RehabiMed Method for the Rehabilitation of Traditional Mediterranean Architecture
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Rehabimed Method

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2005, year of the Mediterranean, is the 10th anniversary of the launching of the most important challenge yet to have been tabled to create a shared space of peace, stability and prosperity in the Mediterranean area: the Barcelona process, the product of the first Euro-Mediterranean Conference.

This ambitious initiative, approved by the foremost representatives of the various countries around the Mediterranean shores and the European Union, seeks synergies in socio-political, economic, cultural and environmental aspects from a decidedly regional viewpoint of mutual development. In 1998 this framework presented the Euromed Heritage Programme for the development of cultural projects to valorize and recover the extensive, varied body of shared heritage with the collaboration of experts in the various countries.

RehabiMed is a project of Euromed Heritage III and follows in the steps of the CORPUS and CORPUS Levant projects, carried out in year one of the programme, to study the characteristics and problems of traditional architecture in the Mediterranean basin.

RehabiMed addresses a basic aim: to reinforce the rehabilitation and maintenance of traditional Mediterranean architecture as a factor of sustainable development (social, economic and environmental). This aim is twofold: it sets out to contribute to improving the living conditions of its inhabitants and to preserve Mediterranean historical and cultural identity.

In order to achieve this useful objective, we have instituted three lines of complementary action: the development of tools, strategies and methodologies for rehabilitation; the application of the tools developed in training activities; and experimentation and the demonstration of the possibilities and effects of a good rehabilitation policy by means of its practical application in four pilot operations.

It is now a year since we began our task, and today we are able to present the first results of the work carried out at debates held between various groups of experts in order to produce a preliminary draft of the methodology. This is a method to produce a framework of reference that will allow the politicians and technical professionals of the various government bodies to carry out initiatives to promote rehabilitation with greater ease. It also aims to help the various professionals involved in the rehabilitation process to apply their skills and knowledge. All of this is only possible if it is backed by
public awareness and the population’s active participation in decision-making.

It has been a difficult task, and the initial results are satisfactory. Now, the document we present must serve as the basis for debate among everyone who is interested in improving, qualifying and extending it, and doing everything necessary to enable us, over the next two years, to produce a consensual methodology that is useful, effective and sufficiently flexible to adapt to the reality of all Mediterranean countries.

Xavier Casanovas

RehabiMed Project Manager

Barcelona, 30 August 2005
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INTRODUCTION

Traditional Mediterranean Architecture

RehabiMed uses the term traditional architecture to refer to everyday architecture that is alive because it is inhabited, essentially civilian, domestic and of pre-industrial construction. It is a form of architecture built using local resources, which covers materials, techniques and the skills of its constructors, and it is the fundamental expression of the culture of the different communities and their relation with nature and the landscape.

It is an architecture that covers different forms of grouping and the scattered habitat with all its auxiliary constructions, not forgetting the more modest elements (fountains, paths, etc.), which, altogether, form the traditional Mediterranean landscape.

RehabiMed focuses broadly on this architecture, including both the rural habitat, fundamental to the humanization and structuring of the territory, and the city, the clear expression of life in community and the optimization of resources and human relations, going beyond the filters of highbrow architecture to incorporate all the values of more modest forms of architecture.

Rural architecture is primarily linked to systems of agricultural and livestock production, which, beyond a simple presence in a bygone landscape, plays a vital role in understanding the processes that have produced today’s landscape, the result of a social and a natural history. Rural architecture has always played a salient role as an element that structures the landscape in which buildings, crops and nature are in perfect balance, the result of a continuous process of change and transformation, a socio-environmental reality generated jointly by biophysical and socioeconomic factors throughout history. The traditional rural habitat takes the form of a heterogeneous variety of built typologies which may be scattered or form small settlements. It is also accompanied by a large variety of auxiliary elements and constructions that are vital to the domestication of the territory (cabins, dry-stone walls, ovens and kilns, caravanserais, fountains, wells, mills, stables, granaries, etc.), and infrastructures (canals, paths, irrigation channels, etc.) which are the result of the historical interaction between natural resources and human ways of appropriating them that bear witness to the coherent hybridization of the biophysical factors of a region and the socioeconomic factors of the community that inhabit it.
Urban architecture, on the other hand, is built in the context of a city or urban settlement, being the expression of a more complex form of community dwelling, in which artisans and traders predominate over the land-related trades and where ‘the new needs and forms of society find their place’ (Frampton, 1961). The urban settlement, though also originally linked to the rural space and to the need to commercialize farming surplus, appeared as a structure to dominate the territory, defined by Braudel (1968) ‘more than by its walls or the number of its population, by the way in which it concentrates its activities on the most limited surface area possible’. The urban habitat covers a large typological range, derived to a large extent from geographical differentiation and from its origin and historical evolution. This historical and morphological diversity not only translates as buildings, construction procedures or materials used, it is also the configuration of the urban form, expressed in the way of structuring and considering collective space (streets, squares, etc.), of organizing constructions and uses which, in the rural world, are scattered (sanctuary, fountain, fortress, etc.), of relating private architecture and public space, developing a greater variety of residential typologies that reflects more complex social structures, in the uses of buildings, in the singularity of its infrastructures (market, school, etc.), and so on. These settlements, which in days gone by exclusively configured the city as a consequence of its growth and transformation, now form an integral part of the contemporary city, where they play the role of historical nucleuses.

It is, then, the form of traditional architecture that humankind used to settle and construct its habitat in the territory around the Mediterranean Sea, a palimpsest permanently rewritten by the relations between people and their surroundings, and which has today become cultural landscape and collective imaginary.

**A changing world. Architecture under threat**

The inventories drawn up as part of the CORPUS and CORPUS Levant (EUROMED Heritage I) projects showed in 2002 the far-reaching transformations and pressures to which architecture, landscape and traditional territory are subject. Today, traditional surroundings are in a dramatic situation throughout the Mediterranean Basin, reduced to a continuing loss of their social and cultural character, threatened by intense degradation and constantly on the retreat. Likewise, the breakdown of the traditional world and the tendency to cultural homogenization as a result of globalization have brought about disregard for much of this architecture, often
considered to be a symbol of poverty with values and qualities that are far removed from the mediatized concept of modernity.

Pressure on the traditional habitat began with the process of industrialization, though it was much accentuated by the modern movement and urbanism in the early 20th century, seeking new models of dwelling and building cities that could overcome the deficiencies of traditional settlements; it went as far as denying all functional, social and even aesthetic values, and radically placed ‘the new’ before ‘the old’. This process emerged at different times according to the country in question and whether we refer to the urban or the rural space.

Today, in the era of the ‘global village’, when the metropolitan industrial city is turning into a diffuse metapolis and the borders between country and city are becoming increasingly hazy, the pressure on this architecture and the population that it houses is even greater.

In the rural environment, many villages are becoming depopulated due to the lack of alternatives for development, and others are subject to violent transformation under the pressures of property or tourism-related speculation without the necessary urban planning. This contemporary urbanism is upsetting the historical balance between humankind and nature, and converting the rural landscape into a landscape without activity, where traditional architecture loses its meaning and original function, and is reused and transformed.

In urban environments, the ‘historical nucleuses’ are affected by different problems according to each historical and regional circumstance, which we could summarise according to four main vectors of pressure, sometimes complementary or simultaneous, and with differing degrees of influence: nucleuses in the process of overpopulation due to migration (south-north or country-city) with the subsequent physical (over-occupation and modification of dwelling), social (constitution of ghettos, insecurity, etc.) and environmental (insalubrity, lack of comfort, pollution) deterioration of the urban environment; nucleuses in the process of depopulation due to the abandonment of the historic fabric for the city, with the subsequent loss of social values and the deterioration of buildings and architectural heritage; nucleuses affected by heavy-handed urban renovation work (demolition of heritage, destruction of the historic fabric with the creation of new expressways, incoherent insertion of new architectures), and, finally, nucleuses affected by processes of urban reinvestment, in which we can distinguish three main
processes: the development of tourism, tertiarization (especially in historic centres) with the possible loss of the residential function, and gentrification (the installation in a run-down neighbourhood of residents from a high-income bracket), all processes that can have a counterproductive effect in social terms.

Institutions such as the UNESCO and ICOMOS have issued repeated alerts about the loss of this heritage. In this respect, mention should be made of the recommendations of the International Charter for the Conservation of Historic Towns and Urban Areas (Washington Charter) of 1987 and the Charter on Built Vernacular Heritage (1999). Both charters, in addition to providing criteria for intervention, stress the need for long-term action in the form of education and sensitization measures, involving the promotion of training and specialization programmes in areas of preservation of traditional architecture, aimed at technical professionals and politicians, who should head policies for the assessment and rehabilitation of this heritage, and seeking the complicity of the population, an active protagonist and participant in this shared legacy.

It is in this context that the RehabiMed project proposes a series of measures to encourage the rehabilitation of this architecture on the basis of sensitization and training.

Rehabilitating traditional Mediterranean architecture

In its global dimension, traditional habitat has a great deal to contribute to a context of sudden changes and urbanization that is neither sustainable nor environmentally friendly, and is marked by a need for the reorientation of urban policies in order to reduce conflicts between humankind and nature, improve quality of life, encourage basic values of community life and call for the recovery of the existing territory and recognition of cultural diversity.

For RehabiMed, the concept of rehabilitation covers a broad range of action with a view to recovering and updating a lost or damaged function—in this case, dwelling. On the basis of present-day concerns, rehabilitation means improving the action of dwelling by seeking a point of balance between technical aspects, the preservation of heritage values and criteria of social justice, economic efficiency and preservation of the environment (the three mainstays of sustainability).
RehabiMed continues the task begun by the European Charter of Architectural Heritage and the complementary Amsterdam Declaration, both dated 1975 and promoted by the European Council. These documents put forward the concept of ‘integrated conservation’ for the recovery of run-down historic centres, not based just on the restoration of monuments but also on the promotion of actions to rehabilitate the fabric of dwellings and social measures with a view to embarking on a new methodology. This methodology addresses the rehabilitation process on the basis of the integration of traditional space into a larger territorial context; from the global viewpoint of a multisectorial, economic, social and environmental approach; driven by a desire for coordination; calling for consensus of action between the various agents; that is flexible, due to the need for continual adaptation to changing realities; and, essentially, non-dogmatic, not claiming to produce single solutions to the problems of the traditional habitat of the Mediterranean Basin, seeking instead solutions that adapt to the conditioning factors and specificity of each local context.

The RehabiMed method

RehabiMed proposes a method of intervention aimed at local authorities and at all the agents involved in rehabilitation processes that will both help them and facilitate the promotion, planning and management of interventions to rehabilitate traditional architecture in its territorial context (rural or urban), providing a series of tools and recommendations to assist its implementation. In the different stages of the intervention, the method provides various tools to analyse, evaluate, propose and carry out this type of operation, leading to the development and implementation of a “Rehabilitation Action Plan”.

Among these various tools, the project stresses the use of the “RehabiMed Guide to the rehabilitation of traditional buildings”, since the building is undoubtedly the central element in rehabilitation and the element that brings together the basic conditions of the habitat. The Guide is a complement to an overall strategy, but it can also be used independently. Although it is possible to rehabilitate a building
in isolation, it is important to have an overview of the territory in which it is set and to understand the relation of the singular element to the whole of which it forms part, in order to ensure that intervention on the small scale is coherent with the larger-scale conditioning factors. This is why the RehabiMed project insists on the need to apply this guide in the framework of an overall rehabilitation method that lays out shared, coherent criteria for intervention and transformation in order to address the complex problems involved in these situations.

The RehabiMed method is the result of the efforts of a network of Mediterranean experts who, in the first year of the project, drafted its principles and procedures. It is true that the method involves a high degree of commitment and may present points that are difficult to address according to the reality of a given country and place, but we are convinced that setting high goals will in the long term stimulate the quality of the rehabilitation of our traditional architecture.

The document we present is a first draft of the method, its first public presentation, which will be enriched by discussion in surveys and seminars, by its application in the four pilot operations programmed by the RehabiMed project for 2005 and 2006, and by all the contributions of the experts who are interested in it, whom we urge to send any nuances or suggestions to: rehabimed@apabcn.es.
RehabiMed Method for the Rehabilitation of Traditional Mediterranean Architecture
REHABILITATION AS A PROCESS

The rehabilitation of traditional architecture has to be set in the framework of a process of revitalization and regeneration of the territory of which it forms part, whether an urban or a rural environment. It has to be understood as an intervention on both the physical environment and on the population it hosts, and the series of cultural, social and economic activities that define the ‘social environment’, with the main objective of improving the living conditions of this population as well as the quality of the area and the ‘built’ environment, maintaining and promoting its cultural and heritage values, and at the same time guaranteeing its coherent adaptation to the needs of contemporary life.

Rehabilitation has to be a slow, programmed process of transformation with mid- and long-term objectives and no fast or sudden interventions. It has to begin with a firm political decision that leads not to the carrying out of specific projects but calls instead for action and ongoing evaluation in accordance with the evolution of the area and its inhabitants.

