
Mining Sites of Wallonia (Belgium) No 1344rev

Official name as proposed by the State Party

The Major Mining Sites of Wallonia

Location

Communes of Boussu, La Louvière, Charleroi, Blegny
Provinces of Hainaut and Liège
Walloon Region
Belgium

Brief description

The Grand-Hornu, Bois-du-Luc, Bois du Cazier, and Blegny-Mine sites are the best preserved coal-mining sites in Belgium, dating from the early 19th century to the second half of the 20th century. They are testimony to surface and underground mining, the industrial architecture associated with the mines, worker housing, mining town planning, and the social and human values of their history, especially the Bois du Cazier disaster (1956).

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of four *groups of buildings*.

1 Identification

Included in the Tentative List

8 April 2008

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

29 January 2009

27 January 2011

Background

This is a deferred nomination (34 COM, Brasilia, 2010).

The World Heritage Committee adopted the following decision (Decision 34COM 8B.27):

The World Heritage Committee,

1. *Having examined Documents WHC-10/34.COM/8B and WHC-10/34.COM/INF.8B1,*
2. *Defers the examination of the nomination of the Major Mining Sites of Wallonia, Belgium, to the World Heritage List in order to allow the State Party to:*

- a) *Clarify the ownership situation of Blegny-Mine and contractualize responsibility for its management with the management company;*
 - b) *Review the buffer zone at Bois-du-Luc, in accordance with the principles already applied to the buffer zones for the three other sites;*
 - c) *Make in-depth protection of the property's components effective through systematic inclusion on the list of historic monuments and protected cultural sites in Wallonia. The protection must be coordinated between the various sites and it should achieve the highest level possible;*
 - d) *Formalize and promulgate a harmonized protection system for the buffer zones in direct relationship with the property's Outstanding Universal Value, and take into account the need to protect the surroundings of the property's components, especially through control of urban development;*
 - e) *Create a conservation plan for the entire property, defining its methodology and monitoring and specifying its managers and stakeholders. This plan should, in particular, take into account the restoration of the conditions of authenticity of the private houses on the Grand-Hornu estate;*
 - f) *Formalize and make effective, in accordance with Paragraph 114 of the Operational Guidelines, a consultation and management coordination structure between the various sites, operating on a regular basis, specifying its structure, the stakeholders, the scope of its authority, and its working methods. It will, in particular, be in charge of a coherent and homogeneous monitoring system yet to be defined;*
3. *Considers that any revised nomination requires an expert mission to the site;*
 4. *Recommends that the State Party:*
 - a) *Appoint without further delay the safety manager at Blegny-Mine;*
 - b) *Design and implement, as part of the Conservation Plan, a study and training programme for the long-term conservation of this technical and industrial property with its specific nature.*

The State Party submitted additional information on 27 January 2011, and the heritage listing orders and coloured maps of the sites in September 2011.

Consultations

ICOMOS consulted the TICCIH and several independent experts.

Literature consulted (selection)

Bergeron, L., *Les villages ouvriers comme éléments du patrimoine de l'industrie*, TICCIH, 2001.

Hughes, S., *The International Collieries Study*, a joint publication of ICOMOS and TICCIH, 2003.

Jaquet, P., et al., (éd.), *Le patrimoine industriel de Wallonie*, Liège, 1994.

Robert, Y., *Le complexe industriel du Grand-Hornu*, Scala, 2002.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 28 to 30 September 2011.

Additional information requested and received from the State Party

On 29 September 2009 the State Party was requested to provide additional information regarding the justification for the property's serial inscription, comparative analysis, and management. The State Party responded in a letter dated 16 November 2009 which included a three-page summary and various annexes.

ICOMOS requested additional information from the State Party in a letter dated 14 December 2011 to:

- confirm the extension of the buffer zone for Bois-du-Luc;
- confirm the implementation and operation of the Coordination Group and the four steering committees.

The State Party replied on 22 February 2012 providing additional information that is incorporated into the present assessment report.

Date of ICOMOS approval of this report

14 March 2012

2 The property

Description

The four sites forming the property are located in the same coal region, forming a strip 170 km long and 3-15 km wide which crosses the country from east to west. It is separated into two distinct geological basins: Hainaut in the west and Liège in the east. The former extends on the French side into the Nord-Pas-de-Calais Basin, while the latter extends on the German side towards Aachen.

The nominated property consists of three sites in Hainaut and one in the Liège region. Each includes between twelve and twenty-six registered elements of an architectural, industrial, or technical nature.

The Grand-Hornu colliery and workers' city

This ensemble has twelve main elements within a highly integrated industrial, urban, and architectural ensemble. It was designed in the 1810s by the founder of the colliery, Henri de Gorge, and the architect Bruno Renard. The central industrial section was developed between 1816 and 1832 and the surrounding workers' housing was completed during the first half of the 19th

century. The ensemble is an example of the utopian projects of the early industrial era in Europe.

The industrial buildings that form the core of the ensemble are arranged along an approximately east-west main axis, where they served the historic mining operations that closed in 1955. On the western side, a main building forms a monumental entrance with colonnade and pediment; it is flanked by stores and the lamp room. After passing through the two corner buildings with lanterns, this first ensemble extends towards the interior along two orthogonal side wings (stables to the north, stores to the south). The interior buildings are accessed from here. They are arranged around a main central courtyard in the form of an extended ring; they include the machinery construction workshops, now partly in ruins, the carpentry shop, and administration offices. This internal courtyard, flanked by a series of arcades, has in its centre a statue of the founder of the colliery, Henri de Gorge. To the east, along the main axis of the industrial buildings, is the crypt, where the founder and various managers of the colliery are buried.

The industrial ensemble is surrounded by the workers' city. This is concentrated on an ensemble of streets, trapezoidal in shape. Most of the housing was built at the same time as or shortly after the industrial buildings. The estate includes a total of 450 individual dwellings. They are in rows, originally built in lots by street, using standard plans with identical facades and each with a rear garden. The southern estate is directly linked to the industrial ensemble, with the manager's residence forming the southern annex.

The site with its buildings, closed over fifty years ago, today illustrates the architectural and social dimensions of the Walloon coal-mining heritage. It was designed as an 'ideal city' at the very beginning of the Industrial Revolution on the European Continent (1810-20).

A modern building was added in 1991 to the industrial buildings to house the Museum of Contemporary Arts of the French Community of Belgium (see Authenticity).

The Bois-du-Luc colliery and workers' city

This ensemble is divided into five geographic zones with distinct industrial, technical, and social uses, all with a direct link to the operation of the mine. They include 22 registered built elements or ensembles, the majority of which were erected between 1838 and 1909. The colliery is, however, one of the oldest in Europe, dating back to the end of the 17th century.

The south central part is arranged around the operation of the Saint Emmanuel pit, its two shafts and its service buildings in Neo-Classical style (foremen's room, lamp room, shower-bathrooms, etc.). The pit still retains many technical elements, in particular headgear, lift cages, and an 1842 winding gear. This industrial section also includes the first manager's residence and the more

recent electricity sub-station ensemble. When the mine was closed in 1973, many neighbouring industrial buildings were demolished: the coke plant, sorting and washing equipment, locomotive shed, etc. The western section is arranged in a U-shape around a vast square courtyard with its opening facing the industrial site. The buildings included an ensemble of workshops and colliery offices. Today they house an eco-museum and a mine museum. In the direction of the workers' estate, a large metal lift gate mounted on two towers and marks the boundary of the industrial site and the colliery workshops.

