Housing estates in Berlin (Germany)



Official name as proposed by the State Party: Housing

Location:

Housing estates in the Berlin Modern Style

Berlin, Germany

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Brief description:

The serial nomination includes six housing ensembles constructed between 1913 and 1933 in Berlin. The properties, most of them designed with the participation of the architect Bruno Taut, testify the development of social housing from the garden city model to the functional approach that characterised the modern movement in architecture and urbanism. The properties also testify to the combination of urbanism, architecture and landscape design and the extensive use of colour. These ensembles provided, on a large scale, healthy, hygienic and humane living conditions for low income groups and demonstrated democratic housing development.

Category of property:

In terms of Article 1 of the 1972 World Heritage Convention, this is a serial nomination of six groups of buildings.

1. BASIC DATA

Included in the Tentative List: 20 September 1999

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

Date received by theWorld Heritage Centre:24 January 2007

Background: It is a new nomination.

Consultations: ICOMOS consulted its Scientific International Committee on 20th Century Heritage and DOCOMOMO.

Literature consulted (selection):

Benevolo L., Storia dell'architettura moderna, Bari, 1960.

Curtis W., Modern architecture since 1900, London, 1982.

Frampton K., Modern architecture. A critical history. London, 1992.

Hilbersheimer L., Berliner Architektur der 20er Jahre, Mainz, 1967.

Pehnt W., Deutsche Architektur seit 1900. Manchen, 2005.

Technical Evaluation Mission: 19 - 22 October 2007

Additional information requested and received from the State Party: ICOMOS sent a letter to the State Party on 11 December 2007 on the following issues:

- The meaning of the term "Berlin Modern Style";

- The rationale behind the selection of the six nominated properties from among the Housing Estates dating from the 1910s and 1920s still existing in the city;

- Extension of the comparative analysis to other relevant German and European Housing Ensembles, pointing out similarities and differences. This should include an analysis of the Berlin Housing Estates in relation to later housing developments in Europe and other continents;

- The review of the proposed buffer zones in Gartenstadt Falkenberg and Weisse Stadt.

On 22 February 2008, ICOMOS received additional information from the State Party in reply to the issues raised. The additional information provided is analysed in the corresponding sections of this report.

Date of ICOMOS approval of this report: 11 march 2008

2. THE PROPERTY

Description

This is a serial nomination that includes six properties, each one a housing ensemble located in Berlin and constructed between 1913 and 1934. All these estates are based on a holistic settlement ground plan, which reflects the respective model of housing reform of each developer. The idea was to create housing for all income levels, of equal standard and varying size, with dedicated bathrooms and kitchens and generous loggias and balconies, which faced the sun. This intention was complemented by the desire to find a modern architecture to reflect the ground plan structure, treat front and rear facades without hierarchy and to embed all this in communal functional green spaces. In fact, the green spaces are very important in creating a friendly impression; the developers not only aimed at creating a new social and spatial order; they also wanted to create beautiful facilities and make the inhabitants of these areas happy.

The nominated properties were selected as landmarks of the evolution of housing solutions over the first decades of the 20^{th} century. The following paragraphs summarize the main features of each property.

- Gartenstadt Falkenberg

The nominated property covers a surface area of 4.4 ha. Built to the design of Bruno Taut, the housing estate was erected in two phases. The houses form open groups around two residential streets. The estate has 34 residential units: 23 single-family terraced houses in several groups, 8 multiple dwellings, 2 semi-detached houses and one single family house. Two separate villa-like houses frame the narrow access road to the courtyard. At Akazienhof, groups of row houses of varying design face one another. On the eastern side there are two double-storied groups of houses with a total of ten units arranged in pairs. Their paired entrances are framed by white painted pergolas. The spatial impression is determined by the subtle asymmetry of the composition. The prevailing colours are unusual brownish red and ultramarine blue (Taut blue). The sequence of the colours in the house units expresses the compositional principles of sequencing and mirroring and stresses the harmonic asymmetry of the place - white for the tripartite house at the head, yellow and brown for the double-storied houses and green, yellow, blue and red alternating for the rows and pairs.