OBJECTIVES OF THE METHOD

The objectives of the method are to order and systematize the stages of the rehabilitation process (from political will to carrying out and evaluation of the action), identify the tools and instruments to be used (technical, administrative and legal) for optimum management and development, and define the criteria that will allow reflection on the problems and the strategies to be established in order to guarantee the success of the process.

The method, aimed at all the agents involved in the rehabilitation process but particularly at the public authorities—who must set
themselves up as promoters of the process—and the experts commissioned with coordinating and managing its application, aims to contribute to the construction of an optimum framework for the rehabilitation of the traditional enclave, and the definition of overall guidelines for action that are coherent with the specificities of each place, going beyond the usual isolated interventions.

RehabiMed presents an ambitious method of intervention, with the intention of sensitizing the public authorities and experts to the complexity of this type of process, which is usually approached too schematically (an overly general analysis and unilateral reflection producing, in the short term, isolated, partial actions without subsequent evaluation), often seeking merely immediate results, with unforeseeable consequences, compromised social issues or irrecoverable losses of heritage.

The RehabiMed method aims to help to improve the process, creating an ideal framework of reference that also accepts that its application will depend on the reality of each country, subject to very different legal, socio-cultural, political and technical conditioning factors. The method can be developed partially or with differing intensities in each of its stages, but the starting point is always the need for an overall understanding of the process and the acceptance of its principles: exhaustive knowledge of the sphere of action, broad-based social consensus in drawing up the strategy, consideration of long-term objectives, etc.

PRINCIPLES OF THE METHOD

The method adopts five basic principles in order to guarantee the success of the rehabilitation/revitalization process.

- **Integration**, understanding the traditional space, the historic city and the rural territory to be part of a larger-scale territory in which they have to be set and organized in accordance with their historic singularity, and not regarded as isolated enclaves.

- **Globalism**, considering a multisectorial approach to the process in economic, social and environmental terms, not from an exclusively
technical or urbanistic viewpoint, defining an integrated strategy that strikes a balance between enhancing collective heritage and improving the population’s quality of life.

- **Coordination**, aspiring, by calling for a definite context of public action, to a new framework of governability in which the agents involved in rehabilitation (politicians, experts, social agents, etc., as well as citizens) become involved in the process and seek consensus as a basis for action as the true guarantee of sustainability.

- **Flexibility**, accepting that the long duration of rehabilitation processes requires ongoing evaluation of action and the possibility of redirecting the rehabilitation strategy, adapting it to the frequently unforeseeable social and economic changes that condition the evolution of the territory.

- **Adaptability**, defining merely a framework-guide that facilitates the management of rehabilitation and does not claim to find solutions that can be generalized to the problems of traditional habitat all over the Mediterranean basin, accepting rather that the definition of strategies and proposals of action will be conditioned by the specificities of each local context.

### PHASES OF THE METHOD

The method is divided into five phases of action, according to which we can identify eight key stages or moments in the process.

- **Orientation.** The process begins with the *political will* to act (stage 1), which includes the making of the *preliminary decisions* (stage 2) required to appropriately organize and manage the rehabilitation process: delimitation of the area of intervention, decisions as to the nature of the actions to be carried out and the definition of the framework of governability—that is, the organization of the intervention of the various agents involved in rehabilitation, and the participation of inhabitants.

- **Diagnosis.** Before deciding on a strategy of intervention, it is necessary to recognise the prevailing legal conditions and establish the area of action in the form of *an analysis of the*
territory (stage 3), with a programme of multisectorial studies that is in keeping with the place and the political orientation adopted, and with recognition of the inhabitants’ needs and expectations. During the analysis phase it is possible to identify problems that were not noticed in the political orientation phase, leading to the need to reconsider orientation (phase 1). The analysis is used as the basis for the integrated diagnosis (stage 4), a report on the current state of the area, agreed by social consensus and with the corresponding political backing, with a detailed breakdown of its potentials and dysfunctions.

**Strategy.** On the basis of the critical points of the field of action identified in the integrated diagnosis, and by means of strategic reflection (stage 5) that takes into consideration a series of strategic and sustainability-related premisses, a series of hypotheses of action will be defined to evaluate its viability. The reflection process may reveal that the phase of analysis was insufficient, necessitating a return to phase 2 in order to complete diagnosis of the area. Once the feasible target scenario has been decided on, an Action Plan (stage 6) will list all the actions to be carried out in order to achieve it. The plan will be agreed by social consensus and approved by the politicians; it will then, together with the proposed projects and policies, implement the appropriate legal and working instruments to undertake them.

**Action.** This phase includes the implementation of the Plan (stage 7) carrying out all the actions foreseen in the Action Plan (both urban planning actions and specific projects for buildings, open space, etc.), and complementary measures of a social, economic or environmental nature. In the case of building rehabilitation projects, the RehabiMed Guide for the rehabilitation of traditional buildings will be applied.

**Follow-up.** The phase of continual evaluation (stage 8) of the actions will begin alongside the actions that are carried out. Evaluation, which will take place while actions are under way but also continue once they are completed, has to monitor the degree of compliance with the objectives established in the reflection phase. In the event of evidence that the actions do not produce the desired results or that the conditions of evolution are not as originally expected, it will be necessary to return to the strategic reflection phase or even, if the conditions of the territory are seen to have evolved, to the diagnosis phase.
1 ORIENTATION
Political will

The rehabilitation process begins with the political decision to take action. This decision must be taken by the administration on the basis of the perception of problems affecting a given area, but it may also come in response to the pressures of civil society or at the initiative of the private sector.

Identification of problems

The speed of economic and socio-cultural changes in Mediterranean societies over the last century has led to the rapid obsolescence of traditional habitats which are unable to adapt to such sudden changes in such a short space of time and are affected by a whole range of economic, social, urbanistic and environmental problems.
The extreme diversity of the origins and historical evolution of the different typologies of Mediterranean habitat, the heterogeneity of its geographical and social conditioning factors, its different artistic and construction cultures, and different present-day economic and social contexts produce a correspondingly diverse range of problems.

It is on the basis of a perception of the overall problems and negative tendencies that affect a given area that the political need to solve them should be identified. Different problems call for different responses.

Deciding on the need to act

Public initiative has to head an intervention that will adapt the structure and use of traditional habitat to the needs of a contemporary territory—that is, that will promote its redefinition as an environment that facilitates rather than hinders present-day life. This is a difficult challenge for an architecture that is often marked by characteristics that make this kind of adaptability very complicated.

The success of the rehabilitation process will certainly depend on the decided involvement of the public administration, as both the initiators and backers of the entire process, in which the area’s body of social agents must also be involved.

Political approach and justification of intervention

The need for rehabilitation is not justified by the desire to preserve and value traditional architecture alone; its principal objective has to be to improve the living conditions of the population it houses, as well as improving the quality of the physical territory in which it is set.

It is in this respect that the political powers have to accept that the necessary improvement of the population’s living conditions precludes excessively conservationist strategies and inflexible historical ties.

With this objective as a point of departure, the rehabilitation process may be politically approached and justified as a way of solving a broad range of problems that are almost always complementary:

a social approach, with a view to combating poverty, encouraging social cohesion and avoiding social exclusion, curbing processes of
The main objective of the process of rehabilitating traditional architecture has to be to improve the living conditions of the population it houses. / Albara and Apamea in Syria

demographic regression and meeting the social and cultural needs of residents and users;

an **urban planning viewpoint**, with a view to upgrading a run-down or declining environment, revitalizing the residential fabric and improving its conditions of habitability, enhancing open space and renewing and improving existing infrastructures;

an **economic viewpoint**, with a view to vitalizing and diversifying economic activities or improving the attractiveness and integration of the area into its city or region;

an **environmental viewpoint**, with a view to improving environmental quality (pollution, thermal and lighting comfort levels, etc.) or optimizing the management of energy and physical flows (waste management, water cycle, etc.);

and a **heritage viewpoint**, with a view to conserving and valuing built heritage, preserving and valuing the cultural and natural landscape, or rehabilitating and coherently integrating heritage into the requirements of present-day life.
ORIENTATION
Preliminary decisions

Delimitation of the physical area of intervention

It is important to exactly define what the specific geographical scope of the intervention is to be, since the smooth development of the process depends on it, from the drawing up of an exhaustive analysis of the area to the coherent definition of the borders of the planning area or the geographical scope of financial aid.

The delimitation of the physical area of intervention, though sometimes a complicated issue due to the continuity of fabrics within a city or territory, may respond to several criteria; these are not always administrative or geographical, and centre on unity, be it morphological, typological or landscape-related, economic, social or even in terms of the feeling of belonging of its inhabitants.

We basically consider three typologies of area: the urban nucleus, be it a ‘historic centre’ around which a town has grown up or any other old area that has been absorbed by an urban system; the rural nucleus, a village whose economic activity is mainly based on agricultural and stock-keeping systems and which retains its historic characteristics unaltered or only slightly modified, even if it contains low-profile new buildings, constructions and elements, or one-off transformation operations have taken place; and, finally, the scale of rural territory, by which we understand an area of traditional characteristics in which scattered buildings are situated along with other types of auxiliary constructions forming a unity of landscape.

We should point out that although we focus our action on a specific geographical area, it is important not to forget the adjoining territories, both in the analysis and in the strategic decision-making phase, since action on a given territory will have repercussions on adjacent territories. It is also indispensable to consider the relation and the insertion of our area of action within larger territories (town, agglomeration, region), reconciling local and global interests.

For the application of the rehabilitation programme to be effective, it is advisable to accord the area a specific legal form in order to facilitate decision-making, the efficient management of the process and the implementation of actions. Legal regulation of the rehabilitation area is non-existent in most Mediterranean countries, and in some of them this legal concept is limited exclusively to areas...
of protection or conservation. Likewise, the legal concept of rehabilitation area is limited almost exclusively to urban areas and historic centres, and is practically non-existent in rural territories.

Definition of the framework of governance and participation

Governance is the framework of formal and informal rules (regulations, procedures, customs, etc.) that lay down the guidelines of interaction between the actors involved in a process of public decision-making. This is also, then, the case of a rehabilitation process such as we envisage. Governance is also the body of mechanisms by means of which citizens and social groups organize their interests, exercise their rights and obligations, and act as mediators in disagreements.

As explained above, the role of the public authorities is vital as agents to promote and back the rehabilitation process. However, if it is to be successful, the process has to be managed by trained experts with the involvement of the other actors present in the territory, both inhabitants and other social groups involved (private companies, shopkeepers’ associations, civil societies, etc.), since they all have to be identified and feel that they are participants in a collective project.

The aim of these rules of play, which in our case must also extend to the phases of analysis and action, is to guarantee the efficient interchange of information and initiatives between the territory’s various actors. At local level, the disparity of perceptions is frequent. Governance that encourages the sharing of perceptions among all local actors will therefore be crucial in advancing towards sustainability.

The different groups of actors involved in the process are the public authorities, the teams of experts, the body of social agents and the residents and users.

The public authorities, as explained above, will promote and guarantee the entire rehabilitation process. Their role is vital and has to involve the sensitization and involvement of the different sectors of society. As representatives of the citizens as a whole, they will be responsible for backing the different phases of the process and recognising their viability, particularly the joint diagnosis and the action plan, as the result of technical work and popular expression. They will establish the most regular dialogue with the technical team,
which will inform them of the evolution and results of the process’s various phases. In the first phase of the process, they will decide the orientation and nature of the actions to be carried out in accordance with the political approach and justification. This initial decision, agreed by consensus with the technical teams, may be modified after the completion of the analysis phase. The authorities play a vital role in undertaking the projects and policies laid out in the action plan and the evaluation phase.

The technical team (or teams, depending on the phase of the process), made up of the administration’s or external technical professionals, will be commissioned with the management and coordination of the process. The entire rehabilitation process is a technically complex operation requiring a high level of professionalism. The team may be made up of architects and planners, but it also has to include engineers, sociologists, economists, lawyers, geographers, etc., to ensure the necessary coordination and dialogue between the various viewpoints and competences in the different stages in which it decisively intervenes (carrying out of the diagnosis, drafting of the action plan, etc.). The team will be closely related to the public authorities and share its projects with social agents and citizens. The participation of the technical team is also vital in the follow-up and coordination phases.

The social agents (private companies, societies and civil associations, NGOs, public and private education and cultural institutions, etc.) will participate in both the diagnosis phase and in strategic definition, presenting their expectations and needs, expressing their interests and agreeing on them by consensus with the other agents. Their participation is also important in the action phase (private initiative, universities, etc.) in producing and carrying out projects and actions, coordinating their own with public interests.