The southern and south-western part of the property directly extends the colliery operations with the enormous Saint Emmanuel slag heap.

The workers' estate forms the north central part of the nominated property. The Carrés (or Bosquetville) estate was built in 1838, based on a cross-shaped symmetrical street plan and a ring road. It defines four built ensembles, two of which are rectangular in shape and the other two trapezoidal. The two-storey facades are regular and homogeneous along all the streets. The street layout evokes the underground organization of the mine galleries. At the central intersection there are some larger buildings. One of these opens onto the café and a community hall for the mineworkers. The open interior areas were given over to workers' gardens. The Carrés Estate was refurbished in 1975, and again in 1994, to improve its level of hygiene and comfort. To the north-west, the workers' estate is extended by the long Rue du Bois-du-Luc and its 131 houses built in the 19th century. To the north it includes a school.

The north-eastern part of the property mainly comprises the Le Bois pit and its houses, the Saint Patrice slag heap and, forming a link with the Carrés Estate, Quinconces Park (1866). The latter has a monument to Sainte Barbe (Saint Barbara), the patron saint of miners, and a bandstand.

The northern part of the property, along the access road to the main mining site, includes a series of functional and social extensions to the colliery. The oldest building in this section is the hospice, built in 1861. It was extended with a hospital and the Church of Sainte Barbe at the beginning of the 20th century. It also has the second manager's and the engineer's residences, the laboratory, a hotel, employees' houses, and a school.

Bois-du-Luc illustrates the industrial, urban, and social dimension of the classic era of the Walloon coal-mining heritage. In particular, it contains many technical remains that are specific to the history of coal mining.

Le Bois du Cazier colliery

This colliery illustrates a mining operation originally dating from the 19th century, the current components of which date from the late 19th century and above all from the first half of the 20th century. The nominated property

contains 26 registered components. The history of this colliery is marked by the last major mining disaster in European history, which occurred in 1956 and cost 262 lives.

Located in the north of the nominated property, the industrial section is largely rectangular in shape, arranged around the Saint Charles and Foraky pits. The entrance, located at the north-east end, is through a gate, a grid, and the gatehouse with an inscription to the collective memory of the place where the families waited for news after the 1956 disaster. The monument to the victims stands immediately beyond this entrance.

To the east lie a series of functional buildings, forming an alignment that extends from the monumental brick pediment, made up of stores, offices, the changing room, shower-baths, lamp room and the large workshop.

At the centre of the industrial site, starting from the entrance, are to be found the carpentry shop and stables, a hut of the type reserved for immigrants, and the locomotive shed. Beyond that, the area is marked by two monumental pediments which indicate the start of the machine rooms. These are similar to those of the stores and mark the industrial space; they were built in the 1930s. The central hall housed the electricity generator, the blowing engine and the compressors; it is extended by the main staircase. The west hall housed the machines and the technical peripherals for the Saint Charles pit, the winding gear. The pit has two metal headgears which frame the coal delivery building.

To the south of the industrial zone, at the rear in relation to the entrance, stand the secured surviving remains of the Foraky pithead machinery, damaged by the 1956 disaster. Today they form an ensemble dedicated to the memory of this event (memorial space, bell, monument to the Italian workers, and remains of the pit).

These industrial buildings have been converted into a museum and cultural ensemble dedicated to industry in general and glass in particular, along with topics such as workplace safety, migration, etc.

This industrial ensemble is extended to the north-east of the property and in its centre by two slag heaps, No 1 and No 2, which, together with the industrial section, form an overall landscape that is characteristic of mining operations.

The central part of the property includes the Bois du Cazier cemetery. The southern section of the property corresponds with the large Bois du Cazier slag heap (No 3). It rises some 70m above the original ground level. Today, a path provides access to its peak where a landscape viewing point is installed.

The site was finally closed in 1967. It mainly illustrates the technical and social dimensions of mine working at the end of the 19th century and in the 20th century. It is especially notable as a place of remembrance for mining

disasters, and more generally the hard and dangerous nature of the miners' work. It includes numerous technical and industrial elements which provide a comprehensive understanding of the extractive mining system as it may have been in the first half of the 20th century.

The Blegny-Mine colliery

Blegny has been the site of coal-mining since the 18th century. However, it has been rebuilt several times, notably following its destruction during World War II. The nominated property includes thirteen registered elements, some of which are old, in the centre of an industrial mining structure that is typical of the mid-20th century. Coal mining was still active here in the early 1980s and the surface equipment has been conserved. The site was rapidly converted into a mining museum, including some shallow underground galleries that are open to visitors.

The south-west section of the property is arranged around the Marie pit, its metal headgear, and a series of surrounding buildings. These are the oldest elements at Blegny-Mine, dating back to the end of the 19th century. Converted into a mining museum, the site has in particular retained and restored: the blowing engines (first installation around 1927, extended with a second unit in 1970), the lamp room, four generations of compressors (early 20th century, 1923, 1950s, and 1970s), and the winding gear (1924). This section also includes the wash tanks and the coal slurry tanks (settling tanks).

The southern section is arranged around pit No 1 and its annexes. It is surmounted by a 45m concrete tower housing the winding gear, the two lift cages, and the control booth. This system, which provides access to the galleries, still operates as part of the museum and tourism programme.

The buildings surrounding pit No 1 form a continuous ensemble, including the shaft station, forge, and machine shops. It also includes the machine building for the screening and washing plant (1946). In its day, it was an innovative system and it is the only one of its kind to have been conserved in its entirety. This section also includes separate technical premises, including the laundry for the miners' work clothes, a small manual screen, carpentry shop, and timber store.

The western section forms the mine entrance from the access road. It includes the mine offices and administrative services (1924). The centre and north of the property comprises a double slag heap and its slag handling system. The peaks rise to 37m and 55m above the original ground level respectively.

Blegny-Mine illustrates the industrial and mining development of the collieries in Western Europe throughout the 20th century. It is one of the last pitheads to have operated in this region of the world. It retains

more or less intact its monumental technical components and a significant part of its galleries, as the site was rapidly converted into a mining museum. This ensemble forms a significant and explanatory overview of surface and underground mining techniques.

History and development

Coal, or hard coal, was probably used to operate the Roman hypocausts in Liège as far back as Antiquity. However, the first archival reports of its use date from the 12th and 13th centuries, making the Walloon seams among the earliest exploited in Europe.

Alongside traditional domestic uses, coal was used for industrial purposes very early on, in glass, brick, and lime kilns, dye works, breweries, etc. The first trials in steelmaking, in the Liège region, date back to the early 17th century. Its use and the organization of its extraction adopted an advanced capitalist form. In the mid-18th century coke was known in Liège and Charleroi, but its application to steelmaking was still some way off. The first steam-operated mine drainage machines also appeared at this time.

In the early 19th century French mining legislation and the adoption of British methods led to the rapid development of underground mining to produce coke for steelmaking, and later for the pioneering mechanical engineering industry in continental Europe. The Grand-Hornu site is an extremely good illustration of this founding period of modern mining. Belgium's independence in 1830 helped to spur on this growth and made the Walloon mining basin an exemplary centre of the Industrial Revolution outside England.

The second half of the 19th century largely saw these mines continue to grow, gradually benefiting from the progress made in the second era of industrialization, such as the use of compressed air for cutting, electrification of coal extraction, mechanized pumping and sorting, chemistry of coal by-products, etc.

