

Prototype Landscape Catalogue

Conceptual, methodological and
procedural bases for the preparation of
the Catalan Landscape Catalogues

Summary

Olot and Barcelona, may 2006



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*Tant de mains pour transformer ce monde
et si peu de regards pour le contempler*

Julien Gracq

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1. PRESENTATION

In Catalonia, the landscape is more and more a subject of general interest which goes beyond the specialised fields to which it has been restricted hitherto and is becoming a fundamental factor in many territorial planning policies and, even, more sectorial policies of a social, cultural and economic nature. Slowly and discreetly, the idea that an attractive, pleasant and harmonious environment generates a pleasant sensation of welfare and notably increases people's quality of life has begun to make an impression. In this context, on 8 June 2005 the Catalan Parliament passed the **Act 8/2005, for the Protection, Planning and Management of the Landscape of Catalonia**, among other initiatives included in a new landscape policy for Catalonia.

The Bill for protection, management and planning of the landscape in Catalonia creates the **Landscape Catalogue** as a new instrument for the introduction of landscape targets into town and country planning and sectorial policies in Catalonia, and in this way adopts the principles and strategies of action established in the European Landscape Convention promoted by the Council of Europe. The Bill defines the Catalogues as *the descriptive and prospective documents that determines landscape typologies in Catalonia, identify its values and conservation estate and propose landscape quality objectives that must achieve.*

2. THE LANDSCAPE CATALOGUES

The landscape catalogues are documents of a technical nature which the Act conceives as tools for planning and management of the landscape from the perspective of territorial planning. They define the nature of the landscapes of Catalonia, their values – patent and latent – and their state of preservation, the quality objectives which need to be met and the measures required to do so. They are, therefore, an extremely useful tool for the implementation of landscape policies, especially the integration of landscape objectives into territorial strategies, with the active cooperation and participation of all the social agents affecting a territory. This last aspect is important insofar as it involves Catalan society as a whole in the management and planning of its own landscape.

The landscape catalogues are, therefore, the tools which allow us to understand what the Catalan landscape is like and values it contains, what factors explain why we have a specific type of landscape and not another, how this landscape evolves with the current economic dynamics, both social and environmental and, finally, what type of landscape we want and how we can get it. This means that the landscape catalogues supply information of great interest about all the Catalan landscapes, their existing values and those that we can strengthen and they contribute in this way to the definition and application of a new landscape policy in Catalonia.

The Landscape Observatory is the organ responsible for preparing the landscape catalogues, on a commission from the Ministry of Town and Country Planning and Public Works of the Government of Catalonia. The preparation of the landscape catalogues coincides with the works of drafting and revision of the Town and Country Zoning Plans (and the Town and Country Directing Plans) which this Ministry itself undertakes. Given the scale of the project, the Observatory needs the cooperation of multidiscipline working teams trained by specialists in the ambits of landscape analysis, participation -important with a view to involving Catalan society and making it responsible in the management

and planning of its own landscape-, communication and planning, coordinated and supervised by the Observatory's own experts.

The landscape catalogues arose, in fact, at the precise moment when it was vital to install a new culture of town and county planning based on the prudent and sustainable management of natural resources, on a new and imaginative treatment of land not for development and of landscape as a whole and a new form of government and management of the land based on dialogue and social agreement.

3. THE TOWN AND COUNTRY PLANNING SYSTEM IN CATALONIA

The main objective of the landscape catalogues, outside the academic exercise involved of identification, characterisation and valuation of the landscapes, is to contribute efficiently to the incorporation of landscape into town and country planning, particularly in the zoning plans, but also in the directing plans and in town planning in general. But, how is town and country planning structured in Catalonia? And what role do the landscape catalogues play in each planning instrument? We shall clarify this later.

Catalonia has a very marked diversity of landscapes in a relatively small territory, some 32,000 km², with a maritime fringe of some 580 km. Around seven million people live in this territory and 70% of them are in the forty-five municipalities with over 20,000 inhabitants, most of these on the coast or in its area of influence, above all in the Metropolitan Region of Barcelona.



Figure 1. Catalonia

Many of the challenges posed by the territory today have to be tackled on a supra-municipal scale and with an overall view. The current reality shows that municipal town planning, although it may be of fine quality, cannot guarantee that the land as a whole is planned with the desirable rationale, which makes it essential to have an overall strategy. And here we have the principal challenge for the landscape catalogues: to incorporate landscape objectives into this scale of planning.

The town and country planning system in Catalonia is governed by the Act 23/1983, of 21 November, of town and country planning policy. This Act created the following planning figures:

- The General Town and Country Plan of Catalonia (PTG), which defines the territorial objectives of balance which are considered of general interest for Catalonia. Among other functions, this Plan provides for the population centres which will exercise a promoting or rebalancing function, the placing of large infrastructures for communication, drainage and energy, and the location of areas of agricultural or forestry use of special interest and the areas and natural elements which must be preserved. The first and only General Town and Country Plan of Catalonia, in force until now, was approved in 1995.
- The town and country zoning plans (PTP), the principal purpose of the landscape catalogues, are designed to deploy the General Town and Country Plan of Catalonia in each of its seven territorial fields of application:
 - Alt Pirineu i Aran
 - Comarques centrals (Central Districts)
 - Camp de Tarragona
 - Plana de Lleida
 - Regió Metropolitana de Barcelona (Metropolitan Region of Barcelona)
 - Comarques Gironines (Girona Districts)
 - Terres de l'Ebre

Some of these plans are at present in the drafting phase and others are expected to be amended.



Figure 2. Fields of action of the town and country zoning plans

It is important to emphasise that the town and country zoning plans are centred on three basic systems in the structure and the operational character of the land and, on each of these the landscape directives emanating from the landscape catalogues have a different nature and impact:

- The system of open spaces, which includes all the land classified as not for development for urban planning.
- The system of urban settlements, which corresponds to existing settlements (towns, villages, urbanisations, amenities, industrial land,

etc.) and proposals of strategies for their extension, reform and consolidation.

- The system of mobility infrastructures, which corresponds to the road and railway networks, airports, ports, the logistical system and associated nodal junctions.

The incorporation of the landscape variable into the town and country zoning plans is fundamental, above all because these are placed hierarchically above urban planning.

The third figure in territorial planning comprises the territorial sector plans, which embrace all Catalonia, but are involved with a single aspect, such as roads, areas of natural interest or airports. These types of plans are not the direct purpose of the landscape catalogues, although the Landscape Act establishes that the town and country zoning plans can determine when and how the landscape directives become recommendations for sector plans and, therefore, when plans and programmes subsequently approved must be congruent with these landscape recommendations.

With the approval of the Act 31/2002, of 30 December, of fiscal and administrative measures, the town and country directing plans (PDT) were added to the existing system, being an advance on territorial plans for one part of the ambit, for example a group of municipalities or a district, and being structured with the same systems as are described for the town and country zoning plans (open spaces, infrastructures for mobility and urban settlements). The territorial directing plans are, jointly with the zoning plans, the principal purpose of the landscape catalogues.

In the field of urban planning, there are the urban directing plans (PDU), which cover supra-municipal fields (particularly urban and metropolitan or district systems), in which proposals are defined in more detail than the territorial plans allow. Finally, there are the plans of municipal urban planning (POUM), which are the planning instruments par excellence at the local scale. The landscape catalogues of Catalonia are instruments which will ease the connection between territorial and urban planning rules with reference to the implementation of landscape policies.

4. ANALOGOUS PRECEDENTS AND EXPERIENCE IN LANDSCAPE CATALOGUES. THE PREPARATION OF A PROTOTYPE LANDSCAPE CATALOGUE

The landscape catalogues, as the Landscape Act conceives them, are a completely new tool which has very few precedents on an international scale. There is no universally recognised method for studying, identifying and evaluating landscapes and their diversity, although in Europe there is an important base of knowledge in this regard. Important experience has been accumulated in European countries such as the United Kingdom (particularly the Countryside Agency) and Ireland, with evaluations of the nature of the landscape (*Landscape Character Assessment*), and in Belgium, France, Slovenia and Spain, with their respective landscape atlases, which try to identify and evaluate landscapes on a State scale. These experiences are of great interest, but the principal difference between some of these experiences and the landscape catalogues of Catalonia is their final purpose and their integration into the process of approval of the

town and country zoning plans, one of the principal functions – and one of the principal challenges – of the landscape catalogues of Catalonia.

Once the Landscape Observatory received instructions from the Government of Catalonia to prepare the landscape catalogues, the following questions came up: What should the landscape catalogues be like? What working scale should be used in preparing them? What contents should they have, apart from those established in the Landscape Act? What types of values should be identified? How are they evaluated? How do we place the natural, cultural and perceptive elements of the landscape on the same level? How are the landscape quality objectives defined in practice and how are these quality objectives translated into useful directives for territorial and urban planning (the subject, precisely, of this 5th Meeting)?