The residents and users have an important role to play in the entire process. As explained above, a rehabilitation process involves a great deal of technical knowledge and management, but it also has to be constructed with the participation of the territory’s inhabitants, who ought to be the first concerned. The exchange of information and initiatives has to take place between civil society and technical professionals, taking the form of debates, surveys, meetings, etc., in the different phases of the process (diagnosis, strategy and action). Forms of participation may vary according to the context and the social, technical and legislative conditioning factors of each country. The most difficult challenge is how to ensure that this potential becomes efficient participation that represents the body of
inhabitants and social groups in the territory, a very vital aspect to guaranteeing real success and sustainability. The participatory approach requires ongoing effort and political will on the part of the administration in the task of defining the procedures and methods that will guarantee its effectiveness—that is, making it truly representative of society as a whole, defining the level, the moment and the content of participation.

**Nature and scope of the intervention**

The process requires initial political and technical reflection as to the nature of the actions to be carried out. This initial, intuitive reflection prior to the analysis of the territory and the collection of objective data will be conditioned by the type of problems detected and the political approach expressed in the orientation phase. This reflection will to some extent condition the programme of multisectorial studies to be carried out, though these studies may identify aspects that lead to modification of initial intuitive reflection.
3 DIAGNOSIS
Analysis of the territory and the context

Prior to decision-making, it is vital to command a thorough knowledge of the area in which intervention is to take place, detecting its strong points and deficiencies as a basis for subsequent discussion and the determination of priorities and objectives. This knowledge of the area will be gained by drawing up a series of multisectorial studies and exploring the needs and expectations of residents and users, and knowledge of the prevailing legal framework concerning rehabilitation.

Beyond the eminently urbanistic approach on which rehabilitation operations are usually based, the aim is to achieve a holistic overview of the territory in which a sectorial interpretation on the part of each discipline produces an integrated overview of the situations and problems involved.
The diagnosis phase is particularly important, since the suitability and coherence of future proposals for action will depend on it and its optimum coordination and approach. Insufficient knowledge of the area may lead to erroneous conclusions, conceptual ambiguities and contradictory results.

Planning the diagnosis

A technical team will be responsible for coordinating the diagnosis. Its first task will be to draw up a programme of multisectorial studies, specifying the type of studies to be carried out and how they should be coordinated in order to optimize resources and ensure the coherence of the whole. The technical team’s objective is to guarantee a plural, overall interpretation of the territory, over and above the partial views of each study.

The type of studies will be conditioned by the typology of the area of action and by the nature of the actions defined. The studies will be commissioned to technical professionals specializing in the various subjects; it is important for the technical professionals to be sensitized to and trained in heritage issues to be able to detect heritage values in the built environment (architectural, social, etc.) and direct discussion towards the possibilities of preservation and rehabilitation.

Another function of the technical team is management of the contributions of civil society in the area (artisans, small industry, tertiary sector, residents and users, etc.) with a view to constructing a diagnosis in accordance with overall interests. The diagnosis development programme will specify the time, level and form of the participation of civil society, which also has to take place in the course of the different sectorial studies, as applicable (sociological, mobility, psychological studies, etc.)

Finally, the technical team will be responsible for drafting the document summarising the diagnosis, which identifies the critical points (strong points and dysfunctions) of the intervention area. This document must be agreed on by the consensus of all agents and backed by the political powers.

Identification of the prevailing legal framework

During the stage of analysis it is important to identify the existing legal instruments as a point of departure for their redefinition or
adaptation to the needs of the strategy and rehabilitation work.

It is necessary to identify the legal framework of action and urban planning management, both the general principles (competences and possibilities of public action, owners’ rights and obligations, etc.) and the possibilities of listing and regulation of the site, the distribution of competences between administrations (local, regional, etc.), the existing types of instruments and concepts (plans and regulations), management instruments (expropriation, cession, cooperation, etc.), and the mechanisms of discipline and regulation of urbanistic and building action (permits, infringements, etc.).

It is important to analyse the possibilities and limits of public action that are envisaged by urban planning legislation, since the possibility of carrying out urban planning action that places the general above the individual interests is vital to success. We also have to bear in mind that the analysis cannot be limited solely to our specific area of intervention; it must cover a much broader context, since general or urban development plans on the scale of the city or strategic territorial plans, for example, may condition the development of specific plans for our area of action.

The analysis of the legal framework must not be limited solely to urban planning legislation, however. It must also consider regulations regarding heritage on a local and general scale (listing, protection, possibilities of transformation and use, etc.) and all sectorial regulations which clearly affect rehabilitation policies and therefore condition their development, from the environmental (waste, energy, natural spaces, etc.) to social (housing, health, education, etc.) and economic (commercial, production activities, etc.), and the different forms of grants and the possibility of applying for them.

**Programme of multisectorial studies**

Below, we describe the sectorial studies that may be carried out to produce a full understanding of the territory.

The development of work will be divided into a first phase of data collection (field work, consultation of official statistics and/or existing indicators, reference to existing works and documentary sources, consultation of agents in the territory), a second phase of data analysis and a third and no less important phase of expression and visualization of the results of the studies, preferably using suitable graphic methods and maps.
The urban planning and architectural approach

Territorial context, integration and continuity of fabric

The analysis of the relation and articulation of the target territory with its larger-scale bordering territories (district within a city, village within a region, etc.) is the starting point for a good urban planning approach, analysing the continuity of fabrics, systems, open space and infrastructures, and assessing its degree of articulation and integration into larger-scale territories.

Structure of the territory

Analysis of the area of intervention on the basis of its physical configuration, including both the morphological characteristics of the settlements and buildings, and of open space and infrastructures, as a basis for establishing coherent rules of intervention and transformation. The study has to identify the superposition of structures from different periods, different interventions and processes of transformation that have taken place (in coordination with historical and geographical studies), and current rates of growth and transformation.

In an urban context it is necessary to analyse the structural data of the urban fabric in terms of an analysis of both the space occupied by buildings (building typologies and densities, grouping, heights, depths, etc.) and 'empty space' (private open space, public space comprising streets and squares, inner patios, gardens, etc.), its forms (squares, intersections, passages, porches, new streets, etc.) and the relation and articulation of the two. This analysis of the territory must include a study of existing infrastructures and services (drainage, water supply, electrical installations, mobility and transport infrastructures, etc.).

In the context of the rural territory, the analysis of the territory’s structure will centre on the typology and forms of settlements (grouped nucleuses, scattered building, auxiliary constructions, etc.), the forms and systems of open space (landscape typologies, diversity of farming models, forestry systems, hydrological system, etc.), the relation between the two, and existing infrastructures and their insertion into the territory, establishing a hierarchy of the different levels and uses of local paths and the different systems of water control (irrigation and drainage network, etc.).

The results of the studies will be expressed graphically in the forms of maps drawn to show the different variables studied.

Uses of the area/territory
Description of the uses present in the territory as a basis for discussion about suitability and sufficiency.

The analysis of the presence and intensity of uses will differentiate natural uses (forestry, hydraulic systems, etc.) previously identified in the analysis of the territory’s structure, human activities, which we classify under productive uses (trade, crafts, farming, etc.), facilities (schools, civil and religious institutions, markets, etc.) and residence. It will study the insertion and relation of the different uses within the different typologies and the spatial relation between all of them. It is important to identify spaces, buildings and/or dwellings that are unoccupied or unused.

In relation to the use of space, it is also important to study the types of ownership of the different typologies (in the rural territory, the division of farmland) and its spatial distribution as a basis for considering viable mechanisms for the management of the rehabilitation operation.

Studies of uses will be completed graphically by detailed maps of their implantation and density in the territory.

**Building and residential typologies**

Comprehensive study of the different typologies (building and residential) present in the area of action as a basis for precisely addressing their adaptability to new requirements of functionality and habitability, and drawing up norms for conservation and modification. Without specific knowledge of the values of the many typological outlines present in the area of action, proposals for transformation will merely be general hypotheses that may lead to the definition of erroneous or partial solutions.

The study must graphically identify and reproduce the structural and formal characteristics of all the typologies and typological variations present in the area of intervention, on the scale of the building and the residential unit.

**Urban tensions and states of conservation**

Description of the age and state of conservation of the buildings in the area of intervention, and of any critical points of an urban planning nature.

In both urban and rural contexts, we consider urbanistic critical points to be areas with a large number of dwellings with inadequate conditions of habitability, areas with excessive building or population...
Comprehensive study of typologies prior to an evaluation of their adaptation to the new requirements of habitability / Special Plan for Toledo, Busquets

The identification of heritage values of typological systems and public spaces allows us to discuss the mechanisms of conservation and modification. / Special Plan for Toledo, Busquets

Heritage values

Identification of heritage values, taking into account the heritage values characteristic of traditional architecture—that is, not from an exclusively historical and artistic viewpoint, but valuing this architecture as a testimony to the history of a society, ways of life and forms of community, and in relation to the environment. The identification of these values is important as elements on which to base a policy to reclassify the area of intervention.

The analysis will be approached from three viewpoints and their interrelation: the values of construction and residential typologies, of open space and of the traditional structure of the area, identifying the different periods.

In an urban context, heritage analysis must include the values of public space (sequence of spaces, historical layouts, singular or monumental spaces, etc.), of buildings (singular complexes, systems and typological series, monuments, etc.) and of the organization of urban space for its value and significance throughout history.

In the rural territory, the analysis has to focus on landscape values (natural environment, farming structure, etc.) and the value not just of buildings and settlements, but of all auxiliary buildings and infrastructures that humanize it, valuing their degree of ‘authenticity’, artificialization and possible reuse.

Construction and formal values

Identification of the construction systems, materials, and stylistic and composition resources of the buildings in the area of intervention (form of the roof, openings in the façades, projections, finishes, and doors and windows, etc.), as a basis for the definition of a good rehabilitation manual.

The study can be organized by typologies and elements (roofs, levels, areas with a high presence of buildings in a poor state of repair, areas with a high level of vacancy or abandonment, etc. These conditions appear simultaneously (vacancy and degradation, inhabitability and degradation, etc.) and it is important to relate them to other urbanistic or socioeconomic variables (population income, diversity of functions, accessibility, etc.).
façades, structural elements, etc.), systematizing and ordering the different types of solutions by periods, as applicable, which will then be explained graphically in detail (maps and photographs).

Mobility and accessibility

Analysis of mobility in the area of action, due to the close relation with its morphological structure and the definition of infrastructures, both of the necessary and non-obligatory mobility of its residents, and the movements of external users. The study must detect flows of mobility with the various means of transport and relate them to conditioning factors of accessibility and integration of the area into larger-scale bordering territories.

Socio-economic approach

Integration and territorial polarity

Analysis of the relation, ‘position’ and role of the area of action from a socioeconomic viewpoint, with regard to its neighbouring territories (city, region, etc.), valuing its degree of integration, segregation or specialization.

Demography

Analysis of the population structure of the area from different viewpoints, paying particular attention to age groups and the working capacity of the population and its level of education, and the distribution by socioeconomic profiles and cultural groups. It is also important to contemplate the effects of present-day and historical migratory flows, and seasonal variations in population due to factors such as tourism.

The demographic analysis has to be carried out in relation to the territory, expressing in map form those areas with greater or lesser density, and identifying the spatial implantation of the different population groups, detecting cases of social segregation as a basis for the development of social cohesion measures and policies.

Sociology / social values

Analysis of social habits and conduct with regard to forms of the territory and construction, the temporary or simultaneous nature of activities, the use of collective space, the existence of social conflicts and segregated groups or collectives, etc. Description of the structure of family units, the existence of neighbourhoods or districts, social and associative fabric, etc., all important aspects when
The anthropological analysis has to identify relations between urban form and traditional forms of social relation, in this case trade. Aleppo bazaar in Syria / Benevolo

drawing up a strategy for citizen participation.

**Anthropology / cultural values**

Study of the values of the built space (and specifically the value of public space in urban environments) from an anthropological viewpoint (spaces of social interaction, exchange, communication, transit, etc.) and its relation to the morphology of the territory, and the evolution of customs, traditions and their repercussion on forms of habitat.

**Psychology / life-related values**

Study of the feeling of belonging and rootedness in the place, of feelings of insecurity, lack of communication, forms of social cohesion and their relation to the feeling of identity, etc.

**Economic parameters**

Analysis of parameters linked to economic activity, related both to the presence of production activities and structures (presence and importance by sectors, growth of economic activity, etc.) and to the classification of the population (active population, level of employment, type of employment by sectors, level of income compared to other territories, etc.).

**Real-estate dynamics**

Analysis of building, residential typologies, plots, etc., from the viewpoint of real-estate activity (real-estate values, market and activity, etc.), relating it to other territories, mapping the results and relating them to variables such as state of conservation and age.

**Territorial and administrative organization**

Description of the territorial organization of the area and the functioning of the administrative management bodies and their coordination with other entities (state, regional, etc.).

**Historical and geographical approach**

**Historical context**

Description of the historical context of the area of action and the territory in which it is set, with particular attention to the social and cultural (and artistic) processes that have determined the form of the architecture and the habitat.

**Historical evolution and conditions of structural evolution**
Description of the evolution of the urban form and an account of the geographical, historical, economic and social factors that have conditioned it.