At the turn of the 20th century the Walloon mines began to suffer from severe competition. Production continued all year round throughout the major events and economic changes, such as World War I and the Depression of the 1930s. Walloon coal mining managed to remain serviceable, but it was ageing and had to cope with seams that were increasingly difficult to exploit. Bois-du-Luc is testimony to this long period of maturity of the Walloon mining system. Deeply affected by the Second World War, it emerged in a diminished state from bombing during the conflict.

At the end of World War II, the Belgian Government decided to undertake a massive relaunch of coal production to underpin the country's reconstruction and industrial development. However, the low productivity of the Walloon mines led to the extensive recourse to immigrant labour, especially Italian. The Bois du Cazier mine is indicative of this period both for immigration and for the difficult mining conditions. This situation took a

dramatic turn with the 1956 mining disaster and its many victims.

In 1951 the European Coal and Steel Community (ECSC) was formed as a prelude to the construction of the new Europe. This was an opportunity to restructure the Walloon mines, but 1958 saw the beginning of a movement towards the progressive closure of the less profitable pits. Almost 20,000 mining jobs were lost in a very few years. The *Société anonyme des charbonnages du Borinage* was created in 1959 to bring under the one umbrella all the basin's mining assets, undertake their closure when they became non-viable, and relaunch production using more modern methods at the best of the mines.

A final push was made in the early 1970s to introduce modern techniques at the few remaining active mines that were still considered to be productive. Blegny-Mine in particular is indicative of this period. Confronted with competition from coal imported from Eastern Europe, Africa, etc., and delivered at low cost to North Sea ports, the last remaining Belgian pitheads closed in 1983-84. This trend went hand-in-hand with the general collapse of heavy industry in Wallonia in favour of 'port steelworks' that began in 1970. The final mining crisis expresses one of the most significant aspects of this deindustrialization process, in terms of landscape, town planning, and social history.

This deindustrialization process was also characterized by long periods of abandonment, notably at Le Grand-Hornu, between its early closure (1955) and the effective takeover by the public authorities just a dozen or so years later.

3 Outstanding Universal Value, integrity and authenticity

Comparative analysis

The State Party's comparative analysis is divided into two parts. In the first, it focuses on the *distinctive features* specific to each of the four sites nominated as serial components.

The apparent uniformity of the mining heritage in its main functional components should not ignore the geological conditions and the economic, historical, and social context specific to each component. There were several hundred collieries in the Walloon region; today, they have all been closed for over two decades. Much of the infrastructure has been completely swept away and reused for completely different purposes, and thus profoundly modified. Very few mining complexes have retained their quality as evidence of this past. Recognition of this industrial heritage has resulted in the listing of various components (slag heaps and technical and industrial components of the collieries) as sites or monuments, but the vast majority are incomplete. The four nominated sites are already included in this inventory; they are the only ones that still demonstrate sufficient integrity while also

meeting the conditions of authenticity. At the same time, they are the most significant in illustrating Wallonia's mining past.

One colliery, Cheratte, was finally not included despite its architectural qualities, because of its state of complete ruin.

The State Party presents an international comparative study. It briefly quotes the major mining sites already recognized in the World Heritage List. These are the British sites of the Industrial Revolution: Ironbridge Gorge (1986, criteria (i), (ii), (iv) and (vi)), Blaenavon Industrial Landscape (2000, criteria (iii) and (iv)), and Cornwall and West Devon Mining Landscape (2006, criteria (ii), (iii) and (iv)). The Belgian sites represent a broader historical period, from the rise of the industrialization phenomenon to the mid-20th century. They also highlight technology transfers in the mining sector.

The most comparable site, in terms of the industrial theme and period, is probably the Zollverein Coal Mine Industrial Complex in Essen, Germany (inscribed in 2001, criteria (ii) and (iii)), which ceased operations in 1986.

In the field of utopian cities connected with industry, the Royal Saltworks of Arc-et-Senans, France, is a central reference (1982, criteria (i), (ii) and (iv)), and to this should be added New Lanark in the United Kingdom (2001, criteria (ii), (iv) and (vi)).

Finally, the Walloon coal mining sites are located in close proximity to and enjoy significant geological, mining, and social affinities with the Nord-Pas-de-Calais mining basin in France (which will be examined by the 36th session of the World Heritage Committee). However, because of the different history and the nature of the heritage conserved, the Belgian analytical and descriptive approach differs from the French approach as an evolving cultural landscape. The immediate environment of the Walloon sites precludes such an overall landscape approach.

ICOMOS considers that, in its first section, the comparative analysis suitably justifies the selection of the components proposed for the serial inscription. Furthermore, on the basis of the State Party's response on 16 November 2009, ICOMOS considers that the series is now complete.

However, on the basis of the TICCIH-ICOMOS thematic studies (see Bibliography), ICOMOS considers that other European or foreign coal-mining sites might have been taken into account in the comparative analysis, even though they are not included in the World Heritage List: in the Saarland, the Ruhr, the United Kingdom, Poland, the United States, China, Japan, South Africa, etc. This gap in the comparative study concerns Blegny-Mine in particular. The same applies to industrial social utopias and 19th century industrial urban planning, with Crespi d'Adda, (Italy, 1995), the Guise Phalanstère (France), or even the Catalan industrial colonies (Spain) and the watchmaking

towns of La Chaux-de-Fonds and Le Locle (Switzerland, 2009), etc.

ICOMOS considers that the State Party's comparative analysis has been carried out at the national level for similar properties and at the international level the gap is largely filled by the ICOMOS-TICCIH thematic studies. The ensemble makes it possible to identify the specific values and comparative significance of the nominated property.

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

Justification of 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:

- The abundant presence of coal in the Walloon subsoil permitted the development of its extraction in ancient times for domestic and pre-industrial applications.
- The British example of the Industrial Revolution spread very early to the Walloon mining basin, resulting in the rise of heavy industry in the early 19th century. This was fostered by the region's traditional use of hard coal, the proximity of the British example, and the possibility of rapidly developing the transport of heavy materials by canal or rail.
- The four sites selected are testimony to the history of the Industrial Revolution in Europe, from its arrival on the Continent in the early 19th century, and then during the second era of industrialization, through to its decline in the second half of the 20th century. This history has many facets - technical, architectural, social, landscape, and urban.
- The property is testimony to the built utopias of the 18th century and their implementation in the 19th century within the context of the Walloon mines, for the industrial buildings and workers' housing.
- In the 20th century, through the large-scale recruitment of immigrant labour, the collieries were privileged places for intercultural exchange in the context of mining and industrial work.

The four sites of the serial nomination are complementary and exemplify Belgian mining history. The first two illustrate the birth and development of this type of industry in the 19th century, within an overarching architectural and social vision of the paternalistic type. The other two are testimony to the technical developments and utilitarian architectonic options of the early and mid-20th century. The ensemble therefore provides considerable analytical and typological consistency in coalmines during the various phases of contemporary industrial history.

ICOMOS considers that this justification is appropriate.

Integrity and authenticity

Integrity

The integrity of the mining, industrial and social testimony is not borne specifically or totally by any of the sites alone. This lack of individual completeness of the sites is a justification for the serial approach.

The historical dimension of the beginnings of the Industrial Revolution and its initial growth (1800-70) is above all present at Grand-Hornu and Bois-du-Luc. These two sites are remarkable testimony to the ambitions and utopian ideals of 19th century industrial architecture and town planning in Europe. The technical and industrial testimony for this period is weaker, but it is present at Bois-du-Luc.

