Nord-Pas de Calais Mining Basin (France) No 1360

Official name as proposed by the State Party Nord-Pas de Calais Mining Basin

Location

Nord-Pas de Calais Region Nord and Pas-de-Calais Departments France

Brief description

The Nord-Pas de Calais Mining Basin corresponds to the French part of the northwest European coal seam. On a broad open plain, it extends along some 120 km, through the two administrative departments of Nord and Pas-de-Calais. It presents a remarkable cultural landscape in terms of its continuity and homogeneity. It provides an important and well-preserved example of the mining and industrial landscapes created following three centuries, as evidenced by the pit heads and their equipment, a dense and diversified worker habitat, the urban planning of mining towns, slag heaps, etc. Significant human, economic and cultural values are associated with the mines' history, in terms of everyday activity, social events and accidents.

Category of property

In terms of categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a serial nomination of 109 *monuments, ensembles* and *sites*.

In terms of the Operational Guidelines for the Implementation of the World Heritage Convention (January 2008), the property is also nominated as a cultural landscape, in the organically evolved landscape category and the continuing landscape subcategory.

1 Basic data

Included in the Tentative List 1 February 2002

International Assistance from the World Heritage Fund for preparing the Nomination None

Date received by the World Heritage Centre 25 January 2010

Background This is a new nomination.

Consultations

ICOMOS consulted the TICCIH and several independent experts.

Comments on the assessment of this cultural landscape were received from IUCN on 1st February 2012.

The information was carefully considered by ICOMOS in reaching the final decision and recommendation in March 2012.

Literature consulted (selection)

Bergeron, L., « Les villages ouvriers comme éléments du patrimoine de l'industrie », *Patrimoine de l'industrie - Industrial Patrimony*, TICCIH, 2001.

Centre historique minier, 10 mars 1906, La catastrophe des mines de Courrières..., Lewarde, 2007.

Hughes, S., *The International Collieries, Thematic Study,* ICOMOS and TICCIH, 2003.

Mattei, B., Révoltes et mythes du mineur..., Seyssel, 1987.

Woronoff, D., Histoire de l'industrie en France du XVIe siècle à nos jours, Paris, 1998.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 19 to 23 September 2010. A further mission took place on site from 17 to 19 September 2011.

Additional information requested and received from the State Party

In its letter dated 28 January 2011, ICOMOS requested additional information from the State Party concerning:

- the possible presence of any industrial components incidental to the actual coal extraction (coke plant, power plants, etc.);
- the State Party's long-term vision regarding pumping out the many old pits given the soil subsidence.

The State Party replied on 25 February 2011 with additional documentation that is incorporated into the present assessment report.

Date of ICOMOS approval of this report 14 March 2012

2 The property

Description

At the continental end of the North European Coal Seam, the Nord-Pas de Calais Mining Basin extends along some 120 km. It forms a strip of land lying roughly east-west, that is no wider than about twelve kilometres and covering an area of approximately 120,000 hectares. It straddles the two administrative departments of Nord and Pas-de-Calais. The main cities are Valenciennes, Douai, Lens and Béthune. Inventory and typological approach

The nominated serial property includes 109 separate sites (or components), grouped within 13 regional sectors corresponding to the former mining companies. The ensemble includes a total of 353 remarkable objects forming the mining landscape. They are described by sector and then discussed by theme in the nomination dossier. The fact that a single inventory object can cover several uses or different built structures explains the high number of objects in the typology. For the property's definition, the reference is the number of inventoried objects per section.

| Section No, mining | No of sites or | Number of |
|---------------------|----------------|-----------|
| company name | components | objects |
| 1- Anzin | 1 to 20 | 87 |
| 2- Aniche | 21 to 33 | 44 |
| 3- Escarpelle | 34 to 37 | 8 |
| 4- Ostricourt | 38 to 40 | 10 |
| 5- Dourges | 41 to 49 | 37 |
| 6- Courrières | 50 to 57 | 21 |
| 7- Lens | 58 to 69 | 52 |
| 8- Liévin | 70 to 76 | 13 |
| 9- Béthune | 77 to 87 | 29 |
| 10- Vicoigne-Noeux- | 88 to 91 | 22 |
| Drocourt | | |
| 11- Bruay | 92 to 100 | 21 |
| 12- Marles | 101 to 105 | 5 |
| 13- Ligny-Auchy | 106 to 109 | 4 |

The remarkable sites and objects have been defined within the context of a systematic inventory approach to the mining heritage of the Nord-Pas de Calais Basin. It also involved studies by experts and symposia to analyse and identify both the objects and the living and evolving cultural landscapes. The types of objects are:

- The pits (17): A pit includes all the surface facilities or pit head, the associated shaft or shafts and related underground infrastructure. The earliest surviving elements date from 1850, the period of the Basin's industrial development. Since that date, all the major periods of extraction and construction techniques are represented within the pits. In addition, four pits have been designated by the State Party as "major sites of remembrance"; Gohelle, Oignies, Arenberg, and Lewarde, the current Mining Industry Historical Centre.
- The *headgear* (21): These are large metal or concrete frames that support the lift systems over a mine shaft for the men and the extracted ore. They form a tall and spectacular monumental structure that is typical of a mining landscape.
- The slag heaps (51): These are hillocks of spoil from the coal mine, as extraction advances. They have sometimes taken on very considerable proportions, such as the twin slag heaps at pit 11-19 in Lens which have a footprint of 90 hectares and exceed 140 metres in height. The slag heaps symbolize the landscape identity of the Mining Basin. Their visual impact is all the greater as the surrounding landscape is a uniform plain. The slag heaps adopted as part of

the property form a selection of the most representative and/or provide the greatest integrity.

- The coal transport infrastructure or '*cavaliers*' (of which there are 14 covering a total distance of 54 km): Mining led to the development of very dense coal handling and heavy transport networks, including railways and waterways. They contributed to shaping the region and landscapes in the Mining Basin. The sections of '*cavaliers*' form a link between the property's various components.
- The railway stations (3): In a coal-mining region, they are a specific regional structure related to heavy transport and they are a major site in any mining town. The Fresnes-sur-Escaut, Lens, and Douvrin stations have been selected.
- The subsided mine ponds (5): It was in the first half of the 20th century that ponds appeared where mines had subsided, a visible consequence of the intense subterranean exploitation. They contribute to the industrial landscape.
- The workers' estates (mining villages) and social habitat (124): The mining villages are groups of workers' houses in mining regions, with repetitive façades generally in brick, along regular and symmetrical alignments on straight paved roads. Resulting from the owner paternalism of the 19th century and the desire to control the mining population, the estates are a major testimony to the urban and social transformations delivered by industrialization. Their design reflects the confrontation between different currents of social thinking and new ideologies in the 19th century. Under the influence of architects and entrepreneurs, they have taken many forms and have evolved throughout the history of the mines. Still very numerous today in the Nord-Pas de Calais Mining Basin (almost 600), those included have been the subject of a rigorous selection based on their significance, integrity and authenticity. The property displays a vast constructive typology ranging from the traditional mining village to detached housing estates, garden cities and tenement buildings.
- The schools (46): In all periods, mining companies built schools, vocational training centres, domestic science schools for girls, etc. These initiatives were an adjunct to the social provision of worker housing, while also answering the specific training needs for the mine and the owners' education projects for the families. State and Catholic schools were added to this initial arrangement and gradually took over throughout the 20th century.
- Religious buildings (26): Many places of worship were built by the companies to encourage religious practice, good moral conduct and provide a framework for the social practices of the miners and their families. They were also intended to stem the early dechristianisation of mine workers and the rise of socialist and then Marxist ideas. Symbols of spiritual elevation, but also of order and morality, the religious buildings are built with care and an obvious concern for monumentality. The projects were often entrusted to renowned architects.

