
The Architectural Work of Le Corbusier (France, Argentina, Belgium, Germany, India, Japan, Switzerland) No 1321 rev

Official name as proposed by the States Parties

The Architectural Work of Le Corbusier
An Outstanding Contribution to the Modern Movement.

Location

Argentina

La Plata, Province of Buenos Aires

Belgium

Antwerp, Flanders

France

Paris, Île-de-France

Poissy, Île-de-France

Boulogne-Billancourt, Île-de-France

Pessac, Aquitaine

Marseille, Provence-Alpes-Côte d'Azur

Roquebrune-Cap-Martin, Provence-Alpes-Côte d'Azur

Saint-Dié-des-Vosges, Lorraine

Ronchamp, Franche-Comté

Éveux, Rhône-Alpes

Firminy, Rhône-Alpes

Germany

Stuttgart, Baden-Württemberg

India

Chandigarh, Punjab

Japan

Taito-Ku, Tokyo

Switzerland

Corseaux, Vaud

Geneva, Geneva

Brief description

The Architectural Work of Le Corbusier is a transnational serial property, consisting of seventeen sites, chosen because together they represent an outstanding response to some of the fundamental issues of architecture and society in the 20th century. They were implemented over a period of half a century, in the course of what Le Corbusier himself described as "patient research".

Chosen from the work of Le Corbusier that survives in eleven countries on four continents, the sites in seven countries on three continents, are said to attest to, for the first time in the history of architecture, the

internationalization of architectural practice across the entire planet.

The component sites are all innovative in the way they reflect new concepts, all had a significant influence over wide geographical areas, and together they are seen to have disseminated ideas of the Modern Movement throughout the world.

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 9 *monuments* and 8 *sites*.

1 Basic data

Included in the Tentative List

Argentina: 1 June 2007

Belgium: 4 April 2005

France: 31 January 2006

Germany: 1 February 2007

India: 23 October 2006

Japan: 14 September 2007

Switzerland: 28 December 2004

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

27 January 2015

Background

This is the third nomination to be presented for a transnational series of the work of Le Corbusier.

The first nomination, submitted in 2008, entitled *The Architectural and Urban Work of Le Corbusier*, presented twenty-two sites under seven themes.

The World Heritage Committee in Decision: 33 COM 8B.19 (Seville, 2009) referred this first nomination back to the States Parties in order to allow them to:

- Strengthen the justification of the Outstanding Universal Value to demonstrate the influence of the works of Le Corbusier on the architecture of the 20th century and the Modern movement.

A second nomination, submitted in 2010, was entitled *The architectural work of Le Corbusier: an exceptional contribution to the Modern Movement*. In this nomination, nineteen component sites were set out chronologically.

The World Heritage Committee, in decision 35 COM 8B.40 (Paris 2011), deferred this second nomination to allow the States Parties to:

- Meet the objections stated with regard to this proposal, including the development, through a constructive dialogue with the World Heritage Centre in conjunction with the Advisory Bodies, of a common notion of Outstanding Universal Value of the site.

Between 2011 and 2013, ICOMOS, with representatives of the International Scientific Committee on 20th Century Heritage, and the involvement of some members of the ICOMOS World Heritage Working Group, undertook many meetings with representatives of all the involved States Parties in which there were intensive discussions on the shortcomings identified in the first two dossiers and on how progress might be made. There has also been greatly enhanced collaboration between States Parties (ten international meetings each year, in addition to the regional or local meetings) since 2012.

By December 2013, as it was considered that the discussions had gone as far as they could go, ICOMOS wrote as follows to the States Parties:

“ICOMOS recognizes that the participating States Parties have made a significant investment of time, resources and cooperative activity over the past 18 months. Based on the work that has been produced, ICOMOS considers that the process of resubmission of the nomination planned for 2015 should not be further delayed, and thanks all participating States Parties for the collaborative process.”

The third nomination submitted in January 2015, entitled *The architectural work of Le Corbusier, an exceptional contribution to the Modern Movement*, reflects a large amount of work undertaken by States Parties to respond to the requests of the World Heritage Committee. This has been based on intensive expert discussion, including with ICOMOS, and also on new research.

Consultations

ICOMOS consulted its International Scientific Committee on 20th Century Heritage and the International Scientific Committee on Documentation and Conservation of buildings, sites and neighbourhoods of the Modern Movement (DoCoMoMo).

Technical Evaluation Missions

Five evaluation missions were undertaken by ICOMOS: to India from 2 to 6 October 2015, to Japan from 18 to 21 August 2015, to Argentina from 9 to 13 September 2015, to Germany from 27 to 30 November 2015, Switzerland from 1 to 2 October 2015, to Belgium on 29 September 2015 and to France from 21 September to 9 October 2015.

Additional information received by ICOMOS

During the evaluation of the original nomination, ICOMOS sent letters to the States Parties on 16 October 2008, 23 October 2008, and 19 December 2008. The first letter raised the issue of the basis of the selection of the sites that comprise the serial nomination and the extent of additional sites to be

nominated in future years, if the property is inscribed. The second and third letters were related to two new projects planned within the nominated area of the site of Chapelle Notre-Dame-du-Haut, Ronchamp.

Information amounting to 140 pages was received from the States Parties on 27 February 2009 in relation to management, new projects at Ronchamp, alterations to the boundaries of the museum in Tokyo, future proposals for restoration and better protection of a number of sites in the serial nomination. Considerable extra material on the description and justification for Firmigny-Vert was also submitted.

For the third nomination, extra material has been received from the States Parties on 22 February 2016, in response to the interim report sent by ICOMOS on 18 January 2016, on boundaries and buffer zones, implications of recent development at Molitor and Ronchamp, conservation plan for Chandigarh, new building to the rear Maison Curutchet, monitoring indicators, impact of forthcoming new Heritage Law in France and final shape of series.

Date of ICOMOS approval of this report

11 March 2016

2 The property

Description

The third revised nomination is virtually a new nomination, particularly in terms of the way the sites are presented in relation to the justification for Outstanding Universal Value, and the explanations for the conceptual basis of the choice of component part of the series.

The nomination is shorter and clearer and sets out precisely how the attributes of each component site contributes to the proposed Outstanding Universal Value of the overall series. The emphasis is on the way the sites convey the innovative nature of the buildings and the influence they have had all over the world as a reflection of the new architectural ideas and approaches promoted by Le Corbusier. This is in contrast to the previous nominations which tended to present the buildings for what they contributed toward the architect's development.

The number of sites has been reduced from 19 to 17 (there were 22 in the first nomination). Three have been omitted:

- Villa Jeanneret-Perret, La Chaux-de-Fonds, Switzerland
- Pavillon Suisse à la Cité universitaire, Paris, France
- Maisons Jaoul, Neuilly-sur-Seine, France

And one site has been added:

- Complexe du Capitole, Chandigarh, Punjab, India

The nomination is based on the idea that the Modern Movement, despite its diversity, is a major and essential socio-cultural and historical entity of the 20th century, which has to a large degree remained the basis of the architectural culture of the 21st century. It suggests that from the 1910s to the 1960s, the Modern Movement, in meeting the challenges of contemporary society, aimed to:

- Instigate a unique forum of ideas at a world level;
- Invent a new architectural language;
- Modernize architectural techniques;
- Meet the social and human needs of modern man.

The series of the Architectural Works of Le Corbusier is seen to have provided an outstanding response to these challenges. The component sites have been selected to reflect how these four challenges were addressed in a particular exceptional way.

From 65 buildings or groups designed by Le Corbusier that survive today, the 17 sites included in the new submission are:

- 1923 *Maisons La Roche et Jeanneret, Paris, France*
- 1923 *Petite villa au bord du lac Léman, Corseaux, Switzerland*
- 1924 *Cité Frugès, Pessac, France*
- 1926 *Maison Guiette, Antwerp, Belgium*
- 1927 *Maisons de la Weissenhof-Siedlung, Stuttgart, Germany*
- 1928 *Villa Savoye et loge du jardinier, Poissy, France*
- 1930 *Immeuble Clarté, Geneva, Switzerland*
- 1931 *Immeuble locatif à la Porte Molitor, Paris, France*
- 1945 *Unité d'habitation, Marseille, France*
- 1946 *Manufacture à Saint-Dié, Saint-Dié-des-Vosges, France*
- 1949 *Maison du Docteur Curutchet, La Plata, Argentina*
- 1950 *Chapelle Notre-Dame-du-Haut, Ronchamp, France*
- 1951 *Cabanon de Le Corbusier, Roquebrune-Cap-Martin, France*
- 1952 *Complexe du Capitole, Chandigarh, India*
- 1953 *Couvent Sainte-Marie-de-la-Tourette, Évieux, France*
- 1954–59 *National Museum of Western Art, Main Building, Tokyo, Japan*
- 1953–65 *Centre de récréation du corps et de l'esprit de Firminy-Vert, Firminy, France*

These are described in relation to the four main concepts.

Instigate a unique forum of ideas at a world level

Some buildings immediately assumed an iconic status and attracted worldwide interests and had world-wide influence. These include the Villa Savoye, as an icon for the Modern Movement; Unité d'habitation in Marseille as

a major prototype of a new housing model based on the balance between the individual and the collective; Chapelle Notre-Dame-du-Haut, Ronchamp, for its revolutionary approach to religious architecture; the Cabanon de Le Corbusier as an archetypal minimum cell based on ergonomic and functionalist approaches; and the Maisons de la Weissenhof-Siedlung became known worldwide, thanks to the resounding critical success of the Werkbund exhibition.

Some buildings acted as catalysts for spreading ideas around their own regions, such as Maison Guiette, Belgium, that spurred the development of the Modern Movement in Belgium and the Netherlands; the Maison du Docteur Curutchet that exerted a fundamental influence in South America and continues to do so; the Musée National des Beaux-Arts de l'Occident in Tokyo, the prototype of the globally transposable Museum of Unlimited Growth, which cemented ideas of the Modern Movement in Japan; while the Complexe du Capitole, had a considerable influence across the Indian subcontinent, where it symbolized the country's accession to modernity.

Many of the sites reflect new architectural concepts, principles, and technical features. Examples are the minimum house, of which the Petite villa au bord du Léman, 1923, is an early expression; the minimum living cell is crystallized in the Cabanon de Le Corbusier; the five points for a new architecture are transcribed iconically in Villa Savoye; the glass-walled apartment building has its prototype in the Immeuble Molitor; and the concept of balance between the collective and the individual, as set out in the Athens Charter, has its prototype in the Unité d'habitation.

Invent a new architectural language

Some of nominated sites created two major trends in the Modern Movement – Purism and Brutalism – and others initiated a move towards a sculptural form of architecture which is still influential in the early 21st century. For instance, the inaugural use of Purism – forms and colours as a means of structuring interior space – can be seen in the Maisons La Roche et Jeanneret, Cité Frugès, and the Maison Guiette, while the Unité d'habitation is seen to have played a pioneering role in promoting the trend of Brutalism, and Ronchamp and the Complexe du Capitole promoted sculptural forms.

In 1927, Le Corbusier published in Germany *the Five Points of a New Architecture*: pilotis, roof garden, open plan, ribbon windows and free design of the façade. This short manifesto was adopted around the world and spearheaded the Modern Movement.

Maisons La Roche and Jeanneret constructed in 1923 can be seen as the forerunners of the Five Points, which were fully articulated at the Villa Savoye.

The Immeuble Molitor is an example of the application of these principles to a residential Block, while they were also applied to minimal houses, such as the Cité Frugès

or the loge du jardinier at the Villa Savoye. Later in his career, Corbusier reinterpreted the five points in the Maison Curutchet, in the Couvent Sainte-Marie-de-la-Tourette and in the Musée National des Beaux-Arts de l'Occident.

Corbusier's use of space was also seen to revolutionise design more than in any other works of the Modern Movement.

Modernize architectural techniques

Innovation and experimentation with materials and the standardisation and industrialisation of architectural components were also seen as key aspects of Le Corbusier's new approaches.

The Maisons de la Weissenhof-Siedlung demonstrate the architectural and spatial capacities generated by the independent structure of concrete beams, while pre-stressed reinforced concrete was used in the Couvent Sainte-Marie-de-la-Tourette, and in the Complexe du Capitole, concern for natural air-conditioning and energy saving, led to the use of sunscreens, double-skinned roofs, and reflecting pools for the catchment of rainwater and air cooling.

Many of Corbusier's building also exemplify the search for standardisation – part of the search for perfection. For instance the Unité d'habitation de Marseille was a prototype intended for mass production, while the Petite villa au bord du Lac Léman set out the standard for a single span minimal house, and le Cabanon de Le Corbusier the standard, minimum unit for living.

The Modulor was a harmonic system based on human scale, designed by Le Corbusier. This was used for all his buildings after 1945, including for the exterior spaces of the Complexe du Capitole which reflect the silhouette of a man with raised arm.

