove's wildlife.

In Orgi actions have been taken, including promenades for the blind, welcome area, observation towers (see 5.2.4). These specific projects were approved by the monitoring committee and administrative procedures and are similar to other cases (including processes of participation and public exhibitions).

5.2.4 IMPLEMENTATION STRATEGY

By the Government of Navarre, competent in the SCI management (PP2), no specific budgeted for each of them exists. The Environment Department performs management activities, maintenance and improvement described in each of the approved Management Plans. The information is accessible via internet and it is showed in the public accounting reports and in the State of the environment reports in Navarre and executed activities.

In the case of Orgi (ARN1), management and maintenance, is almost 100% funded through an **agreement signed between the Government of Navarre and Lizaso Council** (Local Authority equivalent to NUT6). These activities are performed by a local company (five employees) contracted by public tender until 2017.

Other activities and investments are often financed by **sponsorships or European initiatives or financial institutions.** These projects may be new construction projects, environmental volunteering, case studies, etc. In this way were funded, for example, path for blind persons for some campaigns with students from universities of Navarre.

Among these financing entities are Cederna-Garalur Association for Rural Development (LEADER manager), the Regional Tourist Consortium Plazaola, IMSERSO ONCE Foundation, ONCE-Navarra (Spanish National Blind Organization), Caja Navarra Foundation.

Table 3 -Management and Maintenance Expenses (ARN Orgi)

Año	Total Achievement	Gov of Navarre
2001	55.283	100%
2002	57.015	100%
2003	74.367	95’7%
2004	73.000	88’9%
2005	73.001	94’1%
2006	76.000	95’4%
2007	76.000	95’4%
2008	80.000	95’6%
2009	80.001	97’1%
2010	80.001	97’1%
2011	76.000	100%
2012	50.492	100%

5.2.5 MONITORING AND EVALUATION

As shown before in Figure 4 DECISSIONS TIMELINE.- OAK FOREST (ANR-1) and (PP-2) every year the department of Environment makes a Monitoring Memory of finished tasks, both maintenance and management of the protected environment as environmental monitoring of protected species. By means of other agents can extract other data as mushrooms and berries extraction or communal harvesting firewood.

Finally notice that forests and natural environments are freely in Navarre, therefore can not give the exact figure of visitors. This applies to Protected Landscape of Oak wood of Basaburua and Ultzama. In addition to the activities related to wood, there are only control and regulation in certain activities such as hunting, fishing and mushrooming.

In Orgi there is a control related to secure parking and the number of people accessing with a motor vehicle. The mean annual visitors are around 40,000 people.

You can download the Monitoring Plan (Plan de Seguimiento) of PP2 where there are activities implemented in the programming period of 2007-2012.

(http://www.biodiversidad.navarra.es/Lugar.aspx?id=47**)**

5.2.6 ACHIEVED RESULTS

- **Implication of a local public entity in the management** of a protected space shared by the Regional Government and other public institutions; town council of the valley, Cederna-Garalur Association…etc.
- **Change of the local policy in environmental management** (intergovernmental and public / private cooperation) **of a communal mount** in order to destine it to public use, conservation of nature, and environmental education for the whole of society.
- **Creation of local employment**, to develop the plans and programs of Orgi, which varies according to the financial capacity of concrete actions and campaigns management of resources (forest, communal lawns and mushrooms). The most steady employment in the case of management Orgi-1 RNA.
- **Preparation of environmental volunteer programs**, attention to protect social work personnel, and work camps with young persons from the valley. Generally organized jointly by the Government of Navarra, the management company of Orgi, Ultzama City Council and funded by the CAN (Savings Bank).
- Through the follow-up on the type of visitors to the space, conducts and attitudes of these, the **environmental impact on the space has been diminished.**
- Adapt a natural space for all of those persons with different types of incapacities.
- **Create a meeting place** between the different societies, urban and rural, facilitating the integration of other cultures of increasing presence in Navarre that make the just and selfless access, without exclusions, to nature a reality.
- Through economic austerity and with rustic criteria, a space to which an average of **annually 45,000 visitors** attends has been managed. Access to forests and Orgi is free of charge. In the latter case the visitor control is done by car parking management (not free). This model applies elsewhere in the network in Navarra and has cost the citizen understands.

6 Links to ESPON studies

ECONOMIC PERFORMANCE

Practice is related indirectly to economic performance, in the traditional sense. On the contrary, the spatial policy is targeted to discourage the 'most economic' land use and to stimulate a 'lower' economic.

QUALITY OF LIFE

The practice has a positive effect on the feeling of "well-being" of citizens and contributes to an environment and healthy lifestyle (itineraries, recreational and sport areas, etc). The risk of poverty rates is not considered likely to be affected either positively or negatively.

ENVIRONMENT

The practice is related to the protection of biodiversity. In the case of oak forest is used a form of environmental protection (included in the Natura 2000 network) and the main objective is the preservation of the species contained in that space. It combines the restrictive use of some areas (Protected Landscape) with access to educational and recreational uses in the Orgi Forest.

INNOVATION

Orgi contributes significantly to research on natural species and affects to forest use and coordination with a population of traditional livestock use. It affects environmental education through interpretive centres.

POLYCENTRIC DEVELOPMENT

The valleys of Ultzama and Basaburua are in the field of POT 3, near Pamplona, capital of Navarre which is considered within the territorial development model "Port of Navarre". Appropriate accessibility rates are good at regional level but compared with other regions correspond to those of a peripheral region in Europe.

ATTRACTIVENESS

The practice encourages the protection of landscape diversity of Navarre and is incorporated in the image and landscape touristic tours. It has received a significant increase in visitors and users and includes actions on universal design and therefore affecting to index of satisfaction of residents and visitors.

CLIMATE CHANGE

Not considered potential risk areas affected by the Climate change. On the contrary, the protection of forests (oak in the case of Orgi) will improve the adaptation to Climate change.

LAND USE

As explained before land use in Navarre is managed by management cards. In urban regulates construction activities and in the not urban (SNU) analyzes all possible activities and compatible uses that allows the character to use. Any desired new activity implanted in a SNU must incorporate an administrative process that regulates its implementation or not.

7 Links to European policy principles

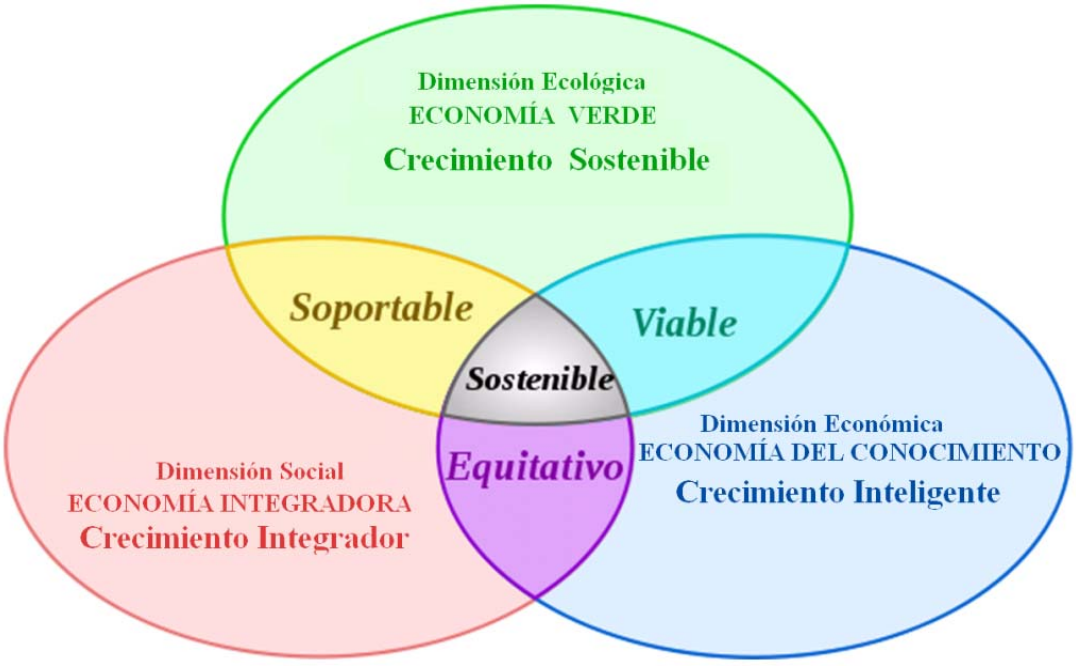
From Navarre contribute to the general debate about **CAF-concept Sustainable Territorial Development** is considered important, in a more global and **comprehensive way: the discipline of Spatial Planning.** It is their relationship and impact on sustainable territorial development, which is the purpose that Article 2 of the LFOTU is set for the procedures of the Government of Navarre on Spatial Planning. From a conceptual point of view the content of sustainable territorial development is analogous to **territorial cohesion** used by the European Union.

Territorial Strategy of Navarre (ETN) began to be developed in 2001 and was possibly the first European region to implement the objectives of the ESPD in their own territorial governance system. Adopted in 2005 addressed the issues now are components of territorial cohesion for European policies: assessing territorial capital itself, the polycentric expressed in Navarre by the concept of region-city, equivalent accessibility and coordinated inter-administrative work.

http://ec.europa.eu/regional_policy/what/cohesion/index_en.cfm

The concept of territorial cohesion is related to the concept of sustainability and the three principles of the Europe 2020 Strategy: sustainable growth, smart growth an inclusive growth (**see figure 7).** So with These six concepts should guide the decision making in planning and Implementation of spatial planning and land use tools.

Figure 7 – Sustainability: the value of the concepts



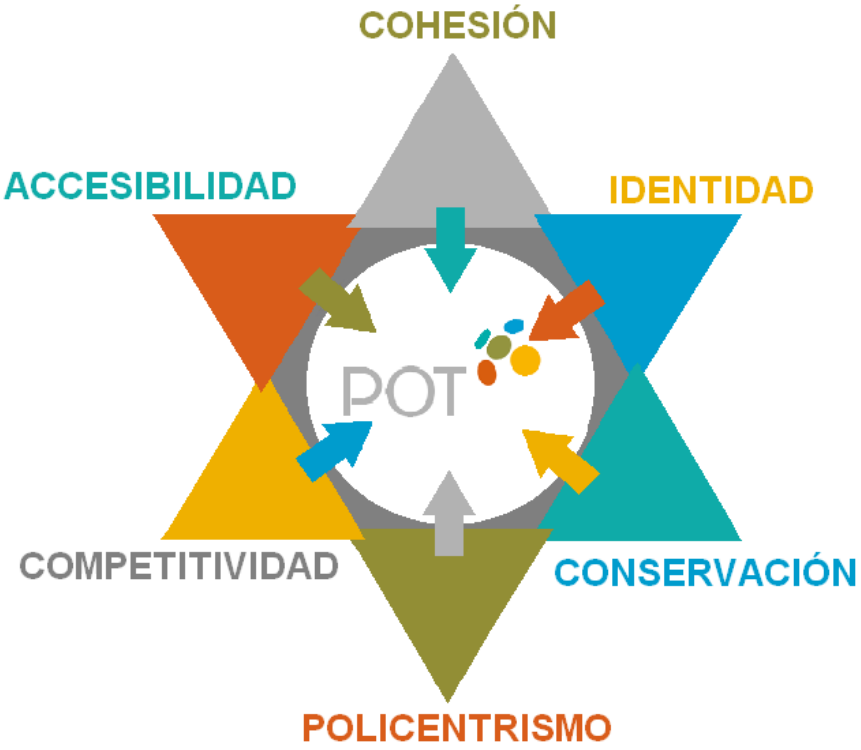
SOURCE: Transformed from an original licensed creative Commons including the three strategic objectives of the Europe 2020 strategy

We analyze the performances by its effect on the following six topics **or strategic issues (see figure 8):**

1. **Competitiveness.** The smart and sustainable growth
2. **Social cohesion.** Building an inclusive Europe
3. **Conservation.** Protection of Natural Resources and Environment
4. **Polycentrism.** A new urban-rural relationship in globalization
5. **Identity.** Intelligent management of natural and cultural heritage
6. **Accessibility.** Equivalent access to infrastructure and knowledge

These six concepts are rooted in the European Spatial Development and the Sustainable Development Strategy (EU and UN documentation). And so they have understood our LFOTU and especially Territorial Strategy of Navarre (ETN, 2005). So we claimed from the beginning to keep the "thread" in the documentation Liveland: all actions carried out on the territory must be related to the six strategic issues in correspondence with the territorial sustainable development.

Figure 8 – Sustainable Territorial Development in Spatial Planning Instruments



SOURCE: Territorial Strategy of Navarre (ETN) and territorial spatial plans of Navarre (POT)

8 Summary

The case study of Navarre: The Protected Landscape of the Basaburua and Ultzama Valleys and Orgi oak forest is a practice of landscape under **protection by Regional Law 9/1996 on Natural Reserves of Navarre.** Its vision and strategy aims the **protection** and is mainly related to natural character and biodiversity protection. **Educational and recreational** component is added in concrete enclave of Orgi oak.

In its execution and implementation process has been **public participation processes** as befits environmental and territorial **procedures established by law in Navarre**. **Plans of use and management** of natural reserves of Navarre are considered planning instruments. Their criteria are incorporated at 5 subregional spatial Plans (POT).

However, to implement the recommendations of the ELC, and following the analysis set in Liveland, this practice of landscape **should provide a more holistic, strengthen analysis and intervention in the field of health and economic functions**, as well as **complete the value of the landscape** that has so far been technically and lack, for the "**social vision of the landscape".**

THE MAIN CHARACTERISTICS OF CASE STUDY ARE:

- The character is "countryside" and is determined by environmental and human use: is a mosaic of oak forest and pastures of traditional uses (livestock and agricultural). However, in its statement of "protected" have become more important environmental values.
- One of its peculiarities is the presence of a type of oak that can live in the waterlogged soils at the bottom of the valley, the **Quercus robur, or English oak**, many of which are a hundred and even two hundred years old. Those primitive oak groves were spread over the humid valleys of northern Navarre. Since then until very recent times, the action of man has made them disappear, **converting them into agricultural terrain and prairies**.
- Multifunctionality and compatibility of uses between Orgi Forest (ARN1) and the Golf Course included in the Site of Community Importance (SCI, ES2200043) in the Natura 2000 network and Special Area of Conservation (SAC), Protected Landscape of Basaburua and Ultzama Valleys
- 17 years of functioning (1996/2013) have taken place with the pilot experience of public use of nature, Orgi has received **650,000 visitors who are satisfied** with the space. Monitoring annual report of indicators exist. In the case of Orgi is monitoring the indicators of participation, volunteerism and environmental education.
- Facilitate the transfer of experience to other significant actors in Navarre and other regions because of its technical nature on the landscape as processes of participation and coordination between agents.

ACHIEVED RESULTS

- **Implication of a local public entity in the management** of a protected space shared by the Regional Government and other public institutions; town council of the valley, Cederna-Garalur Association…etc.

- **Change of the local policy in environmental management of a communal mount** in order to destine it to public use, conservation of nature, and environmental education for the whole of society.
- **Creation of local employment**, to develop the plans and programs of Orgi.
- **Preparation of environmental volunteer programs**, attention to protect social work personnel, and work camps with young persons from the valley.
- Through the follow-up on the type of visitors to the space, conducts and attitudes of these, the **environmental impact on the space has been diminished.**
- Adapt a natural space for all of those persons with different types of incapacities.
- **Create a meeting place** between the different societies, urban and rural, facilitating the integration of other cultures of increasing presence in Navarre that make the just and selfless access, without exclusions, to nature a reality.
- Through economic austerity and with rustic criteria, a space to which an average of **annually 45,000 visitors** attends has been managed.
- The model of Orgi is an example of **sustainable management**, of analysis, and environmental protection that may be extrapolated to other zones of interest.

TRANSFERABILITY TO LIVELAND

1. **Legal framework.** It is an example of using a legal framework on environment and landscape field. (Regional Law 9/1996 on Natural Reserves of Navarre).
2. **Protected Landscape and Natural Recreation Zone.** Includes these specific tools of landscape protection by Law.
3. **Shows actions on Landscape protection and management** where a protected area and an economic activity (a golf course) coexist.
4. **Liveability.** It is an example of scalar approach regarding planning instruments, objectives and strategies for the use of Liveability.
5. **Multiscale.** It has management tools for each of the scales according to the Law of Natural Spaces of Navarre in coordination with spatial planning instruments.
6. **Multifunctionality.** It lets combine protection and uses.
7. **Participation.** The process has included high participation in the design and has focused on public use (satisfaction surveys), and also for dynamic and annual programming. Development of activities and projects of a social and volunteer nature are encouraged.
8. **Management**. Use and Management Plan with Action Programs and implication of a Local Entity.
9. **Collaboration**. Allows coordination between municipalities and agents.
10. **Agreements** with organizations and social groups to promote activities.
11. **Education and awareness.** Environmental Education and informal Recreation compatible in nature with Conservation of the oak grove's wildlife.

9 Annex: Arga Riverside Park

The case of Arga complements Orgi for Oak Forest, more related to the regulatory framework because Arga case provides specific actions with respect to the functions of Landscape set out in the CEP and Liveland.

9.1 Framework

In Pamplona, capital of Navarre, the geographical space and the urbanism is managed by the same law, LFOTU, therefore shares the same interpretation and concepts. However, it is possible incorporate the specific criteria related to policies "botom-up", local participation and sustainability related to the implementation of Local Agenda 21. Pamplona has approved the II Local Action Plan and actively participates in the activities of the Red Navarra of Local Entities throw Sustainability (redNels), also integrated into the Spanish network and UN-Habitat initiative[7].

The region of Navarre put forward the planning and development of the Arga Riverside Park (1996 – 2007) as good practice in the framework of the Liveland project. The 'linear park' includes the area of the city of Pamplona and other municipalities along the river. Because the park includes the functions of water, nature, recreation and cultural heritage, we call it an 'inter-local landscape development plan'. The contribution of Navarre (by a company owned by the region) is focused on the realisation of the physical interventions.

The Riverside Park is developed by two plans:
PSIS, for the whole area of Pamplona City Council, (Not Pamplona)
http://www.mcp.es/parque-fluvial
City of Pamplona: General Urban Plan (PGOU)
http://www.parquefluvialdepamplona.com/parquefluvial/en/presentacion/index.asp

Experience selected in the Best Practices Competition (Dubai in 2012), and listed as GOOD.
http://www.unhabitat.org/bp/bp.list.details.aspx?bp_id=4188

In the case -**Arga Riverside Park**- the comprehensive approach according to the Spatial Planning legislation has achieved the Hispania Nostra's award in "Best territorial or landscape practice"

- http://www.hispanianostra.org/premios-hispania-nostra-2013-nota-de-prensa/
- http://www.pamplona.es/verpagina.asp?idpag=NT3000775&Idioma=1
- http://www.diariodenavarra.es/noticias/navarra/pamplona_comarca/pamplona/2013/06/14/el_parque_fluvial_pamplona_premiado_las_buenas_practicas_120873_1702.html
- http://81.19.96.174/2013/06/15/ocio-y-cultura/cultura/el-parque-fluvial-del-arga-logra-un-premio-hispania-nostra

The Municipal Plan introduces a different way of understanding the relationship between the plateau and the valley city, because the Plan value the space between them, the river Arga, the meanders of the left bank and the slope as a meeting place and relationship. An

[7] Remember, and is explicitly mentioned in the description of the case studies that both the "Arga Riverside Park" as the "Protected Landscape of the Basaburua and Orgi-Ulztama Valleys" is collected and selected in the database of good practice:
http://www.unhabitat.org/bp/bp.list.details.aspx?bp_id=4188
http://www.unhabitat.org/bp/bp.list.details.aspx?bp_id=1744

opportunity to create a space that characterizes the northern neighbourhoods and improves urban quality[8].

The area of Pamplona and surroundings is described in the Subregional Spatial Plan, sub-area 10.4 "Pamplona Metropolitan Area" that incorporates 10 municipalities complete and the rural part of 7 other municipals terms but only on its urban part. The map of the subregion points out the bigger areas of 'urban green' and of the countryside, which may not be urbanised in the next years.

The river Arga is described as 'Environmental Unit of Riverbanks and Riverbeds'. This Environmental Unit gives a comprehensive analysis of the environmental functions and services of the water course in its surroundings. In the area of Pamplona the water functions are described as:

ARGA RIVERSIDE PARK NAVARRA. PLANNING SYSTEM
1. REGIONAL LEGISLATION IN SPATIAL PLANNING
• NAVARRE LAW 35/2002 ON SPATIAL PLANNING AND URBANISM (LFOTU)
3. LANDSCAPE AND INSTRUMENTS OF SPATIAL PLANNING IN NAVARRE
• PLAN WITH SUPRA LOCAL INFLUENCE (PSIS)
4. ENVIRONMENTAL UNITS (UA)
• UA14 - RIVERBANKS AND RIVERBEDS
5. MANAGEMENT OF SNU (LAND NOT TO BE URBANIZED)
• SNU BY ENVIRONMENTAL VALUE; RIVERBANKS AND RIVERBEDS SYSTEM
7. MAP AND CATALOG OF INTERESTING LANDSCAPES.
• TYPE: 37. VALLEYS OF THE BASQUE, NAVARRE AND CANTABRIAN MOUNTAINS • UNIT: 37.01. PAMPLONA BASIN

9.2 The actors and relevant milestones

Navarre Government as the supervising organism of the regional spatial plans as well as the **only** stakeholder in environmental matters (Protected Landscape of Ultzama and Basaburua). For Arga Riverside Park the Government of Navarre stimulated coordination of the project and participated in the consortium that carried out the works in the area not corresponding to Pamplona City, through the public company NILSA.

The planning and execution of the designed actions have **two stakeholders working** in a coordinated way (**see map 5 above):**

A) '**Pamplona's County Services** (MCP) or Commonwealth of Pamplona's County: "Pamplona's County Riverside Park". Is a voluntary federation of local governments in the surroundings of Pamplona. Founded in 1982, it was first of all focused on integral water policy: sanitation of waste waters and restoration of river courses. The federation now works as well in public transportation systems. MCP took over the management of the Riverside Park from the Commonwealth and the reception of the Works executed by NILSA.

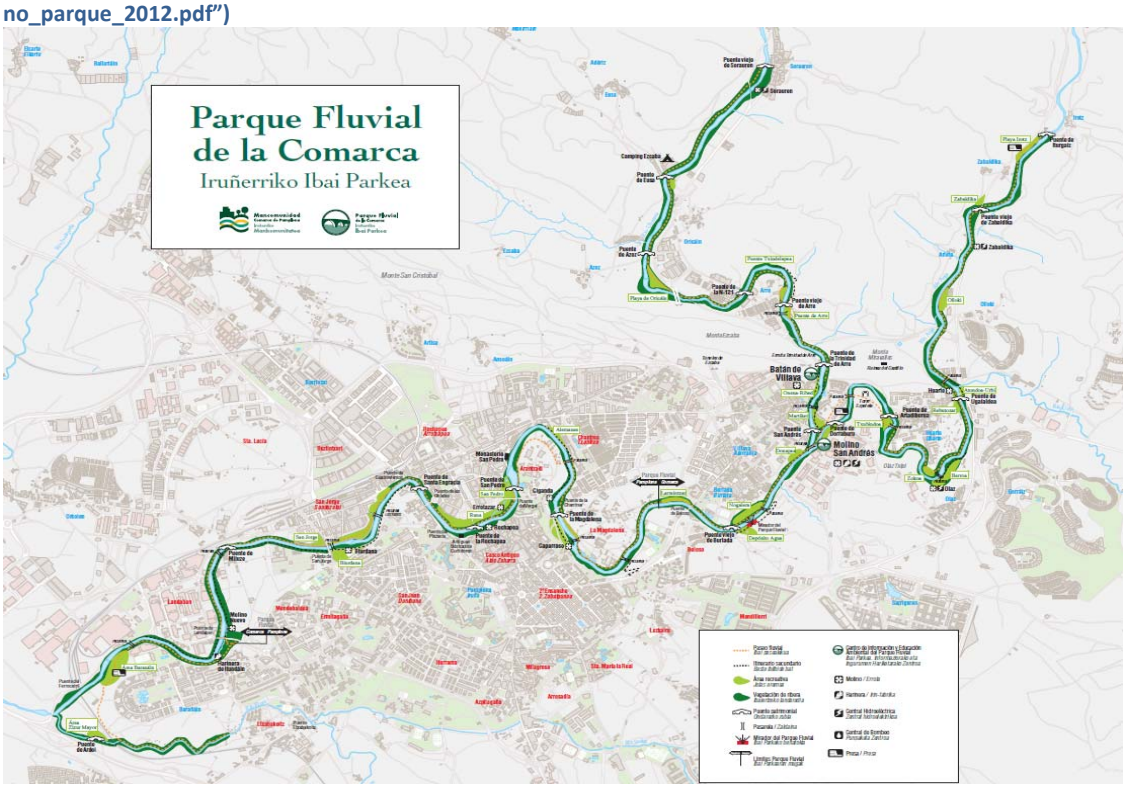
B) **Pamplona City Council District or** Municipality of Pamplona: as performer of its own planning and developer the central area of the Riverside Park.

[8] http://www.pamplona.net/planmunicipal/arga.html

A. **THE COMMONWEALTH OF PAMPLONA'S COUNTY (MCP)** is made up by all municipalities within its boundaries. Planning is performed through a Sectoral Plan of Supralocal Scope (PSIS), a tool of regional spatial planning. The construction works are performed by NILSA, a public company owned by the Navarre Government.
http://www.mcp.es/parque-fluvial

The PSIS is an "Inter-local project and action plan" for the Arga Riverside Park, performed by NILSA for the Commonwealth of Pamplona's County (MCP).

Map 5 - Arga Riverside Park, in the Metropolitan area of Pamplona (see file: "plano_parque_2012.pdf")



Riverwalk
Paseo fluvial
Ibai pasealekua

Secondary Path
Itinerario secundario
Beste ibilbide bat

Sport and recreational area
Área recreativa
Jolas eremua

Riparian vegetation
Vegetación de ribera
Ibaiertzeko landaredia

Heritage bridge
Puente patrimonial
Ondarezko zubia

Gangway / Pasarela / *Zaldaina*

Viewpoint of Riverside Park
Mirador del Parque Fluvial
Ibai Parkeko behatokia

Riverside Park's limits
Límites Parque Fluvial
Ibai Parkearen mugak

Riverside Park Information and Environnemental Education Center
Centro de Información y Educación Ambiental del Parque Fluvial
Ibai Parkea. Informaziorako eta Ingurumen Heziketarako Zentroa

Mill / Molino / *Errota*

Flour factory / Harinera / *Irin-fabrika*

Hydroelectric power station
Central Hidroeléctrica
Zentral hidroelektrikoa

Pumping Station
Central de Bombeo
Punpaketa Zentroa

Dam / Presa / *Presa*

Relevant milestones:

A) Actions by Consortium (Works within the County's municipalities subjected to PSIS):

1. Providing a contract for the plan (PSIS)
2. Organizing informal participation
3. Accompanying the making of the plan
4. 1999. Approving initial the PSIS → decision by Government of Navarre.
5. Organizing formal participation.
6. Definitive approval and publishing.
7. Work development (NILSA) under Consortium supervision.
8. 2000-2007 — park infrastructure is developed (path, recreational areas and Fulling Mill interpretation center) by NILSA, agency of water & infrastructure under responsibility of the Government of Navarre.
9. 2007 — responsibility on park Management and maintenance is transferred to the Commonwealth of Pamplona's County.
10. 2011 —opening of the second interpretation center in the San Andres Mill.

The "management contract" for the Park defines the tasks, actions and services regarding daily management by the public company "Pamplona's County Services" (MCP), which is fully owned by the Commonwealth of Pamplona's County.

The PSIS are supervised by the Government of Navarre and must be publicly heard as established in the LFOTU. In this PSIS a forum was established to work together with the local stakeholders, opened to citizenship proposals, that as a result has helped to obtain an open urban space without physical barriers and a natural setting to carry out activities[9].

B. **THE MUNICIPALITY OF PAMPLONA** as responsible of its own territory. It is planned as a Development Plan derived from the city's Master Plan (PGM), conceptualized with a **sufficient** description as a linear infrastructure[10].
http://www.parquefluvialdepamplona.es/parquefluvial/es/rio_arga/paseo_fluvial_arga.asp
Relevant milestones:

- 1984 — the Master Plan of Pamplona is approved according to current legislation in that moment.
- 1993 – Study about the physical and urban environment of the Arga River in Pamplona. Basic proposals to create the Riverside Park.
- 1996 – Arga's Comprehensive Plan. Financed by the Municipality of Pamplona (20%) and European cohesion funds FIMMA (80%).
- 1998 – Project of the County's Riverside Park.
- 1999 – 2002 – Development of Pamplona's Master Plan: Arga, Elorz and Sadar Riverside Parks, defined as linear infrastructures. The municipality designs the Plan and organizes a public procurement to assign the works.
- 2003-2009 – Works of the Comprehensive Plan of Pamplona's Rivers are carried out.
- 2005-2007 – adaptation of Pamplona's Master Plan to law LFOTU 35/2002.
- Currently the "Trinitarios" area is under works to create a new bridge over the River, as well as another wide area to connect the two existing Universities within the city through the Park of Sadar River.

[9] These elements, among others, have been valued to be selected in the Best Practices Competition (Dubai in 2012), and listed as GOOD. http://www.unhabitat.org/bp/bp.list.details.aspx?bp_id=4188

[10] See section PGM 1.3. Back ground and context.

9.3 Planning culture

Water and rivers

Navarre has a regional policy on water quality and river courses. Planning related to the quantity and quality of water is done in coordination with the State Administration and applies the Water Framework Directive (2000/60/EC).

http://www.navarra.es/home_es/Temas/Medio+Ambiente/Agua/

In spatial planning (OT and OU) water is treated in its variant of interest service for citizens: potable (supply) and subsequent treatment (sanitation), also for use in irrigation and its solidarity variant as resource for human habitat. The river is the natural water channel, and the river must reach the water with the same quality it was taken to the supply.

Main ambition (foreword)

A) The "**master plan**" is the decision to realise the Park in a described way. It makes for the Basic legislation about land use, and establishes deadlines to perform the Works as well as the tools to be developed, which are the Master Plan of Pamplona and the PSIS of Pamplona's County Riverside Park.

B) The "**action plan**" gives objectives / functions of the Park (nature, heritage, recreation, flood prevention) and qualities (program of requirements). Includes overview maps with future land use and new developments. Decision of local authorities that such Park is desirable. In this case it is referred to the Comprehensive Plans of Pamplona Rivers and the same PSIS mentioned.

C) The "**development plan**" gives exact design, pictures and maps of the physical development (interventions and buildings) to be realised for high quality of the Park, in relation to its functions. These are the urbanization projects (streets and urban infrastructure), buildings, green areas, etc. required to carry out the former. Their implementation is different depending on the kind of works to perform and the spatial plan that they develop.

D) The "**management contract**" for the Park defines the tasks, actions and services regarding daily management by the public company "Pamplona District Services (MCP)", which is fully owned by the municipalities of Pamplona District (Pamplona's County).

E) It is relevant to point out that all plans, projects or programs approved by the municipalities or the regional government must go through public participations procedures legally compulsory. There are some optional procedures such as Local Agenda21 and others.

ACTIONS AND MEASURES ENVISAGED

These plans catered for the recuperation of the riverbeds and riverbanks by clearing underbrush and sanitation work, and the creation of a long, uninterrupted, natural path for walkers and cyclists peppered with new parks, footbridges, quays and restored mills.

The Pamplona Riverside Park, set between water and vegetation, passes city walls, historical bridges and footbridges, parks, dams and mills, farms and market gardens, picnic areas, quays, angling areas, a fronton, an Environmental Education Museum.

The meanders of the River Arga approach and wander away from the city walls, running under Pamplona's main historical bridges. The walk along its banks runs parallel to the watercourse and passes sports areas frequented by walkers, cyclists, rowers and anglers, not to mention peaceful spots of great beauty.

Recuperated autochthonous flora and the country-like surroundings of market gardens and farmland stand in contract to the nearby urban environment. The autochthonous flora consists of ash, willow, alder, lime trees and blackthorns, which live side-by-side with a wide range of fauna in the form of terrapins, fish and ducks, among others.

ACTIONS AND MEASURES IMPLEMENTED

Currently there is a **park built in the urban fabric**, creating a natural, recreational and historical axis that links up with other existing roads (Camino de Santiago, streams, etc..) and also includes:

- **An example of living the Landscape and the River for citizenship**. An enthusiastic and massive use by the residents of the District of Pamplona. According to surveys conducted in 2011, the park has been visited by 71% of the surveyed population, showing a degree of satisfaction of 7.8 out of 10.
- **A legal framework for action supra local** regulating land use and activities.
- **A 35 km pedestrian and cyclist promenade** between the towns of the area. This walk is connected to the Camino de Santiago and other local greenways.
- **25 recreational areas** interconnected, for recreational and sporting use.
- **A specific educational program** for river area integrated in the school supply and articulated from two industrial buildings rehabilitated and turned into centers of information and awareness (Batan and San Andrés Mill). There is as well the Environmental Education Centre of San Pedro, in the Arga waterline in Rochapea District (Pamplona).
- **An annual program of revitalization** with different groups and organizations of festive, supportive and innovative aims.
- The historical Bridges network of the County is completed: to Pamplona bridges (Magdalena's, San Pedro's, Santa engracia or "lovers'" and Miluce), are added t**he rehabilitation of four bridges** in the park (Arre, Burlada, Barañáin and Arazuri).
- **An internal working forum**, to work together the mayors of the towns, which made the work programs and specific funding.
- Its one million square meters make it the vast green infraestructure of the city of Pamplona.

Trinitarios and Arrosadia Works complete the works in the park and will make up for two renewed entrances to the city: a bridge to the North and a lake and park joining both university campuses together, completing the Sadar River Park.

9.4 Results, monitoring and evaluation

ACHIEVED RESULTS

The addition of a green axis along Pamplona's County has an abundance of transferability elements to any modern urban environment with environmental sensitivity. It faces relevant issues of urban management in the XXIst century and improvement of quality of life related to Liveland components.

- Improvement of public health after a buffer zone (Boise, landscape…), a pedestrian path to foster healthy practices and best environmental practices.
- Sustainable mobility: a pedestrian path and cycleway to connect different settlements in the County.

- Environmental sensitivity, social programs and actions to foster knowledge and spread urban ecology concepts related to Sustainable Territorial Development
- Natural and public scene for cultural purposes
- Documented historic way associated to rivers: bridges, mill and fulling mill. Several publications related to historical heritage, environmental elements, etc.
- Work place for neighborhood participation and volunteer associations.
- A laboratory of experiences in the urban environment matter

Currently, since the experience acquired after the Pamplona's County Riverside Park, the Commonwealth (MCP) per request of seven municipalities, is dealing with the creation of the San Cristobal-Ezkaba County's Park, an emblematic place connected to the Riverside Park, using the same procedure.

MOBILIZATION OF RESOURCES

- As it was already mentioned the works in the area of Pamplona were financed with both local as well as EU funds coming from different programs.
- The mobilization of resources occurred through uniting the capacity of the Government of Navarre, through the public company NILSA, with the needs and interest of the local bodies in the area.
- The proximity of the municipalities to the territory meant that it was easier to gain social consensus regarding the project and obtain the necessary land. The public company NILSA was in charge of propelling and directing the project, establishing the legal formula (the consortium) for the execution of the work and getting funding for it.
- The Federation has developed the project and ensured its preservation and maintenance, making it reaches the different sectors of society. It has also promoted the extension of the project to other nearby municipalities through which the waterway continues by drafting the Supra-municipal Sector-specific Impact Plan for the Extension of the Riverside Park, passed in 2011.

LEARNED LEASSONS

- **The need for a supra-local project** that draws together the interests of the different local authorities and which is arrived at through the consensus of different sectors from the municipalities within the area of the Park and the citizenship in general.
- **The importance of leadership**, in this case by a public company (NILSA), based on the powers of the Government of Navarre, with a coordinating and driving role.
- The coordination of the works carried out in Pamplona so that continuity of the whole park was achieved
- **Joint management linked to a refined source of funding**. The creation of a joint decision-making body and joint funding by the different local authorities, and integrating the Riverside Park into the Integral Water Cycle Service (MCP).
- **The importance of public satisfaction.** This has led to participation in the programmed events and interest shown by the Local Authorities of areas neighboring the Park, making its extension more likely.
- **To oversee activities** in the areas through, for example, ordinances governing use.

TRANSFERABILITY TO URBAN ENVIRONMENT

- **Sustainable mobility**, pedestrian-cycle path connecting the different nuclei in the district.

- **Improved public health** through an environment that cushions environmental impact (noise, landscape, etc.), an area for walking-exercise that encourages healthy habits and good environmental practices.
- **Environmental awareness,** programs and actions in the social sphere to learn about and spread the concepts of urban ecology.
- Natural public setting for **multicultural events** of all types and origin.
- **Documented, conserved historical route** of the heritage associated with rivers: mediaeval bridges, and mill. Two books compiling the park's historical heritage have been published.
- Reception and work centre for **local resident participation and voluntary groups.**
- **A laboratory for tests** and experiments in the field of the urban environment.

TRANSFERABILITY TO LIVELAND

1. **Legal framework.** It is an example of using a legal framework and a spatial planning instrument (PSIS) on environment and landscape field.
2. **Liveability.** It is related to the functions and components of Liveability: natural protection, ecological connectivity, healthy uses, cultural heritage management and monitoring tools.
3. **Protection, management and planning** of landscape in line with the European Landscape Convention (ELC).
4. **Guidelines of Landscape.** To meet the objectives of the ELC missing landscape guidelines should be incorporate according to the criteria included in the CEP.
5. **Participation.** The process has included high participation in the design and has focused on public use (satisfaction surveys), and also for dynamic and annual programming.
6. **Results.** According to surveys, citizens consider the Riverside Park as a unique landscape.
7. **Management**. Creating a single administrative entity for management, with financial autonomy.
8. **Collaboration**. Allows coordination between municipalities and agents, including program management, maintenance and expansion under study.
9. **Funds**. Participation in programs to raise funds: FEDER and Interreg III B (Atlantic Arc) and the Consortium funds.
10. **Agreements** with organizations and social groups to promote activities.
11. **Education and awareness.** Educational programs for the Riverside area.

ARGA RIVERSIDE PARK

www.espon.eu

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ISBN

ESPON

LIVELAND
Liveable Landscapes: a key value for sustainable territorial development

Targeted Analysis 2013/2/22

Baseline Report Practice Case
Basque Country

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INVESTING IN YOUR FUTURE

This report presents the final results a Targeted Analysis 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.

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

This basic report exists only in an electronic version.

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1 Introduction

Despite the entrenched tradition in spatial planning in the Basque Country, is being during the last decades when the Basque administrations at different levels have started to be more conscious about landscape. So many different examples exist which reflect this interest, and already consider landscape to some extent in documents, plans, strategies and policies although until now mostly in a partial and disperse way.

In the framework of the Liveland project, the Basque Country brings forward, as good practice, one of the key instruments for landscape conservation, planning and management currently developed at regional level, which is:**-" The Landscape Catalogues and Landscape Guidelines"**

1.1 The practice

As already stated, for the purposes of the Liveland project, the instrument that will be put forward for analysis is the Landscape Catalogues and Guidelines.

The landscape Catalogues are the operational materialization of the Basque Government commitment with the ELC and its desire of integration of landscape consideration into spatial planning.

The Catalogues are being recognized as landscape planning (and management) instruments in a draft bill law.

The idea is that all the 15 planning areas (functional areas See Chapter 2.2 of the present report) in the Basque Country develop their Landscape Catalogues and Guidelines. But this will be done in several stages.

Main ambition

The main ambition of the Catalogues and Guidelines is to become an instrument for landscape protection, planning and management. The instruments are recognized in the draft bill law of the landscape policy, being still in parliament for approval. [1]

With this premise, the catalogue provides the analysis and evaluation of landscapes -in each of the planning areas in which the Basque Country is divided- and define quality objectives and policy measures.

Then, based on the information provided by the catalogues, landscape guidelines are defined and approved by the region, and legally incorporate the landscape quality objectives into the existing spatial planning instruments: Territorial Spatial Plans (made by the Provinces or the Region) and the Sector Plans (made by the Region).

The Catalogues was first presented in 2011 by the Department of Environment and Territorial Policy- Spatial Planning The elaboration process last 2 years and nowadays the landscape Guidelines are being approved.

[1] This process has been discontinued with the changing of political term in the Basque Parliament

For the purposes of Liveland project we are going to concentrate in **The Catalogue of Laguardia in Araba** which has been selected to be analyzed and comparatively assed together with other experiences in EU. It has been considered the one with the strongest methodological approach and interesting participation and consultation process.

The report on Landscape Catalogue was prepared in 2011 and 2012 and published in two parts. The report on the Guidelines was published at the end of 2012. The decision making about approval of the new regulation and modification of the Subregional Integrated Spatial Plan (PTP) for Laguardia is yet going on.

It is important to highlight here that part of the technical assistance has been subcontracted to external consultancies in the three catalogues under development.

In particular, the Catalogue of Laguardia has been elaborated by MELISSA CONSULTORÍA E INGENIERÍA AMBIENTAL S.L[2], in close and continuous collaboration with the practitioners in the department of Spatial Planning.

The Department of Environment and Territorial Policy is within the Basque Government, the one responsible for elaboration and implementation of the new landscape instruments.

Next step of the Landscape Catalogues will be the integration of the landscape Guidelines, containing actions, measures and recommendations, in the formal Subregional Integrated Spatial Plan (PTP) of Laguardia. The approval of the guidelines in the spatial plan will not be finished until 2013.

The diagram in next page tries to describe the process biography with regard to the evolution of landscape policies in the Basque Country from the 90´to the present, with a particular focus on the instrument being analysed in the project.

At present there is not a formal agenda for the elaboration of the remaining 12 Catalogues and Guidelines.

The figure on next page shows the process biography of landscape policy and practices in the Basque Country

[2] www.melissaconsultoria.com

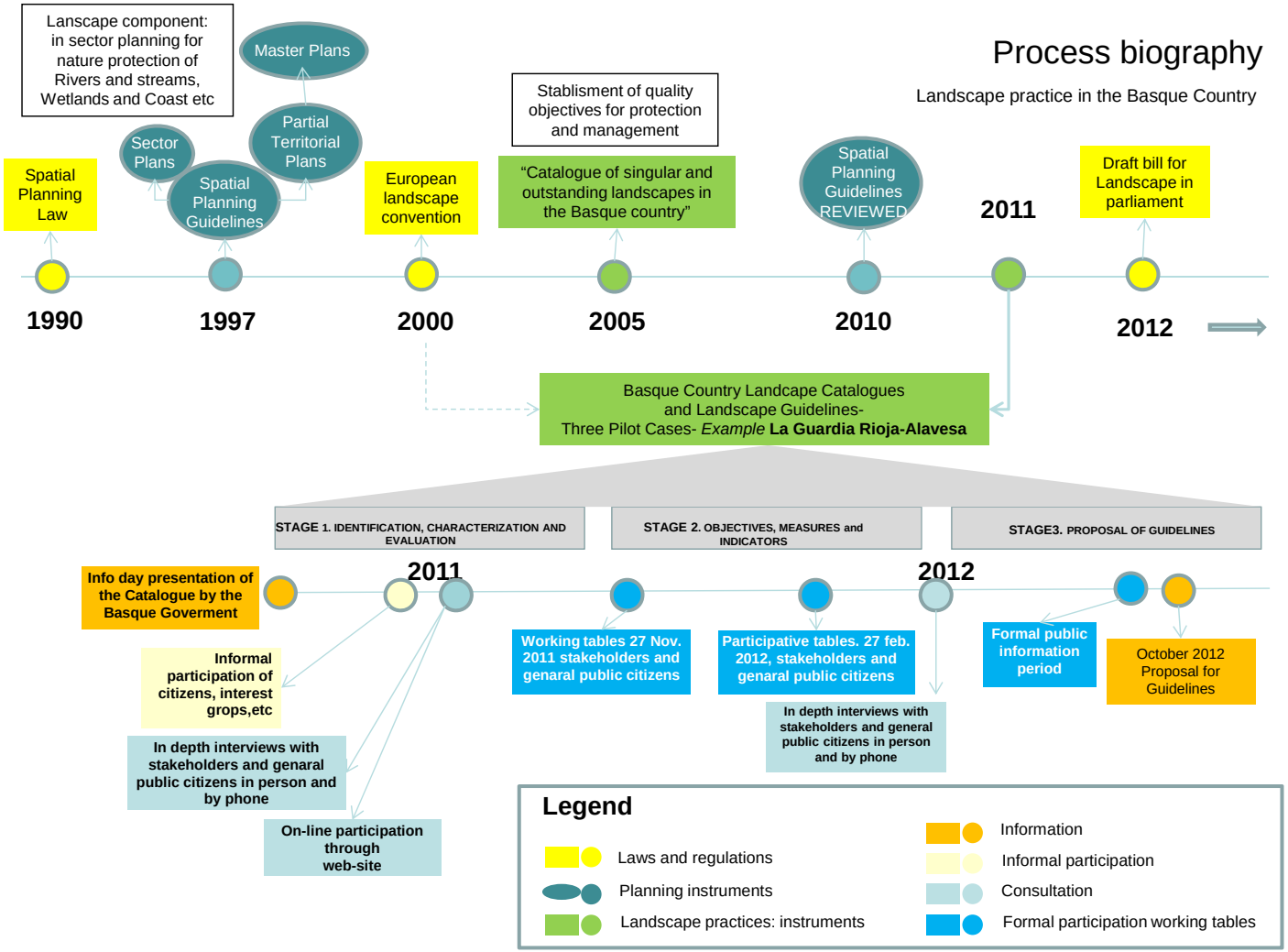

Figure 1 Process biography landscape policy in the Basque Country and focus on the Landscape Catalogue of Laguardia

1.2 The actor

The Basque Country is an autonomous region in the North of Spain, with an own Government and Parliament.