The second phase, built in 1914-1915, includes twelve unified groups of houses. The street is designed as a defile, having along both sides landscaped slopes with multiple terraces formed by walls, stairs and low plants that constitute the front gardens of the rows of houses which are set back from the road. All house types have in common individual colouring and the same architectural details - lively plaster in cross-wise application, red gable roofs made of single-lap crown tiles with the same pitch, high rectangular transom windows, white painted chimneys and wooden elements (shutters, pergolas and trellises). Each apartment has a garden, varying from 135 to 600 m^2 , originally meant for growing part of the inhabitant's food. Green alleyways serve the gardens, with small, standardised stables for breeding small animals. Taut's garden town concept in the second development phase integrates the front gardens of the single-family houses with the road space. The proposed buffer zone, revised in February 2008 on request of ICOMOS, covers the adjacent areas, with a surface of 31.2 ha.

- Siedlung Schillerpark

The nominated property has a surface area of 4.6 ha. It was built between 1924 and 1930 to designs by Bruno Taut. The housing estate is separated from the immediate residential quarters as if it were an autonomous block in the city network. The two blocks from the first two development phases, erected between 1924 and 1928, demonstrate the novel urban development and residential concept most clearly. Without following a precise block alignment, Taut places three-storey ribbon buildings with East-West and North-South orientation around quiet garden courts so that they appear as open block boundary buildings. The large garden courts are made publicly accessible, by providing passages at the extreme ends of the ribbons. It is the first test for Taut's principle of "outdoor living space" in a multi-storied environment. Even the Schillerpark evolved as one of the main entrances to the park and, along Oxforder Strasse, Taut created a wide green corridor with a double row of trees which crosses the housing estate to connect the park with semipublic green spaces and the church-yard in the Northeast.

The row buildings display an unusual plastic and contrasting style with their many projections and insets and an alternation between loggias and balconies developed consistently from the functional design orientated towards the sun. The architecture with its red brick walls, the flat roofs and the plastic shapes of the façades with loggias and balconies particularly reflects the Amsterdam school with its traditional, strong brick buildings. The second development phase, completed in 1928, consists of semidetached houses with paired loggias. Subsequent development phases reflect simplified designs, in part as the result of growing economic restrictions. To preserve a coherent overall appearance, Taut continued using dark red bricks for façades in the third phase (1929-30) but he stopped using plaster structures and distinguished jamb zones. Hans Hofmann designed a new development phase in 1954, in harmony with Taut's concept on the same high level of design using the architectural style of the 50s. Two enclosed courtyards reflect particular attention to the garden design. Since the flats are orientated towards the sun, the staircases, loggias and balconies face the street or yard. The proposed buffer zone covers a surrounding area of 31.9 ha.

Grossiedlung Britz (Hufeisensiedlung)

The nominated property occupies 37.1ha. It was erected on the land of the former manor of Britz in six phases from 1925 until 1930 and comprises 1963 housing units designed by Bruno Taut and Martin Wagner. Taut responded to the topography and natural space. He integrated garden town elements, like small houses and tenants' gardens, as well as common functional green spaces among houses of the 20s, creating a completely novel housing estate landscape. The integration of architecture and topography appears most clearly in the symbol of the housing estate - the horseshoe. Taut created a 350 m long three-storey horseshoe-shaped row of buildings around a depression with a pond at its centre. The row consists of 25 houses of the same type and forms a large common green space. To the west there is another symbolic spatial arrangement, a diamond shaped courtyard surrounded by rows of single-family houses. Both shapes share an axis and together they form the central motifs of the first two development phases. The uniform use of white and blue in the housing units along the horseshoe stresses their proximity. For the surrounding single-family row houses, however, Taut did not use a uniform colour for each block. On three sides, three-storey flat-roofed blocks of flats were erected like screens or a town wall around the row of houses with their steep-pitched roofs and gardens. The Red Front consists of two long rows of thirty equal three-storied housing units whose tower-like projecting staircases recall military architecture. The head buildings of the horseshoe with brilliant white facades interrupt the "Red front". Here, it is flanked by community buildings.