Meet the social and human needs of modern man

Le Corbusier's buildings were designed around the new needs of 'modern man in the machine age', both individual and collective living, both at home and at work, and in both public and private spaces.

Examples include the Manufacture à Saint-Dié which created light new workspaces, in contrast to those of a traditional factory; and Maison Guiette, which experimented with an open conception of space. As demonstrated in the avant-guard housing at the Cité Frugès, and the affordable Maisons de la Weissenhof-Siedlung, these new approaches were not intended for a tiny fraction of society but rather for the population as a whole. By contrast the Immeuble Clarté was intended to revolutionise middle class housing.

Le Corbusier revised and published *the Athens Charter* for the reform of urban planning. This had been drawn up by the International Congress on Modern Architecture (CIAM) in 1933, based on *Radiant City* which Le Corbusier had worked on from 1932.

The Athens Charter was responsible for revolutionising thinking on architecture and urban planning in the second half of the 20th century.

The Complexe du Capitole, the focal point of the plan for Chandigarh, is seen as the most complete contribution to the principles of *Radiant City* and the *Athens Charter*.

The following are brief descriptions of each of the components:

1923 Maisons La Roche et Jeanneret, Paris, France

The Maisons La Roche et Jeanneret are a pair of semi-detached houses built at the same time in 1923 at right-angles to one another. The normal domestic arrangements are turned upside down, with the garden on the roof, living rooms on the top floor, and bedrooms beneath. Their construction reveals the full potential of the Dom-ino system, with fenestration running the length of the frontages. Within, the plans were open and fluid and the surfaces decorated with a range of strong colours, punctuated by black and complemented by white, which underlined the sequences of the 'architectural walk'.

Since 1968 the two houses have belonged to, and been the centre of, the Le Corbusier Foundation. They have been the subject of many restorations in the intervening years. Most recently the original colours have been restored and some managed public access arranged.

1923 Petite villa au bord du lac Léman, Corseaux, Switzerland

The Petite villa au bord du lac Léman is a small, narrow one-storey house, built for the architect's mother in 1923. Constructed partly of roughcast breeze blocks, the front facing the lake and the Alps beyond has a window running its whole length. Within, the space is organised to meet precisely the needs of its inhabitants in a minimalist way, as a small 'machine to live in'. In 1931 one side was clad with zinc-coated sheets; subsequently in the 1950s when the house was repaired, the southern elevation was clad with aluminium sheets. The house was lived in by the family until 1972, when it was acquired by the Le Corbusier Foundation which restored it in 1975. It is now a museum.

1924 Cité Frugès, Pessac, France

The Cité Frugès was the result of a commission from the Bordeaux industrialist, Henry Frugès, for a garden city in Pessac, comprising 130–150 houses with shops. The aim was to show the relevance of prefabrication and of a certain form of standardisation. At Cité Frugès de Pessac, Le Corbusier started with a basic module of 5 square metres and developed four different ways of grouping them and many individual variations. One of the most striking features of the Cité Frugès was the use of polychromy on the exterior facades in order to, in Le Corbusier's own words, '*sculpt the space through the physical quality of colour – bring forward some volumes while making others recede. In short, compose with colour in the same way as we have composed with form.*

This is how architecture is transformed into urbanism.
After many technical and financial difficulties, the work was completed in 1926, but the houses remained empty until 1929. Their new owners immediately began modifying them. The city was damaged by bombs in World War II and suffered from lack of maintenance until 1973, when restoration work was started. After many years of research and a combination of public and private interventions, a coherent management framework was put in place in 1998. One house is now a museum and the rest are lived in; around half retain their original colours.

1926 *Maison Guiette, Antwerp, Belgium*

The Maison Guiette was built in 1926 on a long narrow plot, typical of the urban grain of Belgium. Together with its neighbouring Weissenhof-Siedlung villas, it was considered to be amongst the first innovative expressions of a new architectural language, where Le Corbusier applied his Five Points of architecture. The Maison Guiette is thus seen to reveal an emblematic phase in the development of the Modern Movement in Belgium, where it is the Le Corbusier's only building. Maison Guiette is still lived in as a house and there is no public access.

Over time, the immediate environment of the house has developed differently from originally anticipated. Behind the garden a series of three tower blocks were built in the 1967 and the whole property is now in an awkward urban setting, within a transport interchange. Since the 1960s, the R1 main ring road and tunnel crosses almost underneath the house, and a semi-public parking lot for 200 cars is at its western side. The situation has not been improved by the new tram route built in front of the house in 2011-2012.

1927 *Maisons de la Weissenhof-Siedlung, Stuttgart, Germany*

The Maisons de la Weissenhof-Siedlung, were constructed as part of an estate of working class housing created for the Deutscher Werkbund exhibition of 1927. Its 33 buildings comprising 63 dwellings were designed by seventeen architects, under the artistic direction of Mies van der Rohe. The exhibition was seen as the first architectural manifestation of what was to become known as the International Style. Although the estate was said to be a blueprint for future workers' housing, the budget was far beyond the reach of most workers.

Le Corbusier built three houses at the edge of the city. The house at Bruckmannweg is in strictly cubist form, on piles and with a roof terrace. The pair of symmetrical semi-detached houses at Rathenaustrasse were conceived on the model of the 'transformable house' with great flexibility in the interior spaces. Sliding doors and bed cupboards allowed the bedroom space to be incorporated into the living space during the day.

At the end of the exhibition the houses were let to tenants and the semi-detached ones were considerably modified. Parts of the estate were bombed in

World War II, but the Le Corbusier's buildings survived. In the 1980s the houses were restored and many of the main alterations were reversed. In 2002 the Municipality acquired the semi-detached houses and they now house a museum.

1928 *Villa Savoye and gardener's House, Poissy, France*

The Villa Savoye is an exact counterpart of the proposal for minimum housing made by Le Corbusier and Pierre Jeanneret at the second congress of the CIAM in Frankfurt in 1929. Raised on piles, the villa sits in a large meadow originally surrounded by trees and overlooking the River Seine. It demonstrates all of Le Corbusier's Five Points: piles, long horizontal windows, freely designed facade, roof terrace, and fluid interior spaces unencumbered by load-bearing walls. It is seen as emblematic of his work at this date and demonstrates what might be called 'radical purism'.

The flat roof caused problems from an early date. By the end of World War II the house had fallen into ruin. In 1965 it was saved from destruction by a public campaign. Since then there have been three restoration programmes. The exterior is now painted in white, although originally it may have been tinted in several colours. Further research is being carried out on the polychrome walls, with the aim of partial restitution.

Nearby is a small gardener's house built contemporaneously and this reflects the standard plan for minimum housing displayed at the CIAM exhibition. Le Corbusier saw the two houses as reflecting a '*certain common bond between the dwelling of the rich person and that of the poor.*' This small house has recently been restored, including its coloured exterior. The Villa Savoye is open to the public.

1930 *Immeuble Clarté, Geneva, Switzerland*

The Immeuble Clarté constructed in 1930, is a nine-storey block of 50 apartments, constructed for rental as middle-class housing. It is seen as Le Corbusier's most important work in Switzerland. The apartments have balconies – for the 1st, 3rd, and 5th floors on the south side and for the 2nd, 4th, and 6th floors on the north side. In order to maintain the unity of the elevations, tenants were obliged to have standard curtains. The construction was based on 'dry' construction around metal frames. Threatened with abandonment in 1970, the block was purchased and repaired by two architects between 1975 and 1977.

1931 *Immeuble locatif à la Porte Molitor, Paris, France*

The Immeuble locatif Porte Molitor was constructed for middle-class clients in 1931 on an exceptional site in the Bois de Boulogne. Restricted by the restrained pale stone buildings of the neighbourhood which it adjoins, the building, with its narrow 13 m frontage of iron, concrete, and glass bricks, does not set out to shock. On the top floors Le Corbusier built a studio apartment for himself which was his Paris base until his death. While

Le Corbusier was still alive, the building suffered from water ingress.

Since the second nomination, an enormous rugby stadium has been constructed right in front of the glass façade effectively blocking all view of the Bois de Boulogne.

1945 Unité d'habitation, Marseille, France

Founding work of architectural Brutalism, Unité d'habitation was a major prototype of a new housing model based on the balance between the individual and the collective and intended for mass production.

After World War II, with Europe's housing problems worse than ever, Le Corbusier put his urban theories into practice with the construction in 1945 of the Unité d'habitation, a synthesis of four decades of his thinking on collective living. Seventeen storeys high and designed to house 1,600 people, the Unité d'habitation incorporates various types of apartment, as well as shops and communal rooms, all connected by raised 'streets.' It is now a popular address for Marseille's middle-class professionals.

1946 Manufacture à Saint-Dié, Saint-Dié-des-Vosges, France

The Manufacture à Saint-Dié is the only factory to be built by Le Corbusier. He was invited in 1946 to design a new factory for a hosiery business, the old one having been partially destroyed in World War II. Completed in 1950, the factory was based entirely on modular lines. Consisting of three storeys raised on piles, it resembles externally an apartment block with windows shielded by sun-screens. The factory was designed as a 'green' factory where workers could experience 'harmony' as opposed to the unsatisfactory working conditions of old 'black' factories. The new building adjoins the remains of the old factory. The building is still in use as a textile factory.

1949 Maison du Docteur Curutchet, La Plata, Argentina

The Maison du Docteur Curutchet is set on a narrow plot on an avenue that forms one of the monumental axes of La Plata. The three-storey building, built in 1949, provided domestic space and consulting rooms for the doctor. The house demonstrates the Five Points and also includes curved walls, a ramp between the different levels of the two distinct blocks, and elements reflecting adaptation to the local environment such as *brise-soleil*. Le Corbusier did not visit the site and oversaw the work through letters. This created difficulties and towards the end of 1951, he was replaced by Simón Ungar, who completed the work introducing some modifications. The house was lived in for only a short time and then declined for almost thirty years. It was restored in 1987 and is now rented by the Order of Architects of the Province of Buenos Aires, which uses it for cultural events. It is open to visitors.

1950 Chapelle Notre-Dame-du-Haut, Ronchamp, France

The Chapelle Notre-Dame-du-Haut is quite unlike any other of Le Corbusier's work in terms of its sculptural quality – the billowing roof, inspired by a crab carapace, surmounting thick, curved walls pierced with tiny windows that bring patterns of light into the interior. It has become an icon of Christian sacred architecture, revolutionizing religious architecture in the 20th century.

The enthusiasm of Le Corbusier for the dramatic site on Ronchamp hill, which had housed a church since at least the 13th century, and the freedom the commission gave him, all contributed to create the ideal conditions for his work, which combined all his talents as architect, painter, sculptor, and engineer. He saw the church as a remote pilgrimage place. Le Corbusier also built two other low buildings, a house for the guardian, and a house for pilgrims which included a restaurant and two dormitories. The work was completed in 1950.

Since the second nomination, a new visitor centre (Porterie) and a new monastery (St Claire), both designed by Renzo Piano in 2009-2011, have been built into the western slope of the hill. Part of the Porterie is in the nominated area, while the monastery is in the buffer zone. A new entrance gate has replaced the historical entrance gate and the old Fermerie, used as a porter's lodge, has been demolished. These new interventions have changed fundamentally the relationship of the chapel with its landscape, as envisaged by Le Corbusier.

1951 Cabanon de Le Corbusier, Roquebrune-Cap-Martin, France

The Cabanon de Le Corbusier is a very small cottage at the edge of the sea, extending to no more than 15 m² and lit solely by two windows. Built in 1951, Le Corbusier used it for holidays. It was laid out to reflect the minimum standardised dwelling. Both the walls and the furniture were constructed of prefabricated pieces.

1952 Complexe du Capitole, Chandigarh, India

The Indian Prime Minister, Jawaharlal Nehru, commissioned a new capital for the Indian province of the Punjab following the Partition of India into two countries, India and Pakistan, in 1947, as this separated the Indian part of Punjab from its capital Lahore. Nehru wanted the new capital, Chandigarh, to be a 'symbol of India's freedom'.

The new city stands against the backdrop of the Shivalik Hills. The nominated Capitol Complex is at the centre of one side of the grid plan city layout. Three monumental reinforced concrete buildings, the High Court, the Assembly and the Secretariat, and four monuments, the Open Hand Monument, Geometric Hill, the Tower of Shadows, and Martyrs Memorial, are set on a vast concrete plaza. All the monuments, except the Open Hand Monument, straddle the central axis that connects the Assembly with the High Court Building. The nominated area also includes landscaped areas that separate the Capitol Complex from Uttar Marg, the main

street. The buildings were constructed over a period of about 15 years. For the most part the buildings are used as originally intended.

Corbusier's plan included a Governor's Palace and Museum of Knowledge, for which designs were produced but neither built.

1953 Couvent Sainte-Marie-de-la-Tourette, Éveux, France

The Couvent Sainte-Marie-de-la-Tourette was inspired directly by Cistercian models. Sited on a steep slope, it has three above-ground storeys and two below ground, and provides a church and domestic buildings for the monastic community, including 104 cells.