The Basque Government according to the Law 4/1990 has exclusive competences on spatial planning and on landscape policy. The Department of Environment and Territorial Policy responsible for spatial planning and land us planning gathers around 30 officials in the field of spatial and landscape policy.

Landscape policy lies within the department of Environment and Territorial Policy, one of the eight departments that configures the Basque Government, alongside: Justice, Economic development and competitiveness, Employment and social policies, Finance and Revenue, Education and Culture, Security and Health

The administration responsible for launching the Landscape Catalogues and Guidelines is the Department of Environment and Territorial Policy, Lead Stakeholder of the Liveland Project, of the Basque Government also for its elaboration and implementation.

Besides the COPV Committee of Spatial Planning of the Basque Country is the top advisory board, is perceived as a key instrument for the coordination between different administrations in the area of spatial planning (including coast) and urbanism) in the Basque Country and therefore has a very relevant role also in the approval of the catalogues and guidelines.

The landscape Catalogues and the Landscape Guidelines are important instruments of the over-all strategy to integrate landscape in the existing planning documents. Based on the information provided by the Catalogues, landscape Guidelines are defined (by the Region) to be included in the Subregional Spatial Plans (made by the Provinces and the Region in certain cases) and the Sector Plans (made by the Region).

1.3 Back ground and context

The BC has a tradition on spatial planning since the 1990s. Nevertheless landscape is being for many years approached from a sectoral point of view (nature policy) and mainly focused on conservation (like protection of rivers). However, when in 2009 the Basque Country signed the European Landscape Convention (ELC) this path started to change slowly towards a wider and more comprehensive view of landscape.

The update and modification of the Basque Country Spatial Planning Guidelines (which process started in 2010) introduced a chapter on landscape, in which landscape is the reflection of the *care and affection of the inhabitants* for its territory, being a *conditioning element* for the kind of activities on it and the way they are developed.

Landscape policy

In 2009 The Basque Country established a Territorial Forum for the region where all institutions are invited to participate and discuss on the regional development. Most of the municipalities participating in such forum consider that the landscape

constitute an important assess for the economic development and the quality of life and believe that the landscape in the Basque Country is one of the quality factors that could differentiate the region from others.

Local stakeholders also coincide in the fact that, several elements exist that are deteriorating the landscape, mainly driven by diffuse urbanization processes, new urban developments and extractive/mining activities.

Three main milestones could be identified in this process of political awareness with respect to landscape:

- First, in the Basque Country the commitment with Landscape was first introduced in the Basque Strategy for Sustainable Development 2002-2020, which included among its key objectives the elaboration of a "Catalogue of outstanding and singular landscapes in the Basque Country"[3], with the aim of elaborating plans for its conservation and restoration. This first catalogue has a very biased perspective on conservation and preservation and it is not really in line with the spirit of the ELC. However it was the first instrument focusing totally on landscape in the region until that moment.

- Second, with the revision and modification of the Basque Territorial Strategy- and Regional Spatial Planning Guidelines (DOT)[4] in 2010, a specific chapter on landscape was introduced. The New Territorial Strategy devotes his chapter D5 to Physical Environment and Landscape and points out that: (…) landscape is the reflection of the care and affection of the inhabitants for its territory, being a conditioning element for the kind of activities on it and the way they are developed.

- Third, in the year 2010 a proposal for a new Landscape Law was launched and it is now in the parliament pending for approval. This law, inspired by the ELC, aims at giving "landscape" legal entity and integrating landscape into planning instruments. The draft bill still under approval in parliament, regulates the method for the elaboration of the catalogues, the process for approval, coordination with the planning process- in timeframe and milestones, guarantees the consideration of landscape guidelines into the spatial planning instruments. The law incorporates a broader approach to landscape, overcoming the biased perspectives identified in the previous experiences.

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[3] Catalogue of outstanding and singular landscapes in the Basque Country http://www.ingurumena.ejgv.euskadi.net/r49-u95/es/contenidos/inventario/paisaje/es_catalogo/indice.html

[4] Spatial Planning Guidelines http://www.ingurumena.ejgv.euskadi.net/r49-565/es/contenidos/informacion/dots/es_1165/indice_c.html

In the framework of the proposal for a new Landscape Law the following instruments for landscape protection, management and planning have been defined:

- Landscape **CATALOGUES**: Analyze and evaluate landscapes in each of the Functional Areas and define quality objectives.

- Landscape **GUIDELINES**: Legally incorporate the landscape quality objectives into territorial planning. And derived from that:
  - **Landscape ACTION PLANS**: For implementation of specific measures in specific areas that may require special attention due to its vulnerability.
  - **STUDIES OF LANDSCAPE INTEGRATION**: related to projects and activities that will potentially have a significant impact on landscape

For organization and awareness also incorporates the following figures:
- Landscape Observatory.
- Awareness raising mechanisms and the integration of landscape in educational programmess.

In 2013 a new government has been installed. They propose now to not approve the specific landscape law, but to i**ntegrate landscape (definition and instruments) in the spatial planning system and regulative framework**, maintaining in any case the instruments for landscape protection, management and planning defined in the draft bill

2 Planning system and culture

The Basque Country is characterized by his long tradition in spatial culture and its spatial planning system is being recognized as one of most influential, not only in Spain but within the European context.

Following an overview is given of the context of the planning practice with a short description of the policies and the planning system in the Basque Country (BC).

2.1 Interpretation of key concepts

Landscape is recognized as *"whatever part of the territory as conceived by the population, which character results from the action and interaction of natural and human factors",* as in the European Landscape Convention. Landscape is also recognized as an essential element in the quality of life, expressing a common natural and cultural heritage and contributing to the configuration of the territorial identity.

In the draft Landscape Law is pointed out that the area "*has an exceptional richness and diversity of landscapes mainly due to its geographical location but also the human activities through time (…) Such diversity constitute a resource and a heritage of common interest from the environmental, cultural, social, historical point of view, but also from the point of view of the economic development".*

Landscape is understood as a dynamic element which reflects the interrelationship between people and their environment through time, and therefore its conservation should not be focused only on the preservation of particular views, but to the maintenance and improvement of its quality and diversity, incorporating new elements and uses in the territory. So the effort is placed in boosting and promoting the harmonic evolution of landscape, considering and integrating landscape values in all human interventions on the territory.

Spatial planning is recognized in the Spatial Planning Law (1990) and in guidelines for the whole territory of the Basque Country.

Quality of landscape (or space) is recently introduced in spatial planning via the instrument of 'landscape catalogues', where landscape is evaluated on a broad set of values: aesthetic, ecological, productive, cultural, social, symbolic and spiritual.

The conservation of nature (natural heritage) is seen as 'sector policy' (which is competence of the region of Basque Country) for the protection of Rivers and streams, Wetlands and the Coast. Nature is also based upon the Basque Strategy for Sustainable Development (2002 – 2020) which includes the protection of nature (as resource) and of biodiversity as an unique asset to be fostered.

The current Landscape Strategy is described in the Figure 2 bellow.

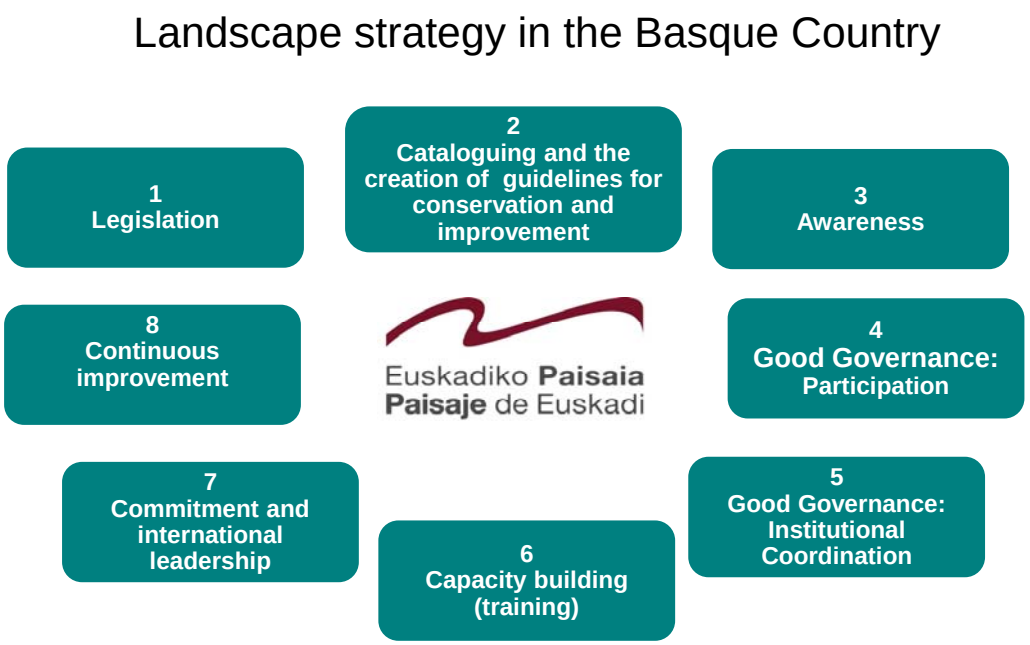


Figure 2 landscape strategy in the Basque Country

2.2 Planning system

Spatial policy on regional level

In terms of spatial policy, in Spain, the regions enjoy a relatively big autonomy. Especially such regions as Galicia, Catalonia and the Basque Country have even bigger independence in their policy than others. Each region has its own strategy of regional development and spatial planning.

The Basque Government has legislative capacity since 1990 (LOT 4/1990)

The following figure briefly explains the key elements of the Basque spatial planning systems (see Figure 3):

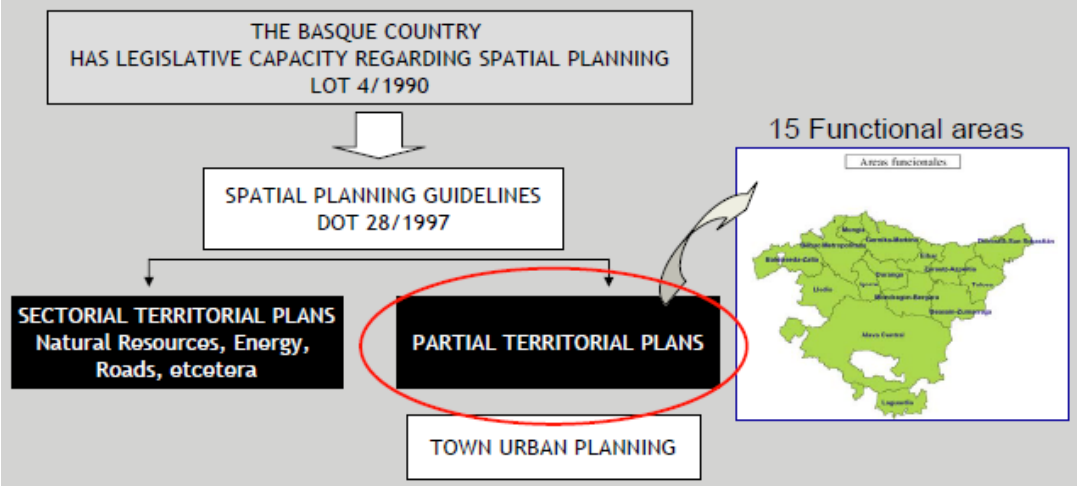


Figure 3 Spatial planning system in the Basque Country

Regional Spatial Planning Guidelines (DOT) regional scale

The main instrument for Spatial Planning at regional level is the "Spatial Planning Guidelines" (DOT): they define the territorial strategy for the whole region and the territorial model, including functions as main cities, main infrastructure and protected nature parks. Constitute the framework for regional and sectoral plans and municipal planning. This framework tries to guarantee that the plans are not processed independently of each other, but all pursue consistent and coherent objectives with a global vision and no individual or contradictory. The Spatial Guidelines define the instruments for spatial planning:

- Territorial Partial Plans- Spatial planning at subregional level
- Sector Plans- covering the whole region
- Master Plans/ Land use plans at local level

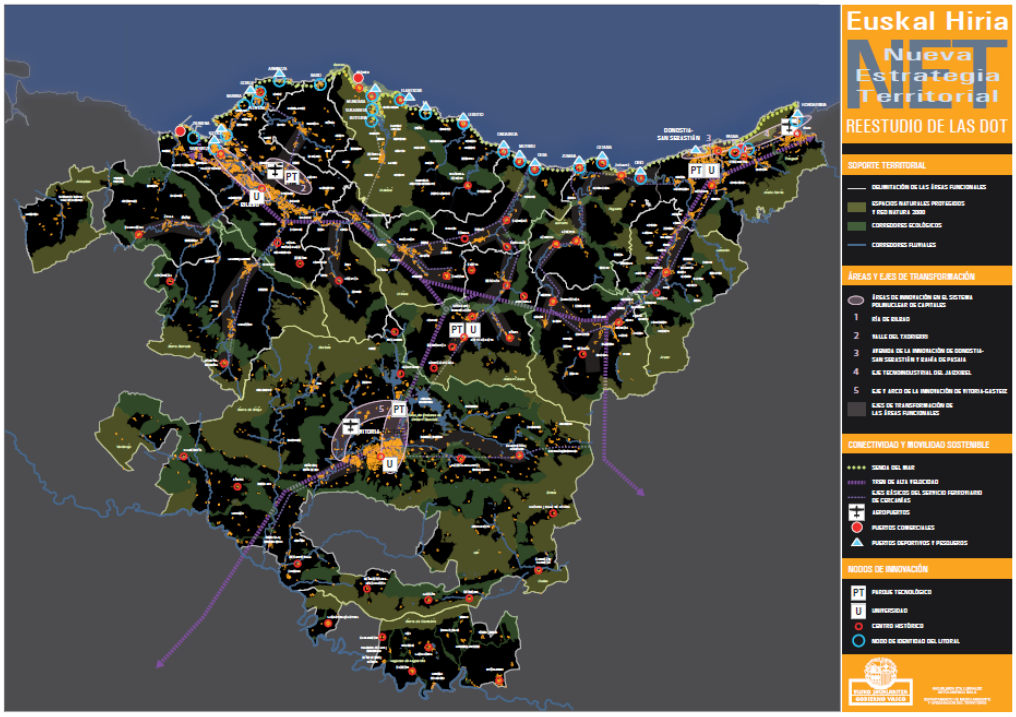
The Regional Spatial Guidelines and its Territorial Partial Plans maintain a hierarchical relationship with the Sector Plans. This means that whatever prescription included in the sector plans should be in line with the Regional Guidelines and the partial plans, and any conflict would lead to the nullity of the corresponding sector plan. However, the praxis sometimes differs, and there are several exceptions to this hierarchical approach. These sorts of conflicts are resolved case by case.

In 1997 the Basque Country approved the Regional Spatial Planning Guidelines, although its elaboration started in the ´80. These Guidelines include also a 'Spatial Strategy' put on a map with main designations. Main ambition is the harmonious and coordinated development, based on criteria of interconnection and integration. The main objectives are to:

- Protect and improve the natural resources.
- Reinforce and rebalance the urban system.
- Improve the integration of Basque Country with Europe.
- Improve the urban areas.
- Potentiate a network of medium cities.

Since the territorial model in the Spatial Guidelines had more than 20 years, in the years 2006-2011, the Guidelines and the Strategy were reviewed, now waiting for approval by parliament[5]. The most important innovation is the concept of "Euskal Hiria" which tries to create a 'Euro-region', capable to compete in the European context. The draft map (see Map 1) has following designations:

- Protected nature areas (Natura 2000)
- Ecological corridors
- Transformation areas in poly nuclear urban zones
- High speed train tracks
- Technological parks and universities (knowledge industry)
- 'Knot' of coastal identity



Map 1 New Territorial Strategy for the Basque Country

5 Boletín Oficial del País Vasco nº 59, del 22 de marzo de 2012. http://www.ingurumena.ejgv.euskadi.net/bopv2/datos/2012/03/1201404a.pdf

Territorial Partial Plans (PTP) at subregional scale

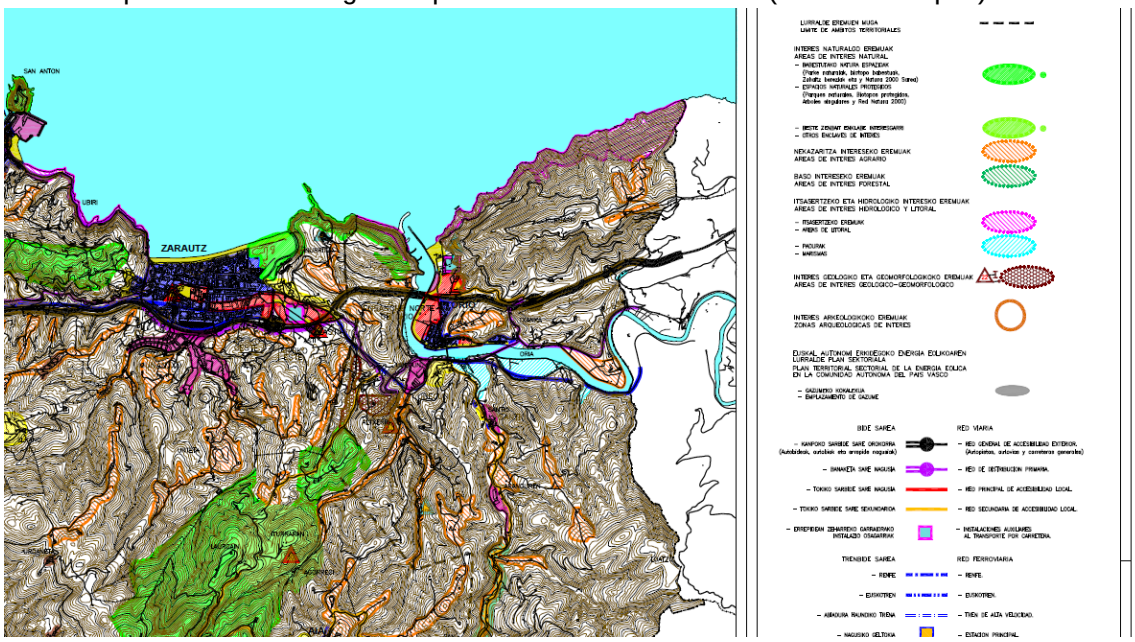
These instruments develop the Regional Spatial Guidelines in the supra-municipal areas designated for planning purposes by such guidelines. These areas are called functional areas and the Territorial Partial Plans specify for each the detailed management criteria that established by the guidelines.

The Basque Territory divides in 15 functional areas- defined exclusively for planning purposes. There is a Territorial Partial Plan in each of the functional areas. These plans could be done by the region or by the provinces. For spatial planning purposes, the region is divided in 15 sub-regions. Each 'functional area' contains between 12-15 municipalities. The sub-regional scale is considered the most appropriate for balanced territorial development and to operationalize the general objectives. The functional areas have the most suitable physical and functional size to analyse the problems and challenges, to identify the potentials and to define the spatial objectives and designations.

The three provinces have the competence to make such sub-regional plans although there are exceptions in which the plan is elaborated by the region. The structure of such plans is given by the Spatial Planning Guidelines (DOT). For instance the spatial planning maps have following structure:

- Physical environment: identification of singular elements to be preserved and improved
- Physical environment: basic categories for planning
- Communication and Transport infrastructures.
- Public facilities and areas for recreation
- Green spaces, green network
- Urban settlements
- Proposal of territorial development model
- Actions for structural and strategic interventions

An example is the sub-regional plan of the Zarautz area (detail in Map 2).



Map 2 Territorial Partial Plan (PTP) for the functional area of Zarautz.

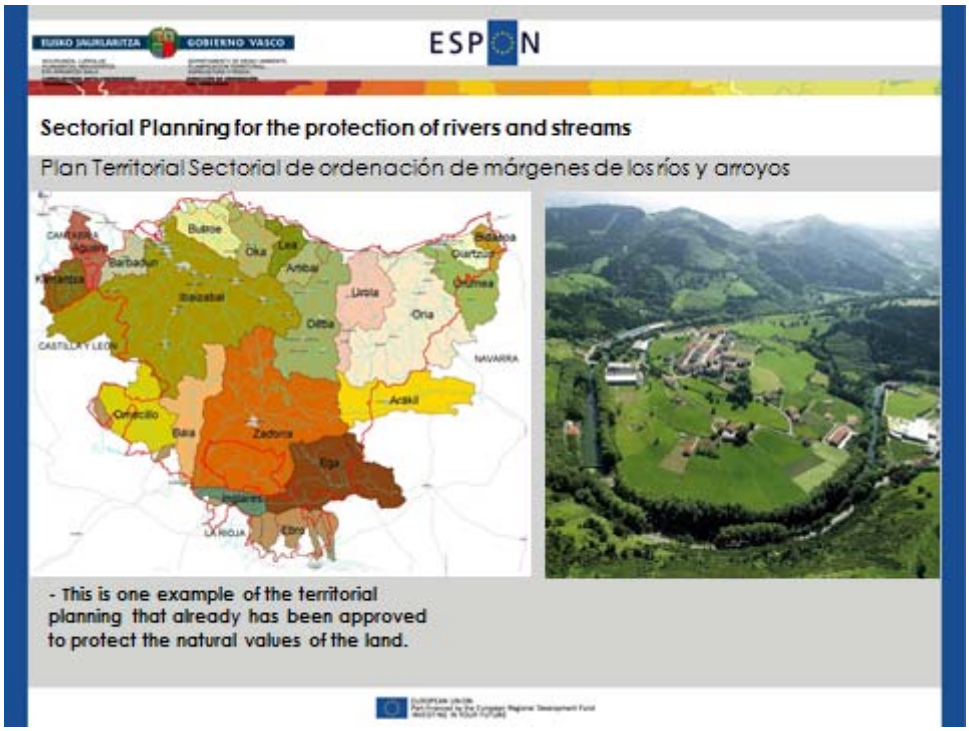
Territorial Sector Plans (PTS)

These are the planning instruments elaborated by the Departments of the Basque Government with competences in different fields with territorial impact. The Sector Plans develop the proposals of the Regional Spatial Guidelines.

So the region of Basque Country is also responsible for the making and implementation of sectoral plans, which have big impact on spatial development:

a) For nature protection of Rivers and streams, Wetlands and Coast;
b) For the basic planning of infrastructures: Railways, Roads, Wind power energy;
c) For economic activities (industry) and trade;
d) For housing and
e) For water and flooding.
An example is the sectoral planning for Coastal Protection (2004), from which some of the objectives are:

- Definition of coastal zones to be planned.
- Inventory of coastal heritage to be protected.
- Creation of a useful division of coastal zones for the integration of different uses.
- Protection and conservation of natural resources in coastal zones.
- Safeguarding public access to coastal zones.
- Define and specify planning for 'rias' (long, narrow inlet of river valleys).
- Development of guidelines for land use in coastal zones.
- Programme of actions in the coast.



Map 3 Sectorial planning for the protection of rivers and streams: This is one example of the territorial planning that already has been approved to protect the natural values of the land.

2.3 Planning culture

The Basque country has a long tradition and planning culture with a strong regional autonomy for spatial planning, with a consolidated law system, and experienced too, well known not only in the Spanish context but internationally.

Besides it is also remarkable to consider the high level of identity of the Basque country and its people which is reflected in the strong relationship between citizens and their environment.

Despite its recognizable value and influence, the planning culture in the Basque Country has also its criticisms:

- It has been criticized for having so many planning instruments being some of them yet under approval which inevitably generates certain level of uncertainty, together with a lack of long term view in planning.

- Besides, the sector policies usually prevail very strongly in territorial integrated planning which is germen of spatial conflicts.

- In the Spanish context there is still the culture for the “compulsory” which means that if something is not compulsory, should not be important. This adds some weakness to the planning culture and system itself, since there is a claim for the standardization and normalization of process and procedures.

- In that connection there is a need to work towards certain level of flexibility with easy planning procedures, would be an opportunity for a more efficient and effective planning. There are long periods for the approval of planning instruments, and laws, especially due to politic changes.

- Another relevant issue is the relatively higher prevalence of private interests over the public ones.

- Particularly evident is also the separation between the interest of policy makers and citizen´s needs and desires.

3 Geographic description of the practice case area

Basque Country

The region has a diverse morphology (mountains and rivers) which determines, to some extent, the development of settlements and linear infrastructure.

The Basque Country is one of the most densely populated areas in Spain. It has a surface of about 7.200 km² and a population of 2.150.000. For the last decades stagnation has been noted in the total population.

The population density is about 300 inh / km², but the distribution of the population is concentrating primarily around the main cities. Almost half of the population is concentrated in the Bilbao metropolitan area.

There is a contrast between development of towns in the costal and transport corridors and the relatively uninhabited inland areas of the region. There is a trend of abandonment of agricultural areas in mountains and inland.

The physical structure of land in this region is highly diverse in hits three provinces Áraba (capital: Vitoria-Gasteiz), Biscay (capital: Bilbao), Gipuzkoa (capital: Donostia-San Sebastián).

In the north the region is limited by the coast line of the Bay of Biscay, with big beaches, rocky coasts, estuaries and valleys with small rivers. The south part of region is occupied mainly by a high plateau called the Araba plains. Rivers flow in southern direction from mountains to the Ebro River.

Over 90% of Basque Country could be considered as rural area. A high proportion consists of hilly, rocky and mountain areas which determine the type of vegetation and human activity. On the whole, the region is dominated by agriculture and forest areas.

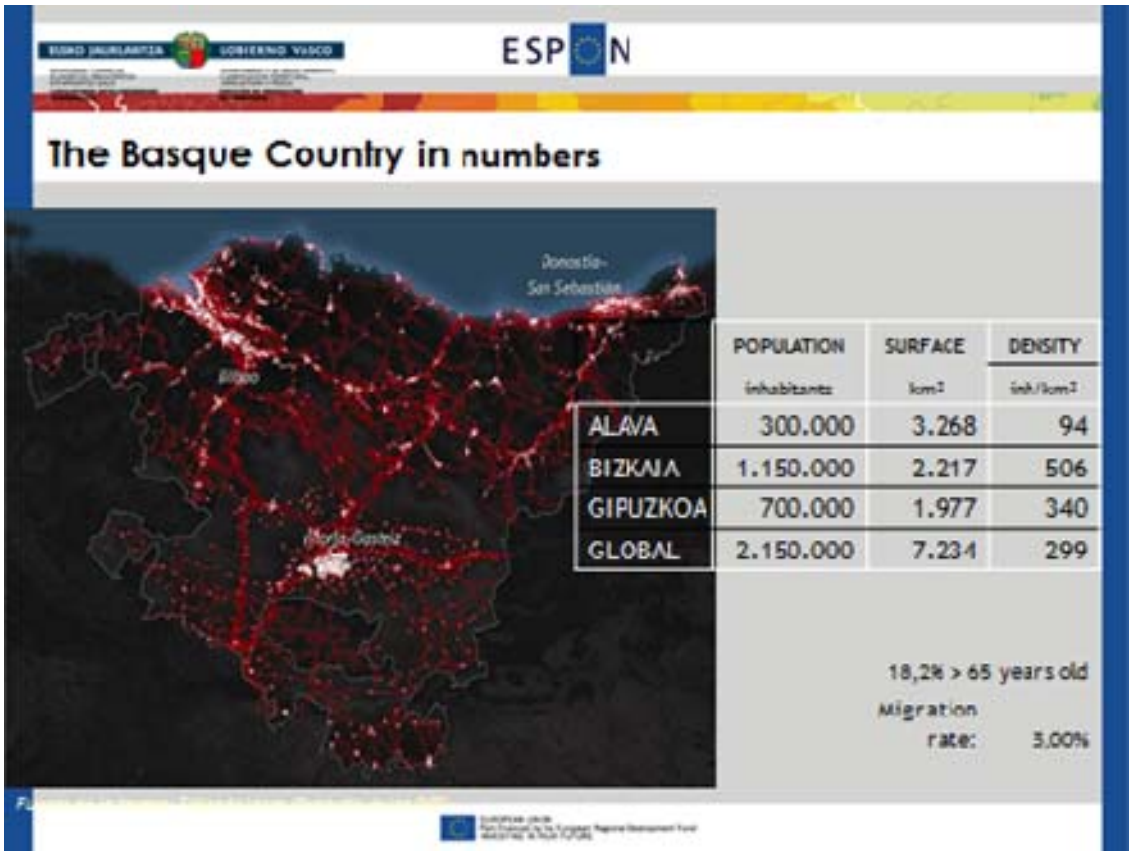


Figure 4 Basque Country in numbers

The population density is about 300 inh/ km², just below the EU average, but the distribution of the population is fairly unequal, concentrating primarily around the main cities. Almost half of the population is concentrated in the Bilbao metropolitan area.

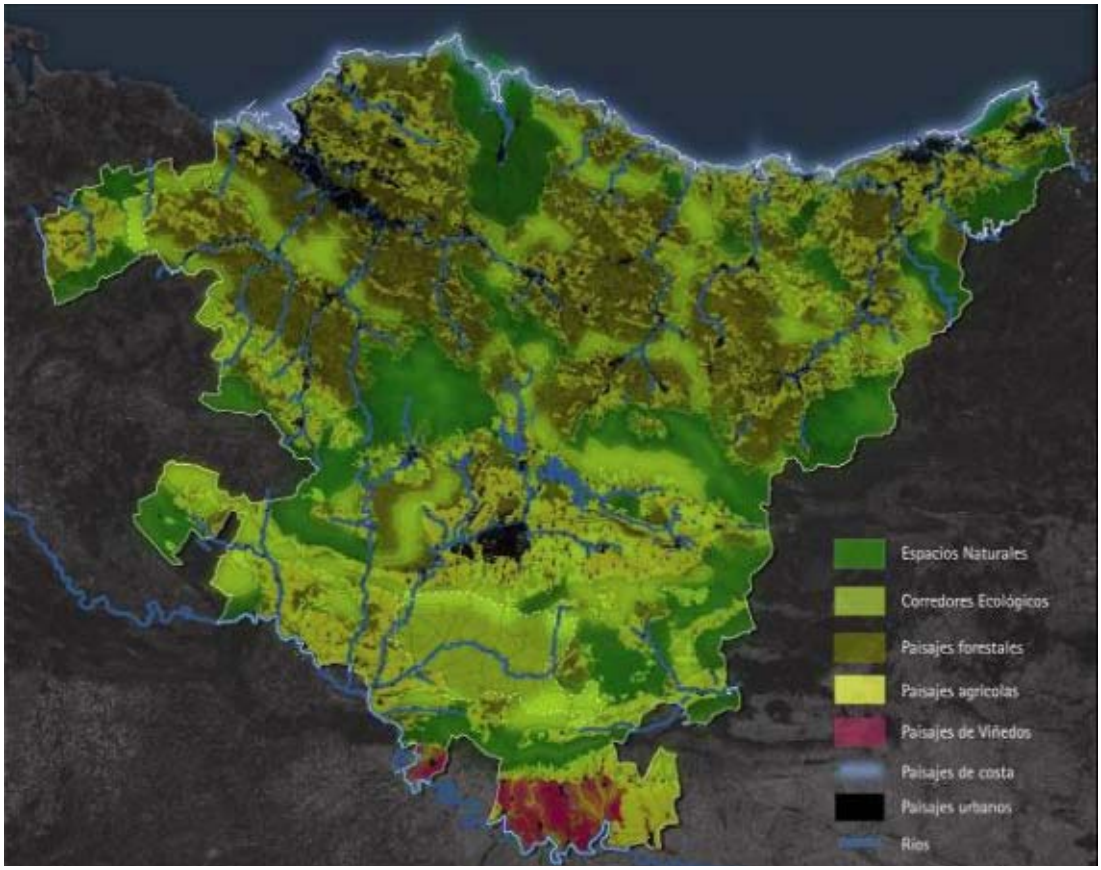
Protected natural areas cover currently 23% of the territory. There exist several kinds of protection. Agricultural land, which represents 10-11% of all lands in the Basque Country, is located mainly on the bottoms of valleys and in plain areas. Urbanised land in the Basque Country occupies 8% of the whole area. The urban land use is traditionally organized around central cities. Many of these urbanised areas have evolved into 'city-regions' or 'poly-nuclear zones'.

Concluding some characteristics of the spatial development:

- Diversified relief (mountains and rivers) determines, to some extent, the development of certain socio-economic and urban elements.
- Density of population. The Basque Country is one of the most densely populated areas in Spain. For the last decades a stagnation has been noted in the total number of population.
- Diversified settlement system with concentration of population in three capital cities (Bilbao, San Sebastian and Vitoria). There is a contrast between development of towns in the costal and transport corridors and the relatively uninhabited inland areas of the region. There is a trend of abandonment of agricultural areas in mountains and inland.
- Relatively extensive and sustainable development of the coastal zone, because of the relief (rocky areas with some bays and estuaries). Development of tourism was more selective (example is San Sebastian as a Cultural Capital of Europe in 2016).
- Relatively favourable socio-economic condition of the region regarding level of unemployment, wages and general level of economic development.
- Development of the main cities with projects of revitalisation that facilitate the development of social infrastructure, public transport and compact urban developments with special regard to aesthetic considerations.

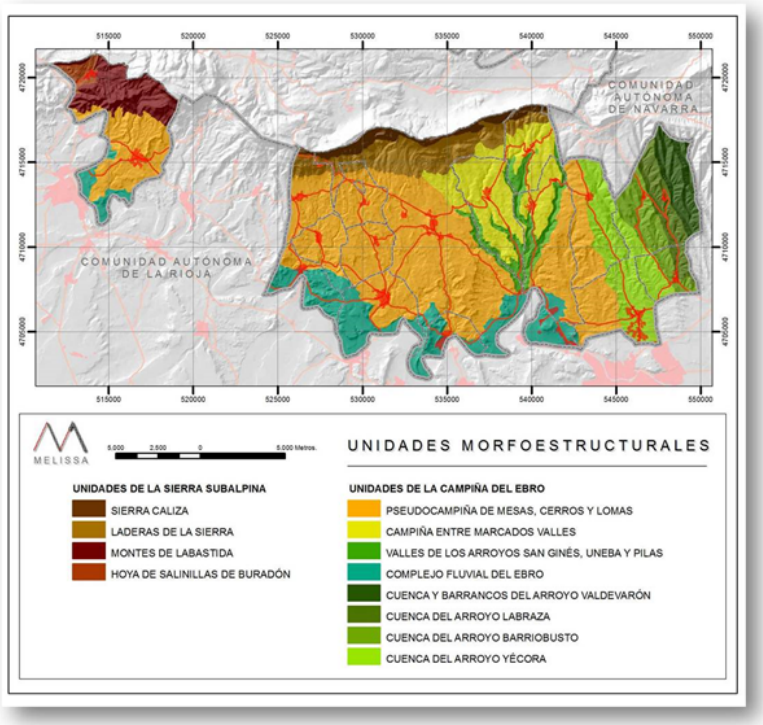
Planning area Laguardia

The case area Laguardia covers about 310 km² and has a population of less than 12.000 inhabitants. On Map 4 with landscape types, the case area lies in the very South and contains vineyard landscape and natural areas (mountains).



Map 4 *Landscape types in the Basque Country*
Natural areas, Ecological corridors, Forest landscapes, Agricultural landscapes, Vineyards landscapes, Coastal landscapes, Urban landscapes and rivers.

Map 5 gives insight in the structure of Laguardia regarding the physical environment and morphology.



Map 5 Morphology

4 Challenges and ambitions of practice case

Main aim of BC with the study on Catalogue and Guidelines is to integrate landscape in the current spatial planning instruments. Especially the implementation of methodologies (from analysis to action) and muliti-scale instruments (how to influence other governments and private stakeholders).

In order to achieve this main aim the key needs and expectations of the Basque Country with regard to the LIVELAND project outcomes are to share experiences and good practices with regard to landscape evaluation, planning and management:

- Methodologies for evaluation and characterization
- Processes: public participation, institutional coordination
  - improving coordination between administrations;
  - Strengthen stakeholder's involvement in the planning process.
- Procedures: integration in spatial planning
- Good guidelines for quality objectives.
- Explore the need for the regional boost- regional plan
- More developed territorial indicators. The Basque Country although having already high quality territorial data is in need for updated data and more developed territorial indicators

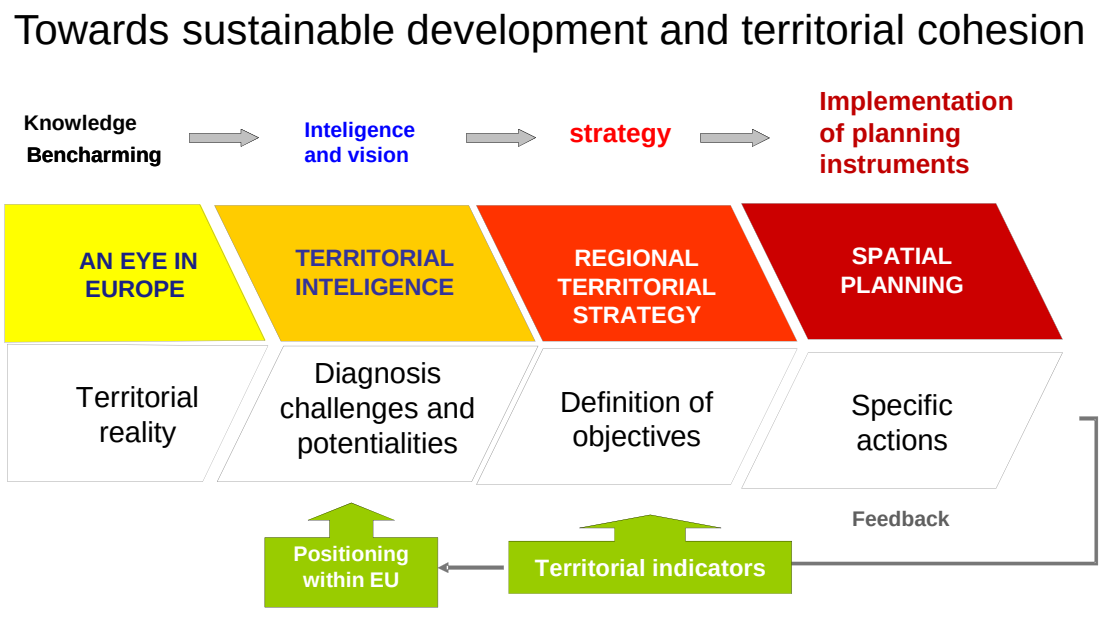


Figure 5 Sequence from the territorial analysis to the definition of specific actions for spatial planning towards sustainable territorial planning and management. Own ellaboration. Tecnalia 2013.

5 Description of the planning practice

Both actually, the adhesion of the ELC and also the draft bill recognizes protection and quality development. The catalogues define objectives link to protection and also guarantee of quality in particular in those areas designated as areas of special interest due to its value- cultural, environmental, quality- and also its fragility and vulnerability, being under certain impacts. The draft bill also considers complementary instruments for protection and landscape improvement: Landscape Action Plans and Studies for landscape integration

Definition of tangible objectives for each of the landscape units defined in the catalogues. Each objective is identified considering public perception and interests and it will be later translated into specific actions and in terms incorporated: a) as guidelines in the spatial comprehensive plans b) special actions – interventions in areas of special interest

Very important the consideration of OBJECTIVE COMPONENT of landscape- expression of territorial system alongside the SUBJECTIVE COMPONENT- Perception

Although the catalogues are still on progress and have not been finalized yet, it is still considered important to offer the Landscape Guidelines as an interesting instrument bridge between landscape evaluation and quality objectives and its integration into spatial planning.

Based on the information provided by the catalogues, the objectives of landscape quality and the measures and actions, landscape guidelines are defined to be included in the instruments of spatial planning (Partial Territorial Plans, Sector Plans)

Public participation in decision making regarding planning and environmental issues is regulated by law in the Basque Country, as this also affects the landscape planning instruments.

5.1 Planning process and decision making

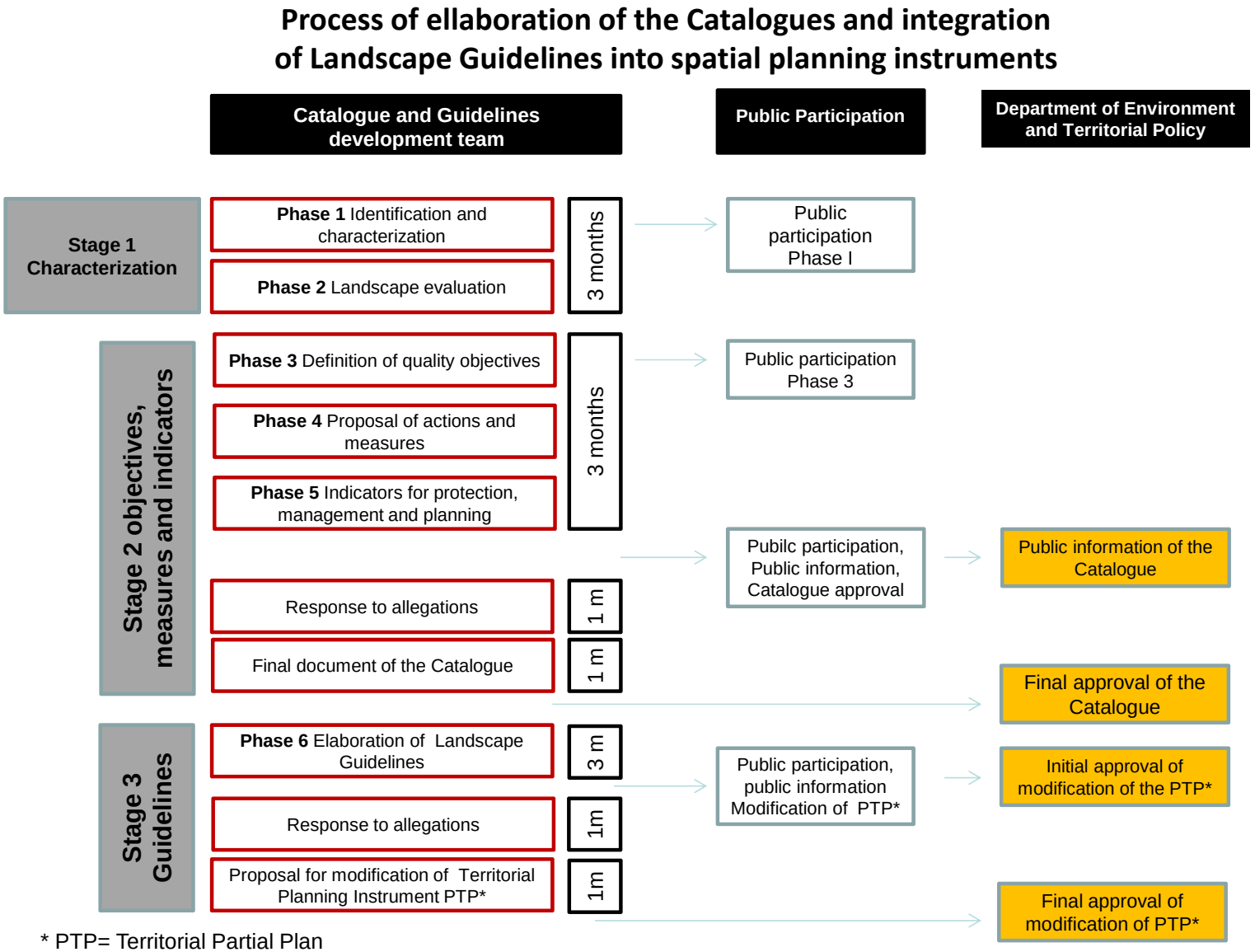
5.1.1 Time line of the planning process

Who drives the process?

The administration responsible for launching the Landscape Catalogues and Guidelines is the Department of Environment and Territorial Policy (Spatial Planning) of the Basque Government also for its elaboration and implementation.

Three pilot experiences were launched at the same time in 2010; one in each of the Basque Provinces, representing three different territorial realities. For Liveland purposes remember that we are focusing on one of the three pilot experiences which is the Landscape **Catalogue of Laguardia Rioja Alavesa.**

The diagram in next page tries to describe the process biography with regard to the evolution of landscape policies in the Basque Country from the 90´to the present, with a particular focus on the instrument being analysed in the project.



