NATIONAL PLAN FOR INDUSTRIAL HERITAGE

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INTRODUCTION

Throughout recent history, industrial activities have generated productive systems that have gradually become subsumed into our cultural inheritance as a result of the rising awareness of our heritage, which combines the need for conserving its material testimonies and transmitting the memory associated with each activity in a specific territorial setting.

The testimonies of industrialisation constitute an indispensable legacy in understanding the past two centuries of Spanish history. These systems, jointly or as elements and factors impacting on the industrial reality, have played an important role in both urban and rural territorial evolution, in forming the historical and cultural character of its sites, places and landscapes, and in general in defining the specific living and cultural surroundings in which industrialisation has developed. Conservation and the study of these testimonies are thus crucial for understanding and documenting a key period in the history of humanity.

Industrial heritage, as historical memory, manifests itself differentially according to era, phase of development, sectors of activity and the geo-cultural areas in which the industrialisation process occurred.

The conservation and activation of cultural heritage have never been foreign to the conditions of their economic and social environment, nor have the changes in paradigm relating to heritage intervention. A new approach in economic planning should emphasise sustainability and means making alternative choices to the traditional way in which we have prioritised investment of resources in cultural policies, whether public or from the private sector. It is therefore imperative to recapitulate and update all aspects of preventive restoration and conservation of cultural assets, and especially to seek to generate a new Heritage Culture that will allow society and its institutions to become involved in the recognition of its values, in raising awareness of the need to conserve it, in the proactive management of heritage resources and in their enjoyment and use by the citizens. This is the biggest assurance that the material legacy will remain as a social asset, a factor of cohesion and a witness to the country's history.

Industrial heritage is connected to the cultural appropriation processes that society establishes through the traces from the past, in our case the industrial era, through conserving its material or intangible testimonies linked to the memory of work and sites. Furthermore, the diversity of circumstances that concur in the industrial reality means we have to emphasise that through its heritage, reconciliation can occur in the traditional division of Spanish culture between sciences and humanities thanks to the necessary interdisciplinarity that its study requires. Industrialisation as a historical process, which is essentially European in its origins and makeup, allows contemporary Spanish history to connect with the Europe that emerged from the scientific revolution and the Enlightenment, influencing the collective identity and the image that we as a people have of our contribution to modernity and the improvement in living conditions. Industrial heritage, including its scientific bases, its procedures and techniques, social and environmental conflicts, its symbolic contents and extraordinary landscapes, emerges as a repository of cultural resources endowed with vast power and visibility, acting as a structuring lynchpin for research,

creation and dissemination actions and for economic stimulus.

After years of efforts and actions by the associations that defend industrial heritage, the state, Autonomous and local administrations and some specific research institutions, heritage guardianship and museographic dissemination, there is consensus that testimonies associated with the working culture form part of the cultural heritage. This recognition should be made extensive to the public or private initiatives that have museumised an industrial activity, whether sectorial or thematic. Right now, insufficiencies and ambivalent results are forcing us to methodologically and conceptually consider new approaches to and devisings of the very significance and scope of industrial heritage. There is also a need to socially capitalise on the investments made in cultural and collective facilities in recent years, using management tools that entail greater efficiency and profitability in public investment, in the technical means and infrastructures assigned to the cultural heritage. Heritage resources should be associated with creative cultural industries to ensure better protection, conservation, maintenance and future outreach for them.

In Spain, industrial heritage and its traces on the territory have become new cultural assets and an active resource in fostering sustainable development programmes on a local and regional scale. These assets are embedded in a specific landscape, making it increasingly necessary to interpret heritage not as an isolated element but within its territorial context. The industrialisation heritage, with fragile, vulnerable and occasionally misunderstood elements, should be viewed as a new cultural asset represented and interpreted through an updated, integrated and scientific reading. The value of industrial heritage resides not so much in its economic, technical, social or aesthetic values but in the fact that it is history and space, history and society, history and technique; ultimately a social space plus territory. Industrial landscapes possess more life than the objects, taken one by one, embedded in them, and when the societies that gave rise to them disappear, as do their procedures, these landscapes hold the living trace of these testimonies and processes.

Each landscape, architecture, machinery or industrial facility has a character that should be kept alive in any processes of recovery, intervention, restoration or rehabilitation we adopt. Probably one of the most important criticisms of interventions on heritage in recent years is that some of the projects have emptied of content the original elements of these rehabilitated sites, leading to an absence of references and a loss of the memory of work, losing out on narrative vitality and physical specificity. We should thus question the *restoring* process, the fact that not every rehabilitated historic building can adapt to any new functionality with social, political, economic and cultural content. Industrial heritage, in its material and intangible manifestations, in its different scales, in its various morphologies, in its rich topographies, has undergone successive and important changes and needs the right questions to be asked to discover the intrinsic wisdom of the building, the site, its very being, its historical densimetry that has allowed it to survive by mutating.

NEED TO REVISE THE NATIONAL PLAN

National plans are management instruments created to achieve three ends: establishing a unified action methodology on ensembles of assets; programming investments according to conservation needs and coordinating participation of the different institutions intervening in the conservation of these heritage ensembles.

During the decade of application of the National Plan for Industrial Heritage, the concept of Heritage and the role it plays in today's society has been expanded. Each and every one of the assets that comprise heritage possess a set of inherent values that are not just historical, documentary, artistic or construction-related. The values of use, function, evocation and self-esteem are intangible values that should not be severed from the rest and evaded when conceiving the interventions, whether they involve restoration or enhancement.

In developing the national plans, transversality should predominate. Moreover, it is imperative to reconcile the protection of heritage with its economic dimension, its ability to generate wealth and with the obligation of the public authorities of making Cultural Heritage accessible, as this leads to a better quality of life for the citizens.

Furthermore, analysing the current national plans has revealed a series of difficulties associated with the functioning and/or efficiency of the control instruments, as well as other difficulties derived from the actual working methodology.

In the case of the National Plan for Industrial Heritage, leaving aside the varying degrees of success in the attainments, analysing its development has revealed the following:

1st The Monitoring Commission of the Plan, which played a crucial role in its setup, does not currently exist. We should now arbitrate more operative bodies to control the consistency of the interventions according to a common methodology agreed by the different administrations.

2nd The distribution of investments is not equitable for all institutions involved, with the State generally investing far more. Moreover, there is a lack of coordination even within the actual State Administration, both in the programming of investments and in their control. There is a risk of lack of coordination owing to the existence of funding sources outside the control of institutions.

3rd Ten years after the launch of the Plan there are no inventories. The assets belonging to the National Plan for Industrial Heritage are not inventoried, or at least those that each Autonomous administration engaged to make have not been transferred to the Plan's coordination. There are furthermore serious difficulties in the administrations listing industrial assets as Assets of Cultural Interest. The institutions whose task it is are highly reticent when it comes to listing them owing to the difficulties involved in assuming responsibility for their conservation and the possible limitations to their use.

4th The working methodology based on conducting studies, drafting master plans and action projects is totally valid and effective, though there are some aspects that

need to be reviewed without affecting their possible future qualification.

1.– BASIC ASPECTS

1.1– Background

Once it became clear that the Spanish Historical Heritage Institute should assume and embark on actions on industrial heritage, which is an invaluable testimony and is fragile from the standpoint of conservation, a small commission within the Institute's department dealing with the architectural and archaeological heritage drafted an initial document. Besides making a summary diagnosis of the situation of this heritage and its specificity within heritage conservation and restoration, right from the first working meetings it became clear that it would be advisable –not to say needful- to arbitrate a National Plan for this kind of cultural asset. Influencing this conviction, on one hand, was the positive experience of the Cathedrals Plan and, on the other, the legal basis provided for this kind of Plan by Act16/85 on Historical Heritage. However, it is significant that, right from the start, one of the most debated issues was the identification, definition and timescale for this kind of heritage.

In effect, it was firstly necessary to define what *was not* industrial heritage so that an initial operative definition could be outlined. Not surprisingly, it lacked a strong definition even though at that point awareness of this heritage was already considerable and its manifestations appeared to be easily identifiable. For example, in the by now many heritage laws passed by the Autonomous Communities, legal protection was only given to relevant elements associated with the history of science and technique and, of the assets classified as industrial, the oldest ones were primarily valued –waterwheels, mills, salt mines, etc, that is, those that are actually pre- or proto-industrial, on occasion with more ethnographic than industrial value.

Clearly, these to some extent understandable ambiguities in concept made it expedient to give priority to finding an accurate definition for Industrial Heritage in order to propose a Plan. To this end we argued that this heritage is the result of a specific capitalist social relationship with a concrete technological system, mechanisation. Its manifestations thus fell between the mid-18th century and the last third of the 20th century, when substantial changes occurred in the economy, in technology and in productive processes.

Besides fine-tuning the definition of Industrial Heritage, this background document needed to reflect one of the changes that had gradually been outlined in recent decades in the heritage concept, what could be described as the incorporation of the space, against a heritage dominated by time, objects, structures, architectures, monuments, etc, whose greatest value was their antiquity, delimited by the built heritage. In fact, the concept of setting only had a connotation of protection or at most of aesthetic framework. In view of this, heritage categories were gradually defined, dominated by a broader relationship between man and nature, an interaction where the cultural and the natural reality form a continuous whole. Ultimately, heritage acquires a more global, anthropological vision, more a historical than a purely architectural process.

A commission was formed, a branch of the Heritage Council, which tasked with

developing criteria and methodology as well as drafting a basic catalogue of industrial assets. The working sessions were as intense as they were fruitful. The criteria were established for identifying, selecting and intervening on industrial assets, a requirement for defining a selection from which to draft a “catalogue of minimum elements” to constitute the basis for programming future interventions. Also, on the basis of this first catalogue and with the corresponding listings of Assets of Cultural Interest, Studies and Master Plans for the industrial assets, ensembles and landscapes were instrumented, preliminary steps required to elucidate mandatory aspects such as the legal situation of this heritage, its continuous transformation or rights to use. It was all contained in a background document.

The Document viewed by the Commission as the definitive one was submitted to the Historical Heritage Council at its session of 19 and 20 April 2001, held in Úbeda and Baeza. The approval of this document, which sets the guidelines for the Plan and establishes an initial methodology, demonstrated the determination of the Administrations to embark on the protection, conservation and social outreach of this heritage as well as to implement the measures that would make it possible, including the future use of the industrial ensembles, buildings or elements.

Although the Commission was not officially dissolved after the last meeting, from that moment on the line of action and the programming of interventions was thought to be defined for the next few years. The Plan for Industrial Heritage is thus on track and the planned actions continue to be undertaken[1].

In drafting this revision we have taken into account the Background Document of the National Plan for Industrial Heritage (2001), the list of Elements and the “Inventory of Minimum Requirements” of that plan, together with the list of actions undertaken between 2002 and 2010[2].

1.2.- Benchmark regulatory framework

The legal basis for the national plans is found in Act16/1985 on Spanish Historical Heritage, which in its second article states that *"the State Administration will adopt the necessary measures to facilitate collaboration with the remainder of public authorities and of these between each other, and to collect and provide as much information as may be necessary”*[3]. It also states that *"communication and the exchange of action and information programmes on Spanish Historical Heritage will be facilitated by the Heritage Council”*[4].

However, the National Conservation Plan instrument is not defined in the Act. In its article thirty-five, the Historical Heritage Act states that *"for the protection of the assets that comprise the Spanish Historical Heritage, and in order to facilitate people’s access to them, foster communication between the different services and elicit the necessary information for the development of scientific and technical research, National Information Plans on Spanish Historical Heritage will be regularly formulated",* and

1 Appendix 1

2 Appendixes 2, 3 and 4

3 Act 16/1985 of 25 June on Spanish Historical Heritage. Article two, section 2

4 Act 16/1985 of 25 June on Spanish Historical Heritage. Article three, section 1

attributes the competence for drafting and approving such plans to the Spanish Historical Heritage Council.

Moreover, Royal Decree 565 of 24 April 1985, which creates the Cultural Assets Conservation and Restoration Institute, includes among its purposes *"the drafting of plans for the conservation and restoration of Spanish Historical Heritage"*[5]. This function has always been maintained in the Ministry of Culture's successive functional reorganisation decrees.

The National Conservation Plans are a synthesis of these two items: The National Information Plans provided for in the Historical Heritage Act and the competence of the Heritage Council and the Conservation and Restoration Plans provided for in the Decree that created the ICRBC, today the Spanish Cultural Heritage Institute.

1.3.-Definition, categories and scope of application

Definition of Industrial Heritage

By industrial heritage we understand the suite of movable and immovable assets and sociability systems associated with the working culture generated by the extraction, transformation, transport, distribution and management activities of the economic system that emerged from the "industrial revolution". These assets have to be understood as an integral whole comprised of the landscape in which they stand, the industrial relations that structures them, the architectures that characterise them, the techniques used in their procedures, the archives generated during their activity and their symbolic practices.

Industrial heritage has its own interdisciplinary methodology denominated Industrial Archaeology. This scientific discipline studies and enhances material and intangible vestiges as historic testimonies of productive processes. Their study gives us a better comprehension of the structures and processes generated by the development of technical-industrial societies, their sources of energy, their workplaces and spaces, their productive organisation and the way they respond to an economy based on the mechanisation of productive processes.

An **Industrial Asset** is each one of the elements or ensembles comprising Industrial Heritage. We can distinguish between immovable, movable and intangible assets.

There are four types of **immovable assets**:

- Industrial elements**:** for their nature or for the disappearance of the rest of their components but that, owing to their historical, architectural, technological and other value, are sufficient testimony of the industrial activity they exemplify.

- Industrial ensembles that conserve the material and functional components as well as their articulation, that is, they constitute a

5 Royal Decree 565 of 24 April 1985

coherent and representative example of a specific industrial activity such as, for example, a factory.

- Industrial landscapes are evolutionary and conserve on the territory the essential components of the production processes of one or several industrial activities, thus constituting a powerful scenario for observing the transformations and uses that societies have made of their resources.

- Industrial systems and networks for transporting water, energy, goods, travellers, communications, etc that, owing to their complex articulation and heritage values, constitute a material testimony of territorial planning, of the mobility of people, ideas or goods or of the art of building the public works of the contemporary period.

There are four types of **movable assets**:

- Artefacts**,** mechanisms intended for obtaining, transforming and piping substances, for producing energy or for transport and communications.
- Implements**,** tools required for performing the technical procedures associated with economic activities.
- Furniture and accessories from the social working environment. Also includes movable outfittings from the places of residence, management, assistance or leisure associated with industrial establishments, clothing, etc.
- Archives**,** comprised of written or iconographic documents generated by economic activities and industrial relations. This section includes the bibliographic collections associated with the working culture. Registering oral and visual sources is a priority owing to their fragility and danger of disappearing.

In **intangible assets** we find:

- Entities of industrial memory**,** any testimonies, institutions or unitary collections that because of their relevance are an integral part of the historical memory associated with a working system, a scientific discipline or research activity connected to the Working Culture.

Chronological delimitation

Included in the Plan for Industrial Heritage are any manifestations dating from between the mid-18th century, with the start of mechanisation, and the time when it begins to be totally or partially replaced by other systems in which automation plays a part.

Scope of application

The scope of application of the National Plan for Industrial Heritage is the entire territory of the Spanish State.

1.4 – Risk identification

The justification for arbitrating a National Plan for Industrial Heritage lies in the need to protect and conserve a heritage that, owing to its very specificity, suffers from rapid deterioration and is subject to disappearing.