Development phases three through five are exclusively multiple-storied dwellings built in 1927-1929. Taut used balconies in colours, which differ from those of façades, and are paired or arranged in bands. Taut had less space for building the last development phase in 1929/30; he arranged row houses and multi-storied blocks of flats in two lots of seven parallel ribbons along Gielower Strasse.

In an exemplary way, Taut's design took into consideration the interaction of housing estate structure, architecture and private as well as public green spaces. Each flat has a loggia or balcony and all of these face the gardens and connect outdoor and indoor spaces. The single-family houses have adjacent gardens over their entire width and garden bands 40 to 60 meters wide separate the rows of houses. Even the road spaces are designed as residential streets. The green space in the centre of the horseshoe shaped row of houses is subdivided into a public area in the middle and private tenants' gardens in front of the building. The proposed buffer zone surrounding the nominated property is 73.1 ha.

- Wohnstadt Carl Legien

The nominated property occupies 8.4 ha. The estate with its four- to five-storied houses was built between 1928 and 1930 and designed by the company's chief architect Bruno Taut, who cooperated in this case with Franz Hillinger. Their task was to overcome high property prices by setting the buildings as densely as for a city centre, while fulfilling modern mass residential development requirements in terms of social conditions and urban hygiene. The task could only be met by focussing on multi-storied buildings. Taut combined rows of houses, blocks and green spaces to create a novel semi-public space structure. The yards were covered with wide lawns, bushes and trees. They form a sequence of generous, mutually linked housing estate spaces. Despite its location near the city centre, the estate had its own infrastructure with two original laundries and a central heating plant. These are located on the eastern side of the housing estate. Now they are either disused or are used for other purposes.

The wide carpet-like lawns dominate the garden architecture of the entire estate; only a small number of solitary trees are planted in these areas. The paths through the green areas in the courtyards run parallel to the buildings and narrow bands of low bushes separate them from the façades. The paths connect the entrances to the basements, located on the yard-side, with the usual central waste-bin sheds. The proposed buffer zone covers a surrounding area of 25.5 ha.

- Weisse Stadt

The nominated property occupies an area of 14.3 ha. This housing project was built between 1929 and 1931, under the leadership of Martin Wagner by a working group of architects Otto Rudolf Salvisberg, Bruno Ahrends and Wilhelm Büning. The master plan and the design of the houses and flats are rational and economical. The housing estate has been subdivided into three parts by the three architects. All three sections share an open internal structure of block buildings and rows of houses with interconnected green spaces.

The houses designed by Ahrends in long uninterrupted rows follow the bend of Aroser Allee and the parallel Romanshorner Weg. Ahrends gave his buildings individuality by the staircase windows and entrance doors which, by their expressionist brick frames, stand out impressively from cool plain white façades. The loggias face the yards and their glass forms add plasticity to the facades. Rows of houses dominate the section designed by Wilhelm Buning. They form the outer ring of the fan between Aroser Allee and Emmentaler Strasse. The trapezoid areas between them are green spaces. These open towards the tree filled Schillering at their narrow end. In the North, the bridge house by Otto Rudolf Salvisberg crosses Aroser Allee and closes the southern section of the housing estate while at the same time opening up the northern section, which was designed by the same architect. Behind the bridge house is a 280 m long row of houses whose plain, closed front along the road looks like solid, opposite the large open space with its sports grounds and schools on the other side. In the original concept, new school buildings were to be erected there. In contrast to the expressive clarity of the houses designed by Ahrends, the rows by Salvisberg express a finely drawn functionalism.

There are 24 shops, not concentrated centrally but distributed across several dominating urban positions, a children's home in the section designed by Ahrends and even a medical practice - all establishing the high social standard of the estate.

The design of the green open spaces relates closely to the urban structure and the architecture of the estate's three sections. The park-like outdoor facilities were to provide multiple uses for the inhabitants. The intention was to stress the coherence of several buildings and to enhance the appearance of individual rows of houses. The proposed buffer zone, revised in February 2008 on request of ICOMOS, has a surface area of 50.1 ha.