These and other queries, added to the innovative nature of the tool and its importance in territorial planning in Catalonia, led the Landscape Observatory to prepare a prototype landscape catalogue to establish a common working outline for the preparation of the seven catalogues in a coherent and coordinated way. This document, entitled ***Prototype of a landscape catalogue. Conceptual, methodological and procedural bases for the preparation of the landscape catalogues of Catalonia***, was submitted to more than seventy institutions, research groups and experts in landscape for consideration in order to obtain the maximum possible consensus before proceeding to its application.

The landscape catalogues, however, are fully coherent with international documents in such matters. The foremost of them, without doubt, is the European Landscape Convention (Florence, 20 October 2000), approved by the Council of Europe and the European reference for the design of policies for the protection, management and planning of landscape throughout Europe. They also take into consideration the objectives and principles of sustainability formulated in European and international commitments, such as the Rio de Janeiro Summit in 1992 and the European Strategy for Sustainable Development. The Unesco Convention for the Safeguarding of the Intangible Cultural Heritage (Paris, 17 October 2003) and the Guiding Principles for Sustainable Spatial Development of the European Continent of CEMAT (Hannover, 8 September 2000) are other international references which have inspired the conceptual basis of the landscape catalogues. They have been inspired, also, by the Swiss *Paysage 2020* plan and have taken as another reference the *Criteria for the development of the town and country planning programme*, prepared in 2004 by the Ministry of Town and Country Planning and Public Works of the Government of Catalonia.

5. AMBIT OF APPLICATION AND CRITERIA FOR THE ASSEMBLY OF LANDSCAPE CATALOGUES

The principal function of the landscape catalogues is, as has already been indicated, the incorporation of landscape directives into town and country planning and specifically into the zoning plans. It is for this reason that their territorial reach is arranged to correspond with each ambit of application of these plans: Alt Pirineu i Aran, Comarques centrals (Central Districts), Camp de Tarragona, Plana de Lleida, Regió Metropolitana de Barcelona (Metropolitan Region of Barcelona), Comarques Gironines (Girona Districts), Terres de l'Ebre (see figure 2). This said, we must now concentrate on the criteria used to prepare the catalogues.

The landscape catalogues start from an integrated view of the landscape, considering its natural and cultural components as a whole, but never separately. Landscape is understood in the catalogues in a way very similar to the definition given by the European Landscape Convention, that is to say, as an area, as perceived by the population, the character of which is the result of dynamic interaction between natural factors (such as the relief, water, flora and fauna) and human factors (such as economic activities and the historic heritage). The landscape is conceived, in turn, as a physical reality and the cultural representation that we make of it. It is the geographical physiognomy of an area with all its natural and manmade elements and also the feelings and emotions that it awakes in us when we see it. The landscape is conceived in the catalogues also as a social product, the cultural projection of society in a certain area, from a material, spiritual, ideological and symbolic dimension.

The multidimensional focus of landscape is translated into attention to the great multiplicity of values which characterise it. Here, the landscape catalogues of Catalonia start from the existence of various values or types of values (ecological, historical, cultural, aesthetic, symbolic) of landscape attributed to it by the agents that affect it and by the population that enjoys it. This is one of the reasons explaining why the methodology used in the preparation of the landscape catalogues is qualitative. Not all landscapes have the same meaning for the population and, on the other hand, different values can be attributed to each landscape, and in different degrees, according to the agent or individual perceiving it. We have to accept and recognise, therefore, the existence of methodological difficulties and differences of perception with respect to the landscape, making it difficult from the outset to define a quantitative method of valuing the quality of a landscape which will be valid and acceptable for the whole of society. This is why the catalogues avoid making any hierarchical evaluation of levels of quality in the landscape and the quantification of their values, a very complex, not to say impossible, task, as most of the values respond to subjective perceptions and sensations of the population and are not measurable.

Another of the basic characteristics of the catalogues is that the results apply to all the Catalan territory and not only to those special and exceptional places. The landscape catalogues do not exclude any part of the territory; on the contrary, they study the marginal, degraded and every-day areas (landscapes of commercial areas, industrial areas, infrastructures and facilities). The cover is, therefore, global and varies from natural areas to urban areas, passing through the rural and suburban, as well as inland and maritime waters. In the same way, the catalogues deal with diversity and are sensitive to use and to the different perceptions in relation with the landscape of social groups as far apart as children, the elderly or disabled people, who also have a right to the landscape.

The catalogues also arose as proactive instruments, with the purpose of being used principally for the planning and management of landscape from the perspective of territorial planning, in spite of the fact that they must encourage the integration of landscape into other policies which could have a direct or indirect effect on the landscape, such as development, infrastructures, agriculture, culture, environmental, social and economic matters. The applications set out here are very closely related with their financial viability. The proposals in the catalogues (directed to the protection, management and planning of landscape) must be really viable, above all financially.

Another important characteristic of the landscape catalogues is that they integrate public participation as a tool for the involvement and co-responsibility of society in managing

and planning its own landscape. It is normal for a landscape analysis to be undertaken by specialists, but the European Landscape Convention insists on the importance of the public and economic agents in the phases of landscape planning, starting from its characterisation. In fact, it is fundamentally important that we should all be able to recognise our own landscape and that the public and the authorities should take part jointly in decisions referring to its protection, management and planning. In this sense, the participation of the population in the catalogues is basic in identifying those values which, as we said above, are imperceptible from an analysis of the existing cartography of reference, or from the field work; we are speaking of more intangible values, essential in analysing the landscape in an integrated way and perceiving all its nuances.

Finally, the landscape catalogues start from an effective cooperation between the various agents involved, whether they are elected posts, in the scientific field, or the experts and inhabitants of the territories where the landscape catalogue is applied. The mechanisms of participation and enquiry contribute to it. In this sense, the development of the landscape catalogues makes scientific rigour compatible with public participation.

6. FUNCTIONS OF THE CATALOGUES

6.1. Territorial functions

The landscape catalogues must be lead to the integration of landscape into the instruments of town and country planning in Catalonia on different scales, from zoning plans to detailed town planning, passing through the territorial and urban directing plans.

- The catalogues in territorial zoning plans and territorial directing plans. As the Act for the protection, management and planning of the landscape in Catalonia determines, the classification and characterisation of the landscapes, and the quality objectives associated with each of them, will be incorporated, with a regulation nature as standards, directives and recommendations of landscape, into the seven territorial zoning plans prepared by the Ministry of Town and Country Planning and Public Works of the Government of Catalonia and in the territorial directing plans considered appropriate by the Ministry, after public enquiry.
- The catalogues in urban planning. It will be the territorial zoning plans themselves and, according to cases, also the territorial directing plans, that determine in which cases the landscape directives will be of direct application, compulsorily incorporated into the modification and revision of urban planning, or when they constitute merely recommendations for urban planning or for other plans or programmes of a sectorial nature related with landscape. From the viewpoint of urban planning, the landscape catalogues are conceived as tools of great use for experts in town planning and for representatives of the Town and Country Planning Committees, as they will supply directives and recommendations of a landscape order, very useful for the development of specific projects.