In Spain the situation of industrial heritage is seriously threatened owing to:

- The absence of integral planning of heritage resources generated by industrialisation.
- The lack of coordination between administrations and their services or departments in aspects referring to industrial heritage.
- The way competences over actions on industrial heritage are shared out between the various administrations.
- The weak social and institutional perception of the values and significances of industrial heritage.
- The territorial transformations affecting important industrial systems, ensembles or elements.
- The growing demand for intervention projects on industrial heritage areas lacking in scientific rigour.
- The plunder of numerous infrastructures, archives, movable and immovable assets.
- The consideration of and emphasis on the “immovable assets” and architectural assets of industrial heritage, occasionally ignoring its great richness and diversity and the importance of conserving the technical history through its machinery and implements.
- The conservation and maintenance of industrial archives or the various forms of intangible heritage have not been properly recognised and are now threatened with disappearing as factories, works and trades are abandoned and businesses and persons relocate from territories or sites that were industrialised in the past.

- The disappearance of the protagonists of industrialisation without a plan to document their valuable testimonies.

- The deficiencies in protection and conservation given the absence of regulatory and legal provisions and also the actions of occupying old factory enclaves for real estate uses and reuses that led to notable disappearances of elements from the industrial historical heritage.

- The recognition and valuing of industrial heritage has led to a change in the practices of cultural consumption, mainly occasioned by the deindustrialisation of urban areas; the renewal of the urban identities of cities and rural environments, a process in which heritage frequently appears as a new landmark and icon against the backdrop of uniformity imposed by globalisation. The renewed educational interest that teachers and students are experiencing in schools and learning centres, where the knowledge of and visits to museums, centres of economic and social activity, sites and landscapes is becoming a habitual and regular task, as well as the contribution from tourism, which leads to a new vitality in villages, towns and rural areas that were hitherto far distant from the more dynamic tourist centres, are an increasingly robust trend in the consideration given to museums, tourism and the selective reuse of industrial heritage. Finding a balance with tourist use is not always in line with the required levels of sustainability and responsible development in territorial development strategies.

For risk analysis understood as the identification and appraisal of the deterioration risks affecting cultural assets generally, we propose the following methodology aimed at facilitating analysis in specific cases:

- **Definition of deterioration:** deterioration processes detected in the cultural assets to be conserved should be defined by developing a rating scheme for them**.**

- **Concept of risk** as the likelihood of material or intangible deterioration occurring.

- **Identification of risks:** includes a documentation phase for analysis and diagnosis.

- **Risk assessment** pertinent to the damage caused (material integrity – integrity of intangible values) and not to the loss of value.

- **Risk control** according to risk assessment and means available (technical and human).

- **Monitoring and control**

2.– METHODOLOGICAL ASPECTS

2.1– Assessment and selection criteria

Identifying and assessing the industrial assets most likely to undergo an

intervention within the Plan should be a balanced undertaking. Most industrial sectors, industrialisation process phases and Autonomous Community territories should be represented.

The following criteria will be used:

A. Intrinsic

- testimonial value
- typological uniqueness and/or representativeness
- authenticity
- integrity

They will determine the element's intrinsic value and make reference to its importance in relation to other elements of its same typology or genre. It is then comparatively valued and assessed as a testimonial vestige in a more or less nearby setting either for its uniqueness, for being the most representative model of an architectural genre or of a specific industrial sector or for meeting the characteristics that define a build type or for conserving these characteristics without being contaminated by superpositions from other periods. It is the comparative analysis of the element.

B. Heritage-related

- historical
- social
- artistic
- technological
- architectural
- territorial

The criteria recorded in this section determine the heritage value of these cultural assets and refer to their historical and social value in a specific period and society; to their technological value in response to the development and evolution of technique, of industry and the art of building; to the artistic value of the forms and ways of building, representative of the paradigms of the mechanised era; to their relationship with the built territory, its implications and derivations to other elements that come together to define a specific landscape. It is the descriptive analysis of the element.

C. Viability-related

- possibility of integral action
- state of conservation
- management and maintenance
- social profitability

- legal situation

The criteria set out in this section determine the asset's potential value and make reference to its future prospects, level of conservation, possibilities for integral action (immovable-movable), ownership or legal situation and, lastly, the conducting of studies or the implementation of a strategic plan to assess its viability and social profitability. These aspects represent a second phase, the enhancement of the element to be conserved.

2.2.- Thematic areas

If we consider that industrial heritage is an integral heritage, a true reflection of the concept and objectives of Industrial Archaeology, we accept the following as objects of this heritage: industrial landscape (in an urban or rural context), monument or built asset, artefact or machine, document and testimonies of ways of seeing and understanding life in industrial activities. Five crucial fields of work for analysing and assessing an industrial asset affected by many scientific, historical and artistic disciplines or those underpinned by old and new methods and sources, and through which these heritage objects should be approached. Interdisciplinarity and, as a consequence, overall interpretations and applications of the object being studied.

The industrial heritage plan has a place for all architectural or technological manifestations of activities involving extraction, production, transformation, management, transport, distribution or consumption, together with the necessary equipment and facilities to perform these functions (housing, warehouses and healthcare or educational facilities, etc) as well as documentary sources (written, graphic and oral), but always within their historical context and process.

By way of guidance, the elements by sectors are the following:

- Textile industry
- Agri-foods industry
- Cork, wood and furniture industry
- Paper industry and graphic arts
- Leather and footwear industry
- Mining and extractive activities
- Steel and metal industry and mechanics' shops
- Chemical industry
- Construction, ceramic and glass industry
- Naval industry
- Toy industry
- Water extraction and distribution
- Energy: gas, electricity and oil
- Transport(rail, road, maritime, air and public urban)

- Communications (telegraph, mail and telephone)
- Industrial urban planning, housing and social facilities
- Other representative elements associated with each sector, from the broad point of view of the production cycle

2.3 – Intervention criteria

Interventions on industrial elements or ensembles should follow the general conservation regulations applicable to any cultural heritage.

The specific maintenance and conservation guidelines adopted are those approved in the National Assembly of the TICCIH held in Moscow on 17 July 2003 and defined as the NIZHNY TAGIL CHARTER FOR THE INDUSTRIAL HERITAGE:

I. Conservation of industrial heritage depends on preserving functional integrity, and interventions on an industrial site should therefore focus on maintaining its functional integrity to the extent possible. The value and authenticity of an industrial site can be vastly reduced if the machinery or components are removed, or if the secondary elements that form part of the site as a whole are destroyed.

II. The conservation of industrial sites requires profound knowledge of the purpose or purposes for which they was built, and of the different industrial processes that may have taken place there. This may have changed over time, but all previous uses have to be investigated and evaluated.

III. In-situ preservation should always be seen as a priority. Dismantling and relocating a building or a structure is only acceptable when the site has to be destroyed for imperious social or economic reasons.

IV. Adapting an industrial site to a new use as a way of ensuring its conservation is usually acceptable except in sites of special historical importance. The new uses should respect the significant material and maintain the original patterns of circulation and activity, and should be as compatible with the original or principal use as possible. It is advisable to fit out an area to represent the previous use.

V. Continuing to adapt and use industrial buildings prevents the waste of energy and contributes to sustainable development. Historical heritage can play an important role in the economic regeneration of areas that are derelict or in decline. The continuity that reuse involves can provide psychological stability to the communities faced with the sudden end of a longstanding source of work.

VI. Interventions should be reversible and make a minimal impact. Any inevitable change should be documented, and any significant elements eliminated should be registered and stored safely. Several industrial processes confer a lustre that is integral to the site's integrity and interest.

VII. Reconstruction, or the return to a known previous state, should be viewed as exceptional and only appropriate if it benefits the integrity of the entire site or if a larger site has been destroyed through violence.

VIII. The human skills involved in many old or obsolete industrial processes are a

critically important resource whose loss can be irreparable. They should be painstakingly registered and transmitted to new generations.

IX. The conservation of documentary registers, company archives, construction plans as well as sample species of industrial products should be promoted.

2.4 – Phases of action

The instrumentation of the Plan for Industrial Heritage will use in all its steps the knowledge and experience built up by the local collectives most directly associated with the assets covered by this plan. Given that they are the repositories of the working memory and social activities involved in the industrial processes, their role as transmitters of historical knowledge is highly useful in the inventory phase. Moreover, they know well the specific needs and problems that arise in the direct environment of the industrial assets, and so their active involvement in their recovery and enhancement phase has a direct impact on the social and economic integration of the projects within the territorial framework in which they are set.

The National Plan for Industrial Heritage should be developed over the following phases:

1st phase: Drafting of a general **Inventory** of Spanish industrial assets, in accordance with specified criteria, constituting the first step towards the protection of industrial heritage.

2nd phase: Conducting **Studies,** necessary actions for acquiring knowledge on the asset and documenting it for listing as an Asset of Cultural Interest and to determine its ownership and legal situation.

3rd phase: Drafting of **Master Plans** for the assets, jointly or as industrial landscapes featuring a degree of complexity in order to gain integral knowledge of them, a requirement when planning their conservation actions.

4th phase: Drafting of **Intervention Projects** for the assets selected for restoration and conservation.

2.5.-Instruments of the National Plan for Industrial Heritage

Integral inventory. (Inventory of Spain's Industrial Heritage)

Aimed at documenting industrial heritage for its protection and conservation, leading to registering the industrial assets within the appropriate legal framework. The regional, sectorial or thematic inventories already undertaken will be taken into account to thus contribute to a common database. The inventory should pursue the following objectives:

1. The Inventory project is based on the need to constitute an objective database that registers Spanish Industrial Heritage assets, identifying, describing and assessing the testimonies registered. The inventory should become the matrix in which the assets registered in the different Autonomous Communities are selectively inserted.

2. Given how quickly this heritage is disappearing, data-taking as a rigorous and scientific documentation system is the necessary and indispensable starting point.

3. The proposed methodology has to lead to an active, open and ongoing documentary compilation process which will be increased over time for the better knowledge and conservation of this industrial heritage, with the purpose of improving the way it is managed.

4. This proposal considers the use of a clear interdisciplinary industrial archaeology methodology to be the guarantee of the effective identification, understanding and conservation of industrial assets.

5. It seeks to boost connections between the industrial asset being protected and its social environment, the territory in which it stands, the associated historical memory and its potential for development.

6. The mandatory process of analysing the inventory's results, will clearly define the functions to be performed by this industrial asset in regard to the social, economic, scientific and cultural life of the site on which it stands and to the relevance of this asset on a local, regional, sub-regional, Autonomous or State scale.

7. Industrial Heritage is assumed to constitute an integral ensemble that includes contextualised material and intangible testimonies in the industrialisation process in its different grades.

Selective inventory

After it was approved in 2001, the first industrial heritage plan had the primary objective of detecting the principal industrial heritage assets in the different Autonomous Communities. Based on a broad consultation, the Institute, together with the people responsible in the Autonomous Communities, selected an initial list (attached in Appendix 3) with the fifty most appropriate assets for the first interventions.

In the intervening years, and thanks in part to that plan, we have gained better knowledge of the existing heritage and the possibilities these buildings offer as well as the difficulties that arise when investments have to be made.

For the development of this new stage, the list of the "100 Industrial Heritage Elements in Spain" drafted by the TICCIH-España[6] association can be established as an initial catalogue and rough guide.

Studies

Research and actions required for fostering the knowledge of industrial culture and boosting the research groups working on industrial heritage.

We also pursue the knowledge and documentation of some aspects of a specific asset as a preliminary phase to drafting a master plan. In these cases, and in order to

6 Appendix 6

allow the conservation actions to begin, this kind of document should contain the following points:

- Documentation for listing it as an Asset of Cultural Interest
- Primary graphic information
- Historical/heritage assessment
- Legal/administrative status
- First diagnosis of its state of conservation (building and contents)
- Viability as a project and capacity for use

Master Plans

Interdisciplinary framework documents to achieve the most and greatest knowledge of the asset from every possible viewpoint. They should define and specify the comprehensive documentation of the asset's current state, together with the procedures and strategies that underpin, organise and regulate the proposals for any conservation, restoration, use and maintenance actions proposed for it.

To rationalise the interventions and investments made in the conservation of the industrial asset, proposals should be prioritised by phases, financially quantified and given continuity.

They should contain the following sections:

A. Descriptive Report of the Industrial Asset, its contents and its setting

- Description, dimensioning and metrology
- Relationship with surroundings (whether rural or urban, and its assessment)
- Physical composition: construction systems, materials, architectural and technical solutions, etc.
- Description of industry, current uses, infrastructures, facilities, etc.
- Contents, archives or other documentation, etc.

B. Historical analysis

- Assessment and synthesis of the most noteworthy aspects, establishment, purpose and promotion of the works, social and historical setting, etc.
- Compilation of archive documentation (graphic or documentary)
- Possibilities of documenting preceding stages, etc.

C. Legal study

- All matters referring to ownership (registry, rental, taxes, obligations, water, etc)
- Conditions derived from Heritage legislation and, above all, urban planning legislation, etc.

D. Analysis of the state of conservation and final diagnosis (includes contents and setting)

- Pathologies in materials, state of the structures, finishes, damp, etc.
- State of conservation of the existing facilities, etc.
- Risk identification and analysis specific to the asset

E. Plans for Action or Interventions: Documentation, restoration and rehabilitation. Includes all the necessary specific studies, from archaeological excavations to analysis and research, whether instrumental or documentary.

- Methodology and equipment
- Graphic documentation of the Industrial Asset (surveying, photogrammetry, photography, scale modelling, video, etc)
- Interventions

F. Proposals for uses, maintenance and services.

G. Management and Dissemination Plan.

From a theoretical point of view, master plans should take into account the conditions inherent to industrialisation and should use a renewed methodology on the basis of the industrial heritage's uniqueness and accumulated experience. They should bring together all the initiatives, whether public or private, undertaken for conserving, promoting and divulging the asset.

In drafting each master plan, a broad team of professionals from different disciplines should be collected to tackle the work from the integral perspective that assets as complex as these require.

2.6.- Coordination and co-funding of actions

The National Plan for Industrial Heritage constitutes an action strategy enabled by a common methodological framework under which the coordinated action of any public administration, private entities and society in general is undertaken.

This requires a high degree of coordination for any of them to participate in an appropriate manner, with the knowledge of all stakeholders and consistent with the best conservation of the assets.

Once the Heritage Council has approved the Plan for Industrial Heritage, a **Technical Commission for the Monitoring of the National Plan for Industrial Heritage** should be created**.** It should be interdisciplinary and comprised of technicians representing the central administration, representatives from the Autonomous administrations and external experts.

The task of this commission will be assessing and monitoring the theoretical and conceptual aspects of the studies conducted and documents drafted, as well as of the theoretical approach to the actions undertaken.

It will also validate and/or propose the basic working lines, studies on criteria and methodology and interventions in keeping with the formulated working lines. In addition, controlling the compliance of each line of action will be the competence of the Plan's Technical Monitoring Commission.

In order to establish total and permanent communication and coordination between the administrations, the Autonomous Communities may appoint interlocutors through whom the information will be channelled.

2.7 – Specific regulations

INTERNATIONAL REGULATIONS

GENERAL REGULATORY INSTRUMENTS

European Cultural Convention.1954. Council of Europe. Framework for cooperation in the spheres of education, culture, youth and sport.