- Health facilities (24): One of the most important heritage assets inherited from mining operations are the medical establishments. The creation of benevolent funds by the companies, as early as the start of the 19th century, laid the bases for workers' welfare cover. These funds opened numerous hospitals, dispensaries, pharmacies, maternity clinics, milk depots, etc., for the miners and their families.
- Community, cultural and sports facilities (6): These are community halls and sports facilities associated with the development of cultural activities within the mine's social (musical societies) and sports (gymnastics and football) environments, from as early as the end of the 19th century, as part of the companies' social policies.
- Monuments and places of commemoration (10): The mine workers' life included dramatic events specific to this industry, such as the Courrières disaster (1906, almost 1,100 deaths), that added to the monuments and places of commemoration as part of the nation's history.
- Buildings for the mine's socio-economic life (5): These are the "grand offices" of the coal-mining companies and trade union and workers' cooperative premises.
- The owners' and senior manager's houses (18): The managers' and engineers' houses were located within the vicinity of the mine. The owners and the most senior management had residences or *châteaux*, inside fenced parks, a little further away from both the mine pit head and the urban centres. These buildings also incorporated management functions: prestigious offices, board rooms, salons, etc. The architectural and monumental concern taken over them was commensurate with that accorded to the churches, as these buildings had directly to reflect the status of the companies.
- Town halls (2): Those included are Carvin and Bruay-La-Buissière; they reflect a municipal form of architecture that is typical of the Mining Basin.
- Other facilities (3): These include the Auchy-les-Mines railway halt, a signalling box in Chabaud-Latour and a silo.

In its 2011 additional documentation sent in February 2011, the State Party explains why the industrial facilities traditionally associated with coal mines are virtually no longer represented in the Basin's landscape (wash troughs, coke plants, pellet and briquette plants, electricity power plants, etc.). There were already very few such installations in the Basin's history, as it was essentially focussed on extraction, and they were the first facilities to be demolished or to undergo post-industrial conversions.

Landscape approach

Additionally, the 13 sectors form the same number of regional ensembles of which the outstanding components are the *components* and the *objects* previously inventoried. They are presented as so many coherent living and evolving cultural landscapes. A systematic method was adopted to define them. The historic context of the origins of the mining company holding the concession is first examined. The landscape context is then detailed, as the physical backdrop to the mining

operations that were overlaid on the site. The latter is approached from the history of the site's exploitation and the description of the evolution of its landscapes under the influence of the mining industry's growth. In each case, the landscape places are named, illustrated and the component parts indicated.

History and development

The beginnings of coal extraction (18th century –1870s)

Until the early 18th century, there was little interest in the use of hard coal in the north of France, but the increasing scarcity of timber led to a change. The first mining companies appeared in the Valenciennes region, including Anzin which was to have a brilliant future. Extraction remained shallow and by traditional methods.

The geopolitical conditions changed at the end of the Napoleonic Empire (1815), and resulted in France losing its coal and steel resources located in what is today Belgium. The example of the British industrial revolution was behind the drive to find coal seams in France. The extraction pits in the Valenciennes region experienced rapid expansion. The vast extension of the coal basin westwards (Pas-de-Calais Department) was discovered in the 1840s. The region's coal potential took on national importance.

Numerous mining companies were founded during the Second Empire (1850s and 1860s) and they grew steadily after 1870. The scale of equipment, buildings and infrastructure changed completely, marking the starting point for the heritage and landscapes that comprise the current property. With access to canals and railways linking it to the Paris region, the Nord-Pas de Calais Basin became the leading mining basin in France.

From the intensive exploitation by the companies to the Second World War (1880s – 1939)

In 1880, the Basin's total output was close to 8 million tonnes. It grew steadily and, on the eve of the First World War, accounted for one third of France's production. The difficult working conditions of the Nord-Pas de Calais miner were described by Émile Zola (Germinal, 1885). This novel became emblematic of industrial Europe at the end of the 19th century. The Basin was then a major centre for the dissemination of worker unionisation and socialist ideals, together with a paternalistic style of management that was also emblematic. The mine's development was not without difficulty or danger, neither on a day-to-day level or the infamous "firedamp explosions" specific to coal mining, able to blast in a single instant a whole series of underground galleries. Several disasters have marked the Basin's life and history, including the March 1906 Courrières disaster, referred to above, and its 1,099 victims. This is one of the most tragic events in mining history worldwide. After the event, the miners went on a major strike to protest against their working conditions. They all marched under the red flag of the Paris Commune, expressing the particularly strained employment relations with the coal-mine bosses.

Durant the 1914-1918 War, the Basin was cut in two by the Front. The occupied eastern section was flooded when the invasion occurred; it suffered lasting damage that then required lengthy reconstruction after the War. The western section, where extraction continued, started up again more quickly and was used intensively to revive the national economy.

In 1930, the Nord-Pas de Calais Basin reached its peak output of 35 million tonnes, ranking it as one of the leading coal-production regions in Europe. There was a huge need for labour. Almost 75,000 foreign miners, especially Polish, contributed to the workforce. The increasing technical difficulties surrounding the extraction and the 1930s Depression led to a drop in production and yield. Financial problems started to appear, followed by the first company mergers. A "Coal-mining Group" was created to spread the contracts, develop sales, encourage mergers and help modernize the mines.

On the eve of the Second World War, 18 coal extraction companies operated in the Basin, but eight of these accounted for three quarters of the output. At that time, the Basin accounted for 60% of national production and 40% of coal consumption in France. Output climbed back up to 32 million tonnes in 1939. However, the Nord-Pas de Calais Basin had some of the most unfavourable operating conditions in Europe, which explains its relatively high extraction costs. Nonetheless, the diversity of its coal grades and its closeness to Paris and industrial regions meant it enjoyed an extensive and diverse client base.

From the Second World War to nationalization and production revival (1940-1960)

During the French Campaign of 1940, the rapid advance of the German troops only had a marginal effect on the mining industrial heritage, and the occupier was quick to ensure production resumed. This period was marked by the exodus triggered by the invasion, then the 1941 strike. The production facilities by and large came through the war unscathed.

After the Liberation (1945), both the recent past of the coal companies' willing or forced collaboration with the occupier and the energy requirements for the reconstruction effort demanded a compete reorganization. With a centralized controlling political power all the coal mines in the Nord-Pas de Calais Basin were nationalized in 1946 as "Charbonnages de France".

A "national coal battle" was launched under difficult extraction conditions. The miners' work was particularly arduous, especially since they were subject to food rationing like the rest of the French population. These conditions, combined with the start of the Cold War between the former Allies, led to a powerful miners' strike (1947-48) that was harshly repressed. However, the resumption of work in French mines, including Nord-Pas de Calais, is emblematic and marks a turning point in the history of Western Europe, definitively anchored in the Atlantic Bloc and focused on the building of European Union. The ECSC (European Coal and Steel Community) treaty between France, Germany, Italy and the Benelux countries (1951) was the concrete affirmation of this aspiration, and the issue of coal played a fundamental part.

With the rapid economic growth in the 1950s, production increased and the miners' material situation improved. Labour was again in heavy demand, leading to a new wave of migration, this time from the Mediterranean countries. In 1952, the Basin's output was again back to 30 million tonnes a year.