1954-59 National Museum of Western Art, Main Building, Tokyo, Japan

The National Museum of Western Art was built in 1954–59 to house the Matsukata Collection, 370 works of art restored to Japan after World War II. The two-storey building on piles has a flat roof, ramps between floors, and plenty of natural light. The Tokyo museum is one of three realisations of the concept of the 'museum of unlimited growth' (the other two are in Chandigarh and Ahmedabad, India) developed by Le Corbusier which featured growth portals where new wings could be added. It is the only one characterised by a spiral circulation route within a rectangular plan. To the west, set back from the main façade, was an auditorium building, part of the Le Corbusier's designs but not realised until 1964-65. This has since been demolished, to be replaced in 1979 by a large new extension which wraps round the building to the north and west. A second extension has also been added, neither is linked to the growth portals. The terrace, stairs, and forecourt have been largely reconstructed, but still maintain their original form and function.

A restoration programme for the museum is being developed.

1953-65 Centre de récréation du corps et de l'esprit de Firminy-Vert, Firminy, France

Le Corbusier was a friend of the Mayor of Firminy, a small industrial and mining town in the Loire valley. The Mayor developed plans to modernise the city through the creation of a new area of residences and parks. These plans were inspired by Le Corbusier's ideas but designed by other architects. The scheme was realised in part between 1953 and 1965 when the city was renamed Firminy-Vert to signal its move away from what had been called its 'black' past.

In the first nomination, the town planning elements were included. The revised nomination includes only the House of Culture, the Municipal Stadium, St. Peter's Church, a theatre and an outdoor swimming pool with which Le Corbusier was involved to varying degrees. The House of Culture (1955-1969) was designed and mainly built by Le Corbusier; the Municipal Stadium (1955-1968) was designed by Le Corbusier and building

started before his death in 1965 and was continued afterwards by his collaborators; the Church of Saint-Pierre (1960-1965 and 1968-2006) was designed by Le Corbusier (only as sketches) and built entirely after his death by his successor; and the Swimming Pool (1966-1969) was designed in the spirit of Le Corbusier by André Wogensky.

History and development

Charles-Édouard Jeanneret-Gris, better known as Le Corbusier (a pseudonym he used from 1920 onwards), was born at La Chaux-de-Fonds in Switzerland in 1887 and died at Roquebrune-Cap-Martin in France in 1965. Self-taught after his studies at the art school of his native town, he was an architect and town planner, an architectural theoretician, and a writer on subjects including town planning, painting, the decorative arts, furniture, and land-use planning (he wrote some forty books), and was also a painter, sculptor, and creator of furniture and tapestries.

His career can be divided into four phases:

1 Initiation (1887-1917)

When only 17 years old, Le Corbusier worked with the architect René Chapallaz (1881-1975) on the design of the Villa Fallet at La Chaux-de-Fonds in 1905-1907. The next ten years were devoted to travel in Central Europe, Greece, and Turkey, together with spells in Paris, Vienna, and Berlin, where he met architects including Tony Garnier and Josef Hoffmann, and was active in the workshops of Auguste Perret and Peter Behrens. In the construction of the Maison Schwob (1916) he applied the Dom-ino principle, a concrete construction system consisting of a simple framework of posts supporting the floors, based on cubic foundations, the framework of which permits the free composition of facades and plans.

2 The development of a new architectural language (1917-1928)

After moving to Paris, Le Corbusier met in 1918 the painter Amédée Ozenfant (1886-1966) who initiated him into Purism. He applied the aesthetic principles of Purism, combined with the Dom-ino system, in the Ozenfant residence and studio (Paris, 1922). He began to write articles and books about architecture, setting out his conception of a new architectural language. In 1922 he opened a workshop and formed an association with his cousin Pierre; together they designed and built a series of individual houses and artist's residences in and around Paris, and also outside France, including the Maison La Roche and the Maison Jeanneret (Paris), the Maison Guiette (Antwerp), Petite villa au bord du lac Léman (Geneva), the Villa Savoye (Poissy), and the Maison Cook (Boulogne-Billancourt). They designed the theoretical project of the Maison Citrohan (a reference to the name of the car manufacturer André Citroën), designed as a machine for living, by analogy with industrial production. Their ideas were put into practice in the Pessac houses (1924-27) and the Weissenhof houses (Stuttgart, 1927). Le Corbusier then published *The Five Points of Modern Architecture* (pilotis or columns, roof garden, free plan, strip windows, free

facade), the founding text of architectural modernism. The utopian project of a city of three million inhabitants was presented at the Salon d'Automne in 1922, and the Plan Voisin plan for Paris in 1925, sparking off controversy and debate. More than 200 trainees worked successively in Le Corbusier's workshop from 1922 up to his death, in addition to several collaborators, who helped disseminate the architect's thought and expanded the international influence of his work.

3 International recognition (1928-1940)

In 1930 Le Corbusier opted for French nationality and married. His reputation led to public commissions: the Centrosoyuz building (Moscow, 1928), the Cité de refuge de l'Armée du Salut (Paris, 1929), the Pavillon Suisse at the Cité Universitaire (Paris, 1930), and the Immeuble Clarté (Geneva, 1930). He gave lectures outside France and published new books on architecture, including the first volumes in the series of his complete works. His unsuccessful participation in the competition for the design of the League of Nations centre resulted in him assuming the role of spokesman for modernism against academicism. In 1928 he founded the CIAM (Congrès Internationaux d'Architecture Moderne), and in 1933 drew up the Athens Charter town-planning manifesto (living, working, recreation, circulation). Many town planning projects that were never constructed but were nonetheless influential date from this period. World War II interrupted Le Corbusier's work in association with his cousin.

4 Large standardised buildings (1944-1965)

In 1944 Le Corbusier chaired the Urbanism Commission of the Front national des architectes, a body which originated from the Resistance movement. In 1945 he was awarded the commission for an apartment block (*Unité d'habitation*) for Marseille, La Cité radieuse, which was completed in 1952 and the prototype of a series: the apartments are provided with collective facilities (a 'street' with shops, a school, a gymnasium, and amenities in the roof area). During the period of reconstruction, he drew up plans for La Rochelle-La Pallice, for Saint-Dié and for the extension of Saint-Gaudens. None of these plans was realised as a result in some cases of opposition from residents and local authorities. It was at Chandigarh in India that his theories were confronted with reality, from 1950 until his death, with the construction of the new capital of the Punjab and particularly three major buildings – the Palace of Justice (1952), the Secretariat (1953), and the Palace of the Assembly (1955).

In demand all over the world for his designs, conferences, and consultations, he sometimes neglected the follow-up of his projects. During this period, he built the House of Dr Curutchet in Argentina (1949), the Musée National des Beaux-Arts de l'Occident in Tokyo (1957), two houses, the Palais des Filateurs (Millowners Building) and the Town Museum at Ahmedabad (1951), the Carpenter Center for Visual Arts at Harvard, Cambridge (1961), and an exhibition pavilion in Zürich.

In France, he built a factory at Saint-Dié-des-Vosges (1946-1950) and the two Maisons Jaoul at Neuilly (1951), which illustrate a new movement known as Brutalism. Religious buildings date from this period: the Chapelle Notre-Dame-du-Haut at Ronchamp (1950), the Couvent Sainte-Marie-de-la-Tourette near Lyon (1953), and the design of the Church of Firminy, which was built after the architect's death. Also at Firminy, he built the Maison de la Culture and the Stadium (1956).

A new system of proportions and measurements, the Modulor, was developed after 1945; applied to the Unité d'habitation in Marseille, its theory was set out in 1950. Le Corbusier's later designs included a computer centre for Olivetti, the Palais des Congrès in Strasbourg, the French Embassy in Brasilia, and the Venice Hospital in 1965. Several construction projects underway when Le Corbusier died in 1965 were completed by collaborators, while other projects were constructed, such as the Pavillon de Zürich in Switzerland (1963-1967) and the Church of Firminy, which was completed in 2006.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The Comparative analysis in this third nomination dossier is completely new. It aims to determine whether the combination of Outstanding Universal Value and attributes put forward in the nomination is already represented on the World Heritage List, and whether a comparable series may be proposed for inclusion in the future. It also sets out a justification for the selection of sites in the series.

The comparative analysis is set out in three stages:

1. 20th century architecture on the World Heritage List and on Tentative Lists (as of 1 January 2015);
2. A comparative analysis of the properties proposed in these two lists and of 20th century architectural heritage in general;
3. A comparative analysis of the components selected from the work of Le Corbusier, allowing clarification of the selection process used for the proposed property.

Of 35 properties inscribed as part of 20th century heritage, almost a third of these are listed for reasons other than their architectural qualities. Only 22 properties are listed for their outstanding contributions to the development of 20th century architecture and urbanism. These are all considered in relation to the four concepts. In relation to the generation of global ideas, the conclusions drawn are first that it is necessary to consider the buildings as disseminating the written ideas of the architects that produced them, secondly that unquestionably, it was Le Corbusier who became established as the main theoretical contributor and disseminator of this new architectural thinking, and thirdly each component part of the series contributed to the international development of the Modern Movement

and this impact often went beyond mere questions of form or material to an expression of fundamental concepts which can be readily appreciated.

In relation to the invention of a new architectural language, the analysis outlines the evolution of the new formal architectural language of Modernism, from the Purism of the twenties to the sculptural forms of the sixties via Brutalism, from avant-garde to dominant model after World War II. It suggests that for over fifty years, the work of Le Corbusier was at the forefront of its development and that no other single properties or sites, or series, either on the World Heritage List or elsewhere, can reflect the same global influence or the breadth of issues associated with the new language.

In relation to modernising architectural techniques, the ideas of standardisation and industrialisation are seen to have originated in the 19th century and been pursued by other architects before Le Corbusier, such as Walter Gropius, but it is suggested that while others were more concerned with the image of industrialized architecture than with promoting transformation of construction methods, Le Corbusier aimed to define standard types, modules, and reproducible models. No other properties on the World Heritage List convey this aspect of the Modern Movement.

In responding to the social and human needs of modern man, it is suggested that the issues of housing for modern man and housing for the greatest number of people constituted the major challenge facing 20th century societies in general and modern architecture in particular. No other property on the World Heritage list reflects this issue; and on the Tentative Lists, the only single example is Frank Lloyd Wright's Usonian House (now part of a nomination).

The dwelling houses in the series are seen to mark not only emergence of a new art of living, but also examples of collective living, including a prototype for widespread reproduction. The series also reflects the principle of a balance between the individual and the community, an idea now central to the thinking of modern planners and architects. This is also not reflected on the World Heritage List or Tentative Lists with the possible exception of the university campuses of Caracas (Venezuela, Ciudad Universitaria de Caracas, 2000, criteria (i) and (iv)) and Mexico City (Central University City Campus of the *Universidad Nacional Autónoma de México* (UNAM), 2007, criteria (i), (ii) and (iv)) and that of Bogota (Tentative List), all of which meet these humanist goals in their design and planning but to a far lesser degree than components of the nominated series.

The analysis also considers who might be considered to be the main founder of the Modern Movement and suggests that Le Corbusier, through his works and the stands he took, built himself a unique place, occupied by no other architect within the small circle of the founders of the Modern Movement, and was acknowledged as its flag bearer.

The analysis compares other properties inscribed in relation to one specific architect. For each of these the Outstanding Universal Value is inseparable from the personality of each of their creators – whether Vauban, Gaudi or Horta –, but also cannot be understood without taking into account their respective cultural worlds and the influence that the works had.

It is pointed out that The Architectural Work of Le Corbusier is the first transnational file involving seven countries and three continents: Europe, Asia and America. Because Le Corbusier is the first architect in the history of mankind to have acquired this global importance, it is suggested that his contribution to architecture can only be understood at this level.

In terms of justifying the selection of component parts for the series, the analysis sets out a chart of 59 properties built by Le Corbusier and analyses how they might contribute or not to the proposed Outstanding Universal Value, whether conditions of authenticity are met, and whether they have adequate conservation and protection. This clearly sets out the relevance of the selected components but also includes others such as Centrosoyuz in Moscow, USSR (1929) that contribute to Outstanding Universal Value but do not currently have adequate conservation and protection.

ICOMOS considers that the comparative analysis adequately demonstrates that the nominated series in relation to its proposed Outstanding Universal Value does not have comparators either on or outside the World Heritage List, and also considers that the selection of components has been adequately justified.

ICOMOS considers that the comparative analysis justifies consideration of this serial property for the World Heritage List, and the selection of its components.

Justification for inscription

According to the States Parties, the 17 nominated sites that comprise The Architectural Work of Le Corbusier were designed and built between a pioneering period in the birth of the Modern Movement – the early 1920s – and the mid-1960s, when this architecture had begun to be challenged, having passed from avant-garde status to that of a globally dominant architectural style.