- Grosssiedlung Siemensstadt

The nominated property occupies an area of 19.3 ha. It was built in 1929-34; the work group was made up of Hans Scharoun, Walter Gropius, Fred Forbat, Otto Bartning, Paul Rudolf Henning, Hugo Häring and the landscape architect Leberecht Migge. Each architect was allocated the design of individual rows of houses. The result is a very varied image across the housing estate. It contains examples of all styles of *neues bauen* from the functionalism of Gropius through the spatial art of Scharoun up to Häring's organic wealth of shapes. Scharoun had the task of creating an architectural frame for all the different styles. Here, he developed his *leit motif* of "neighbourhood", which relates to the space in which people live. He also preserved the existing trees and from the beginning these trees strengthened the landscape character of the housing estate.

Scharoun designed the access to the estate from the city; a fan-shaped property formed by the curve of the commuter railway line; he used a very plastic design with staggered height, deep cuts for the roof terraces, balcony and circular windows all of which gave it the appearance of a ship. The two rows by Gropius represent the programmed rationality of the design of large housing estates by neues bauen. The subdued colours of the building, limited to a pattern of white-grey-black, reflect Gropius' technical aesthetics. The steel frames of the windows of staircases and loggias, apartments and the protective railings of roof gardens are all painted slate grey so that the band-like structure of these elements stands out clearly against the bright white of the façades. The architecture of Häring is characterised by natural looking materials and colours, especially the soft kidney-shaped balconies standing out far from the building facades. He is the only one to place balconies and staircases on the western side. The strong vertical element of the staircase harmonises with the dominating motif of the layered rounded balconies.

Henning's six rows of houses have natural looking colours similar to those used by Häring. The same yellow plaster, with structured surface, the brick cladding in various shades of yellow and the window frames in light yellow give the group of buildings the image of a garden town or summer resort, despite the ribbon pattern. The three ribbons of houses by Fred Forbat are quite varied. Similar to the buildings designed by Gropius, the clear geometric shapes of the buildings are functional in style, with white façades and highlighted brick elements in various shades of yellow. Forbat's architecture is based on strict, carefully shaped simplicity and the stressing of closed contours, enlivened by asymmetric highlights.

Leberecht Migge was responsible for designing the outdoor facilities. Characteristic of his design is the creation of interconnected housing estate spaces and the consistent integration of existing landscape elements like the trees on Jungfernheide. To avoid disturbing the park-like image with essential service facilities, waste bin sheds were carefully integrated into the overall design. Between the sections designed by Henning and Haring there is a generous park area with common playgrounds and meeting places that creates a spatial connection between the two sections. In the "Green Centre" there are three differentiated meeting places and playgrounds, linked with the surrounding buildings by paths. These facilities are embedded amongst the spatial variation of lawns and old trees. This area is bounded by slopes to the North and East. The proposed buffer zone is a surrounding area of 46.7 ha.

History and development

The builders of the Berlin Garden towns and large housing estates found the land they needed for implementing the housing policy at the quality needed in the rural outer districts of Berlin. The intense development in that part of the city required the existence of the city itself with its economy and strong infrastructure. The new housing estates were situated near the stations of the tightly knit, expanding Berlin commuter transport network. All nominated estates were built by cooperatives and nonprofit organisations. Closed tenements with densely packed structures were replaced by the concept of open housing, created as garden towns and cities. This new concept represents a radical break from urban development of the 19th century with its corridor-like streets and reserved spaces for squares.

The effect of World War I on social policy and the founding of the Weimar republic had a great impact on the development of the city of Berlin. For the urban development plan the transition to the republic in 1918/19 brought a major change to working conditions. The democratic electoral law for regional and local parliaments opened the way to a more socially focussed development and planning policy. The new order also made it possible to implement long overdue changes in the administrative structure. This created the precondition for applying uniform planning principles to the entire area. The economic expansion of Berlin, mainly through electrical engineering, supported by municipal investment, facilitated Berlin's rise to the rank of an acknowledged metropolis.