Convention Concerning the Protection of the World Cultural and Natural Heritage, UNESCO.Paris1972. Ratified by Spain in1982, it came into force in 1975.

GOVERNING PRINCIPLES OF INTERVENTIONS ON CULTURAL HERITAGE

Athens Charter for the Restoration of Historic Monuments.1931.

International Charter for the Conservation and Restoration of Monuments and Sites. ICOMOS. Venice 1964.

European Convention on the Protection of the Archaeological Heritage. Council of Europe. London,1969. The result of the evolution of urban planning policies in European countries.

Amsterdam Declaration incorporating the principles contained in the European Charter of the Architectural Heritage. Council of Europe, 1975.

Warburton Report of 1983. Council of Europe. Reflects the disassociation between the custody of historic monuments and the regulation of urban planning in general. It is viewed as indispensable to protect monuments and their setting. Its provisions are included in Act16/1985 of Spanish Historical Heritage through the special plans item.

Convention for the Protection of the Architectural Heritage of Europe. Council of Europe. Granada. 1985. Ratified by Spain in 1989.

International Charter for the Conservation of Historic Towns and Urban Areas. ICOMOS. Toledo 1987.

Recommendation No. R (98) 4 on measures to promote the integral conservation of historic complexes comprised of movable and immovable properties. Committee of Ministers of the Council of Europe.

Recommendation No. R (91) 13 on the protection of 20th-Century Architectural Heritage. Committee of Ministers of the Council of Europe.

European Convention on the Protection of the Archaeological Heritage. Council of Europe. Valetta, 1992. (Revision of the 1969 Convention).

Principles for the Recording of Monuments, Groups of Buildings and Sites. ICOMOS. Sofia.1996.

Recommendation 1486 (2000) on the maritime and fluvial cultural heritage. Council of Europe.

Charter of Krakow, 2000.

European Landscape Convention. Council of Europe. Florence. 2000.

Convention on the Value of Cultural Heritage for Society. Council of Europe. Faro. 2005.

INSTRUMENTS RELATIVE TO INDUSTRIAL HERITAGE

For **UNESCO,** the concept of Industrial Heritage is an extensive one, as it encompasses industrial manifestations from all eras and not only those derived from the industrial revolution. Based on the idea that the Industrial Revolution modified landscapes and life systems, it emphasises that the intensive procedures used in the extraction of raw materials and the exploitation of minerals and farming products result in important achievements and give rise to major constructions that testify to the creative genius of humanity. Keeping in mind that rapid technological advances have caused the majority of industrial sites to become obsolete, and in order to save them from abandonment or destruction, some mines, factories, foundries and industrial facilities have been registered in the World Heritage List.

UNESCO recognises that industrial sites constitute an important milestone in the history of humanity, that they mark the double power of the human race of creating and destroying, something that engenders progress and setbacks and the hope for a better life through the mastering of technique.

It gives the same heritage value to industrial elements and to well-established heritage and thus recognises that in the past 30 years advances have been made in the awareness of the importance of industrial history in understanding cultural heritage in its broadest sense. The first step in this regard came about thanks to the new discipline of Industrial Archaeology, which grants industrial artefacts the same value as that of many other historic elements that had already been recognised for years. And it adds: Industrial heritage includes not only mills and factories but also the social and technical achievements produced by new technologies, such as industrial colonies, canals, railways, bridges and other forms of transport and some manifestations of engineering.

UNESCO recognises all kinds of industrial sites but does not establish chronological limits. It has thus included some constructions of Roman engineering or medieval workings in the World Heritage List.

On concrete elements, UNESCO presented in 1980 the **Recommendation for the**

Safeguarding and Conservation of Moving Images.

The **Council of Europe** focuses its activity on a theoretical framework through the drafting of regulations, recommendations, working methodologies and codes of good practice aimed at identifying, protecting, conserving and divulging Heritage. In this context, and aware of the changes that have occurred in Europe as a consequence of the technological advances made in recent decades, it gains awareness of the need to pay attention to industrial heritage which, owing to its specificity, features particular characteristics.

Industrial heritage, though implicitly included in general Conventions and Recommendations, is only covered in an explicit manner in two documents of the Council of Europe: Recommendation No. R (87) 24 and Recommendation No. R (90) 20.

The background for these Recommendations can be found in a document issued by the Parliamentary Assembly of the Council of Europe at its thirty-first ordinary session in June 1979. It is **Recommendation 872 (1979) *on industrial archaeology*.** It issues the following recommendations to the Committee of Ministers:

- To entrust the following tasks to an interdisciplinary group of government experts: establishing a practical definition of the precise objectives of industrial archaeology. Proposing the means for inventorying and classifying industrial heritage. Coordinating the analysis of inventoried heritage, taking into account existing research both on a national and international scale.

- To urge the member governments to increase the financial budgets for safeguarding industrial monuments and to support private initiatives in this regard. To ensure that conservation legislation takes industrial monuments into account. To promote the preparation of teaching material on this issue aimed at young people. To promote and facilitate the initiatives of local collectives.

Equally, during the staging of the 2nd European Conference of ministers responsible for Architectural Heritage held in Granada in October 1985, it was requested that the notion of Heritage be expanded to include, among others, the technical and industrial heritage.

Recommendation No. R (87) 24 on European industrial cities falls within a working line on urban policies, with the antecedents of the Conferences of Lille (France, 1983) and Dortmund (Germany, 1985). It highlights the need to revitalise the old industrial cities that played a crucial role in Europe's economic growth. To this end it makes a series of recommendations for the member States.

The traditional industrial city has suffered a sharp decline caused by the depletion of resources and the obsolescence of the techniques employed in production processes, with explicit reference to the coal, steel, textile and naval construction industries.

The state of decay of industrial cities and regions that had their heyday in the late 19th and early 20th centuries causes serious social and economic problems that have to be tackled through a new perspective and with the concurrence of both the public

and the private sectors. The aim is to adapt these sites to a new situation and to boost heritage values to promote their development from a cultural viewpoint.

It urges the member States to launch a reactivation policy based on recovering the environment as a first measure and on making the most of existing resources, from reuse of derelict land to rehabilitation of buildings and facilities, employing advanced techniques producing the greatest possible yield through coordination of projects, enabling planning mechanisms, establishing new executive bodies, involving public organisms and private sectors.

In this quest incentives should be found for business initiatives that promote economic development (industrial and commercial) and sociocultural development to create local employment.

It emphasises the need to exchange information and experiences with other sites, boosting international cooperation, something that undoubtedly contributes to perfecting procedures and to obtaining better results.

Recommendation No. R (90) 20 on the protection and conservation of technical, industrial and artworks heritage in Europe is based on preceding Conventions on cultural heritage in general (Paris, 1954) and architectural heritage in particular (Granada, 1985). Though included in a somewhat broader context, this Recommendation highlights the specificity of industrial heritage and was issued with the aim of establishing the means for its protection and conservation. It recognises that it forms part of the European historical heritage and that safeguarding and conserving it requires the application of methods that conform to its specific nature.

It observes that stimulation and awareness-raising strategies ideally form part of a concerted European-wide action and considers that States should take notice of the need to promote scientific knowledge on industrial heritage.

In consequence, it urges member States to take initial measures to protect industrial assets, consisting of identifying, inventorying and scientifically analysing them, in particular any the assets most at risk of going unnoticed because they are abandoned or in inaccessible spots. This should be complemented with the adoption of legal protection and conservation measures and with their promotion through awareness-raising programmes among the citizens and by fostering cultural tourism. It underlines the advisability of joining forces to safeguard certain industrial assets that, owing to their special significance, are viewed as exceptional and constitute a clear testimony of the development of industrialisation in Europe.

Subsequently, the 4th European Conference of Ministers responsible for Cultural Heritage (Helsinki, 30-31 May 1996) insisted on the need to promote sustainable cultural tourism strategies through which many aspects of European culture can be enhanced, including technical and industrial heritage.

This was later followed by Recommendation 1486 (2000) on cultural maritime and fluvial heritage and the European Convention for the protection of audiovisual heritage (Strasbourg, 2001), which emphasise specific types of assets within Industrial Heritage.

However, it is the **Nizhny Tagil Charter for Industrial Heritage**, signed in Moscow

in July2003[7] that is the most comprehensive and specific document on the protection of industrial heritage. It was drafted by the International Committee for the Conservation of Industrial Heritage (TICCIH).

The preamble frames industrial heritage in the context of the industrial revolution of the late 18th century, at a time when profound technical, social and economic transformations occurred, and recognises that all testimonies derived from this process have a universal value and should be studied and conserved.

The content of the Charter is spread out over seven articles covering the following: 1) definition of industrial heritage. 2) values of industrial heritage. 3) the importance of identification, inventorying and research. 4) legal protection. 5) preservation and conservation. 6) education and training. 7) presentation and interpretation.

The Charter addresses industrial heritage through a global conception that goes beyond strictly monumental aspects and even purely physical elements, as it takes into account intangible testimonies and social and natural aspects. It contemplates not only its constitutive values but also the means for their identification, study, conservation and appropriate treatment.

Chronological delimitation proves to be somewhat more ambiguous. While recognising that the most interesting stage begins at the start of the industrial revolution in the mid-18th century, it extends it to the present day and also includes all

7 http://www.mnactec.cat/ticcih/industrial_heritage.htm

preceding artisan activities, characterised as pre-industrial and proto-industrial.

NATIONAL REGULATIONS

1. Act16/1985 of 25 June on Spanish Historical Heritage.

No express mention is made of Industrial Heritage, which is covered by:

> **Article 1.2.**" The Spanish Historical Heritage is comprised of **buildings and movable objects of** artistic, historical, paleontological, archaeological, ethnographic, **scientific or technical interest**. It includes documentary and bibliographic heritage, archaeological sites and areas and natural sites, gardens and parkland having artistic, historical or anthropological value".
>
> **Article 40.1.** "In accordance with the provisions of article 1 of this Act, Spanish Historical Heritage is comprised of historic movable assets or buildings that may be subject to study under an archaeological methodology, whether or not they have been extracted or are on the surface, in the subsoil, in territorial maritime waters or on the continental shelf…".

2. Bierzo Charter on Industrial Mining Heritage. 2007.

A document presented during the staging of the technical sessions on Industrial Mining Heritage in Ponferrada in October 2007 and approved in 2008 by the Historical Heritage Council.

This document seeks to drive forward conservation and enhancement initiatives for the Industrial Mining Heritage and to establish minimum intervention criteria for it.

AUTONOMOUS REGULATIONS

The majority of Autonomous laws regulating the historical/cultural heritage make no specific mention of industrial heritage, in contrast to archaeological, ethnographic and paleontological heritage. When mentioned, it tends to be grouped with ethnographic heritage and, in Extremadura's law, is even considered to form part of the latter. In general, this mention refers to the delimitation of the immovable and movable assets that comprise it.

It is treated more in depth in the laws of Asturias and Andalusia. The former defines and enumerates the different elements that comprise Industrial Heritage. Positive and negative (destruction prohibition) protection mechanisms are established, including documentary and social heritage associated with it. In the case of the Andalusian law, the granting of specific protection for industrial landscape as a Site of Industrial Interest is particularly noteworthy.

Andalusia

Act 14/2007 of 26 November on the Historical Heritage of Andalusia.

It is given the Title VII, Industrial Heritage.

Article 65. Definition.

1. Industrial Heritage is comprised of the suite of assets associated with the productive, technological, manufacturing and engineering activity of the Autonomous Community of Andalusia inasmuch as they are exponents of the social, technical and economic history of this community.
2. Landscape associated with productive, technological, manufacturing or engineering activities is an integral part of industrial heritage and is protected under Site of Industrial Interest.

Article 66. Classification.

1. Industrial buildings include facilities, factories and engineering works constituting an expression and testimony of systems associated with technical and industrial production. Industrial movable assets include instruments, machinery and any other pieces associated with technological, manufacturing and engineering activities.
2. They will be listed in the General Catalogue of Andalusian Historical Heritage when their values justify it, in one of the categories that the present Law establishes for this purpose.

Article 67. Special protection.

Special protection will be given to any technical, manufacturing or engineering knowledge or activity in danger of disappearing and support will be extended to their study and dissemination as an integral part of Andalusian technological culture. To this end, they will be researched and featured on material mediums to ensure their transmission to future generations.

Article 68. Planning adjustment.

The listing of a Site of Industrial Interest in the General Historical Heritage Catalogue will be paired with the need to include any values should be preserved in the urban development planning, adopting the necessary measures for their protection and enhancement.

Aragón

Act 3/1999 of 3 March on Aragón's Cultural Heritage.

Title IV mentions industrial heritage together with ethnographic heritage and is covered under

Article 73. Industrial Heritage.

Industrial heritage is comprised of any ethnographic assets forming part of Aragón's technological, productive and industrial past and is subject to study under archaeological methodology.A Science and Technique Museum should be created for the preservation and study of industrial heritage

Principality of Asturias

Act 1/2001 of 6 March on the Cultural Heritage of the Principality of Asturias.

It is covered by section 3, Chapter IV of Title II.

Article 76. Historic-Industrial Heritage.

1. The Historic-Industrial Heritage of Asturias comprises any movable and immovable assets that constitute significant testimonies of the evolution of technical and productive activities with purposes of industrial exploitation and their influence on Asturias' territory and society, especially those derived from the extraction and exploitation of natural resources, metallurgy and steel working, transformation of agricultural produce, production of energy, tobacco cultivation and the chemical, armament, shipbuilding, canning or construction industry.
2. The historic-industrial interest of the following elements will be valued in order to individually include them in one of the categories established for this purpose in this Act whenever their merits justify it:

a. Machinery, implements and tools used in the technical and manufacturing processes that have now disappeared or are obsolete.

b. Architectural or engineering constructions and structures adapted to industrial production through technical and manufacturing processes that have now disappeared or are obsolete, such as chimney stacks, gasometers, lattice towers made from iron, wood, zinc and other materials, old mountain mining pitheads, workshops, industrial warehouses or mechanics' shops.

c. Social housing complexes and facilities associated with productive activities dating from before 1940.

d. Maritime, railway or cable communications infrastructures fallen into disuse and mobile constructions, machinery and material associated with them.

e. Water extraction, pumping and piping infrastructures fallen into disuse and linked to industrial processes or urban concentrations.

f. Unique examples of iron architecture, including markets, bridges and viaducts.

g. Documentary collections of businesses meeting the conditions of antiquity referred to in articles 80 and 83 of this Act.

3. The Principality of Asturias and the Town Councils will protect the Historic-Industrial Heritage through:

a. Listing as an Asset of Cultural Asset, inclusion in the Inventory of the Cultural Heritage of Asturias or in the Urban Planning Catalogues for the protection of any assets subject to this treatment.

b. Systematically collecting and making available to the public and researchers in appropriate institutions any documentary collections and machinery and similar assets that have been removed from productive processes and are of unique historical interest.

c. The application of specific regulations contained in this Act or those whose principles are covered by urban planning, environmental or other regulations established by the Public Administrations.

d. Supporting the work of associations, institutions and persons who perform research and social collaboration tasks in the protection of Historic-Industrial Heritage.

Article 77. Prohibition of destruction of industrial machinery.

1. It is prohibited to destroy industrial machinery manufactured before 1940 unless, for reasons of force majeure or social interest or of a lack of cultural interest, express authorisation has been given by the Department of Education and Culture. Authorisation applications should be resolved within a period of no more than three months. Any transfer outside the territory of the Principality of Asturias will be governed by the provisions of article 41.
2. The protection of any documentary assets of historic-industrial interest will be governed by the general provisions covering Documentary Heritage.