* PTP= Territorial Partial Plan

Figure 6 Process biography Landscape catalogue of Laguardia Rioja Alavesa

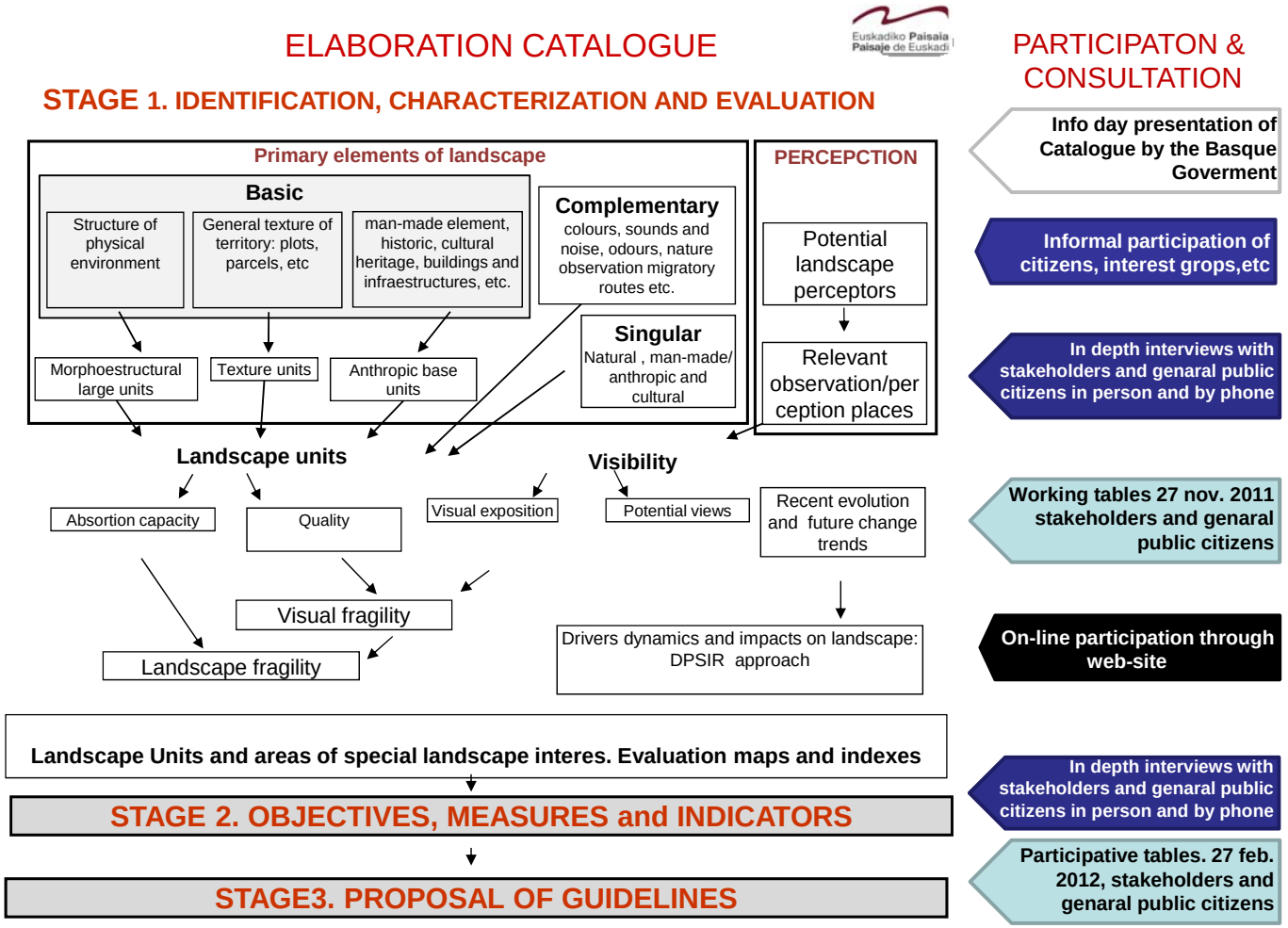


Figure 7 Stages in the elaboration of Landscape Catalogue

5.1.2 Procedures and decisions

Public participation in decision making with regard to policies, plan and programmes with territorial impact is materialized by means of the Strategic Environmental Assessment procedures (SEA). Public participation is required by law only for the approval of land use plans / master plans at local level.

However, access to information in relation to environmental issues is recognized by law in different norms:

- Instrument of Ratification of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, done at Aarhus (Denmark), June 25, 1998.
- Law 27/2006, of 18 July, which regulates the rights of access to information, public participation and access to justice in environmental matters (includes Directives 2003/4/EC and 2003/35 / EC).
- Law 3/1998, of February 27, general environmental protection of the Basque Country

Public participation in the practice under analysis

Public participation is a key issue in the elaboration of the Catalogues and Guidelines. Landscape perception is subjective and therefore the participation of citizens and all agents and stakeholders involved in landscape is remarkably important.
Therefore, during the elaboration process of the Catalogues and Guidelines has been crucial:

- Involvement and team work of citizens and administrations- practitioners
- The administration boosting public participation and public involvement
- Keep participation active in time that would in term lead to awareness and socialization of landscapes values.

The public participation aimed at:

- Allowing people and citizens and also their social agents to express their opinions and PERCEPTIONS of landscape
- Increasing the efficiency in the decision making, resulting from reflections close to the people and taking consensual decisions
- Increasing the sense of involvement and co-responsibility in monitoring and compliance with the decisions on landscape

Several instruments were setting for public participation:
Instruments oriented to know people´s view on the initiative of the Catalogues and Directives

- Web site www.euskadi.net/paisaia
- Facebook
- Email paisaia@ej-gv.es

The following instruments were used for the participation on the process of the Catalogues and Guidelines in the pilot areas:

- Interviews with local agents: face interviews and also electronic
- Working tables with local agents and general public- citizens

Which parts of society did the participants come from?

Interviews were performed by three means:

- **Presence:** local agents met in the building of La Cuadrilla (Laguardia)
- ***Phone***: local agents are interviewed by telephone who could not attend to the event.
- **Online**: The survey was sent by email to other agents who could not attend for the two previous tracks

The interviews addressed people and agents from the functional area, living, working and or using the landscape on a regular basis. The interviews allowed to complete and refine the analysis developed, and was used to make an assessment of the landscape units.

Two working tables with the assistance of two different sorts of agents:

- **Administration** 43 agents, with representatives from all municipalities
- **Citizens** 25 agents, including a historian and NGOs etc

Also the working tables focused on people and local agents, living, working and or using the landscape on a regular basis.

How did the participation process influence the planning process?

Participation has taken place in several moments on the process biography (See figure 2 on page 5) with influence in the planning process per se particularly in two moments:

- For the final approval of the Catalogue
- At the time of modifying the Territorial Partial Plan of Laguardia, in order to include the Landscape Guidelines

5.2 Content of the planning practice

The landscape Catalogue of Laguardia aims at analyze and evaluation landscape in each functional area and define landscape objectives that later will be legally incorporated into Spatial Planning instruments by means of Landscape Guidelines.

The catalogues are developed in 3 stages and six phases (see figure 7).

5.2.1 Analysis

Stage I Landscape Characterization and evaluation – **October- November 2011**

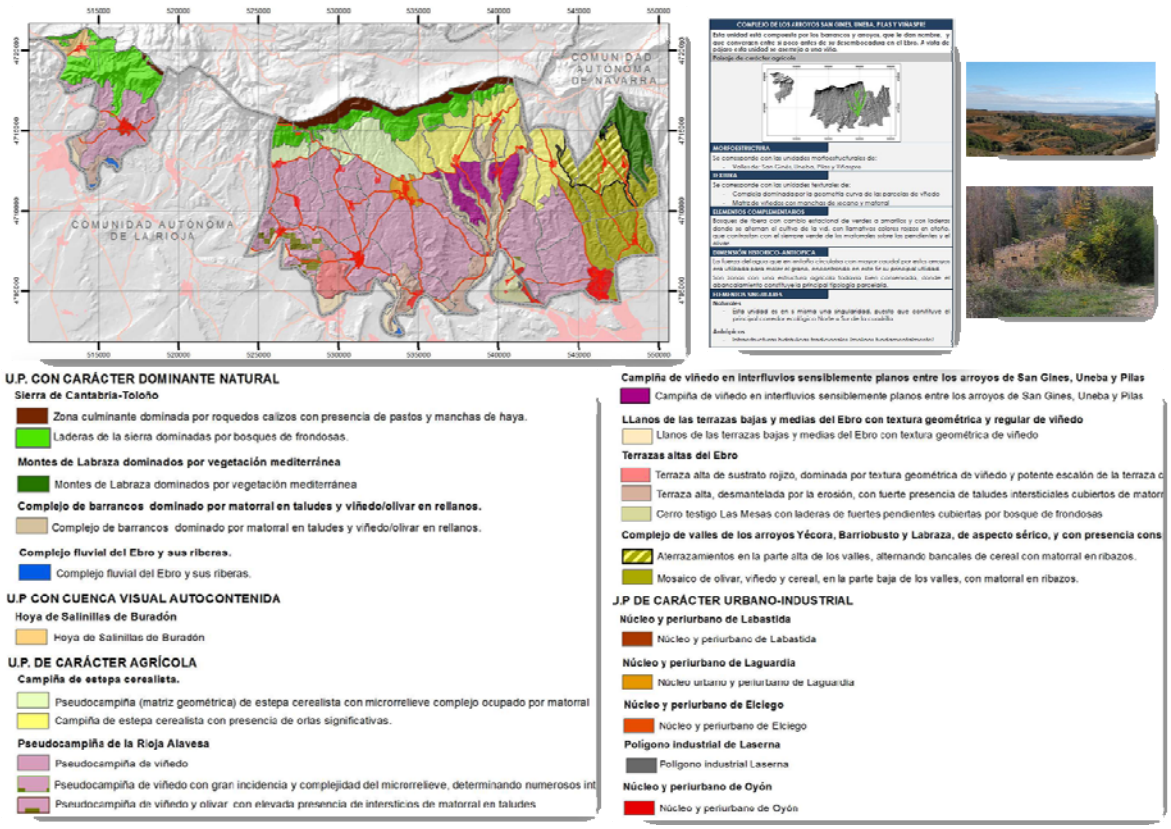
Phase I Landscape characterization: in order to acknowledge people's values respect their own landscapes, interpret the dynamics and processes that have intervene and are currently influencing landscape transformation. So this phase implies a strong participatory /consultation process in order to acquire knowledge on people´s perception and views.

The report published on November 2011 has 215 pages and it contains a characterization of 15 landscape units in the functional area for its evaluation and characterizes the landscape in each of the units by means of:

- The assessment of the evolution of landscape through time
- The identification of landscape values

- The assessment of current landscape dynamics and key drivers

By combination of such maps the 'landscape units' are formed, see map 6.



Map 6 Landscape units

Full report could be access at http://www.ingurumena.ejgv.euskadi.net/r49-cpaisaia/es/contenidos/informacion/paisaia_2011_laguardia/es_paisaia/adjuntos/2011_paisaia_inicio/memoria/memoria_fase_1.pdf

Phase 2 Landscape Evaluation: in order to identify strengths and threats in landscape and potential measures to adopt. In this phase is very important the role of local agents operating in the area

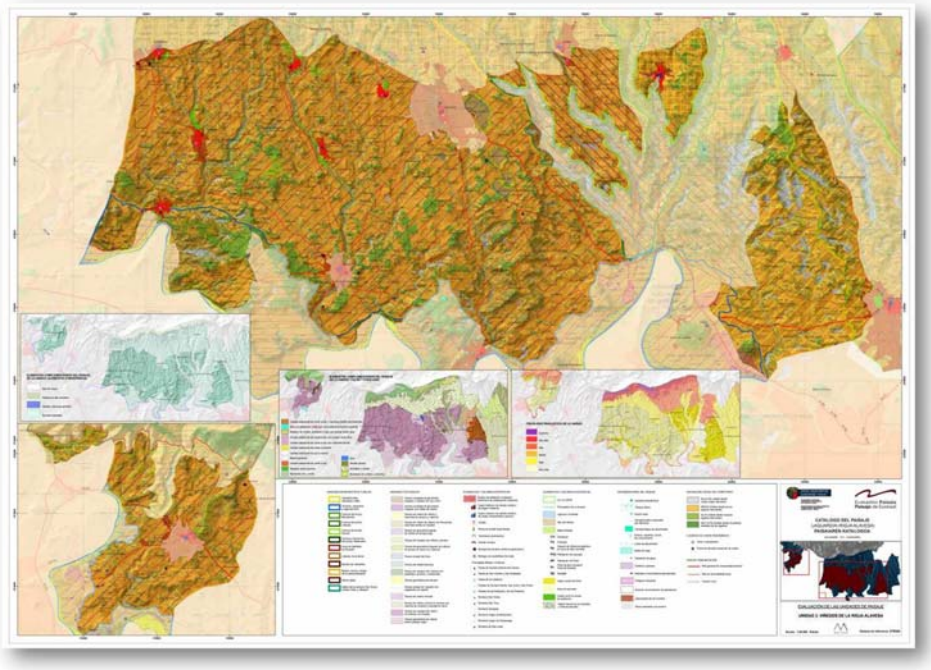
Once landscapes are characterized a second stage is their assessment or evaluation. The report has 69 pages and was published on December 2011. The following values are considered for landscape assessment:

- Aesthetic
- Natural and ecological
- Productive
- Historical and Cultural heritage
- Social
- Symbolic and identity
- Religious and spiritual

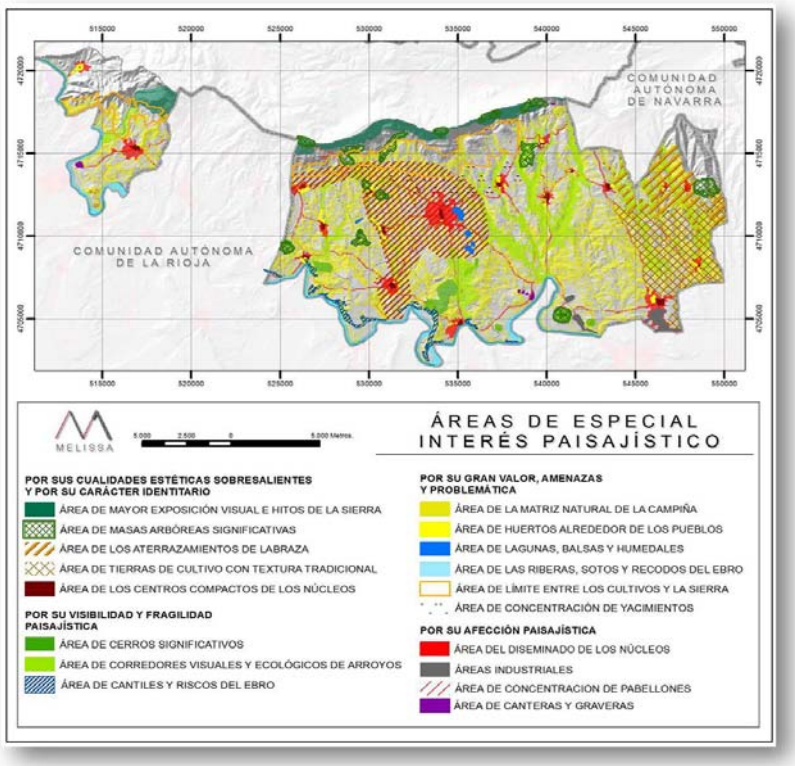
There are also other subjective values that are considered when evaluating landscapes. Due to the subjective character of some landscape values, the

participation of the people is considered crucial. The citizens and social agents are the ones that must contribute significantly to the definition of such values. Other sources are artistic ones as pictures, paintings, literary, touristic guides.

Full report could be access at http://www.ingurumena.ejgv.euskadi.net/r49-cpaisaia/es/contenidos/informacion/paisaia_2011_laguardia/es_paisaia/adjuntos/2011_paisaia_inicio/memoria/memoria_fase_2.pdf



Map 7 *Summary of landscape evaluation alongside summary sheets per Landscape Unit*



Map 10. Areas of special landscape interest

Besides the landscape units, the catalogues also define 'Areas of special landscape interest'. Those special areas are defined due to their singularity, rareness, fragility, level of degradation, identity value or whatever other aesthetic or perceptive value.

5.2.2 Vision and objectives

Stage II landscape quality objectives, measures and indicators – February 2012

Phase 3. Definition of objectives of landscape quality

Define quality objectives. The objectives will constitute the basis for future public policies on landscape protection, planning and management. Therefore this phase will imply the involvement of landscape agents identified in previous phase.

Criteria for definition of landscape objectives:

- Abstract character
- Define in line with the extent of spatial area and thematic ambits

The objectives apply to:

- a) The whole functional area
- b) Specific objectives define to a single landscape unit within the functional area
- c) Specifically defined to Areas of landscape special interest.

The formulation of the objectives is based in two main principles:

- Consideration of landscape within spatial planning is seen as a great starting point for establishing new environmental, social and economic objectives since landscape represents an essential element for wellbeing and quality of life.
- The spatial planning is the most powerful tool for preservation and improvement of landscapes in the framework of sustainable development.

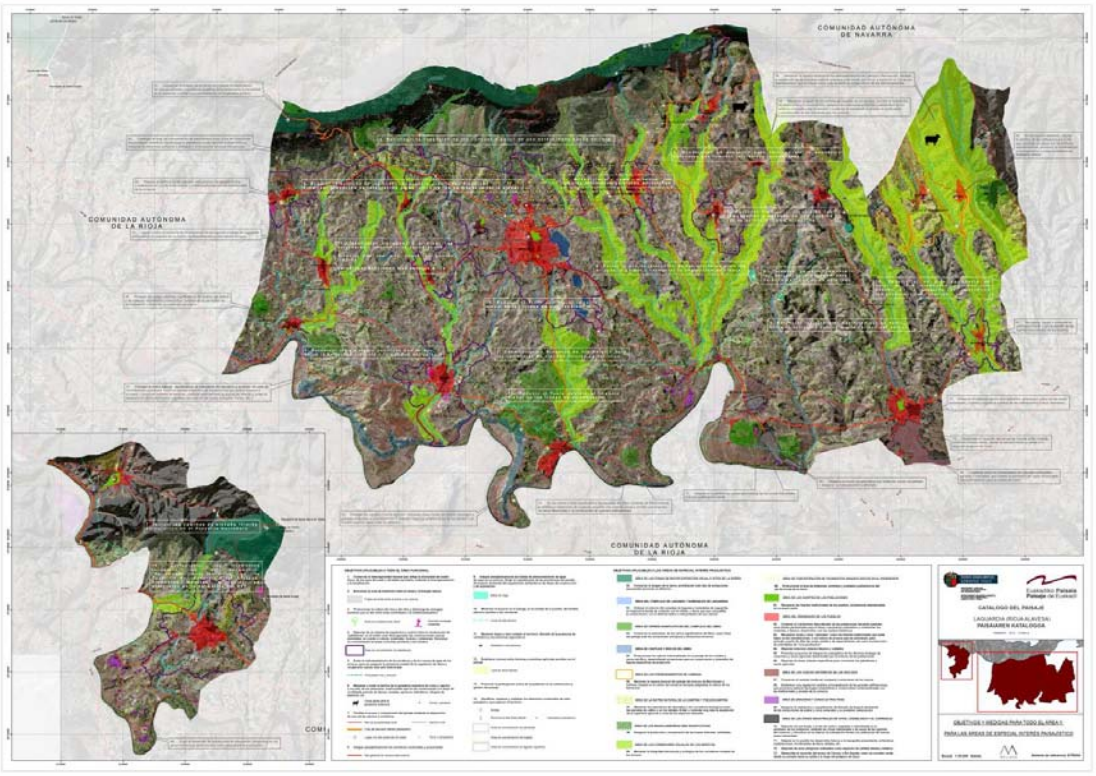
The objectives of landscape quality could aim at:

- Landscape conservation
- Improvement of urban environment
- Maintenance, improvement and landscape restoration
- Harmonic articulation of landscapes
- Protection and value of certain landscapes
- Creation of new landscapes

CONSERVATION of the environmental, cultural, visual and perceptive values of a landscape, to prevent deterioration or loss

1. Preserve landscape features, loud and clear, that define a character and personality of the functional area, as well as values, tangible and intangible ecological, historical, aesthetic, social, productive, symbolic and identity.
2. Keep both visual references and identity (scenic backgrounds) most important features: the Sierra de Cantabria and north Toloño and conspicuous broad and complex south of the Ebro river
3. Preserve and enhance the historic in all its manifestations: locational, structural, architectural and cultural.
4. Search, promote and exploit economically positive synergies that can occur between wine and olive growing activity and landscape quality.
5. Preserve textural heterogeneity that reflects the diversity of the physical environment of the land use and parcel tissue, avoiding homogenization and trivialization.

6. Promote the culture of wine and olive and enhance the positive synergies that exist between these activities and landscape quality
7. Have a system of regulation and control over the construction of “pavilions" in the countryside. Mix new construction permitted, in colors, materials, shapes and volumes. Encouraging their concentration in specific areas near the urbanized areas
8. Avoid overuse of aquifers and water courses of the streams, in order to ensure the notable presence of riparian vegetation and retrieve it when it is impaired



Map 8 Summary map of objectives

5.2.3 Actions and measures envisaged

Phase 4. Proposal of measures and actions

Measures and specific actions are defined for each landscape unit in each functional area and they could be addressed to territorial policies and planning, urban policies and urban planning or sector policies and planning:

1. Rules of direct application (through the sub-regional Spatial Plan);
2. Rules of indirect application (through local Land use Plan or sector plan);
3. Recommendations to public sectors and private agents / developers.

Many of such rules or recommendations are related to the Areas of Special Interest (see map 10).

Some examples of rules of direct application:

- It is forbidden to build any visible new buildings and infrastructures in the most exposed areas, like “Hitos de la sierra” and “masas arboreas”.
- It is forbidden to make fire in the protected nature areas “matriz naturales”.

Some examples of rules of indirect application:

- Land use Plans should establish rules for *historical sites* in urban and built-up areas, governing the aesthetics of facades, pavement type, furniture, information signage, advertising signage, etc.
- Land use Plans should establish rules for *green spaces*, especially in the transition zone between urban and rural, governing the recreational use of water streams, woodlands and traditional orchards.

Some examples of recommendations:

- Responsible sector agencies (on rural development) should encourage *agricultural diversification* by counteracting the monotony of vineyards, encourage the planting of olive trees in the eastern part of Laguardia and encourage the traditional practice of planting fruit trees on the edge of agricultural parcels.
- Responsible sector agencies on motor traffic roads should integrate landscape goals: *the 'road design'* should be adapted to the topography of the land, avoid strong impact paths and avoid large clearings of land.
- Public bodies and NGOs on cultural history should initiate a project on recovering the traditional Huertas-orchards. Involvement of citizens and sponsorship is important in such public-private partnership.

5.2.4 Implementation strategy

Phase 6 Elaboration of Landscape Guidelines

Landscape Guidelines aims at legally incorporate landscape objectives, measures and actions into the spatial planning instruments whether they are sector plan or integrated territorial plans which would also determine the land use planning at municipality level.

Proposal of guidelines to be incorporated to spatial planning instruments:

1. Binding rules of direct application (through Territorial Partial Plan- integrated spatial planning instrument for a Functional Area)
2. Binding rules of indirect application (through Master Plan- Local Land use/urban plan o sector legislation/sector planning)
3. Recommendations (to public sectors and private agents)
4. Actions subject to Further Studies of Landscape Integration
5. Actions subject to Landscape Action Plans for specific areas.

1. Binding rules for direct application

On the most exposed areas it is banned any visible new building and infrastructure in the following Areas of Special Landscape Interest:

- major areas of visual exposure and milestones of the sierra
- significant hills complex Ebro
- protection of individual elements of the countryside and protected forests included in the Areas of Special Landscape Arboreal masses of the countryside.

On protection of natural matrix:

- It is forbidden to fire on the natural matrix.
- On the consolidation of soils Industrial use:The industrial use floors are consolidated should be incorporated into the Area of Special Landscape: INDUSTRIAL ZONES.

2. Binding rules of indirect application

On the movement of soils and clearing in agricultural plots
Urban master plans should control the licenses for earthworks and land clearing in agricultural plots and regulate the manner in which such licenses are granted, considering at least:

- maximun height of earthwork
- Volume of soil moved per surface unit
- Vegetal mass loss
- Compensation measures

The management programm of such plan should stablish the monitoring model for accomplishment of license.

On historical sites in urban areas

Urban master plans should:

- Establish rules governing the aesthetics of facades, pavement type, furniture, information signage, advertising signage, etc..
- Require that housing rehabilitation is adapted to the urban context in which they are inserted, at least in terms of materials, shapes, volumes and colors.

On dissemination of built-up areas
Urban master plans in each municipality should:

- Favor the urban fabric clogging filling gaps, avoiding classifying new floor urbanizableexterior
- Establish standards for new buildings and urban development's consistent and contextualized use typologies with each core.
- The urban sections of streams, woodlands and orchards traditional areas as green space to be conditioned.

3. Recommendations

Urban master plans in each municipality should foresee:

- Recovery following style elements: courses of streams, wooded suburban areas, areas of traditional orchards, trails, road slopes, wasteland "anyone" adjacent to populations, etc.., To the area of patenting transition between urban and rural.
- A space to concentrate on him and wineries craft grower, this space will be developed by a Plan that provides for the particularity of these constructions.

On crop/farming diversification and influence on landscape
Responsible organisms should:

- Encourage crop diversification counteracting the monotony of the vineyard
  Prevent the decline in cereal area in the north and encourage the olive tree in the eastern
- Encourage the traditional practice of planting fruit trees on the edge of the agricultural parcels.

About ranching and its influence on the landscape
The competent bodies:

- Encourage ranching as a building and landscape conservation
- Promoted local livestock products, rehabilitation and upgrading of folds, the second-order associations, etc..

On the road Landscape integration

- Should be avoided as far as possible, the construction of new roads, backing the existing road improvement.
- In any case, the layout of new roads as well as corrections and improvements of existing, adapted as far as possible to the topography of the land, avoiding strong impact paths and terraced with large clearings.

On participation and "land stewardship"

- Creating a land stewardship entity as a collaborative tool management and owners.

On protection of natural matrix

- To exercise the right of first refusal to the sale of any parcel in the natural matrix

About the Huertas- orchard

- Recovering traditional orchards. To this aim help of public bodies and collaboration between the private (sponsorship, etc..) is crucial also involving citizens in recovery projects.

4. Actions subject to studies of landscape integration

Evaluate the impact of projects and activities in the landscape and establish criteria for integration.

According to the draft bill:

1 - In all actions referred to in Article 28.5 of the Law 2/2006, of June 30, of Land and Urban Planning of the Basque Country and detailed below:

- Actions to provide facilities and activities of public interest
- Works under the territorial and urban planning for the delivery of applications and services by public administrations
- Roads, roads and infrastructure or planned networks in urban and regional planning

2 - Assumptions required for the territorial and urban planning
3 - Assumptions that establishes any law or general provision
4 - When the project is subject to environmental impact assessment, the content of landscape integration study will be included in the environmental impact study.

Actions that lead to alteration of the Area of Special Interest called Matrix Natural Landscape of the Countryside

New infrastructures:

- Energy
- transport
- Hydraulic (especially irrigation ponds)
- communication
- landfills and dumps

New buildings outside urban centers and expanding existing

New urban and industrial developments

5. Identification of landscape action plans

Oriented to the protection, management, enhancement and management and landscape

LAP 1. Energy use and production of biomass compost, forestry, agriculture and any other available
LAP 2. Regulation aesthetic and landscape integration of the agricultural buildings on undeveloped land
LAP 3. Recovery banks and banks of watercourses
LAP 4. Protection and enhancement of the Area of Special Landscape
LAP 5. Creating a network of scenic routes: the proposal specifies the roads and paths to include and specifications and management provisions
LAP 6. Adequacy of existing infrastructure: energy, transportation, water conservancy, communications, landfills and dumps, etc..
LAP 7. Valuing cultural heritage: the proposal identifies elements, itineraries and endowments
LAP 8. Plan for the social use of the lakes and wetlands of Laguardia
LAP 9. Enhancement of the Ebro Cantiles and Crags
LAP 10. Enhancement of visible and hidden archaeological heritage: the proposal specifies cataloging Special Interest Area Landscape ARCHAEOLOGICAL CONCENTRATION IN PIEDMONT as "Presumption Archaeological Area" of the Basque Country.
LAP 11. Integration of urban crossings
LAP 12. Sotos Gimileo
LAP 13. Landscape integration of industrial areas
LAP 14. Measures for education, awareness and training: the proposed difference between school and professional farmers

This phase requires a formal public information period. Depending on the development of the regulatory development the incorporation of the landscape guidelines into the spatial planning instruments (Territorial Partial Plans) should follow the participatory process established for the approval of such plans, including the Strategic Environmental Assessment.

Agents and citizenship are aware of:

- The landscape is mostly built functional area
- It has strong character and high quality
- There are notable landscape degradation
- Different sensitivity of the evolution and threats on the landscape
- Huge amount of regulatory filings and its dubious effectiveness The possible interference between such regulations and economic objectives
- No one accepts the possibility of synergies between landscape quality and economy
- A landscape is not accepted rules may be useless and counterproductive.

All this has been advised to be very cautious about the proposed legislation, distinguishing between:

- Binding rules or mandatory: few clear
- Recommendations: the rest

Example **OBJETIVE 1**	**Preserve textural heterogeneity that reflects the diversity of the physical environment of the land use and parcel tissue, avoiding homogenization and trivialization.**
DESCRIPTION	Most of the functional area field shows a texture matrix, ie dominated by the continued presence of the vines in the pseudo-Campiñas of this crop and the pseudo-steppes cereal, and because of the geometric boundaries of the plots and rows of the vine. But there is another mosaic texture without a clear dominance, which introduces complexity and variety, adding value to the landscape, and that occurs most visibly in this functional area.
Instrument of spatial planning and/or sector policy	Territorial spatial planning and Agriculture Policy
MEASURES ***That could be used to reach the objective***	• Restrict as far as possible the consolidation (R) • If the question will have to undergo a specific study of the damage it would do to the natural vegetation matrix, excluding the concentration areas in which said matrix is considered essential (AD) • Keep in land consolidation case, the stone walls, fruit trees, embankments and other existing boundaries are part of the textural richness of the landscape and design new structure interstices grouping those kept and those who want to create, so as the micro relief. (AI) • Encourage the presence of fruit at the edge of the plots (R) • Most comprehensive control of the licenses granted to earthworks and land clearing. (AI) • Require new banking and its adaptation to the topography of the land (R) • Strictly control the use of fire as a technique for removal of weeds and plant debris by farmers (AI)
Kind of measure	Recommendation, Direct application, Indirect Application
INDICATORS ***That could be used***	% of reduction of natural surface Nº of licenses approved by the municipality for the move of soils Nº of fruit trees planted Nº granted licenses to farmers for stubble burning

Table 1 Example of landscape objective form

Studies of Integration

The aim of a Study of Integration is evaluating the potential impact of projects on landscape and establishment of the criteria for guaranteeing the mitigation of such project and its integration into the landscape.

Projects can be: facilities of public interest, works for the delivery of applications and services by public administrations and roads, infrastructure or networks.

When a project is subject to environmental impact assessment, the content of the Integration Study should be included in this report.

In Laguardia in the Area of Special Interest called “Matriz Natural” for following infrastructure projects (even when relative small) an Integration Study would be obliged: energy, transport, hydraulic (especially irrigation ponds), communication, landfills and dumps.

5.2.5 Actions and measures implemented

No actions or measures have been implemented yet, since the Guidelines are still under development.

5.2.6 Monitoring and evaluation

Phase 5. Monitoring indicators

Landscapes catalogues serve as a basis for monitoring and continue evaluation of the landscape policies. Monitoring indicators (protection, management and planning) are needed to know and value the state of the landscape and its evolution in relation with the established objectives of landscape quality.

6 Links to ESPON studies

How can the practice in Laguardia (especially the goals and the measures in the Guidelines) be related and compared to the outcomes of Espon studies?

Economic performance

The practice of Laguardia is related to economic performance of the planning area since concentrates analysis, goals and actions to the 'positive synergy between wine and olive growing and landscape' as mentioned as goal, and the importance of this binomioun to the local economy and its development. Landscape and the economic activity linked to wineyards and olives constitutes also a touristic claim and inherent part of the territorial identity

Quality of life

In the Catalogue and Guidelines the term liveability is not used. But concepts like 'aesthetic and identity values' can be interpreted as 'cultural 'component of liveability. Special attention has been placed in listening local population needs and requests for improving their day to day life. Also several measures have been defined in line with health towards release of stress, strengthen sports and outdoor activities (The study is based on a holistic approach of landscape.)

Environment

The Catalogue includes all environmental factors like morphology, water, soil and weather both in the analysis and diagnosis and also in the definition of objectives. This is particularly relevant in the guidelines oriented to environmental policy related to water treatment (both surface and groundwater) and soil.

Innovation

The practice of Laguadia is not related to economic innovation.

Polycentric development

The Guidelines (in the rural area of Laguardia) is not related to 'urban development' but can be related to 'harmonious spatial development'. In fact it particularly mentioned the relevance of maintenance the configuration of the several settlements in the area with strict rules in terms of building aesthetic for instance.

Attractiveness

Primarily intention of the landscape catalogue and guidelines of Laguardia is not the touristic sector. However, due to the well-known landscape character of the area with vineyards and associated elements it constitutes a very attractive area particularly for certain kind of audience: runners, trekking, mountain lovers, Action Plan on 'scenic routes' have a direct relation to tourism.

Climate change

Adaptation to climate change is not mentioned in the study.

Land use

Land use change as 'evolution of landscape through time' is part of the analysis in the characterization. The Basque Country is strongly diverse in the land use structure respect. We can separate some specific regions with different land use and land cover: the urbanized cities (Bilbao, Vitoria-Gasteiz, and Eurocity Bayonne – Donostia - San Sebastian); agriculture land in Araba, mountains region in Guipuzcoa. All these regions are well connected by transport infrastructure: express roads and highways.

Dynamics and directions of land use as well as land cover changes are analyzed on the NUTS 2 and NUTS 3 level.

Map 9 presents land change typology in the Basque Country particularly focused on the border area between Spain and France.

As it can be seen, changes in each part of the analyzed region are different. On the French side, extensive or complex agricultural intensification took place. There was low intensity of changes. When analyzing the land cover flows in this area, we can notice some urban sprawl or urban land management. The Navarra region was classified as agriculture extensification area, where the intensity of changes was low or with a leaning toward extensification. Araba was classified as region with agricultural internal changes or intensification. Regions of Bizkaia and Guipuzcoa were classified as the ones with internal changes of forest, when we descend to a lower level of regionalization.

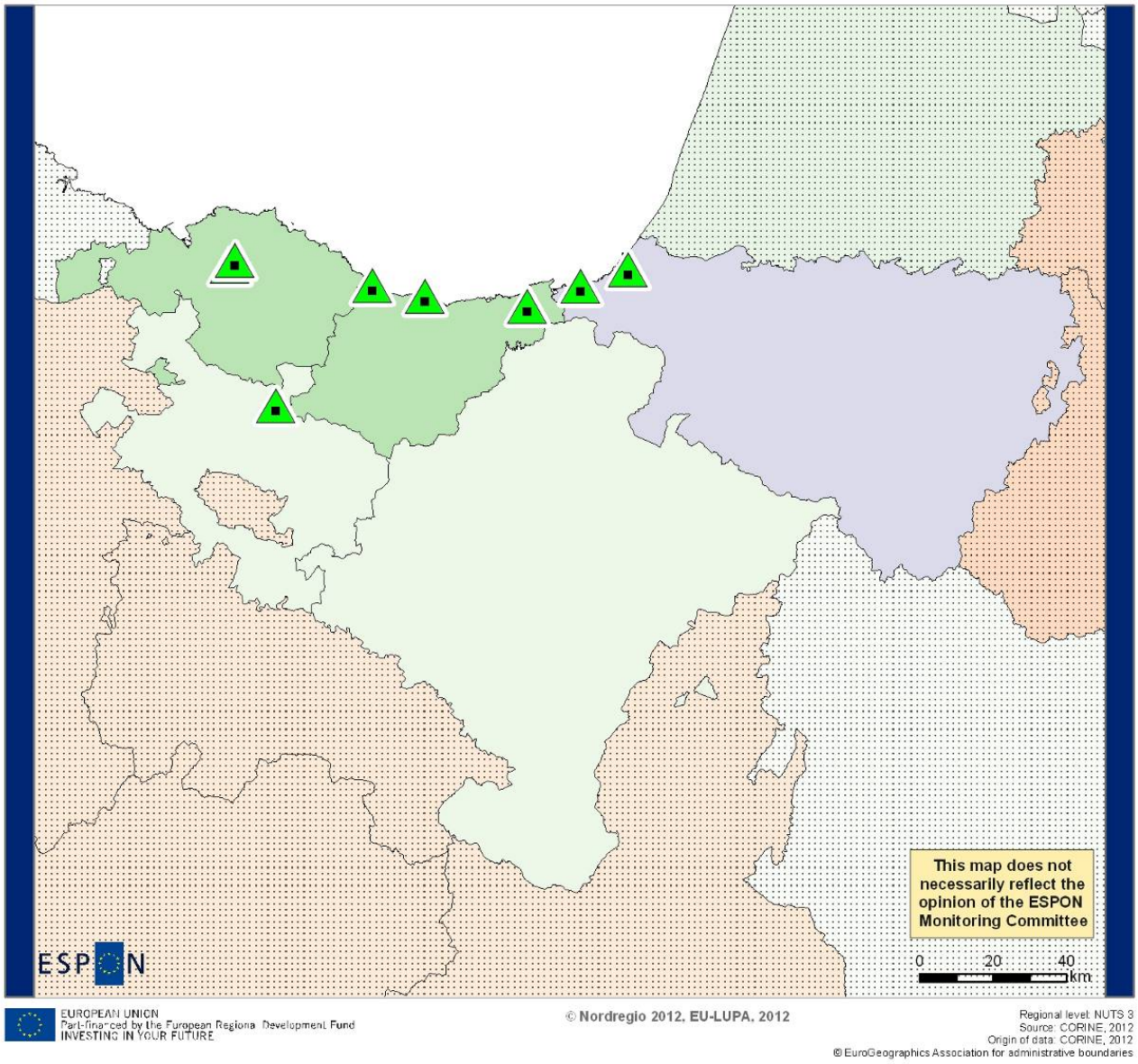
Looking closer at the broader area that includes the Basque Country Region, Atlántiques Pyrénées and Navarre, it turns out that the land cover and land use is closely related to the terrain. A high proportion of hill and mountainous areas, large denivelations (height differences) of area or location on a rocky coast determine the type of vegetation and activity that can be seen in this region. More than 90% of land is covered by undeveloped land like forests, agriculture areas, special protection areas. The highest percentage of this type of land is common in the mountainous area of Araba. But differences in relative numbers are not markedly striking. On the whole, agriculture and forest areas are dominant; other types of lands constitute just barely 8%.

Three types of land use dominate in the analyzed area: forests, special protection area and agriculture with farmland. Forest dominates in Araba: this form of land use covers 31.5% of the region's surface and, at the same time, constitutes 34% of green areas in the region.

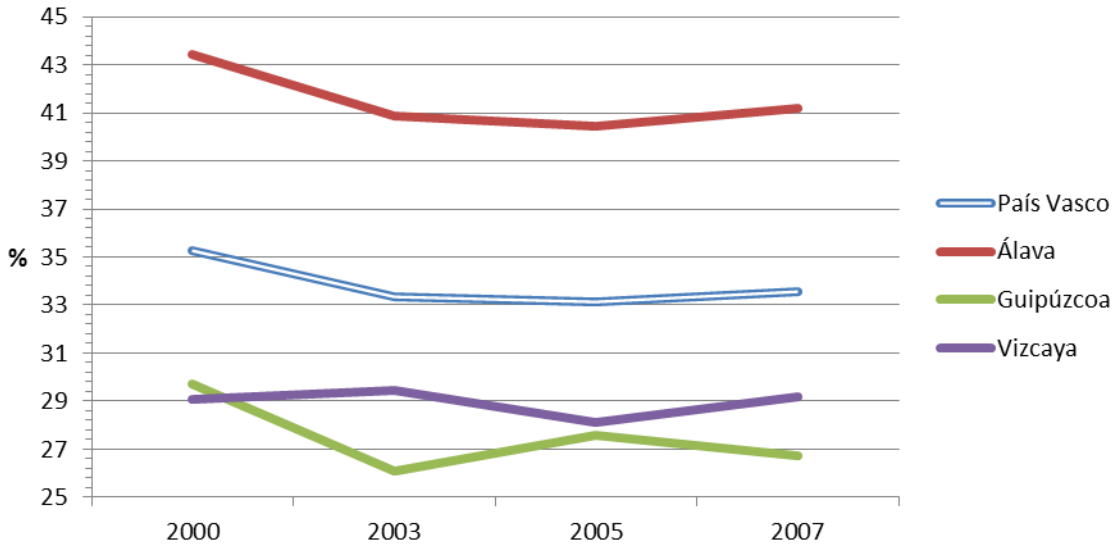
We should notice that the quality of forest is not the same in each region of the Basque Country. Nowadays, there is barely 5% of good quality natural oak forest in the whole region, as compared to originally 80%. Most of the areas which in statistics are classified as forests in actual reality are plantations of trees. The quality of forest in Araba is very high as compared to other regions.

The highest percentage of agriculture area is in south part of the studied territory – in the Araba region. In the analysed period, the surface of agricultural area decreased from 255 290 ha in 2000 to 242 780 in 2007. The critical factors that influence this situation are urbanization processes and other ways of land use intensification.

1990 – 2006 Land Change Typology
Eurocity Basque Bayonne - San Sebastian

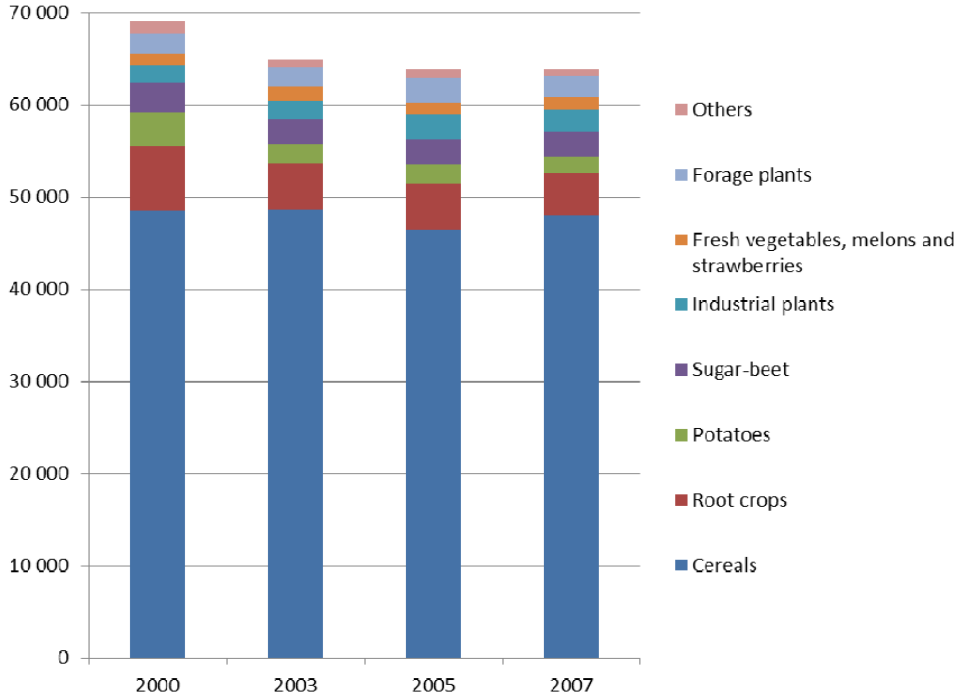


Map 9 Land Change Typology (1990-2006)
Source: Nordregio, based on Corine Land Cover

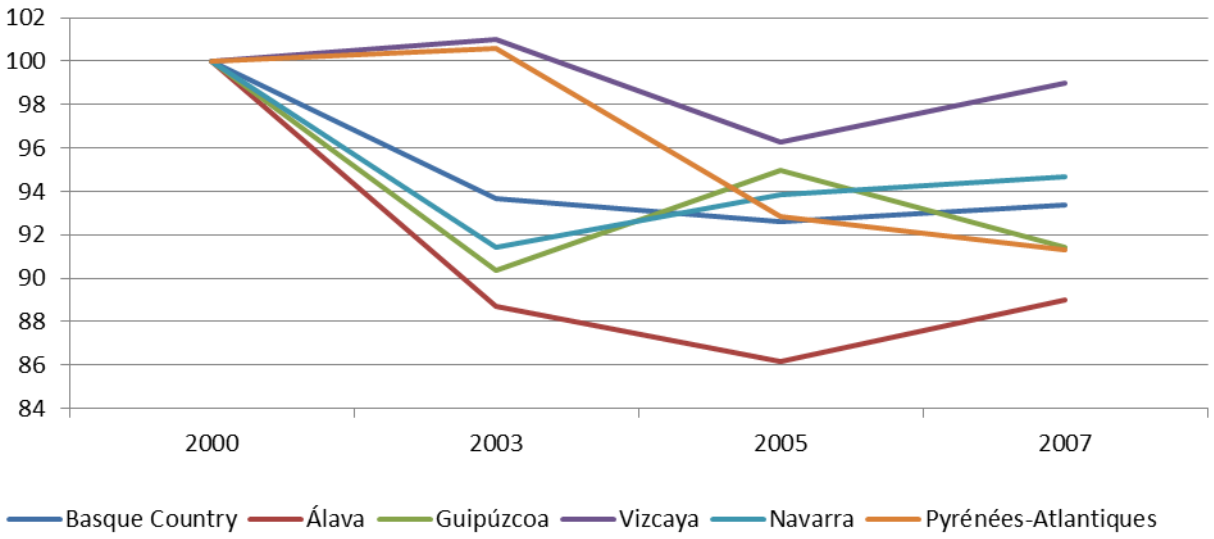


Graphic 1 Total agricultural area. Source Eurostat 2012

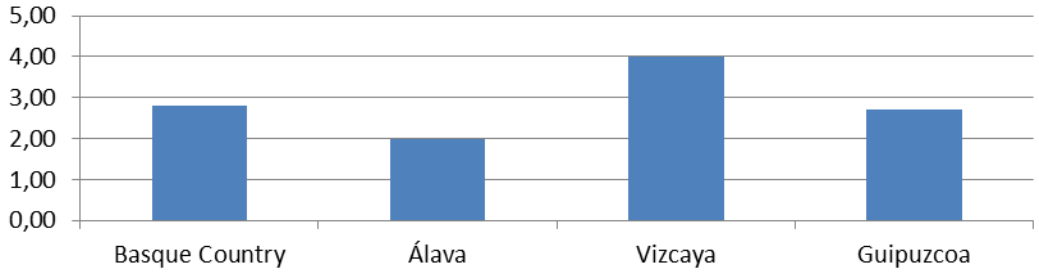
Total area of arable land also decreased – in the 7-year period this area was reduced by about 8% (Figure 29). Most part of the arable land was occupied by cereal crops (primarily wheat, spelt and barley). Area of root crops, potatoes, and sugar beets decreased in the period 2000-2007. Only area of fresh vegetables and industrial plants experienced an increase. Surface area of permanent pasture and meadows decreased in all the regions (Figure 30). The most significant drop was observed in Araba.