Planning works were dominated by the Berlin central government. The guidelines for housing policy and urban development were mainly determined by two urban councillors: Ludwig Hoffman and Martin Wagner. Wagner was a social democrat and architect, who pushed for the construction of reformed housing estates. This was most significant as the lack of housing in Berlin had been further aggravated by war. The political and economic consequence of World War I, in conjunction with the new building laws of the Weimar Republic, ended entirely private housing construction. The demand for small flats was from 100,000 to 130,000 units. Housing construction was finally re-activated, after inflation and currency

reform, by the introduction of a mortgage servicing tax in 1924.

The reform building regulation, which became effective in 1925, provided the basis for new social housing. It aimed to reduce the density of buildings in residential estates and to separate the functions of individual zones. It divided the entire area of the city into different development zones - starting in the city centre where buildings were allowed 5 storeys in density, it decreased towards the outskirts where larger housing estates were built. Here buildings were allowed to reach a maximum of two to three storeys. The density of buildings was much reduced in these areas, where cross buildings and wings were prohibited.

Berlin now had the opportunity to implement housing development in accordance with the models of *neues bauen*. Within only seven years (1924-1931) more than 146,000 flats were built. Such volume of construction was never again reached, not even during the post-war period of the 1950s. Wagner played a central role in non-profit housing welfare in Berlin during the Weimar Republic. For the development of the city he created a polycentric model, dissolving the division between town and countryside. Inside the railway ring, which surrounded the dense Berlin inner-city area, residential quarters were built of open multi-storey design within greenery, to fill the remaining gaps within the city's structure.

During the early phase of the mortgage servicing tax era, the main focus of housing policy was on developing estates of small single-family houses in suburban areas. By this means the responsible politicians wished to counteract the effect of proletarian mass housing and to re-create the people's link with houses and nature, which had been lost. They also wished to give the inhabitants of these housing estates the opportunity of self-sufficient food production. When the income from mortgage servicing tax decreased in the late 1920s, the city of Berlin mobilised its own finance to alleviate the still pressing shortage of housing with further estates built in multi-storey ribbon form. Although the economic crises of 1928-29 had an impact on housing construction, the Berlin government was still able to erect two large estates on the city own-land in 1929-31. When the Nazis took power in 1933, the structures of organisation and personnel in the municipal administration of Berlin completely changed and ended the democratic housing development, which was largely influenced by social-democracy, left-wing trade unions and cooperatives. Martin Wagner had to resign from office. The Nazis' building policy was based on a different idea of the arts. Modernity and neues bauen were no longer sought. Bruno Taut, Martin Wagner, Walter Gropius and many other authors of modern housing had to emigrate.

In the 1930s and 1940s, no major changes were made to the housing estates and they suffered very little destruction during the war. Their appearance was occasionally altered by early repair works after the war, when in some cases the works did not re-establish the original design. From the 1980s, many of these changes were replaced by new works re-establishing the original monuments. Refurbishment and modernisation programmes were introduced from the 1950s to maintain the basic fabric of the housing estates of Britz, Schillerpark, Weisse Stadt and Siemensstadt in West Berlin. These programmes did not take into account the principles of restoration and conservation. In the estates on East Berlin territory (Gartenstadt Falkenberg and Wohnstadt Carl Legien) only occasional repair works were carried out. In the western part of the city thorough restoration works began in the 1980s. These works were carried out in close cooperation among authorities, conservation experts, resident communities and the architects hired for the project. This process began in the eastern parts of the city in the 1990s after the reunification of Germany.

Housing estates in Berlin Modern Style values

Historically, the six properties that constitute the serial nomination bear testimony to housing policies, specifically of the Weimar Republic. The properties reflect a housing reform movement, based on wide political, social, economic, legislative and architectural support.