Article 78. Testimonies of social history.

The social aspects of industrialisation, and most especially those associated with changes in everyday life and the history of the workers' movement, will be especially subject to compilation and study, including any corresponding oral testimonies.

Balearic Islands

Act 12/1998 of 21 December on the Historical Heritage of the Balearic Islands.

Title V covers the Historic-Industrial Heritage:

Article 68. Definition.

Historic-industrial heritage includes movable and immovable assets manifestating the technological, industrial and productive past of the Balearic Islands that may be subject to study under the methodology applicable to history of art, economic history or the history of science and technique.

Article 69. Classification.

1. Historic-industrial immovable assets include factories, constructions or facilities that are the expression and testimony of systems associated with technical and industrial production, have lost their practical meaning and remain unused.
2. Historical-industrial movable assets include vehicles, machines, instruments and pieces of engineering that have lost their practical meaning and remain unused.

Canary Islands

Act 4/1999 of 15 March on the Historical Heritage of the Canaries.

No specific mention is made.

Cantabria

Act 11/1998 of 13 October on the Cultural Heritage of Cantabria.

No specific mention is made.

Castile-LaMancha

Act4/1990 of 30 May on the Historical Heritage of Castile-La Mancha expressly mentions Industrial Heritage in Chapter II, Title II in

Article 22. Industrial Archaeology.

1. The Historical Heritage of Castile-La Mancha is comprised of movable and immovable assets constituting the physical traces of the technological and productive past. The Department of Education and Culture will establish the information to be obtained, the cultural matrixes, operative research purposes and delimitation of the scope of industrial archaeology for its protection.
2. The Department of Education and Culture will promote or conduct systematic study, research and documentation throughout the territory of Castile-La Mancha.

Castile andLeón

Act 12/2002 of 11 July on the Cultural Heritage of Castile and León.

No specific mention is made.

Catalonia

Act 9/1993 of 30 September on the Catalan Cultural Heritage.

No specific mention is made.

Extremadura

Act 2/1999 of 29 March on the Historical and Cultural Heritage of Extremadura.

It is mentioned in Title IV:

Article 58: Elements of industrial or rural architecture.
The provisions of this Act on immovable and archaeological heritage will be applicable to ethnological assets constituting physical remains of Extremadura's industrial, technological and productive past, together with elements of popular architecture and farming outhouses.

Galicia

Act 8/1995 of 30 October on the Cultural Heritage of Galicia.

No specific mention is made.

La Rioja

Act 7/2004 of 18 October on the Cultural, Historical and Artistic Heritage of La Rioja.

No specific mention is made.

Madrid Community

Act 10/1998 of 9 July on the Historical Heritage of the Madrid Community.

No specific mention is made.

Region of Murcia

Act 4/2007 of 16 March on the Cultural Heritage of the Autonomous Community of the Region of Murcia.

No specific mention is made.

Autonomous Community of Navarre

Act 14/2005 of 22 November on the Cultural Heritage of Navarre.

In Chapter II of Title V:

> **Article 66**. Industrial Heritage.
>
> Industrial Heritage comprises the suite of movable and immovable assets that constitute manifestations of or are linked to the productive, technological and industrial activity of the Autonomous Community of Navarre inasmuch as they are exponents of Navarre's social and economic history.
>
> **Article 70**. Protection of Industrial Heritage
>
> 1. The competent Department on culture, through the instruments provided in this Regional Act, will preserve as many assets or spaces as are illustrative of the industrialising process in the Autonomous Community of Navarre, with special consideration for technological ensembles and the constructions that housed them as well as means of transport and road infrastructure.
>
> 2. It is prohibited to destroy industrial machinery manufactured before 1900 unless, for reasons of force majeure or social interest or of a lack of cultural interest, express authorisation has been given by the competent Department on culture. Any authorisation applications should be resolved within a period of no more than two months, after which period, if no express resolution has been handed down, they will be understood to be dismissed.

Basque Country

Act 7/1990 of 3 July on the Basque Cultural Heritage.

No specific mention is made.

Valencian Community

Act 4/1998 of 11 June on the Valencian Cultural Heritage.

No specific mention is made.

3–PROGRAMMING OF ACTIONS

The first industrial heritage plan was primarily concerned with detecting the principal industrial heritage assets of the Autonomous Communities in which investment could be made for their preservation or reuse.

In the ten years of the plan's life, and in part thanks to it, knowledge of the existing industrial heritage has been expanded, the population's awareness of this heritage has increased and an important number of conservation and restoration interventions have been carried out, inventories have been drafted and in some Communities territorial industrial heritage plans have been developed, but this task cannot be considered complete.

This second phase should reflect on the real state of industrial heritage, compiling the information available from the different Autonomous Communities to then implement pertinent actions.

3.1.- Need to learn about Spain's principal Industrial Heritage sites

One of the problems of industrial heritage is the real lack of knowledge of the existing assets that comprise it and which of them deserve to be preserved, as this cannot be done for all of them given that many do not have the necessary construction category or constitute a major testimony of industrialisation. This is not the case with the remainder of built cultural heritage fields.

Not all Autonomous Communities have taken inventories of the principal industrial heritage sites, making it impossible to reach incontrovertible conclusions on their current state, but thanks to the information available it is possible to list the principal industrial heritage elements in the fifteen sectors into which this plan has classified them. These lists should be used as an indicative value in a future selection of assets on which interventions should be performed.

Proposal 1: to draft a list of the principal elements in industrial heritage sectors enumerated in the previous Plan.

3.2.- Fostering the study of productive sites to learn their history and importance as a testimony of its territory's industrialisation

There are few historical, archaeological and architectural studies on productive industrialisation centres. These studies are crucial in establishing the importance of the site as a testimony of history and as a source of information for their proper restoration.

Studies should be encouraged in collaboration with universities to learn about the history of industrial sites and collaborate in organising conferences.

Proposal 2: To foster studies on the material history of industrialisation

3.3.- Divulging the relevance of industrial heritage as a factor of identity in the European context and raising awareness of its study and preservation among the population and those responsible for heritage.

In a European context, Spain is seen as having been eminently agricultural and thus excluded from the industrialisation process. Despite the fact that this perception is partly true when compared with more developed countries, this is not entirely the case. The most significant industrial heritage should be preserved to provide visual proof that many parts of the country did see industrial development.

One of the difficulties in preserving this heritage is the lack of awareness in a part of society and people responsible for cultural heritage, perhaps be due to the large amount of heritage in existence, although this attitude is not justifiable. Even so, many actions have been undertaken, mainly thanks to local and Autonomous initiatives and to the national plan.

These preservation actions of industrial heritage have to be disseminated through publications and products in an audiovisual and digital format and other actions such as the exhibition and catalogue on Industrial Heritage being promoted by TICCIH-Spain. Training courses should also be imparted mainly to political leaders and technicians from the administration to transmit the importance and possibilities of restoration and reuse.

Proposal 3: To perform dissemination and training actions to give society a better understanding of the importance of Industrial Heritage as a testimony of our country's involvement in the industrial process and to thus better understand the history of the past centuries. Dissemination has to help visualise the many preservation actions undertaken.

3.-4.- Divulging examples of industrial heritage conservation

Recovering industrial heritage is not done for its contemplation as is the case with a considerable part of heritage. These actions seek to preserve the testimony of economic activities that affected society to such an extent that it was given the name of Industrial Revolution. Preserving this heritage requires it to be reused, sometimes as a museum or archaeological venue but mostly as containers of a contemporary activity. Many owners of industrial heritage and responsible public authorities face the difficulty of deciding which actions can be undertaken in an abandoned productive centre. Today there are numerous and completely valid examples of cultural heritage that should be divulged.

Proposal 4: To divulge examples of good practices in the preservation and reuse of industrial heritage

3.5.- Industrial landscape

Industrial production is a complex issue and a major part of its success on a territory depends on relations between productive centres in its same and other sectors as well as ancillary industries. Other times, productive centres that depend on local raw materials or a specific geography, such as mining or hydroelectric plants, are culstered on a specific territory. These productive centres create industrial landscapes that have currently gained new value and both UNESCO and ICOMOS have specifically promoted them as World Heritage Sites.

Proposal 5: To locate the country's most important industrial landscapes and initiate protection plans with the Autonomous Communities.

3.6.- Industrial heritage and local development

Interventions in heritage should not only to conserve cultural assets forming part of a territory's identity but also advance local development, regenerating places in the urban or rural landscape and boosting tourism.

Industrial heritage, when museumised or interpreted, is a valuable tourist asset. On one hand its principal potential lies in visualising how the goods for everyday use and for work were produced or how the minerals and other raw material were extracted and, on the other, in showcasing how people lived and worked in the industrial era.

The success of preserving industrial heritage largely depends on its contribution to local development. Industrial tourism actions promoted by other Departments of the administrations should be coordinated.

Proposal 6. To foster industrial tourism and divulge examples of district or territorial regeneration that have made a positive impact.

3.7.- Plan for investing in industrial heritage

The plan for industrial heritage investment has to impact on sites of national importance according to the criteria grouped into blocks A and B of the National Plan, insisting on its relevance in the country's overall production sector.

Final approval for an investment chosen according to the above criteria will depend on whether the criteria listed in block C of the National Plan are met.

Proposal 7. Investments should be made in heritage assets or in industrial landscapes with high national value.

4.- EXECUTION AND MONITORING

4.1- ECONOMIC AND FINANCIAL STUDY

The sources of funding for executing the plan are highly varied. The state administration, through the Ministry of Culture and specifically Spain's Cultural Heritage Institute, will invest annual amounts of between 2 and 3 million, though for our general calculations and given the current situation, we will prudently estimate them at two million four hundred thousand. Other state administration bodies such as the Ministries of Development or Environment may reasonably contribute a similar amount, either as direct investment or through applying the cultural 1%.

Investment made by the Autonomous Communities as a whole should at least equal state investment, and so we can estimate the annual contribution at four million eight hundred thousand, representing an average annual investment by Autonomous Community of just under 300,000 euros.

The Local Administration will also make investments through the Provincial Councils and the Town Halls which, though difficult to quantify, can be estimated at 50% of investment made by Autonomous Communities. Finally, the investment made by Foundations, Associations and private individuals can be estimated at an amount similar to that of the local administration.

Annual investment would therefore amount to more than 14 million euros for each one of the next five years, not considering possible updates, giving a total figure of 72 million euros.

Annual distribution of investments

Private entities 2,400,000€

Ministry of Culture 2,400,000€

Local administration 2,400,000€

Other state bodies 2,400,000€

Autonomous Communities 4,800,000€

The whole funding amount will be allocated to the plan's objectives, to include not only investment in building restoration and rehabilitation but also documentation, research, dissemination and training.

According to the lines of action recorded in this document, budget distribution for the 2012-2016 period is reflected in the following table.

This would mean that while more than 80% of investment over these five years would be allocated to rehabilitation of buildings, around 20% will be left over for research, documentation, dissemination, training, protection and promotion aimed at making appropriate use of them.

LINES OF ACTION	Year 2012	Year 2013	Year 2014	Year 2015	Year 2016
Inventory	125,000	125,000	125,000	---	---
Studies	450,000	450,000	450,000	450,000	450,000
Training	300,000	300,000	300,000	300,000	300,000
Dissemination	300,000	300,000	300,000	300,000	300,000
Protection plans	600,000	600,000	600,000	600,000	600,000
Promotion and regeneration	600,000	600,000	600,000	600,000	600,000
Interventions	1,025,000	12,025,000	12,025,000	12,150,000	12,150,000
TOTAL	**14,400,000**	**14,400,000**	**14,400,000**	**14,400,000**	**14,400,000**

In total for these first five years of the plan, we foresee completing the inventory of industrial assets; drafting sixty preliminary studies of assets and researching the material history of industrialisation; imparting ten courses or sessions and issuing ten publications on action methodology and interventions completed; sixty projects to study and locate industrial landscapes and drafting protection plans for them; sixty industrial tourism promotion actions; and drafting ten master plans and restoration and rehabilitation projects for industrial buildings or ensembles.

By applying these percentages uniformly to the contributed amounts, we would have the following budget distribution between the different institutions for each one of the proposed lines of action:

Research (2,250,000€)

Private entities 17%

Local administration 17%

State administration 40%

Autonomous Communities 26%

Inventory taking (375,000€)

Private entities 7%

Local administration 6%

State administration 27%

Autonomous Communities 60%

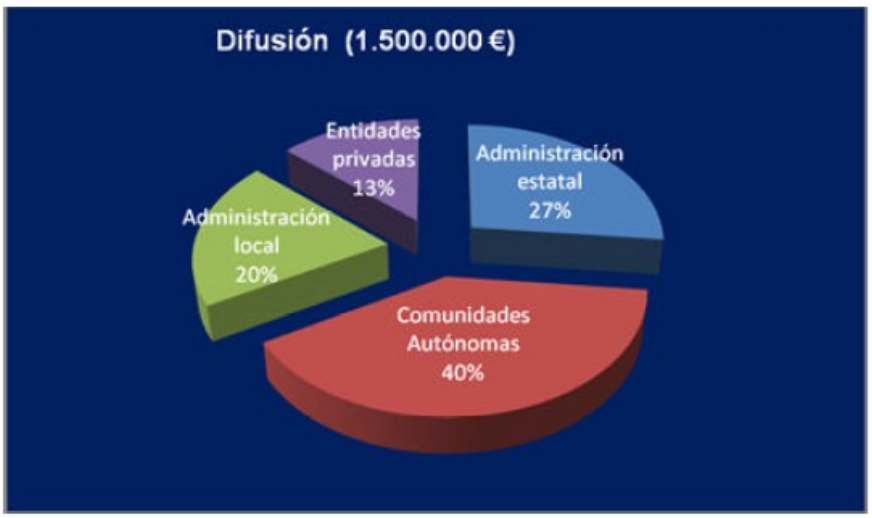
Training (1,400,000€)

Private entities 18%

State administration 28%

Local administration 18%

Autonomous Communities 36%



Dissemination (1,500,000€)

Private entities 13%

State administration 27%

Local administration 20%

Autonomous Communities 40%

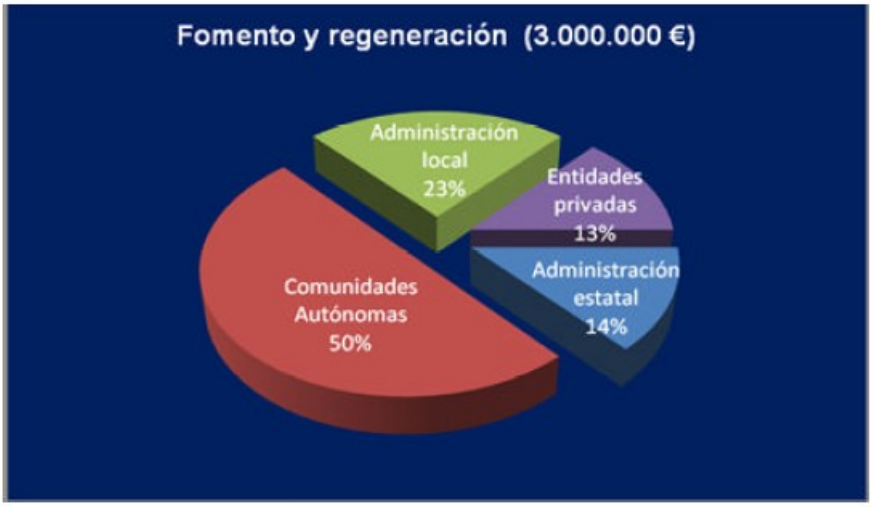
Protection plans (3,000,000€)

Private entities 6%

Local administration 17%

State administration 27%

Autonomous Communities 50%



Promotion and regeneration (3,000,000€)

Local administration 23%

Private entities 13%

State administration 14%

Autonomous Communities 50%

Interventions (60,475,000€)

Private entities 17%

Local administration 16%

State administration 35%

Autonomous Communities 32%

4.2. - Control and monitoring

The **Technical Commission's** composition will be determined once the Plan for Industrial Heritage is approved by the Heritage Council and will comprise representatives from the central administration, Autonomous administrations and external experts. The commission's working dynamic, meetings and communications will be established after its formal incorporation.