Graphic 2 Structure of arable land in the Basque Country (in ha) Source Eurostat 2012



Graphic 3 Dynamic of changes permanent pasture and meadows (in % date for 2000- 100%) Source Eurostat 2012



Graphic 4 Share of residential land in the Basque Country and its provinces in 2000 Source Eurostat 2012

7 Links to European policy principles

How can the practice in Laguardia (especially the challenges regarding content of the study) be related to principles and goals of European policy?

Europe 2020

The practice of Laguardia as a spatial planning instrument under the Spatial Planning Guidelines, responds to the objectives of two strategic documents can be mentioned that are aligned to the EU strategy 'Europe 2020', which focuses on employment, innovation (in world market perspective) and climate change.

The *Basque Environmental Strategy for Sustainable Development 2002-2020* approved on June 2002, in the context of a long-term strategic view in line with the undertaking made at the Earth Summit in Rio de Janeiro in 1992 to draw up strategies for sustainable development in each territory.

The five environment goals of the Basque Environmental Strategy for Sustainable Development are the following:

1. To ensure clean and healthy air, water and soil.
2. Responsible management of natural resources and waste.
3. Protection of nature and biodiversity: a unique asset to be fostered.
4. Balance between territories and mobility: a common approach.
5. Limiting effects on climate change.

The necessary conditions for the successful implementation of the strategy are:

1. Integrating environmental variables into other policies.
2. Improvements in current legislation and its application.
3. Encourage the market to develop in an environmentally-friendly way.
4. Enable the public, the authorities and businesses, making them jointly responsible, and modifying their behaviour in favour of sustainability.
5. Research, technological development and innovation that takes care of environmental matters.

The *Basque Country's plan to tackle climate change* (2008-2012) has strategic goals such as:

1. Reduction in greenhouse gas emissions to +14% in relation to 1990's levels.
2. Increase CO2 absorption to 1% of 1990's emissions by forest and agricultural management.
3. Minimize the risk to natural resources, above all to biodiversity, hydrology and soil resources.
4. Minimize the risk to human health, urban and socioeconomic systems.

The way to reach these goals is by 4 thematic strategies that include 120 actions:

1. Less carbon intensive energies – reduce Its share in the energy, industry, transport, residential, services, agriculture, forestry and waste management.
2. Adaptation – anticipate climate change and preserve natural ecosystems, protect human health and adequate infrastructure and socio-economic systems.
3. Knowledge – develop scientific-technical and social knowledge in order to observe the environment, knowing the problems and creating solutions. It has to involve the Basque Science, Technology and Innovation Network, businesses and the Basque Government.
4. Governance – coordinate the Basque Government, regional government and municipalities to be an example and raise public awareness of climate change.

Spatial Development Perspective (SDP)

The practice of Laguardia has the following links to the EU SDP.

- The 'rules for green spaces' regarding Land use Plans, can be seen as 'urban-rural partnership'.
- Over all the integration of the landscape approach in planning instruments, can be interpreted as 'wise management of natural and cultural heritage'.

8 Summary

Central in the 'good practice' of the region of Basque Country (BC) is the making of a study on Catalogue and Guidelines in the sub-regional area of Laguardia, which has been prepared in the years between 2011 and 2012. The landscape Catalogues and Guidelines are the operational materialization of the Basque Government commitment with the ELC and its desire of integration of landscape consideration into spatial planning.

In the BC the concept of 'landscape' (as integrating approach) is rather new. The government, inspired by the ELC, aims at giving 'landscape' legal recognition and integrating landscape in the already existing planning instruments within the successful and stable spatial planning system. The study on Laguardia, entrusted by the Department of Environment and Territorial Policy, is one of the three pilot cases being undertaken nowadays in the Basque Country. The idea is that all the 15 planning areas in the Basque Country develop their Landscape Catalogues and Guidelines. But this will be done in several stages.

The main ambition of the study is the filling-in of methodologies (from analysis to action) and the development of instruments, to influence other governments and private stakeholders.

Landscape **CATALOGUES**: Analyze and evaluate landscapes in each of the Functional Areas and define quality objectives. The identification of many landscape qualities on maps is bundled in Landscape Units, which have a certain character distinguished to others. The evaluation of landscape values results in a map with Areas of Special Interest, which is the basis for further policy development. Special Interest can cover high identity value as well problems because of degradation. Related to the geographical information, next phase is elaboration of objectives and measures. The objectives represent principles of conservation (for the whole area), protection of certain landscapes and creation of new landscapes.

Landscape **GUIDELINES**: Legally incorporate the landscape quality objectives into territorial planning. Regarding actions is distinguished between direct rules indirect rules and recommendation. Most actions are related to Areas of Specific Interest and cover countryside (vineyards, orchards) and built-up areas (historical sites). Derived from the Guidelines there are two mechanisms of measures implementation:

Landscape ACTION PLANS: For implementation of specific measures in specific areas that may require special attention due to its vulnerability. The study on Laguardia made proposals for several of such plans, some on specific landscape units (like a river valley) and some for a big area (like a network of scenic routes).

STUDIES OF LANDSCAPE INTEGRATION: related to projects and activities that will potentially have a significant impact on landscape

The process of public participation has been quite ambitious and challenging. Several forms of informal participation focused to stakeholders, different actors and general public were used like interviews (also on E-mail), workshops / round tables and social media.

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ISBN

ESPON

LIVELAND
Liveable Landscapes: a key value for sustainable territorial development

Targeted Analysis 2013/2/22

Baseline Report Practice case Midden-Delfland

Version 16 March 2014

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INVESTING IN YOUR FUTURE

This report presents the final results of a Targeted Analysis conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

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

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This basic report exists only in an electronic version.

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1 Introduction

1.1 The practice

The municipality of Midden-Delfland (MD) put forward the making and executing of the local landscape plan "Perspective 2025" as good practice in the framework of the Liveland project. MD was project leader of the making of the landscape plan in the years between 2007 and 2009. The involved town councils decided on the plan in May 2010.

The document was written by the bureau of landscape architecture "Bosch Slabbers Tuin- en landschapsarchitecten".

On the implementation of the landscape plan is worked in cooperation with other authorities in the execution organisation "Court of Delfland", which includes a bigger area of 'green spaces'.

Main ambition of the landscape plan is to improve the spatial quality of the open space in an intensively urbanized area and to improve the connections between the country side and the surrounding cities.

1.2 The actor

Midden-Delfland is relatively small municipality in the open rural area between the cities The Hague, Delft and Rotterdam. It has a surface of 50 km² and a population of 18.000 people.

The municipality has competences on spatial developments (in town and country side). The municipal regulation (coupled on the Land Use Plan) binds the owners of land and buildings.

In the municipal government is one alderman responsible for space and landscape. In the administration work around 5 officials in this field of policy.

1.3 Back ground and context

Central in the 'good practice' of the municipality of Midden-Delfland is the making of a local Landscape Plan. (In the Netherlands this kind of plan is called a 'landscape development plan'.) For the making of this plan the municipality worked together with the near municipalities (including the city of Delft) and the 'Water Board' that is responsible for the water-management. So in fact the Landscape Plan is 'interlocal'.

The area of the Landscape Plan has a surface of 6.500 ha (65 km2) and a population of 20.000 inhabitants. In the surrounding big cities live around 2 million people.

For the next 20 years the urban conglomeration of Rotterdam – The Hague is expected to have an on-going growth of population, infrastructure and economy. Following 'higher' spatial policy documents, the area of Midden-Delfland will be respected as 'open space' or 'green garden'. Here the citizens can have 'far away views' and can enjoy the cultural heritage and natural landscapes. MD is very near the urban space and so part of the daily living space of citizens of the big cities.

2 Planning system and culture

Following an overview is given of the context of the planning practice with a short description of the policies and the planning system in the Netherlands and the region, the province of South Holland.

2.1 Interpretation of key concepts

Nature and landscape

In the planning practice in the Netherlands the key words Nature and Landscape are often mentioned together, as the 'green space' or country side. These policy fields are often summarised as the 'ecological string of sustainability'.

'Nature' is a strongly organised -'sectoral policy'-, with officials and big NGOs. There exist several private nature organisations on conservation and management. Nature or 'Ecological Main Structure' as planning designation is seen as protected area, where the land is often in ownership of the government or a specialised nature organisation. Management of such areas is strictly regulated.

'Landscape' has multiple interpretations in the Dutch professional debate, as 'space' (related to spatial quality), as design or architecture, as cultural and historical values and as (technical) landscape development. (In many cases a landscape design is made for technical infrastructure, like high ways and water canals). Dominant in the practice of MD is the interpretation of landscape as spatial quality and as landscape 'view' and design.

Spatial policy

The Netherlands (especially the densely populated region of South Holland) has a long tradition of land use planning in town and country side. With the term 'spatial quality' is distinguished between functional value (for use or economy), future value (long term interests) and 'liveability' as visual quality, recreational value and cultural identity.

Liveability is a more diffuse term, related to the relation of an individual with his environment. The spatial planning concentrates on physical aspects, but also social and ecological items are often mentioned. In the Dutch policy practice is often pointed on social and recreational values, meaning that 'public spaces' (like urban squares, parks and recreation areas) should be 'nice' and enjoyable for everybody.

2.2 Planning system

The Netherlands have signed the European Landscape Convention, but not translated this convention in a national landscape law. In the period of acceptance (around 2005) Dutch politicians assumed that 'landscape' is sufficient integrated in nature- and spatial policies.

Landscape policy (as spatial quality and as protection of high value areas) is since long integrated in the spatial planning on all levels. Landscape (as natural and cultural value and as 'local identity') is often a spatial designation on spatial policy maps. Dutch spatial planning has a long tradition of multi-functional designations, as for instance 'agriculture with natural and visual values'. The 'function map' of the region South Holland mentions 'agrarian landscapes', which means not only production, but also 'free time landscape'.

Nature policy is sectoral organized. The Dutch nature law is strictly focused on protected areas and the implementation of sectoral conservation policies and nature management. Nature reserves are designated by a regional government and it is obliged to make an nature management plan.

Since 2010 exists a strong policy of deregulation and decentralisation on national level, in which many responsibilities on space, nature and landscape are transferred from national to regional governments. Also the national government made very big budget cuts for these policies.

'Structural visions' (or 'strategies') on future spatial developments are obliged on national, regional and local scale, because they are basis for regulations and physical developments on project level (see figure 1 which gives a overview of the planning system).). Such vision-plans are 'form free', so each province (region) and municipality has its own 'school' or methodology. The regulative part (guidelines) of such plans should be based on the vision. Municipalities are obliged to make a 'Land Use Plan' (plan of local designations), which is a rather strong instrument of regulation of spatial developments.

A 'Landscape Plan' is not obliged in the Netherlands, but a voluntary instrument of municipalities, often in cooperation with others. In practice it is an 'action plan' on the measures in green space in the coming 10-15 years (see figure 1). From the 1980's until 2010 the preparation of a landscape plan was subsidized by the national government. The subsidy was linked with conditions, like the making of the plan by a landscape architect and approval by the local parliament(s). Since 2010 all subsidies were cut.

Last but not least for all physical projects (small or big scale) it is obliged in the NL to make a 'blue print plan', with which the project exactly is described. A developer always needs a permit of a government.

	Vision Space	Action Landscape	Regulation Space	Development Space	Management Nature
National	Obliged		Obliged		
Regional	Obliged		Obliged		Obliged
Local	Obliged	Voluntary	Obliged		
Project				Obliged	

Figure 1 Kind of plans on space and landscape and governmental layers

Explanation of figure 1:

- Vision = desired future development, goals, targets
- Action = strategy using rules, finances, agreements and communications
- Development = physical operation, project with buildings or change of land use (realisation by 'blue print plan')
- Management = daily physical measures (no big changes)

Another question (next to the obliged character of documents) is the binding power of plans. A formally approved plan (by an government and parliament) always binds the government and lower governments. In the Dutch law on spatial planning only the local land use plan (and the development plan in its consequences) is binding for private developers and citizens. The regulations and guidelines on national or regional scale are only binding government.

2.3 Planning culture

Spatial planning has a tradition of around 50 years. Most of the obligatory spatial plans (on regional and local level) are now in their 4th generation of revising.

The basic planning cycle of preparing plans and implementing policies, with the stages "analysis – objectives – actions – evaluation – new objectives" is broadly accepted in the planning practice in the Netherlands.

The tradition of Dutch planning is based on decentralisation, participation and consultations. Not only interest groups, but also citizens on different levels are involved in the making of regional and local visions and also of concrete master plans of projects. A weakness of this approach is the complexity of political networks and the long during process of decision making. It often happens that earlier decisions were revised. Further the technical solutions of long lasting conflicts on spatial claims (in a densely populated country) were getting pricier. Since a few years the new law on spatial planning gave more power to 'higher' governments to realise their projects of 'important interest', also against the interests of 'lower' governments and citizens. Further the definition of 'interest' of private groups and their possibilities to make juridical objections were restricted.

MD has a recent experience with the increased power of higher governments. Just after the finish of the Landscape Plan, the national government took a decision on a new motorway, after a complicated discussion of 40 (!) years. Despite of national goals of protecting open space, it was decided that the high way will be constructed, with rather complicated technics. The realisation of this 'big project' and the compensation of this operation with respect to natural, recreational and agrarian values is now the dominant executional task for the municipality of MD.

Regarding the type of governmental instruments (Regulations, Finances, Cooperation and Communication) a municipality has a weak position regarding finances. For spatial developments and for nature management the municipality is dependent on higher governments and private investors. But the regulative power of the land use plan is high and in practice it has a 'higher status' as the landscape plan.

3 Geographic description of the practice case area

The area of Midden-Delfland (MD) is located in the West of the Netherlands between the urban conglomerations of Rotterdam, The Hague and Delft. It is a 'buffer zone' between these big cities. MD is also a green space, boarding the Westland, a centre of intensive horticulture under glass near the coast. It is an open space ('bufferzone') in the 'Randstad'. The cultural landscape consists of peat meadows and old 'polders', low-lying tracts of land enclosed by dikes, which form an artificial hydrological entity. These polders consist of reclaimed land from former flood plains, separated from the sea. The polders now are mainly used for the dairy agriculture, and some recreational areas in de border of the cities. The area includes some small protected nature areas, but main use is agriculture. The inhabitants live in 3 villages and 2 hamlets.

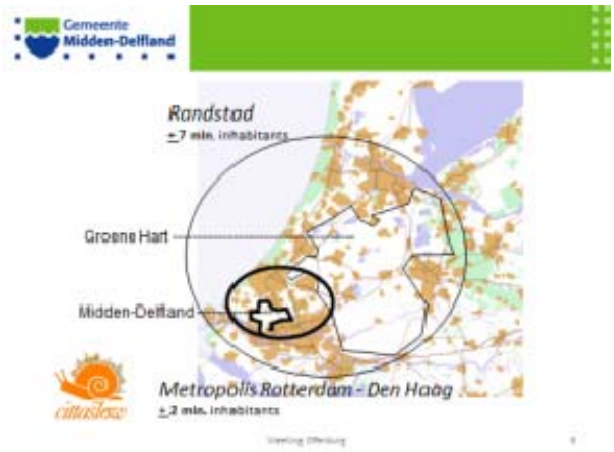


Figure 2 Location of Midden-Delfland in the 'Randstad'

Figure 3 Green spaces in the Metropolis Rotterdam – The Hague

Midden Delfland is an 'open space' in a densely urbanised area, with mainly thin lines of 'green' and small urban parks.

4 Challenges and ambitions

Challenges regarding content of planning

The Local Landscape Plan of Midden-Delfland ("Perspective 2025") sees its challenge in the following trends and future developments in and around the area:

- Two directions in the dairy agriculture are foreseen: bigger enterprises (land and buildings) to produce milk for the world market versus 'broader' entrepreneurs, producing 'landscape' and high value products and services for the regional market.
- The landscape will develop further from production area (for farmers) to 'user area' for the recreation of citizens
- The population in the cities will get older and more 'multicultural'. Recreational behaviour will get further 'individualised'.
- More prosperity will lead to more mobility and new wishes regarding liveability, welfare, wellness and care.
- An 'authentic' landscape with recreational value is also a location factor for the surrounding cities in the global economic competition.
- Globalisation will also lead to 'locality' and the wish to belong to a 'home'.

- The climate will change (unpredictable rainfall) and sustainability will get more important.

The wishes of society regarding landscape and quality of space will change the next years. These expectations and the choice of the municipality for 'Citta slow, leads to following tasks for the landscape plan (not being an 'end picture'):

- Stronger position of the dairy, especially wide views and cows in the meadow (as characteristic of peat meadows) and space for broader functions of agriculture.
- Green and blue (water) quality of the 'city garden of the metropolis' as distinctive location factor.
- Reciprocity in the partnership of city and country side.
- Bringing together the elements of the landscape (agrarian, recreational an nature areas, villages and hamlets) to an identity.
- Building a landscape in 'layers', where history and today come together.
- A robust water system (water storage) and protection of historical structures.
- Make many connections and links for water, nature and people.

Summary:

1. How to improve spatial quality?
2. How to improve the relation and connection between city and countryside?
3. How to facilitate the dairy sector in its role as manager of the landscape?

Challenges regarding processes of planning

The Local Landscape Plan of MD has been produced in a participative process (2007 – 2010), including interest groups, citizens and politicians of the involved municipalities. Process challenges of the municipality are:

1. How to work together with stakeholders and citizens to create support?
2. How to organise and/or improve cooperation between relevant public institutions?

5 Description of the planning practice

Following the planning practice of making and executing of the Landscape Plan is described. First a sketch of the planning process. The content of the planning (goals and actions) will be described in the line of the planning cycle.

5.1 Planning process and decision making

5.1.1 Time line of the planning process

The practice of the municipality of Midden-Delfland regarding landscape and space consists of several activities:

1. Making of a 'structural vision' called "Vision MD 2025" (2004 – 2005).
2. Involvement in 'Cittaslow' since 2008. (Cittaslow is an international network of small municipalities, with the aim of preservation of own identity and heritage values, quality of life, hospitality and regional products.)
3. Making of a Landscape Plan "Perspective MD 2025" (2007 – 2010).
4. Implementation of the Landscape Plan within the cooperation "Court of Delfland" targeted to spatial developments, since 2010.
5. Implementation via revising of the regulative 'land use plan' (2011 – 2013).

Most of these documents were made in cooperation with the surrounding towns and cities and with involvement of Waterboard and Province.

The activities around the ('inter-local') Landscape Plan (point 3) is the central item of exchange of experiences within LIVELAND. The time line of making of "Perspective MD 2025" is as follows:

- Start (problem statement, work plan) Oct 2006
- Contract with adviser Jan 2007
- Identification of ideas Nov 2007
  Consultation of citizens, stakeholders and politicians in "cafés" in 5 places; also in surrounding cities.
- Scenarios of future developments June 2008
  Conference with stakeholders, experts and politicians.
- Char coal sketch Sep 2008
  Consultation of stakeholders and experts in a "design table".
- Refinement per landscape unit (19 'polders') Winter 2008/09
  Consultation of experts, stakeholders, citizens and farmers in "design tables" and "kitchen table meetings".
- Draft Landscape Plan, incl. refinements per polder Apr 2009
  Conference with stakeholders, experts and politicians.
- Publication and formal participation Summer 2009
- Reaction on opinions and final Landscape Plan Winter 2009
- Decision in local parliaments Spring 2010

5.1.2 Participation

During 1 ½ year (Nov 2007 to April 2009) diverse actors were involved in the preparation of the Landscape Plan: stakeholders, interest organisations, citizens, farmers and local politicians, also from the surrounding cities. These were informal consultations in diverse working forms (see time line).

The making of the elaboration per polder was not foreseen, but decided on the 'design table' about the char coal sketch, because the officials needed more detailed 'design principles' and guidelines to judge initiatives for spatial developments in the daily practice.

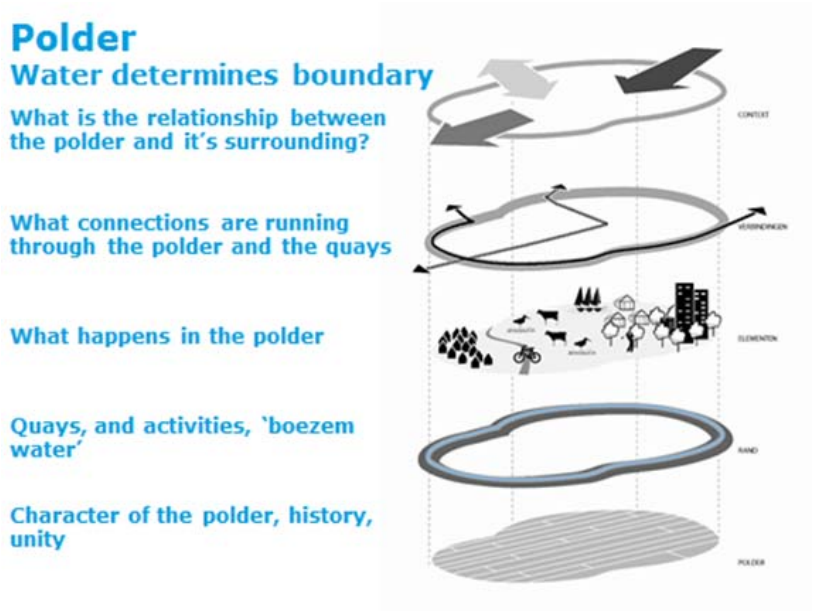


Figure 4 *Analysis per polder*

5.1.3 Procedures and decisions

The procedure of publication of the draft Landscape Plan and the handling of formal opinions took relative little time. Only some details were changed. There came some alternative proposals about luxury residences, horse riding enterprises and horticulture glasshouses in open landscape, but these were all rejected.

The final decisions in the Councils of Towns and Waterboard were not controversial, because many politicians were involved in the informal consultations.

5.2 Content of the planning practice

The complete document of the Landscape Plan called "Atlas of the development perspective" (published on the website of the municipality) consists of around 250 pages on paper and includes a big amount of maps and photos. The document (only in Dutch) can be downloaded from the website of the municipality: http://www.middendelfland.nl/over-middendelfland/gebiedsvisie-midden-delflanda-2025_3154/

The content of the LLP is:

- Summary (for politicians in around 10 pages, including basic map)
- Introduction (back grounds, function of plan, process of plan making)
- "Authentic landscape" (analysis of history, qualities and trends, tasks of design)
- "Perspective 2025" (map with objectives, actions and design principles)
- "Implementation strategy (further steps towards realisation)
- "Elaboration per polder" (detailed maps and actions in 19 subareas)

5.2.1 Analysis

The analysis is based on the planning context (the 'Structural Vision' of the province of South-Holland and other plans and programs) and the 'Vision MD 2025'.

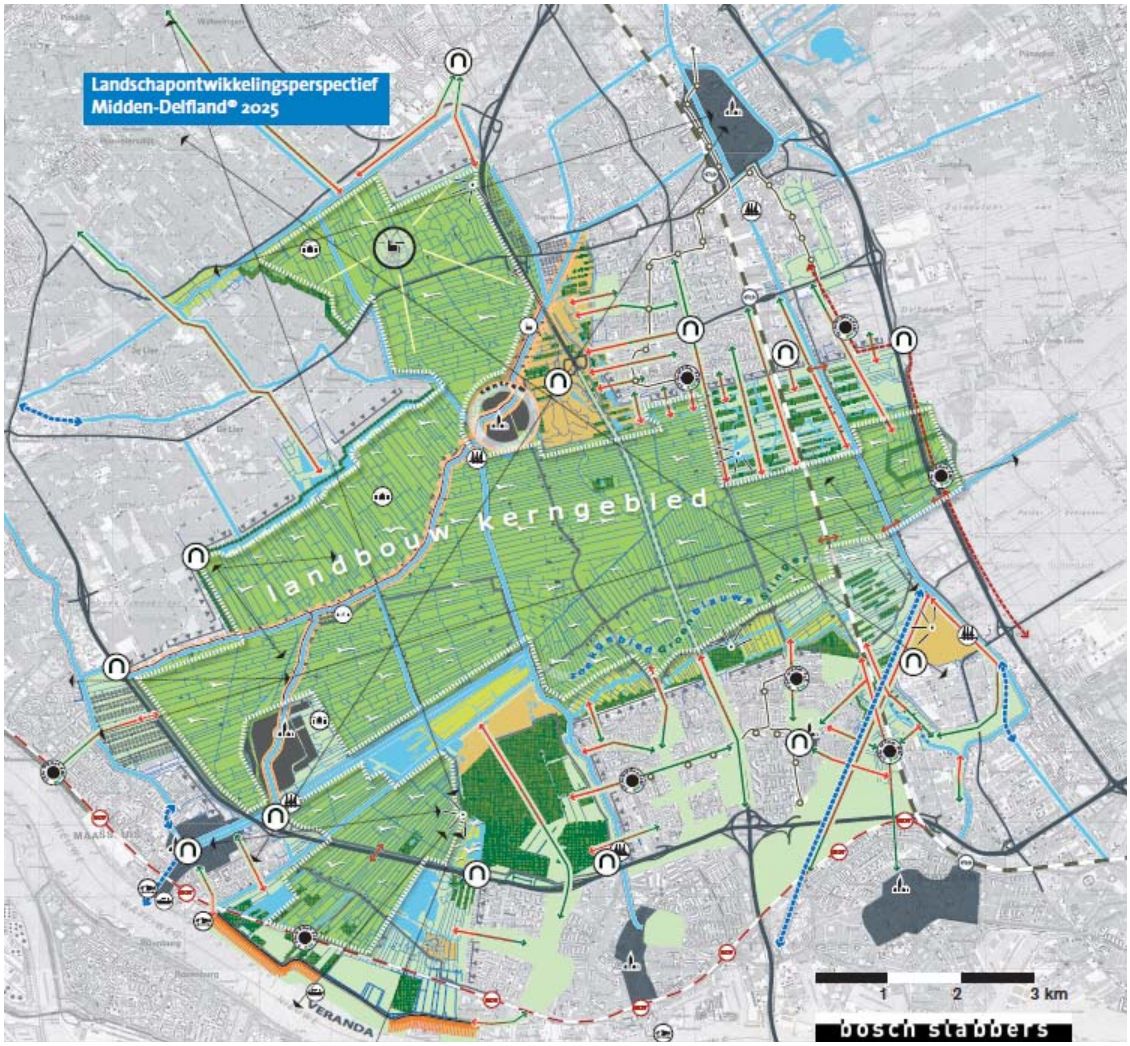
Components of the analysis are a historical analysis of land use and a design of scenarios of desirable future developments, regarding agriculture, recreation, nature and cultural history.

Next step in analysis was a big synthesis map (based on an 'integrated design' or 'char coal sketch' (see figure 6) of the main functions of the total area), which later was detailed in elaborations per landscape unit (here polder). This synthesis map (or 'perspective', see map 1) gives the main functions and symbols of spatial interventions on location. This map is rather detailed (it needs 'close reading') and is the main result of the planning process.

Figure 6 *Green structure around Midden-Delfland: 'Court of Delfland'*

Figure 5*'Char coal sketch' as preparation of main map 'perspective 2025'*

Legend of map 'Perspective 2025' (selection)
Light green = agricultural area including meadow bird protection
Dark green = nature area
Orange = recreation area
Red / green arrow = realise linkages (slow roads) between city and country side
Black arrows = realise wide views and 'panoramas'



Map 1 *Perspective Midden-Delfland 2025*

Map 2 *'Zoom in' to borders West and South of Delft*

5.2.2 Vision and objectives

The objectives are all based on reinforcement of the 'basic qualities' of the Midden-Delfland area (which are already defined in the 'Vision 2025'): open space, robust water system, nature, heritage and agrarian identity. The objectives are described as tasks:

- Contrast between city and country side: keep the green space open and silent.
- Relations with the broader environment: make green connections with other open areas and rivers and over big traffic roads, which are a barrier for recreational traffic.
- Relations with the near environment: make many connections to the surrounding urban areas: 'green fingers' in the city and 'portals' between city and country side.
- Reinforce the quality of the borders between urban and rural areas.
- Realise a zoning of recreation from intensive near the city to extensive and individual in the green core area, mainly used by agriculture.
- Agrarian core area: protect the open landscape and the meadow birds (managed by agrarians) and stimulate the diversity of enterprise types.
- Make better use of the recreational qualities of the landscape and the water. Make many connections and public facilities. Stimulate small scale private facilities.
- Reinforce east-west connections as compensation of future traffic developments (new high way, broadening of existing high way and railway).

These objectives are not translated into measurable targets in words, but directly carried on to concrete measures, which are located on the synthesis map 'Perspective 2025' (see next stage).

For instance the objective of "green connections to wider environment" is not translated in surfaces of future green areas, but in an indicative map of the surrounding of MD, called the 'Court of Delfland' (see figure 5 on 'green structure').

For instance the “connections between city and green space in the near environment” are symbolised with green and red arrows in the border areas on the map (see map 2 with the border of Delft).

5.2.3 Actions and measures envisaged

The ‘Perspective 2025’ is an ‘action map’ and gives an overview of physical actions and measures. The perspective includes

- an overview map,
- ‘principles of design’ of future spatial developments and
- maps with ‘networks’ (or connections) related to ecology, water, public transport, walking, cycling and horse-riding.

These actions are worked out for 19 subareas (‘polders’) in very detailed maps with functions (as agriculture, nature, water, recreation, and buildings), borders (between city and countryside) and connections. These elaborations per polder give a detailed description of the desired spatial quality and of future developments and measures.

Some actions, design principles and elaborations:

- Meadow birds and agriculture: the core area for dairy overlaps the core area for meadow birds. This means a careful matching of agrarian and nature management actions and also conditions for recreational use of the land (no access in breeding season). Costs of nature management for farmers will be compensated.
- Horse riding: because specialised horse enterprises are in conflict with the open, agrarian landscape, such business is only allowed in the recreation areas near the urban borders. The expansion of bridle ways is given on a map with ‘horse riding network’ and located only in the city borders.

Map 3 *Dark brown = space for horse enterprises and bridleways*

- Borders of city and countryside: to realise attractive 'slow traffic' connections, the border zones will carefully be designed with 'green fingers' inside the city, sightlines (to see the landscape from the city), 'folding screens' (to hide urban buildings seen from the country side) and 'port buildings' as symbols of the 'transition zone' and as information-centre. The 'passageways' from city to country side are worked out in 'principles of design' and sketches.

Photo: Well-designed transition zone between city Maassluis and countryside

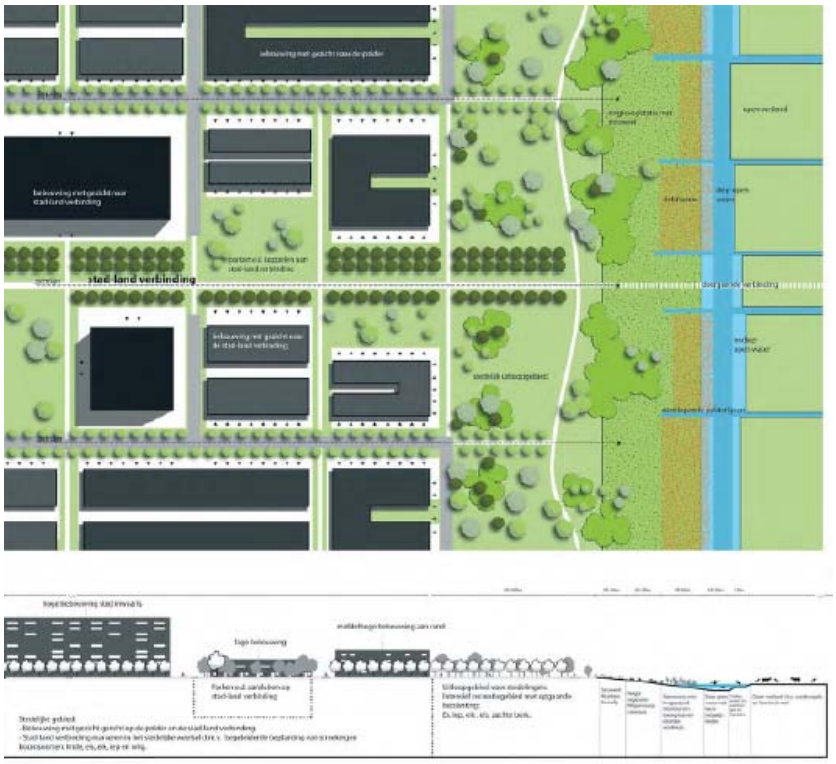
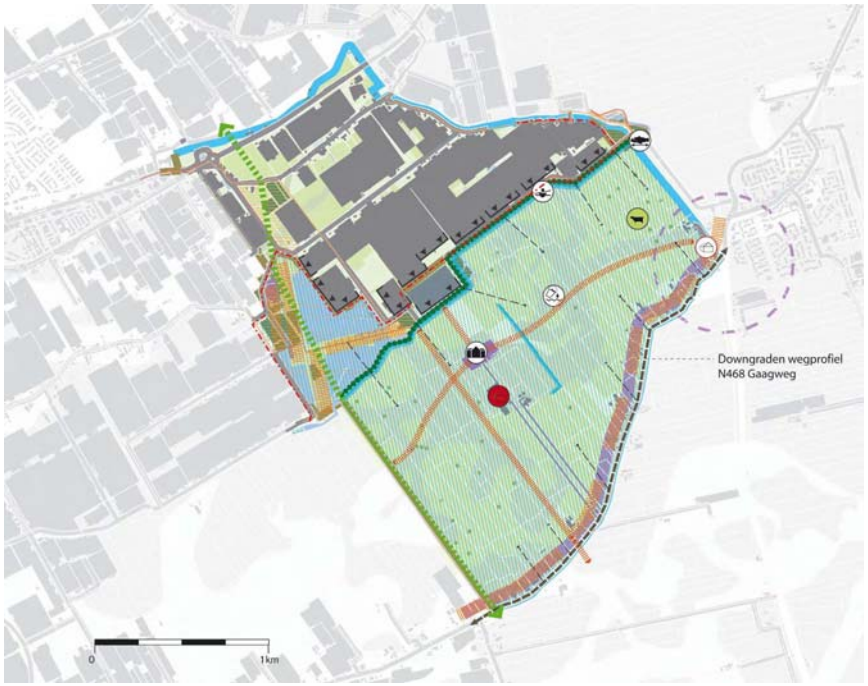


Figure 6 *Design principles of transition zone of borders*

The border between 'open dairy' landscape and the very 'closed' landscape of horticulture glasshouses is a very sensitive one. One of the 'planning failures' of the past is the admittance of spread glass houses in valuable open spaces. The region has an instrument for the revision of such 'disturbances' by financing the buy-up of such glass houses. The Landscape Plan gives guidelines for such actions in the elaboration of some polders: the places with priority for such 'sanitations of diffuse glass houses' are localised on map.



Map 4 *Elaboration of the border of glass house center Westland*

5.2.4 Implementation strategy

Realisation of the actions in the 'Perspective 2025' will be done by a follow-up:

- Translation of the landscape plan in spatial vision plans ('structural visions') of the involved municipalities.

- Translation of the perspective (and the elaborations) in spatial land use plans (designations) of the involved municipalities.

- Translation of of the perspective in the documents of the implementation cooperation 'Court of Delfland' (Hof van Delfland). Especially in an 'realisation program' 2012 –2015, including a map on which all projects are located.

Since 2010 the council of the 'Court of Delfland' operates with a Coordination Group of officials and a Steering Group with politicians from 16 governmental organisations. They have made a vision and a realisation program. www.hofvandelflandraad.nl

The 'realisation program' 2012- 2015 includes so called 'key tasks':

- Economic vital rural area
- Area marketing
- Spatial quality
- Links and 'portals' between city and country side
- Recreational connections and routes for walking, for bicycles and small boats

For each key task a project leader is designated and each task has its own means and finances. The meetings of the Coordination Group of officials are only meant as platform of exchange, coordination and inspiration. The 'manager' of Court of Delfland has the task to coordinate the reports of the project leaders. He is also 'sounding board' for the problems of the project leaders. The only common budget of the Court is for the 'area marketing'.

Photo: image of a new recreation area at the city border

For example the key task 'spatial quality' sets focus on the follow-up of the regional guidelines for spatial quality of the Province South Holland. Project leader is the regional agency for Green Service. This agency will organise meetings and workshops on 'inspirations on landscape quality' with professionals from local governments and organisations of land management, but also with active members of NGOs and entrepreneurs. A further activity is the development of a 'hotline', where citizens of cities (the group of users of the area, which probably counts 1,5 million) can give their opinion about the quality of the landscape. Probably an 'app' for smart phones.

A second example is the development of 'links and portals' between city and country side. One of the tasks under Court of Delfland is 'Delft South'. Here the 'slow roads' will be optimised and the existing recreation areas will get a 'face lift'. The regional quality guidelines give some inspiration for 'artificial recreational landscapes' in city borders (see photo). The elaboration of the Landscape Plan for Delft South gives a 'development direction', which later will be filled in with a master plan.

Photo: traditional recreation area in city border

5.2.5 Actions and measures implemented

3 years after the finalisation of the landscape plan most of the envisaged measures are 'on the way'. The networks of recreational connections on water and in 'slow roads' are in realisation by the Court of Delfland. The concept of 'portals' between city and countryside is further filled in. The design principals are an instrument in the daily practice of the officials of the local governments.

In 2013 the municipality made a report for the national government about the execution of the landscape plan. It is stated that the Perspective is translated in formal spatial plans and in the realisation program and investments of Hof van Delfland (see chapter 5.2.4 above). Also an overview is given of measures related to the objectives of the plan (see chapter 5.2.2 above). The progress in these measures is described: for instance the program for sustainable farming, the demolition of 18 ha of horticulture under glass and the realisation of 4 portals between city and countryside.

Over all the report concludes one can say that finances are a problem (because of economic crisis and budget cuts) and are causing some delay. At the other side, but the common vision (goals and elaborations per polder) is clear and all governments are working together in the same direction. Also in cooperation with diverse private stakeholders the open landscape has undergone a boost of positive developments. Also the realisation and compensation

5.2.6 Monitoring and evaluation

Monitoring of spatial developments (in relation to the objectives of the Landscape Plan) is not mentioned in the 'Perspective 2025'. The officials of the municipalities in the area of MD have very detailed insight in the spatial developments in their territory, but have no tradition on monitoring reports.

The implementation organisation Court of Delfland makes lists of projects and 'performance indicators' that are very well guarded, also by politicians. So there is insight in the process of implementation and there is a steering organisation.

There are independent organisations on monitoring of finances of governments (audit offices) and nature (NGOs). Until now the Landscape Plan has not been 'measured'. So there is no evaluation of the Landscape Plan, but the involved experts have drawn some lessons:

- An intensive multi stakeholder approach is an effective way to create a common vision. But that takes time, patience and effort, qualified people and a design process of zoom-in and zoom-out.

- People from outside may think that Midden-Delfland is an agricultural community as an island surrounded by high density cities. Of course are farmers an important stakeholder, but it is stated that all inhabitants of the community are integrated in the urban network, in a physical, social and mental way.

- The landscape is not static, but dynamic. There are always developments. The question is not how to stop them, but how developments can be steered in direction in our mutual benefit. The municipality makes choices towards such developments that contribute to quality of the landscape.

- The landscape plan helps to make choices for landscape quality. Especially the design principals in the 'Perspective 2025' are working very well in the daily practice of the officials, especially related to private developers.

6 Links to ESPON studies

How can the practice in Midden Delfland (especially the vision and the actions in the Landscape Plan) be related and compared to the outcomes of ESPON studies?

Economic performance

The practice of Midden-Delfland is not related to economic performance, in the traditional sense. On the contrary, the spatial policy is targeted to discourage the 'most economic' land use (intensive horticulture) and to stimulate a 'lower' economic activity (diary with nature management). Also the engagement of the municipality with 'Citta slow' indicates that a higher 'gross domestic product' is not an ambition. The ambition is to stimulate a 'new' type of economy: sustainable, adapted to local landscape and circumstances. For instance, a multifunctional agriculture, producing high quality 'local' products for the near cities. Also services for recreation and 'wellness' will contribute to new economy.

Quality of life

In the Landscape Plan of MD the term liveability (as one of the principals of spatial policy) is related to the 'well-being' of inhabitants, but especially of the citizens in the surrounding cities.

Environment

The Landscape Plan of MD focuses on 'green space' and not on pollution and green-house gas. (In the Dutch planning system this is task of non-spatial environmental policies.)

Innovation

The practice of MD is not related to economic innovation, in the sense of 'world market', but in the sense of adapted and sustainable innovation (see above).

Polycentric development

The practice of MD is strongly related to 'harmonious development' with the completion of a 'bufferzone' in the polycentric metropole of Rotterdam – The Hague. The practice (in cooperation with other governments) focus on implementation of the functional designations and – above all – the quality targets of the regional spatial plan.

Attractiveness

Landscape as factor for economic attractiveness (as location factor for tourism) is mentioned in the regional spatial plan, but for other areas. The open space of MD is not primarily intended to attract tourists, but to deliver recreation value for all surrounding citizens. But the goal of better relation between city and countryside is also filled in for the touristic cooperation with the touristic attraction of e.g Delft.

Climate change

Adaptation to climate change is part of the objectives of the Landscape Plan, by the objective of an 'robust water system' (safety for floods) but includes 'normal' actions of the Water Board and no specific actions of the municipality.

Land use

The area of MD has high land prices, because of potential land use change in direction of intensive agriculture (horticulture) and urbanisation. The practice of MD is directed to counteract such 'autonomous' developments.

7 Links to European policy

How can the practice in Midden Delfland (especially the ambitions of spatial policy) be related to principles and goals of European policy?

Europe 2020

The practice of MD has no links to the EU strategy 'Europe 2020', which focuses on employment, innovation (in world market perspective) and climate change.

Spatial Development Perspective (SDP)

The practice of MD has strong links to the EU SDP, especially the goal of 'polycentric and balanced spatial development' (see chapter 6 above).

The Landscape Plan is a filling of 'urban-rural partnership', especially the 'green infrastructure' of the urbanized area and the recreational connections between green core area and the surrounding cities.

Further the Landscape Plan is an example of 'creative management of cultural landscapes' targeted to spatial quality by developing 'principles of design' of future developments.

8 Summary

Central in the 'good practice' of the municipality of Midden-Delfland (MD) is the making and executing of the Local Landscape Plan (LLP), which has been prepared in cooperation with other governments in the years between 2007 and 2009. This plan is now implemented in an execution organisation, which includes a bigger area of green spaces.

In the Netherlands 'landscape' (as spatial quality) has since long been integrated in the spatial planning on all levels. The country has a broad set of plans on space, but recently only on regional and local level. A LLP is a voluntary instrument of the municipalities. Spatial plans on regional and local level are obligatory. A municipality is an executing government, with strong instruments for (detailed) steering of spatial developments. The LLP binds the involved governments; the local spatial plan binds also private actors.

Main ambition of the LLP is maintaining and improving a 'green space' in an urbanized area of very high density. Goals are related to the relation (partnership) between city and countryside and to management of landscape by agriculture (dairy sector).

In MD there are spatial conflicts between such components as recreational areas (parks) and agrarian landscape (accessible cultural landscape) versus other functions, like spread housing (which should be an exception outside urban areas) and industrial agriculture (horticulture). Choices have been made in earlier spatial plans (called 'visions'); the LLP makes an operationalization.

The LLP focuses not on designations, but on development and management of landscape. It defines actions of governments, mainly as 'physical measures'. The objectives of the LLP are not translated into measurable targets in words, but directly carried on to concrete measures, mainly described on maps. So the 'Perspective 2025' is an action plan, which includes an overview on a synthesis map, 'principles of design' (guidelines) of future spatial developments and additional maps with networks of ecology, water, public transport and 'slow roads'.