On a scale of the rural territory, identification of the conditions of evolution and modification of the natural landscape at the hands of man, of the evolution of elements of colonization: modification of the relief, introduction and modification of hydraulic systems (extraction and distribution), plot divisions and fragmentation of the landscape, development of infrastructures, implantation of building, etc.

Archaeology

Investigation of the archaeological heritage, an architectural or stratigraphic testimony of the area’s history. Archaeological heritage must be listed as far as possible in order to be considered under the regulations of urban intervention, as it may be an important conditioning factor in the construction of new works or infrastructures that involve radical transformation or the demolition of old buildings, or the extraction of stratigraphic deposits from the subsoil.

Biophysical approach

The physical environment

Description of the physical aspects of the territory that have conditioned the forms of architecture and traditional habitat, including both the area’s climatic conditions and meteorological dynamics, and the territory’s geological and geomorphologic characteristics (description of the soil, relief, etc.) and surface and underground water.

These physical conditioning factors have to be considered when drawing up rehabilitation projects on the scale of the building and of the structure of the territory, and in order to produce the optimum insertion of new architecture.

Natural landscape

Analysis of the territory’s landscape values, identifying different units, homogeneous areas (wood, irrigation crops, types of natural spaces, etc.) and their fragmentation, existing biodiversity (communities of fauna and flora), forms of protection of natural spaces and systems of farming management (production typology, degree of intensification, etc.), forestry and hydrography.
Environmental parameters

Analysis of environmental parameters and use of the territory’s natural resources, such as the management of the water cycle (consumption, supply and quality), cycles of matter (supplies, transport, etc.), waste management (production, composition, treatment, rubble, farming, industrial, etc.) and energy flows (networks and consumptions), and analysis of comfort parameters (noise pollution, air pollution and thermal and lighting comfort).

Natural risks

Analysis of the past and present natural risks that affect the territory (geological, flooding or seismic risk, erosion, desertification or forest fires), evaluation of the impacts on the natural environment of human activity (introduction of foreign activities, implantation of industrial activities, impact of infrastructures that fragment the territory, construction activity, presence of dumps, etc.) and identification of the existence of preventive measures.

Identification of the needs and expectations of residents and users

Apart from the development of multisectorial studies, it is important for the technical team to include the contributions of the body of social agents and residents in the area of intervention to be able to address, with full knowledge and guaranties, reflection on the problems affecting the area (conditions of habitability, quality of life, comfort, accessibility, real-estate opportunities, need for services, heritage valorization, etc.) and complement the technical approach with the expression of its inhabitants’ experiences and expectations.

The technical team has to plan the management of the inhabitants and social agents’ contributions in the form of consultations, public debates or sectorial meetings on specific issues (public space, mobility, services, housing, etc.), in coordination, for example, with the drafting of technical studies.

The combination of the technical analysis and the viewpoints expressed by the inhabitants of the place should produce a shared interpretation of it, and the make the body of agents aware of the plurality of the often unknown problems and aspects that affect their living context.
4 DIAGNOSIS
Integrated diagnosis

Summary of potentials and dysfunctions of the area

The drafting of the document summarising the diagnosis, the *integrated diagnosis*, will fall to the technical team coordinating the diagnosis and be written on the basis of the different studies carried out and the contributions of the different actors in the territory, normally integrated into the various sectorial studies.

The objective of the technical team, in view of its multidisciplinary make-up, is to guarantee a balance between the physical and socioeconomic aspects of rehabilitation, moving from multisectorial views to a single, integrated approach that aspires to a degree of globalization of the situations and the mechanisms that produce them.

On the basis of the analysis of the various sectorial studies and contributions, the technical team will draw up a summary that identifies the critical points of the area, with both its potentials (aspects that can facilitate the rehabilitation process and help to enhance heritage) and its dysfunctions (aspects that are to be improved by the rehabilitation process and that currently prevent good ‘functioning’ and a valorization of the heritage). Due to the integrated approach of the summary, we believe that it should be ordered and referred not to sectorial aspects (economic, demographical, anthropological, etc.) but to elements of the territory that we could classify as: *built environment, open space, infrastructures* and *social environment*.

The summary will be complemented by all the graphic and cartographic documentation that may serve as a basis for its comprehension and for the development of strategic reflection and proposals for action.

Social consensus and political backing

The provisional diagnosis will be presented to civil society, which will be able to contribute its own viewpoint. The technical team will incorporate any opinions that are agreed on by consensus and proceed to the final approval of the diagnosis by the public authorities.
5 STRATEGY
Strategic reflection

This stage of the process should lead, with reflection on the results expressed in the integrated diagnosis (identifying the critical points of the area of intervention), to the definition of a target scenario of action that is politically, socially and economically feasible. The limits of this reflection are established by a series of criteria. The definition of scenarios will be based on consideration of the strategic premisses and the primary objectives of rehabilitation, and their evaluation in terms of the requirements of viability (economic, juridical and social) in keeping with the objectives of sustainable rehabilitation.

There is no single way of advancing, much less when we start out from very different territorial contexts that are conditioned by the most diverse physical, historical and socio-cultural realities. The action plan, the strategy for action, will incorporate the target scenario and define the series of projects and legal and administrative changes to be carried out in order to achieve it in an established timeframe.
Planning the decision-making process

A technical team, which may be the same one that worked on the diagnosis phase, made up of technical professionals and experts from different disciplines, all trained in and sensitised to heritage issues, will be responsible for directing and coordinating strategic reflection.

Although decision-making has always been primarily a political and/or technical issue, today it is necessary to manage a new decision-making framework that is open to the contributions of civil society. Judicious management of this phase will guarantee that political, social and economic priorities are agreed by consensus by the majority of society.

Definition of scenarios of intervention

The first phase of reflection, based on the results expressed in the integrated diagnosis (potentials and dysfunctions of the area) will lead to the establishing of target scenarios—that is, the definition of the final desired state of the area of intervention. This reflection will be conditioned by a series of criteria, which we divide into strategic premisses and priority objectives for sustainable rehabilitation. It is obvious that this reflection on the desired scenario is also a reflection on the type of actions to be carried out in order to achieve this particular scenario and, therefore, on the future action plan, which is simply the strategic framework that summarises the intervention and groups together all the actions.

Technical reflection on the definition of scenarios will centre on the search for balance, always a difficult task, in complying with the strategic premisses (long term/short term, global/local and public/private) and satisfying the priority objectives of sustainable rehabilitation (quality of life, heritage issues, social cohesion, economic vitality and environmental efficiency).

Criteria for reflection

Strategic premisses

Reconciling the long and the short term

The definition of scenarios has to take into consideration the long-term impact, without renouncing short-term actions that are often the most effective way of involving citizens. Reflection has to envisage
the future impacts of the action (foreseeing reversibility, transmission of heritage value, resources running out, preservation of natural and cultural heritage, etc.).

**Consideration of subsidiarity of scale**

The actions to be carried out and, therefore, the target scenario, have to consider their impact on different territorial levels. This involves reflecting on the subsidiarity of decisions on more global scales and, conversely, of global actions on our area of action.

**Synergy between public and private interests**

The target scenario will involve the complicity of all agents; it is therefore important for its definition to combine the satisfaction of collective with private interests and, conversely, private and community concerns. One example of this is reconciling residential with tourism-related interests.

**Priority objectives of sustainable rehabilitation**

*Improving residents’ quality of life*

Rehabilitation has to stress the issue of improvement of the quality of life of the area’s residents, improving accessibility to services (health, education, etc.) and guaranteeing access to a habitable dwelling (safe, comfortable and accessible) that is adapted to the needs of all residents thanks to its typological diversity. The objective of the strategy must be to reinforce and improve public service infrastructures and define quality open space (public space) that is suitable for collective appropriation and sociability.

*Valorization of cultural and natural heritage*

The aim of rehabilitation must be to preserve the cultural and natural heritage of the area of intervention—that is, transmit society’s collective memory, taking into account its adaptation to new requirements and demands. The strategy has to opt for rehabilitating built space and constructions that can be adapted to new needs, readapting typologies and structures if necessary, and even according them a new and different function to the original, reconciling the heritage values to be preserved and new values of use. On the scale of the territory, this requires the definition of a model that reassesses the natural and heritage resources of each place, making it resistant to transformation processes and providing it with a structure that can accommodate new requirements.
RehabiMed Method for the rehabilitation of Traditional Mediterranean Architecture –REHABIMED METHOD

Traditional urban space has to be enhanced to promote sociability and encourage social cohesion. / market in Barcelona.

One of the major challenges facing historic enclaves is how to harmoniously combine the dynamics of tourism with their residential function. / Sidi Bou Said, Tunisia

The orderly, integrated management of waste within the singularities of historical space is one of the key issues addressed by an environmental approach. / Barcelona

Improving social cohesion

The main aim of rehabilitation has to be to combat poverty and social exclusion—that is, to valorize social heritage. The strategy must promote social cohesion and the idea of citizenship (promotion of diversity, civic awareness, etc.) and encourage intra- and inter-generational solidarity.

Promotion of economic vitality

Another of the objectives of rehabilitation must be to promote the vitality and economic autonomy of the area of intervention, promoting a diversity of functions and activities, not just tourist or leisure activities, investing in knowledge and innovation and combining them harmoniously with residence and traditional production systems (artisans, farmers, etc.). Rehabilitation must advocate intrinsic traditional values, mobilizing their natural and heritage potential, and guarantee the integration of the area into the larger-scale territory (encouraging attractiveness and polarity, increasing the exchange of resources and information, etc.). A well-managed tourist attraction generates investment in new activities and employment and, as a result, reinforces the identity and self-esteem of the people who live there.

Environmental efficiency

Rehabilitation cannot only consider environmental criteria in the rehabilitation of buildings; the latter bear a clear relation to the configuration and transformation of the urban form (management of flows and infrastructures, mobility, arrangement of typologies, etc.). It is important to bear in mind not just the durability of natural resources (use of materials, energy efficiency, management of the water cycle, etc.) but also the prevention of environmental dangers and the control of natural and technological risks.
Evaluation of scenarios of action

The evaluation of scenarios is an important stage in the process, but one that is particularly difficult to manage.

The scenarios defined will be evaluated in terms of both their degree of coherence and their viability.

Firstly, the evaluation of coherence will take the form of an assessment of the degree of compliance of the strategic premisses and the priority objectives of sustainable rehabilitation by means of a study of the overall cost, crossed impacts and the sustainability of the scenario. It is of course practically impossible to meet all the objectives, since total compliance with some objectives means non-compliance with others. One example is the possible contradiction between the objectives of improving quality of life and heritage preservation, since urgent social demands call for short-term solutions (demolition, new construction, etc.), which may endanger the continuing survival of heritage. It is therefore a question of assessing, on the basis of reflection about compared and contrasted impacts or overall cost (social, economic and environmental costs), which scenario allows us to optimize the balance between the different requirements, accepting that it is practically impossible to satisfy all of them.

Secondly, evaluation of the viability of the scenario will consider economic and juridical viability and the possibilities of social acceptance. A better scenario, with greater coherence or likelihood of sustainability, may be discarded due to economic reasons or on the grounds of juridical unviability and be replaced by a scenario that provides partial, less coherent responses. It is, then, important to strike a balance between the different decision-making factors, choosing those scenarios that allow a greater degree of coherence and durability with the lowest financial cost and the highest level of social acceptance.

This phase of evaluation has to involve all agents. Although both the definition of scenarios and the final decision will depend on technical factors and therefore fall to the technical team, the scenarios may provide the basis for discussion at meetings and public presentations. These meetings may be the opportunity, for example, to assess the degree of social acceptance of the proposals, one of the requisites for the evaluation of the scenarios.
Choosing the target scenario

Having chosen the most suitable scenario of action for the area, taking into account criteria of coherence and viability, the next step is to define the content of the rehabilitation strategy, the action plan, which will allow us to carry through the actions.

The rehabilitation strategy will be defined by two conditions of action on the area: the physical transformation projects, which define the degree of intervention on the physical territory, and complementary sectorial policies, referring to the degree of complexity of the actions or policies about the population and the social environment.

The actions and projects for the physical transformation of the territory may range from the smaller scope of environmental rehabilitation, based on actions and projects affecting the exterior image of the buildings and open space (what we might refer to, in an urban context, as urban landscape operations), to conditions of integrated rehabilitation, which develop projects that affect all aspects of the urban morphology (improvement of infrastructures, creation of new spaces, insertion of new architectures, etc.), or two intermediate conditions, typological or structural rehabilitation.

The complementary sectorial policies may range from non-existence—that is, total reliance on urban planning action (in some of the previous conditions)—to global policies that include all kinds of social, economic and environmental policies, including all the intermediate degrees between.
The action plan, which draws together the strategic orientations of the intervention, is merely the organization and working coordination of all projects (actions affecting the physical territory) and sectorial policies to be carried out (social, environmental and economic actions) at the service of an objective, which is to achieve the desired scenario.