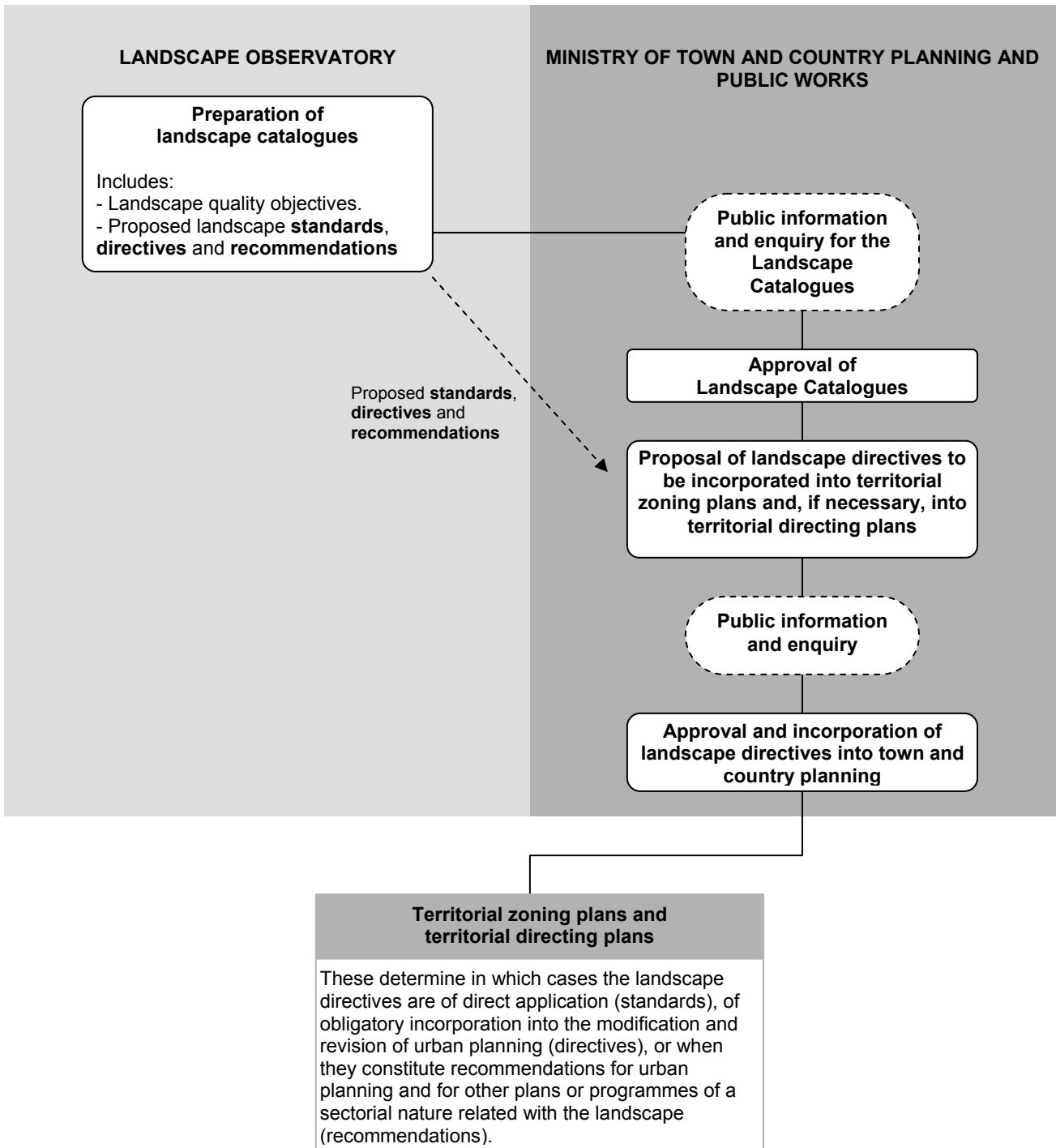


Figure 3. Process of integration of landscape directives into planning (according to the Act 8/2005 of the Landscape of Catalonia)

6.2. Sectorial functions

Apart from their use in town and country planning, the landscape catalogues also have the following extremely important functions, although their application in these fields depends to a large degree on other agents:

- They constitute a solid base for the definition of specific landscape strategies for particular parts of Catalonia. In this sense, they become a reference source in the preparation of landscape maps. The Act for the protection, management and planning of the landscape of Catalonia defines the landscape maps as “instruments for the agreement of strategies between public and private agents for the implementation of actions for the protection, management and planning of the landscape which are directed to the maintenance of its values”. In contrast to the catalogues, whose ambit of application coincides with the regions to be organised in the future for the political and administrative structure of Catalonia, the maps are of municipal, supra-municipal and district application.
- They act as a basic document for campaigns of sensitisation on the diversity of landscape in Catalonia and its environmental, cultural and aesthetic values, and for the inclusion of landscape in various levels of teaching in Catalonia.
- They are useful in the process of defining sectorial policies and strategies, such as, for example, policies for the preservation of nature (policy for natural areas, for ecological connectors), agrarian policies concerned with sustainability, policies for rural development, policies of tourist promotion associated with landscape, industrial policy, the policy on extraction activities, transport policy, telecommunications policy, energy policy (above all in the ambit of renewable energy), water policy (insofar as it refers to the maintenance of quality in large bodies of water), waste policy (installation of tips and other infrastructures), cultural policy and education policy.
- They act as starting documents for the definition of regional and local strategies directed to the sustainable development of the area (Local Agenda 21, sustainability strategies, etc.).
- They supply the landscape quality objectives and the landscape information necessary for processes of strategic environmental evaluation of policies, plans and programmes, for studies of environmental impact of projects affecting the territory, and for studies of landscape impact as established in the Town Planning Act.
- They act as reference documents for the development and application of the Fund for the protection, management and planning of the landscape, a financial instrument of the Government of Catalonia created by the Landscape Act for the purpose of being allocated to landscape improvement actions.

7. THE LANDSCAPE UNIT IN THE LANDSCAPE CATALOGUES: A NEW BASIC ITEM IN TERRITORIAL PLANNING IN CATALONIA

Article 11 of the Act for the protection, management and planning of the landscape of Catalonia establishes what shall be the minimum contents to be incorporated into the seven landscape catalogues. They are the following:

- a) An inventory of the landscape values present in the area.
- b) A list of the activities and processes which impact or have impacted most obviously on the actual configuration of the landscape.
- c) An indication of the main routes and areas from which the landscape is perceived.
- d) The geographical outline of the landscape units, understood as structural, functional and/or visually coherent areas on which a differentiated regime of protection, management or planning could impinge.
- e) Definition of the landscape quality objectives for each landscape unit. These objectives must express the aspirations of the group with regard to the landscape characteristics of their environment.
- f) The proposed measures and actions necessary to achieve the landscape quality objectives.

The study of the landscape units referred to in article 11 section five of the Landscape Act allows us to understand and visualise the general structure and functioning of the territory and diversity of landscape in each of the seven territorial planning regions, so that the landscape units express the large range of landscapes existing in each of the seven territorial regions and, in general, in Catalonia. The final result, having defined the units, will constitute an identification of the basic items in the rich and diverse landscape mosaic in Catalonia.

The landscape units are defined according to the landscape characteristics of the territorial area under study (the ambit of the respective territorial zoning plan), but also considering their priority usage in the instruments of territorial planning, urban planning and all the decisions for action and intervention in the territory arising from the implementation of sector policies.

Thus, the landscape units become, through the landscape catalogues, the basic territorial items on which the landscape policy of Catalonia will be founded in the coming years. They are the basic territorial units on which the landscape quality objectives emanating from the European Landscape Convention will finally be formulated, as well as the criteria, proposals and measures which will end up by being integrated into territorial, urban and sector planning. This fact gives the landscape units resulting from the preparation of the catalogues outstanding importance.

It must be pointed out that the landscape catalogue is not conceived as a set of catalogues of various areas of landscape interest, but rather that there are landscape units covering the whole of the territory of Catalonia, so that every point and every place will always belong to a certain landscape unit. This nuance is important because it

makes clear that the catalogues do not deal only with landscapes with certain exceptional scenic, harmonious and/or ecological values, but that they embrace all kinds of landscapes down to the very last corner of the territory, above all those which lack any protection or attention. The landscape units also avoid discontinuity in the boundary areas between the seven territorial regions (see figure 3), in such a way that the landscape unit can have – and in fact has – continuity with the neighbouring territorial ambits.

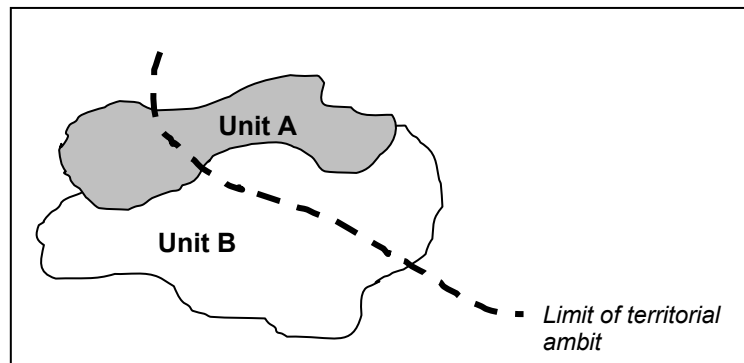


Figure 4. Landscape units and administrative limits

As the principal objective of the landscape catalogues is, as has already been indicated, to integrate landscape into territorial planning, the scale of the work coincides with that proper to the territorial zoning plans, that is to say, the scale of 1:50.000. This level of detail is optimum for the study of the landscape information needed for town and country planning.

7.1.- A modern conception of the landscape unit

A detailed analysis of studies on landscape at an international scale shows that, for the definition and characterisation of landscapes, the concept of the 'landscape unit' has been widely used. The use of this concept has been extended to other disciplines studying the landscape from various focal points and this has led to the enrichment of the diversity of views on the landscape, but, in contrast, it has not fostered communication among the specialists. In this sense, the landscape catalogues give a new meaning to the landscape unit, in accordance with the modern trends to be observed in landscape analysis throughout Europe and on an international scale, trends which give more and more importance to the dynamic and intangible elements of landscape (as well as those static and material) when defining its nature.

Landscape units are portions of land sharing the same nature, that is, they are characterised by a set of features which contribute to making one landscape different from another, and in no way better or worse. Thus, the landscape units in the catalogues are based, principally, on the elements that structure the territory (mountains, rivers, the road network) and on its organisation (agricultural, forest or urban land), but considering at the same time that this landscape has some specific dynamic features which have contributed – and do contribute – to shaping its present image (irreversible development processes, agricultural transformations, etc.) and a cultural tradition and particular history, difficult to identify with the simple

superimposing of cartographic layers. The nature of the unit will depend, then, on a combination of the shapes of the relief (mountain, valley, plane, etc.), land cover (crops, developed areas, riverside woods, etc.), the organisation of the space, historic dimension (age-old and modern landscape structures, etc.), perception (texture, colours, shapes, etc.), and the relationships established between the local population and their landscape (proximity, feeling of belonging, etc.).