The series is seen to be of Outstanding Universal Value for the way it:

- Reflects the history of the Modern Movement through half a century;
- Demonstrates a radical break with styles, design methods, technologies, and construction practices of previous centuries;
- Crystallizes some of the major concepts of modern architecture for the first time on a global level such as a new architectural language, the free plan, free façade and roof terrace, the concept of space/time,

the industrialization and standardization of building, the democratization of architecture;

- Laid the foundations of architectural Purism and Brutalism, two major aesthetic components of the Modern Movement;
- Displays constant sculptural inventiveness, presaging the beginnings of sculptural architecture;
- Attests to a strategy of research and constant experimentation with materials such as concrete and glass, with the standardization of structural and facing components, and with the industrialization of building techniques;
- Includes several standard modules and prototypes that were designed to be mass-produced.

ICOMOS considers that the series supports this justification but also considers that the buildings within series acted as catalysts for spreading ideas around their own regions, and together spurred the development of the Modern Movement as a truly global force.

Integrity and authenticity

Integrity

As a world-wide serial nomination, integrity refers to whether the component parts of the nomination sufficiently cover the attributes needed to demonstrate the Outstanding Universal Value suggested by the States Parties. Integrity thus relates to the ability of the 17 selected sites to represent and reflect the necessary attributes of Outstanding Universal Value.

In contrast to the two earlier nominations, ICOMOS considers that the nomination dossier now adequately demonstrates how the series might be seen to reflect the way Le Corbusier's buildings built in seven countries and three continents might be seen to reflect not only the development and influence of the Modern Movement but the way they were part of its transmission around the world.

Integrity of specific sites

For each individual site, integrity relates to the completeness and coherence of sites in relation to their ability to display their contribution to the nominated value. For most of the sites that comprise the nominated series, the integrity is good. The sites where there is some loss of integrity are as follows. For some this is historical loss; where there is greatest concern is where this loss has happened during the course of the nomination process.

For Cité Frugès (Pessac), new buildings on the site of three destroyed standardised houses by Le Corbusier within the nominated property were inconsistent with the architect's concepts. One of them has already be bought by the municipality and demolished, and the other two are in an area of pre-emption. The goal is for these three houses to be bought and for them to be managed to *'enhance the authenticity and integrity of the City'*.

There are historical losses (for instance, in Cité Frugès, Pessac, where three structural elements were destroyed within the nominated plot), but planning morphology/parcels of these area is not changed.

At Villa Savoye and the adjacent gardener's house, integrity is partly compromised by the Lycée and sports fields built on three sides of the original meadow that surrounded the villa in the 1950s. High trees form a visual barrier between the Lycée to the west and the villa, but the upper parts of the new building are visible from the terrace of the villa. A sports field now lies immediately behind the villa on the side facing the River Seine. The setting of this site is fragile.

At the Maisons de la Weissenhof-Siedlung, Stuttgart, war-time destruction and post-war reconstruction, has led to the collective integrity of the model settlement being affected by the loss of ten houses out of twenty-one.

The two examples of recent loss of integrity are la Chapelle Notre-Dame-du-Haut à Ronchamp and Immeuble locatif à La Porte Molitor. At Ronchamp, where Le Corbusier's structure overlaid a centuries-old pilgrimage site, the integrity of the site has been compromised by a new visitor centre and a nunnery by the architect Renzo Piano near the chapel. Although the latter can be said to reinforce the traditional use of the area, its realisation has impacted visually on the approach to, cutting into the contemplative hillside setting of Le Corbusier's structure, competing with it and removing the original rising pathways. This has led to a serious loss of integrity. This extensive development was commented on adversely in the first evaluation but the work still went ahead.

At Immeuble locatif à la Porte Molitor a rugby stadium has been constructed right in front of the glass façade of the apartment block. This enormous structure immediately opposite the site, effectively compromises the setting of the site in the way it blocks all the views of the Bois de Boulogne which were such a feature of the apartments through their innovative glass facades at the time of their construction, and leads to a serious loss of integrity.

There is an overall need to provide much stronger management for the settings of many of the properties in order to ensure high buildings or other new constructions do not impact adversely.

ICOMOS considers that the integrity of the whole series has been justified; and that the integrity of the individual sites that comprise the series is good in most cases, with some vulnerabilities, but with serious losses of integrity in the sites of Immeuble locatif à la Porte Molitor, and la Chapelle Notre-Dame-du-Haut at Ronchamp, where the development impacts need to be mitigated.

Authenticity

Authenticity of the whole serial property relates to the ability of the sites as a group to convey the Outstanding Universal Value as nominated. Authenticity of the individual sites relates to their ability to exhibit their initial design and conception in terms of their built form, setting, and use, in relation to how they contribute to the overall Outstanding Universal Value.

In contrast to the two earlier nominations, this current dossier shows clearly the way the overall series adds up to more than its component parts.

Authenticity of individual sites

For each individual site, authenticity relates to how well the attributes of the site can be said to reflect the overall Outstanding Universal Value of the series. For most of the sites, the authenticity is good. The sites where there is some problem with authenticity are the following.

At Cité Frugès, on three plots houses were constructed with traditional houses instead of Corbusian structures (one of these has now been demolished in September 2015 and there are plans to rebuild in more appropriate style). Elsewhere in the urban landscape, there is a partial loss of authenticity through neglect and interior changes. Further registration of individual houses is needed (in addition to already listed structures) in order to consolidate the authenticity of this component site.

At l'Unité d'habitation, the fire of 2012 destroyed a small part of the building. This has now been totally reconstructed to the original design, but with some reduction in authenticity.

The authenticity of the existing Capitol Complex in Chandigarh could be impacted if either or both of the governor's palace or the museum of knowledge were now to be constructed, an eventuality that has apparently been discussed. Even though plans exist, the lack of opportunity for the architect to be engaged in discussions on the building work would compromise their authenticity.

At the National Museum of Western Art in Japan (NMWA), the original intention for the forecourt of the Museum appears to be as a wide open space. Forecourt planting in 1999 tends to detract from the presentation of the building, its key views and the setting. Given the care that went into the reconstruction of the forecourt paving, including reinstating the modular system, the planting seems inconsistent with the conservation approach of NMWA. This planting could be reviewed in the future in order to strengthen authenticity.

The most problematic cases are those of la Chapelle Notre-Dame-du-Haut at Ronchamp and Immeuble locatif à la Porte Molitor.

The recent new developments at Ronchamp have a highly negative impact on the authenticity of this world-famous

chapel. Le Corbusier intended the chapel to be a place of silent meditation approached on foot along a winding path. At the entrance of the site, there is now a visual competition between the new constructions and the works of Le Corbusier, it is impossible to avoid the new large Porterie, the metal gates around the nunnery, and the harsh concrete walls of the car park that cut into the slopes. Although the new structures could have been sited much further down the hill and still allowed visitor to stroll on foot to the chapel, this option was not taken.

These interventions have severely compromised the authenticity of la Chapelle Notre-Dame-du-Haut at Ronchamp and undermined its ability to convey Le Corbusier's ideas. It is no longer a remote pilgrimage chapel, a serene object in the landscape approached gently on foot. The new roads and paths cut across Le Corbusier's established paths and destroy the fundamental relationship of the building with its landscape and its ability to convey the idea of the church as a remote site being reached after a stroll up the hill.

At Molitor the enormous rugby stadium has been constructed right in front of the glass façade, which is the main attribute of the building for the innovative way it conveyed light, air and spaciousness into the interior. The almost entirely glass facades, built using single glazing, wired glass or glass blocks, was at the time of its construction an unique example.

Permission was given in 2011, during the planning of the current nomination, for the construction of the stadium within a *Site inscrit*. Distant panoramas of Paris historically seen from the windows and balconies of the building have now been blocked by the body of the stadium. This stadium has severely compromised the ability of this site to convey its value.

General

Some of the sites have been restored and partly reconstructed in recent years, after previous stages of neglect or disfigurement. In some cases changes have been reversed, in other cases they have not. However, comparing the nominated houses to other inscribed 20th century houses, such as the Masters' houses of Kandinsky/Klee at Dessau (Germany), the Villa Tugendhat at Brno (Czech Republic), and the Rietveld Schröder House in Utrecht (The Netherlands), reveals that these also share similar slightly diminished levels of authenticity.

Although many of the nominated sites are still used for their original purposes (contributing positively to their authenticity), in some cases, such long-term use can exert an impact on interior details and lead to more fundamental changes.

Modern architecture is technically difficult to maintain in terms of some specific details, such as single glass panes in finely profiled steel frames, which can be susceptible to steel corrosion or the cracking of large sheets of glass. New windows have been inserted in many of the buildings

(often with double-glazed panes and sometimes new profiles) although most of these are close to the original details. The exterior cladding of many of the buildings has caused problems of moisture and dampness, and, in some instances, such as Maison Guiette, the new surface is finished with plaster which is slightly different from the original. The Villa Savoye suffered a roof collapse because of structural problems and modifications had to be made to keep the overall form, while the Museum in Japan was considerably modified to strengthen its earthquake resistance. Nevertheless overall, the modifications can be seen to be reasonable, and proportionate, in relation to supporting the continued use of the building

ICOMOS considers that the authenticity of the overall series has been demonstrated, and that for most sites while some modifications have been made their authenticity remains; this cannot however be said for the Chapelle Notre-Dame-du-Haut at Ronchamp where the new interventions have cut across the ability of the site to convey Le Corbusier's ideas and planning and led to considerable loss of authenticity; or for Immeuble locatif à la Porte Molitor where the new stadium has taken away the ability of the apartment block to demonstrate the way a glass façade brought views into the building and has also caused a considerable loss of authenticity. In both these sites, mitigation measures are needed to reverse these impacts.

ICOMOS considers that the conditions of integrity and authenticity for the series have been fully justified; and for individual sites, the conditions of authenticity and integrity have been largely met, apart from two component sites, the Chapelle Notre-Dame-du-Haut at Ronchamp and Immeuble locatif à la Porte Molitor.

Criteria under which inscription is proposed

The property as a whole is nominated on the basis of cultural criteria (ii) 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 States Parties on the grounds that The Architectural Work of Le Corbusier exhibits an unprecedented interchange of human values, on a worldwide scale over half a century, in relation to the birth and development of the Modern Movement.

The Architectural Work of Le Corbusier revolutionized architecture by demonstrating, in an exceptional and pioneering manner, the invention of a new architectural language that made a break with the past.

The Architectural Work of Le Corbusier marks the birth of three major trends in modern architecture: Purism, Brutalism and sculptural architecture.

The global influence reached by The Architectural Work of Le Corbusier on four continents is a new phenomenon in the history of architecture and demonstrates its unprecedented impact.

This influence is all the more powerful as The Architectural Work of Le Corbusier was further propagated by the architect's many writings, immediately disseminated and translated throughout the world. This unique complementarity between the built work and the publications made Le Corbusier the main spokesman for the new architecture and led to his work becoming a worldwide source of inspiration.

ICOMOS considers that this criterion has been justified for the whole series.

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 States Parties on the grounds that The Architectural Work of Le Corbusier is directly and materially associated with ideas of the Modern Movement, of which the theories and works possessed outstanding universal significance in the 20th century. The series represents a "New Spirit" that reflects a synthesis of architecture, painting and sculpture.

The Architectural Work of Le Corbusier materializes the ideas of Le Corbusier that were powerfully relayed by the International Congress of Modern Architecture (CIAM) from 1928.

The Architectural Work of Le Corbusier is an outstanding reflection of the solutions that the Modern Movement sought to apply to the major challenges of the 20th century:

- invent a new architectural language;
- modernize architectural techniques;
- respond to the social and human needs of modern man.

The contribution made by The Architectural Work of Le Corbusier to these major challenges of the 20th century is not merely the result of an exemplary achievement at a given moment, but the outstanding sum of built and written proposals steadfastly disseminated worldwide through half a century.

ICOMOS considers that this criterion has been justified for the whole series.

ICOMOS considers that the serial approach and the selection of the series have been justified.

ICOMOS consider that the criteria and the Outstanding Universal Value have been demonstrated for the series.

4 Factors affecting the property

There are no generic factors facing all elements of the nomination. The factors are specific to individual sites.

In the second dossier, it was stated that at five sites – Cabanon de Le Corbusier, Maison Guiette, Villa Savoye, Immeuble locative à la Porte Molitor and la Chapelle Notre-Dame-du-Haut à Ronchamp – there were projects in the sites or in their settings, which could have an impact on their integrity, but that these were the subject of studies, dialogue, debate, or interventions that have reduced considerably, or even eliminated, any negative impact.

As set out below, ICOMOS considers that in two cases, the promised studies have not reduced or eliminated impact and major projects have had serious and detrimental effects.