As well as defining the actions, the plan will define the framework of operations (agents in charge of implementation, models of public and private financing, etc.) and the modification or adaptation of the legal framework (urban planning instruments, specific ordinances, rehabilitation manuals, etc.) in order to implement rehabilitation work.
Drafting of the Rehabilitation Action Plan

The action plan will be drafted by the technical team and, though it must be validated by political decision, which has to accept and implement it, it must also be backed by maximum social consensus.

Specification and quantification of the actions to be carried out

The actions to be carried out will be divided into three main areas: actions to transform the structure of the area (urban planning itself), the specific projects for buildings and open space, and the complementary sectorial policies or measures (the body of social, economic and environmental measures required to guarantee the true sustainability of the rehabilitation intervention).

Actions to modify the structure of the territory

The plan specifies which actions to modify the structure of the territory will be carried out (freeing up of space, adjustment and updating of functions, creation of new infrastructures, improvement of accessibility, etc.). The actions must address a gradual, ongoing modification rather than fast and sudden transformation. These actions will be implemented by urban planning instruments. The plan will:

- define suitable forms of protection for the structure of the territory and its built environment;
- specify appropriate uses and activities, assessing the relations that organize architecture, open space and their possible functions. In a rural context, the uses defined will not compromise the environmental and landscape quality of the natural setting (recreation, culture, etc.);
- list the criteria of modification of the territorial structure and built space (growth, creation of new open spaces, modification of heights and building levels, depths, alignments, etc.). On the territorial scale, it will define a model that, based on the specificity of each place, makes it resistant to transformation processes and provides it with a structure that can accommodate new requirements;
- define the criteria for the transformation of the form of open spaces. In an urban context, the influence of historic layouts, interrelation between morphology and typologies, etc., and in
rural territories, modification of the landscape and the territory (paths, fields, potential vegetation, etc.);

- define the criteria of development and replacement of infrastructures and services. In the rural territory, it will establish criteria for the careful superposition of new infrastructures that do not compromise the functioning of existing paths and water control systems, adapting them to the demands of competitive agriculture;

- define the criteria of relation with bordering areas and territories (accessibility, degree of continuity and suture between the historic and the bordering territory) and insertion into larger-scale territories, be it city or region.

Projects of intervention on architecture and open space

The action plan will list which buildings are to be conserved and which rehabilitated/transformed or demolished. It will also indicate projects for new constructions and for the urban planning or reclassification of open space. The criteria governing these projects will be taken from the corresponding bodies of legislation: specific ordinances and rehabilitation manuals. The action plan will:

- list the criteria for rehabilitation (and transformation) of buildings, their formal configuration (residential typological configuration, typological regulation of buildings—patios, stairs, structure, etc.) and their compositional and formal components (regulations for façade composition, types of openings, projections, form of roof, use of materials and finishes, etc.), and the conditions for partial demolition and the addition of new volumes;

- define the criteria for the insertion of new architectures (to replace buildings that are in an advanced state of deterioration, functionally unsuitable, etc., or in empty spaces produced by demolition). Regulations should not be too restrictive, allowing the construction of contemporary architectures on the basis of the particularities of the traditional context;

- define the criteria of mobility and accessibility (vehicle access, pedestrian areas, etc.) in keeping with the singular configuration of the historic layout or the landscape, optimizing different flows for residents and users, and with prospects of improved environmental quality of the area;

- define the degree of intervention in the different types of open spaces. In urban contexts, according to urban hierarchy
(smaller, main, singular spaces, etc.), scale and interrelation. In rural contexts, according to different units of landscape (woods, fields, etc.) and in accordance with the specificities of each place (implantation of auxiliary buildings, construction of walls, embankments, etc.);

- define the formal and compositional criteria that are to govern projects in open space.

**Complementary sectorial policies**

Complementary policies must be specified in order to guarantee judicious rehabilitation according to socioeconomic and environmental criteria. This involves listing the social policies to be carried out (social cohesion, combating poverty, promoting citizenship, literacy, health campaigns, etc.), economic initiatives (commercial reactivation, professional training, promotion of employment, management of tourism, etc.) and environmental proposals (waste management, water cycle management, efficient energy management, etc.). Experience has shown that interventions based solely or mainly on the rehabilitation of buildings or urban planning action without foreseeing complementary policies do not produce the expected results. Without this type of measures, stone takes priority over people.

**Definition of appropriate legal instruments**

**Urban planning instruments**

Good urban planning action calls for good urban planning instruments.

Initially, the urban planning legislation that affects our field (national, regional, etc., depending on the administrative structure and the distribution of competences of each state) has to include a suitable planning concept to define urban planning action in a historic context such as we are dealing with. Independently of whether or not this planning concept exists (special reform plan, urban improvement plan, etc.), high-level planning concepts (territorial, municipal plans, etc.) have to recognise the particularities of the historic area and not condition the correct implementation of the area’s specific rehabilitation plan, responding to the requirements tabled by the action plan.

In addition to the suitability of planning concepts, it is necessary to review the validity of urban planning management mechanisms
Ordinances specifying modules and full-empty relations in new construction on the basis of existing architectural elements. / Malo, Italy

Ordinances must define the systems of transformation of the various built typologies in order to adapt them to new conditions of habitability. / Study for the centre of Barcelona, Busquets

Rehabilitation manuals describe the intervention solutions for traditional construction elements. / Manuale de Roma

(ownership, rights, intervention-transformation mechanisms, etc.) for our traditional context since, in some cases, this legislation is not adapted to the reality of the intervention in a historic environment, and it will be necessary to create specific mechanisms.

Urban planning instruments (special plan, urban project, etc.) will contain the above-mentioned criteria for the correct transformation of the urban form in keeping with the historic specificities of the area under intervention.

**Specific ordinances**

Drafting of specific ordinances for building. There is normally a series of local ordinances, produced by urban planning, that determine the construction and rehabilitation of buildings. It is advisable to draft specific ordinances, associated with the specific planning for the area of intervention, that contain the above-mentioned criteria for the drafting of specific projects, regulating the possibilities of modification of buildings (modification of heights, depths, façades, typologies, etc.), restrictions on the insertion of new architectures in the historic context (factors conditioning styles, materials, proportions of openings, etc.), in accordance with the historic characteristics of buildings in the area of intervention.

**Rehabilitation manual**

A rehabilitation manual must be drafted to bring together all the technical characteristics, systems and construction solutions used in the traditional architecture present in our area of action and propose solutions for intervention in the different typologies, elements, etc.

Just as urban planning instruments regulate the transformation of the structure of the territory and ordinances govern the form of buildings, the rehabilitation manual standardizes the criteria of intervention on the smaller scale, taking into account the heritage values of technical and construction aspects of the traditional architecture of a place.

**Heritage legislation**

Legislation on traditional built heritage (open space, buildings and complexes, typologies, etc.) is required, beyond that which governs the protection of monuments, cultural objects and specific building catalogues. The legislation covering urban and architectural heritage has to allow the implementation of the proposed actions—that is, it should not be so protectionist that it hinders any modification or
transformation of traditional urban form and its architecture, in accordance with the needs outlined in the action plan, nor be too permissive with regard to destruction and modification of the traditional habitat. In this case, specific urban planning should address heritage regulations governing traditional forms.

**Sectorial legislation**

It is also necessary to review the validity of prevailing sectorial regulations affecting our area of intervention and how to modify them in order to adapt them to the action’s aims, both those conditioning actions that are more social (habitability, accessibility, housing, etc.) or economic (commerce, tourism, etc.) and environmental (waste management, use of materials, etc.). The modification of this legislative framework almost always takes place alongside complementary sectorial policies.

**Defining the working framework**

**Financing instruments**

When envisaging actions it is important to have a clear idea of the cost and how work is to be financed. The financing of rehabilitation work, conditioned by the mechanisms of site and building ownership, may be approached in various ways, sometimes complementary and not exclusive, in a single process of intervention (co-financing, mixed economy, etc.). Indeed, it is practically impossible to approach rehabilitation work exclusively from the public sector, which has to be complemented by private initiative.

In more global urban planning, particularly in interventions on collective open space (though sometimes also acting on private land), financing is, as a rule, public. In rehabilitation and replacement strategies, although the initiative is mainly public, in some cases financing is jointly public and private, and in others mainly private with incentives and public funding (grants, tax incentives, etc.).

**Management bodies, consortiums and agents involved**

Management bodies are essential in guaranteeing the efficient running of the rehabilitation process. They are usually public bodies though sometimes, depending on the regional context, they involve mixed public-private capital. These bodies may have a degree of independence of the administration, though still being linked to collective interests and political control.
Public initiative should promote the creation of a specific body to manage the rehabilitation process. Rehabilitation has to combine the initiative of the public administration with the intervention of public and private social agents in the form of consortiums, collaboration agreements, etc. / Nicosia, Cyprus

Normally they are responsible for managing the implementation of urban planning interventions, though it would be a major step to create a more complex body that manages all the actions included in the action plan, including social, economic and environmental aspects. In this way it would be possible to control the complementary nature or conflicts arising between different actions, improve follow-up and reconsider the strategy faster and more efficiently, a role now reserved solely for the administration.

The management bodies may be complemented by another type of smaller entities and offices that reinforce specific aspects, such as the offices that promote private rehabilitation (advice, projects, procedures, etc.). These entities can and must establish agreements with universities, companies, and public and private institutions in order to involve them in rehabilitation actions, exchanging knowledge, techniques, etc.

Training strategy
All rehabilitation processes have to be accompanied by a series of complementary measures to guarantee their success. By complementary measures, we refer for example to the creation of policies to train professionals from different fields who are sensitized to traditional heritage and workers who are qualified in this type of architecture (materials, construction systems, etc.).

Communication, public awareness and rehabilitation promotion strategy
It is important to have a good communication strategy (to publicize objectives, the actions to be carried out, etc.) and develop a good public awareness campaign to sensitize and inform the population about the social and cultural values of this rich heritage and the need to preserve it as a common legacy.

In addition to sensitizing the population to heritage issues, this campaign should also serve to promote citizen appreciation of traditional space as a specific space for life and as grounds for pride requiring everyone’s involvement for maintenance, enhancement and updating. This would be the framework for campaigns to promote private rehabilitation and the promotion of specific aspects of rehabilitation that are equally important (environmental improvements to buildings, façade restoration, promotion of maintenance, etc.).
Mechanisms of participation

The plan will define how information is to be presented about the design and definition of the proposed projects (particularly public projects) and how they might include contributions made by means of consultations or other participation strategies.

Timeline and organization of phases

The various actions (urbanistic, social, etc.) will be coordinated and organized according to a timeline. It is important to estimate the starting date and duration of each of the actions, and its coordination with the other actions planned, and to establish partial goals and objectives.

Social consensus and political approval

The Action Plan will be presented to civil society, who may then make its contributions. Once agreed by social consensus, the political powers will endorse its content and viability, and pass it for implementation.
7  ACTION

Implementation of the Plan

This phase corresponds to the implementation of the Action Plan that is, to the carrying out of the actions contained in it, subject to the definition of the working instruments required to apply the plan and its necessary adaptation to the legislative framework. The action will be developed in accordance with the programmatic guidelines (order, duration, financing, etc.) established in the action plan.

The implementation phase of the action plan is not just the carrying out of a series of projects and sectorial policies; in accordance with the stipulations of the operational framework, it also involves a series of campaigns to sensitize the public and promote rehabilitation, train technical professionals, etc.
The plan’s development has to be accompanied by a favourable climate for the promotion of private rehabilitation, culture, and the values of rehabilitation and maintenance, in which all citizens should feel involved and be motivated by the enhancement and improvement of their living environment. Investment also means an improved image of the environment, which in turn is an incentive to the development of more investment and interventions, further reinforcing the feeling of identity and self-esteem of the population.

**Development of urban planning procedures**

This phase represents the carrying out of urban planning actions to modify the form of the territory and adapt it to present-day requirements. Urban planning procedures, normally effected alongside specific projects, will be public in initiative and financing.

*It involves actions to modify the structure of the territory and replace and modify buildings (vertical and horizontal demolition and bringing down of height, elimination of obsolete construction or superfluous volumes, freeing up of open space, ventilation of patios, etc.), actions to transform open space (creation of new streets, modification of alignments, etc.) and actions to improve infrastructures (electrical, drainage infrastructure, new roads, etc.).*

**Development of specific projects**

Specific projects carried out alongside urban planning action (creation of new buildings on land freed up by the demolition of an obsolete construction, classification of new open spaces, etc.) may be public and private initiatives with the corresponding financing.

When promoting the rehabilitation of private buildings, the public administration should foresee mechanisms for grants or subsidies.