Decline and closure of the pits (1960-1990)

Despite French industry's need for coal at the start of the "Glorious Thirty" (1945-1975), the Basin's production stagnated because of the difficulties associated with the coal's extraction and signs of depletion in many mines. Extraction costs rose, as did the need for investment that Charbonnages de France found increasingly difficult to raise. A decline in mining that nobody wanted to mention became apparent. This was a period of deteriorating balance sheets, and deficits starting from 1960. The situation was in part masked by the nationalization and the various commitments made by the State to the miners. It was also becoming preferable to choose other forms of energy: oil, natural gas or electricity. Coal markets declined and clients turned towards better quality imported coal. Just as France changed its political regime (start of the Fifth Republic) and signed a peace treaty in Algeria, the 1963 miners' strike, whilst very well-supported, contributed to the end of an era in the Mining Basin.

The 1960s was a period of controlled decline. The strong French economy meant young adults could find other forms of employment, often less arduous and more enriching. In 1966, the Basin still employed a total of around 65,000 workers, of whom almost 20% were of Moroccan origin. The economic and financial situation started to deteriorate even faster from 1967. The strikes in 1968 and then in 1971 marked both a leap in the numbers of workers and inevitable milestones in the decline of coal extraction.

It then became clear to experts that the Mining Basin could probably no longer continue to operate beyond 1980 to 1985. Aware of this situation, the various leaders (company, unions and public powers) negotiated the gradual closure and a vast redundancy plan for the miners. This managed downsizing was only momentarily slowed by the 1970s' oil crisis. The Oignies pit was the last to close at the end of December 1990. The final figures: the Nord-Pas de Calais coal basin dug 852 mine shafts, extracted 2.4 billion tonnes of coal and left behind 326 slag heaps.

In the 1980s, the Mining Basin was an economically devastated region with very high unemployment, while the better trained young people left. Attempts at industrial reconversion were limited, other than in Valenciennes, which had traditionally been more diversified. This situation, combined with the management of the coal mines by a single State-owned company, explains why the mining landscape has been so well preserved compared with other major European mining regions.

3 Outstanding Universal Value, integrity and authenticity

Comparative analysis

The State Party examines properties already inscribed on the World Heritage List, the Tentative Lists of State Parties and other coal mining sites in Europe and around the world. Its comparative analysis is based on the property's definition and the importance of its landscape dimension.

It is difficult to grasp and define a large-scale mining heritage. Two different approaches can be adopted. The first, conventional, starts by compiling a detailed inventory of what exists but risks being a simple accumulation of sites, constructions and artefacts, right through to detailing the industrial and mining equipment and infrastructure. It can lead to a 'collection' approach, and risks the museumisation of the property in the way it is managed. The second, while not ignoring the importance of the inventory, views the mining heritage as a global and dynamic notion, which it is essential to situate at a broader scale and within an on-going evolution. This leads to overarching approaches and the central notion of living and evolving mining landscapes, where the involvement of the past in the present finds its place, including the difficult economic and social transition following the mines' closure.

The State Party considers the Nord-Pas de Calais Mining Basin to be the largest in France, compared with those in Lorraine (Longwy), the Loire (Saint-Étienne), and Saôneet-Loire (Blanzy). The extent, density and homogeneity of the components of the mining landscape are far greater in Nord-Pas de Calais than anywhere else in France.

The State Party compares the Nord-Pas de Calais Mining Basin to the following properties already inscribed on the World Heritage List:

- Metal ore and other types of mines or quarries: the Wieliczka Salt Mine, Poland (1978, criterion (iv)); Røros Mining Town and the Circumference, Norway (1980, 2010, criteria (iii), (iv) and (v)); Mines of Rammelsberg, Historic Town of Goslar and Upper Harz Water Management System, Germany (1992, 2010, criteria (i), (ii), (iii) and (iv)); Humberstone and Santa Laura Saltpetre Works, Chile (2005, criteria (ii), (iii) and (iv));
- Coal and steel sites: Ironbridge Gorge, United Kingdom (1986, criteria (i), (ii), (iv) and (vi)); Völklingen Ironworks, Germany (1994, criteria (ii) and (iv)); Zollverein Coal Mine Industrial Complex in Essen, Germany (2001, criteria (ii) and (iii));

- Worker housing sites: Crespi d'Adda, Italy (1995, criteria (iv) and (v)); Saltaire (2001, criteria (ii) and (iv)), and New Lanark (2001, criteria (ii), (iv) and (vi)) in the United Kingdom;
- Industrial cultural landscapes: Blaenavon Industrial Landscape, United Kingdom (2000, criteria (iii) and (iv)); Mining Area of the Great Copper Mountain in Falun, Sweden (2001, criteria (ii), (iii) and (v)); Derwent Valley Mills (2001, criteria (ii) and (iv)), Cornwall and West Devon Mining Landscape in the United Kingdom (2006, criteria (ii), (iii) and (iv)); Sewell Mining Town, Chile (2006, criterion (ii)).

The State Party also examined various mining or industrial sites on the Tentative Lists, such as:

- Mining and Cultural Landscape in Germany;
- The Industrial Complexes in Ostrava in the Czech Republic;
- The Gold Route in Parati and its Landscape, Brazil;
- The Namaqualand Copper Mining Landscape in South Africa;
- Mining Historical Heritage in Spain;
- The Major Mining Sites of Wallonia, Belgium, which are an immediate extension of the Nord-Pas de Calais Basin and provide significant mining and social similarities. However, because of their different history and the nature of the heritage conserved, often monumental in nature, the Belgian analytical and descriptive approach differs from the French approach of an evolving cultural landscape.

The State Party examined other major coal-mining sites in Europe and the world. While residual technical components are generally well identified, the other components defining the structure of mining landscapes are, in general, less clearly identifiable. Several of these basins have undergone industrial diversification and reconversion that are not found in Nord-Pas de Calais. The mining and industrial infrastructure has often been extensively dismantled in the contemporary era. This essentially concerns the following countries and basins:

- In the United Kingdom: the North-East, South Wales, Midlands, Yorkshire, Lancashire and Clyde (Scotland);
- In Germany: the Ruhr;
- In Poland and the Czech Republic: the Silesian Basin;
- In Ukraine: the Donbass Basin, still active;
- In the United States: the Pennsylvania Basins provide larger and still open landscapes;
- In Japan: the Sorachi Mining Basin (Hokkaido Island) provides a relatively complete landscape but in an area that is smaller than that of the Nord-Pas de Calais Mining Basin.

ICOMOS considers that the comparative analysis presented is very complete. It leads to the conclusion that the Nord-Pas de Calais Mining Basin firstly differs from adjacent national and regional sites by its exceptional extent and specific landscape qualities. It then differs from the sites already inscribed on the World Heritage List, those on the Tentative List and other similar large coalmining basins in terms of the large-scale presence of a mono-extractive industry, enabled by the geological continuity of the subsoil. All facets and all periods of the coal-mining industry, both technical and social, are present, from the 1850s to the end of the 20th century. This chronological continuity of the testimony is strengthened by several events of national or European importance (Courrières disaster, dissemination of socialist ideas, major strikes, impact of the World Wars, nationalization and the building of the European Union.

ICOMOS considers that the comparative analysis appropriately justifies the selection of the components of the series and that it convincingly illustrates the notion of a living and evolving cultural landscape.