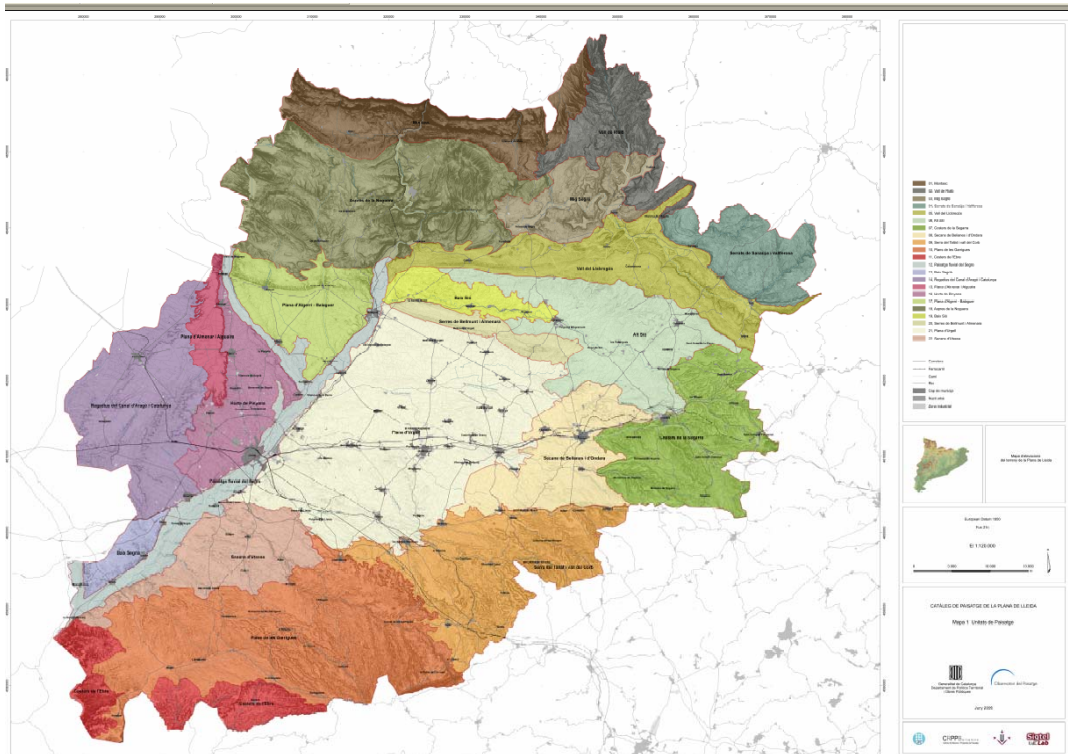


Figura 5. Landscape units in the Plana de Lleida

From a methodological viewpoint, what has been said above means, in fact, that the landscape unit in the landscape catalogues is not just the result of outlining on a map a portion of territory with similar morphology and ground cover and, therefore, the result of a merely structural combination of elements. The landscape unit, as introduced in the catalogues, also considers the particular relationships (social, economic, cultural) which have been established between a territory and its inhabitants and which form part of the identity of the people who live there. In this sense, every landscape unit will be unique, singular, different from the others and from those of other corners of the country, displaying diverse structural, functional and historical criteria.

Thus, an operational concept of the landscape unit is proposed, understood as a part of the territory characterised by a specific combination of landscape components of an environmental, cultural and aesthetic nature, and of clearly recognisable dynamics, conferring on it an idiosyncrasy differentiated from the rest of the territory. The definition of the units is based on landscape elements enduring in time, to ensure that the catalogues have a long period of validity. The six landscape variables used to define the landscape units are:

- The physiographical factors and, particularly, the relief, which is of great importance in Catalonia.
- The use and cover of the land, a study of which enables the characteristic spatial layout of each landscape to be identified.
- The historical dimension of the landscape, that is to say, the human factor as the principal transforming agent of the landscape from a historical perspective. The landscape is a reflection of the functions given to it through the centuries. It is founded on the landscape forms and structures that we have inherited, such as, for example, the urban patterns (shape and dimensions of an urban centre), the parcelling and ownership structure, the types of settlements in the area (disperse or concentrated populations), the historical distribution of certain production activities (terracing, industrial colonies, pasture areas or mineral extraction activities), the water infrastructures (reservoirs, channels and irrigation networks), the old road networks and other communication and transport infrastructures (roads and railways). The endurance of these marks in the area contribute to defining the character of a specific landscape and the identity of a territory and are basic elements which must be taken into account in later landscape planning.
- The structure of the landscape, analysed from the ecology of the landscape through calculation of indices of diversity or fragmentation of the landscape.
- The study of visibilities and, therefore, the view of the landscape. This aspect is very important in defining the landscape units, since the observation and comprehension of the landscape is strongly conditioned by the existence of particular visual observation points and routes (topographical landmarks, urban centres, communication routes, etc.), which are the factors that to a great degree contribute to our perception of the landscape.
- Detection of recent dynamics and immediate trends. The definition of the units must be based also on long-lasting landscape elements, to ensure that the catalogues are valid for a long time. Projects which already affect parts of the territory, but which are not recorded in the reference cartography, must be taken into account.
- The feeling of the place. Landscape is much more than a set of natural, aesthetic components or the result of historical and social-economic factors which have intervened in the territory. Landscape is, to a great degree, concerned with experience, that is to say, it is formed from the sum of experiences lived through over the years, with deep-rooted feelings of belonging and identity. The ancestral social and economic relationship established between the various populations of a territory, or between a village and a nearby river, the use of certain techniques and practices in dealing with crops, the names of places, the existence of a dialect spoken in a little area and the special recognition of certain landscapes (through their importance during childhood or through their daily use) are, among others, some of the factors –now intangible – which identify us with a particular landscape.

The quantity and variety of landscape variables which can be used in the characterisation of a landscape constitute, from the beginning, a serious methodological difficulty. In this sense, the methodology used in characterising landscapes in the setting of the landscape catalogues starts from three fundamental premises: that it should be simple, that it uses the best possible information available – in Catalonia this is diverse and of quality – and that it should be useful for territorial, urban and sector planning.

The landscape catalogues take into account the continuity of the landscapes where they border other autonomous communities and neighbouring European States. The results obtained by the landscape units at these limits are compared with other landscape classification initiatives such as the *Atlas de los Paisajes de España*, prepared by the central Ministry of the Environment, and the *Mapa de cubiertas del suelo Corine Land Cover* (2000) on a scale of 1:100,000, prepared by the European Environment Agency in 2004. This cartography is a key factor in defining the landscape units where Catalonia borders other Spanish and European regions, such as Aragón, País Valenciano, Midi-Pyrénées and the Languedoc-Roussillon.

7.2.- Landscapes needing special attention

As well as the landscape units, the catalogues provide for a second level of analysis (called the ‘special attention landscape’) reserved for those cases where it is necessary to record the existence of landscape sectors with very singular features, but of very little territorial extension. They are portions of territory which have a certain heterogeneity, complexity or singularity from a landscape viewpoint (for example, suburban areas being transformed or other places undergoing intense and rapid changes in their uses) and which, therefore, need specific directives and criteria for their protection, management and planning.

The role of the special attention landscapes is a key factor in imposing other planning objectives than those which are merely territorial, as is the case of town planning. The decisions taken in the town planning ambit do, without doubt, end up by impacting on the landscape, or at least they are easier for the population to perceive. The study of suburban and urban areas in the metropolitan region of Barcelona, the Catalan coast, certain parts of the Pyrenees and, in general, landscapes in rapid transformation, are examples of landscapes which in certain cases require this type of analysis in more detail. The information and analysis supplied by a study of the special attention landscapes will constitute a basic framework of reference for the teams drafting municipal town planning outlines (POUM) and for those who prepare landscape studies for the purpose of including them in the POUM environmental reports.