**Building rehabilitation projects**

Rehabilitation projects for buildings to be conserved, whether maintaining the initial use or reusing them for other purposes, will follow the criteria established in the *RehabiMed Guide for the rehabilitation of traditional buildings*. The criteria defined in the guide are limited to planning guidelines and accompanying rehabilitation ordinances. Particular attention to the legal framework must be paid.
by rehabilitation work involving typological changes and modification of volumes (partial demolition, insertion of new volumes, etc.) and elements such as façades, roof, etc. Optimum rehabilitation also requires attention to the rehabilitation manual corresponding to the area, which will list the rehabilitation conditions of the rehabilitation area’s construction systems, and formal and stylistic elements of the typologies.

Projects for the insertion of new buildings

New architecture projects will mainly be carried out by private initiative, though the administration may also develop some (for example in the case of some social dwellings or new facilities).

Projects for new buildings in traditional contexts have to respect the conditioning factors stipulated by the specific ordinances contained in planning (with regard to dimensions of openings, heights, type of roof, etc.). Within the limits established by these regulations, which should not be excessively restrictive, the projects designed must be contemporary, based on an understanding of the specificities of the place and its history and shunning approaches that involve excessive codification, absolute indifference, radical ‘imitation’ or historic distortion. Public buildings must be designed as good examples of this.

Projects and treatment of open space

Rather than basing projects for new urban spaces on criteria of ‘imitation’ of the compositional and ornamental elements of the historic city, they will be designed from a contemporary viewpoint, on the basis of a ‘historic interpretation’. The definition of open spaces in rural contexts will pay particular attention to the landscape characteristics of the place.

Development of sectorial policies

The complementary sectorial policies established in the action plan (social, economic and environmental) will be carried out.

Social policies

Social cohesion policies are normally a priority in rehabilitation interventions, since the simple transformation of the physical environment, though necessary, is not sufficient to guarantee the
The renovation and updating of urban infrastructures must be carried out alongside building rehabilitation, ensuring their integration into the place without detracting from the values of traditional space. / Kairouan, Tunisia

The success of the process, as the population housed in traditional architecture tends to have greater problems of social segregation or poverty, being the sector of population that has been unable to ‘escape’ an environment that is often considered to be a symbol of poverty.

Social policies, alongside actions to enhance and physically revalorize the space, have to focus on combating social exclusion, with special attention to the social processes produced by the reclassification of urban or territorial environments, such as processes of gentrification or expulsion of the native population. These processes are often inevitable but are counterproductive to guaranteeing the necessary cohesion and local identity unless they are addressed and remedied in time.

Social policies may include policies centring on housing, training, employment, integration of excluded social groups, literacy, promotion of accessibility in buildings, etc.

**Economic policies**

The integrated rehabilitation of a traditional environment calls for the development of a series of economic policies that will give the area an economic vitality that allows it to play a specific role on a territorial scale. This role should make the most of the opportunities offered by its historic singularity. The economic revitalization of a traditional environment has to consider the diversification of functions and activities in order to guarantee a plural population with prospects for the future.

The economic policies may include commercial revitalization, management of tourism, etc.

**Environmental policies**

These days, all rehabilitation interventions should be complemented by an ambitious environmental policy that guarantees the definition of an environmentally efficient territory. Though many environmental parameters are conditioned by the reconfiguration of the structure of the territory and building (efficient infrastructures, coherent definition of building in accordance with climatic conditioning factors, etc.) and the way in which the intervention is managed (use of materials, energy saving, waste production, elimination of toxic products, introduction of water saving mechanisms, etc.), it is necessary to implement a series of policies that enable sustainable management of the area.
Environmental policies may include policies to encourage energy or water saving, waste management, the introduction of renewable energies, the definition of models of sustainable mobility, the promotion and use of collective transport, etc.

**Development of complementary campaigns**

As explained above, as well as the specific actions (projects and policies) described in the *Action Plan*, the development of interventions will be accompanied by a series of strategies, also outlined in the strategic *Action Plan* (operational framework), with the aim of sensitizing the population to heritage, promoting different aspects of private rehabilitation, encouraging a culture of maintenance, and involving and encouraging all social agents and residents to improve the quality of their living environment. This improvement in the living environment will have a direct effect on feelings of collective welfare, identity and identification with the place for all the actors involved in the rehabilitation process, and in terms of progress and social cohesion.
8 FOLLOW-UP
Continual evaluation

It is important to implement a mechanism for the ongoing follow-up of the operations, since, bearing in mind the length of rehabilitation processes, there may be social and economic changes, etc., that call for the redirection of the original strategy and a reconsideration of the actions initially envisaged.

The follow-up and evaluation mechanisms will have a two-fold objective: to control the implementation of the plan and specific actions, evaluating the degree of satisfaction of the initial objectives, and to continually evaluate the area once the planned operations are complete, with a view to monitoring their evolution and detecting unforeseen or unexpected changes in long-term forecasts or due to unforeseen changes in the social or economic structures.

Creation of an observatory to evaluate the application of the plan

A technical follow-up team must be created to evaluate the plan, along with a series of mechanisms (indicators, population surveys, etc.) to control compliance with the planned objectives and partial goals.

Follow-up and continual evaluation of the process

The methodology has to envisage the possibility of making the process retroactive and even of reconsidering proposed action strategies in the event of unforeseen changes in the initially detected conditions for which the actions were defined.
RehabiMed
Guide
for Rehabilitation
of traditional
buildings
OBJECTIVES OF THE GUIDE

With the aim of rehabilitating traditional architecture in a conscious, orderly and adequate manner, this document offers the architect/engineer a guide¹ to follow during the rehabilitation of traditional buildings.

The way we have chosen, though not necessarily the only one, first of all defends the need to preserve the fact of ‘dwelling’, both in the sense of improving the living conditions of inhabitants and preserving the meaning of this architecture within the community. Secondly, it sets out to recognise traditional architecture as part of the Mediterranean cultural landscape. Its rehabilitation with a minimum rigour represents the transfer to future generations of heritage values (historical, artistic, memorial, testimonial, etc.).

We have to point out that acting according to these principles calls for an arduous task of sensitization: of the technical professionals, because most of their university training is based on the construction of new buildings using reinforced concrete and industrialized techniques that are hard to reconcile with this architecture, and of the community, because it is vital for it to recognise the testimonial value of its architecture. To this end, we propose mechanisms for the community’s active participation in decision-making.

It is also a guide that sets out to be, as far as possible, ‘scientific’, ‘objective’ and ‘precise’, and one that places a great deal of emphasis on the initial phases of diagnosis and reflection prior to the project; it is a guide that disagrees with interventions in built environments carried out without a thorough knowledge of the building and its circumstances, on the basis of the fact that ‘this is how it’s always been done’; a guide that mistrusts the excesses produced by a blind faith in new technologies applied without criteria; and, finally, a guide that aims to cut back the habitual lack of economic control of rehabilitation work.

It is quite true that for each specific building it is necessary to find the scale and scope of each of the stages proposed. The RehabiMed guide therefore presents a general outline of maxims to be adapted to each specific case.

The guide takes as its starting point the premiss that if we do not

¹ To guide: ‘to go before, showing a path’.
know, we are unable to reflect and, therefore, we cannot rehabilitate. It therefore proposes four divisions of the process (knowledge, reflection and the project, the work, lifespan) within which the different stages of work are carried out.

The aspects of architecture and construction proposed in a guide of this kind for the rehabilitation of buildings might seem to be well known to all, but the very fact that they are known often leads to false premisses in the various stages, and the quality of rehabilitation work tends to suffer.

To close this introduction, we would just like to remind that this guide acquires its maximum value when it is applied in a broader area of action, whether on the scale of the district, the town or the territory, and as part of a coordinated action plan as proposed in the RehabiMed Method for the rehabilitation of traditional Mediterranean architecture.

**GENERAL OUTLINE OF THE GUIDE**

**The initial agents in the process**

The foremost agent in any operation to rehabilitate a building is the owner, who may be public or private, individual or collective. In all cases, the owner represents the soul of the operation, the seat of the desire to improve a home, do business, simply keep a building standing, share in the collective enthusiasm of improving a street, etc. It is also important to remember that some or all of the dwellings in an apartment building may be rented, and the needs and opinions of the tenants therefore have to be taken into account.

On the other side of the relation, the architect/engineer is the professional qualified to direct the various stages of rehabilitation with the collaboration of a multidisciplinary team. This guide uses the term architect/engineer, though in the Mediterranean context we find various professionals who are qualified, totally or partially, for this kind of work, such as the architect, the architect-engineer, the building engineer, the technical architect, etc. However, the complexity of careful rehabilitation work means that they are particularly trained and sensitized to these issues, as well as being open to the collaboration of experts from different disciplines (historians, anthropologists, restorers, topographers, etc.).
The third agent in the process is the builder or contractor. The role and capacity of this figure is different all over the Mediterranean. In some areas, traditional know-how has completely disappeared, whereas in others it is still possible to build as it was done in the past. By protecting traditional Mediterranean architecture, we are also protecting these crafts.

The stages to follow

RehabiMed observes how, in practice, the client decides on a series of improvements or changes to be made to a building and immediately undertakes rehabilitation work. In some cases, the client will consult an architect/engineer, but the result of rehabilitation is the reflection of the immediate needs of the moment. Some would argue that it has always been so, that this is an ‘architecture without architects’, but we all know that the organic growth of pre-industrial architecture responded to techniques and conducts that were distilled by tradition and carried out by true professionals, experienced workmen, whether master builders, masons or maalem, who all form part of a world that has practically disappeared. The proposal of the systematic participation of university-trained technical professionals may seem a frankly technocratic alternative, but we think it responds to the reality of the far-reaching social changes in the Mediterranean basin. All of these technical professionals have to be aware of the inevitability of most of these changes and the fact that, as Kevin Lynch\(^2\) reminds us, they will probably only be able to ‘manage transitions’.

As a rough guide, we might say that, while in general practice the process comprises just two phases (the decision to take action and the work itself), RehabiMed proposes a sequential procedure, a process in four consecutive phases that begins with the decision to act:

\(^2\) LYNCH, Kevin: *What time is this place?*, 1972.
As shown in this poster printed by Guarda City Council, although each of the street’s inhabitants carry out with the best of intentions operations that might be termed rehabilitation, without supervision, a guide or criteria of conservation, the street will ultimately be changed to the point that it is unrecognisable. (Câmara Municipal da Guarda, 1985, Portugal).

I. Knowledge: any intervention must be preceded by knowledge of the building and its occupants. Stage one (1. Preliminaries) includes the client’s decision to take action but takes the form of a preliminary diagnosis that makes an initial, objective valorization of the proposal and the object of intervention (the building and its users). The complexity of the building usually calls for a second stage of knowledge (2. Multidisciplinary studies (Analysis)), based on
meticulous disciplinary research to analyse social, historical, architectural and construction aspects.

II. Reflection and the project: once knowledge of the building and its users has been acquired, we can go on to reflection, which represents a third stage, 3. Diagnosis (Synthesis), that synthesizes the information collected during the previous phase. This stage individually explores problems and their causes, and produces an overview of the building’s potentials and deficits. The fourth stage (4. Reflection and decision-making) picks up the client’s ideas for rehabilitation work and seeks to reconcile them with the reality of the building, its heritage values, economic possibilities for investment, etc. At this point the criteria of intervention are confirmed (how to conserve, to what extent to transform, etc.), and they must therefore be guided by a solid professional ethic. And, finally, on the basis of sound criteria, it is now possible to move on to the fifth stage (5. Project) and the drafting of the project document that enables the contracting, constructing and control of rehabilitation.

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3 Analysis: ‘distinction and separation of the parts of a whole in order to discover its principles and elements’.

4 Synthesis: ‘composition of a whole by the joining together of the parts’.
III. The work: Having passed through these two major stages, phase six (6. Rehabilitation), will be far more precise, preserving the values of the building, adapting better to the client’s needs and, though apparently contradictory, at a lower economic cost because the uncertainties surrounding work have been better defined. But in order to guarantee the quality of physical rehabilitation work, the contracting of the builder and his collaborators is vital, be they artisans, restorers or other specialised companies.

IV. Lifespan: it would seem that once rehabilitation of the building is complete, the process is at an end, but we also include a seventh and final stage, 7. Maintenance, which comprises minor cleaning work, repairs and renovations carried out according to a timeframe throughout the building’s lifespan until future rehabilitation (a major operation that will restore the building to the standards of the time). Particularly important in this stage are periodic inspections to detect deficits and new needs before the building begins to decline.
KNOWLEDGE
Preliminaries

This first stage brings together all the necessary contacts to begin a building’s rehabilitation process, once the client has decided to do so. The themes addressed are very varied in order to allow a sufficiently open initial approach to the general framework of the operation. This stage turns around what is generally called the preliminary diagnosis, a phase of orientation for the client.

Decision to take action / Interview with the client

This stage represents an open dialogue between the owner and the architect/engineer. The architect/engineer has to identify the client's needs and desires, and detect possible ways of putting the idea into effect. It is important to bear in mind that the initial reasons for a commission may differ from the final decision. The owner will often consult an expert for a minor problem (a crack, damp, etc.), issues of comfort, municipal conservation requirements, etc., but it is the architect/engineer who has to be capable of orienting the owner in order to rationalize the intervention and perceive the more determinant needs which may be different to the owner's initial concerns.
The owner may also have decided on rehabilitation of the building for purposes of financial investment, and in this case the architect/engineer has to be a good advisor with regard to the legal aspects and economic cost of the operation.