From an urban and architectural point of view, the main values associated with the nominated properties are:

- Theoretical and practical research into functionality, rational planning structures, living norms and facilities.
- The development of housing typologies from a garden city to large housing developments, including new types of ground plans and flats, establishing new hygienic and social standards.
- The introduction of a new architectural aesthetic and detail in housing developments, based on the interpretation of functional elements.
- Research into new construction technologies, structural elements, buildings materials, standardisation and prefabrication.
- The combination of urban, architectural and landscape design.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The nomination dossier includes a single section dedicated to both Integrity and Authenticity. The six properties that constitute the serial nomination were selected out of numerous housing ensembles constructed in Berlin during the first three decades of the 20th century. The State Party acknowledges the difficulty in choosing among the many larger and smaller Berlin housing estates. The choice was made on the basis of the following criteria: the significance of the architectural design and urban structure from the point of view of the arts; the condition of the original structure; the social policy intentions of the developers and international recognition. It is no coincidence that most of the selected housing estates are works by Bruno Taut; as for no one else, his name is linked to the heyday of social construction in Berlin during the Weimar Republic. The selected properties bear witness to a larger group of housing estates constructed in the city during the period.

Since the nominated properties were scarcely damaged during World War II, they exhibit a high degree of Integrity. The nominated areas include a complete range of urban, architectural and landscape components to illustrate their values. Some reconstruction was, nevertheless, carried out during the post war period and this is discussed in the section Authenticity.

ICOMOS considers that the nominated properties exhibit an acceptable degree of completeness of buildings, open spaces and the relations between them; minor interior changes do not have a negative impact on the integrity of the ensembles.

On request of ICOMOS, the State Party provided additional information on the rationale behind the selection of the six nominated properties out of the ensemble of housing estates existing in Berlin. The selection was made on the basis of the following main criteria:

- the extent to which the residential estates stand for outstanding exemplary changes and improvements in the housing and urban development situation;
- the extent to which the fabric of the buildings is preserved;
- the estates' role in the historical development of modern residential construction to document the important stages of the "Berliner Moderne" in its process of housing and urban design reform.

ICOMOS is satisfied with the information provided by the State Party and considers that the six nominated properties constitute prominent examples of the development of housing estates in Berlin between 1910 and 1933.

Authenticity

According to the State Party, the fact that the fabric of most of the historic buildings has been preserved is characteristic of all nominated properties. Ideological interference during the Nazi period consisted only of repainting the façades of Wohnstadt Carl Legien. Since most of the settlements are not located within the central area of Berlin, they were hardly damaged during World War II. With regard to form and design, materials and workmanship, the nomination dossier provides the following specifications for each property:

Gartenstadt Falkenberg:

Only one row house at Gartenstadtweg had to be rebuilt. With the resurfacing in 1966 it lost one important design quality - the manually applied trowel plaster with its lively structure. Thorough repairs following restoration guidelines began in the early 1990s and were completed in 2002. These works included the renewal of plaster surfaces and many doors, shutters and some windows were replaced by new ones, manufactured to the original design. Thanks to research on the original state of the buildings, the restoration recovered Taut's colourfulness.

Siedlung Schillerpark:

The buildings of all three phases of development are well preserved. Despite the war and renovations, the authentic appearance has been maintained. Wherever changes occurred - in concrete sections, loggias, windows, etc. - the characteristic design elements have been restored or repaired in line with restoration requirements. The house at the corner of Bristolstrasse and Dubliner Strasse was almost completely destroyed. Max Taut headed its reconstruction. He rebuilt it almost as it used to be. The restoration works, begun in 1991, corrected the overall appearance of the housing estate and largely recreated the original designs. In recent restoration works, the insulation has been removed from one block.

Grossiedlung Britz (Hufeisensiedlung):

Since the housing estate at Britz was only slightly damaged during the war and single-family houses were not sold to individual owners, after the war, the whole housing estate consisted almost completely of the original fabric. The characteristic mixed housing estate form with multi-storey buildings and single-family houses has not been disturbed by additions or new buildings. The appearance of the single-family row houses with their narrow and deep gardens is still authentic. Original windows, doors, brick cladding and roof shapes as elementary design elements have been preserved everywhere.