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

Justification of the Outstanding Universal Value

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Covering an area 120 kilometres long, the Nord-Pas de Calais Mining Basin provides geological continuity and large-scale regional unity that provide information about the development of its mining history.
- The Basin experienced a continuous mono-industrial occupation of coal mining over almost three centuries. This has resulted in extensive changes to the natural environment and formed characteristic and well preserved landscapes.
- The continuous large-scale coal mining, particularly intense from the middle of the 19th century to the end of the 20th century, has produced very complete material testimonies of technical, industrial, architectural, urban and social orders.
- Coal extraction created new human settlements, caused migration and developed cultures that subsequently became part of the landscape.
- The Basin's technical components are still sufficiently numerous to provide testimony, over 120 kilometres, of a continuous and remarkable ensemble of mining units, each with its own traits. They form a succession of landscapes testifying to the mining activity. Their structure and visual patterns are unique.
- The Nord-Pas de Calais Mining Basin is notable for the exceptional abundance and diversity of the built environment of worker housing and community infrastructure. It also provides testimony to the dissemination of solidarity and social ideals among mining workers.
- The Nord-Pas de Calais Mining Basin is a perfect illustration of the changes wrought by industrialization on the technical, social, cultural, landscape and environmental planes.

ICOMOS considers that this justification is adequate. The property provides complete and detailed testimony to the regional, technical, economic and social development of the human activity of coal extraction in the industrial era. Its landscape values are expressed through the number and diversity of its individual constituent components, almost all related to coal extraction; they are legible at the extraction, pit level and also through the presence of landscape ensembles and characteristic horizons. The diversity and the completeness of these various levels of the property's perception provide a unique and exceptional testimony.

Integrity and authenticity

Integrity

The integrity of the mining, industrial and social testimony, in terms of its various dimensions, is not borne specifically or totally by any one of the 17 sites, which justifies the serial approach.

This is a cultural and evolving landscape where the various strata of the history of the Mining Basin are well represented. Many components remain, within the sites, providing testimony to its first industrial era, from 1850 to 1914. The prior artisanal or proto-industrial periods are not present, but this is a general characteristic feature of this type of property that has been active until a very recent time. ICOMOS also notes that the strictly industrial testimony of the serial property, in the sense of its major technical installations and factories traditionally associated with coal extraction: wash plants, coke plants, pellet plants, thermal power plants, etc., were almost all destroyed in the period of the abandonment of coal mining. There were fewer of these and above all they were less diverse than in other coal basins, but they nonetheless numbered in their tens in Nord-Pas de Calais. The integrity of the material testimony therefore focuses on the mining and social aspects from the end of the 19th century up until the period when the mines were closed, but not or only marginally on the directly associated mining history.

The integrity of the landscape has continuously evolved over three centuries, whilst retaining considerable unity. The Mining Basin is built across a region that was initially rural, with many natural features that form the backdrop to the variety in its landscape. Building on these local conditions, the many modes of spatial occupation by the large number of companies explain the diversity of each of the pits and the diversity of their urban environments. However, the mono-activity of this mining industry over the long term and the low rate of reconversion of the abandoned industrial facilities provide strong territorial unity to the serial property. Its various facets express the wealth and variations around a central testimony: the mechanized extraction of coal by considerable human forces. Passing through the Mining Basin offers as many different atmospheres and landscape variants as specific factors brought to light.

ICOMOS considers that the diversity and the number of components that make up the property, and the many additional aspects of its landscapes express a good level of technical, territorial, architectural and urban integrity. The integrity of the industrial testimony to coal extraction is, however, clearly much weaker. This unequal integrity in the material testimonies nonetheless still enables a satisfactory expression of the property's economic and social values. In practice, the landscape integrity can be satisfactorily read on three levels: the technical object or building, the intermediate level of the coal extraction pit, worker estate or local territory, and lastly the more expansive view of the horizons that meet the visitor's eye.

ICOMOS considers that the series' components have been chosen with care and method for their individual quality, the value and wealth of their testimonies, and their participation in perfectly described landscape ensembles. In terms of their integrity, the serial approach to the property nominated for the World Heritage List is justified.

Authenticity

The First World War caused considerable destruction to the eastern and central part of the Mining Basin. The Second World War caused exceptional wear to its equipment. In both cases, there was a period of reconstruction and modernization that saw the renewal of the built structures and the pits' technical equipment. However, this occurred within the context of operational continuity, often in similar forms and frequently using material already employed in the 19th century, such as brick. Steel tended to replace iron. Reinforced concrete is the main new addition, used fairly widely in the 1920s; it therefore constitutes a particular construction trait. These changes, which would in any event have occurred through innovation and modernization specific to the industrial world, are also signatures of these periods and contribute to the overall authenticity of the testimony.

Also, the quantity and diversity of the preserved documentation (see conservation, archives) enables a detailed analysis of the evolutions and changes to the Mining Basin's heritage. The evolving landscape is therefore fully documented and its study is based on objective knowledge of material data for the various periods.

Part of the housing ensembles, urban structures and public buildings were rebuilt after the First World War. The approach taken was to "rebuilt as it was", in an attempt to eradicate painful memories of the war's devastation. More broadly, the dwellings underwent an improvement to their sanitation and comfort. Later changes made by the owners have sometimes affected the authenticity of some streets or districts. The care taken with the selection of the property's components has minimized this aspect.

The public buildings reconstructed after the wars have almost always retained their original function. Recent uses are generally compatible with the conservation of their architectural authenticity. The remaining industrial buildings and technical equipment are authentic, even if some have suffered from having been abandoned since the 1980s, and from inadequate restoration.

ICOMOS considers that the authenticity should be considered at the level of the property's various types of components (the 109 components) and at the level of each of the associated landscapes. Owing to a rigorous selection of these components, the conditions of authenticity are generally good. However, they suffer from occasional gaps in the housing and potential threats to the landscape from economic development.

ICOMOS considers that the conditions of integrity and authenticity have overall been met.

Criteria under which the property is proposed

The property is nominated on the basis of cultural criteria (ii), (iv) and (vi).

Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

This criterion is justified by the State Party on the grounds that the Nord-Pas de Calais Mining Basin is testimony to a considerable exchange of influences, over approximately a century, concerning the development of worker housing linked to large industrial companies and at the scale of a cultural area specific to northwest Europe. As a fully-fledged participant in the search for the model worker city, from the middle of the 19th century to the 1960s, the Mining Basin is particularly representative of the period's movement of ideas among industrialists and architects. These exchanges found numerous applications in the Nord-Pas de Calais Mining Basin, both in time and space, from the passage through stages from terraced housing to detached dwellings with gardens, through to the structuring of this habitat in garden cities, urban districts and even autonomous ideal cities. One of the characteristics of the Nord-Pas de Calais Mining Basin is the exceptional density of the evidence of this flow of ideas, practices and experiments concerning worker housing.

ICOMOS considers that the nominated property provides remarkable and highly diversified testimony to the exchange of ideas relative to the design of worker housing and urban planning linked to large mining companies from the middle of the 19th century to the 1970s, from *mining villages* to separate estates, garden cities to urban districts. The mining landscapes provide testimony to the dissemination of industrial coal-mining techniques and methods. Finally, it reflects international human migration organized by the large companies.

ICOMOS considers that this criterion has been justified.

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the State Party on the grounds that Nord-Pas de Calais Mining Basin provides an eminent example of a type of construction or architectural ensemble evolving towards the emergence of a complex landscape that provides an exceptional illustration of a significant period of the history of industrial Europe, from the end of the 18th century to the middle of the 20th century. Because of the large-scale exploitation of underground coal resources, a new type of human settlement appeared, featuring a close association between the extractive technical components, working spaces, transport infrastructure and public and private living spaces. They constituted a rapid and massive urbanization process reflecting a step-change in the history of traditional urbanization, governed exclusively by a productive rationale requiring specific facilities for a substantial human labour force. New elements structuring the landscape appeared specific to mining operations (headgear, slag heaps, mining villages, subsidence ponds, etc.). These landscapes are testimony to the core of the industrialization process in Europe at this period.