**Preliminary diagnosis**

The key point in this first stage is the preliminary diagnosis. This involves an initial global approach to the building, its values (architectural, historical, etc.) and its problems (related to construction, habitability, etc.) by means of a preliminary inspection of the building. This first visit takes the form of a visual inspection in which the architect/engineer’s experience plays a fundamental role. A visit to the whole building will be conducted in an attempt to recognise the construction system used, its characteristic architectural values, the pathologies affecting it, associated social problems, etc. Particular attention will be paid to the load distribution and water drainage.

All of this information can be compiled in one or various systematized inspection sheets. This is the case of the *MER* in France and Switzerland, and the *Test Mantenimiento* in Spain, etc. Some of these inspection methods have recently incorporated data associated with the building’s energy behaviour and other environmental parameters.

In situations of major fragmentation of ownership of the building, a series of interviews is required to guarantee the participation of all owners and users of the building.

Alongside the inspection, the architect/engineer has to investigate the building’s legal status with a view to finding out the urban planning obligations and restrictions to which it is subject (permitted urbanistic use, level of listing, legal protection imposed by urban planning, mortgages, censuses, etc.) and the grants that may be applied for in the event of rehabilitation. The degree of heritage protection of the area and/or building is generally decisive to the operation. Initial contact with the corresponding authorities (municipality, regional administration, etc.) may help to clarify this context. It is also necessary to detect the legal conditions of the building’s occupants: low-rent tenants, occupied dwellings, sublet tenants, etc.
The preliminary diagnosis report

After inspection and legal consultations, the architect/engineer has an initial understanding of the building and will have detected its deficits and potentials.

The preliminary diagnosis report may clearly include in summarised form the data collected, and must evaluate the building’s state of conservation and set forward recommendations. The expert may, then, from the start of the process, inform the owner of the possibilities of rehabilitating the building and technical and economic restrictions. At this point, the client has to decide whether to continue with his or her initial ideas or reformulate the intervention. This report may of course take the verbal form of an interview, but it is always best to make a written record, as the client may wait several months to make a decision or consult another expert, and the written word is always more precise.

If the building is in a good state of repair and no major changes are foreseen, we can go straight on to stage 7 (7. Maintenance) and propose a preventive maintenance plan. However, 90% of cases call for a second stage of multidisciplinary studies before starting rehabilitation.
2 KNOWLEDGE
Multidisciplinary studies (analysis)

This stage of the process consists of the systematic collection of information in all the fields requiring research in order to produce full knowledge of the object of study.

Conducting these multidisciplinary studies successfully depends on the training of the expert responsible for carrying out or directing them (the corpus of knowledge of the technical expert may, in the simplest cases, be concentrated in one person with, at some points, the consultation of various specialists). We cannot trust exclusively to our own experience and intuition, which, though very necessary, must be accompanied by the systematic collection of information, which, in some cases, will be backed by specialized tests.
Establishing of provisional hypotheses

The multidisciplinary studies stage is fundamental to gaining sufficient knowledge of the building and its context before intervention begins. By this token, it is advisable to set the objectives and some initial hypotheses in accordance with the information collated in the preliminary diagnosis report and to verify them as the studies advance.

Programme of multidisciplinary studies

These hypotheses will be taken as a basis to plan a feasible, coherent study campaign using the means available. At this point, the architect/engineer must be fully aware of the scale of the intervention (a small house, a large building containing many dwellings, a listed building of great monumental value, etc.). The work may also be staggered to allow subsequent verifications to be made of initial ones. By this point it should be clear who the director of all the studies is to be.

Social aspects

Depending on the type of rehabilitation, socioeconomic aspects may be crucial to the intervention. The basis for study tends to be a sociological survey to detect family units and possible problem situations (overcrowding, marginalization, unemployment, abandonment, etc.) and their relation with the district as a whole. According to the type of operation, the possibility of provisional or definitive rehousing of inhabitants with very close links to the municipality should be organized.

Furthermore, in the world of traditional architecture, anthropology may provide us with valuable data about the social significance of the house, use of spaces, customs, etc.—all the intangible aspects related to the community’s perception of its architecture. In the case of constructions that are as fragile as traditional architecture, anthropological studies should be promoted to document forms of dwelling that are in danger of disappearing. The fact that many dwellings in traditional neighbourhoods are now inhabited by people

5 Hypothesis: ‘a provisional theory or supposition taken as the basis for research to confirm or deny its validity’.
An understanding of the customs associated with traditional lifestyle is part and parcel of a careful approach to its architecture. The ethnographer Violant i Simorra studied the customs of the people of the Pyrenees before transformation.

emigrating from other traditions implies the need for knowledge of both cultures and the possibility of combining them harmoniously.

Historical aspects

Architecture, and this also applies to the traditional form, is valued when it can be recognised as part of a tradition. The introduction of historical studies always helps to set far more solid criteria of intervention.

First of all, the historical method explores documentary sources (notary archives, family archives, old photographs, past projects for the building) in order to compile data that helps to understand the building and its transformations. At the same time, the building itself is a splendid historical document that can be carefully studied as material culture using the archaeological method that is generally conducted alongside the graphic survey of the building (test drilling in walls, analysis of construction materials, stratigraphic analysis of the building, etc.).

Another historical discipline, oral history, plays an important role in the rehabilitation of traditional architecture. Asking questions of the elderly may produce very useful data about the building and also about traditional construction techniques that are disappearing.
Architectural aspects

Without a good graphic survey of the building it is difficult for the architect/engineer to understand it and therefore to produce a project in keeping with reality. The level of complexity of the building and planned interventions will suggest the most suitable type of plan and its degree of precision. The type of survey may be manual (using a tape measure), topographic or photogrammetric. In all cases, all efforts must be made to produce a precise plan, since it will provide the basis for all subsequent work.

At the same time, good photographic or video documentation is extremely useful, since it retains elements that may go unnoticed at first sight.

A graphic plan is not only an abstract measuring operation. Drawing the building is the best way to discover and understand it. An important part of the plan is recognition of the building’s architectural values and the graphic plan of materials, construction techniques and their pathologies from a construction viewpoint.

The way a 21st-century architect/engineer sees traditional architecture is inevitably a present-day viewpoint marked by present-day concerns. It is important to take into account the fact that the very idea of cultural heritage is a cultural construction of the last 200 years. In this respect, the value and authenticity of traditional Mediterranean architecture, in all its diversity, cannot be valorized by a fixed criterion. The necessary respect for the cultures of the Mediterranean basis calls for an understanding of architecture in its tradition.

The inspection will involve an unbiased study of the building’s architectural values (integration in the place, spatial configuration, singular structure, type of ornamentation, etc.), attempting to avoid fragmentary appreciations and seeking the unitary logic that produced the architecture.
An evaluation of the values and transformations of the traditional dwelling can be represented by the layers of finishes on the dwelling’s surfaces (floors, ceiling and walls). (Dwelling in Tinerhir Kasar, Morocco – III Atelier de Réhabilitation des Kasbahs du Sud de l’Atlas)

In order to understand a building within the architectural tradition of the area, it is important to consult works of reference about local architecture (historical or typological studies, etc.). (J. Revault: Palais et demeures de Fès, CNRS, 1988, Morocco)

During this stage we recommend consultation of the completed studies about the building’s typology and, in some cases, the carrying out of further studies about singular aspects of the building. Traditional architecture is particularly characterized by the surfaces of its walls (colour, texture, irregularities, etc. of façades and interiors), making studies of colour and applied decoration very valuable. This will involve multidisciplinary participation, because the focus on the use of colour or applied paint calls for a study of the history, art and construction of traditional techniques.

It is also important to remember that though change is slow in the pre-industrial world, a traditional building grows and is modified in keeping with the needs and means of each period. It is therefore advisable to study the building’s architectural transformations, once again with recourse to a historical study, in order to understand its present-day configuration.

This stage will also require detailed consultation of the building’s legal and urbanistic framework. In the case of listed buildings, their records will be studied in order to understand why they are partially or completely listed.
A building tends to have a long life, and the exterior image may have changed several times in its history. Colour studies analyse the layers of painting and/or stucco on the façade with a view to discovering its original decoration and how it has evolved. (Façade on the Rambla in Barcelona, Spain)

In order to discover spatial and constructional transformations, the architectural analysis has to be based on a historical analysis that dates and identifies stylistic influences. (Building in Barcelona, Spain – àqaba.documentació històrica)

**Construction aspects**

This stage includes the identification of all the building’s physical and construction elements, and observation of its lesions. Here we should point out that the training of architects and engineers since the 19th century has centred on the study of construction by subsystems (foundations, walls, floors, facings, etc.); in traditional architecture the building was constructed as a whole, and it is important to address it from this global viewpoint. This stage therefore calls for an architect/engineer who is familiar with the traditional construction methods of the region, with a solid scientific and technical training in the pathology of traditional buildings.

The approach to problems has to be as scientific as possible: detection of lesions, a preliminary hypothesis as to their causes and verification of these hypotheses. The architect/engineer will also have access to a series of experts (chemists, geologists, biologists, etc.) and tests (on site and in the laboratory) that will allow him/her to identify materials, possible alterations, monitoring of fissures, wood boring insect attacks, etc.

It is particularly important to evaluate the building’s structural safety in order to avoid accidents. This involves soil investigation (by means of a geotechnical report if necessary), an analysis of the structural coherence of the whole and the structure’s load capacity. This evaluation is particularly essential in seismic areas, where a careful study of the building’s vulnerability is necessary. This is a
An evaluation of the gravity of a building’s lesions calls for detailed knowledge of how the building was constructed. (Thessalonica, Greece, 1997 – Manos Anagnostidis, Maria Dousi, Olympia Hatzopoulou)

particularly conflictive issue, since structural safety standards are designed for new constructions of steel and reinforced concrete, and it is practically impossible to assimilate them to the traditional reality. The dilemma of simultaneously conserving and making a building secure can be nuanced by knowledge of the building’s structural behaviour over long periods of time.

When approaching the rehabilitation of a building, we recommend introducing criteria of sustainability and environmental protection. This involves analysing the building’s water and waste cycles and energy consumption, and studying winter and summer comfort levels. Mediterranean construction tradition has countless bioclimatic solutions that should not be undervalued due to ignorance of them during an intervention.

This phase should not overlook verification of the building’s connectivity (state and position) with basic infrastructures (drainage, drinking water, electricity, telephone networks, etc.) in order to foresee from the start the effective possibilities of connection, which in some cases would call for work that is simply unfeasible.

The next step is to measure the lesions. The width of fissures being measured using fissurometer.
3 REFLECTION AND THE PROJECT
Diagnosis (synthesis)

Critical evaluation of studies

The diagnosis stage\(^6\) involves a task of synthesis and critical reflection that is based on the multidisciplinary studies carried out during the previous stage. This evaluation has to lead to unitary planning to avoid excessively fragmentary results due to limitations on the material available.

In order to organize and establish information it is always necessary to place it beside other information and highlight it. For example, superposing it graphically over the geometric plan of the building. Three types of maps can be systematically drawn (in floor plan, elevation, section): firstly, a map of values with notes about the spatial, colouristic, historical and artistic values of each part or the whole of the building; secondly, a map of deficits with notes on the building’s social problems, features, and lesions and degradations; and thirdly, the map of former and/or existing uses showing how the building was and is used before intervention.

\(^6\) Diagnosis: ‘act of deciding the nature of an illness by observation of the symptoms and signs’.
The diagnosis phase must bring together all information in orderly fashion (plans of values, deficits and previous uses). The team of Professor Luigi Zordan at the Università degli Studi dell’Aquila (Italy) has developed a ‘reasoned guide’ offering examples of how to represent this data in order to produce a judicious diagnosis (Luigi Zordan: *Le tradizioni del costruire della casa in pietra: materiali, tecniche, modelli e sperimentazioni*, 2002).

Beside, a map of the original uses of a building produced by a historical study (Antic Hospital de clergues de Sant Sever, Barcelona, Spain – àqaba.documentació històrica)

**Confirmation of hypotheses**

The initial evaluation should produce an overview of the building and confirm the hypotheses put forward at the start of multidisciplinary studies, based on observations and tests. However, it is always possible to raise new hypotheses (initial hypotheses not subsequently confirmed, appearance of new conditioning factors, etc.) and return to the study phase in order to verify them.

**Writing a report**

At the end of this stage it is once again necessary to establish, in writing, the knowledge gained about the building. This report will list the building’s composition, describe and justify its values, list its deficits and their causes, and offer recommendations. The diagnosis report will always be written on the basis of individuation of problems and their causes, according to the criterion of technical impartiality.