Industrial organization at the height of European coal mining (from the end of the 19th to the first half of the 20th centuries) is clearly to be seen at the Bois du Cazier site. It also reflects the essential social values of the mining and industrial world at this period: immigration and the dangerous nature of the work, as evidenced by the 1956 disaster.

The technical dynamics of coal extraction and processing, as they were in the final phase of operations in the second half of the 20th century in Europe, are mainly present at Blegny-Mine. All the machinery and the access to the galleries at this site provide a complete perspective of this industrial and technical phase of human history. It forms an integrated operational ensemble.

The industrial mining landscape dimension of the sites is present in many places, notably the imposing slag heaps in Bois-du-Luc, Bois du Cazier, and Blegny-Mine. The landscape value is, however, of varying quality depending on the site, and is sharply limited by the surrounding environment, with which at times the coalmine has no direct rapport. The nomination dossier does not rate this element of the property's value highly, and so it is only a secondary dimension of its integrity.

ICOMOS considers that the elements of the series have been selected for the quality, value, and extent of the testimony they provide, each within its own frame of reference. Each expresses an original and complementary dimension of the value of the ensemble of the serial nominated property and each has the necessary components with sufficient integrity for a clear expression of this overall value.

Authenticity

Grand-Hornu: The industrial buildings are currently in a fairly good state of conservation, but in a form that was restored and reconstructed in the 1970s from an abandoned site in ruins. Some buildings however have retained this condition, notably the remains of the workshops, which are roofless but in their original masonry architectonic state. There are no technical or

industrial remains. While the architectural authenticity of the industrial ensemble is weak, it still expresses the atmosphere of an ideal industrial city of the early 19th century. It is possible in this case to refer to perceived authenticity.

The Museum of Contemporary Arts of the French Community of Belgium, which provides a new use for the industrial site, has installed a new building that blends closely with the existing heritage. The overriding architectural decision was to stress its differentiation while at the same time ensuring that the volumes and materials were compatible with its historical environment. It can be considered favourably since it does not adversely impact the authenticity of the place or its expression.

The state of the workers' houses poses a problem of authenticity. The houses were sold to private owners, starting in the 1950s, and work to modernize and maintain the facades has been carried out without there being any concerted conservation policy for the urban heritage. The State Party considers that these transformations are reversible. Extensive conservation-restoration work for the attributes of the authenticity is to be considered for this part of the property, notably following the decision 34COM 8B.27, point e, of the World Heritage Committee.

Bois-du-Luc: This is a very diversified ensemble providing industrial and urban structures, and architectural components that satisfactorily meet the conditions of authenticity. The later abandonment of mining than at Grand-Hornu (1973) occurred in a cultural and social context that was more aware of heritage conservation. The actions by the State were programmed and organized in consultation with the private and public owners. The exterior restorations were carried out with greater care and respect for authenticity. The adaptation of the houses to contemporary urban use may be considered successful, having been carried out under the aegis of a single owner with a social role. The eco-museum, which occupies a large part of the industrial site, and the mine museum contribute to the expression of the site's authenticity.

Bois du Cazier: The structure of the site and its industrial and mining buildings form an ensemble that bears witness to the heyday of mining in Wallonia from the end of the 19th century to World War II. It also testifies, perhaps even more strongly, to the social conditions and the dangers of mining operations. The memorial to the 1956 disaster and the industrial museum contribute to the expression of the authenticity of these testimonies. In terms of construction, only the three pediments and the two metal headgears provide visual elements of an authentic nature. The other aspects of the buildings on the site have been extensively modified, notably with a view to making this a memorial after the disaster and the closure of the site. The architectural and organizational contributions to the site carried out within this context are of an interpretive and functional nature, underpinning the

collective memory; from a morphological and architectural point of view they cannot be said to be authentic. The environment of the industrial site, comprising the slag heaps and the cemetery, contributes to a sense of the property's landscape authenticity. In short, the testimony of the workers' memory is absolutely authentic, and it is underlined by the landscape environment of the industrial site, but the site's architectural and structural components are much less so.

Blegny-Mine: The industrial site is an authentic expression of a mining facility of the final period of coal mining in Wallonia. Its physical dimensions and the comprehensive nature of its technical and industrial evidence emphasize this authenticity and allow an interpretation of the quality of the mine's technical and social conditions post-World War II. Still in operating condition, the technical and industrial process for extracting and preparing coal meets the conditions of authenticity.

ICOMOS considers that the authenticity of the components of the nominated serial property varies depending on the component considered and depending on the property's sites, but it nonetheless achieves a satisfactory level overall. The programme announced for the renovation and management of the Grand-Hornu workers' city will favourably restore the conditions of authenticity for this property once it has been implemented.

ICOMOS considers that the conditions of integrity and authenticity are satisfactory overall. Several gaps will be filled by implementing the projects announced for Grand-Hornu.

Criteria under which the property is proposed

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

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 Walloon coalmines are among the earliest in Europe. They played an exemplary role in mining, notably during the modern era. They represent a site where the innovations of the English Industrial Revolution were disseminated on the continent of Europe very early, as early as the 18th century. This role was extended and reinforced in the 19th century when the Walloon mining region in its turn became an exporter of mining technology and knowledge worldwide. As a global coal extraction system, the Belgian colliery model was widely disseminated and taught.

The Walloon mines are one of the oldest and most important places of cultural intermixing through the

participation of workers from other regions (Flemish in the 19th century), and then through immigration from various European regions in the 20th century (Italians, Czechs, Hungarians, Poles, Yugoslavs, Russian prisoners, etc.). The 1956 accident at Bois du Cazier symbolizes this mixing of cultures in the melting-pot of the mine: the victims were primarily Italian and Belgian, but ten other nationalities were also represented.

The Grand-Hornu and Bois-du-Luc sites reflect the influence of architectural and urban trends linked to the utopian view of the industrial and workers city that arose in the Age of Enlightenment.

ICOMOS considers that the four sites that make up the series nomination are testimony to considerable and exemplary technical, cultural and social exchange in Europe throughout the development and operation of coal mining.

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 the four sites of the Walloon coal-mining heritage form a microcosm of the Industrial Revolution from the technological and social points of view.

At the technological level, the property is testimony of the three successive technical systems associated with the Industrial Revolution: its initial development, through to around 1860, based on coal, steam, and iron; then the changes wrought by the second era of industrialization, electricity and chemistry in particular; and finally, from the 1960s, the final efforts at mechanization in the face of the inevitable deindustrialization of Western Europe (Blegny-Mine).

On a social level, the Belgian coalmines illustrate, in the opinion even of Karl Marx, all the constituent elements of industrial capitalism: the switch from family capitalism to the proprietary limited company, the creation of a working class entirely identified with its means of production and shared values, and the development of idealistic and utilitarian paternalistic management. The Grand-Hornu and Bois-du-Luc city-factories provide two complete examples from the 19th century.

ICOMOS considers that the ensemble of the four sites that form the property provide a prominent and complete example of the industrial mining world in continental Europe at the various stages of the Industrial Revolution. It provides significant testimony of its industrial and technological components, its urban and architectural choices, and its social values. It also provides a significant overview of mining landscapes of this period.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that the serial approach is justified by the selection of relevant and complementary sites.

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

Description of the attributes of Outstanding Universal Value

The four sites of the nominated property are complementary and exemplify Belgian and European mining history. They provide four testimonies of the various technical, architectural and social forms of coal mining throughout this history.