ICOMOS considers that the Nord-Pas de Calais Basin provides an eminent example of the development of underground coal mining by large industrial companies from the middle of the 19th century to the end of the 20th century. They mobilized an extensive and organized workforce, structured physical space through urban development and specific industrial structures, of which the series of living and evolving mining landscapes, well preserved in terms of their diversity, density and scope, provide exceptional testimony today.

ICOMOS considers that this criterion has been justified.

Criterion (vi): be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance;

This criterion is justified by the State Party on the grounds that the Mining Basin is closely associated with the description of workers' conditions in Continental Europe, notably starting from a novel by Émile Zola, *Germinal* (1885), which, inspired by the 1884 strike, described the life of miners in the Nord-Pas de Calais region and the bitterness of the conflict between capitalism and labour. More broadly, the Basin provides a remarkable example of worker solidarity, the dissemination of trade unionism and socialist ideas.

The Courrières pit disaster on 10 March 1906, led to a vast solidarity movement. In terms of its extent and the number of victims, it is a major event in the history of the mining industry, widely reported in France and internationally. An undeniable turning point in mining

safety and worker history, this event revealed the particularly harsh working conditions in mines and the ever-present danger in the galleries. Safety regulations and research took on a completely new level of importance in Europe and North America.

ICOMOS considers that the social, technical and cultural events associated with the history of the Mining Basin have had international repercussions. They are an exceptional illustration of the danger of mine-working and the history of its major disasters, such as Courrières. They bear testimony to the social and technical conditions of coal-mining operations. They represent a major symbolic site of worker's conditions and their solidarity, from 1850 to 1990. They are testimony to the dissemination of worker unionism and socialist ideals.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that the serial approach is justified and that the selection of components for the series is adequate.

In conclusion, ICOMOS considers that the nominated property meets criteria (ii), (iv) and (vi) and conditions of authenticity and integrity and that Outstanding Universal Value has been demonstrated.

Description of the attributes

The components that express the property's Outstanding Universal Value should be considered from the point of view of the constituent elements and from the point of view of the successive landscapes they collectively provide, forming a correlated organic ensemble.

- The property includes physical components linked to the landscape: the mine slag heaps, farmland, subsidence ponds, etc.;
- The industrial mining heritage is comprised of: the mine pit heads, the associated buildings and industrial facilities, the residual technical equipment, such as the headgear and machines, etc.;
- It provides transport infrastructure or 'cavaliers' (railways, canals, conveyors, etc);
- It includes worker housing and specific urban development: *mining villages*, garden cities, detached housing, tenement buildings, worker districts and estates, engineers houses, etc.;
- It includes monumental and architectural components: churches, schools, manager's *châteaux*, company head offices, worker union headquarters, stations, town halls, hospitals and clinics, community halls, sports facilities, etc.;
- It has places of remembrance and celebration of the Basin's history and its miners, notably the four pits declared as "grand sites of remembrance".
- All these components are grouped in a unique series of thirteen contiguous landscape zones that are

characteristic of the mono-activity of industrial coal extraction from the 18^{th} to the 20^{th} century.

4 Factors affecting the property

Development pressures

After the cessation of mining, the Nord-Pas de Calais Mining Basin had to consider its economic reconversion. While, on the whole, few major industrial projects were undertaken, there was a general movement to appropriate the abandoned mining facilities. The former mining sites accounted for a considerable amount of property, sometimes in the heart of built-up areas. They may become real challengesin terms of the development of large economic, commercial or urban projects. The property aspect of the mining heritage is sometimes little or poorly understood by the local stakeholders, even though this state of mind is tending towards greater recognition.

ICOMOS considers that there are contrasting situations in the Nord-Pas de Calais Mining Basin. While some zones have adopted a development dynamic that is respectful of the heritage environment, others appear to be more fragile and, in certain cases, the quality of the mining landscape may be affected by poorly managed economic or urban development.

Tourism pressures

Tourism activity is mainly limited to visits to the four main sites of remembrance and mine museums. The number of visitors is perfectly compatible with their relative capacities. A marked increase in tourism and its diversification to include discovery circuits is fully compatible with the property, as this is one of the aims of its development.

ICOMOS considers that there is no particular pressure from tourism or its growth.

Environmental pressures

By its very nature underground mining causes extensive geological and environmental damage, whatever the mining techniques used and the precautions taken. For many years, there was the phenomenon of the "black country" caused by coal dust pollution, no longer extant today as a result of the cessation of mining activities. The main residual consequence relates to the areas of soil subsidence, the consequences of which are a weakening of the built environment and the evident rise in the water table. This sometimes results in the collapse of buildings and the creation of ponds and even lakes in some instances. Systematic pumping must be constantly maintained when the areas of subsidence involve urban areas or transport infrastructure.

ICOMOS considers that the subsidence due to underground mining operations and water table levels are

phenomena that are technically under control today, but their long-term management remains a major issue.

Natural disasters

There are few natural risks in the region. Tectonically, northern France is not a region located on any fault line. Earthquakes are of low amplitude and are not noticed by the population. However, there is a risk of mine gallery shoring being weakened in the event of an earthquake.

Impact of climate change

Tornadoes or exceptional storm events that may be related to climate change have so far not affected the property.

ICOMOS considers that poorly managed urban development pressure could affect certain landscape aspects of the property.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The property is comprised of a series of 109 individual territorial components, each clearly defined on maps following survey boundaries. The total surface area of the nominated property is 3,943 hectares. It involves 87 municipalities and includes around 100,000 people within its boundaries.

The buffer zone has a surface area of 18,804 hectares; it concerns 124 municipalities and has a population of around 712,000. It incorporates all the components that form the property and systematically includes the boundaries stipulated for historic monuments and, where applicable, protected natural sites. It also includes components of the industrial mining heritage of lesser value, but these enhance the overall significance and express the territorial and landscape continuity of the Mining Basin. It protects the property's sightlines from the main access routes.

ICOMOS considers that the boundaries of the serial property and of its buffer zones are adequate. They justify the notion of a living and evolving cultural landscape.

Ownership

Since the 1946 nationalization, a large part of the real estate components, industrial buildings and technical objects are still publicly owned. However, the winding up and end of mining concessions in the 1990s led to the breakup and redistribution of the land and buildings within the property, often passing to a multitude of entities established under public law and specific to the State Party (State Party itself, State bodies, municipalities, departments, inter-municipal associations, public law companies, local and regional public entities, etc.), and to

private companies and individual owners. The same applies to the urban sections of the property where all the types of housing ownership available under French law co-exist, from public ownership to individual private ownership, "mixed" housing companies (public authorities operating under private law), real estate companies established under private law, etc.

ICOMOS considers that the situation regarding the ownership of the property's component parts is complex, in terms of its fragmentation and the multiplicity of owners. However, the latter are all clearly identified as are the legal frameworks under which they exercise their ownership rights. Public control of the ownership of many of the components is assured, as is the State Party's capacity to intervene with respect to all other forms of ownership.