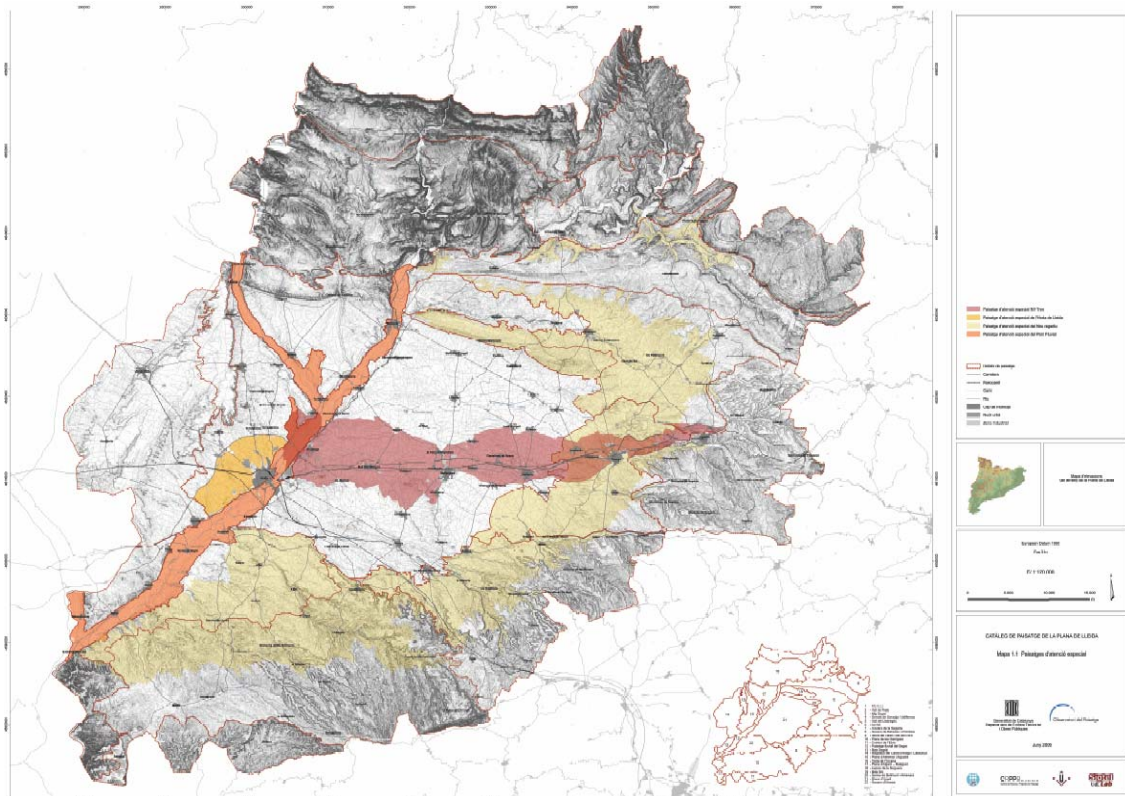


Figure 6. Special attention landscapes in Lleida

8. PROCEDURES FOR PREPARATION OF THE CATALOGUES

The catalogues are not seen as a mere exercise in methodological trials, but are conceived to obtain certain applicable and very specific results. The procedure for the preparation of the landscape catalogues comprises five phases:

1. Identification and characterisation of the landscape.
2. Evaluation of the landscape.
3. Definition of the landscape quality objectives.
4. Establishment of directives, measures and proposals for action.
5. Establishment of follow-up indicators.

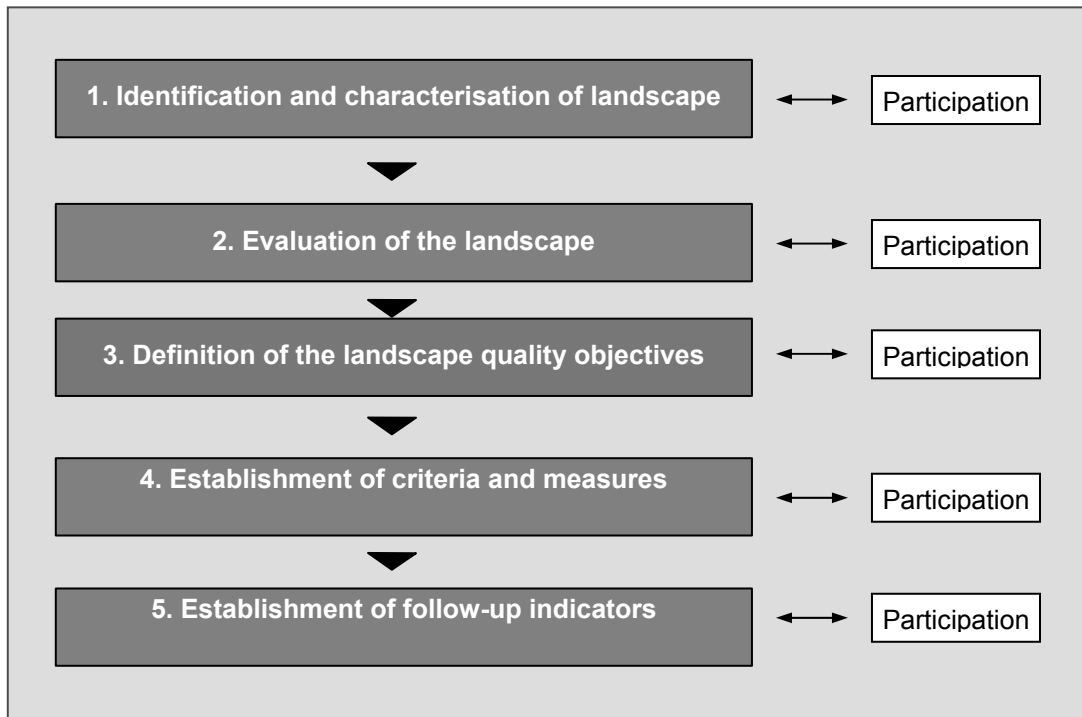


Figure 7. Procedure for the preparation of landscape catalogues

8.1.- Identification and characterisation of the landscape

This is the first phase of the preparation process, in which the parts of the territory with a similar nature are identified (on the basis of a study of the natural, cultural and visual elements which configure the landscape), the areas identified are classified – these are the landscape units – they are mapped and their nature described. Describing the nature of the unit involves:

- Studying the evolutionary sequence of the landscape.
- Listing exhaustively the landscape values of each landscape unit.
- Describing the general dynamic of the landscape and the natural and social-economic factors which have intervened – and do intervene- in its evolution and transformation. This section analyses how the landscape will evolve if current trends continue (for example, loss of the agricultural-forest mosaic structure or loss of biodiversity), the risks of combustibility, inflammability, flooding or waterway pollution and the disturbances in the landscape caused by human activity in the area (an exhaustive inventory of the elements which, through their state of degradation and abandonment, or their simple existence, contribute to impoverishing the landscape quality, such as the construction of certain roads or other infrastructures, developments, mining activities and old tips, telecommunications towers and antennae, camp sites, farms and greenhouses, airport runways, high tension lines and wind parks).

- Analysis of the possible future evolution of the landscape, taking into account the natural dynamics of the area, the social-economic trends, current legislation and the implementation of current territorial, urban and sector planning policies.

At the end of the characterisation process a database is also obtained with photographs of the landscape units, which will then form part of the Photographic Archive of the Landscapes of Catalonia.

Inventory of landscape values

Of the whole process of characterisation of the landscape, the most significant part is the identification of values. This is concerned with landscape values in all their dimensions, through a broad classification which has been chosen with regard to the wealth and diversity of cultural landscapes in Catalonia and the overwhelming need to identify them and record them. The values analysed are of various types and are described in more detail in the next two sections:

- Aesthetic values.
- Natural and ecological values.
- Productive values.
- Historical values.
- Social use values.
- Spiritual and mythological values.
- Symbolic and identity values.

For the identification of the more cultural, perceptive and interpretative values (such as the aesthetic, symbolic and spiritual) and, therefore, more subjective in evaluation, it is very important to know the opinions of the people who live in a territory, through enquiries both general and directed to informed people. However, public participation is not the only way of finding out about these values. Exploration of the artistic and literary legacy of the place is another way. Throughout history, artists and writers have transmitted landscapes in their works with aesthetic and symbolic attributes and – we should not forget this either – they themselves, at times, have been their creators.

In addition to those appearing in the above list, other values of a perceptive or interpretative type can be identified. They correspond to the sensory perceptions – not only visual – that a person has of a particular landscape. It can be a safe landscape, or a terrifying, calm, noisy, disturbing, wild or remote landscape. These values are easy to describe but very difficult to identify and are not considered as priorities for the catalogues. Now, at this point, it is very important for the working teams who prepare the catalogues to have sensitivity and a capacity of observation and empathy with the place under study.

Legally recognised landscapes

The valuation of landscape starts with those parts of the territory or elements of landscape which are recognised legally as of special landscape value on an international, State, Catalan or local scale. They are, among others:

- Areas of landscape interest, such as the areas defined in the coastal system Directing Plan and in the Government of Catalonia's special plans for protection of the natural environment and landscape, and areas of interest defined in the landscape maps.
- Areas recognised in the regulations on natural areas (National Parks, Natural Areas of National Interest, Nature Reserves, Nature Parks, Areas of Natural Interest (PEIN), Special Plans, Hunting lodges, Game reserves and Picturesque landscapes established by regulation on a local scale.
- Areas recognised strictly for their geological interest, such as the inventory of areas of geological interest of Catalonia.
- Areas recognised strictly for their cultural interest, such as Cultural Assets of National Interest.
- Areas recognised on a European scale, such as Specially Protected Bird Areas (ZEPA) and the Natura 2000 Network.
- Areas recognised internationally, such as Biosphere Reserves, specially protected areas of the Mediterranean, areas designated as the Heritage of Humanity.