- First, as a mining project in terms of the organization and construction of the industrial site, in the various periods of the Industrial Revolution taken as a long-term process. More specifically, its beginnings and its first peak (Grand-Hornu and Bois-du-Luc), its functional utilitarianism in the second era of industrialization (Bois du Cazier), and its late reconstruction and final productive intensification in the phase of decline (Blegny-Mine).
- The property is testimony to the utopias of the industrial city within the context of coal mining, notably in the form of the ideal city of Grand-Hornu organized around an industrial site with strong architectural significance, and the very complete industrial and social ensemble of Bois-du-Luc, illustrating the Christian paternalism of family-owned companies in the 19th century.
- The property is testimony to the technical systems used to extract coal, particularly the old machines at Bois-du-Luc and the technological ensemble at Blegny-Mine. The latter, by virtue of its completeness, both above and below ground, and its state of conservation permit a satisfactory interpretation of the coal production process.
- The interculturalism and workers' values coupled with immigration are clearly present in Bois-du-Cazier, because of the 1956 disaster and the presence of the memorial.
- The presence of the mining landscape with the slag heaps provides additional understanding at three of the sites: Bois-du-Luc, Bois du Cazier, and Blegny-Mine. They complete and reinforce the attributes of the Outstanding Universal Value listed above.

4 Factors affecting the property

Development pressures

In general, there are few risks linked with uncontrolled urban or industrial economic development. All the sites are listed, thereby guaranteeing that special attention will be paid to any potentially threatening planned activities. Additionally, industrial activity has ceased and its

resumption is improbable given the investment that would be required

The industrial sites all have a cultural or social function today, and the current infrastructure meets the needs of these changes in use. All have been recently restored. There is little space left for new construction in the buffer zones with their dense built urban environments (Grand-Hornu, Bois-du-Luc and Bois du Cazier). Blegny-Mine is surrounded by an essentially agricultural area.

ICOMOS considers that there is potential for property pressures from the renewal of the existing built environment within the urban buffer zones and recommends that attention mainly be paid to changes to the existing building stock and restoration.

Tourism pressures

Through their roles as cultural, memorial, or museum centres, the industrial sites already receive many visitors. This does not pose any problems, since the sites have all been stabilized and restored; the risk of accidents is limited. Furthermore, the surface areas concerned, the volumes of the buildings, and the decisions made when they were converted allow for the reception and movement of a large number of visitors. At present, none of the sites has reached its maximum capacity and significant increases are not an issue at any of them.

Environmental pressures

There are few, if any, environmental pressures. On the contrary, it could be said that the cessation of operations on the sites has resulted in an improvement in the air quality with a reduction in dust and smoke.

The colonization of the slag heaps by wild or planted shrub vegetation is helping to stabilize these artificial hills, which are in places very high and steep. This provides a natural means of preventing the risk of landslides or collapses.

Natural disasters

Belgium is not on any fault line. The earthquakes are of low amplitude and are not noticed by the inhabitants. However, there is a risk of the shoring of the mine galleries being weakened in the event of an earthquake.

With respect to mine risks, the safety precautions demanded by the mine administrative authorities precludes any risk of gas emanations and consequent accidents. The situation of Blegny-Mine is special, as it is possible to visit one of the old galleries.

Impact of climate change

The effects of climate change are at present indiscernible. Events such as tornadoes or exceptional storms, possibly linked with climate change, have so far not affected the property.

ICOMOS considers that the threats to the property itself are low. On the other hand, pressure from renewal of the existing urban building stock could eventually occur in the urban buffer zones.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The components of the property and their buffer zones are:

- Grand-Hornu: The property has a surface area of 15.86ha; 859 people live within its boundaries. The buffer zone has a surface area of 47.81ha, and 387 people live within it.
- Bois-du-Luc: The property has a surface area of 62.55ha; 622 people live within its boundaries; the buffer zone has been extended in accordance with the decision 34COM 8B.27, point b of the World Heritage Committee, under a regional decision in August 2011, surface area is 100.21ha.
- Bois du Cazier: The property has a surface area of 26.88ha; there are no residents within its boundaries. The buffer zone has a surface area of 104.06ha, and 1,049 people live within it.
- Blegny-Mine: The property has a surface area of 12.78ha; there are no residents within its boundaries. The buffer zone has a surface area of 92.62ha, and 158 people live within it.

ICOMOS considers that the boundaries of the four sites and of their buffer zones are adequate.

Ownership

In general, the industrial parts of the sites were acquired by the regional or local authorities following the closure of the mines. The management of the industrial sites was then transferred to cultural, tourism, or social associations under long-term leases.

There are two types of ownership in the inhabited zones: semi-public entities in charge of public housing acting as the lease owner of the housing (the Carrés Estate in Bois-du-Luc) and private owner-occupiers (the workers' houses in Grand-Hornu).

The main public and semi-public owners are:

- Grand-Hornu: Hainaut Province (site), Boussu Commune (landscaped areas).
- Bois-du-Luc: Walloon Region (site), Centr'habitat public housing association (estate), Louvière public social assistance centre (hospital), Louvière City (hospice, schools and park), Le Doyenné (church and schools).
- Bois du Cazier: Walloon Region General Commissariat for Tourism (site), Charleroi Commune (cemetery).

- Blegny-Mine: The World Heritage Committee requested clarification of the situation for this site (34.COM 8B.27, point a). The difficulty in establishing ownership and right of use for this site was in particular related to the State Party's right over the underground parts, because of the cessation of the industrial mining operations but not to the use of certain galleries for tourism activities. This question is currently being settled as follows:
 - Upon liquidation of the operating company, SA Charbonnages d'Argenteau, the mining site's property ownership reverted to the Province of Liège. The latter then ceded the usage rights to the Walloon Region which then contracted it to the management association "Domaine touristique de Blégny-Mine" (2010).
 - However, the underground mine remains under the mining concession held by SA Charbonnages d'Argenteau until June 2012. On this date, the Walloon Region intends to take over the concession; the transfer deed is currently being prepared. During the transition period, the situation of usage and responsibility for the underground mine for tourism purposes depends on the agreement (not provided to us) between the mining company and the *de facto* management association for the site and its underground parts; in the event of an accident a complex legal situation may ensue.
 - The Blegny-Mine Association owns the documentation centre and the rolling stock; it has also become the contractual manager of the site under a management agreement with the Province of Liège (General Commissariat for Tourism) effective from 1 January 2010.

ICOMOS considers that the situation of ownership of Blegny-Mine has been clarified and that the complex situation will be settled after enactment of the deed of transfer for the long-term lease of the underground mine to the Walloon Region.

Protection

Legal protection

The listing as a historic monument of the Walloon Region is recognition of the heritage value of a property, but also a public commitment to take the necessary measures for this property's protection and conservation. This commitment takes several forms: regulatory, organisation of the consultation procedure, financial consolidation by the Walloon Heritage Department and legal action if needed. Two other levels of protection also exist. Recognition of *protected heritage status* is reserved for the sites and ensembles. This is a lighter and more flexible restriction than listing. There is also a higher level of classification, *Exceptional Heritage* of the Walloon Region. At times, municipal orders and plans can strengthen and extend the regional level of protection.

The World Heritage Committee recommended more extensive and more systematic protection of the property's more significant components (Decision 34.COM 8B.27, point c); it also requested a standardized protection system for the buffer zones (Decision 34.COM 8B.27, point d).