Protection

Legal protection

Protection of the serial property is provided by national laws, regional, departmental and local orders and administrative regulations concerning the following points:

1) Protection of the individual cultural components

The general framework is the *Historic Monuments Act* (1913, updated in 2007). It is implemented by orders listing a property as an historic monument (*MH*) or its inscription on the *Additional inventory of historic monuments* (*ISMH*). An order refers to real estate property; it may concern a building or a machine, sometimes several buildings or facilities, sometimes a component of a building. It only partially covers the notion of component or object. Orders concerning the serial property's components were generally issued between 1992 and 2009, some earlier. The listing procedure was undertaken for three buildings in 2011.

| Type of property | MH listing | ISMH listing |
|------------------------------------|------------|--------------|
| Pit | 3 | 13 |
| Company offices | | 2 |
| Headgear | 5 | 16 |
| Community & sporting facilities | | 2 |
| Public buildings | | 13 |
| Monuments | | 9 |
| Religious buildings | 3 | 8 |
| Stations – transport | | 2 |
| Dwellings and estates | 1 | 5 |

2) Territorial and landscape protection of the heritage

A ZPPAUP (Area of Protected Urban and Rural Architectural Heritage) is a framework for legal action at the regional level. It is the result of an agreement negotiated between the State Party's services and the local stakeholders to publish cultural protection regulations adapted to a given region. It is also used as a tool for management and shared supervision in agreement with the regional development plans (point 5). In this instance, it focuses on the living and evolving cultural landscape of the mines. Three *ZPPAUP* agreements have been signed and implemented (at the end of 2009) in Béthune, Carvin and Valenciennes. The work undertaken will be pursued under the framework of a new legal structure called *AVAP* (*Areas for the Enhancement of Architecture and Cultural Heritage*).

A submission for listing the property under the protection of the 1930 Act is scheduled for 2012-2015.

3) The protection of natural areas

This aspect is covered by the following legislation:

- At the European level, the Directive 92/43 of 1992 which established the Natura 2000 network;
- At the national level, the 1976 Protection of Nature Act, updated in 1985 (ENS or sensitive natural areas), the 1995 Environmental Protection Act and the 2005 Environmental Charter (Constitutional Law).

All these acts, orders and regulations form the *Environmental Code*. Within the scope of the property, eight types of protective measures are applicable for around sixty application cases in the form of specific protected areas.

4) The Mining Code

The disused mining facilities, whatever their current ownership, continue to be governed by the French *Mining Code* that deals with issues of residual safety and underground access. More generally, it deals with measures covering the public authorities' management of material issues in the post-mining period.

5) Regional consistency

Consistency of the various aspects of the property's protection is provided by regional administrative tools enabling consultative management between the public and private stakeholders in the context of the public regulations of the *Urban planning Code*. This refers to the *SCOT* (*Master Plan for Regional Consistency*) covering several municipalities, and the *PLU* (*Local urban planning schedule*) at the municipal level. Within the context of the property:

- SCOT: Three have been completed and one is currently being drawn up; they are now being harmonized to ensure the mining heritage and its landscapes are taken into account in a homogeneous and consistent manner in regulations.
- PLU: There will eventually be around one hundred.

Under the existing urban planning codes and Local urban planning schedules, municipalities issue building and construction work permits.

6) The Heritage Charter

This represents the final effort to ensure regulatory consistency by the national, regional and local public services, the private owners and citizen associations. It

was drawn up as part of the process involved in creating the dossier for the property's nomination for inscription on the World Heritage List, and is designed to steer all cross-authority questions for the property's management (see management). It was adopted by the partners in November 2009 and officially published in September 2010, under the title of *Heritage Charter for the Unified Mining Basin*. This will be the reference document for the property's protection.

Traditional protection

Traditional protection concerns the ownership and recognition of the property's values by the local population a large part of which is made up of miners' families and their descendants. This is expressed through a living worker culture and an on-going deep homage to the victims of the Courrières disaster, a tangible memorial to French and immigrant miners. It is also expressed through the inhabitants of the workers' estates' attachment to their homes.

Effectiveness of protection measures

ICOMOS considers that within a complex legal, regulatory and regional arsenal, the Historic Monuments legislation is a coherent and relatively simple body of legislation which, with the protection of cultural landscapes, forms the core of the protection. This complexity does, however, have dual merit: none of the aspects of the protection is overlooked and it applies continuously to the property's components and to their buffer zones. Also, the State Party is aware of these difficulties: one area of its effort is aimed at making the protection homogeneous, applicable to the entire property and comprehensible to the parties involved. ICOMOS encourages this approach, notably through the Heritage Charter.

ICOMOS considers that the protective measures for the property are adequate.

Conservation

Inventories, recording, research

Numerous local, regional and national institutions have archival centres concerning the property: the Historic Centre for Mining in Lewarde, the Scarpe-Escaut Regional Natural Park, actions by the Lens-Liévin Art and History Society, the CPIE (Permanent Centre for Environmental Initiatives (CPIE) – Slagheap Chain, National Labour Archives in Roubaix, the Departmental Archives in Nord and Pas-de-Calais, the Regional Department of Cultural Action, Charbonnages de France Archives, etc.

The lead-up to the property's nomination has been a lengthy process, based on an exhaustive and detailed inventory by the *Mining Basin Mission*. It is based on scientific symposia attended by a range of academic and professional experts. The Mission was preceded by a series of entities and specialist programmes which had been overseeing the "post-mines" period since the 1970s.

Present state of conservation

The inventory and studies carried out between 2000 and 2009, along with the surveys of the municipalities allowed an in-depth census of the mining heritage components and a precise state of their conservation to be drawn up. These situations vary from good to fairly good, especially for housing and public buildings, to situations of less consistent conservation for the abandoned industrial sites. Their state varies according to the specific history of each pit, from the start of mine closures in the 1970s to 1990. The most damaged, converted or quite simply abandoned mining and industrial sites have not been retained within the scope of the property. They may however appear within the buffer zones as components of secondary significance.

Particular attention has been paid to the analysis of the state of conservation of the landscape visual axes, from the main road access routes to the various components of the property. The four major sites of mining remembrance form the most complete ensembles and landscapes. The slag heaps selected are considered the most intact.

Knowledge of the state of conservation of the property's component parts is grouped in the systematic inventory database where it is classified by type and by municipality. The assessment of their state of conservation is used to define the medium- and long-term conservation policies.

Overall, ICOMOS considers that all the components forming the serial property are in a good state of conservation.

Active conservation measures

The many conservation measures are grouped under thematic action programmes for the pit heads, slag heaps, transport components and the miners' housing estates.

The built and architectural heritage is under the responsibility of its owners. The public sites are incorporated into the systematic supervision of their state of conservation and programmed actions, the importance and level of funding for which vary according to their protection situation. Sites classified as Historic Monuments receive funding from the State; the others receive funding from the region or municipality.

The most characteristic landscape components, such as the slag heaps or headgear, most noteworthy public buildings and churches, and finally the social housing in the worker estates are the subject of significant restoration or enhancement campaigns, several of which are currently in progress. The privately owned sites may apply for public funding on the basis of similar criteria. The various regional programmes and the Heritage Charter schedule actions and harmonize conservation at the level of the property.

Maintenance

Maintenance measures are the responsibility of the institutions, associations and private owners who manage the components or objects that make up the property. However, given the large size of some of them (pits, headgear, private railway lines etc.), the question of long-term maintenance funding remains unanswered.

Effectiveness of conservation measures

ICOMOS considers that the conservation measures taken or planned are adequate on a technical level. However, they seem often to be at the level of a project rather than actions actually undertaken. The actions need to be programmed more precisely and the funding clearly indicated, given that several of the municipalities have substantial community expenses but limited financial resources, or even high levels of debt. Therefore, an overarching conservation programme with a medium-term calendar, indicating the financially consolidated actions and those yet to be consolidated, would be useful for a good overall view of the conservation measures. In some cases, the restorations undertaken seem somewhat excessive and tend to overinterpret the objects.

In conclusion, ICOMOS considers that the property's state of conservation is overall satisfactory. It would be desirable to develop a financially consolidated overarching conservation programme for the medium term.

Management

Management structures and processes, including traditional management processes

The *Nord-Pas de Calais Mining Basin Mission*, created in 2000, is a public structure tasked with technical work for the entire Mining Basin on behalf of the various local and regional authorities and the State which established it. It provides an executive structure across all authorities for the conservation, management and supervision of the property and its landscapes. It provides a tool for studying or implementing the various urban restructuring programmes, housing restoration, social, economic and ecological actions. It also provides promotion and communication. Lastly, it is the body that writes the Management Plan.