La Chapelle Notre-Dame-du-Haut at Ronchamp

In the first evaluation, it was noted that the most substantial and imminent proposed development was at this site for buildings designed by Renzo Piano to be constructed within the Bourlémont hill on which the Chapelle Notre-Dame-du-Haut stands, and thus within the nominated site. These were to provide a new entrance facility with auditorium/exhibition space, a new nunnery for nine nuns, and an oratory for thirty people at the western edge of the hill. The second dossier explained how the owners of Ronchamp sold part of the site to the Association of Friends of St. Colette, owners of the Monastery of St. Claire of Besançon, in order to develop the nunnery.

There were many objections to the scheme, including from the Le Corbusier Foundation, on the grounds that there is not room on this sensitive site for more than one architectural statement, that the interventions will be 'felt' even if not seen, and that the proposed structures should be located much further away from the Chapel. ICOMOS communicated concerns about the proposal to the State Party in a letter sent on 19 December 2008.

The proposals were nonetheless given permission in March 2008 and the buildings have now been constructed. ICOMOS considers that this intervention is greatly regrettable and has a considerable and highly detrimental impact on authenticity and integrity as set out above. ICOMOS does not consider that these impacts should be accepted and that mitigation measures must be developed and implemented in order to allow this component site to convey fully the attributes for which it was nominated.

Villa Savoye

The recent mission reported that a large 'Pôle culturel et multimédia' project is being planned to be opened in 2019. The pre-project details were submitted following the mission. The proposed centre will have several functions, and be of significant scale. It could potentially disturb the integrity of the surroundings of the property

and impact on historic views from the upper terrace. The project is at an early stage and has yet to be fully assessed. As the setting of the villa has already been compromised by a lycée and a sports field, ICOMOS considers that detailed Heritage Impact Assessment must be carried out, before any commitment is given to this project, and submitted for review.

Immeuble locatif à la Porte Molitor

Since 2008 – and without any mention of details in the second dossier – a large-scale rugby stadium was built in 2013 directly in front of this apartment building. The enormous structure immediately opposite the site, effectively obscures all the views of the Bois de Boulogne, which were a feature of the apartments at the time of their construction. The massive new stadium is on land that is protected as a 'site inscrit'. This construction, as well as overwhelming the site, calls into question the effectiveness of the protective measure for the setting of this site and others.

L'Unité d'habitation, Marseille

A huge velodrome of intensive architectural form, and bright white colour has been constructed just outside the limits of the buffer zone. From some vantage points on the upper level of the l'Unité d'habitation it intrudes strongly into views. Its construction suggests that there was insufficient visual analyses and impact assessments undertaken before permission was given, and that current zoning restrictions are inadequate. There is also a risk of redevelopment of the 'Renault' and 'Peugeot' sites in the vicinity. As in certain nearby zones buildings could be constructed up to 32 metres in height, if these heights were reached there could be potential risks for the property if original visual corridors are not respected. There is an urgent need for the setting and views to be more clearly defined and appropriately protected.

At Maisons La Roche et Jeanneret the visual appreciation of the site is diminished by car parking in the Square du Docteur Blanche. There is also pressure from intensive vertical or large-scale development in adjacent urban areas in the buffer zone.

Maison du Docteur Curutchet

In the first evaluation it was stated that the principal threat to the Maison du Docteur Curutchet is the pressure of the dynamic urban context. Many of traditional houses have been replaced with new high buildings, especially downtown. An apartment block more than double the height of the property had been built right at the edge of the curved 1930s building that adjoins the property and there are further tall buildings at the corner of the block. A new building is under construction in the street immediately behind the house. The current protection appears to be inadequate to control development beyond the small buffer zone.

National Museum of Western Art

Although more developed land to the east of the Museum has been included within the buffer zone, visual analysis of potential impacts on the NMWA need to be a

critical part of impact analysis for any future development proposals in or near the buffer zone.

The existence of architectural guidebooks, websites, and guided tours indicate that there is already great professional, educational, and tourist interest in visiting the architectural achievements of Le Corbusier. The numbers of visitors are increasing, but the tourism pressure varies from site to site. This depends on the accessibility of the interiors for the general public, and not all properties are open to visitors, and some only very occasionally.

A new security problem has developed at Ronchamp. With the development of the visitor centre and monastery, the porter's lodge was demolished leaving no inhabited house on the site. This has had the unfortunate effect of encouraging vandalism and opportunistic attempts at theft. Le Corbusier's Moon window was smashed into pieces in January 2014 and the Chaplain's house has been broken into.

The delicate atmosphere of the hill and its age-old pilgrimage tradition is now at risk due to the twin uses of the place, and to the improved road access, not only to the Monastery but – for the nuns – also to the Chapel. There is an urgent need for the installation of physical and other protection of the coloured windows and other elements on the site and measures taken to control access particularly at night.

The nomination dossier identifies four component sites that are subject to seismic risks to varying degrees. For some such as the National Museum in Tokyo, extensive work has been undertaken to strengthen the building and this has had a substantial impact on the built fabric.

No implications of climate change have been identified.

ICOMOS considers that the main threats to the property are development pressures in the property, buffer zone or wider setting, which in two sites have been realised.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

France

For the sites in France, the revised nomination dossier contains detailed and recently drawn maps in colour for each component and its buffer zone indicating the geographical position, both at a local and a regional scale. The revised maps provides a revision of the buffer zones, which are now no longer defined as circles but based on local circumstances and the visibility of the properties. The demarcations are now all defined in a more or less logical relation to their local topographical, historical and urban situations. The effectiveness of these revised buffer zones is supported by additional urban planning measures, although in some instances these

have yet to be fully implemented – as also set out below.

In four sites, the buffer zones had been reduced from the 2009 and 2011 nomination dossier: Immeuble locatif à la Porte Molitor, the Maisons La Roche et Jeanneret, Villa Savoye and l'Unité d'habitation. These reductions appeared to relate to the pressures from urban development.

In response to a request from ICOMOS, the State Party of France has amended the buffer zones for Molitor, Maison La Roche et Jeanneret, Villa Savoye, the Chapelle Notre-Dame-du-Haut at Ronchamp, the Centre de Firminy and Cabanon de Le Corbusier.

At Ronchamp, the newly defined boundaries of the nominated area and the buffer zone in the revised nomination dossier were more comprehensive than before but needed to be more precise near the Porterie. Small adjustments have now been made to the buffer zone as discussed during the mission relating to the need for clearer demarcation based on visible landscape features and the inclusion of some small identified 'gaps'.

At Couvent Sainte-Marie-de-la-Tourette, the boundaries of the site have been amended to ensure all attributes have been included such as the monastic cemetery (in the south-west direction), the main entrance alley and the planning axis (Allée Cavalière).

At Maisons La Roche et Jeanneret, following the mission, the nominated area has been enlarged to include the Square du docteur Blanche as historically this was an integral planning element. The revised nomination only included a small buffer zone, which had been reduced by almost a hundred hectares since 2009. At the request of ICOMOS, this has now been enlarged.

At l'Unité d'habitation, following the mission, the south-west boundary of the nominated site was adjusted to remove a private house, which has never been a part of Le Corbusier's planning structure.

Subsequent to the ICOMOS technical evaluation mission, the buffer zone has been extended.

At Villa Savoye, in the revised nomination, the buffer zone had been diminished from 376.156 ha to 128.167 ha. At the request of ICOMOS, this has now been extended zone to include historically supportive areas.

At Cabanon de Le Corbusier and Roquebrune Cap-Martin, minor modification to the buffer zone have been made following the ICOMOS technical evaluation mission to include the grave of Le Corbusier.

At Immeuble locatif à la Porte Molitor, in the 2011 nomination dossier, the buffer zone was 67.033 ha and, according to the ICOMOS technical evaluation mission, had now been diminished to 47.916 ha - although no buffer zone was marked on the formal plans.

New plans submitted show the buffer zone extended to include early 20th century public and residential buildings (between avenues du Parc des Princes/General Sarraill and avenue Murat) which were historically in direct visual contact with the nominated building. A revised map has been produced which now includes the new stadium.

Switzerland

In the original dossier, the three sites in Switzerland all had buffer zones of 100 m radius and were given national protection as the settings of protected monuments. These did not respect local topography. In the revised dossier, extended buffer zones have been delineated to take account of the points made by ICOMOS in the original evaluation. Beyond the 100 m radius, the revised buffer zones have local protection.

Belgium

In the original dossier, ICOMOS considered that the circular buffer zone around the Maison Guiette with a radius of 100 m should be reconfigured. The revised dossier shows an enlarged buffer zone but the protection given to this extended area is not set out. The State Party of Belgium has clarified that there is no specific protection relating to the proposed buffer zone. However, the Government of Flanders will look into the possibility of extending the current protection of the Maison Guiette as a monument with a 'transition zone' (*overgangszone*).

Germany

ICOMOS considers that the boundaries of the Maisons de la Weissenhof-Siedlung and their buffer zone are well considered and clearly defined. This zoning has proven to be effective for the control of development on the former Messe site opposite the Weissenhof-Siedlung.

Argentina

The boundary of Maison du Docteur Curutchet only includes the house and not the adjoining buildings. Following the mission, the small buffer zone was enlarged to include a triangular block defined by Calle 54, Calle 2 and Diagonal 78, in order to avoid further rising tall buildings in the background of the Casa Curutchet.

Japan

The buffer zone for the National Museum has been extended to include the Tokyo University of Arts, Ueno Station area, JR East lines and an area further to the east, in response to comments in the ICOMOS evaluation of 2011. It is still the case, though, that the extent of the buffer zone has been related to the planning context rather than a historical or visual analysis of the NMWA site.

The visual analysis from three viewpoints is incorporated as an annex of the revised dossier. Following the mission, further satisfactory clarification has been provided on the eastern section of the buffer zone within the East Side Zone of the Special Scenic Development

Zone under the Landscape Act, in relation to the potential visual impacts of development both from and to the nominated site.

India

Following the ICOMOS technical evaluation mission, in order to more fully convey the intent of the proposed inscription as a Capitol Complex, not just as an ensemble of Capitoline buildings and monuments, the boundary has been extended to include the mound and the pedestrian linkage from the Jan Marg to the Capitol Plaza. This allows the approach to the Capitol Complex to be via a central path flanked by landscaped hills on either side. Such a path was central to Le Corbusier's ideas.

Following the mission, clarification has been provided on the protection offered to the wider setting of the property beyond the buffer, particularly in relation to the Shivalik hills and the village of Kansal.

ICOMOS considers that the boundaries and buffers zones are adequate.

Ownership

Most of the nominated properties are privately owned. Three belong to the Le Corbusier Foundation (Maisons La Roche and Jeanneret in Paris, Petite villa au bord du lac Léman in Geneva, Immeuble locative à la Porte Molitor in Paris). The Ronchamp Chapel belongs to the private Association Oeuvre Notre-Dame-du-Haut. The Manufacture Duval is privately owned by the same production firm as commissioned the building. The Immeuble Clarté, Geneva is owned by its residents.

The Villa Savoye at Poissy, the Weissenhof houses in Stuttgart, the Cabanon at Roquebrune-Cap-Martin, the Museum in Tokyo, and elements of the site at Firminy belong to the respective States Parties or to public authorities.

Protection

Many of the components received early protection in their respective countries, mostly in the two decades following Le Corbusier's death. Some, like the Maisons de la Weissenhof-Siedlung in Stuttgart and the Unité d'habitation in Marseille, were given protection during Le Corbusier's lifetime.

The revised nomination dossier provides a helpful chart that sets out for each component the relevant forms of legislative protection.

France

In France a new Law on '*Liberté de création, architecture et patrimoine*' (CAP), is expected to be approved in mid-2016. This might introduce significant changes for heritage protection. The Law CAP could transform all major protection zones established at the national level (Secteur Sauvegardé, ZPPAUP and AVAP) and on which the nomination dossier is based, into '*Cité Historique*', which means that some World Heritage

properties would be protected within the Urban Code instead of the Heritage Code. Further details need to be provided by the State Party to clarify the implications.

As set out above under boundaries, where the buffer zones have been extended they now have a combination of national and local protection.

The Maisons La Roche et Jeanneret are both protected according to the Historic Monuments Act (*classement*), including the exterior and interiors. The national protection includes a buffer zone of 500 m.

The Villa Savoye and gardener's House are both protected according to the Historic Monuments Act (*classement*), including the exteriors and interiors. The national protection includes the surrounding garden and a buffer zone of 500 m. The areas facing the River Seine are protected as *Sites et Monuments Naturels* by the decision of the Ministry of Environment.

The exterior (facade and roof) and the public spaces of the Immeuble locatif à la Porte Molitor are protected according to the Historic Monuments Act (*inscrit*). The apartment of Le Corbusier is protected (*classement*). The building should also be protected. The buffer zone is protected as a *site inscrit*. Nonetheless this has not prevented the construction of a huge stadium immediately in front of the glass facade of the site.

The Unité d'habitation, Marseille, is protected according to the Historic Monuments Act (*classement*) for the facade, upper terrace, and entrance porch, parts of the inner communications, entrance hall, elevators' lobby, and apartments 643 and 50 (with its total original design and buffer zone).