At Grand-Hornu, the industrial site, buildings, and interior courtyards are listed as historic monuments (1993), as are the worker's city and the manager's residence (August 2011).

In Bois-du-Luc the majority of the industrial and social buildings and the workers' housing is listed as a historic monument (1996). They have been covered by the higher level of Exceptional Heritage of the Walloon Region since 2006. The employees' houses, engineer's and second director's residences, hotel, workers' houses outside the Bosquetville Estate, and the Saint Patrice and Saint Emmanuel slag heaps were listed in August 2011.

Since 1990 the Bois du Cazier industrial site has been covered by Walloon Protected Heritage status. The non-listed industrial sections, the historical components of the communal grave and the Italian monument were listed as historic monuments in August 2011.

The Blegny-Mine mining site was listed as a historic monument in August 2011. In particular, this listing covers: the Marie pit buildings, its internal equipment, external coal slurry tanks; pit No 1, its tower and industrial facilities, its lift and part of the galleries; the slag heap building and machinery; a series of technical buildings (laundry, sorting yard, carpentry shop, forge entrance, weigh scales, etc.); and the site entrance. Blegny-Mine's buffer zone was promulgated by Regional Decree in August 2011.

ICOMOS considers that the progress made since 2009 in extending the protection of the components that make up the four sites complies with the recommendations of the World Heritage Committee and that this protection is now adequate.

Protection of the buffer zones is provided, at a general level common to the four sites, by the CWATUPE (Walloon Code for Regional Development, Urban Planning, Heritage and Energy) which defines the protection zones for listed monuments and sites, and also stipulates the general terms for their protection. Urban planning permits can only be issued after compliance has been granted by the *Royal Commission for Monuments, Sites and Archaeological Excavations*. The serial property's four buffer zones have officially been placed under this regulation by a regional deed dated 22 August 2011.

The sector plans, specific to each site's commune, records the local town planning situations. The first three sites are located in zones with long-standing industrial and urban occupancy, the fourth, Blegny-Mine, is in a

rural zone; most of its buffer zone is given over to farming and only a small fraction is allocated to rural housing.

ICOMOS considers that control of the buffer zones is adequate under the provisions of the Development Plan (CWATUPE) as they refer to the environment of listed monuments and sites, and their application to the four buffer zones of the serial nomination, under the Regional Deed of 22 August 2011. ICOMOS recommends that landscape impact studies be carried out prior to any urban or industrial conversion projects at the first three sites to determine how they affect the property's visual values.

Traditional protection

The traditional protection concerns the involvement of the residents or the neighbouring population regarding the components of the property. It is expressed in the form of a living working-class culture and an on-going very strong commemoration of the mine victims in Bois du Cazier, a living memorial to the Walloon and immigrant miners. It is also expressed by the attitude of the inhabitants of the worker estates towards their homes.

Effectiveness of the protection measures

Given that the components expressing the property's value have been listed as monuments or sites, ICOMOS considers that the protection measures are adequate and that they should be effective. The same applies to the buffer zones under the protection of the Development Plan (CWATUPE).

ICOMOS considers that the legal protection in place is adequate.

Conservation

Inventories, archives, research

There is a series of sector inventories of historic monuments in the Heritage Department of the Walloon Region. This is completed by recent studies used to inform the extension of listings to include various components of the property (2009-2011).

Each of the sites has its own archives, at times very extensive, regarding its history; they are generally stored in documentation centres open to researchers (Blegny-Mine and Bois du Cazier). There are also numerous historical, regional and tourism studies made by various institutions, especially Liège University. The latter assisted with the creation at Blegny-Mine of the mining industry archive and documentation centre (CLADIC). More generally, the documentation services and public libraries, both at the site museums and in city and university institutions in Belgium, have extensive documentation dealing with the various architectural, urban, social and industrial aspects associated with the sites and the history of coal mines in Belgium and Europe.

Present state of conservation

Aside from the Grand-Hornu workers' houses, with their extensively modified facades, the state of conservation of the property's various components is generally good. It is monitored by the cultural, tourism and museographic associations in charge of the majority of the industrial sites, through semi-public structures for the other components of the property, the dwellings in particular.

Nonetheless, this generally favourable state of affairs seems to reflect widely varying local dynamics, specific to each site, and limited involvement by the regional services responsible for regional heritage conservation, which alone are in a position to ensure a homogeneous approach to these issues.

Active conservation measures

The authority responsible for conservation and restoration is the Heritage Department of the Walloon Region. In practice, for the public and semi-public sites, the conservation work is mainly provided by the owner bodies in consultation with the other local and regional authorities concerned, generally under multi-year plans. They are supported by specialist associations: Wallonia-Brussels Industrial Heritage, Museums and Society in Wallonia (an industrial, scientific and technical heritage group), and Walloon Archives.

Following the decision 34.COM 8B.27, point e, by the World Heritage Committee, a foundation for the restoration of the 160 façades of the Grand-Hornu workers' city is now being set up by the partners in the site's management. It includes a programme for the ensemble together with technical and financial aid for the individual owners.

The studies for writing a general plan for the conservation of the industrial facilities at Blegny-Mine were started in 2011, under the responsibility of the new director of conservation and risks.

ICOMOS considers that the various sites have developed or improved their local conservation plan since the initial nomination in 2009. It would nonetheless be advantageous to harmonize these plans and incorporate them into an overarching conservation plan for the four sites in order to target the full expression of the serial property's Outstanding Universal Value.

Maintenance

General maintenance measures are largely handled by the sites' managing associations and institutions.

Maintenance of the technical and industrial components still in operation at Blegny-Mine is financially covered by the contract between the Walloon Region and the site's Management Association.

Effectiveness of the conservation measures

ICOMOS considers that the effectiveness of the conservation measures has been improved by the measures taken, notably the renovation project for the Grand-Hornu workers' city and the draft maintenance and conservation plan for the technical facilities at Blegny-Mine.

Nonetheless, the creation of an overarching conservation plan, as recommended by the World Heritage Committee (34COM 8B.27, point e), could be based on grouping together the existing or draft conservation plans, providing they are written using a shared format prepared by the scientific authorities in charge of supervising the serial property. This would make it possible to harmonize the policies at each site and to handle conservation projects in a more homogeneous manner.

Local trends and issues remain: at Grand-Hornu, the policy for restoration assistance for the workers' city needs to be implemented; in Bois du Cazier, the conservation policy seems to be dominated by memorial and social aspects to the detriment of the site's other material components; and at Blegny-Mine, maintenance of the technical facilities requires significant long-term attention, etc.

Greater involvement by the Coordination Group and the Regional Heritage Department in the scientific entities and in the supervision of the overarching conservation is required.

ICOMOS considers that conservation policies exist and are being developed for each of the sites, albeit independently. By creating conservation plans for each site using a shared format, it would be possible to harmonize the individual policies leading to conservation projects being handled in a more homogeneous way. The Coordination Group and the Regional Heritage Department must become more involved in the scientific entities and in supervising the conservation of the four sites.

Management

Management structures and processes, including traditional management processes

The management of the industrial sites largely takes the form of a delegation of contractual activities of a cultural, social, or museographic nature by public or semi-public owners to specialist associations or professional public entities. As a general rule, a lease and a contract govern the relationships between the owner and the manager:

- At *Grand-Hornu*, the manager is the Walloon French Community and the Museum of Contemporary Arts.
- At *Bois-du-Luc*, the sections of the industrial site open to the public are entrusted to the Ecomuseum and the GABOS cultural activity group. They receive

financial assistance from various regional and local authorities.