The Mining Basin *Conference of Regional Authorities* will be the policy body for the overarching management of the property. It will provide the general orientation, coordinate the stakeholders, and monitor the property's overall conservation and communication at the level of the Basin. It will be co-chaired by the President of the Regional Council and the Region's Prefect. It will oversee compliance with the *Heritage Charter*, discuss the compatibility and consistency between projects and will encourage the design of joint actions. It is supported by an association structure created for the citizens: the *Mining Basin Association*. October 2011 is the date announced

for the establishment of the Conference in the temporary form of a consultation commission.

Most of the individual sites are managed or used by a single institution: either a not-for-profit association, an authority or a delegated private manager. Specialist institutions of a property-wide nature are:

- The Lewarde Historic Centre for Mining,
- The Scape-Escaut Regional Natural Park,
- Lens-Liévin Art and History Society,
- The Environment Centre Slag Heap Chain, etc.

ICOMOS considers that the official notification of the creation of the *Conference of Regional Authorities* must be confirmed and that, within this context, its institutional and technical links with the la *Mining Basin Mission* and the *Mining Basin Association* must be clarified.

Policy framework: management plans and arrangements, including visitor management and presentation

For the property as a whole, the following plans apply:

- The heritage development plan was made official by all the partners in 2006;
- It is extended by the Heritage Charter adopted in 2009;
- The various plans, charters and sectorial and thematic management measures apply, in part or in full, to form the Management Plan. In particular, the latter includes a contractual section with local stakeholders and owners through a series of framework agreements.

The plans covering the overall Mining Basin are:

- The State-Region Project Contract (2007-2013);
- The Regional Development Directive;
- The Regional Development and Sustainable Development Directive, under the Grenelle II Act;
- The scheduled management of the consequences of the post-mining period through a public technical bureau.

The main thematic plans are:

- The specific programmes of the urban municipalities and inter-municipal structures, notably for the restoration of the social housing;
- Cycleways and greenways;
- The Regional master plan for the sustainable development of tourism and leisure activities;
- The departmental plans for walk itineraries;
- The programmes associated with the ZPPAUP and PLU (see protection);
- The municipal cultural action programmes.

Under the general context of the Plan for heritage development and the Heritage Charter, under the technical supervision of the Mining Basin Mission, three sector management plans were officially published in 2011 for the pit heads, private railway lines, slag heaps and for four miners' housing estates.

Risk preparedness

The main risks are soil subsidence as a result of the mining operations, and the associated rise in the water table. After *Charbonnages de France*, control of this situation was taken over by a State scientific and technical entity: the *BRGM (Geological and Mining Research Bureau)*. The *National Commission for Mining Risks* also has a policy role. Together, they apply the Mining Code and monitor mining risks through local prevention and monitoring plans. The regional branch is the (*Regional Consultation Authority*).

A pumping network to maintain the level of the water table below the subsided areas has been installed: the *Water Pumping Stations*. Following the request by ICOMOS, additional information was provided about the artificial maintenance of the water table levels. A major impact study is currently being completed to assess the pumping, its risks and the possibility of flooding (2008-2012). It will create a precise map of the risks. Known results show that there is a risk for only nine of the property's 109 components. Eight workers' housing estates could experience flooding of less than 50 cm of water. The annual cost of pumping is around \notin 430,000.

Involvement of the local communities

The local communities have participated in each stage in the serial property's definition and they are kept regularly informed of the project's progress.

The *Mining Basin Association* is responsible for relations with the local population, and the dissemination of the property's values and commitments for its protection through citizen behaviour expressed in particular through the Heritage Charter.

Resources, including staffing levels, expertise and training

The financial resources form an important aspect of the nominated property. However, a distinction must be made between the sums provided under the general support policy for the closure of mining activity, at times considerable sums, and budget lines applied for the property's conservation. The two are, however, closely interconnected and cannot be separated, such as for housing restoration, industrial reconversion programmes, securing the safety of old mines, management of the geological impacts, etc. These programmes have been financed at all levels: European structural funds, State Party, region, the state-owned enterprise Charbonnages de France, departments, etc.

These general expenses for the entire mining zone, far more extensive than the property itself, but concerning it, are estimated at \in 3.9 billion since 1990. They will continue at much lower levels because of the end of large socioeconomic operations, but the amounts remain significant nonetheless, notably through the State-Region Project Contract (2007-2013): €86 million including a major urban regeneration programme much of which is within the property. Added to this are various sources of European funding for the current period (2007-2013), totalling €70 million, a large part of which is designated for treating abandoned former industrial spaces and mines. European funding is also allocated for the environment and risk prevention and regional development projects.

Contractual regional and departmental funding exists also for global actions without it being possible to know what sums are allocated for the property and its conservation.

In terms of human resources, the types of personnel present in the property's various management and enhancement authorities are:

- Municipal employees with expertise in management, tourism, culture, environment, technical maintenance work, social integration, etc.;
- Personnel of the regional or Mining Basin public authorities: engineers, town planners, heritage curators, communication specialists, etc.;
- Personnel in tourist bureaus: tourism experts, guides, etc.;
- Personnel employed in museums, parks and promotional centres: museographers, guides, lecturers, etc.;
- Hotel and restaurant staff;
- Private companies contracted for delegated management;
- Association personnel and volunteers.

The overarching Mining Basin Mission has 18 permanent staff.

The State Party also provides a table of regional training courses in culture, heritage and tourism.

Effectiveness of the current management

ICOMOS considers that the management of the serial property has involved considerable resources, but that up until now in the context of general public policies concerning areas and topics that largely exceed its geographic boundaries and heritage definition, while nonetheless having contributed decisively to its conservation. It is necessary, under the Management Plan, to analyse better the sums actually allocated to the property's conservation and management, and to provide a summary table of the current or future actions, with precise dates for their implementation. It is also necessary to rapidly carry out a detailed survey of the personnel working on the property's conservation and management and their qualifications, in order to draw up a policy for human resources and training requirements.

ICOMOS considers that the property's management system is overall adequate. However, its specific human and financial resources need to be clarified and confirmed. The official announcement of the *Conference* of Regional Authorities, as an overarching policy authority for the property's management and monitoring, needs to be confirmed. A summary of the current and future conservation actions and a schedule for their implementation are needed.

6 Monitoring

Work on the inventory of the components and objects enabled the creation of a detailed database that is appropriate for the property's heritage monitoring on the basis of the standard criteria applied under the regulations of the State Party's Ministry of Culture, notably through its Regional Department of Cultural Action. Specific indices have been defined for monitoring the slag heaps and renovating the habitat areas under contractual arrangements with the owner organizations. It will in particular include social monitoring of the property's conservation.

Since 2010, and following work on new indicators, global and systematic monitoring of the state of conservation of the main categories of attributes has been implemented. In particular, it includes:

- A landscape observatory in the form of an experimental programme with the Scarpe-Escaut Natural Regional Park in cooperation with the Nord and Pas-de-Calais departments' CAUE (Architecture, Urban planning and Environment Councils), within the context of the municipal PLU;
- An ecological and landscape inventory of the old railway lines in the Mining Basin.

The overall responsibility for monitoring lies with the public structure, the *Mining Basin Mission*.

The work on new indicators and monitoring the consequences of mining must be continued.

ICOMOS considers that the documentation needed for monitoring has been compiled and is functional. However, planning monitoring operations, at the level of the overall property, and implementing the new indicators announced are needed.