During the process of making the LLP stakeholders and the officials of the municipalities felt the need of a more detailed approach, which resulted in a elaboration of smaller landscape units (19 polders). For each polder a map was made which shows the existing qualities and another map showed the desired development direction. This approach was crucial for the success of the LLP. The 'elaboration per polder' includes maps with description of character and designation of nature, recreation, demolition of horticulture under glass and new houses. These detailed guidelines have proven to be useful in the practical execution of the plan, especially in permits for private initiatives of developments.

Another challenge of MD municipality was the participation and involvement of private stakeholders in the planning process. During the preparation of the LLP many and diverse stakeholders (organisations and individuals, also from surrounding cities) were involved. Many working forms were used, like 'cafés', 'design tables' and 'kitchen table talks'.

In the implementation of the LLP a lack of financial resources (because of national budget cuts) has cause some delay. But the execution organisation, together with other governments, and the cooperation with private developers, succeeded in a boost of quality improvements in the open landscape

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ISBN

LIVELAND
Liveable Landscapes: a key value for sustainable territorial development

Targeted Analysis 2013/2/22

Baseline Report practice case Thy National Park

Version 11 March 2014

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INVESTING IN YOUR FUTURE

This report presents the final results of a Targeted Analysis conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

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1 Introduction

Danish national parks are land or water areas with unique natural values. In contrast to the usual understanding of national park as landscapes of high aesthetic value that are to be preserved as a park for conservations purposes, Danish national parks should display various types of landscapes as well as display how people live in interplay with nature. This is achieved by including forests and open countryside; agricultural land and small villages/communities; as well as both public and privately owned land.

Overall, there are three focus areas of Danish national parks: 1) nature, landscape and cultural historical values, 2) outdoors activities and nature experiences and 3) local business development (The Ministry of the Environment 2013). More specifically, the Danish Act on National Parks states 10 purposes of the national parks, of which 5 are related to landscape and nature; 2 to teaching, research and dissemination activities; 1 to experiences; 1 to the local society, and 1 to public participation.

The national parks are not appointed by any state actor but designated in cooperation between local, regional and state actors. Local interests form the basis of the establishment of a national park but final approval by the Ministry of the Environment is required.

The development of national parks is based on voluntary agreement and local participation as national park plans have no formal legislative power. National park foundations are actors established to work with the administration and development of the national parks but they are no authority and are thus dependent on cooperation with municipalities, the local section of the Nature Agency, landowners and other local actors.

1.1 Thy National Park

Thy National Park is located in Northwest Jutland in the most Western part of Denmark and covers an area of 244 square kilometres in the peripheral municipality of Thisted. It stretches over a 12-kilometer-wide belt along the west coast of Jutland. It is a relatively small area with absolute North to South distance of 55 kilometres and absolute East to West distances only between 5 to 12 kilometres.

The landscapes of the National park consists of a wide variety of landscape types: coastline, dunes, dune heaths in mosaic with humid dune slacks and a large number of nutrient poor swallow dune lakes, dune plantation, limestone cliffs (grasslands), and a few large calcareous lakes and nutrient-rich lakes. The national park describes itself as “Denmark’s largest wilderness”. Historically, the extensive sand drifts in the dune areas have often damaged the cultivated areas, wherefore beach grass and trees have been planted to protect against the sand. Those activities created the plantations that make up a large part of the landscape in Thy National Park today. The forest plantations are mainly owned by the Danish Nature Agency, but approximately 280 ha are privately owned. Approximately 1,6 % of the land area is agricultural land, and another 7% is permanent pasture land. Plantations cover app. 33 % of the area and 58% of the area of Thy National Park is protected land. 25% of the area is privately owned (dunes, plantations, lakes and farmland) (Thy National Park Foundation 2010; Thy National Park Foundation 2013). In addition to the high natural values, the national park also consists of valuable cultural landscapes with regional, national and international value. There are many historic sites in the areas such as grave mounds from the Bronze Age and German bunkers from the Second World War. Also, the impacts of

climate change and human activities can be seen in the natural areas which mean that also the natural areas are valuable as historical landscapes with cultural values.

The national park is used for activities such as swimming, surfing, golf, jogging, cycling, fishing and hunting. There are some tourism facilities in the national park such as parking spots, toilets, information tables and simple camping places. There are few overnight possibilities in the area but it is seen that there is a great potential in developing the outdoor activities and tourism in the national park. Good overnight possibilities already exist in the coastal villages of Klitmøller, Vorupør, Stenbjerg and Agger that are located within the outer boundaries of the park but which are not formally included in the actual national park area.

Map 1 National parks in Denmark with Thy national park in the Northwest part (Source: http://www.danmarksnationalparker.dk/)

2 Planning System and Culture

2.1 The Danish planning System

Landscape planning in Denmark is part of the general spatial planning framework, where the local level (the municipalities) and the national level (the Ministry of the Environment) are the core authorities responsible for spatial planning. In Denmark, there are no spatial plans at the regional level; only very specific planning for e.g. raw material and ground water are carried out at the regional level.

The Ministry of the Environment has three sub-ordinate national agencies that are of special importance for the development of the landscape: the Nature Agency, Environmental Board of Appeal, and Environmental Protection Agency. Planning is regulated by a variety of laws, such as the Planning Act, the Nature Conservation Act, Forest Act, Environmental Protection Act, and the Agricultural Act.

The municipalities have the strongest role when it comes to landscape planning. They are responsible for planning both in urban areas and in the open land. The landscape planning carried out within a national park are thus subordinate to the municipal plan but the national park foundations play an important role for the planning of national parks that can stretch over the territories of one or several municipalities. The national park foundations have no formal administrative power but they have a coordinating or mediating role in the development of national parks.

There is no comprehensive national level plan for landscape or other spatial planning. The municipal level planning is however influenced by national plan reports, national planning directives and national guidelines in form of national preconditions for municipal planning, just as they are to implement international planning directives for nature, such as Natura 2000. The national level may also engage in direct interventions in municipal planning. Even though the municipalities have the main responsibility for planning, it is the responsibility of the Ministry of the Environment to oppose a proposal for a municipal plan if it is not in accordance with the general interest. The state may also veto the planning of municipalities and regional authorities to uphold national interests.

The municipalities are responsible for developing a municipal plan that covers the whole municipality, i.e. both urban and rural planning, as well as detailed local plans and permits for construction and changes in land use in rural zones. According to the Planning Act, a municipality is obliged to establish and maintain a municipal plan and for a period of 12 years state its overall objectives. Every fourth year, a municipality also has to present a strategy for the municipal planning (Plan Strategy) that provides a framework for the preparation of the municipal plans as well as for e.g. processing applications for building permits.

According to the Planning Act the citizens must be involved in the planning processes before the plan is adopted. In the Planning Act it is in detail stated when the stakeholders should be involved and whether this should be done by public consultation or a larger debate is needed.

Local plans stipulate how a smaller area may be developed and used, balancing between the interests of different property owners. Local plans are legally binding for property owners. Implementing large development projects, such as a new residential district or a major construction project, require a local plan. The public has at least 8 weeks to comment on local plan proposals before the municipal council may adopt them.

The Planning Act provides for special rules for development in the rural zones and *in the coastal areas* in order to avoid sprawling and unplanned development. It ensures the protection of the recreational and valuable landscapes.

The Act on National Parks is a national plan instrument that is of a special importance for landscape planning. It gives the Ministry of the Environment the opportunity to establish national parks. Establishing a national park may limit the competence of the municipalities when it comes to physical planning within the national park area. A specific national park plan is developed after a national park is established by the national park foundations that manage the national parks but are not part of the municipal organisation. The national park plan must not be in conflict with the regional development plan, municipal plans or local plans. A national park plan must also be adapted to Natura 2000 planning. The national park plans as such are not legally binding for landowners, municipalities or regions.

The Article 6C of the European Landscape Convention (ELC), Identification and Assessment, is the part of the convention that has gained most attention in Danish planning. In 2007, the Ministry of the Environment drafted a Danish version of the English Landscape Character Assessment (LCA) that is a planning tool for mapping, describing and assessing characteristics of landscape areas. Based on the descriptions and assessments, strategic objectives, actions and initiatives are implemented in municipal planning and result in the designation of valuable landscapes (Steffensen 2010).

The LCA method includes all types of landscapes and the Ministry of the Environment recommends that all municipalities use it. The method includes all phases of landscape planning from the landscape analysis to the implementation of goals and strategies in the municipal plan. The method has raised the understanding of landscape as a planning entity and its inclusion in the preparatory work for the plan development intensifies a holistic rather than sectoral approach to planning.

2.2 Planning culture

The Danish planning culture has been classified as having "a comprehensive integrated approach" to planning (Tosics 2010). Public sector activities are coordinated in a formal hierarchy from the national to the local level. The planning system also falls under the "Nordic approach" where local authorities carry out most of the planning activities sharing the responsibility with the national level. There is a very good coherence between the measures at national level and their implementation at the municipal level. Cooperation between the administrative levels is well-functioning.

Public participation is a very strong element in Danish planning culture. It is included in legislation and has an important role in the local level planning practices.

Since the European Landscape Convention was signed in 2000, the focus on landscape in Danish planning has been enhanced (Caspersen 2009). The concept of landscape is included in several plan policies both at national and local level. In Danish planning, the concept of landscape does not only imply protection of valuable landscape even though it is included as one of the elements. Landscape planning and policy include to some extent the role of landscape for recreation. The role of attractive landscape in creating development potential is also addressed – however not very explicitly. Landscape impacts should be taken into consideration when planning for e.g. new infrastructure. Policies also include maintenance of cultural landscape as well as more generally the development of potential of landscapes.

As with the Danish planning culture in general, also the establishment of the national parks and national park plans is based on cooperation between administrative levels. A high level of trust between all governance levels is an enabling factor to such cooperation. In practice, the national park plans function more as working documents or activity plans than traditional spatial plans.

In planning practice related to the national parks, the national park foundations have a specific role in coordinating or mediating the landscape changes. No formal power has been shifted from the municipalities or the national actors to the national park foundations that thus have more of a facilitating role.

3 Description of the plan

The Thy National Park Plan (NPP) was developed in 2010 by the Board of Thy National Park Foundation, who drafted the plan in cooperation with local authorities, interest groups and citizens. The plan includes Board's visions and goals for the park's development on a 20-30 year horizon, and a prioritization and description of how the various goals can be reached.

Participation and local agreement is essential for the success of establishing and implementing a national park plan since the plan is not legally binding and the National park has no formal power. Thereby the plan is based on voluntary agreements and local will (Thy National Park Foundation 2010).

Thereby the nature of the plan is more like that of a working document and it is continuously a work in progress. This provides challenges for the implementation of the plan concerning the engagement of all relevant stakeholders but it also provides flexibility to adapt the plan as it is not binding.

The aim of the plan is to preserve and protect but also develop the nature and landscape. The main focus of the plan is on natural environment but also the cultural environment and cultural history are central. The plan aims to further develop the outdoors activities and tourism in the area at the same time making sure that it is done in a sustainable way. In general, the plan intends to support the development of the national park in a way that support the development of the local community (including business), however with a continuous respect to protection interest. It further stresses the development of dissemination and education on the natural and cultural environments of the national park.

The national park receives funding from the Ministry of the Environment; of which 1/3 can be used for operating expenses/administration. The allocation follows the plan cycle. The Foundation also receives contributions from municipalities and other contributors, and may receive bequests, gifts, grants etc.

3.1 Planning process and participation

Already in 2002, the Minister of the Environment had suggested involving Thy as one of the future national parks. Pilot projects were initiated to look at possibilities to establish national parks in Denmark. Thy was not included in the first round of pilot projects because of the sceptical attitudes of farmers and hunters towards establishing a national park. However, after a local meeting between the county, municipalities and different interest organisations there was a mutual understanding that it would after all be beneficial to study the preconditions for a national park in Thy. The Ministry of the Environment allocated funding for the pre-study project in 2003 and a steering group was established with members from local nature associations, culture associations and outdoors associations as well as from business and tourist associations and representatives from the County of Viborg, municipalities and the national level Nature Agency.

During the pre-study project in January 2005, an information meeting was organised and four working groups on four themes (nature, cultural history, outdoor activities and business life) were formed. The working groups had a total of 26 thematic sub-groups where the working group members focused on more detailed issues. Towards the end of the pre-study period also four geographic working groups where establish to study the interlinkages between the natural areas and each of the coastal villages.

At the end of the project, a report was submitted to the Ministry of the Environment setting out the preconditions or criteria for establishing a national park in Thy based on the work of the committee and the working groups. It stated among other things that the same the general rules for public access to nature should continue to be applied to private and public land in the national park; that farms located in the national park should have the same opportunities for development as other farms and that landowners should be allowed to voluntarily choose whether they want to enter into agreements with the national park.

After the Act on National Parks was adopted in 2007 and the criteria for establishing a national park in Thy was accepted by the Parliament, a proposal on establishing a national park in Thy was published in April 2008 by the Ministry of the Environment. Following that a 16-weeks long hearing phase was started where all citizens, landowners, interest

organisations and authorities were invited. In August 18 the Ministry published the regulations on Thy National Park. The regulations included issues related to the definition of the purpose and scope of the national park, the goals of its development, planning zones, municipal and local planning, establishment of the National Park foundation for Thy as well as administrative regulations.

After the regulations on the national park were signed, a board of National Park Thy and an advisory council were established. The Thy National Park Foundation was established to implement the tasks in practice and set up a national park plan. The Thy National Park Foundation continued to prioritise public participation and started to develop the actual National Park Plan in 2009. The knowledge, proposals and ideas of all actors were included (authorities, national park advisory board, associations, land owners, general public). Not all the proposals of the stakeholders could be included in the plan as there were contradictions between proposals and some proposals were not possible to implement with a national park plan.

3.2 Planning procedures and decisions

The decision-making process of establishing a national park in Thy can be described as neither a bottom-up nor top-down process. By passing the Act on National Parks, the Ministry of the Environment provided the framework for actually establishing national parks in Denmark. However local stakeholders initiated the process for studying the preconditions for a national park in Thy which was based on local agreement between different authorities and interest groups. Still the establishment of the park also required approval from the state level which was received in 2007 after the new law on national park made it possible to establish national parks in Denmark.

At local level, it has from the beginning been essential but also challenging to come to decisions concerning the national park between different stakeholders with different and even contradicting wishes. The whole Thy National Park project and drafting the content of the National Park Plan as well as its continuous implementation are based on local level agreement on the development.

The National Park Foundation is an independent body within state government and its aim is to establish and develop the national park within the framework laid down at its establishment. The foundation is responsible for the preparation and revision of the national park plan and to work for the implementation of the plan. It is steered by a National Park Board and assisted by an advisory council.

The board of the Thy National Park is formally appointed by the Ministry of the Environment and currently has representatives from the Municipality of Thisted, the Nature Agency, a local museum, and from a wide range of associations, such as the Danish Outdoor Council, the Danish Society for Nature Conservation, and the Agriculture and Food Council. The advisory council consists of members from different types of interest groups such as nature protection associations, sports associations, historical associations, landowner associations, agricultural associations, tourism associations and youth associations.

No decision-making power or formal administrative power has been shifted from the state or the municipality to the agency. It can only implement its projects through voluntary agreements with landowners which are one of the main ways to implement the National Park Plan. When drafting the National Park Plan, the agency was also obliged to make sure it

is in line with other plans for the area. However the agency can be thought to have a sort of argumentative power to guide the landscape development.

3.2.1 The actors involved in the establishment and development of the National Park

The Ministry of the Environment

- Established the Act on NPs that made it possible to establish NPs
- Approves proposals on establishing NPs but cannot appoint a NP independently
- Can intervene with NPPs as well as on municipal plans if necessary

Municipality

- Can start the process of applying for a NP together with other local stakeholders
- Needs a national approval before a NP can be established
- Still has the full competence on planning and makes legally binding plans that the NPPs have to be in line with

The National Park Foundation

- No formal power are shifted from national and local level to NP management
- Has a coordinating, mediating and facilitating role in the landscape changes
- Drafts NPP in cooperation with authorities and other stakeholders
- The NPP is not legally binding and it must comply with other plans for the area

Interest groups and the general public

- Participate in drafting the report on the preconditions for establishing a NP
- Participate in drafting the NPP
- Wide local level agreement needed in order to establish a NP and a NPP as they require collaboration of all stakeholders and are voluntary.

3.3 Planning Outcomes

3.3.1 Assessment and evaluation methods

According to the NPP, the development of the national park will be followed up and evaluated so that the board the national park can continuously follow if the goals of the development are reached or not. The NPP shall be revised for the first time two years after the adoption of Natura 2000 plan and after that every six years. In connection to the revisions of the plan, an evaluation of the progress will be published.

3.3.2 Strategy and vision

The aim of the plan is that Thy will create a model for national parks that combines nature and biodiversity protection with the use of nature. Business development in and outside the national park is to take place in interaction with nature protection, protection of the cultural environment, and active outdoor and recreational activities.

The main point of departure in the vision for Thy National Park is the value of the dune landscapes where there is a high potential for strengthening the nature and its development. Although nature protection has a priority, the protection and preservation of cultural and historical landscape is among the objectives. Also communication and local engagement and involvement are prioritised. The NPP includes also an action plan with several concrete activities concerning each of the goals presented below.

The goals of Thy National Park are:

1) To protect the most essential habitats (such as the dunes and lakes) and to enhance quality and biodiversity of the habitats. They must be protected and developed to become sustainable and dynamic ecosystems with natural water balance etc.
2) To create a greater coherence between the different habitats and landscapes (especially the dune and the dune heath land) and to strengthen the interaction of the area with the coast and the sea.
3) To implement the conversion of the plantations to natural forests dominated by native trees and shrubs with a special focus on enhancing the natural values.
4) To protect and make visible the most important landscape elements and geological formations.
5) To preserve, make visible and to make available the cultural environments and historical traces related to sand drift control, fire and rescue service, World War II and the changing use of the dunes and the sea as well as to increase knowledge about the environments.
6) To enhance opportunities for outdoor recreation and special nature experiences.
7) To develop the opportunities for outdoor recreation and tourism on sustainable basis.
8) To protect vulnerable natural areas against wear and disruptive use.
9) To strengthen the nature dissemination and guidance as well as to coordinate the activities with local stakeholders through development of activities, services and facilities.
10) To strengthen research and education by establishing educational facilities.
11) To develop the national park in interaction with the environment.
12) To follow up and evaluate the development of the national park.

The following, more concrete objectives mention landscape, cultural environments and cultural heritage:

- The National Park's characteristic landscape elements and distinctive geological formations and deposits must be preserved and made visible.
- Cultural environments and cultural heritage associated with sand control, light house and rescue service, 2nd World War and the local populations changing use of the dunes and the sea must be preserved, visible, accessible and disseminated, just as knowledge of these environments and traces should be developed.

When it comes to monitoring, the Thy National Park Foundation has not yet developed a fully-functioning monitoring system to follow the progress. They are working to establish a nature surveillance program. One of its learning goals as a stakeholder in the LIVELAND project is to find new tools for monitoring and measuring progress.

3.4 Challenges and needs

During the set-up of the NP the main challenge was the local agreement on the content of the NPP. It required coordination of the contents of various plans (municipal versus NPP)

and balancing the interests of various stakeholders. Current challenges refer to the implementation of the NPP in daily work and the continued work with the NPP since it needs to be renewed (at least once in every 6 years) and adjusted to better reflect the local needs and intentions with regard to the NP.

Management of the multifunctional landscape, which implies balancing protection and use of landscape for recreation, business and fishing, is a challenging task. How to handle the pressure on the landscape and balance use and protection is among the key questions. To effectively address the emerging challenges, there is often a lack of experience and tradition, as well as the budgetary capacities.

It was also emphasized that the NP lacks of authority. In principle, the plan authority of the area is assigned to national level or municipality. Furthermore, private land owners have an authority to ban a project development on their land, which makes the planning process even more complicated. Therefore, to satisfy the interests of all parties involved in planning, the compromises should be made, which means that a consensus plan can never be 100% optimal.

The governmental involvement in the planning issues may diminish the actual influence of the municipalities and local communities and thus affect the development of a new planning culture. When it comes to the needs with regard to planning, it is important to develop ideas and learn about combining landscape management and socioeconomic development and apply the tools for balancing stakeholders´ views and demands. Such an approach would help to handle the pressure on the natural landscape in a more effective way.

Communication is another important aspect that should not be underestimated. Strengthening the branding of the NP, promoting the NPP and its visions among public and private actors, with a multiscale, multifunctional and multi-communication approach would draw attention and increase the visibility of the NP.

As mentioned above, there is a need to get practical information and develop the tools for measuring and monitoring the progress in achieving the targets.

Although the public has been involved to a significant extent in the preparation of the NPP, keeping people interested and willing to participate requires additional efforts. In this regard, further development of tools and ideas for improving public involvement is essential.

4 Qualitative assessment of Thy National Park

The qualitative assessment of the planning approaches is based on different learning components: learning from benchmarking; learning from exchange of experiences, and learning from inspirational cases.

4.1 Comparisons within the stakeholder group (Learning I)

An important part of the project has been the exchange of experiences, ideas and visions between the stakeholders, aiming at using this as a process of learning across the cases. A key issue in this connection is of course the specific needs and learning goals which have been expressed in the initial project planning procedures, throughout the workshops, and as comments to the CAF and in the interviews. Below is an overview of the learning related issues which have been brought forward and attempted responded to in the interactions between the stakeholders throughout the project.

4.1.1 Stakeholder expressions of needs, learning goals and learning cases within the project (Thy)

The needs and learning goals of the stakeholders are based upon self-assessments as well as the presentations during the workshops (particularly the 1º Stakeholders workshop).

Overall goals

The overall learning goals on general planning issues are:

- To analyze the challenges and possible advantages of combining the formal municipal and regional plans with more voluntary/indicative plans and guidelines for the inclusion of landscape in land use and municipal/regional planning;
- To explore how to more specifically deal with land use/landscape changes that are located outside of the area in question but which have great impact on the land use/functionality/attractiveness of the area;
- Look into if - and if so - then how it is possible to specify – and preferably quantify - the impact of the new plans;
- Develop tools for future planning. Particularly how to manage/juggle multifunctional land use which includes for instance tourism, recreation, economic development and nature protection;
- Include general learning from other cases as well as from own examples through having an "outside" view on what is actually done.

Planning culture

- How to motivate local micro actors, e.g. for maintaining cultural landscape types (dunes, farming, forests. etc.)
- Make use of learning cases: Midden Delfland and Ljublana through their experiences with and strategies for utilizing local (micro) actors in the maintenance/development of attractive/desired landscape types.

Planning processes and participation

- Tools and ideas for improving public involvement: keeping people participating: Look into how to manage when there are various groups that have interest in/strong opinions on the landscape/land use changes, including local actors as well as regional/national administrations and national/international interest organizations:
- Look into the question 'who has the right to decide on the landscape' and how to handle discrepancies between differing opinions?
- Analyse how to determine who we are planning for, and thus who are to be involved in the planning process:
    - Local actors?
    - Stakeholders?
    - The "public good"?
    - Whoever shows an interest?
- Should all inputs and interests be treated with similar "weights"?
- If comparing a case with lots of stakeholders and public participation in the process and one with none in the LiveLand project, is there a way to measure the impact of involving the stakeholders and public in the planning process? [probably these "measures" are

soft factors such a less friction when implementing landscape/land use changes but are there other aspects?]

- Learning cases: Midden Delfland

Actions and measures

- How to use landscape as a driver/ asset for socioeconomic development
- Pressure on the land: how to balance use and protection
- Motivation of local micro actors in maintaining cultural (dune+farming) landscape/landscape type
- Learning cases: Midden Delfland and Ljubljana

Communication and dissemination

- Communication, branding and promotion of plans, regions and visions, with a multiscale, multifunctional and multi communication approach
- Learning cases:
  - Midden Delfland since they have good quality printed material;
  - Ljubljana from the point of view of the involvement of municipalities;
  - Offenburg with regard to population respect for the plan;
  - the Basque Country branding the region in line with identity and tourism

Impact measurement and monitoring

- Getting practical information and developing new tools for monitoring and measuring the progress in achieving the targets.
- Learning case: Offenburg

Planning procedures and decisions

- Tools for balancing stakeholders views and demands

Management tools

- Tools for managing multifunctional landscapes
- Learning cases: Midden Delfland and Navarra competences on landscape management

4.1.2 Stakeholder experiences from the stakeholder group

Landscape planning is implemented to various extend in all 6 stakeholder cases as is the issue of liveability with regard to landscape. But although the governance level, planning culture, approaches to landscape planning and other factors differ across the stakeholder cases, they are dealing with a number of common problems, and some of the experiences may provide good input to improvements.

Denmark

In Denmark, the landscape is recognized by law with the ratification of the ELC in 2000. There is no specific national landscape policy but the concept of landscape is included in several plan policies, both a national and local level. The municipal plans cover both built-up and open land; hereby also taking landscape into consideration, particularly by using the tool of the LCA.

The Netherlands

In Netherlands the landscape policy is compatible with the ELC. Landscape (as spatial quality) has since long been integrated in the spatial planning on all levels. Landscape (as natural and cultural value and as 'local identity') is often a spatial designation on policy maps. Regional Landscape plans exist but are not binding. Development of a local Landscape Plan is voluntary for the municipalities in the Netherlands. Spatial plans on regional and local level are obligatory. The planning culture in Netherlands is mixed cooperative and public-private partnerships are widely used.

Central in the 'good practice' of the municipality of Midden Delfland (MD) is the making of the Local Landscape Plan (LLP), which has been worked out in cooperation with other municipalities, water board and the region over 3 years period.
The main goal of the LLP is to create a 'green garden' in an urbanized area. LLP focuses on the development, rather than protection, and sees actions as 'physical measures'. Monitoring is not an item in LLP. The objectives of the LLP are not translated into measurable targets in words, but directly carried on to concrete measures, which are located on the synthesis map. So the 'perspective 2025' is an 'action plan', which includes an overview or synthesis map, 'principles of design' of future spatial developments and additional maps with 'networks' of ecology, water, public transport, walking, cycling and horse-riding. The LLP is not legally binding.

Accessibility is an important goal in the LLP but social relations is not a goal of spatial/landscape policy in the Netherlands. Economic goals are not seen as part of livability or high quality landscape in the LLP. Tourism is not included as a goal. Agriculture is not seen as only production of food, but also as manager of landscape and nature (meadow birds). So continuity of dairy production is a goal and a part of a multi-functional concept. Availability of water is part of (higher level) water policy, but not of the LLP. Integration of renewal energy production is an item of landscape planning in the Netherlands, but not in MD.
Some of the health components indicated in the CAF are part of the LLP (physical outdoor activity, availability of public open spaces, open and accessible forests, nearby parks, playgrounds and sport fields) while others are the subjects of other policies (street connectivity, sound level, traffic safety, production of healthy food, surface water bodies and groundwater). In the MD there are spatial conflicts between such components as 'recreational areas' (parks), accessible cultural landscape (forest, nature), space for sport, leisure connections (walking & cycling roads) and other functions, like urban dwelling, agriculture, biodiversity nature and high speed infrastructure. LLP delivers choices and solutions for these conflicts.

The objectives with regard to health components are well defined, but not in a classical quantitative sense. Most of them are directly worked out in detailed maps (a map can be seen as quantitative, measurable description of objectives), design principles (guidelines) and examples.

MD municipality has particularly good competences in involvement of public and private stakeholders in management of the landscape in the municipality, which is among the success factors. During the preparation of the LLP 64 stakeholders (organizations, NGO, authorities) were involved. One starting point was 'drawing exercises' – how could this area develop? The discussion addressed a broad scale at first and continued with zooming into the 'polder' scale (19 polders)– where most stakeholders felt comfortable. A so called 'kitchen table approach' was used, when the private actors were visited at their homes to continue the discussion on the first 6 agreed principles (sketch ->polder approach -> back to

the municipal scale). Through such an approach a social connection to the LLP emerged (a feeling of ownership) and it helped to raise awareness of the landscape issues.
MD municipality has been successful in managing multifunctional landscapes and using landscape as an integrated approach. The factors that contributed to success are the existence of a strong vision and a legitimate plan. Moreover, the political drive among certain partners, as well as physical and nonphysical actions and measures were also identified as success factors.

At the same time, a lack of resources has been a limiting factor, which is a similar problem for most of the stakeholder cases. The involvement of too many stakeholders and too much diversity in action are among the weaknesses of the planning process. It has been concluded that an intensive multi stakeholders approach is a very solid ground for a LLP, but it takes time, effort and money.

Germany

In Germany, all policy plans are legally organised and binding within the administrative limits (hierarchal order, top-down) and most formal landscape planning is well-developed on local and regional level. In practice exists also a bottom-up influence: new local plans are used to renew a regional plan, but this is a voluntary action.

The 'Landscape Plans' are part of the statutory territorial planning system. Since comprehensive and environmental planning competences are decentralised, every federal State ('Land') has developed a specific version of Landscape Planning.

The landscape plan for Offenburg was developed alongside the local land-use plan (not binding). The LLP of **Offenburg** is a multi-sectoral as it deals with many different landscapes related topics and delivers a map with designations of nature, landscape and recreation on rather detailed scale. The landscape plan is problem oriented and is able to address very specific issues. e.g. conception to handle illegal leisure-time-building in scenic landscapes.

The Landscape plan of Offenburg has proven successful in presenting the basis for how to compensate certain impacts on the landscape. The Landscape plan provides some ideas on how to deal with sensible landscapes. It has a special part with guidelines for allotment gardens. According to Offenburg, among the key factors to success is the sufficient and up-to-date database at municipal scale; early communication with land-use planners and nature protection organisations, which enabled to integrate the important contents of the landscape planning into the land-use plan in a very early state, and thinking about conceptions for dealing with problematic issues. Moreover, the availability of an adequate level of structural and financial support for high quality planning has been of crucial importance.

The municipality is equipped with good instruments for planning and creating conceptions for landscape management, which is also supported by a strong planning culture in Germany in general.

Good experience exists in Offenburg regarding the information and developing new tools for monitoring and measuring the progress in achieving the target.

The bottom-up approach has been considered a successful factor in Dutch and German cases, providing a feedback to regional level.

Slovenia

Slovenia ratified the ELC in 2003 and the landscape is recognized at national level in several acts within the Slovenian legislation and also in the Spatial Development Strategy of Slovenia. The landscape planning system is rather informal and is embedded in various legal frameworks. At the moment there are no regional and local landscape plans. The planning culture is referred to as consultative. Among the main regulatory instruments are the voluntary governance agreements.

One of the challenges of the city of **Ljubljana** is integrating the landscape in the regional spatial plan, which is a common problem for most of the stakeholder cases.

The regional development plan of Ljubljana Urban Region does not include actions and monitoring for any of the components of liveability. The strategy and vision for the culture and economics components are provided to some degree. The strategy and vision for culture component are built upon the outcome of the analysis to a limited degree and the objectives are mainly qualitative. Social relations/capital component is not addressed in the plan. Although participation is addressed in the plan, it has not been implemented yet. Consultation and informing were used as the main tools.

Spain

In Spain, landscape protection is addressed in the land law at the national level. ELC was ratified in 2007. The planning culture can be characterized as top-down while such regions as Basque and Galicia enjoy a relatively big autonomy. The autonomous community of Navarra and the Basque Country are in the process of including landscape management in policy.

The **Basque** government provides guidelines for the content and function of sector planning and territorial planning. There are several documents, plans and strategies which already consider landscape to some extent, but the common indicators are lacking and there is not much tradition yet. Landscape has been traditionally approached from the point of view of sector policy and specific conservation action plans. When it comes to the urban areas, the concept of landscape has long been associated only with the protection of buildings or areas that have an architectural or historical interest. The stakeholder involvement in planning processes needs to be strengthened. The Basque Country is revising its Spatial Planning Guidelines. In addition, a proposal for a Landscape Law which is inspired by the ELC and aims to integrate landscape planning in other planning instruments is under development. Among the main regulation instruments are certain restrictions, informal incentives and SEA obligation.

A good database and development of landscape Catalogues are seen as strength of the region. The latter analyzes and evaluates landscapes in each of the functional areas and defines quality objectives. Three pilot 'Landscape Catalogues' are being developed in three functional areas, one in each provinces of the Basque country. The Landscape Catalogues is among the other four instruments envisaged under the draft bill of the Landscape Law.

The landscape catalogues have some contradiction between landscape quality and economic development in some economic sectors. In addition, the monitoring indicators for 'culture' component are not really developed but the need for a monitoring plan was named and some indicators were suggested. The specific targets in relation to culture are not well defined and the main focus is on protection. The objectives that relate to visions and

strategies are mainly qualitative. The objectives will later be translated into actions and measures, so the timeline for meeting the objectives has not been set yet. Monitoring of measures for the components of liveability is not addressed to a large degree and the approaches and methods for monitoring are not defined today.

Uncertainty in planning, lack of integrative vision and stakeholder involvement are among the weaknesses. Although the Basque Country already has high quality territorial data, it is in a need for an updated data and more developed territorial indicators. Similarly to other stakeholder cases, balancing between nature preservation and socioeconomic development represents a challenge.

Although, a regional competence in landscape exists, the capacity to legislate and to define strategies in Navarra is limited. Actually one could speak of a landscape of fragmented protected landscapes. **Navarra** has not had any procedures for landscape evaluation, and general training for managers of protected landscapes and other stakeholders has been lacking. Sectoral policies do not include a concept such as landscape.

Administrative issues and competences are divided over several levels which hampers the implementation of a comprehensive approach to landscape. There is no holistic vision for landscape management and the social and identity dimensions of landscape have not been taken into consideration. There is a lack of indicators measuring landscape dynamics related to a comprehensive landscape management. Further, there has not been any public participation. However, the participation system exists along the plan design: public hearings, period for stakeholder pleas.

Besides the already mentioned weaknesses, a strong territorial governance system is a relative strength of the region, in addition to the abundance of documents and source data for landscape analysis (water, geology, climate, fauna, vegetation, etc.).

The up-coming Landscape Plan for Navarra is meant to address some of these problems, and the ratification of the ELC is seen as an opportunity for the region.

4.1.3 Quantitative benchmarking of the plan practices

Benchmarking on socio-economic indicators

When benchmarking Thy (via DK05 Nordjylland as the relevant NUTS 3 region) to the other cases based on socio-economic context indicators, it is clear that Thy is most similar to the Dutch case when benchmarking for four clusters, only on education indicators is Thy more similar to Ljubljana. However, if dividing the cases into only two clusters, the pattern is more unclear in that the clustering of the cases differs rather widely here. However, in the composite analysis there is a clustering of the cases into a North-South division.

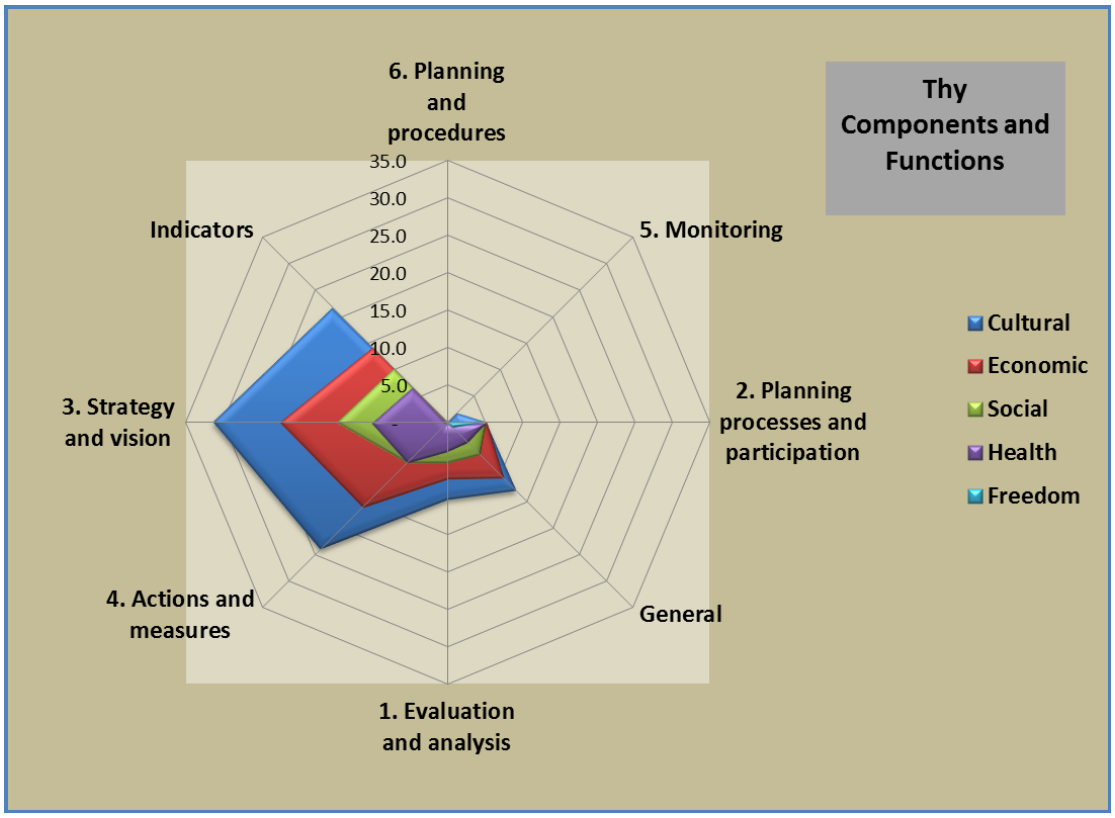
FOUR CLUSTERS		THREE CLUSTERS		TWO CLUSTERS	
ECONOMICS: GDP-INNOV-UNEMPLOYMENT					
1	ES21 Basque Country	1	ES21 Basque Country	1	ES21 Basque Country
	ES22 Navarra		ES22 Navarra		ES22 Navarra
2	NL33 Zuid Holland		NL33 Zuid Holland		NL33 Zuid Holland
	DK05 Nordjylland		DK05 Nordjylland		DK05 Nordjylland
3	SL02 Zahodna Slovenija	2	SL02 Zahodna Slovenija		SL02 Zahodna Slovenija
4	DE13 Freiburg	3	DE13 Freiburg	2	DE13 Freiburg
ECONOMICS: GDP-UNEMPLOYMENT					
1	ES21 Basque Country	1	ES21 Basque Country	1	ES21 Basque Country
	ES22 Navarra		ES22 Navarra		ES22 Navarra
2	NL33 Zuid Holland	2	DE13 Freiburg		NL33 Zuid Holland
	DK05 Nordjylland		NL33 Zuid Holland		DK05 Nordjylland
3	DE13 Freiburg		DK05 Nordjylland		DE13 Freiburg
4	SL02 Zahodna Slovenija	3	SL02 Zahodna Slovenija	2	SL02 Zahodna Slovenija
ENVIRONMENT: NATURE- URBANIZATION					
1	ES21 Basque Country	1	ES21 Basque Country	1	ES21 Basque Country
2	DE13 Freiburg		DE13 Freiburg		DE13 Freiburg
	SL02 Zahodna Slovenija		SL02 Zahodna Slovenija		SL02 Zahodna Slovenija
3	ES22 Navarra	2	ES22 Navarra		ES22 Navarra
4	NL33 Zuid Holland	3	NL33 Zuid Holland	2	NL33 Zuid Holland
	DK05 Nordjylland		DK05 Nordjylland		DK05 Nordjylland
HUMAN RESOURCES: EDUCATION					
1	ES21 Basque Country	1	ES21 Basque Country	1	ES21 Basque Country
	ES22 Navarra		ES22 Navarra		ES22 Navarra
2	SL02 Zahodna Slovenija	2	SL02 Zahodna Slovenija	2	SL02 Zahodna Slovenija
	DK05 Nordjylland		DK05 Nordjylland		DK05 Nordjylland
3	DE13 Freiburg		DE13 Freiburg		DE13 Freiburg
4	NL33 Zuid Holland	3	NL33 Zuid Holland		NL33 Zuid Holland
COMPOSITE: ECONOMIC, ENVIRONMENT, HUMAN RESOURCES					
1	ES21 Basque Country	1	ES21 Basque Country	1	ES21 Basque Country
	ES22 Navarra		ES22 Navarra		ES22 Navarra
2	NL33 Zuid Holland		SL02 Zahodna Slovenija		SL02 Zahodna Slovenija
	DK05 Nordjylland	2	NL33 Zuid Holland	2	NL33 Zuid Holland
3	SL02 Zahodna Slovenija		DK05 Nordjylland		DK05 Nordjylland
4	DE13 Freiburg	3	DE13 Freiburg		DE13 Freiburg

Benchmarking of Thy based on input to the CAF

The practices of making and implementing the plans proposed to the LiveLand project, and which give guidance to future measures of protection, development and management of space and landscape, were analysed by way of the CAF liveability tables.

This analysis shows clearly that the National Park Plan of Thy is focused mostly on the functions of strategy and vision, and actions and measures, while planning, and monitoring and evaluation play only little parts. This is no surprise in that the NPP is the first document developed for the Thy National Park and thus, there is a tendency to give emphasis to the visionary functions of the document. Furthermore, the specific land use planning of the area of Thy National Park are taken care of in other parts of the planning system (municipal and national level), and thus are not meant to be a part of the NPP.

The analysis also shows that the components of Culture, Economic and to a certain degree Social and Health are the livability component that Thy National Park has focused their first plan on. Freedom only plays a small role.



4.2 Learning from external learning cases (Learning II)

The external reference cases have been identified as "good practices" examples in EU in relation to landscape planning and management and its integration in spatial planning.

4.2.1 Stakeholder expressions regarding needs and learning goals with focus on the external learning cases

The needs and learning goals in relation to the external learning cases, expressed by the Thy NP stakeholders, mainly refer to evaluating and monitoring visitors and tourism development, as well as balancing use and protection of nature. How to handle pressure on the natural landscape?

4.2.2 The reasoning behind choice of external cases

Two external learning cases - Dartmoor NP (UK) and Fulufjället NP (Sweden) - have been identified as the 'good practice' examples in EU when it comes to addressing the above mentioned issues.

Both of the external learning cases share some similarities with Thy. For example, in all three NPs some sort of zoning practice with regard to recreational areas is used. The visions of Thy and Dartmoor are quite similar, where an important focus is on the economic development in addition to nature protection.

Both Thy and Dartmoor have permanent residents in the NP and different land owners, which also include the private actors. Therefore sharing experience on balancing various stakeholders' differing views and demands could have a valuable contribution to Thy case.

Different types of land use are represented in all three NPs. Tourism and recreation, and to the less extent agriculture are widely represented activities within the Thy and Dartmoor NPs.

When it comes to the differences, Thy National Park Foundation has no formal power in the form of authority and is entirely dependent on cooperation with municipalities, landowners and other local actors. The situation in Dartmoor is quite the opposite. Dartmoor National Park Authority (DNPA) is the sole local planning authority for land within the NP and is responsible for decision-making on all planning applications within its area.

Dartmoor and Fulufjället NPs were established during a top-down process while the establishment of Thy and NPs is based on cooperation between different administrative levels.

Fulufjället NP is known for being among the first NPs to adopt new approaches to national park plans in Sweden, moving the focus from solely protection issues to including also social issues. Studying the visitors and activities and using the results in planning, including developing tourism activities in the plan were new to national park plans in Sweden when the plan was developed. Considering the interest of Thy in these issues and Fulufjället expertise on that matter, it was an important argument for choosing Fulufjället as an external reference case.

The experience of Dartmoor NP in finding the balance between different types of land use – from military to agriculture and nature protection is particularly relevant for the Thy case.

Moreover, it has a long tradition in spatial planning and in application of instruments contributing to environmental quality and liveability.

4.2.3 Input from external reference cases

Case 1: Dartmoor

Dartmoor covers an area of 954 km^2 in south Devon, England. Among the specific features are the exposed granite hilltops, known as tors, as well as numerous bogs. Today, the landscape is being used for multifunctional purposes – water supply, mineral extraction (china clay mining), farming and even military training (about 11% of the territory). Dartmoor is sparsely populated – it is a home to about 35 000 people.
Dartmoor received a status of the National Park (NP) in 1951. It was amongst the first five NPs to be designated in England and Wales.

An overview of the planning and management of Dartmoor

Dartmoor was established during a top-down process and was managed by the Devon County Council until 1995. The Environmental Act (1995) laid the foundation for establishing of the free-standing Authority for Dartmoor, which took over the administration and management of the National Park from 1997. The NP is not state-owned; it has various landowners, both public bodies and private individuals.

Today, the Dartmoor National Park Authority (DNPA) is the sole local planning authority for land within the NP and is responsible for decision-making on all planning applications within its area. Among the main responsibilities of the DNPA is developing and monitoring the implementation of a National Park Management Plan and granting planning permission.

Balancing use and protection

Much of the open moor is being held under common rights. Public can walk freely on about 47,000 hectares (48%) of open land, some of which is fully open for camping, bicycling and other activities. On approximately 7,000 ha applies the right of access on foot, with some limitations, such as camping. About 1/3 of the land in the NP is protected for its wildlife or geological value, known as Special Areas of Conservation (SACs) (27%) and nationally valuable sites (31% together with SACs), known as Sites of Special Scientific Importance (SSSIs).

For combining different conflicting interests and balancing use and protection, the recreational areas are divided into 'areas of heavy recreation use', 'areas for exploration and tranquility', 'quiet areas', 'areas of opportunity', 'linking town and country'. In the most heavily used sites the management plans are developed in partnership with landowners and commoners.

Linking economic development with protection of the NP and achieving the right balance are also considered highly important within the NP planning. In case of emerging conflicts, the conservation purpose is given a higher priority.