This commission will draft reports and evaluations of compliance of objectives and of the methodology recorded in the National Plan in order to inform the Heritage Council.

4.3.-Validity and revisions of theplan

The National Plan for Industrial Heritage will be in force for ten years, with a review after five years of objectives achieved. This will identify the plan's organisational aspects or approaches that have not been appropriately formulated or developed and redirect them to the desired goals.

APPENDIXES

APPENDIX I

The Plan for Industrial Heritage

Owing to the absence of any dissemination of its own work by Administration, we believe it would be practical to give a narrative of the inception of the Plan for Industrial Heritage and to highlight the positive disposition of the Directorate-General of Fine Arts and Cultural Assets of the Ministry of Culture towards its development through the Spanish Historical Heritage Institute.

In 1999 the Council of Europe, as part of the "Europe, a common heritage" campaign, launched an awareness-raising project on Industrial Heritage as a producer of elements of material culture as well as a life system. Within a common European culture, the need was expressed for evaluating this historical, industrial and recent memory of today's society. Within the Council of Europe's line of objectives and actions it proposed to create an international cooperation network in which all kinds of institutions and professionals involved in this matter would be represented.

The Spanish representative at the Cultural Heritage Committee of the Council of Europe (CC-PAT), Linarejos Cruz, awakened interest in this awareness-raising campaign, which resulted in the Ministry of Culture actively participating in this project[8]. It launched a transnational project that, through working meetings and various scheduled activities, sought to establish a common basis for identifying, interpreting and using a type of Heritage that, owing to its nearness in time and specificity, requires an ad-hoc treatment. In this regard, all institutions and experts involved embarked on this task not as something difficult but as something viable that was bound to succeed.

In this context we should also highlight the work of the TICCIH[9], which was the promoter and author of one of the most comprehensive documents to date, the *NizhnyTagil Charter for Industrial Heritage*, signed in Moscow in July 2003[10] which, though based on a fairly wide-ranging concept, recognises the special significance of industrialisation.

Proposal for an Industrial Heritage Plan

Once it became clear that the Spanish Historical Heritage Institute should assume and handle actions on this heritage ensemble[11], which has high testimonial value and is fragile from the point of view of conservation, a small commission[12] within the

8 Spain, as per the decision of the Ministry of Culture, participated in this project together with Germany, Andorra, Austria, Belgium, France, Italy, Netherlands, Poland, Sweden and United Kingdom

9 The TICCIH is a worldwide organisation, an adviser to ICOMOS, whose purpose is to promote the protection, conservation, study, documentation, research and interpretation of Industrial Heritage. Its President, Eusebi Casanelles, also formed part of the group of Experts in the Council of Europe's Project and is one of its members. Delegate commission of the the Spanish Ministry of Culture's Spanish Historical Heritage Council for the Industrial Heritage Plan

10 Still pending ratification and approval by UNESCO

11 As part of its programming and by virtue of the duties stipulated for this centre in its Founding Decree, "*it is its responsibility to draft plans for the conservation and restoration of Spanish Historical Heritage*" (Royal Decree 565 of 24 April 1985)

12 Comprised of Linarejos Cruz, Alberto Humanes and M.Dolores Fernández-Posse, who sign the first three texts of this issue of *Bienes Culturales (Cultural Assets)*

Institute's architectural and archaeological heritage department drafted an initial document. Besides a rough diagnosis of the situation of industrial heritage and its specificity within the sphere of heritage conservation and restoration, it became clear right from the earliest working meetings that it would be advisable –not to say needful- to arbitrate a National Plan for this type of cultural asset. Influencing this conviction, on one hand, was the positive experience of the Cathedrals Plan and, on the other, the legal basis provided for this kind of Plan by Act 16/85 on Historical Heritage. However, it is significant that, right from the start, one of the most debated issues was the identification, definition and timescale for this kind of heritage.

In effect, it was firstly necessary to define what *was not* industrial heritage in order to outline an initial operative definition. Not surprisingly, it was weakly defined even though at that point awareness of this heritage was already considerable and its manifestations appeared to be easily identifiable. For example, in the by now many heritage laws passed by the Autonomous Communities, legal protection was only granted to relevant elements associated with the history of science and technique and, of the assets classified as industrial, the oldest ones were primarily valued –waterwheels, mills, salt mines, etc, that is, those that are actually pre- or proto-industrial, on occasion with more ethnographic than industrial value.

Influencing this lack of definition is the fact that interest in industrial heritage had its roots in the discipline of archaeology. It was archaeologists who in the second half of the past century used their technique to recover old facilities that illustrated the various economic activities of which structures and material culture were being recovered[13]. This means that when excavating in any facility where an economic activity took place, as for example a 15th-century foundry, it was described as industrial heritage. A good example is the presence of industrial heritage in Galicia's 1995 Heritage Act. An article under Title IV dedicated to Ethnographic Heritage is entitled "immovable industrial assets", describing that "the provisions for archaeological heritage will be applicable to all ethnographic assets constituting physical remains of the Galician technological, productive and industrial past that could be subject to study through archaeological methodology". This means that there is a mismatch –in addition to a common confusion between archaeology as a science that studies the societies of the past and archaeology as a technique for material recovery- while also being the product of a second ambiguity that takes economy for industry[14].

Industrial assets, too, have been taken for Industrial Architecture, that is, industrial constructions that often have a clear monumental or artistic value or display solutions valued in the history of architecture (whether structural or for their use of new materials) or have come up with good functional solutions for their purpose. They are stations that no longer have either trains or tracks and platforms, or cultural infrastructures, or even shopping centres in old factories.

These to some extent understandable ambiguities in concept made it obviously necessary to give priority to accurately defining Industrial Heritage when proposing a

13 In regard to this denomination of "industrial archaeology", which was so popular in the last century, there was also some degree of confusion. It was called thus for the instrumental technique through which the remains were recovered, whatever they may have been

14 These aspects are recorded in some Conventions and Recommendations of the Council of Europe, though it also has two specific texts: Recommendation R (87) 24 on European industrial cities in the sphere of urban policy, and Recommendation R (90) 20 on the protection of technical and industrial heritage. These two texts have their antecedent in Recommendation 872 (1979) relative to industrial archaeology, issued by the Parliamentary Assembly of the Council of Europe in its 31st ordinary session in 1979

Plan. In this we made use of the fact that this heritage is the result of a specific social relationship, capitalism, and has its own specific technological system, mechanisation. Its manifestations thus fell into the period between the mid-18th-century and more or less 1960, when electronics and/or information systems were incorporated into the process.

We understand that this rigour (chronological limitation) in defining the concept leaves out a tide mill that, however sophisticated and original its mechanism, is nothing more than an artisan facility against, for example, a simple mechanised flour mill. However, manifestations of artisan production modes, even if their production took place on a notable scale, are covered by a type of protection and conservation that is to some extent underpinned by Ethnographic Heritage legislation[15].

Besides fine-tuning this definition of Industrial Heritage, we believed this background document should reflect one of the changes outlined in the concept of heritage in recent decades, what could be described as the incorporation of the space, against a heritage dominated by time, objects, structures, architectures, monuments, etc, whose greatest value was their antiquity and bult elements their delimitation. In fact, the concept of surroundings only had a connotation of protection or at most of aesthetic framework. In view of this, heritage categories with a predominance of the man-nature relationship have gradually been articulated, an interaction where the cultural and the natural form a continuous whole. Ultimately, heritage acquires a more global and anthropological vision, one of historical process, than the purely architectural one. This change, for example, is what allows UNESCO to start accepting in its World Heritage List any complex system of organisation, occupation and exploitation of this space, as they are a translation of forms of social organisation. This conception is also behind new heritage items, of which the most interesting one is Cultural Landscapes[16], defined as the combined work of nature and man, establishing three categories of landscapes.

Another aspect taken into account right from the start is that, for a cultural asset to be properly identified, assessed and divulged, it should have integrity. This integrity is the need to take into account every one of the elements or components that form part of this asset and that make it intelligible, as in the case of industrial assets this is far more necessary owing to its very nature, which is sometimes less explicit.

With these two premises we thus had not only the material manifestations of productive or industrial activities but also their physical or geographic context, their historical process, including production, transport and consumption.

Given that this was a proposal due to be submitted by the Institute to the discretion and judgement of the Historical Heritage Council, in an outline general proposal we also pointed out some procedural issues, emphasising the importantce or relevance of listing industrial assets as Assets of Cultural Interest to give them the utmost legal protection, and establishing a Commission in which some Autonomous Communities would be present in representation of the rest with this Commission having the power

15 Almost all Autonomous Communities include in their legislation a title dedicated to the protection and social outreach of this heritage. In contrast, only the Law of Asturias includes a specific Industrial Heritage title, although this Law, which dates from 2002, is from a later date than the Plan dealt with in this volume

16 In effect UNESCO, after maintaining for some time the classification of “mixed asset” (cultural/natural), would in the end coin the concept of “cultural landscape” in the World Heritage Convention of 1992.The Council of Europe, in turn, in the Landscape Convention (Florence, 2000), defines landscape as *any part of the territory as perceived by the population,whose character results from the action and interaction of natural and/or human factors*

to call on experts.

This Commission, a delegation of the Heritage Council and for which a rough schedule was established, was mainly tasked with defining criteria and methodology and drafting a basic catalogue of industrial assets. Also, on the basis of this first catalogue and with the corresponding listings as Assets of Cultural Interest in hand, Studies and Master Plans for the industrial assets, ensembles and landscapes were instrumented, preliminary steps required to elucidate key aspects such as the legal situation of this heritage, its continuous transformation or rights of use. It was all recorded in a background document.

The Delegate Commission of the Spanish Historical Heritage Council for Industrial Heritage and its work prior to the Plan's approval

This background document was submitted as a proposal to the Heritage Council in the session held in Toledo in December 2000. The initiative was very well received by all the Autonomous Communities and at this same session the Delegate Commission was formed and briefed with studying the Plan's viability. Six Communities assumed the representation of the remaining ones: Andalusia, Asturias, Castile and León, Madrid, Murcia and Valencia. Their respective Cultural Heritage Departments designated the technicians who attended the meetings[17]. They were joined by three experts on the topic, chosen by the Spanish Historical Heritage Institute for their recognised knowledge in this kind of Heritage[18].

At the start the administrations, both central and Autonomous, were determined to include these industrial assets on terms of equality with other more explicit and established heritage ensembles. There was also a background document –by now well-developed- on which to hold discussions.

The first two meetings of the Commission, planned in the draft schedule submitted to the Heritage Council, were held in February and March 2001. We want to state here that these working sessions illustrate how the Commission addressed all kinds of problems inherent to this unique heritage. At the **first meeting,** held at the Institute's headquarters on 22 and 23 February, the Commission was officially established and immediately entered into discussions on the background document[19].

The working sessions were as intense as they were fruitful. We established the

17 The technicians were Juan Carlos Jiménez Barrientos, Archaeologist of the Directorate-General for Cultural Assets of the Andalusian Government; Ignacio Alonso García, Head of the Historical and Cultural Heritage Service of the Directorate-General for Culture of the Principality of Asturias; Benito Arnáiz Alonso, Protection Service Ethnologist of the Directorate-General for Heritage and Cultural Promotion of the Castile and León Government; Rodolfo García Pablos, Historical Heritage Services Coordinator of the Directorate-General for Historical Heritage of the Madrid Community; Caridad de Santiago Restoy, Supporting Adviser of the Historical Heritage Service of the Murcia Region's Directorate-General for Culture; and Francesc Llop i Bayo, Head of the Archaeological, Ethnological and Historical Service of the Directorate-General for Artistic Heritage of the Valencian Government. The wisdom of these appointments by their respective Autonomous Communities soon became clear, as they revealed themselves to be not just open and equipped with sharp negotiation skills but also excellent professionals. The Industrial Heritage Plan was thus fortunate to have an excellent inception

18 These three experts were Inmaculada Aguilar Civera, Titular Professor of the History of Art Department of Universidad de Valencia, Eusebi Casanellesi Rahola, Director of the Science and Technique Museum of Catalonia (and also President of the TICCIH) and Román Fernández-Baca, Director of the Andalusian Historical Heritage Institute

19 The meeting's Agenda was as follows: 1) Presentation of the National Plan for Industrial Heritage by the Spanish Historical Heritage Institute (IPHE). 2) Discussion on the IPHE-PNPI (2000)1 background document. 3) Establishment of the Delegate Commission of the Spanish Historical Heritage Council for Industrial Heritage. 4) Discussion on intervention criteria. 5) Approach to the master plan contents. 6) Assessment and selection of Industrial Assets (IA) for their inclusion in the "background catalogue of minimum elements" for programming the interventions

criteria for identifying, selecting and intervening on industrial assets, a requirement for choosing the assets for drafting a “catalogue of minimum elements” to constitute the basis for programming future interventions. One of the lengthiest issues was assessing criteria for choosing assets owing to the wide spectrum of industrial sectors and the different types of manifestations. A categorised classification was finally established.

To establish a classification of the industrial sectors, we started with a detailed allocation for each one of them.

The contents of the Master Plans were outlined, with special emphasis on the social focus, production processes and ways of life as well as on the graphic and written documentary sources of the archives.

After fine-tuning the definition of industrial heritage and industrial asset, we agreed to include the three types of industrial assets (isolated elements, industrial ensembles, industrial landscapes) that had initially been associated with the thematic areas.

We assumed the need to maintain an integral treatment approach to the processes, covering production, transformation, storage and transport centres. But we also decided to grant testimonial value to some decontextualized remains of industrial facilities, such as chimney stacks.

A great deal of time was devoted to the assessment criteria for selecting industrial assets, as highly diverse aspects had to be contemplated. We finally categorised and established three blocks to cover every necessary circumstance.

The last point of the agenda dealt with some of the issues that, while not part of the document, were of interest for the start-up of the Plan. The representative from Murcia, Caridad de Santiago, insisted on the need to draft a general inventory, as industrial heritage is not in the hands of the managers of heritage, which has other agents. This was the first protection measure, on which we all agreed. It was also thought advisable for Román Fernández Baca to create an internet site. In turn, the Subdirector General of the Historical Heritage Institute proposed pilot interventions as a reference for subsequent actions.

While considerable advances were made, there were still some points outstanding and a new session was scheduled to complete the definitive drafting of the document.

The second meeting of the Commission, held at the same venue on 2 April 2001[20], included the final discussion on the document and its final approval before submission to the Historical Heritage Council.