Landscape values

Landscapes have many types of values, some patent and others latent. We list them below:

- Aesthetic. Related with the capacity of a landscape to transmit a certain feeling of beauty, depending on the cultural meaning and appreciation acquired throughout history and the intrinsic value in the colour, diversity, shape, proportions, scale, texture and unity of the elements making up the landscape. The aesthetic value of a landscape generally has a deeply cultural base which associates beauty with certain patterns or models and it does not emerge simply from primary factors such as colour and texture. In this sense, the sea and the mountains are examples of landscapes whose values have changed diametrically throughout the history of civilisation. Some general examples of aesthetic values are those landscape conjunctions where harmonious combinations occur, areas clearly recognisable with respect to their surroundings (agricultural and forest mosaics, dry hills), scenic backgrounds (mountain ranges, horizons), groups of historic buildings or other specially aesthetic features (lines of trees by the side of roads and paths, well-ordered approaches to centres).

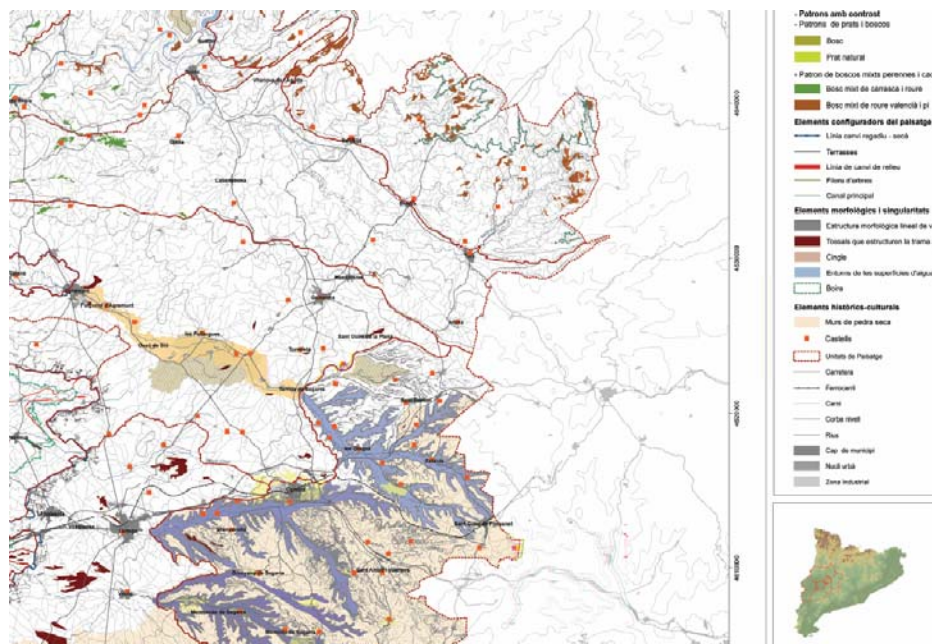


Figure 8. Detail of the map of aesthetic values of the Plana de Lleida

- **Natural and ecological**. These refer to factors or elements which determine the quality of the natural environment. Areas of special natural interest are considered, which will include also landscapes recognised by strictly natural criteria or ecological connections between natural areas (river and land).
- **Productive**. These are related with the capacity of a landscape to supply economic benefits, converting its elements into resources. The productivity can be obtained through agricultural and livestock activities, forestry, shooting, tourism, industrial and mining activities.
- **Historical**. These correspond to the most durable marks that man has left on the landscape throughout history, such as buildings (mills, huts, cabins, towers, bridges, castles, walls, churches), types of settlement, historic centres in modern towns or other architectural groups (industrial colonies), parcelling structures and their boundaries (margins, walls), systems of infrastructures for soil retention (terraces, banks), typical local water systems (formed by traditional irrigation, stone aqueducts), the network of public roads and drovers' roads. This is not an inventory of elements of historical interest, but also includes areas or groups of elements considered as having landscape value from an historical perspective (for the presence of ancient olive groves, stone walls or huts, or a combination of these and other types of elements).
- **Social use**. Related with the use that an individual or a certain group makes of a landscape in terms of itineraries (especially those accessible to people with mobility problems), pleasure, leisure, strolling, rest, observing panoramas (viewing points, tourist routes), meeting places, environmental education, practising sports and therapeutic functions.

- Mythological. These refer to elements of the landscape with group symbolic meanings related with fantastic stories or legends.
- Religious and spiritual. Corresponding to elements of the landscape or landscapes as a whole which are related with religious practices and beliefs, such as, for example, areas containing dolmens, sepulchres or other funerary monuments, places and routes where processions or pilgrims pass, or areas where religious gatherings take place.
- Symbolic and identity. The identity value corresponds to the identification with a landscape that a certain group feels. The two values – symbolic and identity – refer to elements of the landscape or landscapes as a whole with great symbolic or identifying meaning for the local population (or, in general, for the Catalan people) in establishing relationships of belonging or expressions of nationality.

8.2.- Evaluation of the landscape

The second step – evaluation – consists in studying the threats to and opportunities for the protection, management and planning of the landscape in terms of sustainability, for each unit and special attention landscape. It is important at this point to study the responses of the authorities and entities, that is, changes in public policies or individual or group attitudes in order to reduce the pressure on the landscape and improve its quality.

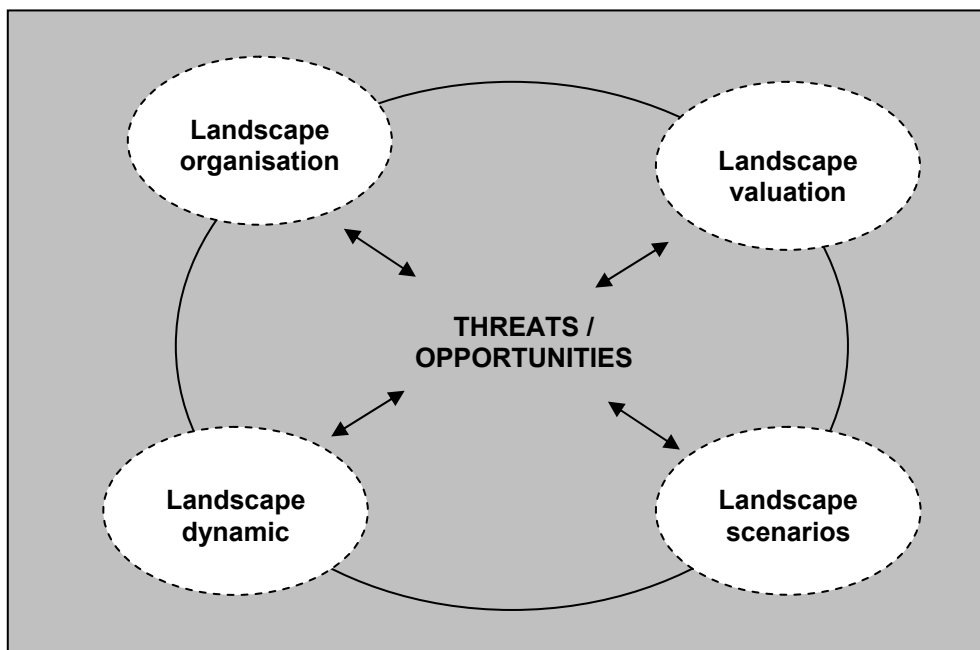


Figure 9. Model of landscape evaluation

8.3. Definition of the quality landscape objectives

This is the point at which the public authorities give shape to local collective aspirations referring to the landscape characteristics of their environment, after understanding its condition, its values and its risks. In this phase participation acquires an important role. The landscape quality objectives defined by the working teams and collected in the process of public participation are defined for each landscape unit and classified according to their function in the landscape, that is to say, its preservation, improvement, restoration, recovery, valorisation, creation or some combination of these.

In their turn, the landscape quality objectives are classified according to whether they are directed to town and country planning (specifically the territorial zoning plans and territorial directing plans) or to sector policies which can have a direct or indirect effect on the landscape (such as those concerned with nature preservation, agriculture, forest, industry, rural development, extraction activities, tourism, transport, telecommunications, energy, water, waste, culture, education, taxation or heritage).