No concerns were raised about the need to regulate or manage the *visitors'* access to the NP and no absolute limit for a number of visitors was established. On the contrary, 'improving

accessibility and widening participation' is among the key themes in the Recreation and Access Strategy, particularly for people with special needs and health problems.

The concerns were raised with regard to an increased use of motorized vehicles. Among the proposed measures in the current NP Management Plan is to reduce the percentage of visitors who arrive by and travel around the National Park by car. However, no concrete actions have been elaborated yet.

Evaluation and monitoring

Evaluation of the progress in realizing the Management Plan is done through monitoring the progress towards achieving the visions and ambitions and monitoring the delivery of the Action Plan. The State of the Park report is a baseline for monitoring the progress of the Management Plan, which contains quantitative data on the 'state' of Dartmoor National Park and describes the change and trends. It is planned to be published regularly, the latest version is from 2010.

When it comes to monitoring visitors and other activities, the following data is being collected in the Dartmoor NP:

- Annual number of visitors to information centres operated by DNPA;
- Percentage of hits on different areas of the DNPA web site are monitored monthly. The proportion of hits to the 'visiting' area of the web site.
- Total annual attendance of guided walks led by DNPA
- Total annual attendance on education events
- organised by DNPA
- Percentage of DNPA organised educational events by type (foreign, primary, secondary, higher education, outreach, special needs, youth oranizations, adult learning,
- Number of events considered through DNPA
- organised events system and the number of participants in events
- Total length of promoted long distance walking
- routes
- Total area of land open to public access
- % length of Public Rights of Way which are 'easy to use'
- Number of passengers using Dartmoor bus
- services annually
- Number of people using monitored footpaths (path counters)
- The use of moorland car parks, monthly (automatic car park counters)
- Annual number of tourist visitors to Dartmoor
- Annual number of staying visitors to Dartmoor
- Total annual visitor spend

The main tool used for monitoring the *number of people* visiting the National Park and their expenditure is the statistical model **STEAM** (2009). STEAM stands for the Scarborough Tourism Economic Activity Monitor and it is widely used by a number of NPs across the U.K. In 2005 Dartmoor National Park Authority commissioned the owners of STEAM (Global Tourism Solutions: GTS) to undertake a baseline survey of Dartmoor National Park for the year 2003.

STEAM

STEAM is a spreadsheet model, which relies on a range of local inputs which may vary from area to area. The more data input that can be provided locally the more consistent is the output. While the traditional measurement of tourism activity is from the demand side (e.g. visitor surveys), STEAM measures the tourism activities from the supply side, which is usually less time-consuming and less costly. STEAM is not designed to provide a precise and accurate measurement of tourism activities, but rather to indicate and monitor the trends. The confidence level of the model is within the ranges of plus or minus 10% in respect of the yearly outputs and plus or minus 5% in respect of trend.
Data used as an input to STEAM for the Dartmoor report included:

- A detailed list of local accommodation providers
- Information on occupancy percentages
- Bed stock for each accommodation type
- Tariff rates
- Attendance at major visitor attractions
- Visitor numbers to tourist information centres
- Local traffic monitoring data

The STEAM report in Dartmoor includes:

- Analysis by sector of expenditure
- Revenue by category of expenditure
- Tourist/visitor days (total number of tourists/visitors multiplied by the average length of stay)
- Tourist numbers
- Sectors in which employment is supported

STEAM provides measurement of day visitors which are staying away from home and visiting the area. Leisure day visitors to Dartmoor arriving from their own home outside of the area fall outside this definition. In order to get total tourist numbers STEAM output is supplemented with a survey of leisure day visitors.

Case 2: Fulufjället

The Fulufjället national park was established in 2002 as the 28th national park in Sweden. It is one of the first national parks certified by PAN Parks. The Fulufjället national park is located in the County of Dalarna on the border to Norway. The size of the national park is 38 414 hectares of which approximately 58% consists of wilderness area. Unique to Sweden is that the mountain area (made of sandstone) is not grazed by reindeers and therefore it has special vegetation.

There are no permanent residents within the national park area but there are several villages in the immediate surroundings of the park. The establishment of the park faced strong opposition from the municipalities and general public. Even though there was a participatory dialogue phase in the designation process, the initial and final phases were centralised and top-down.

An overview of the planning and management of the learning case

The Swedish Environmental Protection Agency and the County Council Administrative Board of Dalarna drafted a management plan for the Fulufjället national park. According to the plan, the main aim of the Fulufjället national park is to protect the area with special

vegetation and high natural values. It also aims to preserve the cultural historical values of the national park and give opportunities for visitors to experience the quiet and untouched nature of the park. It aims to, to the appropriate extend, facilitate the opportunities for the public to experience the nature of the park. However, even though the national park takes into consideration tourism and visitors nature preservation is still its main aim.

In terms of visitors, the aim of the national park is to have content visitors who can get satisfactory experiences

As noted previously, specific to Fulufjället national park is the division of the national park area into four "experience zones" (upplevelsezoner) as well as the extensive visitor studies that were conducted both before the national park was established in 2001 and after it had been established in 2003. The management plan of the national park was based on the results of the study from 2001.

Balancing use and protection

Zoning is used as the main way to combine conflicting interest. It provides possibilities to protect the nature and at the same time in other areas of the national park give possibilities for tourism activities and improved accessibility. Zoning was also used as a way to maintain a high recreational capacity which means that many visitors can be received without negative consequences being caused for the natural or social environment

The management plan uses the concept of "recreational carrying capacity" to define the amount of and type of activities that the park can experience without unacceptable changes taking place in the physical environment or in the visitors' experiences. The plan states that the recreational carrying capacity was high during the establishment of the plan and that the goals that were set for different zones can be reached also when the amount of visitors increases.

Also the concept of "limits of acceptable change" (LAC) has been used in the management plan of the national park. The concept does not only look at the consequences of too many visitors on nature and landscape but also the ways in which overcrowding influences the visitors' experiences.

There is however no absolute limit for a number of visitors for example per square kilometre but instead there are several factors that can influence whether crowding is experienced (e.g. the geography and topography of the area).

Evaluation and monitoring

In the management plan the focus is clearly more on monitoring visitors and visits and less on evaluating whether various goals for the development of the park have been reached.

As noted earlier, the visitor study conducted in 2001 was used as an important basis for planning and zoning the national park. The first study in 2001 also provides an important baseline for following the development and the consequences of establishing a national park in the area. The next study in 2003 already gave some initial indication of the functioning of the park and the zones. The national park management plan sets out that follow-up studies will be done regularly in order to find out if the maximum recreational carrying capacity has been reached. However the County Administrative Board of Dalarna has not conducted or ordered any extensive follow-up study since 2003. In 2012 the aim was to make a new study in 2013.

According to the report on the studies and the development of the national park by Fredman et al. (2005), while monitoring the use of a natural area it is important to ask questions such as who visits the area, what kind of attitudes they have towards the management of the park, what kind of motives they have and what types of obstacles they meet, what kind of conflicts can exist between and within groups and whether the visitors are satisfied with their experiences. Information on these and other issues can help to e.g. decrease conflicts, improve the experience of the visitors, improve the matching between supply and demand of recreation activities as well as develop the infrastructure and improve the ecologic, social and economic impacts of the area.

In Fulufjället, the data collection was done in three stages by people- and traffic-counters by the significant entrances to the area, self-registration methodology as well as by a mail questionnaire that was sent to a selection of Swedish and German visitors. Similar methods were used both in 2001 and 2003. Four people-counters were set up measuring the passers-by by using radio waves. Traffic-counters were set up in three places with sensors that react to pressure. The traffic-counters can mainly be used to complement the people-counters as it is not certain that all car passengers actually spend time in the national park and the amount of passenger in each car can vary.

Seven self-registration boxes were set up in different locations where names and addresses of the visitors were collected together with responds to five questions on their visit to the area (e.g. on time, activities, and earlier visits to the area). Between 2001 and 2003, there was in total a 38% increase in the amount of self-registration cards left in the boxes. Follow-up was done with a small mail questionnaire in order to get data on e.g. individual visits, attitudes to the area and its management, tourism development and economic expenses. The response frequency to the questionnaires was 70-85%.

It was not possible to put self-registration boxes on all trails in the national park and some visitors also hike outside the marked trails which are some of the reasons why the results from the self-registration studies cannot be totally representative. Non-response studies were made in order to study visitors who did not independently decide to fill in a response card. (Fredman et al. 2005.)

The results from the visitor studies based on data collection with people- and traffic-counters, self-registration boxes and questionnaires provided knowledge on:

- number of visitors in different zones,
- type of travel,
- visitors' nationality and background,
- visit patterns, activities and accommodation,
- reasons for visiting Fulufjället,
- visitors' experiences and relations to the nature in Fulufjället,
- recreational capacity,
- attitudes towards Fulufjället's management,
- tourism development,
- visitors and the national park
- visitors' expenses (Fredman et al. 2005.)

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ISBN

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LIVELAND
Liveable Landscapes: a key value for sustainable territorial development

Targeted Analysis 2013/2/22

Baseline Report case Ljubljana Urban Region

Version 07 February 2014

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

This report presents the final results a Targeted Analysis 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.

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1 Introduction

1.1 The practice

The Ljubljana Urban Region (LUR) put forward the making of the study “Expert Basis for Preparation of Regional Spatial Plan for LUR” as good practice in the framework of the Liveland project. Main ambition of the study was to prepare technical documents as first phase of planning. Main items were:

- analysis of the spatial components and sub-areas,
- scenarios for spatial development and
- solutions in form of spatial system concepts.

The study was ordered by the Regional Development Agency (RDA), which is a national agency. It was partly funded by the European Union and partly by the municipalities constituting the LUR. It was written by a consortium with the Institute "Jozef Stefan" Ljubljana, PNZ Consulting and Design Ltd, University of Ljubljana Biotechnical Faculty and Urban Planning Institute of the Republic of Slovenia as project coordinator.

1.2 The actor (stakeholder in Liveland)

The Ljubljana Urban Region (LUR) is an voluntary cooperation of 26 municipalities, with the central city of Ljubljana as chairman. The LUR (as cooperation) has no formal competences on spatial development (these are in hands of the municipalities), but it can propose joint documents and projects, that can be accepted and implemented by the municipalities. The Expert Basis had the ambition to prepare a common plan, but the result was not accepted by the assembly of mayors, that takes decisions.

The Regional Development Agency (RDA) in the region makes contracts with the municipalities to develop projects and partnerships between public and private actors, to implement regional and other development programs and to obtain domestic and foreign sources of funding. For the RDA LUR work around 10 professional officers in the field of regional and spatial development.

1.3 Back ground and context

The planning system in Slovenia lacks an integrated, spatial approach on regional scale. A formal regional government layer does not exist. Spatial plans are made only by national government and municipalities. RDAs are primarily oriented to economic development and were erected for the purpose of absorbing EU Structural Funds. In the 12 statistical ‘regions’ projects for regional and rural development are organized. So there seems to be a lack of integrated regional visions, especially on protection and management of valuable spaces.

Recently RDA LUR thinks that ‘valuable landscapes’, especially the less recognized ones, have a hidden development potential. The Expert Basis raises questions about the future of a less exposed, but rather characteristic Slovenian landscape, the protected Landscape Park Polhograjski Dolomiti, which exists for almost 40 years.

2 Planning system and culture

Following an overview is given of the context of the planning practice of Ljubljana Urban Region (LUR), with a short description of the policies and the planning system in Slovenia.

2.1 Interpretation of key concepts

Landscape

LUR is inspired by the European Landscape Convention (ELC) and a comprehensive landscape approach. Landscape is seen as characterized by natural processes on the one hand and economic, social, cultural and political interests on the other side. Professionals see landscape often as 'view' or 'image' of physical space.

Landscape policy in Slovenia on national level is sectoral organized as protection of natural and cultural heritage. Landscape policy is also involved in spatial planning at national level.

Spatial policy

Spatial planning focuses on possibilities of future development. In that context spatial potential means the capacity of physical space for development, targeted predominantly to settlement, infrastructure, production and services, recreation and tourism. The spatial planning includes also nature conservation and protection of cultural heritage.

The planning cycle (with the stages "analysis – objectives – actions – evaluation – new objectives") is well not known in Slovenian practice. Often the practice is action oriented, without preparing comprehensive analyses.

2.2 Planning system

Slovenia has only 2 governmental layers, though the constitution mentions also regions. Local self-government is an important political value and the number of municipalities has grown the last years. At present, there are 210 municipalities, 30% of which have less than 2.000 inhabitants.

Landscape policy

Slovenia has signed the ELC in 2003. Regarding the recommendations of the Council of Europe on landscape policy, Slovenia has a tradition to integrate landscape in spatial planning and sector policy. The identification of landscape identity is part of spatial analysis.

Since 1996 exist a national strategy of landscape protection, which is input for spatial planning policy. One of the challenges is the disappearance of cultural landscape heritage, the widespread abandonment of agricultural activity and the overgrowing of farmland.

The landscape strategy contains a proposal for 'outstanding' landscapes, which are the most valuable natural and cultural landscapes. 'Landscape park' is a conservation category which includes natural and cultural values. It is an area with a pronounced quality and long-term coexistence of mankind and nature.

Spatial policy

On the national level, the Spatial Planning Directorate is responsible for the legal framework, as well for the spatial arrangements and projects of national importance. Beside that it has supervision of the spatial plans, carried out by municipalities. The national spatial strategy is binding for the local spatial planning.

The spatial development strategy of Slovenia (2004) sets out comprehensive spatial planning objectives. Landscape is defined through: landscape potentials and resources for activities (use of water, mineral extraction, recreation, agriculture and forestry), landscape values (landscape identity, natural values) and landscape threats, due to harmful activities.

The Spatial Strategy introduces 'landscapes of cultural and symbolic meaning', which are rather big (figure 1). This designation is defined as an area of 'adapted' development, based on a vision on the sustainable use of heritage resources. 'Outstanding landscapes' are smaller areas, with a high value that reflects a unique structure, based on three components: unique land use, proportion of natural elements and specific settlement pattern (figure 2).

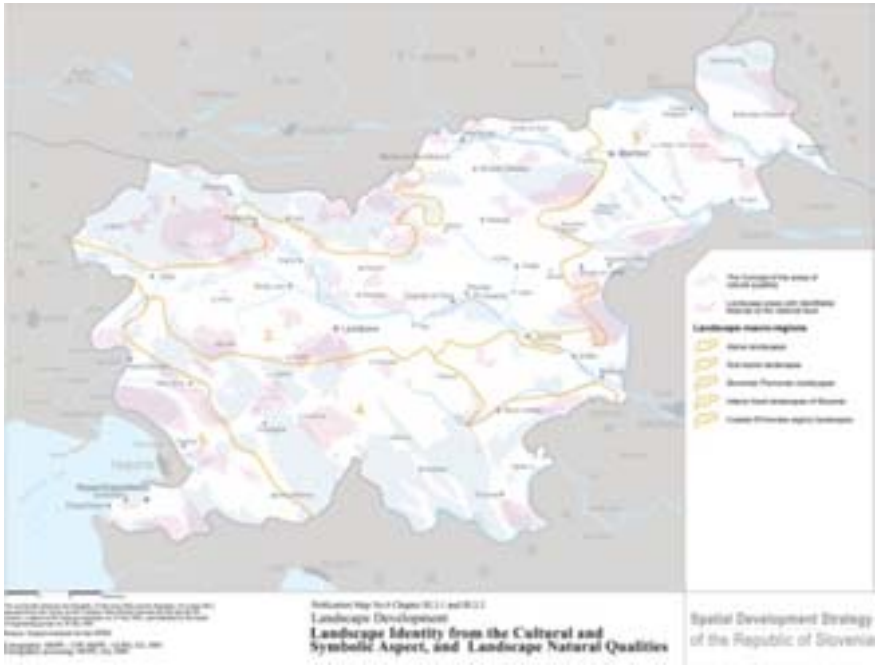

Figure 1 *Landscapes of cultural and symbolic value in Spatial Development Strategy of Slovenia (2004)*

Regional development

The Regional Development Agencies (RDAs) act as a service agency and work on programs, partly financed by the EU, which have a development focus and contain a selection of bottom-up initiatives. For instance: Regional housing policy, Comprehensive renovation of an old village center and 'Eco village'.

The regional development projects have no counterpart in regional spatial policies. Recent legislation is encouraging municipalities to engage in 'regional projects' and for this purpose regional analysis and 'visions' are needed. For this purpose the Spatial Planning Directorate prepared guidance for all RDAs.

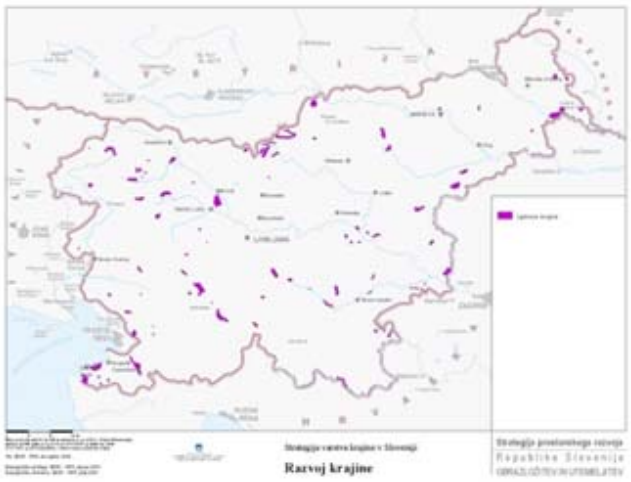

Figure 2 *Outstanding landscapes of Slovenia*

Kind of plans

In Slovenia the plans on national scale include a vision (objectives and strategy) on space and landscape.

There is no tradition to make action plans on landscape.

The making of spatial regulations is obliged at national (guidelines) and local level (land use plans).

For projects of physical developments (buildings and works) a 'vision at regional scale' is needed (because of EU regulation). For concrete projects at local scale a permit (related to spatial plan) from the municipality is needed.

In Landscape parks, targeted to protection, a management plan is obliged.

	Vision Space & Landscape	Action Landscape	Regulation Space	Development Space	Management Landscape
National	Voluntary		Obliged		Obliged
Regional				Obliged	
Local			Obliged		
Project			Obliged		

Table 1 ***Kind of plans on space and landscape and governmental layers***

Explanation of table 1:

- Vision = desired future development, goals, targets
- Action = strategy using rules, finances, agreements and communications
- Development = physical operation, project with buildings or change of land use (re-alisation by 'blue print plan')
- Management = daily physical measures (no big changes)

2.3 Planning culture

The spatial planning system in Slovenia is mainly top-down oriented: the municipalities must follow the national spatial plan strategy and national sectorial policies, as for instance agri-cultural or infrastructural.

There seems to be a preference to use juridical instruments.

In the planning process the stakeholders are invited to participate in the preparation of spatial plans. The public is invited to participate rather late in a formal procedure, when most of the preparation work is done and main solutions are chosen.

The participatory culture seems to be underdeveloped in Slovenia. Also the nongovernmental sector is under-organised. NGOs formally cannot work in favour of public interest of spatial planning.

The national planning culture in Slovenia, in the last two decades, has gone in direction of deregulation and weakening of the planning rules and routines. The overall political orientation gave priority to the free market initiative and private ownership.

3 Geographic description of the practice case area

The LUR with the capital city of Ljubljana connects 26 municipalities with approximately 500.000 inhabitants. With a surface of 2500 km2 and a population density of 210 inh/km2, it is the busiest part of the country. Here lives 1/4 of the national population and operates 1/3 of the enterprises. The city with its suburban settlements and natural environment is more and more intertwined with other municipalities in the surrounding.

Figure 3 ***International location of LUR***

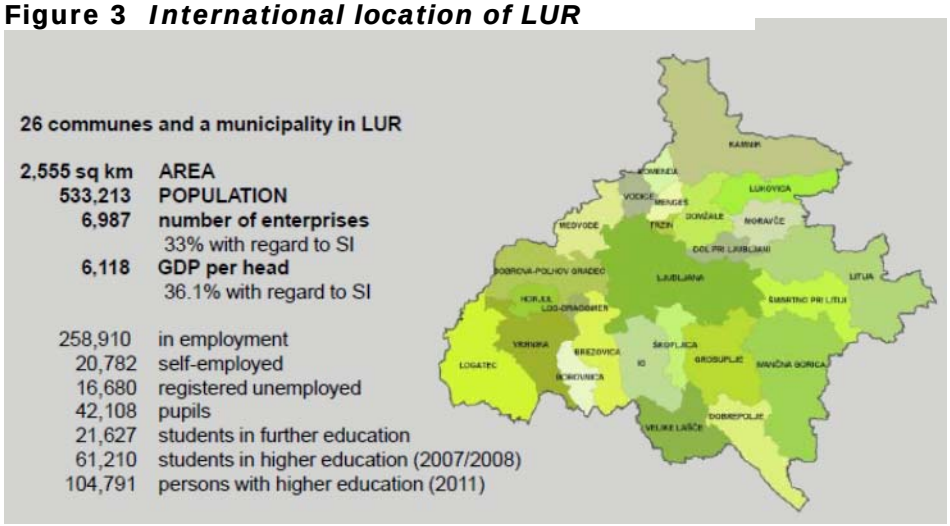

Figure 4 *Municipalities in LUR*

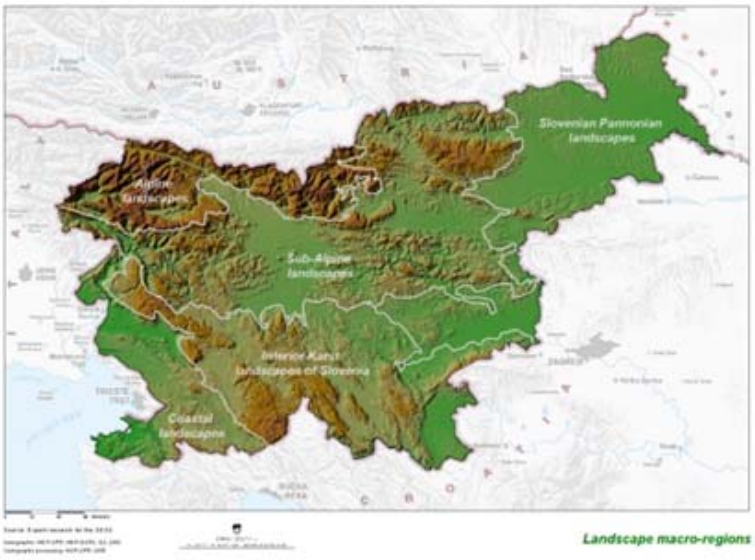

Figure 5 *Landscape types of Slovenia*

The area of LUR lies on the crossing of two landscape type regions, the Pre Alpine region and the Carst area. This geography defines the diverse landscape character.

The area is dominated by woodland and cultural landscape. 32 % of LUR is agricultural land and 59% woodlands, more than 27 % of the region is part of EU nature protection and around 12 % is protected by national legislation.

There are six nationally 'outstanding' landscapes in the LUR declared by the national Spatial Development Strategy (2004). These areas should be managed by a Management Plan and declared as protected by the municipalities that share the territory of these landscapes. Municipalities have not decided yet.

Only two examples:

- Landscape park Polhograjski dolomiti was declared under nature preservation in the 1970's, considering cultural values as well. Generally speaking the park is a characteristic Slovenian landscape with dynamical and forested terrain, which is divided with farmlands and small settlements and crowned with a small church on almost all of the hill tops. The main issue is how to reach agreement among all municipalities about the management plan.
- Ljubljansko Barje was declared to be Landscape Park recently on the base of nature protection law. The area is big wetland, shared by seven municipalities. The main problem is how to balance the expectations of local governments and land owners with the ones of nature protection.

4 Challenges and ambitions of practice case

Main ambition of the study "Expert Basis for Preparation of Regional Spatial Plan for LUR" was to prepare technical documents as first step to develop a common plan at regional scale.

Scenarios of future spatial developments should give insight in physical and societal problems. Solutions for harmonious development should be searched in form of spatial system concepts.

LUR recognizes its landscape as underused development opportunity. Further efforts must be done to promote this potential. The strength of its identity should be further activated.

5 Description of the planning practice

The planning practice, expert based, for the Regional Spatial Plan is now described. The process of preparation by experts and involved participants is first sketched. The content of the study (goals and actions) will be described in the line of the planning cycle, which is not completed, because the study was not accepted as start for a formal document.

5.1 Planning process and decision making

For the making of the study on a regional plan, the research team gathered material, taking into account the available policies and studies, with their evaluation and the collection of other data.

In the process of preparation there were several tools for informing and communicating with representatives of municipalities and other stakeholders were used. In depth interviews were made with mayors and their assistants, several thematic workshops were implemented, information and materials were provided by electronic and regular mail, lectures were organized, and communication via interactive web portal was enabled. All information about project activities, events and results were available on the project web site in real time.

Timeframe of the implemented activities

- Expert base on the natural features of LUR (October 2008)
- Expert base on social conditions (October 2008)
- Location studies for development projects for Regional Development Program (November 2008)
- Spatial development scenarios, their evaluation and selection (Juli 2009)
- Preparation of spatial concepts and guidelines for Regional Spatial Plan (August 2009)
- Strategic Environmental Impact Assessment for designing of spatial concepts (November 2009)

The Expert Basis had the ambition to be first step towards a common plan, but the result was not accepted by the assembly of mayors, so no formal decisions were taken and the process of preparing a regional spatial plan stopped.

5.2 Content of the planning practice

5.2.1 Analysis

Input for analysis were experts inventories of natural features (natural resources), economic and sociological aspects and spatial structures, like settlements and infrastructures

To explore future spatial developments 3 scenarios were elaborated:

A) Gradual changes of spatial systems and environment;

B) Optimal economic, social and environmental cohesion with priority for quality of life;

C) Adoption to external changes, in economy and climate, leading to big changes of spatial systems.

Scenario A is 'business as usual' with continued dispersed patterns, sectoral management of space and emphasis on local interests.

Intensive agriculture will develop in the lowlands and plains. In hilly areas with extensive agriculture the land will get overgrown. Forests will cover 2/3 of land in the region. The nature will be well preserved, 1/2 surfaces in the region will be protected as outstanding landscape. Development projects will focus on the field of recreation and tourism.

Scenario B puts focus on balanced use of space and preservation of the natural environment providing high quality of life in cities, towns and rural areas.

More cooperation between local communities and areas with similar problems will lead to creation of joint programs. Well maintained landscapes and green areas will offer recreational facilities for all ages and interest groups. Agriculture in the lowlands and plains is based on integrated production, while in hilly areas more organic farming will take place. Forests will account for 60% of the land in the region. Management plans will organize the integrated maintenance of protected areas, tourist products and recreational infrastructure.

Scenario C is based on new technologies and innovative approaches, stimulating energy-efficient in buildings and sustainable life styles. Main goal is sustainable and harmonious development of space and prevention of natural disaster, resettlement in safe areas and leaving risky areas for natural processes. It also considers natural and recreational areas in conjunction with programs of promoting healthy lifestyle and cultural programs and education. Stimulating of agricultural innovation, especially organic farming.

5.2.2 Vision and objectives

Based on discussions on the scenarios, following main directions and general guidances were proposed:

- balanced use of space, which is reflects a consistent and appealing landscape image,
- introduction of new, environmentally friendly technologies,
- protection of vulnerable areas from encroachment, whilst protecting people from the effects of potential natural disasters,
- response to the current problems and conditions,
- to achieve a high quality of life in both urban as well as rural areas,
- to achieve the highest possible level of environmental protection.

5.2.3 Actions and measures envisaged

Proposals for measures and projects:

- Agriculture: focus on integrated and organic production and cooperation between urban and rural areas.
- Forestry: sustainable forest management.
- Preserved natural and cultural landscapes with national characteristics: ensuring proper planning and programming.
- Management of protected areas: Management Plans are implemented by professional services. The concept of 'protection through use' should be established.

6 Links to ESPON studies

How can the practice of LUR (especially the scenarios in the study) be related and compared to the outcomes of Espon studies?

Economic performance

The expert basis covers also economic performance. In the selective summary above, focus was laid on landscape and green economy, like agriculture.

Quality of life

Liveability or quality of life of inhabitants of the region is worked out in the scenario B.

Environment

Environment and adoption to climate change and natural risks is worked out in the scenario C.

Innovation

Innovation, especially as sustainability and new lifestyles, is worked out in the scenario C.

Polycentric development

The study suggests that spatial planning should be more intertwined with transport planning. It should reduce the need to travel by car and deliver sustainable forms of transport, including a network of foot- and cycling paths.

Attractiveness

Attractiveness in the study is mainly related to residential areas. Local characteristics and diversity of styles are goals. The aim is the creation of healthy environment and healthy lifestyles, with recreational spaces and potential for physical activity.

Climate change

In the whole area of the region the safety of settlements and agricultural land against floods should be ensured, respecting the principles of sustainability. Interventions in the flood plains and in the dynamics of karst water should be prevented.

Land use

Balanced use of space is reflected in the consistent and visually appealing landscape image. Development is directed in protection of vulnerable areas, aiming to support a high quality of life and achieving the highest possible level of environmental protection.

7 Links to European policy principles

How can the practice of LUR (especially the main directions of spatial policy) be related to principles and goals of European policy?

Europe 2020

The practice of LUR has no links to the EU strategy 'Europe 2020', especially on employment and climate change. About innovation it seems LUR has a slightly different interpretation.

Spatial Development Perspective (SDP)

The practice of LUR has strong links to the EU SDP, especially the goal of 'polycentric and balanced spatial development'. The study is broad and covers all the principles and goals of the SDP.

8 Summary

Ljubljana Urban Region (LUR) in Slovenia is an informal, voluntary cooperation of 26 municipalities, with the central city of Ljubljana as chairman. The making of a study for a Regional Spatial Plan was ordered by the Regional Development Agency, which is a national agency. The 'expert basis' was prepared between 2008 and 2009. The study contains all spatial items (environment, demography, settlements, infrastructure etc.) and gave attention to natural resources and landscapes, especially the less recognized ones.

LUR is inspired by the ELC and searches potentials in landscapes, going further than only protection as Landscape Park, which exists since long in national policy.

In the study 3 scenarios of general spatial developments were made, assuming different future changes: gradual change, high ambition on quality of life and adoption to climate change. The outcomes of these 'scoutings' were translated in 'spatial concepts' and guidelines on (under others) landscape.

Guidances are proposed on management of protected areas (concept of protection through use, professional management), forestry (sustainable management) and agriculture (organic production and urban-rural partnership).

A second ambition is the active participation of the interested stakeholders (in particular the local public), which would enable them to have a stronger and more creative influence on important spatial decisions**.**

The results of the study in the years after 2009 were not accepted by the politicians who take decisions about the cooperation of the LUR. So until now no further preparation is done for a Regional Spatial Plan.

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LIVELAND Project

Liveable Landscapes: A key value for Sustainable territorial development

Workshop summary

"Comparing and exchanging experiences on landscape practices in 6 European case studies"

Municipality of Midden-Delfland
3th and 4th April 2013

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

CONTENT

- WELCOME STATEMENTS AND INTRODUCTION
- A STEP FORWARD FROM THE INTERIM REPORT
- OVERVIEW OF PROJECT TIMELINE
- WORKSHOP STRUCTURE
- STAKEHOLDERS´ PRESENTATION OF GOOD PRACTICES FOR BENCHMARKING
- CONCLUSIONS
- STEERING GROUP METING: next steps towards the Draft Final Report

The second stakeholder workshop of the LIVELAND project was held in Midden-Delfland, The Netherlands, on the 3rd and 4th of April, 2013. The workshop was conceived as a benchmarking exercise itself where stakeholders and practitioners had the opportunity to exchange their experiences on landscape planning and management practices.

The workshop expected results were foreseen as an overview of good and best practices of landscape and territorial planning, with focus on approaches which can serve as general inspiration for landscape planning in a territorial planning context, and in term:

- Identify examples of actions or measures which have proven successful towards harmonious and sustainable territorial development, like for instance combining landscape protection and socio-economic development.

- Identify examples of impact on regional development where socio-economic development has gone hand in hand with successful landscape protection and management

- Interaction between researchers and stakeholders for better definition of project next step

WELCOME STATEMENTS AND INTRODUCTION

The workshop was hosted by the Municipality of Midden-Delfland. The event was kicked off by Arnoud Rodenburg Major of Midden-Delfland who briefly presented the current activities undertaken in the municipality.

Picture 1 Mr Arnoud Rodenburg. Major of Midden Delfland

A round of presentations helped in knowing the geography of the table and served as a starting point for the working sessions.

Sara Ferrara, *ESPON CU and Liveland project officer*
Project Stakeholders Izaskun Iriarte *Lead Stakeholder, Director of Cabinet and Media. Department of Environment and Territorial Policy. Basque Government*; Kees Boks, *Municipality of Midden-Delfland* Leen Koster, *Municipality of Midden-Delfland* Bernadet Keijsper, *Province of South Holland* Arjan van de Lindeloof, *Province of South Holland* **;** Stijn Koole *Bosch Slabbers company;* José Antonio Marcen, *Director of Spatial Planning, Mobility and Housing in the Government of Navarra* Signe Kappel Jørgensen, T*hy National Park, Independent foundation under the Ministry of Environment.* Sabine Gunst, *Department of Planning, Building and Environment. Municipality of Offenburg*
Members of the project research group *Rob Schroder (Alterra, The Netherlands) Lisbeth Greve Harbo (Nordregio, Sweden) Jeršič Mateja Šepec (REC, Slovenia) José María Jiménez (Nasuvinsa, Spain) Boris Stemmer (HHP, Germany) Diedrich Bruns (University of Kassel, Germany) Gemma García (Tecnalia, Spain)*

A STEP FORWARD FROM THE INTERIM REPORT

Gemma Garcia from Tecnalia gave a short introduction to the workshop program and contextualized the workshop within the project work-plan. She also briefly presented the project progress so far from the Interim Report with regard to the benchmarking exercise

- **Objectives of the benchmarking:**
  - Benchmarking is the process of comparing and measuring *one organisation against others,* and in that connection being able to identify "best practices" and generate measures that may help the organisation to take action in order to embrace the new challenges and eventually improve its performance
  - The question of "best practice" is often dealt with as an important "measuring stick", as the identification of successfully demonstrated practices may provide useful information on as well where to look for solutions, and what issues to use as means of comparison. It is very important for each stakeholders to see insight from others who have dealt with the same questions and addressed the same issues and problems
  - Bringing up the specific approach to landscape and territorial planning in each case study, facilitating the exchange of experiences and feedback between the participating stakeholders, and out of their practices and experiences in connection with interactions with other cases identify such "best practices" which can serve as both measures of direction and step-stones in the development process.
- **Introduction to the practices put forward by each case study and will be used in the benchmarking exercise**

Case Study	Plan or practice
Basque Country	Spatial Planning System and planning instruments as a whole Landscape catalogues and landscape guidelines A.F. de Laguardia (Rioja Alavesa). http://www.ingurumena.ejgv.euskadi.net/r49-cpaisaia/es/contenidos/informacion/paisaia_2011_laguardia/es_paisaia/indice.html
Navarre	Spatial planning system and associated instruments Fluvial Park of Arga River, placed in Metropolitan Area of Pamplona, developing Regional Law 35/2202 of Spatial Planning http://www.parquefluvialdepamplona.es/parquefluvial/es/rio_arga/paseo_fluvial_arga.asp http://www.mcp.es/parque-fluvial Protected landscape of Basaburua and Ultzama oak groves, Landscape protection, developing Regional Law 9/1996 on Natural Reserves of Navarre http://www.bosque-orgi.com/
Ljubljana Urban Region	
Offenburg	Spatial comprehensive plan http://www.offenburg.de/html/flaechennutzungsplan.html?t=b22e5efb0e0871f4d1593d1af73693df Landscape Plan http://www.offenburg.de/html/landschaftsplan.html Plans on regional level http://www.region-suedlicher-oberrhein.de/de/regionalplanung/index.php
Midden-Delfland	Landscape Plan Development system Landscape planning on regional scale Zud Holland
Thy National Park	National Park Plan http://www.danmarksnationalparker.dk/Thy/

- **Preliminary quantitative and qualitative analysis of information**

Three issues relevant for the benchmarking exercise have been identified:

1. The socio-economic and environmental framework which is about communalities in the overall setting of the case studies. At this point of time the task has focussed on a clustering of the case areas through a set of indicators which have been available at a proper NUTS level.

2. The conceptual interpretations of Liveability: This is about turning a large set of reflections on the concept of Liveability into quantitative identifications based on a merge of the Landscape-Liveability Matrix and the Common Analytical Framework (CAF)

3. The planning practice approaches which is about generalising planning experiences into practice recommendations that enables a performance check as basis for the identification of benchmarking criteria- Objective of the present workshop

When trying to identify communalities between cases and case study areas as well as pointing to cases which may serve as "best practices" two sides are apparent:

- A qualitative side where qualities of the practices in the different cases are identified and compared, but also convertible into quantities that can facilitate the benchmarking
- A quantitative side recognizing that policy-making demands the formulation of verifiable and therefore concrete and measurable targets– an issue that is fundamental to ESPON

LIVELAND aims at using both qualitative and quantitative approach to benchmarking

A mixed method integrating qualitative and quantitative research enables quantitative methods that are enhanced with qualitative measures of key processes and outcomes.

Examples were shown on some possibilities in generalising a complex set of qualitative data into a limited number of quantities which enables both visual and digital presentations, and thereby comparisons.

OVERVIEW OF PROJECT TIMELINE

Full Power point presentation available in Annex II

WORKSHOP STRUCTURE

The workshop objectives and procedure of the working session were briefly introduced. Despite the fact that the diversity in the nature of the involved case studies is one of the most interesting and attractive aspects of the project, it is also true the cases are not directly comparable.

With the aims of enable and facilitate the exchange of experiences on landscape planning and management among the stakeholders´, the workshop was designed as follows:

Four themes, four working sessions

Based on previous results about stakeholders self-assessment out of the first project workshop and also the identification of needs and learning goals, the following 4 themes were selected for comparison:

Theme 1: Making of the landscape plan: (Landscape) planning process
a) On assessment and evaluation methods
b) On implementation, actions and measures for protection, development planning and management
Theme 2: Multi-scale and multi-sector approach in planning procedures and decisions.
Theme 3: Participative vision of landscape and branding.
Theme 4: Indicators and monitoring: Impact measurement.

Open discussion on experiences

Professionals of landscape policy and spatial planning shared their experiences in two moments during the workshop (see workshop program in Annex 1 of the present document): a) in the morning the 1º day, Theme 1 and Theme 2 were addressed; b) in the morning the 2nd day, Theme 3 and Theme 4 were addressed.

Representatives from all project case studies, but Ljubljana Urban Region, brough their experiences, shared with other proffesionals, and discussed about the satisfactory outcomes and in term, potentials for transferability into theirown case.

As preparation for the workshop, Stakeholders were kindly asked to undertake a brief individual "homework" in advance, where they provided knowledge and perspective in relation to each theme, identifying the key successfull factors, also hurdles or difficulties and the strategies to overcome these difficulties.

For each of the suggested working themes, a reference out of the project case studies, was suggested. The reference case will act as the "bechmark" offering, to the rest of the cases, the opportunity to learn about their "successful" stories, the experiences that they consider to be "best practices".

The proposed reference cases in each of the themes are the following:

- Theme 1 Offenburg and Midden Delfland (*both having a mature "plan")*
- Theme 2 Province of South Holland and Basque Country representing regional and subregional levels
- Theme 3 Basque Country and Thy National Park
- Theme 4 Navarre

Idea-sharing and transferability

Finally a wrapping up session serves to close the event with some reflections about transferability. This entitled a round questions to practitioners on the key relevant issues from each of the working sessions and also the most important challenges for the transferabilitily to their own practice.

The Workshop closes with the Steering Committee Meeting reviewing Interim Report and decisions on next steps for project development.

BEST PRACTICES FOR BENCHMARKING

An outlook of each of the working sessions is drawn in the present paper.

The full Power Point Presentations of the practices has been included in Annex III of the present document.

WORKING SESSION 1

THEME 1: Making of the landscape plan: (Landscape) planning process

OFFENBURG Presentation by Sabine Gunst

What scale of data?

- In Offenburg, they have data on regional scale (S. Oberrhein, city of Freiburg – Municipality of Offenburg situated outside), which gives hints that are also binding enough but not detailed enough for the municipality.
- A first step was to analyse available regional data and see what data was needed.
- Data was not ranked but developed separately.
- Especially data on biotopes was evaluated before making the landscape plan. Lots of quick changes in this. Lots of interest for biotopes and soil because this is easy to map – and quick changes occur.

Data sources on scale of the "Land Baden-Württemberg":

- Edicts and manuals/guidance to transform legal demands on lower scales.

Data sources on scale of the region (Region Südlicher Oberrhein)

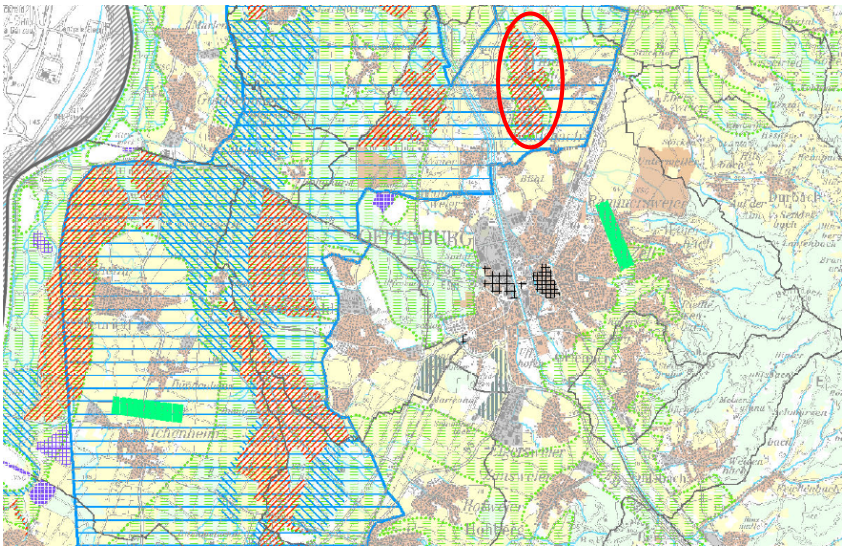
- Regional plans defining priority areas (for biotopes), green lines
- Regional plans to differentiate the development of municipalities (centers, rural areas,…) to allocate or reinforce infrastructure in certain areas.

Data sources on scale of the Kreis (Ortenaukreis)

- Mapping of biotopes protected by law

Example for structure of data base (spot in the north of the territory):

1. Binding guidelines on regional scale (Regionalplan of Regionalverband Südlicher Oberrhein):



Binding green lines / green space (have to be kept without buildings)

Priority areas for:
Biotopes (examplary area)

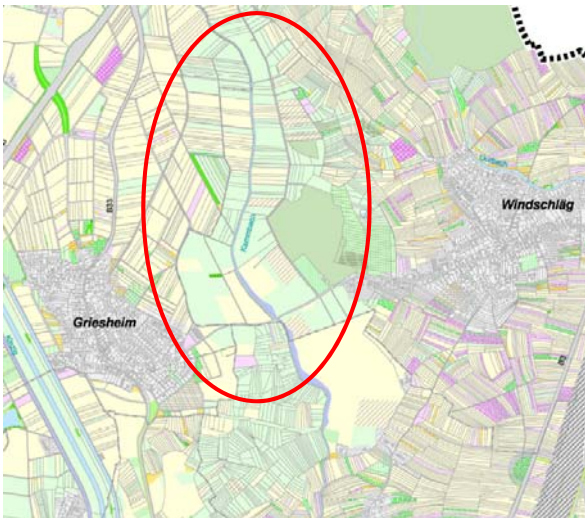
Floods

Exploitation

Sheltering area for:
Groundwater (examplary area)

Example of biotopes in one specific area (Kammbachsenke; surrounding the creek kammback)

2. Types of biotopes on local scale (current mapping for landscapeplan):

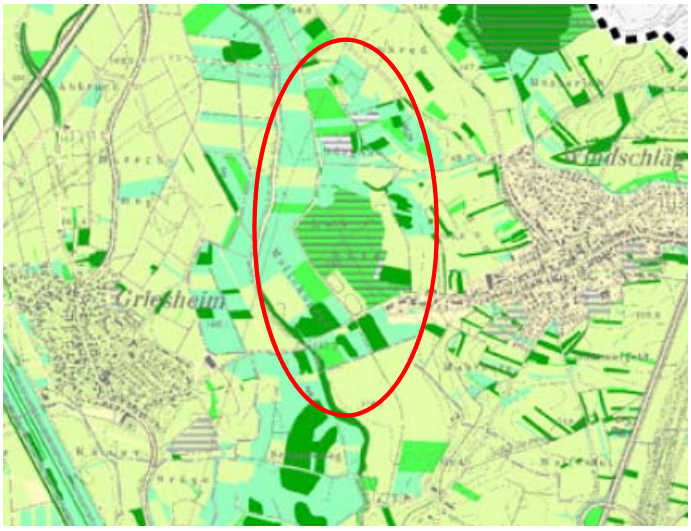


- Creek (Kammbach)
- Fields covering most of the ground
- Few meadows
- Forest
- Orchard (fruits)
- Wood / groves

→ Current intensive land-use doesn't match with valuable and damageable ressources (water, biotopes) in the examplary area

- First we had to look to the binding guidelines, and then we looked at the local …
- Then we made a valuation of the biotypes .