Other issues not discussed at the previous meeting were also dealt with, such as industrial activity sectors[21] and a more detailed definition of the Master Plan contents,

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20 The meeting’s Agenda was as follows: 1) Approval of the revised IPHE-PNPI (2000) 1 background document. 2) Discussion of the appendix on sectors of industrial activity. 3) Definition of master plan contents. 4) First attempt at a catalogue of minimum Industrial Assets that could be subject to intervention

21 Professor Aguilar provided a structured list that was finally completed as it appears in the sectors appendix of the Plan’s background document

which at that time were considered to be the most appropriate instrument for dealing with industrial assets. But given that we were lacking knowledge of some of them, and to ensure the viability of drafting such master plans, it was proposed and accepted to introduce a Preliminary Study item in the Master Plan. Its purpose was to determine the viability of intervening on a specific asset, as industrial heritage is subject to rapid transformation, to varied legal statuses and, on occasion, to being dismantled. We considered normalising as much of the technical conditions list as possible for the contract that covered these documents, to include primary historical/heritage and graphic documentation, initial diagnosis of the state of conservation, the need for specific studies (archaeological, inventory of machinery, etc) for inclusion in the Master Plan. Above all it had to contemplate an essential aspect in this kind of Asset, as demonstrated by years of experience: the legal/administrative status, its viability as an investment project, social outreach and, ultimately, the degree of availability for carrying out interventions.

The contents of the Master Plans led to lengthy discussions since, together with aspects common to this type of document such as historical memory and assessment, new essential aspects emerged such as relationship with the landscape or environmental aspects of the urban or rural medium, forcing us to document rules on conditioning factors and necessary authorisations in various sectorial legislations. A second lengthily discussed and essential aspect was documenting not only the industrial process, with its machinery, facilities and equipment, but also defining the business archives or other documentation, which were vital for its social history. Moreover, we were dealing with a material culture, particularly in regard to specific types of materials for which, unlike other historical heritage, there was no conservation tradition; it had also never been addressed until then (hoppers, railway materials, machinery, structures combining different materials, etc).

There were a further two sections of importance: the proposals, with a definition of areas of action and compatible uses, and the management and maintenance plans. We also had to consider dissemination, as there was little awareness of this heritage. This Master Plan model, or standard Master Plan, appears in the Appendix of this volume, understanding that the characteristics inherent to each Asset determine the specific way of dealing with it.

A conviction always present throughout the two meetings was the unavoidable need to undertake the pertinent Asset of Cultural Interest listings in a correct way. To this end we considered including the necessary listings documentation in the Master Plans[22]. Right now the number of protected industrial assets has increased, as has the degree of awareness of this heritage, but it is still insufficient, particularly taking into account that the majority of industrial facilities are located in peri-urban areas that may be subject to development.

The Autonomous Communities have been doing this work, and right from the start of the Plan for Industrial Heritage some industrial assets have already been protected.

The definitive Document was submitted by the Commission to the Historical Heritage Council at its session of 19 and 20 April held in Úbeda and Baeza. This document, which is included in the Appendix, was approved and is still in force. However, this

22 It should be kept in mind that the Administration cannot intervene on Assets not listed as Assets of Cultural Interest, and at the time there were few industrial assets enjoying legal protection, as these were limited to a few buildings of artistic value

approval did not mean the end ofthe tasks being undertaken by the Commission, which had worked so hard and well. With the approval of this document, which sets the Plan's master lines and establishes an initial methodology, it was made clear that the Administrations were determined to address the protection, conservation and social outreach of this heritage and instrument the measures that would make it possible, including the future use of built ensembles or industrial elements. The Directorate-General for Fine Arts and Cultural Assets, in turn, introduced the "conservation and restoration of cultural assets" programme, a specific sub-project for industrial assets.

The work of the Delegate Commission after the approval of the Plan for Industrial Heritage. The catalogue of Assets.

The Delegate Commission, once the Industrial heritage Plan was approved, still had an arduous task ahead. A catalogue of minimum elements had to be drafted, recording the most appropriate industrial assets for the first interventions. It had first to develop the criteria and asset selection procedure for this catalogue, while the agreed instrumentation had to begin to be tested in practice.

It was agreed that the catalogue should represent the Spanish industrialisation process and provide territorial balance and by sectors. A petition was submitted to the Autonomous Communities, asking them to present a list of representative industrial assets, together with an explanatory dossier. This proposal was very well received and, while the response was uneven, the material contributed by the majority of Autonomous Communities was sufficient to begin the drafting of this catalogue of minimum elements. The first step was systematising the information, collected in files containing all the necessary fields to facilitate the selection task.

The third meeting of the Commission was held in Almadén on 14 and 15 March 2002[23]. At this session the Commission studied the proposals sent in by the Autonomous Communities and reached the following agreements:

- To accept as a new member of the Commission the representative from Castile-LaMancha, Alfonso Caballero Klink[24]. In addition, and at the request of the Valencian Generalitat government, to approve the replacement of Francesc Llop with Emilia Simón. The commission was thus comprised of seven representatives from the Autonomous Communities and seven members of the Technical Platform.

- To urge the Autonomous Communities, through the Heritage Council, to:

▫ initiate protection procedures for the Industrial Assets submitted by each Autonomous Community for inclusion in the Plan for Industrial Heritage. The most

23 The Almadén mines had been scheduled to cease their mining-metallurgical activity in late 2003. To palliate the effects of these measures, Minas de Almadén y Arrayanes (MAYASA) planned a rehabilitation plan for the industrial complex, for which it requested the collaboration of the IPHE and its inclusion in the Industrial Heritage Plan. This is why the third meeting of the Commission, which included a tour of the mining facilities, was held in Almadén. The Agenda for the meeting was as follows: 1) Presentation of Industrial Asset proposals sent in by the Autonomous Communities. 2) Discussion and viability study of the proposals. 3) Selection of Industrial Assets to be included in the first phase of the Industrial Heritage Plan. 4) Definition of the procedure for each one of the Industrial Assets selected (listing as an Asset of Cultural Interest, need for a preliminary study, master plan, project, etc)

24 Given that the conversion process of Almadén (Ciudad Real) would take place as part of the Industrial Heritage Plan, the Communities Board of Castile-La Mancha asked to form part of the Commission

appropriate procedure would be applied for each case, according to the provisions of the corresponding legislation.

- list as Assets of Cultural Interest any Industrial Assets selected by the Commission.

- ask the Autonomous Communities of Aragón, Balearics and Autonomous Cities of Ceuta and Melilla to submit their Industrial Asset proposals to the Delegate Commission for possible inclusion in the National Plan for Industrial Heritage.

- ask the Autonomous Communities of Andalusia, Castile-La Mancha, Catalonia, Extremadura and La Rioja to expand the submitted documentation for subsequent study and discussion at the next meeting of the Commission.

- approve the proposals submitted by the Autonomous Communities of **Asturias** (*Santa Bárbara Pit. La Rabaldana (Turón Valley). Gas and Electricity Factory. Oviedo and Chute of Grandas de Salime*), **Cantabria** (*Steel works of La Cavada. La Cavada (Riotuerto), San Roque de Riomiera (Riomiera) and La Pila (Soba). Mining landscape of Reocín (Reocín). Mineral-loading jetty of Dicido. Mioño (Castro Urdiales*), **Castile-León** (*Mining basin complex of Sabero (León). Mechanical sawmill of Valsaín (Segovia). Textile industry complex of Béjar*), **Galicia** (*Massó canning factory and whaling station, Balea (Cangas)–Bueu. Pontevedra. Hydroelectric plants of the river Tambre. "Madrid" and "Pontevedra" railway viaducts in Redondela. Pontevedra. Naval shipyards of the Ferrol Arsenal. ACoruña*), **Madrid** (*Workshops of the Nuevo Baztán complex. Isabel II Canal. Pontón de la Oliva Reservoir (Patones) and power station (Torrelaguna). Royal Tapestry Factory. Madrid. Old "La Esperanza" Flour Mill. Alcalá de Henares*), **Murcia** (*La Unión and Cartagena mining landscape. Mineral-loading jetty of El Hornillo. Hornillo Bay, Águilas.Cartagena Arsenal*) and **Valencia** (*El Molinar, Alcoy (Alicante). Old station of El Grao. Valencia. Silk factory, Almoines (Valencia). Tobacco factory of Valencia*).These actions were given the priority established in the Plan's background document.

- establish the Permanent Secretariat of the Delegate Commission in the Spanish Historical Heritage Institute, calle El Greco number 4, 28040 Madrid.

Given the exceptional nature of this meeting, which included a tour of the mining complex and was attended by authorities from the central, Autonomous and municipal administrations, it was decided to schedule a new working session within a period of two months.

The fourth meeting was held on 20 May at the IPHE to study the new proposals sent in by the Autonomous Communities, amplify incomplete documents and establish the orders for actions in 2002-2003[25].

25 The meeting's Agenda was as follows: Studying Autonomous Communities proposals submitted after the deadline or for which complementary documentation was requested. Defining criteria and procedure for the final selection of Industrial Assets in the first phase of interventions of the Industrial Heritage Plan. Selecting Industrial Assets and procedure applicable in each case. Establishing commissions for 2002-2003

The results of the two sessions was reflected in the document reproduced below:

The Delegate Commission of the Historical Heritage Council for Industrial Heritage, after studying the proposals submitted by the Autonomous Communities, has reached the following agreements in its working sessions held in Almadén (14.03.2002) and Madrid (20.05.2002):

- *Of the proposals presented, 49 have been selected for the first actions. The criteria for this selection are those of the background document of the Plan for Industrial Heritage and the prioritisation that the Autonomous Communities have made of their own proposals. The risk factor has also been taken into account.*

This first list also determines the industrial assets that will be given immediate attention. They are labelled as follows: IN = Inventory; PS = Preliminary Study; MP = Master Plan; PRO = Action Project.

ANDALUSIA

1. *Nuestra Señora del Pilar sugar factory. Motril (Granada). MP*
2. *Riotinto Mines (Huelva)*
3. *Blast Furnaces of Marbella (Málaga).PS*
4. *Royal Tinplate Factory of Juzcar (Málaga)*

ASTURIAS

5. *Santa Bárbara Pit. La Rabaldana (Turón Valley). MP*
6. *Gas and Electricity Factory. Oviedo*
7. *Grandas de Salime Chute. PS*

CANTABRIA

8. *Steel Works of La Cavada. MP*
9. *Mining Landscape of Reocín (Reocín)*
10. *Mineral-Loading Jetty of Dicido. Mioño (Castro Urdiales)*

CANARIES

Proposals under consideration

CASTILE-LAMANCHA

11. *Royal Metal Factories of S. Juan. Riopar (Albacete). PS*
12. *Mining Zone of Puertollano (Ciudad Real). PS*
13. *Royal Cloth Factory of Brihuega*

CASTILE AND LEÓN

14. *Sabero Mining Basin Complex (León). PS*
15. *Mechanical Sawmill of Valsaín (Segovia)*
16. *Ensemble of Textile Industries of Béjar. IN*

CATALUÑA

17. *Miralda Factory of Manresa*
18. *Asland Cement Factory in Clot del Moro*
19. *SedóColony of Esparraguera (Barcelona). MP*
20. *Industrial Colonies of the Llobregat. PS*

EXTREMADURA

21. *Flourmill of Plasencia*
22. *Mines of Aldea Moret*
23. *Almendralejo Winery PS*

GALICIA

24. *Massó Canning Factory and Whaling Station, Cangas–Bueu. Pontevedra. MP*
25. *Hydroelectric Plants of the River Tambre. PS*

26. *“Madrid”and“Pontevedra” Railway Viaducts in Redondela. Pontevedra*
27. *Naval Shipyards of the Ferrol Arsenal. ACoruña*

MADRID

28. *Workshops of the Nuevo Baztán Complex. PRO*
29. *Isabel II Canal. Pontón de la Oliva Reservoir (Patones) and Power Station (Torrelaguna). PS*
30. *Royal Tapestry Factory. Madrid*
31. *Old “La Esperanza” Flour Mill. Alcalá de Henares*

MURCIA

32. *La Unión and Cartagena Mining Landscape. PS*
33. *Mineral-Loading Jetty of El Hornillo. Águilas. PRO*
34. *Cartagena Arsenal*

NAVARRE

35. *El Trujal.Cabañillas*
36. *Power Stations of the River Iratí*

(under consideration while awaiting complementary documentation)

BASQUE COUNTRY

37. *Jaizkibel Dredger. Pasaia. PS*
38. *Irugurutzeta Mining Site*
39. *Blast Furnace I of Altos Hornos de Vizcaya. Sestao. MP*
40. *Añara Salt Mines (Alava)*

RIOJA

41. *Royal Cloth Factory of Ezcaray (Under consideration)*

VALENCIA

42. *El Molinar Mill Complex, Alcoy (Alicante). MP*
43. *Old Station of El Grao. Valencia*
44. *Silk Factory, Almoines (Valencia). PS*
45. *Tobacco Factory. Valencia*

(The Autonomous Communities of Aragón and Balearics, and the Autonomous Cities of Ceuta and Melilla, have not submitted any proposals)

- *Actions underway within the Plan for Industrial Heritage in the Spanish Historical*

Heritage Institute, I.P.H.E. (Ministry of Education, Culture and Sport, MECD):

46. *Mining Complex of Almadén (CiudadReal). MPand PRO*
47. *Artillery Factory of Seville*
48. *Railway Settlements. IN*
49. *Castile Canal. PS*

- *The 49 industrial assets chosen in this first selection should be given the maximum protection granted by the Historical Heritage legislation.*

- *This first selection of assets made from the proposals of each Autonomous Community are the first step in a general inventory of industrial heritage.*

The fifth and last meeting[26] of the Delegate Commission was held on 15 December 2003 and took stock of the activities undertaken in 2003. By then some actions had already been undertaken for the Commission to analyse, together with the incidents that had arisen. In effect, the start-up of the first scheduled actions revealed that it was not always feasible to realise the proposed objectives owing above all to legal and administrative imperatives.

The conclusions were reflected in the Minutes, which recorded the following points:

1. Evaluation of 2003 activities: State of play and analysis of the studies conducted.

This evaluation was performed by Autonomous Communities and highlighted the most significant incidents arising from the studies, master plans or inventories defined as a priority for action at the 4th meeting of the Commission on behalf of the I.P.H.E.:

Andalusia. The industrial asset selected for study was the Sugar Factory of Motril. After a tour and contacts with the Andalusian Government, it was seen that the work was already underway and being performed by Motril City Hall, and so an Action Viability Study for the Blast Furnaces of Marbella was commissioned..

Asturias. A viability study was conducted for the entire Turón Valley, that is, it was decided to consider the valley as an industrial landscape, exceeding the scale of the Santa Bárbara Pit proposed in the first instance.

Cantabria. The difficulties of defining the project to be undertaken with the Autonomous Community made it advisable to postpone the order to 2004.

Balearics. This Community's proposal –the Industry Museum. Fábrica Nova de Soller - arrived in 2003, outside the deadline.

Aragón. This Community, which had previously declined making any proposals, has recently sent in several industrial assets that it considers appropriate for intervention (OjosNegros Salt Mines (Teruel), Royal Gunpowder Factory of Villafeliche (Calatayud, Zaragoza) and the proto-industrial and industrial fluvial complex of Gelsa (Zaragoza). The dossiers submitted by the Community were seen by the Commission, which could

26 The meeting's Agenda was as follows: 1) Progress report on 2003 activities (state of play and analysis of the studies conducted). 2) Programming proposal for 2004-2005. 3) Comments and suggestions

not study them in depth and decided to postpone selection until a more detailed study of each of them had been conducted, a task entrusted to the IPHE.