- At *Bois du Cazier*, the overarching management is entrusted to the 'Bois du Cazier' association, which benefits from the financial support of the General Commissariat for Tourism, the Charleroi Community, and the Belgian French Community. Its activities are shared by the site's overall management, the memorial, and the glass museum.
- At Blegny-Mine, the legal situation of the management association "Domaine touristique de Blegny-Mine" has been clarified since 2009 and its relations with the regional and provincial public governing authorities have been strengthened.

A series of public, semi-public, and individual owners manage the other buildings used for community purposes or for housing.

There was no clearly established overarching management framework in the initial nomination dossier and the World Heritage Committee pointed out this gap (34COM 8B.27, point f). The additional dossier itself indicated that "to develop a long-term shared and coordinated approach was innovative" for the managers of the four sites. It is the Walloon Heritage Department that has brought them together relatively regularly since 2009, notably to write the additional dossier. This has led to:

- as a first step, the implementation of a provisional working group which was recently converted (22 September 2011) into a permanent *overarching Coordination Group*; its composition has been made official and it has met on several occasions;
- a "joint declaration" signed by the four site managers in 2009, committing them in general terms to complying with the values of their sites and to consulting with each other;
- each site having a steering committee involving a management committee and a scientific committee;
- a draft management plan that is compiled and implemented under the authority of the Coordination Group; preliminary work has recently been started, following the creation of the Coordination Group

ICOMOS is pleased to note the recent implementation of a federal management structure, the *overarching Coordination Group*, in accordance with the decision 34COM 8B.27, point f) of the World Heritage Committee; it must accompany and coordinate the property's four steering committees.

On the other hand, ICOMOS notes that the division into four independent site scientific committees seems to be prejudicial to the expression of the property's Outstanding Universal Value, which is not fully borne by any of the sites but by the ensemble of the four. A single scientific committee, grouping together all the various entities already planned at each site, and working with the Coordination Group, is essential. It would be able to prepare the shared conservation and management formats; it would be able to deliver opinions about the

conservation of the series as a whole and to coordinate its supervision.

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

The shared reference framework for the territorial management of each site is provided by the “sector plans” governed by the Town Planning Code (see protection). These ensure control over land zoning and they govern building permits.

The January 2011 complementary documentation provides the following points relative to the operation of the Working Group common to all the sites, which is a forerunner to the Coordination Group:

- an “action programme” common to the four sites for 2010 and one for 2011. However, they are very schematic, merely providing chapter headings dealing with cultural, tourism and social aspects; the effective actions are an initial merger of the communication policies and the organization of a joint study day;
- the announcement of a management plan.

ICOMOS takes note of a federal management system and the difficulties the sites have in working together. Rather than compile a joint management plan, it would seem more useful to define a detailed management plan for each of the sites based on, if possible, a shared format that would be defined by the *Coordination Group* and the *Regional Heritage Department*, and to include the conservation plans already mentioned together with the confirmed elements of the joint annual action plans.

Risk preparedness

Risk management primarily relates to the safety of the old mines and the public's admission. The former is governed by the Belgian Mines Code, the most recent version of which dates from 1998. A manager has been appointed and appropriate inspections are made regularly.

The only site where there is frequent inspection of its facilities is Blegny-Mine, in terms of its industrial safety and the admission of the public, since much of it is still operational. The lift cages and cables undergo daily visual inspection; other regulatory inspections are performed at this site at frequencies ranging from weekly to yearly. They are carried out by qualified personnel from approved agencies. There are specific electricity safety measures for the underground facilities, with a local emergency generator. The absence of firedamp and dioxygen (O₂) levels are checked continuously. If a first threshold is reached, the ventilation systems are automatically started up. Other alert levels and automatic safety procedures are in place. Blegny-Mine is classified as a ‘non-firedamp mine,’ *i.e.*, one which presents a low and stable potential mine risk. An

engineer was hired in December 2010 to oversee safety at Blegny-Mine.

The pits at the other sites are under passive supervision, as all have been closed. The risks involved in admitting the public to the old mine buildings are of the same order and subject to the same safety and health rules as all other similar premises open to the public. They have been secured and have automatic fire warning systems. Some premises considered more liable to theft or break-ins are protected by alarms and surveillance systems.

Involvement of the local communities

The municipalities are involved in the management and development programmes at each of the sites, as well as in consolidating the property's finances for conservation. The site management associations and local cultural associations provide significant opportunities for the local population, especially former miners and their families, to engage in the life of each of the sites. The latter attend the Bois du Cazier memorial events and are in charge of much of the current operation of the Blegny-Mine facilities.

Resources, including staffing levels, expertise and training

Numerous staff, specializing in the relevant activities, are in place at the various sites that make up the serial property. In most cases they are employed by the associations and companies in charge of management and the cultural and museographic activities at the sites:

- At Grand-Hornu, around one hundred people, some of whom work part-time.
- At Bois-du-Luc, around fifteen people are employed by the two museographic associations.
- At Bois du Cazier, the management association employs a staff of 28 people; ten Charleroi municipal employees are also seconded on site.
- At Blegny-Mine, 76 people are present under various contractual arrangements. The tasks involve running the site for visitors, as well as three maintenance teams.

ICOMOS notes that no information is provided about the staff in charge of the conservation of the properties.

Effectiveness of the current management

The effectiveness of the tourism and cultural management at each site, considered as an autonomous entity, appears satisfactory. It is in most cases provided by a large number of staff, although no mention is made of their skill levels. These teams are also in charge of general maintenance of the public areas and, at Blegny-Mine, they are also tasked with the technical operation of the mining site.

In the final analysis, this is a relatively loose federal-type property management system, with each site having its own management structure. It is therefore essential to

strengthen the coordination and harmonization aspects between the sites, in particular to express fully the Outstanding Universal Value which is not borne individually by any one of the sites, but by the serial ensemble. The approaches to adopt in order to achieve this involve the effective operation of a common overarching entity, the merger of the sites' scientific committees, individual site management plans written on the basis of a common format and the harmonization of conservation plans.

ICOMOS considers that the management system of the property is adequate at least with regard to cultural and museographic management at each of the sites, as well as for technical operation and general maintenance; but it should be reinforced by the merger of the site scientific committees and individual site management plans written on the basis of a common format.

6 Monitoring

The original nomination dossier explicitly indicates that there are no specific indicators to measure the property's state of conservation (p. 75). However, 'health status files' were developed for each building to coincide with the compilation of the nomination dossier. In theory, these are to be updated every five years. The files produced are annexed to the documents for each site. In practical terms, they are photographs of the building façades with qualitative statements ranging from 'very good' to 'very poor'. The 'work/urgency' section is generally not documented.

ICOMOS considers that monitoring is technically in place at the level of the individual public and private buildings that form the property, but that no overall monitoring has been defined to date in terms either of its indicators or of a common framework and of the exercise of responsibility for the monitoring.

7 Conclusions

ICOMOS recognizes the Outstanding Universal Value of the Major Mining Sites of Wallonia (Belgium), comprised of the former Grand-Hornu, Bois-du-Luc, Bois du Cazier, and Blegny-Mine collieries. The series is fully justified. ICOMOS also notes the efforts made by the State Party to satisfactorily respond to the recommendations of the decision 34COM 8B.27 of the World Heritage Committee; however, all these efforts are very recent with regard to certain points (e and f notably) and it requires additional efforts, such as the establishment of an overarching scientific committee for the four sites and the writing of a harmonised conservation plan using a common format.