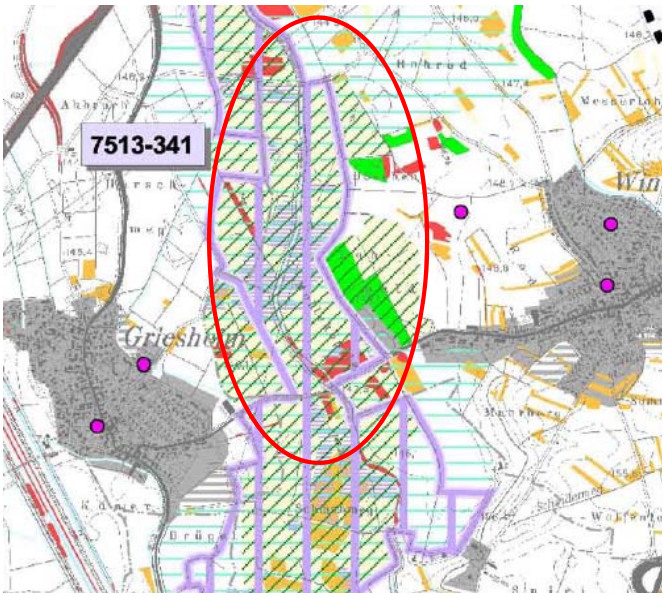
3. Valuation of types of biotopes on local scale (landscapeplan):



The darker green
the more valuable / damageable
by impacts

Also European interest (bird sanctuary) in this area.

4. Areas protected by law (took over into landscapeplan):



- European bird sanctuary

- European Flora-Fauna-Habitat sanctuary

- Biotopes protected by law

- Natural monuments

- Focal area for species protection (Artenschutzkulisse Land Baden-Württemberg)

- Valuable land but with deficits.
- Historical land use changes -> detoriation of nature.

Have liveability been considered?

- With regards to the natural functions, they are important.
- Pure drinking water is important for the people and is an abundant resource that should be sheltered.
- We should also keep the cultural identity of the area, i.e. the cultural landscape elements, especially for the people living in the area.

Analysis between the legal framework and the target and designs of the map -> development of guidelines for the defined areas

Example guidelines "Kammbachsenke" to strengthen the natural functions of **Water:**
- Protection of meadows and forests
- Change of land-use (from fields to meadows) recommended
- Reduce of impacts like fertilizer and pesticides
- Reduce of impacts causing drawdown of groundwater (e.g. sealing of the soil surface)
- No use of flood areas by building or intensive farming fields
- Re-naturalization of rivers and creeks
- Rivers and creeks without agricultural use or buildings in a strip beside the water, to keep space for flooding water and to avoid impact of substances to the water from the fields.

Example guidelines "Kammbachsenke" to strengthen the natural functions of **animals/plants/biological variety:**
- Extensivation of agriculture and yielding of netting elements (green structures, trees, groves)
- Reduce of cultivation of corn (Mais) (avoiding of too much fertilizer and pesticides)
- Protection of the biotopes, especially reeds and wetlands
- Kammbachsenke as habitat for birds

Content of landscape plan:
1. Measures for protection: by law have been taken over
2. Measures for landscape development
3. Measure for landscape structuring

What has proven successful?

Landscape plan presents the basis for measure, and the landscape plan gives the basis for how to compensate certain impacts on the landscape.
In the Upper Rhine valley, we have the problem that people build sheds in sensible landscapes – without permissions – and the landscape plan provides some ideas for how to deal with this .
Sensible landscapes: the LsPlan has a special part with guidelines for allotment gardens.

How to reach higher quality?

Sufficient and up-to-date database
Early communication with land-use planners (it's not formalised at the moment)
Early communications with nature protection organisations (we meet with them app. 2 times per year)
Think about conceptions for dealing with problematic issues.

DEBATE

Question: Where did you talk to the inhabitants?

Offenburg: It was developed in parallel with the land-use plan and here they are obliged to consult the public. It was also sent for hearings, but in the mind of people land-use plan is more important than landscape plans.

The public that we tried to involve was both the people living there and relevant sectorial authorities.

Question: What is the time perspective?

Offenburg: It is 10-15 years. But we are already looking to see if it is still valid (in certain areas).

Question: In Holland it is often difficult to get resources to implement the demands; how is that with you?

Offenburg: It was easier for us to get funding to develop the plan than now to implement it. Now we try to have some elements implemented

Question: If you were developing land-use and landscape plan in parallel, did you consider to include landscape in the land-use plan?

Offenburg: One land-use planner took the information about the sensible landscape areas into the land-use planning process. It was brought in as a conception in the early stages and when the land-use plan was finishing, areas was brought in that can be used for those impact measures to compensate…

Question: More specific should we incorporate the landscape into a greater plan on land-use – or should have a special visibility and personality as a 'landscape plan' in its own right.

Offenburg: In Germany[1], it is different, it depends on the 'länd', and you have to have both plans. We can include everything but it is not binding. Landscape plan is an expert plan and not-binding, while the land-use plan is binding. In other 'länder' the landscape plan is binding so there are restrictions on what can be included. Here the landscape plan takes to role of the land use plan outside of the built-up areas.

It appears that there is a kind of worry for binding plans. It is read as a political fear and not so much the inhabitants.

A similar experience in Navarra; the government has a strong control of the land use in the rural areas. Everything (a house, a path) has to have permission from the government level. We have to regulate whether certain things can go ahead - depending on the nature of the area. The non-built-up areas are in the control of the government level. So there is 5 regional plan covering the rural areas; a spatial plan that regulates the land-use.

Nasuvinsa: the landscape is indirectly covered by the regulations of soil, water etc. at the local spatial plan but a question is what is the gab in our local planning? A high percentage is covered (not a big gap between e.g. Germany and Navarra) but something might be missing. Another question is the 'ownership rights' – who can built? A third question, what is the reality for managing these plans?

[1] The States ('regions') the German federation consists of, are called "Land" (like Baden Würtenberg) or "Länder" in plural.

Offenburg: if I understand you right, there is a lack on local scale? Gemma: No, not really, the local plan covers a lot of the issues through the local spatial plans and the regional plan but the question for the government is, is it necessary to have a landscape plan? Sabina: okay. For us it is useful to have all these elements integrated in one plan; it gives better argumentative strength.

Midden-Delfland Municipality: are the local levels committed to landscape planning? Jose Marcen: We have the competence and the final decision option at the governmental level (if for instance the municipalities don't cooperate).

Nasuvinsa: a question to Offenburg is, is the landscape a perfection of the landscape planning or can this be covered already in local planning?

Midden-Delfland Municipality: perhaps I can rephrase: are the landscape managed prioritised at local level? Jose Marcen: In general, NO, perhaps a few municipalities are aware of the need. At regional level, there is no need to take the landscape into consideration of certain decisions. The question is should there be developed a new tool (e.g. a landscape plan) or can it be included in the current tools (e.g. municipal plans). E.g. if the municipality ask about permission to build something but on two landscape areas (forest and agriculture, e.g.) they have to apply the same measures for the decision. But perhaps they need to differentiate the decisions depending on the landscape elements?

University of Kassel: these structural discussions will not solve the issue of the liveability. The real question is – how makes these landscape/spatial/ plans? Perhaps with a landscape plan, inhabitants might think that finally someone is addressing the concept of (their) landscape and they will come behind it. You need someone to argue on behalf of the landscape and convince others that landscape is important.

Basque Goverment: from a policy perspective, landscape is an abstract concept, so it is important to include the policy level. It is important to raise awareness and as already brought up, the implementation is a constraint.

Government of Navarra: in Spain we have no landscape planners, we have no spatial planners; we have only urban planners. The rural areas are not planned, they are just regulated/controlled. The result of the control of the land use is quite good but we have no proactive vision. Which we should. Jose Marie: Landscape can be a superior local perception of the territory. For instance, an area can be catagorised as 'forest' but the perception of the valley, is not taken into account.

MIDDEN-DELFLAND Presentation by Stijn Koole

Several historic maps where presented first to show the quick development of the area. Smarter development could have made our landscapes and the development more adaptable to present issues such as sustainability. What are our long-term perspectives of our landscape planning:

1. Agricultural identity
2. Openness- wide views
3. Robust water system – water is a very important connecting factor between the urban and the rural (in terms of landscape element rather than function)
4. Robust ecological factors
5. Close relationship with surrounding cities
6. (Cultural) history

Lessons learned as part of the process

1. Midden-Delfland is integrated in rather than separated from the urban fabric.
2. It has a specific role in the region; it is complementary to the urbanity.
3. Different perspectives on the landscape (city in a friend; not an enemy).

On the result of the plan:

1. A key part of the area is agricultural area – with a lot of users – and can only exist because of these users. This means giving them opportunity to make changes if this is necessary for them to keep their function. Therefore they have developed guidelines that show the farmers how they could develop their activities to be in line with the landscape/spatial qualities.
2. No new insight, but typical for peat land: certain ecological values, like meadow birds like the godwit, (Google translates 'grutto' into 'godwit') are dependent from agricultural management.
3. There is no such thing as THE ecological quality. Therefore it is important to establish which types of ecology different groups think about.
4. A landscape is always in the making. There will always be changing but how can we use them for our mutual benefit? A tool for this is to invite public and private stakeholders to work together. It is easier for the farmers to maintain the agricultural landscape than for the municipality.
5. More investments for recreational accessibility in the edge areas. More urban forms of recreation. Example of the tram from Den Hague. Development principles of sight lines and accessibility lines. Make the accessible lines more attractive by designing them as recreationally inviting.
6. Old connecting lines are still important.

Key conclusions:

- Plan is understood as kind of a framework and guidelines for the development
- Relation to the surrounding cities
- Integration into the urban landscape (Integration)
- Specific role for the surrounding urban areas
- Question of landscape perspective -> what is landscape as an integrated approach?
- Farming as producers of landscape.
- Guidelines for the development of landscape

- Protection of views
  - i.e. canaly
  - Delft
  - Harbor
  - Rotterdam
- "Cultural ecology"? -> Birds protection. (Nature protection is not possible without land use)
- Recreation is an important function that has to be addressed. -> Access to the land when not breeding -> multifunctional landscape.
- Landscape is recognized as a concept. But is it also realized to be a construction of the mind.
- Who is going to pay for the plan and the implementation? E.g. farmers
- Transition areas -> relation to the cities. Make the open space accessible. (Individual and public transport)
- Green and blue runners -> old canals as relations between landscape and urban areas= 'connections' or material lines in the landscape.
- Beautification of landscape elements (blue and green runners)

Stakeholder involvement

64 stakeholders involved (organisations, NGO, authorities), during 3 years, and a lot of meetings. One starting points was 'drawing exercises' – asking the question: how could this area develop? We started at too broad a scale; so during the process zoomed into the 'polder' scale (19 polders) – where most stakeholders felt comfortable. The kitchen table approach: going to their homes and discuss with the stakeholders on the basis of the first agreed 6 principles.

Not only on landscape, but also on other elements such as housing, green houses.

Sketch ->polder approach -> back to municipal scale.

A lesson learned: an intensive multi stakeholders approach is a very solid ground for a plan, but it takes time, effort and money.

Dedicated people are important. The zoom-in/zoom-out exercise is also useful.

MIDDEN-DELFLAND Presentation by Kees Boks

Translating LOP into a municipal structural vision:

1. Translating LOP into a land-use plan. Is currently in process and open for commentary. New: Extended possibilities for the farmers, recreation etc. LOP is a reference plan for the Land Use Plan (something totally new). Land-use plan should be approved in June 2013.
2. Incorporate/translate the LOP into Delfland Garden Spatial Vision (a broader regional area from Rotterdam to Den Hague)

As the LOP is a sub area of the Delfland Garden the LOP actions are adopted in the Delfland Garden implementation program .

Implementation Program LOP	Implementation Program Delfland Garden
Long list of concrete measures, to sum up in: • stimulating dairy sector • demolishing solitairy greenhouses • redesigning and restricting unwanted features in landscape • developing access ports within own borders	1. Economic vital landschape 2. Spatial quality 3. Connecting city - countryside 4. Marketing

Success factors
Comprehensive list of needed actions, physical, non-physical
Cooperation between partners, civil servants
Political drive among certain partners
Physical and non-physical actions and measures

Shortcomings	Responses
No sufficient money	Using existing funds 'Red for Green' fund
Too many stakeholders	New consultative structures (but adequate?)
Long term investment program not sufficient	
Too much diversity in action	Bringing focus within each main task

DEBATE

Implementation of Plan

- The landscape development plan has to be migrated to the binding land use plan. (like in Offenburg)
- In the responsibility of the municipalities

Success factors

- List of actions
- Cooperation
- Actions and measures

Questions

Clarification on the 6 grounding principles: In theory, a joint effort. A lot of the information came from the stakeholders but the expert also added issues that might not have been suggested. Some of the principles are also of the type "We don't want…" (green houses e.g.)

The LOP is unbinding but becomes binding as it is translating into the land-use planning. Furthermore there is also a 'social contract' since the stakeholders agreed on the 6 principles.
Ownership is one social connection to the plan; awareness is another. (the example of the rich Rotterdam house owner that went from tearing down his new house in MD, to wanting to restore it due to its cultural value).
Who took the initiative to this process? It was a municipal initiative, basically one person – and they raised the money to conduct it. However, there was a national subsidy for this kind of process at the time.

WORKING SESSION 1

THEME 2: Multi-scale and multi-sector approach in planning procedures and decisions

SOUTH HOLLAND, Presentation by Arjan van de Lindeloof

The national planning in Holland focuses increasingly on the European dimension of the Netherlands, since it is in the midst of large, economic clusters. The planning principle is decentralisation and simplification of the overregulated Netherlands with a focus on economic growth, infrastructure, liveability and security.

SOUTH HOLLAND, Presentation by Bernadet Keijsper

Gives the regional perspective on the green spaces of South Holland that is now the responsibility of the province (previously was a nationally designated ecological/green open space). They develop a regional land-use plan (a functional plan?) and a spatial quality plan. This relates to landscape in that it is a landscape catalogue.

- Randstadt -> Urbanization
- Midden-Delfland -> by law a green area.
- Designated to the province of South Holland (Keep the Green Belt)
- “Provincial landscape”
- Two plans
    - Landscape plan
    - Plan of spatial quality
- 16 areas with quality guidelines and MiD is one of them.
    - Description of qualities
    - Ambitions (not detailed)

The landscape (the natural resources) is the foundation for planning – with the aim of reaching higher spatial qualities. A combination of area quality guidelines (regional scale; spatial characteristics/spatial qualities/ambitions).

Regional Spatial plan includes goals and maps about spatial functions and about qualities.

Some images showing various aspects of the landscape of Midden-Delfland:

- The high pressure on Midden-Delfland is why the national government has the borders around the green area. is no longer ‘green space by law’ since (2011) the national government has no longer goals and maps about ‘landscape and green’ and about ‘urban development. These are decentralised.
- Linten = “ribbon” (English) = a row / line of buildings along a road, canal or watercourse.
- Intensive recreation
- Maintenance of the (cultural) landscape

Observation of multiscalar approach municipal and region:

- Mutual goals; mutual gain, mutual basis)
- Cooperation (sometimes difficult to take responsibility; many people working on same task)

DEBATE

ESPON CU: Your guidelines are very detailed but yet non-binding?

Province of South Holland: It is a balance; we have very detailed guidelines in order to gain influence by giving examples. Normally the provins will develop this to cooperate with the municipalities; however here the process was the other way around. Since the LOP of MD was already developed; the province could take this as background material for developing their guidelines.
Province South Holland gives regulations about functions (land use) that binds municipalities and also non-binding guidelines / examples about qualities.
The process of MD has also inspired other areas of the South Holland province to develop their LOPs. The example of MD has been a trigger in this respect.

REGIONAL PERSPECTIVE FROM THE BASQUE COUNTRY by Izaskun Iriarte

Strategic

- Landscape has been traditionally considered into spatial planning mostly from the point of view of conservation and aligned with sector policy (protection of rivers, coastline management, renewal energy, agro-forest)
- With the Adhesion to ELC the Basque Country takes a step forward towards a desirable integration into spatial planning
- The incorporation of landscape as a key issue- a value for economic and territorial development- into the Territorial Strategy of the Basque Country, in the revision of the DOTs- The Spatial Planning Guidelines

Operational

- A draft bill - ACT, has 5 key instruments for Landscape protection, management and planning:
  - CATÁLOGUES: Analyze and evaluate landscapes in each of the functional areas and define quality objectives.
  - GUIDELINES: Legally incorporate the landscape quality objectives into territorial planning.
  - ACTION PLANS: For implementation of specific measures.
  - STUDIES OF LANDSCAPE INTEGRATION
- The draft of the Landscape bill –ACT was presented to the Basque Parliament in the previous legislative period but it was never approved. The current Basque Government is reconsidering its regulatory approach to landscaping.
- Three pilots “Landscape Catalogues” are being developed in three functional areas, one in each provinces of the Basque country. The “functional areas” are those areas in which the Basque territory was divided for planning purposes.

- Operational integrating landscape: Territorial plans are made by the Regional goverment for the Functional Areas, which are not admiistrative but planning areas So the landscape guidelines are made by the Region and they are binding for the territorial plans in the functional areas.

- The master plans are developed by the muncipailties and are exclusively compoetnece of local level

- Coordination and articulation between different administrations. On one hand all planning instruments are subject of SEA and this requires a specific procedure for coordination among different administrations and public information.

Besides the COPV Committee of Spatial Planning of the Basque Country is the top advisory board, is perceived as a key instrument for the coordination between different administrations in the area of spatial planning (including coast) and urbanism) in the Basque Country.

How does the COPV works?

1.-Competences:
Development of the basic criteria for the policy on Urban Planning and in accordance with the provisions of economic planning for Basque public sector.
Propose specific measures to coordinate the actions of Territorial and Urban Planning implementation by various government departments as well as other government of the Basque Autonomous Community.

2.-Functions:
Reporting planning instruments: Guidelines for Planning, Partial Territorial Plans, Sectorial Territorial Plans.
Inform prior to final approval of urban planning: the General Urban Plan, Planning Subsidiary Rules, Draft Delimitation of Urban Land, Performance Programs and Special Plans.
Report Plans Natural Resource Management.
Reporting prior approval by the Minister of Housing on requests for transfers of standards of land for housing construction VPO.
Report on urban zoning and use different free zones and clearances under planning (art. 50. TR 1976 and Decree 133/96).

Landscape Catalogue in Laguardia as practice to analyse in Liveland Project

3 pilot projects to test these new instruments a well good result based in participation;

At the moment we have to reconsider the results of this test. It is necessary to have a legal framework but we have to decide whether to go with the Act as it is or if we should include other instruments.

Gemma: the catalogue was presented last Wednesday and I will translate them for distribution. It is very interesting in that they analyse very different elements of landscape (including sound- and noise-scapes but also the perceptions of people) - perception done as points in the landscape where people are asked about their perception of the landscape there. I.e. a very thorough consultation.

Questions:

How to get from analysis to objective? Still a very new result but not only analysis.

What is the process in relation to landscape catalogues?

Stage 1 Landscape characterization
The catalogues delimitate landscape units for its evaluation and characterize the landscape in each of the units by means of:
• The assessment of the evolution of landscape through time
• The identification of landscape values
• The assessment of current landscape dynamics and key drivers

Stage 2 Landscape Evaluation
Besides the landscape units, the catalogues also define "Areas of special landscape interest". Those special areas are defined as such due to their singularity, rareness, fragility, level of degradation, identity value or whatever other aesthetic or perceptive value.

Stage 3 Objecitves
The analysis and landscape evaluation in the catalogues will help in defining the "objectives" that will be later translated into landscape guidelines.

Stage 4 Guidelines
This guidelines will set the framework for landscape planning and management actions to be incorporated in future spatial plans
The landscape guidelines „normatively" incorporate proposals to landscape quality objectives
territorial planning

Not only physical characteristics; but also economic perspective, agriculture/industrial (vineyards), cultural elements, urban regeneration elements. Also contains some objectives of the visions for the landscape.

LANDSCAPE CONSIDERATIONS FROM by Jose Antonio Marcén

The example is that of a wind farm close to a Natural Park- competence of Goverment of Navarra- that is being analysed in a wider geographical context. So regarding landscape they are thinking not only in turns of whether the base is located within a certain category but how the landscape is influenced.
In the concrete decision, the local authorities and the investor were very surprised by the rejection (of erecting a wind mill in a certain location) due to landscape considerations since this was a new consideration. Mind-changing perhaps?
A general discussion on how to balance regulation and holistic landscape planning. One issue raised was that perhaps it is necessary to differentiate between important issues such as infrastructure where a compromise always have to be found and other elements (such as buildings) where a cooperation on e.g. design can be fitted to suit – or at least not conflict with –the landscape.

Finally a round of impressions:

University of Kassel: it becomes clear that when looking at the cases presented it is obvious that the planning process starts with an issue that needs to be solved.

Bosch Slabbers: perhaps the question is to be proactive and not just react to problems. I.e. create a flexible approach that can be adjusted to the arisen problems.

FIELDTRIP QUALITY OF OPEN SPACE UNDER URBAN PRESSURE

- Agrarian landscape: cows in the meadow, agrarian bird management, walking paths and local products

- Transition zone of city and countryside: ‘slow roads’, recreational ‘portal’ and (intensive) recreation area

- Border between open dairy landscape and closed landscape of horticulture under glass

- Construction of new highway, challenge: comply with landscape quality objective

WORKING SESSION 2

THEME 3: Public participation and branding

THY NATIONAL PARK by Signe Kappel

Process of establishing the park; how to we run it with participation today; and branding.

Establishment process

Context: The Thy National Park Agency called 'Nationalpark Thy' is responsible for the management of the NP area. It is set up as a foundation (Nationalparkfond Thy) with a board and an (advisory) council. Many instruments (like funds and formal power of protection) lie in hands of the ministry of Environment and the municipality Thisted.

Main challenge of the NP Agency is implementation of the National Park Plan (NPP), which was approved in April 2010.

National park is a fairly new thing in Denmark. All of the planning is already there in Thy; the national park comes on top of this as a new possibility; a bottom-up process where they are given some possibilities.

It is stated in the law that the minister can only establish a national park if there has been a public survey of the interest for the park. When the local hear the word 'national park' they are sceptic because they think 'preservation'. So one first step was to make them think differently about the concept of a national park.

The process of establishment:

- 400 participants in the first meeting. This number has since diminished a bit….
- The process was loosely steered by the steering group, and the stakeholders were divided into four thematic groups: Natural values, Cultural values, Business and … , Recreation and …
- Extent/border of national park was agreed upon by the citizens (nature group and business group).
- One precondition was that there can't be implemented new restrictions on the agricultural land.

One of the most interesting things about national parks in Denmark is that it is neither a top-down or bottom-up process: the Ministry prepared the legal framework (the Act on NP) that made it posible for the local level to take the initiative to establishing the NP – which ultimately had to be approved by the Minister and thus you can argue that the NPP was mandated to finalise this process. However there was no requirement from the Minsitry that a NP should be set up at all.

They have, however, since received their own budget for running the NP (i.e. the Ministry obviously supports the establishment of NPs in Denmark).

Daily work

It was hightlighted that the NPP is a working/activity plan – which is to be carried out by cooperation (on a voluntary basis) with the municipal, the national (environmental) authorities, and other public and private actors.

- 25+ permanent volunteers, 14 local in the council; 19 advisory local citizens (members of council and expert group have to be organised – ideally local members from local sections of the NGOs).
- Volunteer coordinator: how to keep the volunteers engaged – to ensure that the national park shows its appreciation for their work.
- Several project employees (bicycle tourism; business development potentials).
- Since Thy is not an authority they only get anywhere with voluntary work. A positive attitude is the way forward – which is also related to the branding process.
- High level of recognition in the local population (TV; knowledge of the NP).

Challenges/consideration:

The challenge during the set-up of the NP was the (local) agreement on the content of the NPP, today it is the implementation of the NPP in daily work but also the continued work with the NPP – since it has to be renewed (every 4 years – in theory at least) and adjusted to reflect the local intentions with the NP.

- price of high level of participation; time consuming; maybe not all groups are represented; how much should the process be steered?
- Full participation process is needed when you're making the plan and thus need the input.

It is a public foundation with regular employees and which is steered by a council and aided by local advisories. The strategic decisions are taken through the continued work with the (coming) NPP and then each activity carried out (e.g. branding; tourism bicycling) is to reflect the implementation of the (current) NPP. More 'advanced' landscape activities such as e.g. moving on the pine plantations (with the aim of creating more open dune spaces) are then a continued cooperation activity with e.g. the national forest agency. So while the NP foundation doesn't have the authority to make demands, they have the argumentative power to guide the landscape development through the existence of the NP – and from this they also have the resources to facilitate such cooperation btw. e.g. Thisted municipality, the nature agency and private land owners. In that sense they can be viewed as mediators or coordinators when it comes to landscape changes.

Interesting to dig into how landscape can be managed at a local level without actually shifting the formal power to the NP organization or without setting the landscape 'aside' through protection only – and thus also lots of practices and very new ways of inter-linking the different administrative levels with landscape.

DEBATE

Tecnalia: interesting the use of the brand as economic potential and the very voluntary (in contrast to the Spanish experience) participation process.

Midden Delfland Municipality: the use of landscape in a broader sense (more than a nature reserve but also that the nature reserve adds to the success) and the participation/ communication process.

Basque Goverment: interesting how it has been divided the stakeholders into the groups. Very useful for acknowledging the different wishes and perhaps also useful for reaching compromises.

Alterra: balancing nature protection and the wishes of different visitors.

WORKING SESSION 2

THEME 4: Indicators and monitoring

OFFENBURG EXPERIENCE by Sabine Gunst

Indicators at the local level were presented.

Offenburg shouldn't be a reference case, but rather a learning case.

We have a big catalogue of indicators but they are only suggestions. The municipality choose only a few of them. The examples of suggested criteria:
- Impact measurement is the most important for us.

The demands for impact assessment in the landscape plan allow us to include issues that are more than "just" nature indicators.

We have a long list but at the moment we are not capable (economically/ capacity-wise) to carry out them all.

Ideas for monitoring:

- Data available in other departments? (Bicycle programme in Offenburg)
- Ask the people in e.g. 10 years intervals?
- We know how to measure the impact on nature (ground water; biotopes) but how do we measure the more fluffy thing?

NAVARRA EXPERIENCE presentation by Jose Antonio Marcén

CSPT has the task of monitoring spatial use in Navarra. Therefore the Observatorio has been asked to develop a monitoring system that the CSPT can use for this task.

Indicator systems requires a profound understanding of the goals of territorial policies.

Suggestion for the project:
- Make a catalogue of indicators (indicating which are relevant for which issue).

It is extremely important to distinguise between:
- Indicators monitoring landscape
- Indicators monitoring management of the plan-policy action

Clear objectives and targets for the monitoring indicators are needed.

CLOSSING SEESION– KEY ELEMENTS FOR THE FUTURE PROGRESS

Tecnalia dynamized the wrapping up session, where the stakeholders were asked to identify, in each of the 4 themes addressed during the workshop

- What are the factors of success?
- What are learning lessons that could be implemented in the own case?
- Shortcomings and constraints

Landscape plans elaboration and implementation and multi-scale approaches

- Data is an important issue, lack of quality data at local level, downscaling still needed
- Financial support makes a difference: both in developing the plans but most important in the implementation of the actions designed in the plans
- Formal plans: There is a debate regarding the need for an formal plan legally binding versus the integration of landscape considerations in the already available plans and instruments of the planning system (land use plans at local level or spatial planning plans at regional/subregional level)
    - From Navarre and Basque Country is perceived a need for starting with a top-down approach and tools, being complemented with bottom-up ones.
    - Landscape is no longer perceived as only been ecological aspect.
- Expertise: besides the management, necessary to have experts on landscape planning involved in the elaboration of the plans: remarkably important for the consideration of liveability issues
- Stakeholder involvement/ Public participation/ consultation: good governance is crucial for the sucess of the plan design and implementation.
- Multi-scale approach: multi-scale approach is key aspect.
    - Guidance at regional level is seem very relevant (this is the perspective of Basque Country and Navarre) having the territorial vision and strategy- Top down approach.
    - The bottom-up approach as been considered a succesful factor in Dutch and German cases, feedback to regional level.
    - Concept of landscape combines both the orthodox understanding of protecting nature and adjusting to reality.

Whereas Offenburg, Thy NP and Midden- Delfland present proper landscape plans, Navarra and Basque Country, have no proper instrument for landscape planning. However the spanish case studies traditionally addressed landscape components from a spatial planning/geographical perspective. They lack the bottom-up approach that provides a participative and social view to landscape.

Indicators and monitoring

- Aim of the evalution: What do you want to do with the evaluation? Is it possible to measure landscape as a whole thing? (Doing better or less?)
    - Need for evaluation does exist? But comprehensive?
    - Obligation to measure? What would you choose, what are the right things to measure? How are the things measured?
- Catalogue: Good to have catalogue of indicators, but hard to have them adapted to every case.
    - Offenburg: Indicator catalogue is interesting but it is difficult for us to apply all these indicators from various scales and sectors in our work.

- Do you feel good with your landscape -> soft factors (more than sectoral aspects) especially with regard to landscape and livability

- Perception-related monitoring system? How to measure the "fluffy" thinks? How do I measure? South Holland has experience with defining goals and guidelines on spatial quality and 'subjective' issues. From these goals indicators (measurable definition of political goals) could be developed.

- Thy National Park: it is the indicators on the fluffy things that are / it's about finding the right things to measure and define the minimum amount of things to measure.

- How do you measure spatial quality? What is beautiful? -> Subjective issue.

Midden-Delfland Muncipality:

- Enhancing spatial quality is one of our goals but how do we define 'spatial quality'?
- The aspect of liveability makes it difficult to set up indicators for landscape. There is a need for monitoring; you have to be responsible for your policy, but I don't know about a comprehensive system.

- Socioeconomic indicators
  - Development perspective? What of the actions and measure in the plan have been conducted? But that does not say anything about the impact on livability or socioeconomic situation?
  - Does that depend on the formulation of the targets?

Additional debate:

Nasuvinsa: remember that indicators allow comparison between e.g. Norway and Spain. LiveLand contributes to this. Indicators might be problematic but please try to set up a minimum of indicators.
Goverment of Navarra: keen on the indicators for the use for strategies; not for the implementation of actions.

- It might be possible to compare the examples in concerns of livability. That is the idea of ESPON? The Indicators are not suitable for local regional.
  - Matrix of livability: are indicators directed to the objectives of the plan.
  - Other indicators address physical space
- Efficiency of CAF indicators -> fixes a minimum of indicators for multiscale approach (within the CAF?)
- Indicators for territorial strategy might be more interesting than indicators for the plans? Because Plans might only concern sector interests, but the development of the territory is interesting.

Basque Goverment: a specification of the landscape indicators should be a perception. Indicators without perception (land use?) is already developed in the sectors (e.g. environment).

- Indicators should be related to perception.
- Important to related to the Territory

ESPON CU

- How do you want to develop your landscape plan
  - What is the plan for? ->What is the objective? (Why are you starting this process?)
  - You need instrument to measure the achievement of the goals? This is secondary.
  - Policy maker should formulate the questions, but it is not the job of the scientists. Scientists might support.
  - But most plans come out of experts ideas?

- Example Glass houses: Goal is improvement of the landscape?-> landscape character is the objective. The other is a sub target.

University of Kassel

- Landscape is a question of policy -> that is politically been decided.
- Where do the objectives come from? For example Thy and MD?
- Do we want to know if we achieved the goals? Than we need indicators!

Participation and branding

Offenburg : my challenge is how do i reach the people that are silent; how to engage? also, the people that agree are usually silent.

ESPON CU: could the project do a cost-benefit analysis of the various types of public participation (formal/informal; in relation to the complexity of landscape planning)
Government of Navarra: legal participation or quality participation; cultural identity of the participants (cultural perception of landscape in the "backpack" of the e.g. danish people);

- Good examples of participation processes in Thy and MD?
- How to reach the people that are not "loud"? How do you reach all parts of society?
- Positive commitment not only contra reaction.
- Cost-benefit analysis of the participation process? Do they fit to the type of process and planning? (e.g. landscape evaluation?)
- HOW & WHO?
- Participation is also needed for the implementation of a plan (e.g. commitment, money, active support)
- People might carry out the actions of the plans?
- Bottom up? Especially when there is no money!
- Important to provide feedback to participant.
- Does it really not work when it is only voluntary? Probably should be supported by a leader and money (example from Thy)
- Legal participation or quality participation
- Cultural identity within the participation.
- There is a multitude of interest in the process. First it might be very exhausting but might be very efficient in the phase of implementation. Following the achievement of goals (ownership of landscape) is the biggest benefit! (Network of activists)
- Find new ways to relate to younger generation. How to do that (Also those in the cities). Maybe new communication ways
- Education?
- Not reasonable to take opinions on plans already made? (Like in Spain / Germany) Fight of planners and agents? (And public?) -> better to achieve a win-win-situation

- It would be important to distinguish here between "regulated and formalized participative processes" and processes to acquire a "social and participative vision on landscape"

KEY ASPECTS WITH REGARD TO LIVEABILITY

- Having drinking water clean and fresh water
- Identity from regional specific types of land use (Thy, MD…)
- Experiencing of seasonal changes (progress in natural processes) -> landscape plans
- Manage your own piece of land (does not have to be property) -> also easy access to landscape
- Having a role -> ownership of plan and territory
- Feeling of togetherness / helping to make a plan
- Multifunctional landscape with a certain complexity many people can enjoy (many different uses) (landscape is in the mind of people) -> a rich landscape / high quality
- Recreational aspects?
- What do you expect to find? If the landscape matches your expectation it is liveable?
- What is the character of the landscape?

SHORT INTERLUDE BY ERIC LUITEN

Eric Luiten Professor of Cultural History and Spatial Design at the Faculty of Architecture has been appointed as State Architect for Landscape and Waterscape.

5 main questions to ask for MD:

- Which future spatial image for MD is correct:
  - What should the landscape look like?
  - Park or Landscape?
  - What is the image?
- What should be the role and weight of dairy farming? A goal or a mean?
- Which species is the ecological 'goal'? (meadow related or forest related) What is the dominant species / what is the reference?
- How should we organise the ownership to this area?
  - Protection & Management?
  - How to distribute responsibility?
  - Property or Protection?
  - Top down / bottom up.
- Who is profiting most from a continuous green MD? And who takes care of that?

And in general terms:

- What kind of landscape do you want?
- How do you deal with the interface between rural and urban?
  - What is the relation to the surrounding areas?
  - How to steer development?

ESPON

Third Stakeholders´ Workshop

"Reflections on policy recommendations and potential for transferability"

Workshop summary

16th and 17th September, 2013, Bilbao, Spain

Prepared by Tecnalia

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

This third and last project workshop with stakeholders in Bilbao, September 2013 aimed at presenting the outcomes from the comparative analysis undertaken and also preliminary key messages for policy development towards more sucessfull and effective integration of landscape into spatial planning. Results from this third workshop should serve as input for the ellaboration of the policy recommendation guidance for best practice in landscape and spatial planning and transferability.

The key objective of this last workshop with stakeholders is to address the guidance for policy development and the transferability assessment, generalizing the experiences, best practices and benchmarking of content and procedures of landscape and territorial planning and their impact on sustainable development as inspiration for future planning approaches (systems, planning and cultures).

The evidences and lessons learned from the outcomes of previous project activities should contribute to the elaboration of policy messages, guidance and recommendations for ***"Planning liveable landscapes in the involved regions and beyond at EU level".***

Besides a discussion on the usability of available **ESPON data and results** from previous and also current projects to reinforce the project outcomes should be adressed in the workshop

EXPECTED RESULTS

- Validated recommendations for the integration of landscape and spatial planning in the involved stakeholder regions and municipalities
- In-puts for transferability analysis of the elaboration of recommendations for the integration of landscape and spatial planning to other European contexts
- Hints on policy messages for ESPON and EC
- Identification of knowledge gaps and definition of links with ESPON framework

WORKSHOP METHODOLOGY

The event will be divided in 3 main parts:

PART 1 -Presentation of key results from project research,synthesis of best practices and introduction to key policy messages for project case studies. These messages will take form of "recommendations" to professionals in the stakeholder regions to improve their processes and performance of landscape and territorial planning

PART 2 –This part will split in two other:

- In depth analysis of Landscape Catalogues and Planning Guidelines"in LaGuardia Rioja Alavesa.
- Field trip Regeneration of Bibao Ría"

PART 3–This third part will split in three parts;

a. Open debate on transferability and policy recommendation at EU level - Guidelines for its applicability to regional policy and practice in other EU regions
    - Need for evolution of certain EU policies
    - Regional EU typologies?
        - Legislation/regulation vs flexible instruments
        - Top down vs bottom up approaches
        - others

b. Key policy messages to EU (DG Regio mainly), the CoE and national authorities will be highlighted to encourage, evidence based, the incorporation of landscape in territorial planning in the framework of territorial cohesion policies. These policy messages will be conceived as messages for rising awareness on relevant aspects, challenges and opportunities for strengthening the consideration of landscape in territorial policies towards sustainable development

c. Discussion on the use of ESPON indicators and contribution to ESPON

WHAT IS THE ROLE OF THE RESEARCH TEAM (TPG MEMBERS) IN THE WORKSHOP?

- **Provide supporting material for reflection and discussions**
- **Observe and capture the essence of the stakeholders' interventions and do not interfere in their statements**
- **Facilitate and moderate the working sessions, wrapping up the outcomes, draw conclusions and clarify both methodological and content related issues**
- **Besides, the research team will support stakeholders in the preparation for the workshop**

September 16th 2013

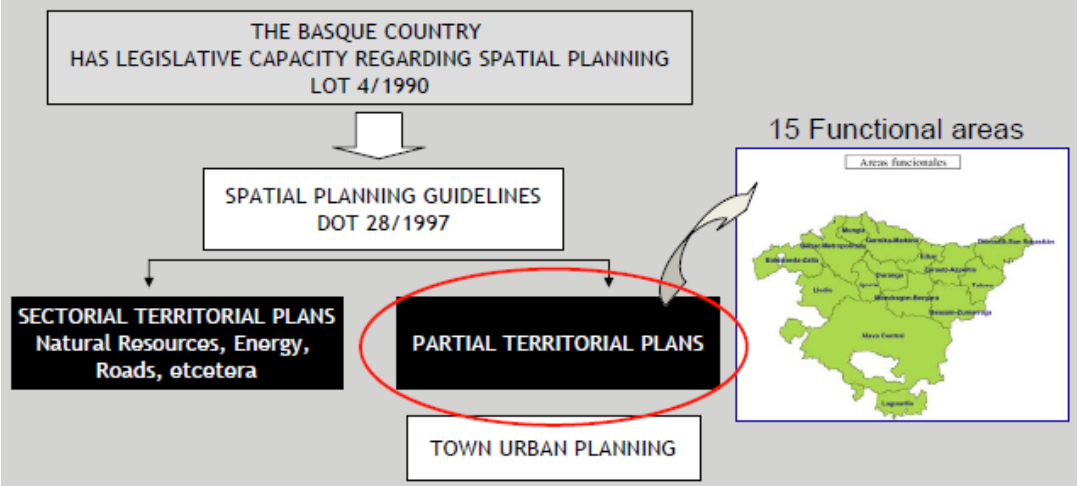
Opening and welcome

by Miren Izaskun Iriarte Irureta Viceminister of Administration and Territorial Planning

She welcomes all participants to the Basque Country and introduced his team in the department

Mº Elena Lete Director of Spatial Planning and Urbanism, Jesús Mª Erquizia Service Manager, Rafael Sanchez and José R. Varela technician in spatial planning and urbanism

Reviews the Basque Spatial Planning configuration.



Outlines the storyline of the policy commitment of the BC with Landscape.

Three main milestones could be identified in this process of political awareness with respect to landscape:

- First, in the Basque Country the commitment with Landscape was first introduced in the Basque Strategy for Sustainable Development 2002-2020, which included among its key objectives the elaboration of a "Catalogue of outstanding and singular landscapes in the Basque Country"[1], with the aim of elaborating plans for its conservation and restoration. This first catalogue has a very biased perspective on conservation and preservation and it is not really in line with the spirit of the ELC. However it was the first instrument focusing totally on landscape in the region until that moment.

- Second, with the revision and modification of the Basque Territorial Strategy- and Regional Spatial Planning Guidelines (DOT)[2] in 2010, a specific chapter on landscape was introduced. The

[1] Catalogue of outstanding and singular landscapes in the Basque Country http://www.ingurumena.ejgv.euskadi.net/r49-u95/es/contenidos/inventario/paisaje/es_catalogo/indice.html

[2] Spatial Planning Guidelines http://www.ingurumena.ejgv.euskadi.net/r49-565/es/contenidos/informacion/dots/es_1165/indice_c.html

New Territorial Strategy devotes his chapter D5 to Physical Environment and Landscape and points out that: (…) landscape is the reflection of the care and affection of the inhabitants for its territory, being a conditioning element for the kind of activities on it and the way they are developed.

- Third, in the year 2010 a proposal for a new Landscape Law was launched and it is now in the parliament pending for approval. This law, inspired by the ELC, aims at giving "landscape" legal entity and integrating landscape into planning instruments. The draft bill still under approval in parliament, regulates the method for the elaboration of the catalogues, the process for approval, coordination with the planning process- in timeframe and milestones, guarantees the consideration of landscape guidelines into the spatial planning instruments. The law incorporates a broader approach to landscape, overcoming the biased perspectives identified in the previous experiences.

The process of finally approving the landscape draft is underdevelopment. Top-down approach from the regional down to the municipalities. The aim is homogenize procedures and guarantee a common instrument for all the territory.

Euskalhiria 2013 Basque Government congress on spatial planning is devoted to Landscape and Liveland will also be there.

Introductions to the workshop program by Efren Feliú Tecnalia

After a round of introduction by each of the participants in the table, Efren excused the absence of Matej Matej Gojcic stakeholder from Slovenia, Sabine Gust from Offenburg who could not attend due to financial and administrative constraints in her administration and Sara Ferrara project officer from ESPON who was unable to attend due to a medical condition.

Workshop dynamics

PART 1

- Presentation of key project outcomes and validation of methodologies and results of the analysis by the stakeholders
- Afterwards individual work and common feedback session

PART 2

- In depth analysis of Landscape Catalogues and Planning Guidelines" in LaGuardia Rioja Alavesa by the Lead Stakeholder
- Presentation of Urban Regeneration in Bilbao by Alfonso Martínez Serra Metrópoli 30
- Boat-trip "Regeneration of Bibao Ría"

PART 3

- Policy recommendation at EU level –
  - Individual work and sharing session
  - Open debate on transferability
- Discussion on the use of ESPON indicators and contribution to ESPON

The benchmarking within LIVELAND project is conceived as a process of comparing and evaluating different practices in the involved case studies with the aim to achieve a higher level of performance, here specifically providing criteria for successfully integrate landscape planning and management into spatial planning and in term, in regional strategies.