There is currently no or inadequate protection for the small garbage facility building and for the garden and its structures.

The Cabanon de Le Corbusier, Roquebrune-Cap-Martin, is protected according to the Historic Monuments Act (*classement*) for the nominated property and buffer zone.

Firminy-Vert is protected according to the Historic Monuments Act (*classement*), including the House of Culture and Stadium, and the Church of Saint-Pierre.

The buffer zone is currently in transition from ZPPAUP protection zone to AVAP (*Aire de Valorisation de l'Architecture et du Patrimoine*) with the same boundary. At the same time, the whole protection system could be transformed into "*Cité Historique*" as envisaged in the Law on "*Liberté de création, architecture et patrimoine*", which is currently being debated and which could become law in mid-2016.

The Couvent de Sainte-Marie-de-la-Tourette is protected according to the Historic Monuments Act (*classement*). The land surrounding the monastery is only nationally protected up to the 500 m zone of protection.

The Manufacture à Saint-Dié is protected according to the Historic Monuments Act (*classement*), including the facades, upper terrace including structural concrete elements, and the office. The buffer zone is awaiting the implementation of supportive protection.

The Cité Frugès, Pessac, is protected according to the Historic Monuments Act (*classement*). Ten individual buildings are being considered for protection. Though significant progress has been achieved compared with 2008, protected buildings consist of only 28% of the housing stock. For private owners in Pessac, increased protection could provide access to increased grants for restoration.

The buffer zone is still protected by seven specific zones (within ZPPAUP). As with Firminy-Vert the whole protection system could be transformed into '*Cité Historique*' as envisaged in the Law on '*Liberté de création, architecture et patrimoine*' which is currently being debated and which could become law in mid-2016.

At Ronchamp, the Chapelle Notre-Dame-du-Haut, the pilgrims' house and concrete tables, chaplain's house, commemorative pyramid, cave, and campanile are all listed and nationally protected as historic monuments, as well as the outdoor cross, benches and movable objects. In 1999, the Chapel ensemble was the first to receive the '*Patrimoine du XX^{ème} siècle*' label. The local authorities have developed adequate supportive regulations for the buffer zone and the adjacent natural reserve. Nonetheless the recent development partly in the site and partly within its buffer zone brings into question the effectiveness of the protection.

At l'Unité d'habitation, Marseille, the construction of a huge velodrome has impacted on some views from the apartments, suggesting that the protection of the setting could be strengthened.

Switzerland

The Petite villa au bord du lac Léman, with its garden and interior, is protected as a historic monument under the Cantonal law of Vaud and is also protected under the Federal law on the protection of nature and landscape.

The Immeuble Clarté, Geneva, is protected as a historic monument under the Cantonal law of Geneva and also the Cantonal law on the protection of nature and landscape. The property is also now protected by Federal law.

In order to protect its setting, district planning rules control the height and volume of possible new constructions. This has been effective.

Belgium

The Maison Guiette is protected as a historic monument and monitored by the administration of the Flemish Community, both for its exterior and its interior.

The regional plan indicates that the area around the house, except for the Park and Ride area nearby the house, is zoned mainly for residential use and that the present green areas will be maintained. These regulations provide an effective framework in general for the buffer zone.

Germany

The Weissenhof-Siedlung, Stuttgart, are protected as historic monuments of special value and as parts of an ensemble (*Sachgesamtheit*) of special value, together with the eleven other remaining houses of the Weissenhof-Siedlung, under the law of Baden-Württemberg. At the local level, a protective land-use plan controls spatial and functional developments in the settlement in such a way that the special site values (buildings, views, green, etc.) will remain recognisable or reinforced.

Argentina

Maison du Docteur Curutchet is protected as an Historical National Monument. Only part of the buffer zone is protected as a national monument. As set out above, the rest of the buffer zone has local protection.

Japan

The National Museum of Modern Art, Main Building, Tokyo, is protected as an Important Cultural Property (Building), Class A. The entire garden of the NMWA is protected a Registered Monument (Place of Scenic Beauty). The scope of the Important Cultural Property (Building) designation does not include the reconstructed elements of the two staircases and forecourt however, along with the Main Building; they comprise part of the Registered Monument (Place of Scenic Beauty). This is because the Law does not allow reconstructed elements to be protected.

The whole of the buffer zone falls within the Special Scenic Development Zone under the Landscape Act and two zones of the City Planning Act: the Urban Planning Park and the Scenic Zone in which building is restricted and landscape conservation is supported.

India

Each of the three buildings and four monuments is protected as Grade 1, the highest heritage classification India. The entire complex as a whole has also been given the highest classification as a heritage precinct. The boundaries of the nominated property lie within the Grade 1 heritage precinct. The protective measures for the buffer zone and the wider setting are satisfactory.

Given the importance of detail and setting for these 20th century buildings, it is crucial that their protection should be sufficiently encompassing and sensitive to allow for protection of interiors, exteriors, context and setting. At some sites, this protection needs strengthening.

ICOMOS considers that in theory the protective measures for the property are largely adequate and for the buffer zones need strengthening at some sites, although the recent permissions given for developments at Ronchamp and Molitor suggest that the planning processes are not being applied in a way that fully considers impact on the value of the component sites in relation to the Outstanding Universal Value for which the series has been nominated.

Conservation

The work of Le Corbusier has been a subject of university research and scientific publications over more than half a century.

The personal archives of Le Corbusier (35,000 plans and 500,000 written documents, in addition to thousands of photographs) are an exceptionally useful source. The Bibliothèque de la Ville de La Chaux-de-Fonds holds papers relating to the early work of the architect – before 1917 –, while the Le Corbusier Foundation mostly holds documents for after 1917.

The ICOMOS technical evaluations missions undertaken were able to compare the state of conservation in 2008 with the situation today and to understand what conservation projects had been undertaken in the intervening years.

France

For most of the sites, the state of conservation is good.

Since 2008, at Saint-Dié-des-Vosges, partial repair has been executed and more work is planned.

Extensive restoration was undertaken at the Couvent de Sainte-Marie-de-la-Tourette, between 2006 and 2013. After the completion of the construction works, the Dominican monastery has never been the object of intensive transformations and extension. Restoration projects for upper terrace and some other parts of the building were carried out in the 1980s, and between 1995 and 1998. Significant conservation campaign covers 2006-2013.

At the Chapel at Ronchamp further work is needed to improve the overall conservation of the site.

At the Villa Savoye, the gardener's house has been fully restored. In the main house, no further work has been undertaken on researching or re-instating the original colour scheme in the interior.

For Maisons La Roche et Jeanneret, during recent restoration work between 2008 and 2014, the original colour schemes and textures have been restored on the basis of scientific research.

The one site where there are conservation issues is the Chapel at Ronchamp. The ICOMOS mission reported that little conservation work had been undertaken since 2008, in spite of there being an agreed conservation

plan. It appears that funding has been diverted to the new monastery. ICOMOS considers that there is now an urgent need for action to be taken by the owners, in collaboration with the Le Corbusier Foundation with the advice of relevant experts, to reinstate regular maintenance and to implement the agreed conservation programme for the Chapel and its ancillary buildings.

At Manufacture de Saint-Dié, Mr. Duval, the son of the original client, actively conserves the original character of the building. Although there are no immediate risks, ICOMOS recommends that a conservation plan be drafted for the benefit of future owners and managers.

Switzerland

Since 2008, the conservation of the two Swiss components has improved as a result of recent and well documented restorations. Only the rooftop apartment at Immeuble Clarté needs repair and upgrading, which is soon to be undertaken by the same architect as for the rest of the building.

In the case of the Immeuble Clarté, where a major restoration project was completed in 2010, there is uncertainty over whether conservation guidelines for the occupants of the apartments and other units will be implemented.

Belgium

The house is basically well conserved.

Germany

The double house, now serving as a museum, is maintained in a good condition since its thorough restoration, as is the garden.

The single family house and its garden are in a fair condition. Since 2008, the deteriorated concrete 'window' construction on the rooftop of the single-family house has been faithfully repaired. Further work is needed to conserve and return the concrete bench near the chimney and to address a cracked kitchen window and a few other defects.

Overall there is a need in the medium to long term for a large project to fully restore this single house.

Argentina

Although state of conservation of Maison du Docteur Curutchet is good, ICOMOS recommends that a comprehensive documentation of the property is undertaken as a basis for a detailed conservation plan to guide future interventions.

Japan

For the National Museum of Western Art, more details are needed as to how the aim to 'return the building to a more original condition in order to highlight Le Corbusier's work' will be translated into action.

India

The monuments are generally in a better state of conservation than the buildings. Of the buildings, the Assembly is in the best condition, with the concrete relatively well maintained, while the High Court and the Secretariat, which both see substantial use and traffic, are not as well maintained. The industrialized building components, such as steel components of the glass curtain wall and the insect screens of the aerators, have tended to rust. This has made the windows largely inoperable and thus unusable for climatic control.

Le Corbusier's original drawings all still survive but need urgent conservation and climatic controlled storage.

ICOMOS considers that there is an urgent need for a Conservation plan to be prepared, as foreseen in the Management Plan. Ongoing conservation work needs to respect ideas of natural light and natural ventilation that were essential parts of Corbusier's designs. Apertures for natural light that are sealed off or ventilating aerators that are sealed shut, may need to be revived in order that the buildings may be seen to work as spaces.

The State Party has confirmed that the process for developing a conservation plan has been initiated. This will include visual and structural surveys, an action plan for restoration and conservation based on the combined findings of the visual and structural surveys and framing of Architectural Regulations to oversee future development and conservation. The plan should be completed by 2020.

In most of the sites, conservation measures are appropriate and are based on long-standing conservation experience and methodology. Conservation work is programmed and entrusted to specialists with high levels of skill and expertise. Conservation treatment is combined with regular maintenance, including the involvement of inhabitants, local communities, and public associations. The exception currently is Chandigarh.

ICOMOS considers that generally the state of conservation is fair to good, and several restoration projects are on-going or planned. However these would benefit from a coherent approach to conservation on matters such as intervention, materials, and replacement of features.

Management

Management structures and processes,
Including traditional management processes

Management of the overall series

For serial nominations within one country, the *Operational Guidelines for the Implementation of the World Heritage Convention*, paragraph 114, specifies that 'a management system or mechanisms for ensuring the co-ordinated management of the separate components is essential and should be documented in

the nomination'. For transnational serial nominations, (paragraph 135), *'it is highly recommended that the States Parties concerned establish a joint management committee or similar body to oversee the management of the whole of a transnational property*'.

A Standing Conference has been established. The principle was adopted by the seven States Parties and the first meeting of the Conference was scheduled to be held in Paris in the first half of 2015. This meeting would be a continuation of all the meetings held since the third nomination file was launched in 2012 (ten international meetings per year, in addition to the regional or local meetings).

The Standing Conference will coordinate the management of the Property, advise States Parties and implement actions for promotion and enhancement of the Property.

Furthermore, an Association of Le Corbusier sites has been set up to bring together all the local authorities in whose territories sites have been nominated. The first meeting was held in Ronchamp in 2010. Its main objectives are coordination, raising public awareness, sharing conservation experience, overall coordination and management of the series, and implementation of management plans for each of the component sites. The Association has met regularly in each of the towns associated with the application.

The involvement of the expertise of the Le Corbusier Foundation – that has the moral rights over Le Corbusier's oeuvre – is also crucial for appropriate management and conservation of the nominated series, especially in those cases where the properties are in private hands other than the Foundation. The effectiveness of protection is in these cases highly dependent on the willingness of their private owners.

Since 2003 the Le Corbusier Foundation has tried to build closer contacts between owners of Le Corbusier's buildings. The Foundation also has a large archive concerning recent world-wide correspondence with private property owners and governmental organisations. The nomination process has strengthened the exchange of information between partners involved. In the supplementary information provided by the States Parties, the intention to employ a full-time architect is indicated as well as planned improvements to the Foundation's data collection to form an observatory.

Given the special problems associated with the conservation of 20th century architecture, a continuous involvement of (inter)national specialists on the conservation of Modern architectural heritage is also essential. In Switzerland the federal administration can call such specialized experts for advice to support the local conservationists (and has done so already). A similar approach is highly recommended for France, where ten components are located in six different counties (*départements*) and the 'deconcentrated' implementation

of the legislative protection involves many different approaches, and for other countries.

Within both France and Switzerland coordinating committees have been set up to oversee the management of sites in those countries.

What remains unclear is how dialogue is undertaken between countries in relation to sensitive development projects. There is clearly a need for contributing States Parties to have knowledge of, and opportunities to comment on, proposed development in a component site that might compromise the value of the overall series.

Management plans for each site

The development of the third nomination and particularly the creation of the International Association of Le Corbusier sites, has facilitated the development of local management plans for component sites. These have been implemented on a partnership basis between owners and the cultural, heritage and planning departments of the local authorities in whose area they are sited.