Canaries. The El Hierro Island Council sent in a proposal that it was decided not to formally study until it came endorsed by the Government of the Canaries.

Castile-LaMancha. As planned, a preliminary study was conducted of the Master Plan for the Riópar Factories and the required land registry documentation was collected for listing the ensemble as an Asset of Cultural Interest.

Castile and León. An appraised inventory was made of the Béjar textile industries. The Mining Basin of Fabero and the Valsaín Sawmill were ruled out until information was available on the actions being undertaken by the Autonomous Community and National Heritage respectively.

Catalonia. A preliminary study for the Master Plan was conducted of the Sedó Colony, in Esparraguera (Barcelona).

Extremadura. It was decided, in agreement with the Community and the RENFE Foundation, to conduct a viability study for the integral recovery of the railway settlement of Monfragüe, using for this purpose the Inventory of outposts performed in 2002 by the I.P.H.E.

Galicia.The Massó factory in Bueu-Cangas was included but could not be studied owing to technical difficulties at the time.

Madrid. A study has been conducted of the La Oliva-Isabel II Canal pontoon.

Murcia. The complexity of the facilities conserved around the mineral-loading jetty of El Hornillo, in Águilas, made it advisable not to restrict actions to the restoration project and to conduct a broader study to integrate more of the surroundings.

Navarre. No order was made because the Navarre government only sent a list of Assets without the required documentation.

Basque Country. The Jaizkibel Dredger in Pasaia had been selected for a preliminary study to the master plan. However, the order could not be implemented as the documentation required for it was not submitted.

Rioja. The 4th meeting of the Commission did not accept the proposal submitted by the Autonomous Community for the Ezcaray ensemble. Other alternatives have been requested.

Valencia. In 2003 a competition was organised to implement the Master Plan for the Molinar Mill Complex of Alcoy. However, administrative problems led to the cancellation of the file.

On the basis of the incidents occurred and described by the technicians of the I.P.H.E., a debate was launched on the following issues:

- advisability of establishing pertinent contacts with the town halls for the industrial assets on which work has begun (J.C. Jiménez and D.

Fernández-Posse).

- at the proposal of I. Aguilar: reiterating to the Autonomous Communities that these assets –together with those listed in the catalogue of minimum elements- should be registered as Assets of Cultural Interest.

- at the proposal of A. Caballero: the advisability of holding meetings in the Autonomous Communities.

- at the proposal of E. Casanelles: the need for dissemination, awareness-raising and social outreach of the Plan for Industrial Heritage.

2. Proposal for 2004-2005 programming:

- Sedó Colony (Catalonia) – to commission the Master Plan, with a few clarifications by E.Casanelles, on the list of technical requirements of the order derived from the preliminary study; the church and school should be incorporated into the existing Museum and a management plan should be proposed for the entire ensemble.

- Blast Furnaces of Marbella (Andalusia) – a preliminary action involving the consolidation and protection of existing structures plus an archaeological investigation. This should be a joint action between the Autonomous Community and the IPHE once it is listed as an Asset of Cultural Interest.

- Turón Valley (Asturias) – The preliminary study conducted in 2003 in accordance with the strategy of giving the Turón river basin the consideration of industrial landscape proposes drafting a Special Interior Protection and Reform Plan of the Mining Enclave of the Turón river valley, to be undertaken by a purpose-created Consortium. The IPHE will commission a Master Plan for the Santa Bárbara Pit site.

- Grandas de Salime Chute (Asturias) – Ordered by the Master Plan.

- The mineral-loading jetty of El Hornillo in Águilas (Murcia) – order for an integral works project to develop the site.

- Industrial Landscape of the Cartagena Mining Range (Murcia) – Master Plan.

- Metal Factories of Riópar (Castile-La Mancha) – Ordered by the Master Plan.

- Railway Settlement of Monfragüe (Extremadura) – Master Plan after being listed as an Asset of Cultural Interest.

- El Molinar of Alcoy (Valencia) – a project for the consolidation of structures. A study of solutions to correct the administrative difficulties for the order of the Master Plan.

- Silk Factory of Almoines (Valencia) – Master Plan.

- Aragón – After the IPHE studied the proposals, it was determined to commission a preliminary study on the Royal Gunpowder Factory of Villafeliche.

- Cantabria – Preliminary study for the steel works complex of La Cavada.

- Massó Whaling Station (Galicia) – Master Plan.

3. Comments and suggestions.

The Commission proposes:

- To urge the Autonomous Communities to list the selected assets as Assets of Cultural Interest and the Ministry of Education, Science and Sport to list the railway settlement of Monfragüe.

- To urge the Madrid Community to amplify the listing of the Isabel II Canal as an Asset of Cultural Interest (Patones-Torrelaguna).

- To address a letter to RENFE Heritage reminding them of the need to respect the industrial assets they own.

- To urge the Madrid Community to propose their representative at the Commission, replacing Rodolfo García Pablos.

- To work on organising a dissemination campaign of the Plan for Industrial Heritage.

- To persist in maintaining contacts with the Autonomous Communities that have not yet programmed their industrial assets.

While the Commission was not officially dissolved after the last meeting, it was estimated that henceforth the line of action and the scheduling of interventions had now been defined for the next two years. The Plan for Industrial Heritage is thus on track and the planned actions continue to be undertaken.

Mª Dolores Fernández-Posse.

APPENDIX II

NATIONAL INDUSTRIAL HERITAGE PLAN (Background Document 2001)

CURRENT SITUATION OF INDUSTRIAL HERITAGE

In recent history, industrial activity has generated elements that are gradually being viewed as part of our cultural heritage. Industrial architecture, engineering structures, machinery, etc. constitute indispensable material for understanding the history of the last two centuries. These production and transport processes, together with technical equipment, have played an important role in the way our cities have evolved, in forming the distinguishing features of their spaces and landscapes and in general in defining the specific living environment in which industrialisation has developed. Conservation and the study of these testimonies are thus crucial in understanding and documenting a key period in the history of humanity.

Industrial heritage becomes the historical memory that manifests itself in different ways according to the era in which it developed, the sectors of activity and the territory in which it occurred.

NEED FOR DRAFTING A NATIONAL PLAN

The justification for arbitrating a National Plan for Industrial Heritage resides in the need to protect and conserve a heritage that, owing to its very specificity, is subject to rapid deterioration and to disappearing.

The precariousness of industrial heritage is due, among other factors, to:

- the high number of elements to be conserved
- they are subject to continuous transformation
- functional obsolescence, which implies an absence of economic profitability
- in most cases they are in desirably-located urban spaces
- they habitually occupy large, single-ownership surfaces
- complete lack of legal protection
- lack of awareness of this heritage, both in the Administrations and in society
- difficulty in conserving them in their entirety, that is, with all the original elements present
- lack and/or diversity of criteria when it comes to addressing either their conservation or their demolition.

- The proposal of the Directorate-General for Fine Arts and Cultural Assets for articulating this Plan through the Spanish Historical Heritage Institute is based on the conviction that developing it will make it an indicative reference and help to unify intervention criteria in the treatment and instrumentation of this kind of highly specific, fragile and neglected heritage.

- LEGAL BASIS

- Its legal basis are the National Plans prescribed by Act 16/85 on Historical Heritage in article 3 which, among the functions of the collegial body of the Historical Heritage Council, includes their drafting and approval as defined in article 35 of this Act.

- This legal basis is enshrined in the provisions of articles 46 and 149.2 of the Constitution, in article 36 of Act 16/85 on Historical Heritage and in the Royal Decrees on the transfer of the State's functions and services in Culture-related issues to the Autonomous Communities, which stipulates acting jointly on specific assets. Equally, this Plan can legally be instrumented in Act 7/85 on Bases for Local Regulation, which establishes economic, technical and administrative cooperation between the Local, State and Autonomous Administrations.

- SCOPE OF APPLICATION

- The scope of application of the National Plan for Industrial Heritage is the entire State territory.

- DEFINITION OF INDUSTRIALHERITAGE

- By **industrial heritage** we understand the suite of industrial exploitation elements generated by the economic activities of each society. This heritage results from a specific production process, a concrete technological system characterised by mechanisation, part of the manifestation of a capitalist social relationship.

- According to this, and within immovable assets, an **Industrial Asset** is each one of the elements that comprise Industrial Heritage.

- Three types of Industrial Asset can be differentiated:

  - **isolated elements** that owing to their nature –as for example a bridge- or to the disappearance of the rest of their components but that because of their historical, architectural, technological and other value are sufficient testimony of an industrial activity they exemplify – as for example the headquarters building of a factory or a furnace.

  - **Industrial ensembles** conserving all of their material and functional components and their articulation, that is, they constitute a coherent and complete example of a specific industrial activity such as, for example, a factory.

  - **Industrial landscapes** that conserve all the essential components of the

production processes of one or several related industries and remain visible on the territory, such as a mining basin.

- CHRONOLOGICAL DELIMITATION

- Included in the Plan for Industrial Heritage are manifestations from the period between the mid-18th century and the onset of mechanisation and the time when they are beginning to be totally or partially replaced by other systems in which automation plays a part.

- THEMATIC AREAS

- The Plan for Industrial Heritage will accommodate all architectural or technological manifestations of productive activities, distribution of their production or their consumption (housing, warehouses and facilities) as well as documentary sources (written, graphic and oral), but always within the historical context and process of which they form part. By way of guidance, the elements by sectors listed in Appendix I.

- CRITERIA FOR APPRAISAL AND SELECTION

- The identification and appraisal of industrial assets that could be subject to intervention within the Plan should be balanced. The majority of industrial sectors should be represented, together with the stages of their industrialisation process and the territories of the Autonomous Communities. The following criteria will be used:

- A.

- testimonial value
- uniqueness and/or typological representativeness
- authenticity
- Integrity

- B.

- historic-social
- technological
- artistic-architectural
- territorial

- C.
- possibility of integral restoration
- state of conservation
- viability and social profitability plan
- legal situation

- INSTRUMENTATION OF THE INDUSTRIAL HERITAGE PLAN

- The protection of industrial heritage should have a mandatory general inventory of Spanish industrial assets.

- The following phases are planned for the development of the National Plan for Industrial Heritage:

- 1st phase. Drafting a selective catalogue of industrial assets that may be subject to intervention in accordance with specified criteria.

- 2nd phase. Required actions for listing them as Assets of Cultural Interest and determining their legal situation (ownership and management).

- 3rd phase. Drafting of Master Plans for these industrial assets, ensembles or landscapes.

- 4th phase. Interventions on selected assets.

APPENDIX III

INITIAL CATALOGUE

The Delegate Commission of the Historical Heritage Council for Industrial Heritage, after studying the proposals submitted by the Autonomous Communities and during their working sessions held in Almadén (14.03.2002) and Madrid (20.05.2002), has reached the following agreements:

Of the proposals submitted, 49 have been selected for the first actions. The criteria used in this selection are those stipulated in the background document of the Plan for Industrial Heritage and the prioritisation that, based on their own proposals, has been made by the Autonomous Communities. The risk factor has also been taken into account.

This first list also determines the industrial assets that will be given immediate attention. They are labelled as follows: (**IN** = Inventory; **PS** = Preliminary Study; **MP** = Master Plan; **PRO** = Action Project).

ANDALUSIA

1. Nuestra Señora del Pilar sugar factory. Motril (Granada). MP
2. Riotinto Mines (Huelva)
3. Blast Furnaces of Marbella (Málaga). PS
4. Royal Tinplate Factory of Juzcar (Málaga)

ASTURIAS

5. Santa Bárbara Pit. La Rabaldana (Turón Valley). MP
6. Gas and Electricity Factory. Oviedo
7. Grandas de Salime Chute. PS

CANTABRIA

8. Steel Works of LaCavada. MP
9. Mining Landscape of Reocín (Reocín)
10. Mineral-Loading Jetty of Dicido. Mioño (Castro Urdiales)

CANARIES

- Proposals under consideration

CASTILE-LAMANCHA

11. Royal Metal Factories of S.Juan. Riópar (Albacete). PS

12. Mining Zone of Puertollano (Ciudad Real). PS
13. Royal Cloth Factory of Brihuega

- ***CASTILE AND LEÓN***

14. Sabero Mining Basin Complex (León). PS
15. Mechanical Sawmill of Valsaín (Segovia)
16. Béjar Ensemble of Textile Industries. IN

- ***CATALONIA***

17. Miralda Factory of Manresa
18. Asland Cement Factory in Clot del Moro
19. Sedó Colony in Esparraguera (Barcelona). MP
20. Industrial Colonies of the Llobregat. PS

- ***VALENCIAN COMMUNITY***

42. El Molinar, Alcoy (Alicante). MP
43. Old Station of El Grao. Valencia
44. Silk Factory, Almoines (Valencia). PS
45. Tobacco Factory. Valencia

- ***EXTREMADURA***

21. Flour Mill of Plasencia
22. Mines of Aldea Moret
23. Almendralejo Winery. PS

- ***GALICIA***

24. Massó Canning Factory and Whaling Station, Cangas–Bueu. Pontevedra. MP
25. Hydroelectric Plants of the River Tambre. PS
26. “Madrid” and “Pontevedra” Railway Viaducts in Redondela. Pontevedra
27. Naval Shipyards of the Ferrol Arsenal. A Coruña

- ***MADRID***

28. Workshops of the Nuevo Baztán Complex. PRO
29. Isabel II Canal. Pontón de la Oliva Reservoir (Patones) and Power Station
    - (Torrelaguna). PS
30. Royal Tapestry Factory. Madrid

31. Old “La Esperanza” Flour Mill. Alcalá de Henares

- ***MURCIA***

32. La Unión and Cartagena Mining Landscape. PS
33. Mineral-Loading Jetty of El Hornillo. Águilas. PRO
34. Cartagena Arsenal

- ***NAVARRE***

35. El Trujal. Cabañillas
36. Power Stations of the River Iratí
    - (under consideration while awaiting complementary documentation)

- ***BASQUE COUNTRY***

37. Jaizkibel Dredger. Pasaia. PS
38. Irugurutzeta Mining Site
39. Blast FurnaceI of Altos Hornos de Vizcaya. Sestao. MP
40. Añara Salt Mines (Alava)

- ***RIOJA***

41. Royal Cloth Factory of Ezcaray (Under consideration)

- (The Autonomous Communities of Aragón and Balearics, and the Autonomous Cities of Ceuta and Melilla, have not submitted any proposals)

- Actions underway within the Plan for Industrial Heritage at the Spanish Historical Heritage Institute, I.P.H.E. (Ministry of Education, Culture and Sport, MECD):

46. Mining Complex of Almadén (Ciudad Real). MP and PRO
47. Artillery Factory of Seville
48. Railway Settlements. IN
49. Castile Canal. PS

APPENDIX IV

ATTAINMENTS 2002–2010

ANDALUSIA

- Blast Furnaces of Marbella (Málaga). Preliminary studies. May 2003. Author: Óscar Gil Delgado
- Royal Artillery Factory of Seville. Master Plan. 2003-2004. Author: Diego Cano, José Morales and Sara Giles
- Caminito del Rey. Project: Commissioned by the Málaga Provincial Council. Author: Isabel Bestué
- Cable Inglés of Almería (Alquife) (cultural 1%: approved)