The proposed methodology for undertaking the benchmarking exercise in the Liveland project is as follows:

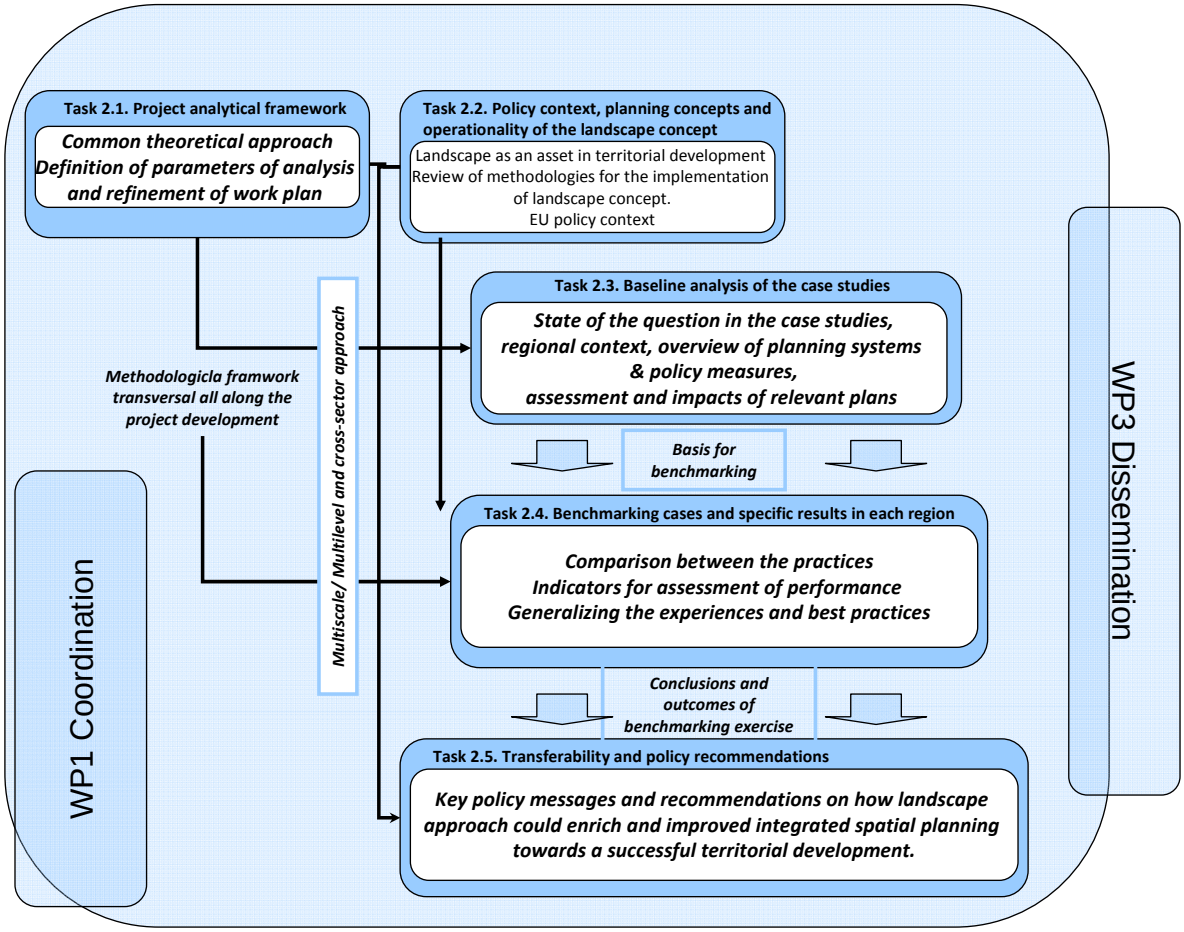
- **Stage 1. Domain to benchmark.** The domain to benchmark is -Landscape and spatial planning practice- in six selected case studies in Europe.
- **Stage 2. Setting the ground for benchmarking: Current status**. A characterization of the case studies is basic input for the benchmarking exercise. The policy context a long side the spatial character, the planning system and competences, the government challenges, vision and strategies and data sources, have been included in the "Baseline Reports" for each of the case studies, together with short description of other potential reference cases
- **Stage 3. Identification of best practices.** For the benchmarking certain practices, plans and/or instruments are selected, primarily based on the learning goals stated by the stakeholders particular as an output of the 1º Stakeholders workshop and workshop follow-up exercises. A common model for the systematization of the evaluation of such practices is defined in the Common Analytical Framework (CAF).
- **Stage 4. Comparative analysis**. The analysis entitles the use of comparative indicators, a proposal for grouping the cases under analysis and the assessment of results
- **Stage 5. Gap analysis** with regard to stakeholder's challenges and goals. Transferability analysis to other cases in the European context
- **Stage 6. Draft guidance towards best practice in landscape and spatial planning** as an input to General guidelines and recommendations for policy development in the final phase of the project.

Figure 1 Stages for benchmarking methodology in Liveland project

The first workshop feed the Baseline Analysis and was alinged to stage 2 and 3 of the benchmarking method approach as a basic input for the comparative analysis exercise.

The second workshop was aligned to stages 3 and 4 of the benchmarking methdo approach, serving as a starting point for the debate on the key elements to concentrate on in the benchmarking exercise.

This third and final workshop is aligned with the last stages of the methodology.The transferability assessment and guidance for policy development is being addressed as a final stage of the project, generalizing the experiences, best practices and benchmarking of content and procedures of landscape and territorial planning and their impact on sustainable development as inspiration for future planning approaches (systems, planning and cultures). The evidences and lessons learned from the outcomes of previous project activities will contribute to the elaboration of policy messages, guidance and recommendations for planning liveable landscapes in the involved regions and beyond at EU level. Available **ESPON data and results** from previous and also current projects will be used to reinforce the project outcomes.



Next Key dates

Fourth Steering Committee meeting- 15-16th Sept 2013 (Bilbao) andThird stakeholder´s workshop
15th October 2013: Draft Final report
31st January 2014: Final Report
June- December 2013: Once all activities has been finished this period will be mainly focus on dissemination

PART 1

Benchmarking results: quantitative (CAF)/qualitative (questionnaire) approach and interpretation of outcomes by Rasmus O. Rasmussen Nordregio

Stakeholder experiences from the stakeholder group

An important part of the project has been the exchange of experiences, ideas and visions between the stakeholders, aiming at using this as a process of learning across the cases. A key issue in this connection is of course the specific needs and learning goals which have been expressed in the initial project planning procedures, throughout the workshops, and also in the later systematization of the practices evaluation.

In order to compare the experiences a pre-set criteria was defined on the basis of the following principles:

1. Stakeholder's needs and learning goals (already addressed in Second Workshop).
2. The analysis of the practices of making and implementing local and regional plans, which give guidance to future measures of protection, development and management of space. For the quantitative evaluation of "Planning Practice" in each of the project case studies, a Common Analytical Framework (CAF) has been developed. For the more qualitative aspects, a questionnaire was also elaborated.

Quantitative evaluation of landscape planning practice

The overall goal of the Common Analytical Framework is to develop a framework that can be used to assess the performance of plans and policies with respect to landscape as an asset in regional development. Furthermore it intends to provide input to the identification of the landscape as a source of liveability and well-being which can contribute to the overall aim of the LIVELAND-project in several ways.

The qualitative approach to the CAF aims at:

- Identify good and best practices of knowledge based decision making for liveable landscapes in the stakeholder regions, in particular of landscape and spatial planning, and of their impact on regional development.
- Define criteria for the integrating of landscape and regional strategies.
- Identify actions or measures in the stakeholder regions which have proven to be successful in implementing combined landscape protection and socio-economic development.

A large set of qualitative characteristics tend, however, to become very complex and therefore difficult to recognize similarities and differences in the regional approaches beyond the comparison of individual statements.

As a consequence a quantitative approach has been developed aiming at identifying the overarching characteristics across the regions and cases at large. This has had implications on the CAF aiming at ensure:

- Consistency ensuring the logic of the questionnaire to be evident for the partners;
- Convertibility aiming at ensuring a qualitative characteristic being convertible into one of the following:
    - A *Unidimensional scaling* method such as the Likert scale approach (for instance a scale from 1 to 5 showing a range from 1=strongly unusable to 5=strongly usable) where the output in this case would be a number between 1 and 5;

- A *Categorical quantity* (for instance a set of categories within the same framework such as "Public involvement in planning procedure outlines □; Public involvement in drafting plans □; Public involvement in planning decisions □; Public involvement in plan revisions □") where the output in this case would be a number between 0 and 4.
- A *Binary quantity* with the range 0 and 1 indicating not existing and existing respectively. The difference between the binary and the categorical quantities is that any registration of a binary quantity would be independent on other quantities (eve others may be depending on the binary) while the elements in a categorical quantity are related to the same topic.
- It has been decided to this limited set of scales in order to keep the response options both relevant and transparent for the partners.

➢ Completeness – In order to ensure comparativeness the body of the questionnaire should be based on components which are relevant for all cases.

Dimensions of the CAF matrix

As a means of providing overview to the analysis the CAF has been structured in two dimensions: the functions, and the components.

The ***functions*** are defined through specific qualities of landscapes related to different types of human activities. Out of a large set of functions a selection has been made representing the most common issues taken forward by the stakeholders. And of course related to which functions could be converted into quantitative measures. This list includes the following functions:

1. Cultural,
2. Social,
3. Economic,
4. Health, and
5. Freedom.

The ***components*** are related to what policy making and planning are requesting in order to move towards the creation and management of livable landscapes. The systematic structure in relation to the quantification refers to parts of the planning stages that had been identified within the project application:

1. **Evaluation and analysis**
2. Planning process and participation
3. **Strategy and vision**
4. **Actions and measures**
5. **Monitoring**
6. Planning procedures and decisions

The categories shown in bold have all been convertible into coherent sets of quantitative categories, and appear therefore directly in the list of components throughout the analyses. It does not leave out the two planning components, but in order to include them in the analysis issues from the planning processes, planning procedures, questions regarding participation and decision making have been included through **a general category** and **a set of indicators** which goes across the 6 components outlined above.

Coding and ensuring comparability of the data

The coding of the data is a simple consequence of the choice of type of quantity, i.e. whether it is based on a Unidimensional scaling, a Categorical quantity or a Binary quantity.

These categories provide inherited skewed data because when adding up a number of variables following a Likert scale from 1 to 5, a number of categorical quantities each with for example 3 tick-boxes and a number of binary data only giving the option of 0 or 1 as values will automatically put more weight to the Likert values compared to the binary data.

To avoid the inherited skewed data using three types of quantity a normalization of the data in the interval from 0 to 1 has been conducted.

VARIABLES		DATA DEFINITIONS		
		Theme	Definition	Subcategory
VARIABLE	COMPONENT	THEME	DEFINIT	SUBCAT
CLT_01	General	Culture	Deal with liveability?	NONE
CLT_02	General	Culture	Map on liveability components?	Evaluation/strategy/actio
CLT_03	General	Culture	Strategy on liveability?	5 levels
CLT_04	General	Culture	Contradictions between components and policy?	5 levels
CLT_50	4-Overall Action	Culture	Propose actions/measures to liveability?	5 levels
CLT_70	5-Overall Monitoring	Culture	Monitoring a part of the plan?	5 levels
CLT_A_10	Indicators	Elements of ID	Indicators addressed?	How many?
CLT_A_10_1	Indicators	Elements of ID	Evaluation/analysis?	Evaluation/analysis?
CLT_A_10_2	Indicators	Elements of ID	Strategy/vision?	Strategy/vision?
CLT_A_10_3	Indicators	Elements of ID	Actions/Measures?	Actions/Measures?
CLT_A_10_4	Indicators	Elements of ID	Monitoring?	Monitoring?
CLT_A_20	1. Eval. And analysis	Elements of ID	Methods described on state of landscape?	5 levels
CLT_A_21	1. Eval. And analysis	Elements of ID	Methods employed on landscape?	Selective/Spatially inclusiv
CLT_A_40	3. Strategy and vision	Elements of ID	Expose visions and strategies based on experiences?	5 levels
CLT_A_41	3. Strategy and vision	Elements of ID	Visions and strategies to territorial protection?	Challenges/Objectives/Tar

Upper left hand corner of the spreadsheet

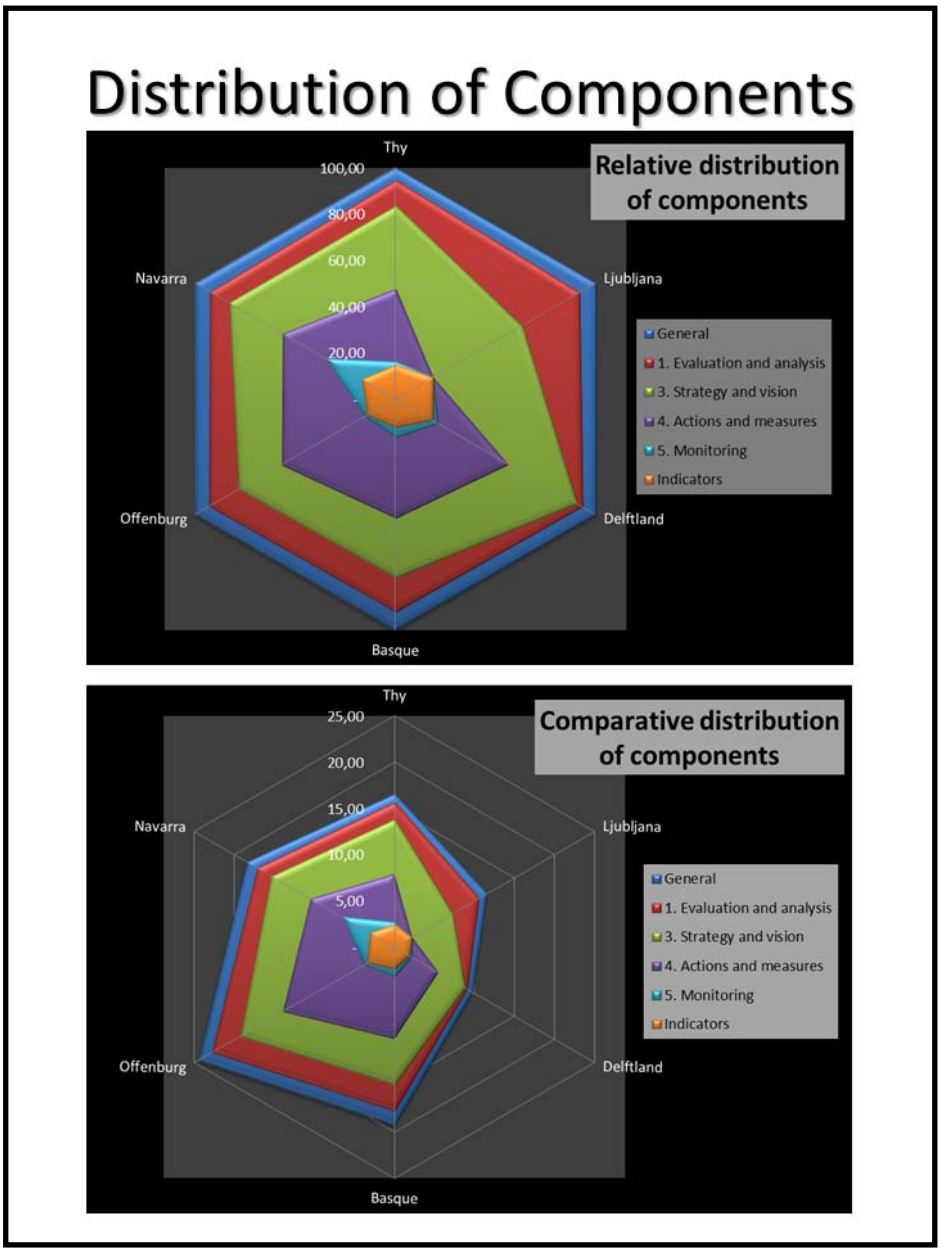
DATA CHARACTERISTICS			RAW DATA						OBS	NORMALIZED DATA					
			Thy	Ljubljana	Delftland	Basque	Offenburg	Navarra		Thy	Ljubljana	Delftland	Basque	Offenburg	Navarra
TYPE	MIN	MAX	THY	LJUBL	DELFL	BASQ	OFF	NAVAR	CROSS	THY-N	LJUBL-N	DELFL-N	BASQ-N	OFF-N	NAVAR-N
VAL_0_1	0	1	1	1	1	1	1	1	6	1,00	1,00	1,00	1,00	1,00	1,00
CATEGORY	0	4	1	2	1	3	2	2	6	0,25	0,50	0,25	0,75	0,50	0,50
LIKERT	0	5	4	2	5	5	3	3	6	0,80	0,40	1,00	1,00	0,60	0,60
LIKERT	0	5	3	3	0	2	2	1	6	0,60	0,60	-	0,40	0,40	0,20
LIKERT	0	5	4	0	5	5	5	4	6	0,80	-	1,00	1,00	1,00	0,80
LIKERT	0	5			0	1	0	4	4			-	0,20	-	0,80
CATEGORY	0	4	3	2	2	3	0	4	6	0,75	0,50	0,50	0,75	-	1,00
VAL_0_1	0	1	1	1	1	1		1	5	1,00	1,00	1,00	1,00		1,00
VAL_0_1	0	1	1	1	0	0		1	5	1,00	1,00	-	-		1,00
VAL_0_1	0	1	1	0	1	1		1	5	1,00	-	1,00	1,00		1,00
VAL_0_1	0	1	0	0	0	1		1	5	-	-	-	1,00		1,00
LIKERT	0	5	2	3	1	5		1	5	0,40	0,60	0,20	1,00		0,20
CATEGORY	0	2	1	1	0	1		1	5	0,50	0,50	-	0,50		0,50
LIKERT	0	5	5	1		3		2	4	1,00	0,20		0,60		0,40
CATEGORY	0	3	2	2		2		1	4	0,67	0,67		0,67		0,33

Upper right hand corner of the spreadsheet

The tables above illustrate the results of the normalization procedure. The upper table is used for identifying the different variables which has been the outcome of the conversion of the CAF questionnaire into a dataset. The lower table is devoted to the generated data and its definitions.

Showing results

A number of different visualisations of the results have been applied.



The Spider-diagram has previously indicated to be a good way of showing similarities and differences between the cases. Each time a spider diagram is used two versions are juxtaposed in order to expose two important characteristics of the calculated data – the relative and the comparative characteristics. In the relative distribution each region show the 100% distribution of the parameters included in the graph. The illustration on top of the below two shown spider diagrams show the relative distribution of the components for each of the six regions. All regions show the 100% distribution, and within these 100% the coverage of each of the components within the region. By means of this graph it is easy to see the level of importance of each component included in the CAF.

It becomes clear how for instance a high level of component "1 Evaluation and analysis" together with "3 Strategy and vision" are absolute dominating in Ljubljana, while the Offenburg data show that a major contribution to the result is "4 Actions and measures".

In the lower graph is shown the comparative distribution of the components. In this graph the total values from all cases are summed and converted into 100% showing all details for all regions. It is thereby possible to see for instance how the Delftland components aggregates to around 10% of the total variation in the data for all 6 cases, while Offenburg accounts for almost 25% of the total variation.

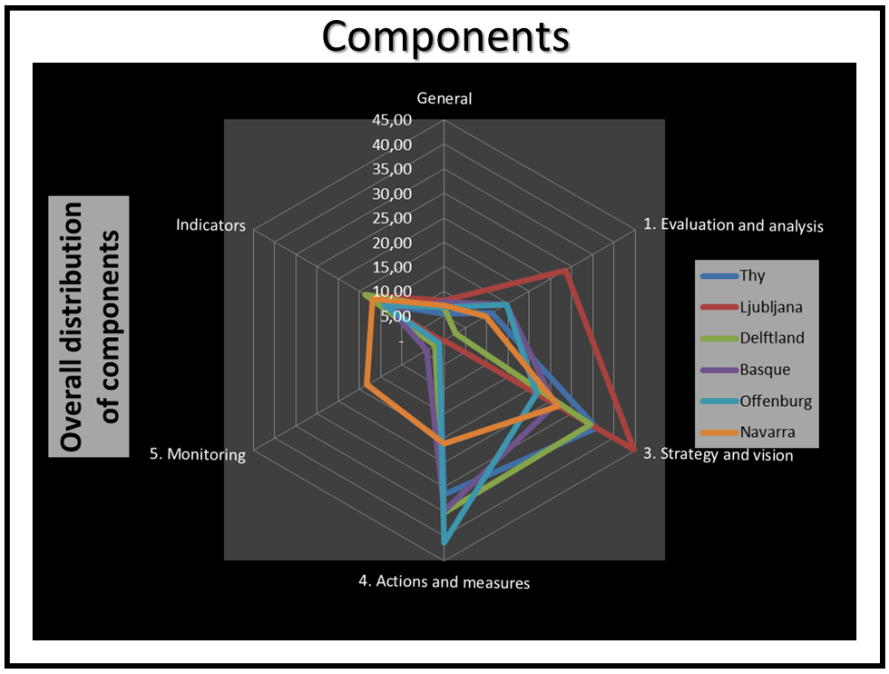
By means of this graph it is easy to see the role played by all components in each case region, and still maintain some overview of how each of the components contribute to the regional characteristics.

The following presentations provide an overview of the components and the functions.

The graph below show the overall characteristics of the distribution of the responses to the CAF questionnaire in relation to the 6 components constituting the main content of one of the two issues determining the CAF. In the spider graph the data for each of the regions sums up to 100%, and the graph show how much of this is related to each of the six components.

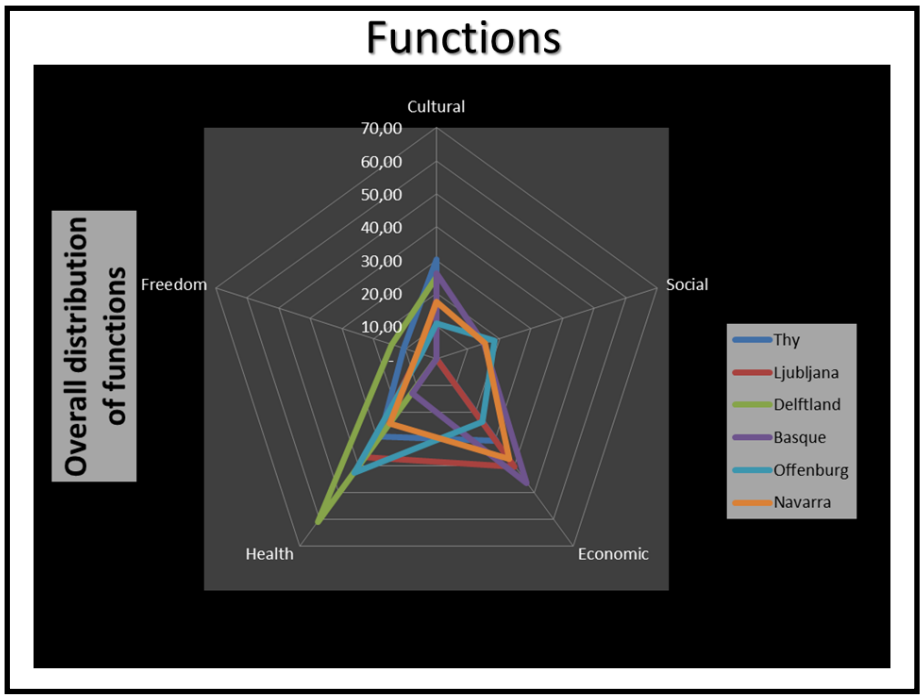
It is quite clear that there are similarities but at the same time also marked differences between the cases. They are situated with components 1 Evaluation and analysis, 3 Strategy and vision, and 4 Action and measures as the most dominant, but at the same time with very different weights in each of the regions. While Delftland, Thy, Basque and Offenburg are situated with quite similar distribution between three of the six dominant components, Navarra show a more harmonic distribution between four of the components. And the major deviator is Ljubljana with a structure determined by only two of the six components.

The six cases as described by the six CAF components.



A much more equal situation is showing when turning to the five functions. In this graph the method is the same, i.e. the data distribution for each of the graphs sums up to 100%, and how large a share of this determined by each of the five functions is shown through the situation in the spider diagram.

The six cases as described by the five functions.



There are two marked deviators from the general pattern – Delftland with health being a major element, and the Basque with economy being the most dominant function. For the other regions the distribution is more even between the function, and in this case Navarra show the most even distribution between the functions – as it did as well in relation to the distribution of the components.

Multivariate analyses

A way of finding trends and characteristics out of a complex set of quantitative data is to apply different types of multivariate approaches. Some principles have already been presented above.

Two obvious approaches to apply in this complexity would be the Principal Component Analysis (PCA) and the Factor Analysis (FA). Principal components analysis is used to find optimal ways of combining variables into a small number of subsets, while factor analysis are used to identify the structure underlying such variables and to estimate scores to measure latent factors themselves.

Dominant components

The results of these analyses have been used in generating the table on the following page showing the dominant combination of components from the regions.

Statistically 14 variables are explaining more than half of the variance and thereby determining most of the similarities and variations in the results of the conversion of the qualitative CAF information into the quantitative CAF dataset.

What is important to remember when interpreting the results, however, is the fact that correlation between some components may be shadowing over lower level of correlation between other components. It may be seen odd that the cultural functions even well represented throughout all case regions connections between for instance health and economic characteristics may be very dominant. Furthermore it is interesting to see how indicators are playing an important role in the results

Similarities and differences between cases

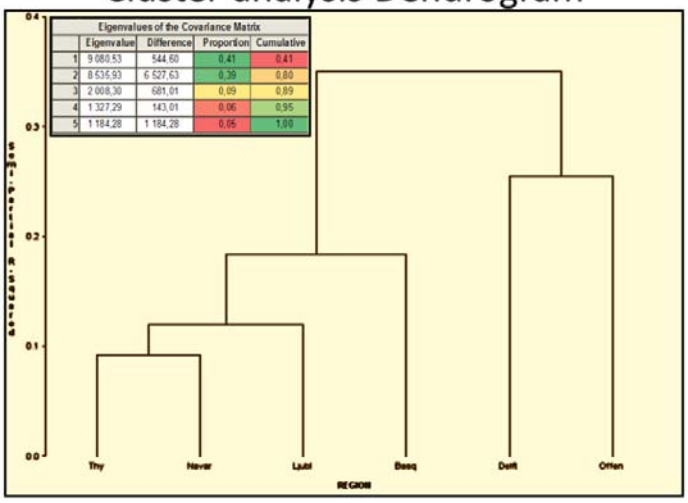
The final part of the quantitative analysis is related to the question of similarities and differences between the six cases in their responses to the CAF questionnaire.

The comparison has been conducted by means of a cluster analysis, an analysis where the distances between the cases are determined in the multi-dimensional space determined by the variables included in the CAF analysis. In the graph the result of the clustering is shown graphically by means of a dendrogram as well as through the calculation of the changes in eigenvalues when the clustering procedure moves forward.

Marking of dominant components

Components	Normalized data: Elements dominating first/second axis/component in multivariat analysis					
	Thy	Cultural	Social	Economic	Health	Freedom
	General	1,7	-	1,4	1,0	-
	1. Eval.	2,4	-	3,2	8,6	-
	3. Strategy	8,9	-	8,8	9,1	0,4
	4. Actions	8,0	-	8,2	7,6	-
	5. Monitor	-	-	-	-	1,0
	Indicators	1,8	-	1,5	1,5	6,5
	Ljubljana	Cultural	Social	Economic	Health	Freedom
	General	1,5	-	1,9	0,9	-
	1. Eval.	2,8	-	5,6	2,2	-
	3. Strategy	4,1	-	10,6	8,7	-
	4. Actions	-	-	-	-	-
	5. Monitor	-	-	-	-	0,2
	Indicators	1,0	-	3,0	3,0	2,7
	Delftland	Cultural	Social	Economic	Health	Freedom
	General	1,3	-	-	1,7	-
	1. Eval.	1,2	-	-	3,8	-
	3. Strategy	-	-	-	15,3	-
	4. Actions	7,7	-	-	8,0	-
	5. Monitor	-	-	-	-	1,0
	Indicators	1,0	-	-	2,0	5,3
	Basque	Cultural	Social	Economic	Health	Freedom
	General	2,2	1,2	2,4	1,1	-
	1. Eval.	4,0	1,3	4,4	2,5	-
	3. Strategy	6,5	3,2	13,3	-	-
	4. Actions	7,8	3,1	16,3	3,5	-
	5. Monitor	1,0	1,6	1,6	-	-
	Indicators	1,5	2,8	4,3	2,5	-
	Offenburg	Cultural	Social	Economic	Health	Freedom
	General	1,5	3,4	1,5	1,3	-
	1. Eval.	1,5	2,6	4,5	6,2	-
	3. Strategy	3,3	4,0	5,5	11,5	-
	4. Actions	4,1	8,1	13,0	21,2	-
	5. Monitor	1,0	-	-	-	0,4
	Indicators	0,8	2,7	2,5	5,0	5,0
	Navarra	Cultural	Social	Economic	Health	Freedom
	General	1,3	2,6	1,2	1,0	-
	1. Eval.	1,6	0,6	3,5	5,3	-
	3. Strategy	3,2	1,4	11,5	6,6	-
	4. Actions	3,7	3,0	7,8	3,4	-
	5. Monitor	3,6	3,2	6,6	3,4	-
	Indicators	1,3	2,2	2,5	3,3	5,2

Cluster analysis Dendrogram



Method wise the software starts with the six cases searching for the two cases looking most alike and combining these data as a first cluster, and continues to look for similarities, now based on the remaining four and the cluster. Each time clusters are generated the change in Eigenvalue is registered, and the process continues until the final situation where all six cases are considered being one cluster.

As shown by the dendrogram the first cases combined are Thy and Navarra. Then Ljubljana is added, and in the next step the Basque region. In the second to the last step Delftland and Offenburg are combined, and then all cases are finally combined.

The distance shown graphically illustrates the level of “look-alike”ness. For instance the distance between the cluster established through combining Thy and Navarra and the following inclusion of Ljubljana in the cluster is very short, while the distance to include the Basque region is somewhat larger.

A quick overlooking of the result show that while Offenburg and Delftland are singled out as a distinct group, the other case regions are stepwise merged into a cluster, with Thy and Navarra showing most resemblance and then including Ljubljana and later on the Basque region before merged with the Offenburg-Delftland group.

Interesting in this connection is how this clustering compare to the general clustering conducted in relation to the major socio-economic and environmental conditions – basically by asking to what extend the regional similarities and differences shown through the CAF with its emphasis on practices in relation to landscape planning can be ascribed to differences and similarities in the general characteristics of the socio-economic and environmental framework.

There are obvious similarities but also differences. In relation to many components used in the general clustering the Dutch and the German regions and cases often end up in the same clusters, just as the two cases from Spain ends up in the same clusters. And obviously because the two sets of clusters are characterised by a lot of similarities in relation to socio-economic and landscape planning experiences and practices.

The two “odd regions out” are obviously Thy and Ljubljana which also reflect diffent social and economic performance. Thy mostly in combination with Germany and The Netherlands due to some of the same reasons as the Dutch and the German cases are clustered together, namely a number of similarities in relation both socio-economic and landscape planning experiences and practices. Ljubljana is mostly singled out when more than 2 clusters are generated. This does not, however, explain its position in the case study clustering procedure.

Discussion on benchmarking results *between participant's stakeholders*

On the METHOD

Navarra:

- Approach is alright.
- Components and functions ok and help in thinking differently for landscape.

Midden-Delfland:

- Too theoretical but alright.
- It is important to bear in mind which is the person you are approaching too: stakeholder, practitioners,
- Terminology: ecology/nature, agriculture and freedom for instance, some terms still not fully understandable:

Basque Country:

- New field, and new tool and we should all bear in mind that we are compering different practices, scales, and ways of approaching landscape and in a new field tool. Whatever attempt that intent to improve integrating of landscape into spatial planning is welcome.
- Approach is ok in principle combining functions and components. However could be applicable at all scales? Considering different competences linked to the functions.
- Could it be applicable to assess different experiences in the Bc?
- Scale: practice vs spatial planning
- Apply the CAF matrix to a territory or to an outstanding
- Method must be reviewed since some errors have been identified. Freedom and Health is missing however in the original CAF matrix is included.

THY NP

- Difficult to work with a very scientific tool.
- Also the results difficult to interpret and see how to use it for.
- The scale is another issue. What is relevant in one scale might not be that relevant in another. Is not only a geographical scale, is very difficult to compare different practices in different scales and different contents. She would like to know how she could learn from other stakeholders through the CAF tool. Does not think that this should be the right tool. Could the project provide further tools?
- Deeper information about other stakeholders practices Baseline Analysis.

Offenburg

- HHP developed the plan and also the CAF so there was easy to complete the exercise and see the usability
- Important to find a common language.
- Generally satisfied with the approach and also the results.

On the RESULTS RELATED TO EACH STAKEHOLDER (Clustering and spider diagram)

Navarra

- Offered a practice which is a "good practice" and this may not reflect of represent the regional reality.
- Scale: practice vs regional spatial planning system
- Usability of the tool not sure: stakeholder would like to see if the tool could be used. Indicators/ monitors: Call for a more accurate indicators for assessing landscape. Perception of the region is different to experiences in local or national level. Not avoid the regional dimensions
- Opportunities to use the CAF to analyze different practices within Navarra region and replicate the analysis.

Midden-Delfland:

- The stakeholders see the area reflected in the diagrams although no much time yet for reviewing it in detail.
- Economy is hidden and this is something that must be reviewed since some inputs must be hidden in the diagrams

Basque Country

- Several errors have been identified in the results fo the comparative analysis related to health and freedom components which must be reviewed.
- Freedom and health functions are missing even when the MATRIX incorporates these aspects. There must be an error in the quantitative analysis- translation See with Nordregio.

Generally

Short summaries of conclusions of the reading of the CAF in order to get aims: points in which are strong and others in which we are weak and why and then, link to this to policy recommendations. This also could help in identify which aspects of the practices reflects specific issues that are only present in the practices and not transferable to the regional scale for instance. But we are talking about good practices to learn from. More time for interpretation. For what the CAF are usable for and also for what are not?

PART 2 –

In depth analysis of Landscape Catalogues and Planning Guidelines“in LaGuardia Rioja Alavesa. Field trip Regeneration of Bibao Ría“

The Department of Territorial Planning offered a presentation of key relevant aspects of its practice “*Landscape Catalogues and Planning Guidelines“in LaGuardia Rioja Alavesa,* with particular focus on the following issues:

- The Catalogue in the frameworks of the Planning System:
- a) a new instrument which do not imply a modification of the current planning system in place b) delimitation coincident with the Functional Area (Planning Area) c) scope and y determinations d) other aspects
- Since to date the Catalogues managed to characterize and evaluate the landscape in that Functional Area and landscape guidelines and recommendations have been also identified to be later integrated into spatial planning and land use planning instruments, a key aspect to be addressed is:
    - Which are the future steps towards the implementation of actions, measures, guidelines and recommendations?
    - How the Landscape Action Plans are going to be materialized? Being one of the most relevant instruments identified in the project by the stakeholders.
- Deepen on the agrarian character of the territory : crucial significance of the wine yards in the configuration of the landscape character; branding – and the reinforcement of the binomial “wine-landscape”

After a presentation by Alfonso Martinez Cearra Director of Metrópoli 30 about urban regeneration in Bilbao, a boat trip has been organized in Bilbao River which will show the tremendous urban regeneration that took place in the city over the last two decades. The following items will be addressed:

- Urban landscapes as future challenge and next steps in the Basque Government.
- Urban regeneration policies, as elements for landscape management
- Urban regeneration and liveability
- Industrial heritage, culture and identity

September 17th 2013

After a summary of previous working sessions the workshop continued with the identification, analysis and preliminary prioritization of general policy options at EU level and open debate on potential for transferability to other regions and territorial realities within ESPON space.

PART 3 –

Policy recommendations at EU Level, transferability and contribution to ESPON

Key findings from LIVELAND cases studies towards key policy messages by Tecnalia

Discussion on the use of ESPON indicators and contribution to ESPON

FINDINGS FROM LIVELAND CASE STUDIES TOWARDS MESSAGES FOR POLICY DEVELOPMENT

Lessons learned from the baseline analysis of the case studies as long as the results of the bencmarking exercise lead to the identification of potential key messages and recommendations for the integration of landscape and spatial planning.

Such recommendations to professionals in the stakeholder regions aims at improving their processes and performance of landscape and territorial planning.

Questions for debate towards development of policy messages

- What kind of landscape do you want?
- Which future spatial image for the territory is correct:
  - What should the landscape look like?
  - Park or Landscape?
  - What is the image?
- What should be the role and weight of the territorial potential of a particular area? A goal or a mean?
- Which species or function is the ecological 'goal'?
- What is the reference?
- How should we organise the ownership to the area under planning and management?
  - Protection & Management?
  - How to distribute responsibility?
  - Property or Protection?
  - Top down / bottom up.
- Who is profiting most from a continuous green MD? And who takes care of that?

Preliminary ideas for discussion

- **Boosting coordination among administrations** is needed in most of the case studies:
  - Is interesting the Offenburg case in that respect in which the policy filed of nature and landscape has its own instruments but main regulative power to implement the Landscape Plan lies within the comprehensive Land Use Plan
  - Besides in Offenburg Landscape Plans are the basis for the SEA of the Spatial Plans (as well as for the EIA for project)

- Navarra has particular spaces such the brand new Landscape Commission: Set the appropriate methodology for the implementation of the landscape in Navarra in line with the CEP (European Landscape Convention)
- In the Basque Country the COPV Committee of Spatial Planning is the top advisory board and is perceived as a key instrument for the coordination between different administrations in the area of spatial planning (including coast) and urbanism) in the Basque Country.
- Midden-Delfland as well as Offenburg present a collaboration between different municipalities in administrative cooperation, which form a functional coherent area of spatial planning

- **In decentralized countries such Navarra and Spain the top down approach from regional to local seems to work quite well** at the time of developing landscape strategies and provide recommendations for regional, subregional and local levels. This is true as long as there is a strong participation of local level, municipalities in the definition of the strategies too.
  - From this perspective, for sustainable territorial development, is imperative that the local planning is coordinated and articulate with the supra- territorial planning. Territorial stragagies could be only successful if there is a consensus built at local level. And the spatial planning instruments respond to this particular need
- **Better coordination between citizens and administrations**:
  - Early public participation and consultation at the early stages of decision making is required for successful planning and acceptance of measures although as shown by the experiences in THY NP and Midden- Delfland such processes are time consuming and expensive consuming great amount of resources
  - THY case study has implemented a very interesting voluntary process and early consultation
  - Promote ownership of plan and territory
  - Encourage people feeling of “togetherness” / helping to make a plan

- **Better coordination of timeframes :**
  - In Offenburg Landscape and Land Use Plan have been developed in parallel becoming an interesting practice

- **Improve implementation strategies, actions and measures:**
  - The binomial land-use/spatial planning and landscape management is remarkably important for successful implementation of actions: independently of the financial constraints including landscape actions and measures within Land Use Plans and Spatial Planning instruments could if not fully guarantee, facilitate their implementation.
  - Financing is one of the most relevant issues in all the case studies analyzed.
  - Regarding financial instruments, in LUR the national government is limited to realize nationally important projects and investments while local authorities stimulate spatial development and management and realize locally important projects alone and in public private partnerships.
  - Land stewardship could be considered in that respect as a way for successfully implementing certain landscape measures and actions towards management in alliance with the users of the territory.
  - Territorial contracts whether they could be private- private or public-private could also instrument be taking into consideration as a way of resolving conflicts in terms of land- use or land- management.
  - In the case of Orgi ARN, management and maintenance, is almost 100% funded through an agreement signed between the Government of Navarre and Lizaso Council (Local Authority equivalent to NUT6). These activities are performed by a local company (five employees) contracted by public tender until 2017. Other activities and investments are often financed by

sponsorships or European initiatives or financial institutions. These projects may be new construction projects, environmental volunteering, case studies, etc. In this way were funded, for example, path for blind persons for some campaigns with students from universities of Navarre. Among these entities are Cederna-Garalur Association for Rural Development (LEADER manager), the Regional Tourist Consortium Plazaola, IMSERSO ONCE Foundation, ONCE-Navarra (Spanish National Blind Organization), Caja Navarra Foundation.

- **Improve spatial quality**
  - Encourage natural science based approach to landscape characterization and evaluation towards planning and management
    - In that sense Liveability strengths natural science approach to landscape combined to ELC approach (cultural and identity)
  - Include identity from regional specific types of land use (this applies all case studies)
  - Strengthen the approach on landscape services for creation of economic social and ecological values towards sustainability- This could be also link to adaptation to Climate Change for instance and energy transition to renewals. Practices of multifunctional landscape management with the perspective of landscape services could in principle serve cross- sector policy integration
  - The landscape plans should reflect "experiencing of seasonal changes (progress in natural processes)" this is well documented in Catalogues and Guidelines of the Basque Country.
  - Include accessibility to landscape as a key aspect of a good practice
  - Multifunctional landscape with a certain complexity many people can enjoy (many different uses) (landscape is in the mind of people) a rich landscape / high quality

- **Improve relation and connection between city and country side**
  - How do you deal with the interface between rural and urban?
    - What is the relation to the surrounding areas?
    - How to steer development?
  - Being the Basque Country a very antropized territory also with a strong rural background and tradition- in the rural areas lay most of the identity of the Basque people, the urban-rural relationship is an issue of extraordinary importance for the territorial strategy. It is being considered in the core of the updated Territorial Spatial Planning Guidelines. It incorporates a specific objective:
  - Urban renewal and enhancement of the landscape according to the restructuration of the productive sector
  - Enhance intermediate scale in territorial planning: Functional areas are inclusive and comprehensive including urban and rural spaces as areas that allow planning closer to the people, and the establishment of headers to build a network of medium-sized cities essential to create new options for developing and providing services at a county level

- **Expertise of the team developing the landscape plan or practice matters**
  - It is remarkably important to consider a multidisciplinary team working side to side with the responsible administration and also very close to citizens and general public in order to achieve a good balance between quality in terms of research, usability, applicability and reliability of the research for real implementation by the competent administrations and acceptability and sense of ownership by public and citizens.

A. OPEN DEBATE ON TRANSFERABILITY AND POLICY RECOMMENDATIONS AT EU LEVEL

Considering the project results achieved so far:

- Is it possible define key policy messages to EU (DG Regio mainly), the CoE and national authorities?
- Could the incorporation of landscape in territorial planning be promoted and strength at EU level in the framework of territorial cohesion policies?

In any case the policy messages should be conceived as messages for rising awareness on relevant aspects, challenges and opportunities for strengthening the consideration of landscape in territorial policies towards sustainable development.

And more important be able to define "Guidelines for the applicability of Liveland to regional policy and practice in other EU regions"

- Need for evolution of certain EU policies
- Could it be possible to use Regional EU typologies?
- How could investing in landscape as a value for territorial development contribute to smart, sustainable and inclusive growth? (Europe2020
- How could landscape planning and management at regional level support European policy integration
- European funds

Transferability

- Transferability to other regions in Europe
- Transferability to urban environment?
- Transferability to marine space?
- Transferability to regions with special?

B. DISCUSSION ON THE USE OF ESPON INDICATORS AND CONTRIBUTION TO ESPON RECOMMENDATIONS TO FUTURE ESPON RESEARCH

For better orientation within the perspective of ESPON studies, the case study areas can be located on various results of earlier ESPON mapping efforts.

For the evaluation of the territorial performance in the Liveland case studies, we have used the outcomes of the following ESPON projects:

- **INTERCO project**[3] which is a selection of territorial performance indicators aligned with the indicators of the LISBON Strategy, Territorial Agenda 2020, EU2020 Strategy and the 5º Cohesion Report[4].
- **ATTREG project**[5] Attractiveness of European Regions and Cities for Residents and Visitors
- **ESPON CLIMATE** [6] Territorial effects of climate change
- **EU-LUPA project**[7] Characterization of land use and land use changes in EU at regional level.
- **FOCI project**[8] Future Orientation for Cities

The selected indicators have been organized in themes as follows:

- Economic performance and competitiveness
- Inclusion and Quality of Life
- Environment and territorial capital
- Innovative territories
- Integrated polycentric territorial development
- Attractiveness
- Climate change vulnerability
- Land use characterization

However none of this studies and indicators could be finally used to assess liveable landscapes and how landscape evaluation, planning and management could become a key value for territorial development.

Now the debate is:

- How Liveland results could influence and contribute to ESPON data base?
- Which are the knowledge gaps and future needs?
- Are there future links between a potential continuation of the project "LIVELAND (II)" and ESPON?

[3] ESPON Territorial Indicators. A first selection of ESPON Territorial Indicators based on the Final Results of the ESPON INTERCO Project Working paper Version 26 June 2012.
[4] Eurostat Cohesion Indicators (http://epp.eurostat.ec.europa.eu/portal/page/portal/cohesion_policy_indicators/cohesion_indicators)
Fifth Report on Economic, Social and Territorial Cohesion (http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion5/index_en.cfm)
ESPON Data Base 2013
http://www.espon.eu/main/Menu_Projects/Menu_ScientificPlatform/espondatabase2013.html
[5] ATTREG - Attractiveness of European Regions and Cities for Residents and Visitors 2010-2012. ESPON Applied Research
[6] ESPON CLIMATE Climate change and terrtiorial effects on regions and local economies in Europe 2009-2011. Applied research
[7] EU-LUPA European Land use patterns 2010-2013. Applied research.
[8] FOCI Future Orientations for Cities 2008-2010. ESPON Applied Research

C. FUTURE RESEARCH

Interactive design of the CAF-matrix

To improve the usability of the CAF-matrix it might be beneficial to make use of interactive functionalities of the Excel software. This tool would increase the usability of the table as it leads to avoidance of extra work. Questions could be masked as long as they are not needed. Additionally, all answers could be checked for logic and consistency where possible.

Consider Biodiversity

In the present version of the CAF biodiversity is not a prominent aspect although many topics that relate to biodiversity are addressed. It is often argued that biodiversity is contributing to liveability in one way or another. For example the 2020 European biodiversity strategy states:
"Its deterioration and loss jeopardises the provision of these services: we lose species and habitats and the wealth and employment we derive from nature, and endanger our own wellbeing."[9]

The link between liveability and biodiversity seems obvious regarding activities that directly relate to biodiversity, e.g. watching birds as a kind of leisure-time activity. Still, it would be an inacceptable generalisation to state that every aspect of biodiversity is enhancing liveability. For example, exposing people to a high variety of pathogens would not be considered a welcome contribution to liveability while, at the same time, it contributes to high biodiversity. It cannot be ignored that there are strong interrelationships in multiple dimensions between biodiversity and liveability; this needs to be highlighted in future revisions of the CAF-matrix. At least this will also contribute to the argumentation of landscape as an asset in liveability.

Components of liveability that are not addressed within the revised CAF

Initial attempts to fill the CAF-matrix showed that a number of components of liveability that are related to landscape are not regularly addressed in official landscape plans and policies. For practical reasons 'security' is no longer part of the revised CAF. For other components the number of indicators was reduced .

Nevertheless, these components and indicators are still important to characterize liveability of landscape as an asset in regional development. Dropping them in the revised CAF should not be misunderstood as these components being less important than others.

Moreover, the fact that particular landscape assets are not regularly addressed in official policy documents points to the high potential of yet unexplored realms of liveability that landscape offers as an asset to be included in planning and regional development. As a first outcome of the analysis it can be stated that most of the plans and policies recognize liveability benefits in all of their dimensions. But only a small part of them is currently addressed. There is still much potential for improvement - even more than the results of the benchmarking task might indicate at first glance.

[9] European Comission (2011: 1)