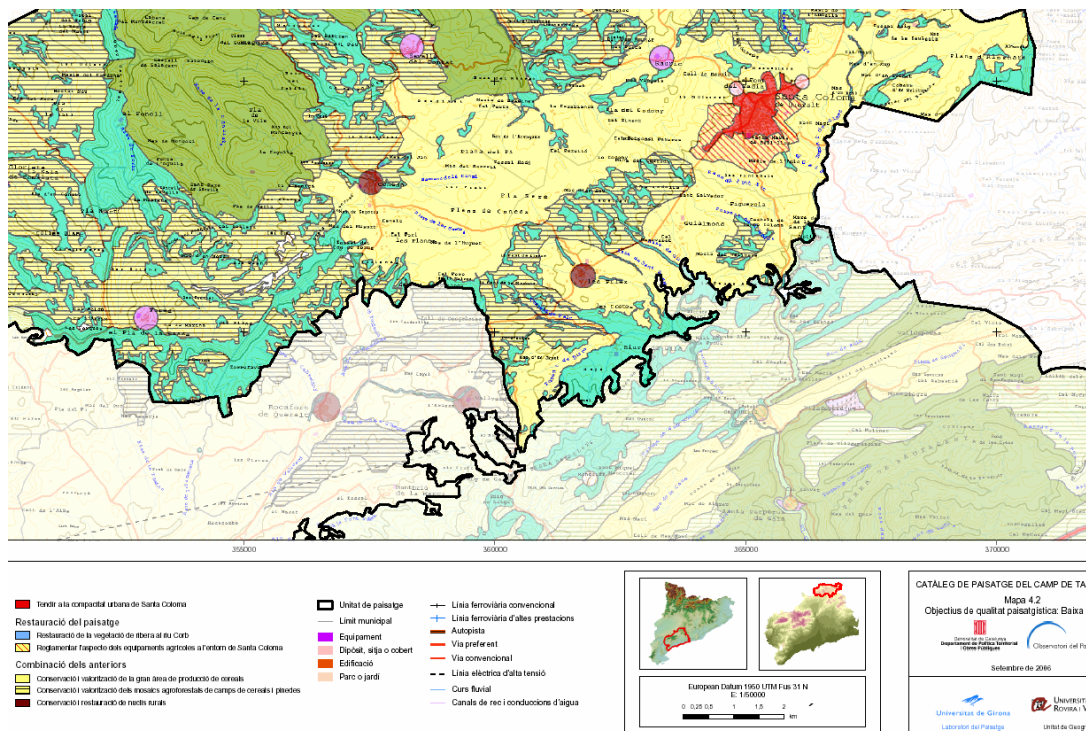


Figure 10. Detail of a map of landscape quality objectives

8.4. Establishment of directives, measures and proposals for action

Having formulated the landscape quality objectives, the fourth phase sets out, for each unit and each special attention landscape, the specific criteria and actions which must be set in train by the authorities to achieve the quality objectives defined in the previous step. In town and country planning the proposals of the catalogues

have to be adapted to the determinations established in the regulations on territorial zoning plans, which are of three distinct types:

- Standards. Provisions precisely formulated and of obligatory compliance for urban planning, projects for infrastructures and other actions in the territory which are subject to regulation.
- Directives. Provisions defining strategies or guidelines for action which must be specified in regulation documents on a minor scale, particularly for urban planning.
- Recommendations. Provisions which are considered adequate for a positive development of the territory but which are subject to the evaluations as to opportunity or suitability made by the competent authorities at the time of the action.

The standards, directives and recommendations must be respected by the system of urban settlements, the system of infrastructures for mobility and the strategies of the system of open spaces, which are the three determinants of the town and country zoning plans. The landscape catalogues supply, for each landscape unit and for the town and country planning ambit in general, standards, directives and recommendations for general and urban planning:

	Urban settlements	Infrastructures	Open spaces
Standards			
Directives			
Recommendations			

And they also contribute, for each landscape unit and for the town and country ambit in general, criteria and measures for sector planning:

Sector policy 1	
Sector policy 2	
Sector policy 3	

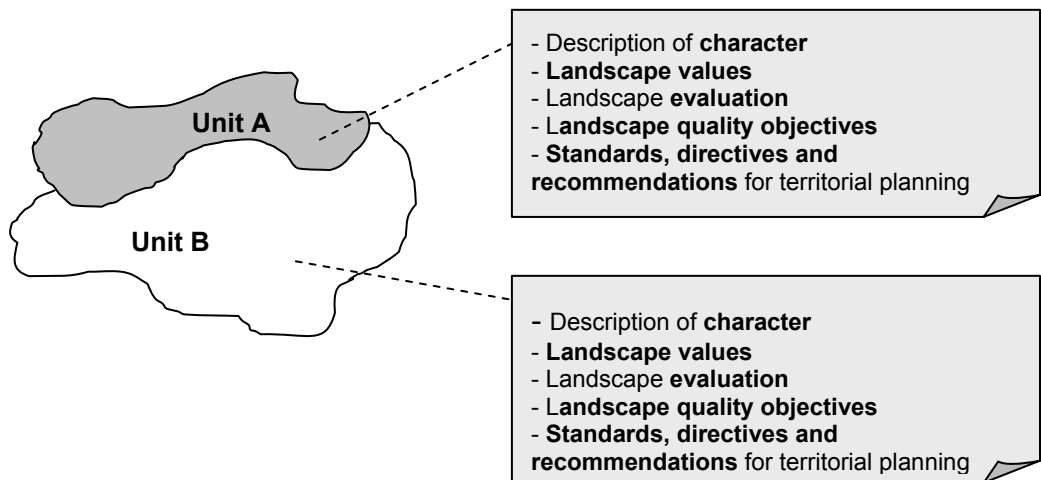


Figure 11. Results for each landscape unit

Catàleg de Paisatge del Camp de Tarragona
Unitat de paisatge 25: Uteca - Mas de Bèrcia

Generalitat de Catalunya
Departament de Política Territorial i Obres Públiques
Observatori del Paisatge

CARACTERITZACIÓ DEL PAISATGE

Elements naturals i humans que constitueixen el paisatge

Descripció dels principals condicionants naturals del paisatge de la unitat com el clima, la hidrologia, els processos geomorfològics, el relleu o l'argila i dels elements que s'han desenvolupat sobre aquest sòstrat com les formacions vegetals i hàbitat, els usos del sòl o les infraestructures).

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Evolució històrica del paisatge

Descripció de la seqüència evolutiva del paisatge i dels principals factors naturals, socials i econòmics que han propiciat els canvis al llarg de la història.

Descripció de la seqüència evolutiva del paisatge i dels principals factors naturals, socials i econòmics que han propiciat els canvis al llarg de la història.

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Fig. 23: Veïa de la hidrogràfia

Figure 12. A landscape unit presentation sheet

8.5. Establishment of follow-up indicators

Finally, a grid of environmental, cultural and social indicators of the landscape is applied, comprehensible to the population, politicians and public managers, formulated from the landscape quality objectives, for the purpose of making it possible to follow up the state of the landscape in Catalonia and its evolution in the

context of sustainable development. One of the main challenges in this phase of the catalogue is the dissemination of the information to society, through the difficulty in understanding it and the limited attention at times shown by the population. Comprehensible indicators are needed which indicate simply and effectively the state of a specific aspect of the landscape and its evolution.

9. CONSULTING THE PUBLIC

The landscape catalogues use consulting the public as a tool for the involvement of society in the management and planning of its own landscape. The process of consultation puts the emphasis on the valuation and perception that an individual has of the landscape (especially in its more intangible aspects) and on a consideration of its threats and opportunities. In this way, the consultation develops at three levels:

- Direct interview with landscape agents, such as institutions, experts, businessmen, trade unions, cultural associations and ecologists.
- Seminars and work sessions integrated into the consultation process for the Town and Country Zoning Plans carried out by the Ministry of Town and Country Planning and Public Works of the Government of Catalonia.
- Enquiry through the Observatory web on the basis of questionnaires addressed to the general public.