Recommendations with respect to inscription

ICOMOS recommends that the Major Mining Sites of Wallonia, Belgium, be inscribed on the World Heritage List on the basis of **criteria (ii) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

The Grand-Hornu, Bois-du-Luc, Bois du Cazier and Blegny-Mine sites represent the best preserved places of coal mining in Belgium, from the early 19th to the second half of the 20th centuries. The Walloon Coal Basin is one of the oldest, and most emblematic of the industrial revolution, on the European continent. The four sites include numerous technical and industrial remains, relating to both the surface and the underground coal mining industry, the industrial architecture associated with the mines, worker housing, mining town urban planning and the social and human values associated with their history, in particular the memory of the Bois du Cazier disaster (1956).

Criterion (ii): Among the earliest and largest in Europe, the four Walloon coalmines are testimony to the early dissemination of the technical, social and urban innovations of the industrial revolution. They then played a major exemplary role on the technical and social levels through to recent times. Finally, they are one of the most important sites of interculturalism arising out of mass industry through the participation of workers from other regions of Belgium, Europe and later Africa.

Criterion (iv): The ensemble of the four Walloon mining sites provides an eminent and complete example of the world of industrial mining in continental Europe, at various stages of the industrial revolution. It bears significant testimony to its industrial and technological components, its urban and architectural choices, and its social values, especially following the Bois-du-Cazier disaster (1956).

Integrity

The series' components have been selected for the quality, diversity and wealth of the testimonies they provide. Each expresses an original and complementary dimension of the serial property's overall value, and each has the necessary components demonstrating sufficient integrity for an intelligible expression of this overall value.

Authenticity

The authenticity of the individual components of the serial property varies somewhat depending on the component considered and depending on all the property's sites, but it achieves a satisfactory level overall. The programmes announced for the renovation of certain components, such as the Grand-Hornu workers' city, should favourably restore the conditions of authenticity for this property. Nonetheless, an

overarching conservation plan would be welcomed to ensure the authenticity of this serial property is lastingly maintained.

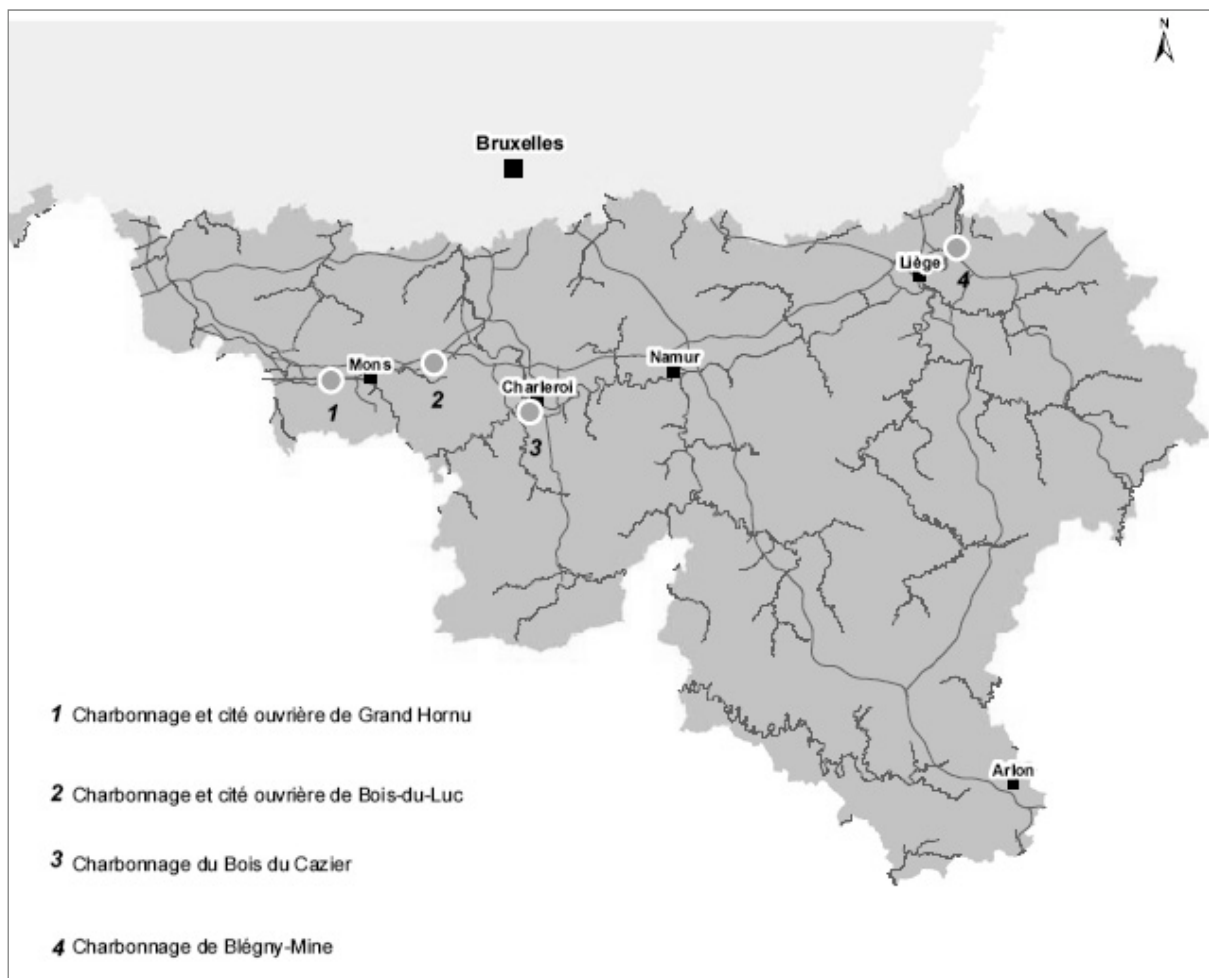
Management and protection requirements

Overall, the protection measures for the sites are adequate. Guarantees have been provided for the sound management of the urban and rural buffer zones through local town planning or sector plans, implementing the general provisions of the Development Code for the environment of the listed monuments and sites.

Starting from the addition of sites with separate management and conservation systems, the serial property has recently acquired a permanent overarching body that is operating effectively: the overarching Coordination Group. The scientific capacities of this group must be strengthened and the programmes and actions coordinated to achieve a level of management and conservation compliant with that of a property with recognised Outstanding Universal Value.

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

- Strengthening the scientific capacity of the overarching Coordination Group by merging the four site scientific committees or at least establishing closer cooperation between them;
- Strengthening the presence and the professional involvement of the Regional Heritage Department in the property's overarching management bodies;
- Writing conservation management plans for each of the sites based on a common format prepared by the Coordination Group and by its associated scientific and professional bodies, and produce an overarching conservation plan;
- Carrying out, for the urban or industrial conversion projects in the buffer zones, landscape impact studies insofar as the property's visual values are concerned;
- Confirming the financial capacity of the Grand-Hornu Foundation for the restoration of the worker city's conditions of authenticity;
- Forwarding to the World Heritage Centre the deed of transfer to the Walloon Region of the long-term lease for the underground mine at the Blegny-Mine site once it has been enacted.



Map showing the location of the nominated properties



Grand-Hornu



Bois-du-Luc



Bois du Cazier



Blegny-Mine