At the end of this stage we will have a report on the state of the building that lists the causes of its deterioration, abandonment, etc. (Istituto di ricerca sul legno, Florence, Italy)

This is a reasoned expert report and must be written so that other technical professionals external to the process can understand it, but it must also include a summary that can be understood by a non-professional reader. The conclusions must be clear, concise and complete. This note will specify the strong and weak points in order to show the potential for rehabilitation of the existing building.
**4 REFLECTION AND THE PROJECT**

**Reflection and decision-making**

**Feasibility**

Now, with a perfect knowledge of the building and its users, it is possible to study the feasibility of the client’s ideas. A further dialogue will take place with the owner about his/her future needs and economic possibilities with regard to the potential of the existing building.

The feasibility study will be based on three partial studies: 1. What we call the transformability map, which simply compares and contrasts the maps of values, deficits and previous uses produced in the last stage, showing which parts of the building would be subject to changes (eliminations, additions, alterations, etc.) and which parts should be conserved to preserve their value; 2. The programme of new uses proposed by the client (the brief) and rationalized (surfaces, relations between uses, etc.) by the architect/engineer; 3. The evaluation of regulatory conditioning factors associated with parameters of urban planning and listing of cultural objects.
Another two examples from Professor Zordan’s guide show us how to graphically represent what he calls the map of transformability and processes of compatibility with a view to reflecting on the integration of new uses.

Continuity of use is generally accepted as the best way of protecting this architecture, though in some cases its revitalization involves a change of use. It is important to suggest sensible changes of use, since some proposals may involve the practical total loss of the values of traditional architecture.

Confirmation of criteria

As commented above, due to its great diversity, traditional Mediterranean architecture cannot be approached with fixed criteria.

In this stage, the architect/engineer has to establish the criteria to be applied to the project (additions, eliminations, priority of aspects of habitability, reintegation of lost parts, reversibility of risky interventions, consolidation of ruined parts, etc.). Initially, neither extreme should be dismissed: pure conservation or pure restoration. The Charter on the Built Vernacular Heritage represents a first general framework to consider.7

7 Guidelines in practice of the Charter on the Built Vernacular Heritage, ratified by the ICOMOS 12th General Assembly, in Mexico, October 1999:

1. Research and documentation
Any physical work on a vernacular structure should be cautious and should be preceded by a full analysis of its form and structure. This document should be lodged in a publicly accessible archive.

2. Siting, landscape and groups of buildings
Interventions to vernacular structures should be carried out in a manner which will respect and maintain the integrity of the siting, the relationship to the physical and cultural landscape, and of one structure to another.

3. Traditional building systems
The continuity of traditional building systems and craft skills associated with the vernacular is fundamental for vernacular expression, and essential for the repair and restoration of these structures. Such skills should be retained, recorded and passed on to new generations of craftsmen and builders in education and training.

4. Replacement of materials and parts
Alterations which legitimately respond to the demands of contemporary use should be effected by the introduction of materials which maintain a consistency of expression, appearance, texture and form throughout the structure and a consistency of building materials.

5. Adaptation
Adaptation and reuse of vernacular structures should be carried out in a manner which will respect the integrity of the structure, its character and form while being compatible with acceptable standards of living. Where there is no break in the continuous utilisation of vernacular forms, a code of ethics within the community can serve as a tool of intervention.

6. Changes and period restoration
Changes over time should be appreciated and understood as important aspects of vernacular architecture. Conformity of all parts of a building to a single period will not normally be the goal of work on vernacular structures.
Decision-making

Having confirmed the criteria, the compatibility of the type of intervention has to be considered, striking a balance between improvement to the inhabitants’ living conditions, safety of the structure, safeguarding heritage values and the available economic resources.

And, finally, the decision can be taken, with full knowledge of the type of rehabilitation work (from conservation to restoration).
Outline proposals

The outline proposals are a stage of comprehensive dialogue with the client, during which it should be possible to activate the participation of the inhabitants or users of the building. It will gauge which of the various planning alternatives best adapt to the proposed alterations and the existing building by applying the criteria outlined during the previous phase. From the start, particular attention will be paid to compliance with the legal framework. Finally, the client will reach an informed agreement as to the type of intervention contained in the project.

Project

The working drawings will describe the intervention in sufficient detail to be able to follow administrative procedures, contract the work and carry it out without deviating from established costs. The project interprets the criteria of intervention and applies a series of technical parameters for the physical construction of the intervention.
The design of the project calls for consultation of publications on local construction (Paolo Marconi: Manuale del Recupero del Centro Storico di Palermo, 1997 / Antonino Giuffrè and Caterina Carocci: Codice di Pratica per la Sicurezza e la Conservazione del Centro Storico di Palermo, 1999).

As a general rule, therapeutic intervention in a building’s problems must address the causes, not just the symptoms.

The choice of a traditional or a modern technique will also depend on the kind of builder who is contracted. It is now a question of finding out whether traditional techniques are still used in local construction and whether it is possible to recover them to carry out rehabilitation.

Here we would like to mention a trend in theory that we think could usefully be adapted to the rehabilitation of traditional architecture and which centres on a necessary knowledge of traditional techniques for responsible intervention in this form of architecture. It includes the works by the Compagnons du Devoir in France, studies on timber structures (Carpintería de lo blanco) by Enrique Nuere in Spain and, most particularly, by Paolo Marconi in Italy, who has put this knowledge to practice in the Manuale del Recupero. The Manuale documents local construction tradition (generally of a municipality or homogeneous region) and presents professionals with forms of traditional intervention. Another step forwards taken in Italy is the Codice di Pratica which introduces methods of analysis and intervention in traditional architecture (structural consolidation, earthquake, etc.), seeking to reconcile traditional construction and more modern techniques. These documents should be consulted during this phase and their recommendations followed when working on the project.

It was these documents that launched the debate in Italy about the use of modern techniques to reinforce and consolidate old structures. During the design of the project, the impact of each of the techniques used will be studied, along with their compatibility with the existing building and the final visibility of the intervention.

The same pains should be taken when integrating modern installations into the building. From the outset, measures must be taken for their integration without detracting from façades and interiors, for example by proposing specific layouts.

The project also has to incorporate such parameters of sustainability as are reasonable for the scale of the intervention (water- and energy-saving measures, introduction of renewable energies or facilities for the correct management of domestic waste, etc.).

At the same time, each of the design decisions will study what is now called the maintainability of construction solutions—that is,
The project specifies interventions to consolidate and reinforce the building in sufficient detail on the right scale. (Reinforcement of the timber floor of Can Plantada, Spain – Cristina Gonzalo Diego)

ensuring that all elements are accessible for subsequent ease and safety of maintenance. The most obvious example is a window that is practically impossible to clean, etc.

The project must be detailed but open to modifications justified by discoveries made during rehabilitation work. It will include the following documentation: geometric definition of the proposal with measurements (floor plans, sections and elevations), plans of the structure, finishes and installations, technical description, bill of quantities, budget, technical specifications, and health and safety measures.

Work on recovering façades specifies colours but also the type of chemical product to be used and how to apply it and control the quality. (Façade in Barcelona, Spain – Chroma Rehabilitaciones Integrals SL)
Tender action

In order to guarantee correct rehabilitation, the choice of the builder or contractor is very important. In some regions it is still possible to find builders who are familiar with and use traditional construction techniques, though they are, sadly, fast disappearing. In some cases it may be possible to train the builder(s) in specific techniques, but in most cases it is simply not possible to use certain techniques because of their economic cost. If working with a construction firm that has little specialized knowledge, particular attention must be paid to the contract in order to supervise materials and techniques. The type of contract will guarantee the quality of work and the professionalism of the builder(s).

Some tasks of cleaning delicate walls or artistic works call for the temporary contracting of restoration professionals using specific methods and techniques.
Obtaining the building permit

The programming of rehabilitation has to take into account the waiting time for the relevant authorities to issue permits. In the case of listed buildings, waiting times may be longer. The report may also be unfavourable, necessitating a return to the project phase.

Carrying out the work

Works direction in the case of a traditional building calls above all for flexibility and dedication. Unforeseen events tend to arise as work is carried out, and it is difficult to only apply what is indicated by the project.

The follow-up of the work may, then, allow the ongoing revision of the project and reinterpretation of the building in the light of new discoveries, which, in some cases, may call for changes to the project.

The project describes construction solutions to reinforce, consolidate or renovate an element. During work it will be necessary to establish mechanisms to verify the suitability of the construction solution and its correct functioning.

Important aspects to follow up are initial considerations, economic supervision, and control of the effectiveness of solutions to reinforce and coordinate the safety of work.

During work a mechanism will have been established to produce a dossier about all the work carried out, upon completion. This comprises a series of plans that reflect how the rehabilitation as built. This document is vital for documenting work in accordance with the Venice Charter but also for organizing a maintenance programme (see stage 7).

There are also a series of organizational aspects of the work that have to be taken into account, ranging from the programming of work to the planning of the entry of several trades, to studies of site accessibility (a great deal of the work is carried out in the narrow streets of historic centres), interior work using small machines (low heights, narrow passages, etc.), foreseeing the protection of certain parts of the building from the elements and rehabilitation work itself, and avoiding accumulation of workers.

Furthermore, it is difficult to envisage demolition operations on a
rehabilitation site; these will in fact be deconstruction or dismounting operations. At the start of work, elements to be dismounted for reuse will be marked (collecting tiles, timber beams, etc.) and measures will be taken for the correct disposal of site waste. The project supervisor must at all times supervise dismounting work and take the necessary safety measures to avoid accidents due to partial imbalances in the building or the appearance of materials or products that are dangerous for health (asbestos cement, asbestos insulation, electrical transformers with PCBs, etc.).

Handover of the work

Upon completion of the work, legal procedures will be carried out to consider it finished and, in some cases, to apply for grants. It is important to use this stage to analyse the management, construction and compliance of the project with planned uses. Though at this point some aspects can be corrected, this feedback stage should serve to improve the project phase for subsequent commissions; no opportunity to learn from mistakes should be wasted.
As we have commented several times, traditional architecture is extremely vulnerable. Custom has been responsible for its conservation (whitewashing during spring celebrations, checking tiles after high winds, etc.), but socio-cultural changes in today's world (the culture of disposability) have accentuated the abandonment of this form of architecture.

If the need for rehabilitation has arisen, it is due in part to such abandonment. Having made the effort to undertake rehabilitation, it is important to make the most of the opportunity to promote its upkeep, because on the very day rehabilitation work is completed, the building starts to age.
Publicizing the building’s values among the community

The breakdown of the traditional world and cultural homogenization have led to disregard for much of this architecture as a symbol of the poverty and backwardness of its population. Once rehabilitation work is complete, it has to be a priority to acquaint the community with its values and make them part of its rehabilitation. Each case will be different but it is important to promote some kind of sensitization activity to show the value of the work carried out (a small event to show how work was carried out, publication of photographs of before and after rehabilitation, publication of the work in the local press, etc.).

Choice of the model of maintenance

An initial definition of building maintenance would be the series of periodic tasks carried out in order to conserve it, during its lifespan, in suitable conditions to cover foreseen needs. Maintenance is habitually associated with the idea of repairing damaged elements, what we call corrective maintenance, but what the RehabiMed method proposes is to think in terms of planned and preventive maintenance.

Planning involves the preparation of a calendar of maintenance operations, and preventing means carrying out maintenance operations before the construction element deteriorates.

The ‘identity card’

In order to systematize this way of organizing maintenance, we propose to give the building an ‘identity card’, a document that compiles all the information about the building and incorporates a timeframe to programme maintenance operations. This card will be presented to the owner (in some cases to all the tenants) so that recommendations can be followed. In most cases, the architect/engineer who completed work and is perfectly acquainted with the building will prepare the information about the building and a timeframe of maintenance operations. Information about the building will comprise the dossier as built (see previous stage) and recommendations for use of the building. The timeframe will also programme maintenance operations for the coming 10 years (cleaning, inspections, repairs and renovation). The timeframe
should also indicate who will carry out these tasks (the user, a trusted builder, an installer, a specialized firm or the architect/engineer).

These cards can also be used to make a note of maintenance operations carried out, incidents that have taken place and alterations made, so that with the passing of the years it becomes a record. The ‘identity card’, a kind of clinical record about the building, will also in the long term provide invaluable information for the conservation of and future interventions in the building.

The maintenance timeframe programs operations over the year and indicates which professional should carry them out. (Carnet d’entretien, Pi-BAT, 1991, Switzerland)

**Maintenance work according to a timeframe**

The operations programmed on the calendar will include a series of periodic inspections by an architect/engineer to evaluate the building’s safety (for example, in relation to detachment of façades, risk of gas leaks, structural deformations) and reprogramme the timeframe. In some cases, it will be possible to detect serious problems in time and propose the repeat of the entire process (*1. Preliminaries*).

In this way, the architect/engineer will become, like a family doctor, the ‘general technical practitioner’ with the building among his or her records, thereby ensuring long-term sustainability of what is now a complete rehabilitation project.
This programme is financed by the European Union