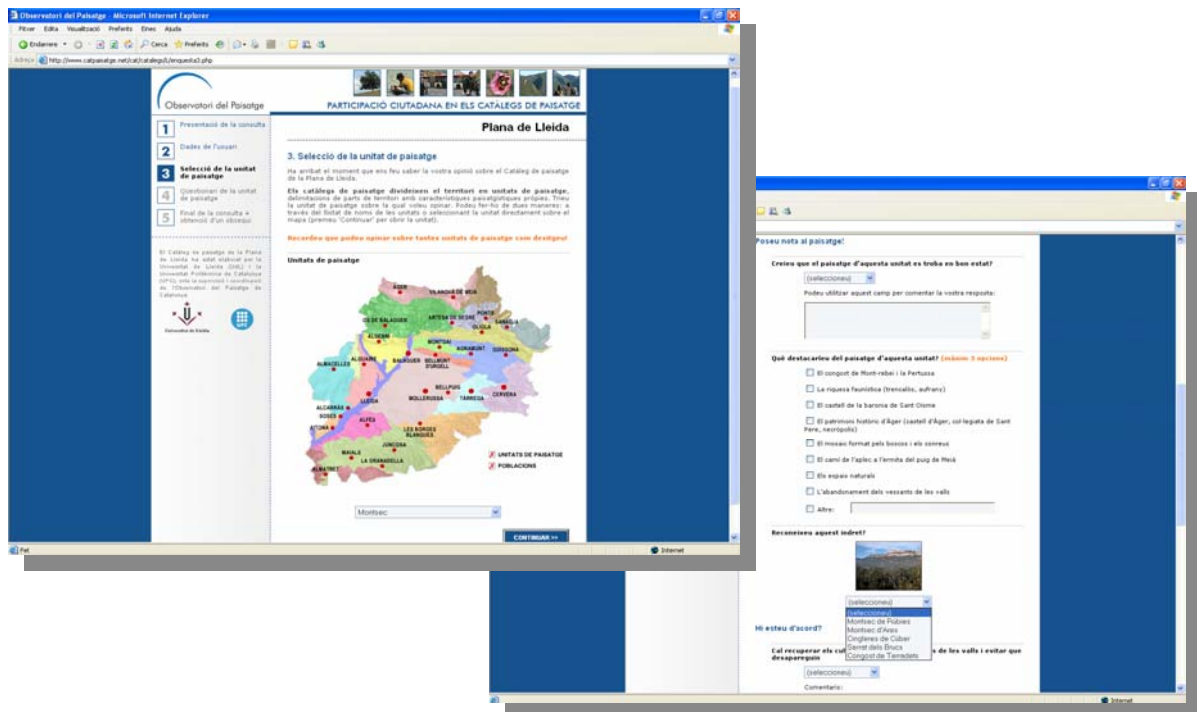


Figure 13. Enquiry through the Observatory web

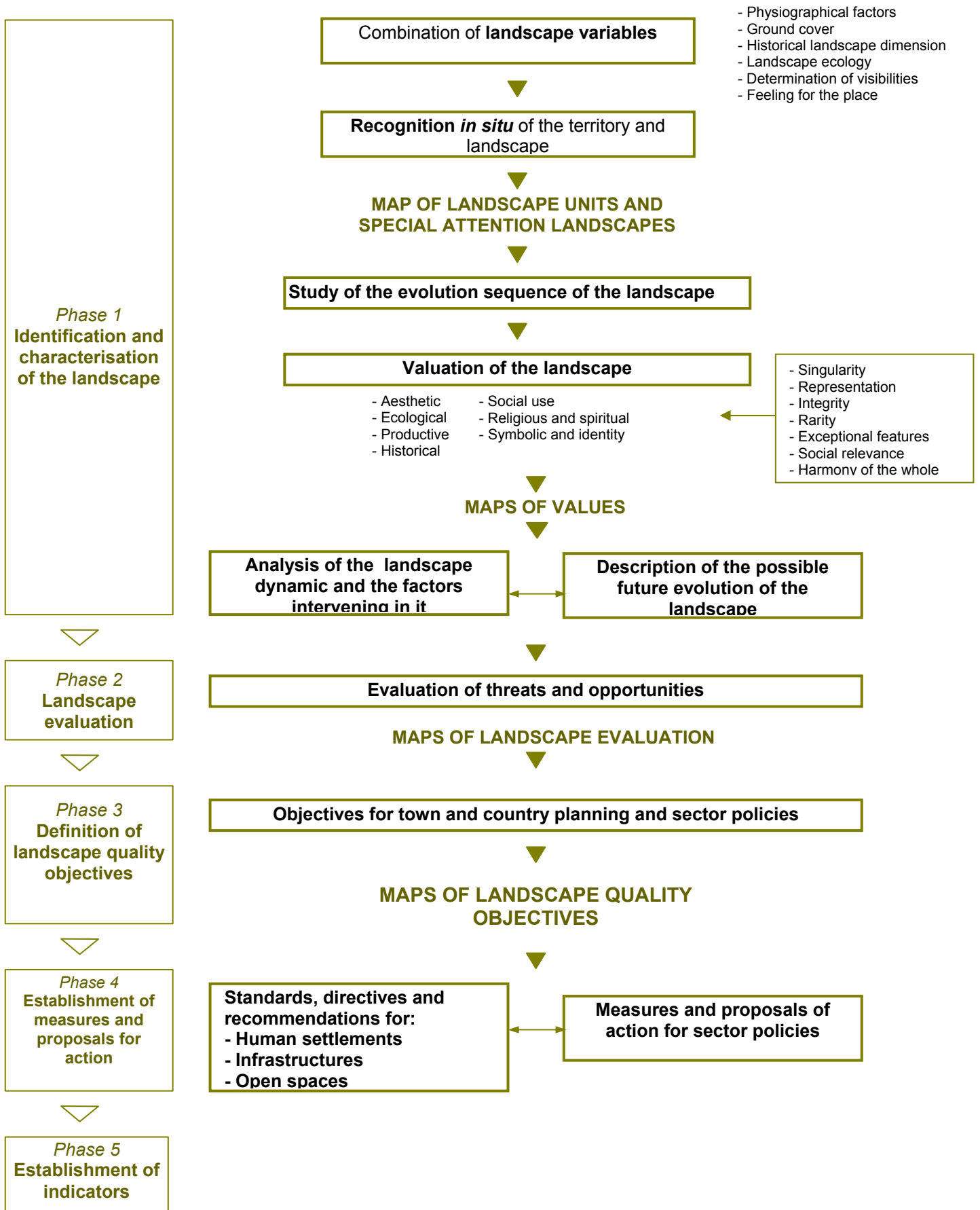


Figure 14. Summary of the procedure in preparing the landscape catalogues

10. RESULTS

10.1.- Written memorandum

Technical document which the Landscape Observatory of Catalonia will deliver to the Ministry of Town and Country Planning and Public Works of the Government of Catalonia. The structure of the written memorandum will be the following:

PART 1.- TERRITORIAL AMBIT

- 1.- Methodology
- 2.- The natural factors which condition the landscape in the corresponding territorial ambit.
- 3.- Human factors: the historical process of peopling and its influence on the landscape.
- 4.- The landscape today.
- 5.- The artistic expression of the landscape of the area.
- 6.- "Significant" landscapes.
- 7.- Dynamics of the activities and processes which impact most notoriously on the landscape.
- 8.- Evolution of landscape as a result of current social-economic and environmental trends.
9. Threats and opportunities.
- 10.- Landscape quality targets for the whole territorial ambit.
- 11.- Proposal of measures and actions for the whole territorial ambit.
- 12.- Establishment of indicators for protection, management and sustainable planning of the landscape.

PART 2. LANDSCAPE UNITS

- 13.- The landscape units in the territorial ambit.
- 14.- Files for each landscape unit with:
 - General details
 - Distinctive traits of each landscape unit (natural, cultural, dynamic).
 - Natural and human elements constituting the landscape
 - Historical evolution
 - Organisation of the landscape
 - Artistic expression
 - Current dynamic
 - Landscape values
 - Principal routes and points of observation of the landscape
 - Risks and impacts
 - Possible future evolution of the landscape
 - Threats and opportunities
 - Landscape quality targets
 - Measures and actions
- 15.- The landscapes needing special attention
16. Conclusions.
17. Documentation of reference.

SCHEDULES

- I. Summary of the whole Catalogue.

10.2.- Maps

The maps to be prepared at E/1:50.000 are:

1. Map of landscape units and landscape needing special attention
2. Map of visibilities and inter-visibilities from the main points and routes.
3. Map of the main routes and areas from which the landscape is perceived.
4. Map of natural and ecological landscape values
5. Map of aesthetic landscape values
6. Map of historical values
7. Map of social values
8. Map of productive values
9. Map of religious and spiritual values
10. Map of symbolic and identifying values
11. Map of impacts
12. Map of risks
13. Maps of evaluation of the landscape by landscape units
14. Maps of landscape quality targets

10.3.- Inventory of landscape agents

From the consultation process a database is obtained with updatable and consultable information on the principal agents (authorities, groups, universities, etc.) involved in the protection, management and planning of the landscape in Catalonia. Having prepared the seven landscape catalogues, the inventories will be integrated into one and will form the **Inventory of landscape agents in Catalonia**, and will be able to be consulted through the Observatory web.

10.4.- Photographic archive

Database with all the photographs taken during the process of preparation of the Landscape Catalogue, duly classified by landscape units, as well as other criteria. The photographs will become the property of the Landscape Observatory and will form the **Photographic archive of the landscapes of Catalonia**.

11. BY WAY OF CONCLUSION

The landscape catalogues of Catalonia constitute a new instrument for the incorporation of landscape into town and country planning and are a key element in facilitating the connection between territorial and urban planning with reference to the implementation of landscape policies. This double objective becomes a true methodological challenge, as there is still not too much experience in Europe which fully tackles these objectives. On the other hand, the landscape catalogues embrace knowledge, analysis and reflection on the diversity of landscapes of Catalonia through the integration of natural and cultural values in their tangible and intangible dimensions. This point is another true challenge, above all for the timid methodologies existing in

the field of identification and evaluation of the intangible elements of landscape, but this is a fundamental question in a tool and in objectives of a holistic and integrated nature in times of growing interest, valuation and social demand for the landscape.

The landscape catalogues do not seek to design the future landscape of Catalonia, apart from pointing out certain trends which seem evident. They must, on the other hand, define strategic lines and specific directives which can contribute to improving the quality of the landscapes and, in short, the quality of life of the people. The catalogues are also a powerful instrument for sensitisation and education and must have a preponderant role in increasing the awareness of the public, private organisations and, also, the public authorities, of the values of landscape, its functions and its changes. The landscape catalogues must be allowed to advance decisively towards a new culture of territorial planning which will require, without doubt, large doses of landscape sensitivity by all the agents intervening in it. This is why the Landscape Observatory, the institution created and designed to generate this sensitivity, has vested so much hope in the landscape catalogues.