ARAGÓN

- Royal Gunpowder Factory of Villafeliche. Master Plan 2005. Juan José Meto-Callén

ASTURIAS

- Santa Bárbara Pit. La Rabaldana (Turón Valley). Preliminary studies. Year 2003. Author: José Ramón Fdez. Molina / Master Plan (2005): Competition (July 2004) Author: Mª Victoria Sánchez de León / Project: Competition (2007) Author: José Ramón Fernández Molina
- Grandas de Salime Chute. Master Plan: Author: Mª Victoria Sánchez de León. Dec 2004-Nov 2005
- Arnao Complex.Castrillón. Master Plan (2009). Author: Victor García Oviedo

CASTILE-LA MANCHA

- Royal Metal Factories of S. Juan. Riópar (Albacete). Preliminary studies. Year 2003 Author: Eduardo Barceló
- Mining complex of Almadén, Ciudad Real. Kiln: Project 2005-2007 Author: Virginia Cinca/Carlos IV Gate (2006-2007) Project: Author: Virginia Cinca

CASTILE AND LEÓN

- Béjar Textile Industries Complex. Inventory (2003) Mª Carmen León and Joaquín Pérez

- Castile Canal. Ribas de Campos. Preliminary studies (2005-2006) Esther Villafruela / Lock No. 7 (Medina de Rioseco) Project and works (2004-2005) Miguel Ángel Alonso. Medina de Rioseco Dock. Project and works (2005-2006) José Ramón Solá Alonso

- Flour Mill, Gordoncillo.2006 Project. Author: Carlos Clemente

CATALONIA

- Asland Cement Factory in Clot del Moro. Project and works. (1st and 2nd phase) 2004-2005 Author: Josep Mª Pons Rollán

- Sedó Colony in Esparraguera (Barcelona). Preliminary studies. 2003 Author: Antoni Vilanova/Master Plan (Competition July 2004) Author: Antoni Vilanova/Project (2006-2009) Church and schools. Author: Antoni Vilanova

VALENCIAN COMMUNITY

- El Molinar, Alcoy (Alicante). Master Plan (Competition 2003): Void. Project and works (2004-2008) Ciro Vidal Climent

- Lombard Silk Factory (Almoines, Valencia). Master Plan (2004-2005) Mª Ángeles Álvarez Builla and Joaquín Ibáñez Montoya

EXTREMADURA

- Railway Settlement of Monfragüe. Inventory and preliminary studies (2003) Fundación Ferrocarriles Españoles (Spanish Railways Foundation)

MADRID

- Isabel II Canal. Pontón de la Oliva Reservoir (Patones) and power station (Torrelaguna) / Preliminary studies (2003). Author: D. Manuel Cuadrado

MURCIA

- Mining Landscape of La Unión and Cartagena/Master Plan (Competition 2005) Tábala S.L. (delivered 2006)

- Mineral-loading jetty of El Hornillo. Águilas/Preliminary studies 2003 Author: Andrés Cánovas / Project for 1st phase: Author: Estudio Cánovas & Maruri (2004-2006) / Project for 2nd phase: Author: Estudio Cánovas & Maruri (Sept. 2009)

- Bridge over the River Segura (Abarán). Project and works (2008-2009) Author: Moisés Lázaro (Civil Engineer)

- ***BASQUE COUNTRY***

- Jaizkibel Dredger. Pasaia. Preliminary studies (not delivered) 2005-2006 Author: Antón Martínez Salazar

- Blast FurnaceI of Altos Hornos de Vizcaya. Sestao.1st phase: project and works. (2006 Competition) Author: ATC Proyecta / 2nd phase project (2009 Competition) Author: ATC Proyecta

- ***GENERAL***

- Inventory of Spain's Railway Settlements. Author: Fundación Ferrocarriles Españoles

- **APPENDIX V.- MINIMUM ASSETS CATALOGUE** (Selected by TICCIH-Spain)
- ***ANDALUSIA***
- Cable Inglés. Almería
- Puerto Real Shipyards (Cádiz)
- Industrial Enclosure of Peñarroya (Córdoba)
- Nuestra Señora de El Pilar Sugar Factory. Motril (Granada)
- Riotinto Mines (Huelva)
- Jándula Reservoir and Power Station (Jaén) Textile Industries of the Guadalhorce (Málaga)
- Royal Artillery Factory of Seville
- ***ARAGÓN***
- G IESA Electrical Materials Factory. Zaragoza
  Ebro Electro-metallurgy Factory. Sástago (Zaragoza)
- E l Run Hydroelectric Station. Seira (Huesca)
- L a Zaragozana Brewery. Zaragoza
- La Ceres Aragonesa Flour Mill. Villanueva de Gállego (Zaragoza) Averly Smelting Works. Zaragoza
- Portland Cement Factory. Morata de Jalón (Zaragoza)
- Coal Mines of Val de Ariño (Teruel)
- ***ASTURIAS***
- Mining Complex of the Turón Valley
- Grandas de Salime Chute and Hydroelectric Station Mining-industrial Complex of Arnao
- Arms Factory of La Vega and Trubia
- Sotón Pit. San Martín del Rey Aurelio
- Industrial Ensemble of Ensidesa. Avilés, Corvera and Gozón
- El Gaitero Cider Factory. Villaviciosa

- Estación del Norte Railway Station of Gijón
  -

- ***BALEARICS***
- Thermal Power Plant of Alcudia Sa Fàbrica Nova. Soller
- Es Sindicat. Felatanitx
- ***CANARIES***
- Jinamar Water Wheel (Telde,Island of Gran Canaria) El Tanque (Santa Cruz de Tenerife)
- ***CANTABRIA***
- Works for transporting timber to the Royal Cannon Factory of La Cavada. San Roque de Riomiera and Soba
- La Montañesa Flour Mill. Pesquera
- La Lechera Montañesa. Torrelavega
- The Mining Landscape of Cabarga. Villaescusa, Penagos, El Astillero and Medio Cudeyo.
- ***CASTILE AND LEÓN***
- Royal Mint of Segovia (Segovia)
- Castile Canal and its associated industry. Burgos, Palencia and Valladolid San Blas Foundry. Sabero (León)
- Valsaín Sawmill (Segovia)
- Thermal Power Plant of Ponferrada's Mining and Steel Works (León)
- Campo Grande Railway Station and Railway Workshops of Valladolid
- Pino Bridge-Viaduct or Requejo Bridge. Pino de Oro-Villadepera (Zamora)
- ***CASTILE-LA MANCHA***
- A

rms Factory of Toledo

- R

oyal Brass Factory. Riopar (Albacete)

- I

món and La Olmeda Salt Mines (Guadalajara)

- E

l Martinete Industrial Complex of Pozuelos de Calatrava (Ciudad Real)

- A

lmadén (Ciudad Real)

- T

erri and Central Slag Heaps. Puertollano

-
-
-
- ***C***

ATALONIA

-
- C

lot del Moro Cement Factory. Castellar de n'Hug (Barcelona)

- D

e la Costa Paper Mill. Capellades (Barcelona)

- Aymerich Steam-driven Textile Factory, Amati Jover.Terrassa (Barcelona)
- Cal Miralda Cloth Factory. Manresa (Barcelona) Colonia Sedó Colony. Esparraguera (Barcelona)
- Farmers' Union. Pinell de Brai (Tarragona)
- Lead Mines of Bellmunt del Priorat. (Tarragona)
- Cardona Salt Mines (Barcelona)
- Steam-driven Machine of Industrias Burés. Anglés (Girona)
- Pumping Station of the Sociedad de Aguas Water Company. Cornellá de Llobregat (Barcelona)

-
- ***VALENCIAN COMMUNITY***

-
- La Británica Refinery. La Cantera Factory. Alicante Santa Ana Viaduct. Benissa (Alicante)
- Giner Factory. Morella (Castellón) Estación del Norte Train Station. Valencia
- Wholesale Central Market. Valencia

- Hoffmann Kiln in Rajolar de Bauset. Paiporta (Valencia)
- El Molinar Mill Complex. Alcoy (Alicante)
- Blast Furnace No.2. Port of Sagunto (Valencia)

- ***EXTREMADURA***

- Aldea Moret Mines. Cáceres
- Monfragüe Station. Plasencia-Junction (Cáceres)
- La Jayona Mine. Fuente del Arco (Badajoz)
- Castuera Flour Mill (Badajoz)

- ***GALICIA***

- Shipyards of the Ferrol Military Arsenal (ACoruña)
- Tambre Hydroelectric Station. Noia (ACoruña)
- Fontao Mining Settlement. Vila de Cruces (Pontevedra)
- Massó Canning Factory and Whaling Station. Cangas de Morrazo (Pontevedra)
- Sargadelos Steel and Ceramic Works (Lugo)

- ***LA RIOJA***

- Municipal Slaughterhouse. Science Museum. Logroño, La Rioja
- López de Heredia ViñaTondonia Winery. Haro

MADRID COMMUNITY

- Nuevo Baztán Complex
- Old wine press and wine cellars of El Real Cortijo de San Isidro. Aranjuez
- El Águila Brewery. Madrid
- Hydraulic Complex of Isabel II Canal.
- Royal Tapestry Factory of Madrid
- Madrid Metro

- ***MELILLA***

- Mineral-Loading Bay of Melilla

- ***MURCIA REGION***

- Industrial Landscape of the Cartagena-LaUnión Mining Range Silos Complex and Mineral-Loading Jetty of El Hornillo. Águilas
- Mining Complex of Cabezo de San Cristóbal and Los Perules. Mazarrón Cartagena Arsenal
- ***NAVARRE***
- Royal Iron Munitions Factory. Orbaiceta
- Portland Cements Valderribas. Olazagutia
- Urban Industrial Complex. Matesa. Iwer Navarra. Pamplona
- Piher. Nacesa. Tudela
- ***BASQUE COUNTRY***
- Añana Salt Mines. Álava
- Vizcaya Bridge. Portugalete (Bizkaia)
- La Encartada Beret Factory. Balmaseda (Bizkaia)
- Blast Furnaces of Vizcaya. Barakaldo and Sestao (Bizkaia) Mining Complex of La Arboleda Trapagaran (Bizkaia)
- La Concordia Railway Station. Bilbao (Bizkaia)
- CAF. Beasain (Gipuzkoa)
- Zerain-Mutiloa Mining Complexes (Gipuzkoa)
- Donostia-SanSebastián Tobacco Factory (Gipuzkoa)
- Patricio Echeverria. Legazpi (Gipuzkoa)

APPENDIX VI.- INSTITUTIONS, ASSOCIATIONS AND MUSEUMS

International and national institutions

- TICCIH. International Committee for the Conservation of Industrial Heritage. ICOM. International Council of Museums
- ICOMOS, International Council on Monuments and Sites UNESCO.World Heritage Sites
- DOCOMOMO. International Working Party for Documentation and Conservation of Buildings, Sites and Neighbourhoods of the Modern Movement
- ICCROM. International Centre for the Study of the Preservation and Restoration of Cultural Property
- European Heritage Network
- VCPD. Research Centre for Industrial Heritage
- ICOHTEC. International Committee for the History of Technology
- IPCE. Instituto del Patrimonio Cultural de España (Spanish Cultural Heritage Institute)
- IAPH. Instituto del Patrimonio Histórico Andaluz (Andalusian Historical Heritage Institute)
- KOINETWORK. (g.e.ie.e.) European group of economic interest

Foundations and other institutions in Spain

- mNACTEC. Museu de la Ciencia i Técnica de Catalunya, Science and Technique Museum of Catalonia (Territorial management system of 25 museums)
- CICOP (centro internacional deconservación del patrimonio, international heritage conservation centre)
- Fundación Docomomo Ibérico
- ICOMOS España
- Fundación Lenbur (Guipuzcoa. Basque Country)
- FUPIA (Fundación de lPatrimonio industrial de Andalucía, Andalusian Industrial Heritage Foundation)
- Fundación del Patrimonio Industrial de Sagunto, Comunidad Valenciana (Industrial Heritage Foundation of Sagunto, Valencian Community)
- CIUDEN. Fundación Ciudad de la Energía. Ponferrada. Museo Nacional de la Energía, City of Energy Foundation. Ponferrada. National Museum of Energy (León)
- Fundación de los Ferrocarriles Españoles (Spanish Railways Foundation)
- MAYASA. Fundación Almadén “Francisco Javier de Villegas”, Minas de Almadén y

Arrayanes (Almadén “Francisco Javier de Vilegas” Foundation, Mines of Almadén and Arrayanes).

- Fundación Riotinto, Riotinto Foundation (Huelva, Andalusia)
- Fundación MUSI (Museo de la Siderurgia de Asturias, Asturias Steelworks Museum)
- FUNDATEC (Museo de la Minería de Asturias, Asturias Mining Museum)
- Fundación Sierra Minera de Cartagena-La Unión, Cartagena-La Unión Mining Range Foundation (Murcia)
- Fundación SIGLO. Junta de Castilla y León, SIGLO Foundation, Castile and León Government (Museo de la Siderurgia y Minería de Sabero, Iron- and Steel-Working and Mining Museum of Sabero)
- Fundación Real Ingenio de Segovia (Royal Mint Foundation of Segovia)
- FHVL. Fundación Hullera Vasco Leonesa (Basque Country-León Colliery Foundation)
- Foro de Arquitectura Industrial de Andalucía (Forum for Andalusian Industrial Architecture)
- Red española para el turismo industrial (Spanish Network for Industrial Tourism)
- **European associations**
- E-FAITH. European Federation of Associations of Industrial and Technical Heritage
- EHRI. European Route of Industrial Heritage
- AIA. Association for Industrial Archaeology (United Kingdom)
- APPI (Portuguese Industrial Heritage Association)
- AIPAI (Italian Heritage and Industrial Archaeology Association)
- SIWE (Foundation for Scientific and Industrial Heritage Belgium)
- Heritage Railway Association
- CILAC (France)
- German Society for Industrial Archaeology (Germany)
- **Spanish associations**
- TICCIH- España (International Committee for the Conservation of Industrial Heritage)
- AMCTAIC (Association of Friends of the Science and Technique and Industrial Archaeology Museum of Catalonia)
- INCUNA (Industry, Culture, Nature). Asociación de Arqueología Industrial “Máximo

Fuertes Acevedo", "Máximo Fuertes Acevedo" Industrial Archaeology Association (Asturias)

- AVPIOP (Basque Association for Industrial Heritage and Public Works)
- SEPDPGYM (Society for the Defence of Geological and Mining Heritage)
- HISPANIA NOSTRA
- AVAI (Valencian Industrial Archaeology Association)
- Asociación Llámpara patrimonio industrial de Castilla y León (Llámpara Industrial Heritage Association of Castile and León)
- Buxa. Galician Industrial Heritage Association
- Asociación de las Salinas de Interior, Interior Salt Mines Association (Guadalajara)
- Asociación Septem Nostra (Ceuta)

APPENDIX VII.- BASIC BIBLIOGRAPHY ON SPANISH INDUSTRIAL HERITAGE

The selected bibliography is based on a succinct selection of the comprehensive bibliographic contribution by TICCIH-España (International Committee for the Conservation of Industrial Heritage).The list below does not seek to be an exhaustive or definitive bibliographic review of Spain's industrial heritage but rather to offer guidance in learning about or visualising the most significant aspects of the interdisciplinary framework for study and knowledge.

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