Sites in France, Germany, Belgium, Argentina, and Japan all have local Management Plans. The two sites in Switzerland have a local section of a national management plan, while the site in India currently is only guided by the Chandigarh Master Plan although a management plan has been prepared.

The nomination file sets out clearly the management responsibilities for all the component sites. Below are comments on specific aspects of management at various component sites.

France

The current owner of the Manufacture Duval à Saint-Dié is responsible for the management of both the production firm and the premises. He is very devoted to the factory and Le Corbusier's architectural characteristics but it is desirable that brings in advice from the Le Corbusier Foundation and other specialists to draw up and implement a feasible management plan for the maintenance and conservation of the site.

At Ronchamp the management system is not currently effective enough in providing ongoing conservation and maintenance and in ensuring the security of the site. ICOMOS considers that action needs to be undertaken to put in place a specific agreement between the various parties involved to establish and implement a long-term management plan and to address the current weaknesses. This needs to have a clear allocation of funds and clear responsibilities.

Switzerland

The management of the Petite villa au bord du lac Léman is the responsibility of the municipality of Corseaux. ICOMOS recommends that a specific management plan is drafted to set out current responsibilities and systems.

The Cantonal authorities have indicated that there will be more supervision to guide appropriate conservation of the recently restored Immeuble Clarté. There is a need to set out guidelines for the occupants of the apartment as well as the restaurant.

Germany

For the single house which is rented out as a home, ICOMOS recommends that specific guidelines for maintenance and use be drawn up for future occupants.

Argentina

The Maison du Docteur Curutchet is managed by The Council of Architects of the Province of Buenos Aires. Greater supervision of development in the setting is needed.

India

Under the Chandigarh Administration, the Chandigarh Heritage Conservation Committee, or CHCC, is being created, which will have overall supervision of any conservation and maintenance of the Capitol Complex. The States of Punjab and Haryana work together in an interstate committee dedicated to the joint maintenance of the complex, including the removal of additions and insensitive alterations, as well as the restoration of the buildings.

A management plan has been prepared as part of the nomination. This will be implemented by the Chandigarh administration. The Plan calls for a Conservation Plan to be developed.

As there is tension between the Le Corbusier's design for buildings to be cooled by natural ventilation and the demands for air-conditioning, and as air-conditioning units nestled in the brise soleil are visually jarring, there is a need for mechanical engineering expertise to be brought into the management structure.

Japan

A revised detailed management plan was created in September 2013. This does not have a concrete actions plan and it would be desirable if specific conservation measures could be identified to address the reconstruction of the interior of the former director's office, a restoration of the forecourt and a restoration of "exhibition rooms with natural lighting" which was an important concept of Le Corbusier's museum designing.

During most of the ICOMOS missions, it was noted that general understanding of the rationale for the series has increased for which the formation of the Association of Le Corbusier sites had had a role.

This was particularly evident in the two 'Citrohan type' houses in Stuttgart where emphasis was laid on the place that they have in both Le Corbusier's development of house types, as well as in the international influence of the Weissenhof-Siedlung in general as part of global spread of the Modern Movement.

Although various websites and leaflets do now refer to the serial nomination, more efforts are desirable to communicate the coherence between the seventeen nominated components of Le Corbusier's oeuvre on each site to the public at large.

As the nomination dossier has set out so clearly the way each item contributes to the whole, an interpretation strategy that allowed each property to explain the Outstanding Universal Value of the whole series and how each component contributes to it, is highly desirable. Perhaps a specific sign could eventually mark each component.

The current staffing levels and levels of expertise and training are high in all sites and mechanisms to allow liaison between sites have been put in place. Nonetheless, there appears to be a need for more capacity building on the processes of impact assessment and a need to formalise and clearly define conservation approaches and procedures across the series.

Involvement of the local communities

Almost no involvement of local communities was mentioned in the first two nomination dossiers. Since then there has been more activity in some sites such as the Museum in Tokyo where local communities actively support the inscription and have been involved in some transnational exchanges with the communities in other component parts.

ICOMOS considers that the management system for the overall serial property is adequate. For individual sites, great progress has been made in putting in place management plans for nearly all components. These need to be strengthened through more specific focus on the attributes of Outstanding Universal Value which have now been clearly defined and the formal use of Heritage Impact Assessments. Clearly defined conservation approaches need to be put in place for the overall series. The Management plan for Chandigarh needs to be submitted together with details of its implementation.

6 Monitoring

Monitoring indicators were provided in the nomination dossier for the series. These are mainly technical indicators related to budgets, tourism, development, and protection measures. What was missing from these indicators were links to the attributes of Outstanding Universal Value. As the attributes of Outstanding Universal Value for the series have now been clearly set out, as well as how each site contributes to these overall attributes, it is these that need to be monitored.

In response to a request from ICOMOS, model attributes were developed for the two properties in Switzerland and a timetable for developing indicators for the rest of the series by the end of 2016.

ICOMOS considers model indicators are clear and adequate and should be developed for the rest of the series.

7 Conclusions

ICOMOS considers that enormous strides have been taken by the contributing States Parties since 2009. Not only has the nomination dossier been completely re-structured and re-focused, but greatly strengthened management systems have been put in place at both local and international level. During the same time, dialogue between the various States Parties has increased (for a very low base for the first nomination), so that there now appears to be a shared understand of the scope of the nomination and the challenges that have to be addressed. The beginnings of dialogue between local communities involved in individual sites are also emerging.

Most importantly, the nomination now sets out a clear rationale for the series, based on the sites and what they convey in relation to the development of the Modern Movement and to Le Corbusier's contribution to it over half a century, and for the way each of the sites makes specific contributions to the overall series.

There has been much debate within the World Heritage Committee over many years as to how 20th century heritage should be inscribed on the World Heritage List in relation to the balance between an architect and his work. The first two nominations submitted for this series were not supported by the World Heritage Committee as they did not clearly differentiate between the importance of Le Corbusier and the importance of the nominated sites, nor did they articulate the way the sites conveyed ideas that could be shared by the whole series, or spell out strongly enough why, for Le Corbusier's work, a global series was justified for the way it relates to the first manifestations of an architect's global reach.

ICOMOS considers that the current nomination does all of these and can be seen as a model as to how a series related to the work of an architect might be structured.

While the new dossier has been compiled, nevertheless there have been increased development pressures on some sites. At two sites, la Chapelle Notre-Dame-du-Haut at Ronchamp and Immeuble locatif à la Porte Molitor, the developments have had a highly damaging impact on their authenticity and integrity and on the ability of the components to convey the ideas for which they have been nominated.

At Ronchamp, the project to develop new monastic buildings and a visitor reception, both designed by Renzo Piano, in spite of opposition by the Le Corbusier Foundation and by ICOMOS in its second evaluation, has resulted in structures being inserted in to the hill that completely overwhelm the remoteness and serenity of

the fragile chapel as a place of pilgrimage, and relationship with its setting as envisaged by Le Corbusier.

At Molitor, a giant stadium has been constructed directly in front of this glass fronted building that fundamentally alters its relationship with the landscape of the Bois du Boulogne that was formerly brought into the apartments through the glass facade.

ICOMOS greatly regrets that these developments have occurred during the evaluation process.

These two developments bring into focus the adequacy of the current protective arrangements. Although the State Party of France has offered details on consultations before these two projects were approved, the precise details as to how the potential negative impacts were assessed remain unclear and do not appear to have adequately considered the potential international value of these sites in relation to the national importance of pilgrimage at Ronchamp and sporting associations at Molitor.

ICOMOS considers that the interventions at these two component sites have impacted to such a degree on their authenticity and integrity and on their ability to convey their contribution to the series, that mitigation measures should be developed, including the possibility of reversing the interventions as soon as possible and within a defined time frame of 20 years.

ICOMOS also considers that all major projects that could impact on the series should be communicated to the World Heritage Centre in line with paragraph 172 of *Operational Guidelines for the Implementation of the World Heritage Convention*. It will be essential in the future for all projects to be evaluated through Heritage Impact Assessments on the contribution of each of the component sites to Outstanding Universal Value. It is for this reasons that clearly defined monitoring indicators relating to the attributes of Outstanding Universal Value are so essential for all component sites.

Furthermore, consideration should also be given to refining the power of the Standing Conference to allow full understanding by all States Parties of major development proposals in all component sites, in relation to their potential impact on the overall series.

A lack of clarity relates to the new Heritage Law being developed in France which, it is anticipated, will be introduced in the second half of 2016. Currently there is no final text available but indications are that the new law will bring significant changes to the way heritage assets are protected and are subject to planning controls. ICOMOS considers that it is of importance that the implications of this new Law are made clear as soon as full details are available in order to understand whether extra protection is needed over and above what the Law can provide.

The nomination makes it clear that the new Standing Conference may recommend extensions to this series. ICOMOS considers that the World Heritage Committee needs to agree the ultimate scope of this series.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that The Architectural Work of Le Corbusier, An Exceptional Contribution to the Modern Movement, France, Argentina, Belgium, Germany, India, Japan, Switzerland, be inscribed on the World Heritage List on the basis of **criteria (ii) and (vi)**.

Recommended statement of Outstanding Universal Value

Brief synthesis

Chosen from the work of architect Le Corbusier that survives in eleven countries on four continents, the sites in seven countries on three continents, implemented over a period of half a century, attest to, for the first time in the history of architecture, the internationalization of architectural practice across the entire planet.

The seventeen sites together represent an outstanding response to some of the fundamental issues of architecture and society in the 20th century. All were innovative in the way they reflect new concepts, all had a significant influence over wide geographical areas, and together they disseminated ideas of the Modern Movement throughout the world. Despite its diversity, the Modern Movement was a major and essential socio-cultural and historical entity of the 20th century, which has to a large degree remained the basis of the architectural culture of the 21st century. From the 1910s to the 1960s, the Modern Movement, in meeting the challenges of contemporary society, aimed to instigate a unique forum of ideas at a world level, invent a new architectural language, modernize architectural techniques and meet the social and human needs of modern man. The series provides an outstanding response to all these challenges.

Some of the component sites immediately assumed an iconic status and had world-wide influence. These include the Villa Savoye, as an icon for the Modern Movement; Unité d'habitation in Marseille as a major prototype of a new housing model; Chapelle Notre-Dame-du-Haut de Ronchamp for its revolutionary approach to religious architecture; the Cabanon de Le Corbusier as an archetypal minimum cell based on ergonomic and functionalist approaches; and the Maisons de la Weissenhof-Siedlung that became known worldwide, as part of the Werkbund exhibition.

Other sites acted as catalysts for spreading ideas around their own regions, such as Maison Guiette, that spurred the development of the Modern Movement in Belgium and the Netherlands; the Maison du Docteur

Curutchet that exerted a fundamental influence in South America; the Musée National des Beaux-Arts de l'Occident as the prototype of the globally transposable Museum of Unlimited Growth which cemented ideas of the Modern Movement in Japan; and the Complexe du Capitole that had a considerable influence across the Indian subcontinent, where it symbolized the Indian's accession to modernity.

Many of the sites reflect new architectural concepts, principles, and technical features. The Petite villa au bord du Léman, is an early expression of minimalist needs as is also crystallized in the Cabanon de Le Corbusier. Le Corbusier's *Five Points of a New Architecture* are transcribed iconically in Villa Savoye. Immeuble Molitor is an example of the application of these points to a residential block, while they were also applied to houses, such as the Cité Frugès, and reinterpreted in the Maison Curutchet, in the Couvent Sainte-Marie-de-la-Tourette and in the Musée National des Beaux-Arts de l'Occident. The glass-walled apartment building had its prototype in the Immeuble Molitor.

A few sites created major trends in the Modern Movement, Purism, Brutalism, and a move towards a sculptural form of architecture. The inaugural use of Purism can be seen in the Maisons La Roche et Jeanneret, Cité Frugès and the Maison Guiette, the Unité d'Habitation played a pioneering role in promoting the trend of Brutalism, while La Ronchamp and the Complexe du Capitole promoted sculptural forms.

Innovation and experimentation with materials of architectural components are reflected in the independent structure of concrete beams of the Maisons de la Weissenhof-Siedlung, while pre-stressed reinforced concrete was used in the Couvent de La Tourette. In the Complexe du Capitole, concern for natural air-conditioning and energy saving, led to the use of sunscreens, double-skinned roofs, and reflecting pools for the catchment of rainwater and air cooling.

Standardisation – part of the search for perfection – is seen in the Unité d'Habitation de Marseille, a prototype intended for mass production, while the Petite villa au bord du Lac Léman set out the standard for a single span minimal house, and le Cabanon de Le Corbusier a standard, minimum unit for living. The modulator, a harmonic system based on human scale, was used for the exterior spaces of the Complexe du Capitole, which reflect the silhouette of a man with raised arm.