7 Conclusions

ICOMOS recognises the Outstanding Universal Value of the living and evolving cultural landscapes provided by the 109 components forming the serial property Nord-Pas de Calais Mining Basin, as well as its exceptional place in the social history and events which mark the mining industry.

Recommendations with respect to the inscription

ICOMOS recommends that the Nord-Pas de Calais Mining Basin, France, be inscribed on the World Heritage List as a cultural landscape on the basis of **criteria (ii)**, (iv) and (vi).

Recommended Statement of Outstanding Universal Value

Brief synthesis

The Nord-Pas de Calais Mining Basin corresponds to the French part of the northwest European coal seam. On a broad open plain, it extends some 120 km, through the two administrative departments of Nord and Pas-de-Calais. It presents a remarkable cultural landscape in terms of its continuity and homogeneity. It provides an important and well preserved example of coal mining and its associated urban planning throughout the two centuries of intensive coal extraction from the end of the 18th century to the last quarter of the 20th century, through industrial methods involving a great many workers. This succession of landscapes resulting from the virtually mono-industry of coal extraction includes: physical and geographic components (slag heaps, farmland, mining subsidence ponds and woods), a mining industrial heritage (pit heads, residual industrial buildings and headgear), vestiges of transport equipment, the so-called 'cavaliers', (canals, railways, conveyors), worker housing and characteristic urban planning (mining villages, garden cities, detached housing estates and tenement buildings), monumental and architectural components testifying to community life (churches, schools, managers' châteaux, company head offices, worker union premises, stations, town halls, hospitals and clinics, community halls and sports facilities), and finally places of remembrance and celebration of the Basin's history and its miners.

Criterion (ii): The Nord-Pas de Calais Mining Basin provides exceptional testimony to the exchange of ideas and influences regarding the extraction methods used for underground coal seams, the design of worker housing and urban planning, as well as the international human migration that accompanied the industrialization of Europe.

Criterion (iv): The living and evolving mining landscapes of the Nord-Pas de Calais Basin provide an eminent example of the large-scale development of coal mining in the 19th and 20th centuries, by large industrial companies and their considerable workforce. This is a space structured by urban planning, specific industrial structures and the physical vestiges of coal extraction (slag heaps and subsidence).

Criterion (vi): The social, technical and cultural events associated with the history of the Mining Basin had international repercussions. They are a unique and exceptional illustration of the danger of mine-working and of the history of its major disasters (Courrières). They are testimony to the evolution of the social and technical conditions of coal extraction. They represent a

major symbolic place of the workers' condition and their solidarity, from the 1850s to 1990. They are testimony to the dissemination of the ideals of worker unionism and socialism.

Integrity

The diversity and the number of components that make up the property, and the many additional aspects of its landscapes express a good level of technical, territorial, architectural and urban integrity. The integrity of the industrial testimony to coal extraction is, however, much weaker. This unequal integrity in the material testimonies nonetheless still enables a satisfactory expression of the property's economic and social values. In practice, the integrity can be satisfactorily read on three levels: the technical object or building, the intermediate level of the coal extraction pit, worker estate or local territory, and, lastly, the more expansive view of the landscapes and horizons that meet the visitor's eye.

Authenticity

The property's authenticity should be considered at the level of its 109 components and at the level of each of the associated landscapes. Owing to a rigorous selection of these components, the conditions of authenticity are generally good. However, they suffer from occasional gaps in the housing, that it would be a good idea to remedy, and potential threats to the landscape from economic development.

Management and protection requirements

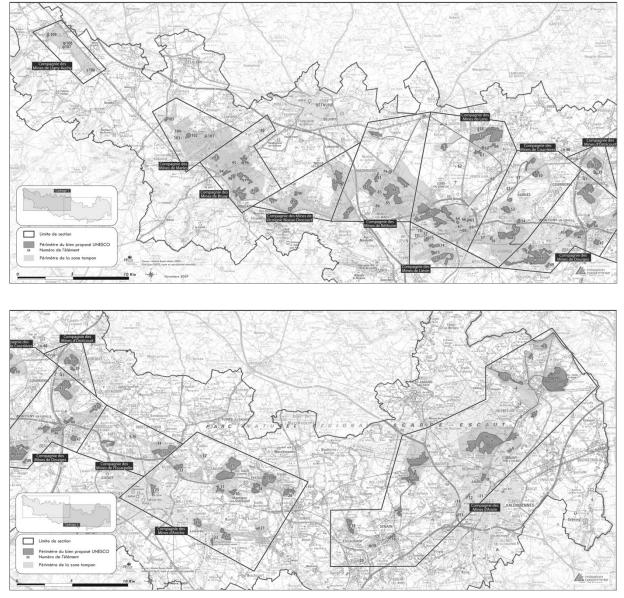
Within a complex legal, regulatory and regional arsenal, the Historic Monuments legislation forms a coherent body of legislation which, together with the protection of cultural landscapes, forms the core of the protection. This complexity does, however, have dual merit: none of the aspects of the protection is overlooked and it applies continuously to the property's components and to their buffer zones. All these provisions have been compiled in a *Unified Mining Basin Heritage Charter* that governs all the property's public and private partners.

The property, comprised of 109 sites, has an operational management system and an overarching technical organization, the *Mining Basin Mission*, which has produced an inventory and the high quality selection of the property's components and associated landscapes. However, the implementation of an overarching policy authority, the *Conference of Regional Authorities*, needs to be confirmed and institutionally established, and the human and financial resources allocated for the property's conservation and its landscapes to be sustained.

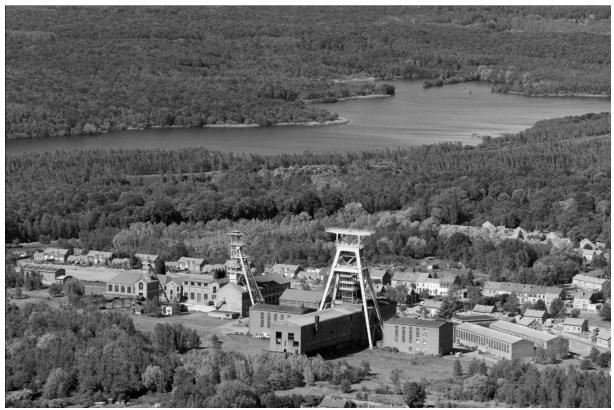
The *Management Plan* and the *Heritage Charter* attempt to assemble in a coherent ensemble the many regulatory texts, the many regional works provisions and the sector plans concerning the serial property's management and its conservation.

ICOMOS recommends that the State Party give consideration to the following:

- The ensemble of protection regulations grouped together in the Heritage Charter being very complex, it is necessary to write a version that is as comprehensible as possible for the stakeholders in the field to make it applicable;
- Including a summary programme of the conservation actions planned for the short and medium term for the entire serial property in the Management Plan, together with information about their financial consolidation and implementation schedule;
- Confirming the official publication of the Conference of regional Authorities as the overarching policy management authority and indicate its institutional and technical links with the Mining Basin Mission and the Mining Basin Association;
- Rapidly performing a detailed survey of the personnel working on the property's conservation and management and their qualifications, in order to draw up a policy for human resources and training requirements;
- Scheduling monitoring actions and implement the new indicators announced.



Maps showing the boundaries of the nominated properties



Anzin mining company - Arenberg pit in Wallers and subsidence pond



Marles mining company – Panoramic view of Auchel slag heap $n^\circ 14$ in Marles-les-Mines



Aniche mining company - Worker estates of Sainte-Marie, Lemay and Pecquencourt



General view of pit n°11-19 of the Lens mining company



Courrières mining company - Social housing of pit n°24 below slag heap 98 in Estevelles



Liévin coal-mining company – school of estate n°16 in Liévin