Wohnstadt Carl Legien:

For ideological reasons, the colours of facades were changed on the occasion of the 1936 Olympic Games.

Weisse Stadt:

In all parts of the housing estate the original fabric has been largely preserved. With the exception of the removal of the central heating plant in 1968-69, no major constructional changes are visible despite the fact that individual houses had to be rebuilt after the war. The urban structure was preserved, as were most design elements which characterise the overall image (windows, entrance doors, loggias, eaves, concrete sections and brick frames).

Grosssiedlung Siemensstadt (Ringsiedlung):

As they are located near the large industrial estate of the Siemens company, the buildings of the Grosssiedlung Siemensstadt suffered considerable damage. Entire sections of the buildings designed by Scharoun and Gropius as well as parts of the block margin by Bartning and of the ribbon buildings by Häring were destroyed. But the destruction did not decisively change the authentic image of the housing estate as a whole. Reconstruction in the early 50s did not completely re-establish the original state. Scharoun himself designed a new head building, which was erected in 1949-50 and replaced the house at Jungfernheideweg 1 in the section which he had designed.

The authenticity of uses and functions is guaranteed, as the six properties continue to be used as housing estates.

ICOMOS notes that the six properties were scarcely affected by bombardments during World War II and that the part of Schillerpark, that was partially destroyed, has been reconstructed in accordance with the original scheme and appearance. Works carried out between the 1920s and 1975 barely affected the buildings and their gardens. Maintenance carried out in the framework of the protection laws after 1975 demonstrates a high level of authenticity. The technical principles of the construction period guarantee the persistence of original materials and installations. Original doors and windows are still in place.

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

Comparative analysis

The nomination dossier includes a comparative analysis with other European cases of housing developments during the first decades of the 20^{th} century, which also reflect the development of modern trends in architecture and urbanism.

From the first half of the 19th century, solving the housing question has been one of the greatest social challenges in most European countries. A milestone in social and industrial history was the settlement of New Lanark in Scotland (inscribed on the World Heritage List in 2001), developed by Robert Owen, which included facilities for working people - in particular educational facilities. A comparable model settlement of the early industrial age is Saltaire in Yorkshire (inscribed on the World Heritage List in 2001), founded in the mid-19th century by the textile entrepreneur Titus Salt. Another example of progress in living conditions for working people was the factory and workers' village of Crespi d'Adda (inscribed on the World Heritage List in 1995) near Capriate San Gervasio in the Italian province of Bergamo (Lombardy).

The English Garden City concept, developed by Ebenezer Howard, found followers in Germany. As early as 1902, the first "Deutsche Gartenstadtgesellschaft" (German garden city society) was founded in Berlin and among its members were social reformers and experts in health hygiene, as well as economists and architects. The focus of Deutsche Gartenstadtgesellschaft was directed more towards housing estates on the edge of cities – the garden suburbs - than towards extended existing cities. In choosing the garden suburb as its urban development model. Deutsche Gartenstadtgesellschaft avoided from the start, the utopian claims of Howard's ideal city. Other important stimuli for reformed housing development in Germany came from the building cooperative movement, which gained more impetus with the 1889 law on cooperatives. Thus, company housing development, the garden city movement and building cooperatives are the roots of European housing estate development in the early 20th century.

After World War I, the need to create healthy, good quality housing for the masses was not restricted to Germany. In many large European cities, like Vienna, Amsterdam and Rotterdam, similar housing programmes claiming social reform supported by public funding were created. In many respects, urban development and architectural concepts created there, were more conservative than those of Berlin. The Netherlands established, as early as 1900, legal foundations for residential development based on social concepts such as 1915's Berlage plan for Amsterdam South, a dense multi-storey brick development, or Oud's plan for Rotterdam with pragmatic solutions for both single-storey and multi-storey buildings.