The idea of buildings designed around the new needs of 'modern man in the machine age', is exemplified in the light new workspaces of Manufacture à Saint-Dié, while the avant-guard housing at the Cité Frugès, and the affordable Maisons de la Weissenhof-Siedlung, demonstrate the way new approaches were not intended for a tiny fraction of society but rather for the population as a whole. By contrast the Immeuble Clarté was intended to revolutionise middle class housing. *The*

Athens Charter, as revised by Le Corbusier, promoted the concept of balance between the collective and the individual, and had its prototype in the *Unité d'habitation*, while the *Complexe du Capitole*, the focal point of the plan for the city of Chandigarh, is seen as the most complete contribution to its principles and to the idea of the Radiant City.

Criterion (ii): The Architectural Work of Le Corbusier exhibits an unprecedented interchange of human values, on a worldwide scale over half a century, in relation to the birth and development of the Modern Movement.

The Architectural Work of Le Corbusier revolutionized architecture by demonstrating, in an exceptional and pioneering manner, the invention of a new architectural language that made a break with the past.

The Architectural Work of Le Corbusier marks the birth of three major trends in modern architecture: Purism, Brutalism and sculptural architecture.

The global influence reached by The Architectural Work of Le Corbusier on four continents is a new phenomenon in the history of architecture and demonstrates its unprecedented impact.

Criterion (vi): The Architectural Work of Le Corbusier is directly and materially associated with ideas of the Modern Movement, of which the theories and works possessed outstanding universal significance in the twentieth century. The series represents a "New Spirit" that reflects a synthesis of architecture, painting and sculpture.

The Architectural Work of Le Corbusier materializes the ideas of Le Corbusier that were powerfully relayed by the International Congress of Modern Architecture (CIAM) from 1928.

The Architectural Work of Le Corbusier is an outstanding reflection of the solutions that the Modern Movement sought to apply to the major challenges of the 20th century to invent a new architectural language; to modernize architectural techniques; and to respond to the social and human needs of modern man.

The contribution made by The Architectural Work of Le Corbusier to these major challenges of the twentieth century is not merely the result of an exemplary achievement at a given moment, but the outstanding sum of built and written proposals steadfastly disseminated worldwide through half a century.

Integrity

The integrity of the series as a whole is adequate to demonstrate the way Le Corbusier's buildings reflects not only the development and influence of the Modern Movement but the way they were part of its transmission around the world.

The integrity of most of the component sites is good. At *Cité Frugès*, Pessac, new buildings on the site of three destroyed standardised houses by Le Corbusier within the nominated property are inconsistent with the architect's concepts. At *Villa Savoye* and the adjacent gardener's house, integrity is partly compromised by the *Lycée* and sports fields built on three sides of the original meadow that surrounded the villa in the 1950s. The setting of this site is fragile. At the *Maisons de la Weissenhof-Siedlung*, Stuttgart, war-time destruction and post-war reconstruction, has led to the collective integrity of the model settlement being affected by the loss of ten houses out of twenty-one.

There is recent loss of integrity at *Ronchamp* and *La Porte Molitor*. At *Ronchamp*, where Le Corbusier's structure overlaid a centuries-old pilgrimage site, the integrity of the site has been compromised by a new visitor centre and a nunnery near the chapel which cut into the contemplative hillside setting of Le Corbusier's structure and has led to a serious loss of integrity.

At *Immeuble locatif à La Porte Molitor*, a rugby stadium has been constructed right in front of the glass façade of the apartment block. This enormous structure immediately opposite the site blocks views of the Bois de Boulogne through the innovative glass facades and leads to a serious loss of integrity.

Authenticity

The series clearly demonstrates how it adds up to more than the sum of its component parts.

For most of the individual component sites, the authenticity is good in relation to how well the attributes of the site can be said to reflect the overall outstanding universal value of the series. At *Cité Frugès*, on three plots houses were constructed with traditional houses instead of Corbusian structures, while elsewhere in the urban landscape, there is a partial loss of authenticity through neglect and interior changes. At *l'Unité d'habitation*, the fire of 2012 destroyed a small part of the building. This has now been totally reconstructed to the original design, but with some reduction in authenticity. The authenticity of the existing *Capitol Complex* in Chandigarh could be impacted if either or both of the governor's palace or the museum of knowledge were now to be constructed, an eventuality that has apparently been discussed.

At the *National Museum of Western Art in Japan (NMWA)*, the original intention for the forecourt of the Museum appears to be as a wide open space. Forecourt planting in 1999 tends to detract from the presentation of the building, its key views and the setting.

The recent new developments at *Ronchamp* have a highly negative impact on the authenticity of this chapel. At the entrance, there is now a visual competition between the new constructions and the works of Le Corbusier. These interventions have severely

compromised the authenticity of La Chapelle Notre-Dame-du-Haut at Ronchamp in terms of its ability to convey Le Corbusier's ideas. It is no longer a remote pilgrimage chapel, a serene object in the landscape approached gently on foot. At Molitor an enormous rugby stadium has been constructed in front of the glass façade and has severely compromised the ability of this component site to convey its value.

In terms of materials, some sites have been restored and partly reconstructed in recent years, after neglect or disfigurement. Overall, the modifications can be seen to be reasonable and proportionate. Comparing the sites to other inscribed 20th century houses, reveals that these also share similar slightly diminished levels of authenticity.

Management and protection requirements

Many of the components received early protection in their respective countries, mostly in the two decades following Le Corbusier's death. Some, like the Maisons de la Weissenhof-Siedlung in Stuttgart and the Unité d'habitation in Marseille, were given protection during Le Corbusier's lifetime. The nomination dossier sets out for each component the relevant forms of legislative protection. All component sites are protected at a national/federal level and their buffer zones are adequately protected by either legislation or planning mechanisms. Given the importance of detail and setting for these 20th century buildings, it is crucial that their protection is sufficiently encompassing and sensitive to allow for protection of interiors, exteriors, context and setting.

In most of the sites, conservation measures are appropriate and are based on long-standing conservation experience and methodology. Conservation work is programmed and entrusted to specialists with high levels of skill and expertise. Conservation treatment is combined with regular maintenance, including the involvement of inhabitants, local communities, and public associations. There are conservation issues at the Chapel at Ronchamp. There is now an urgent need to implement the agreed conservation programme. There is also an urgent need for a Conservation plan to be prepared for Chandigarh.

A Standing Conference has been established for the overall series and will coordinate the management of the Property, advise States Parties and implement actions for promotion and enhancement of the Property. An Association of Le Corbusier Sites has been set up to bring together all the local authorities in whose territories sites have been nominated. Its main objectives are coordination, raising public awareness, sharing conservation experience, overall coordination and management of the series, and implementation of management plans for each of the component sites. The involvement of the expertise of the Fondation Le Corbusier – that has the moral rights over Le Corbusier's oeuvre – is crucial for appropriate management and

conservation of the series, especially in those cases where the properties are in private hands other than the Fondation. Within both France and Switzerland coordinating committees have been set up to oversee the management of sites in those countries.

What remains unclear is how dialogue is undertaken between countries in relation to sensitive development projects. There would be a need for contributing States Parties to have knowledge of, and opportunities to comment on, proposed development in a component site that might compromise the value of the overall series.

Local management plans have been drawn up for each component site. These have been implemented on a partnership basis between owners and the cultural, heritage and planning departments of the local authorities in whose area they are sited. At Ronchamp the management system needs strengthening to ensure the security of the site. At Doctor Curutchet's house, greater supervision of development in the setting is needed.

Given the special problems associated with the conservation of 20th century architecture, a continuous involvement of (inter)national specialists on the conservation of Modern architectural heritage is also essential. In Switzerland the federal administration can call such specialized experts for advice to support the local conservationists (and has done so already). A similar approach is highly recommended for other countries.

The current staffing levels and levels of expertise and training are high in all sites and mechanisms to allow liaison between sites have been put in place. Nonetheless, there appears to be a need for more capacity building on the processes of impact assessment and a need to formalise and clearly define conservation approaches and procedures across the series.

Model monitoring indicators developed for two properties in Switzerland will be developed for the rest of the series by the end of 2016.

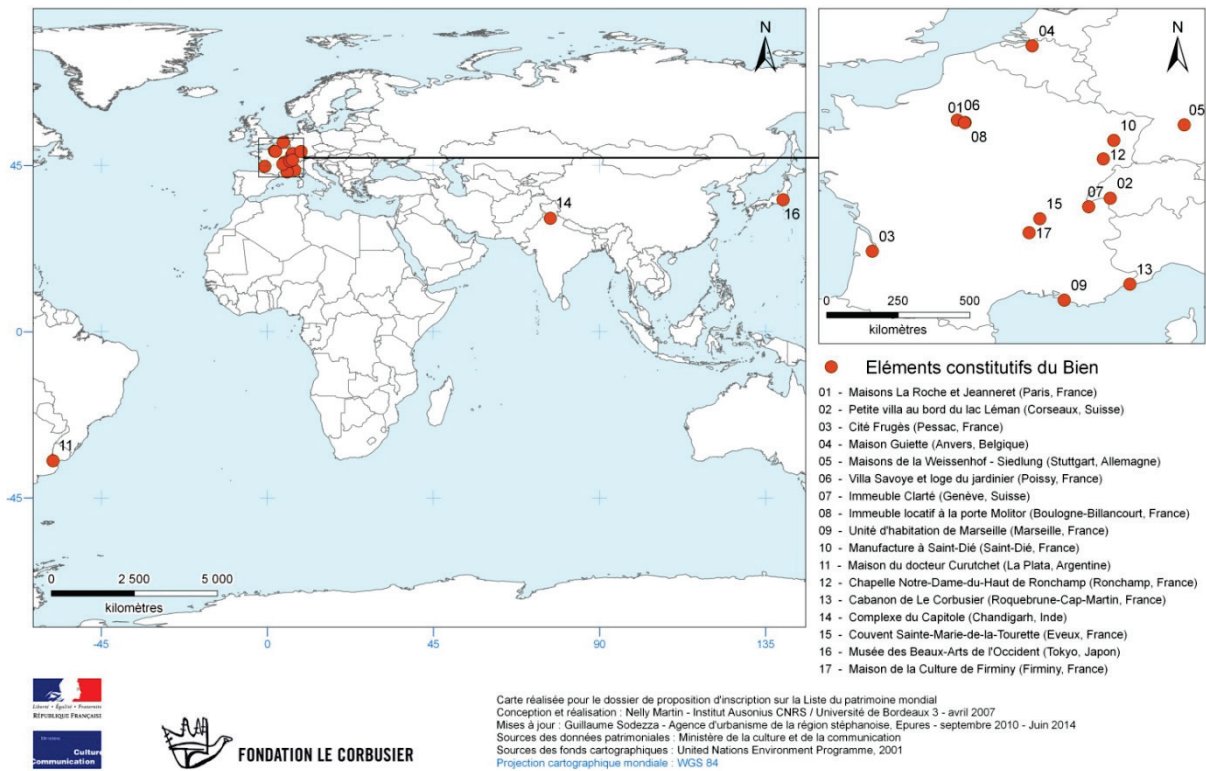
Additional Recommendations

ICOMOS further recommends that the States Parties give consideration to the following:

- Developing short and longer term mitigation measures to address the adverse impacts of recent development at Ronchamp and Molitor, including consideration of removal of the new constructions within a defined timeframe;
- Introducing the Heritage Impact Assessment procedures for proposed development at all component sites;
- Developing monitoring indicators for all component sites;

- Developing agreed overall conservation approaches and procedures for the series;
- Considering how the power of the Standing Conference might be refined to allow full understanding by all States Parties of major development proposals in all component sites, in relation to their potential impact on the overall series;
- Submitting the Management plan for Chandigarh;
- Progressing with the Conservation Plan for Chandigarh;
- Clarifying the protection of the buffer zone for Maison Guiette;
- Clarifying the implications of the new Heritage Law in France;
- Submitting proposals from the Standing Conference on the approach to any further extensions to the series and on its ultimate scope.
- Submitting a State of Conservation report by 1st December 2018 in order to provide progress and/or clarification on the above mentioned recommendations for examination by the World Heritage Committee at its 42 session.

ICOMOS would be ready and willing to discuss these recommendations with the States Parties, if requested.



Map showing the location of the nominated properties within seven States Parties



Element 1: Maisons La Roche et Jeanneret – Paris, France



Element 2 : Petite villa au bord du lac Léman – Corseaux, Switzerland



Element 4: Maison Guiette – Antwerp, Belgium



Element 5: Maisons de la Weissenhof-Siedlung– Stuttgart, Germany



Element 6: Villa Savoye - Poissy, France



Element 8: Immeuble Molitor - Paris, France



Element 11: Maison du Docteur Curutchet – La Plata, Argentina



Element 12: Chapelle Notre-Dame-du-Haut – Ronchamp, France



Element 14: Capitol Complex – Chandigarh, India



Element 16: National Museum of Western Art – Tokyo, Japan