The municipal housing development programme in Vienna also made enormous advances in the field of social residential development after the collapse of the Danube monarchy and the founding of the republic. The municipal administration under Karl Seitz and the urban development councillor Karl Ehn (1926-30) introduced in 1923 a housing programme financed by housing construction tax income. Between 1923 and 1934 approximately 63,000 municipal flats were built. Most of them were located in huge inner-city residential blocks, the so-called "super blocks'. Among German cities, Berlin is one of the centres of social reform housing built after World War I, significant in terms of quantity and quality. Others were Frankfurt/Main, Hamburg and Magdeburg.

In Berlin, Weisse Stadt and the Grosssiedlung Siemensstadt were products of the period "around 1930" and represented the "international style" considered for some time by architectural historians to symbolise the modern age. Both were experimental estates directly financed by the city of Berlin. In comparing Weisse Stadt with the large European housing estates of the late 1920s, its peculiarities and those of Siemensstadt stand out clearly. The large housing estates erected at the same time in France initially followed the garden town pattern but later adopted higher urban densities with a style approximating Art Deco. In England, the heyday of modern residential development began during the period of reconstruction after World War II. In style, the Dutch large housing estates of J.J.P. Oud in Rotterdam and Hoek van Holland are probably the closest to those of Berlin.

Bruno Taut stands out among the architects committed to housing estate development in the 1920s. He is an artist among housing estate developers, who used old and new patterns and types, conceiving ever-new creations along block margins, ribbons, cross bars, rows and groups, never schematically following any dogma. In reference to his *oeuvre*, no European or national search can yield comparatively colourful housing estates built before World War I. The English garden towns, which were the model for the urban development of Falkenberg, are not as colourful. Nor are the housing estates in North European industrial areas, the reform buildings in Berlin or the rural architecture of Brandenburg. Other German garden towns like Hellerau near Dresden (1908) and Staaken (1913) are not as expressively colourful either.

For his unconventional use of colour, Taut stands alone in Germany. The Bauhaus around Walter Gropius preferred primary colours like the group de Stijl. Taut was considered an outsider, which may be why he was not recognised as part of the international fame of the Bauhaus-group. After 1918, Taut was no longer the only one to use such colour diversity in architecture. The Dutch artists of the de Stijl group, Piet Mondrian, Gerrit Rietveld, Theo van Doesburg and also J. J. P. Oud, expressly supported the use of colour in architecture. Yet, they used it differently from Taut. They preferred unblended primary colours (red, blue, yellow) which they usually contrasted with white areas. From the 1980s, a uniform concept was developed for restoring the colouring of individual houses. This was based on comprehensive studies of architectural history but not on investigating, for restoration purposes, the existing houses themselves.

We cannot say that Le Corbusier was inspired to adopt colourful housing by Bruno Taut. The most important difference is that Taut focussed on creating social spaces and on functional and social aspects of architecture, whereas Le Corbusier followed more formal and aesthetic guidelines at Pessac and later the *Unité d'Habitation*. Social housing development, one of the most important tasks of re-building Europe in the 1920s, played a greater role in Taut's oeuvre than in that of any other architect of that period. Visionary, urban planner, architect and artist, he is considered to be one of the most significant representatives of *Neues Bauen* and a pioneer of modern housing estate development.

The additional information provided by the State Party at the request of ICOMOS extends the comparative analysis to other cases in and outside Germany. As discussed in the section Integrity, the State Party provided detailed explanations on the rationale behind the selection of the nominated properties from among the ensemble of housing estates existing in Berlin. The comparative analysis has been extended to include other cases in Germany: Karlsruhe-Dammerstock, Celle, Kassel, Hamburg and Frankfurt am Main. According to the State Party, modern residential estates outside Berlin did not reach a comparable volume, rarely achieved the architectural and urban design quality of the capital city and did not have such a strong wider impact among architects, planners and housing reformers as did Berlin's residential estates. Furthermore, they are now generally in a significantly worse state of preservation than those in Berlin. Besides the examples outside Germany already examined, the comparative analysis was extended to other cases in France, the United Kingdom, Austria, Russia, Central Europe, Scandinavia and the United States of America. The analysis stresses the original features of the Berliner estates, their quality and influence over other cases.

ICOMOS is satisfied with the answer provided by the State Party and considers that the ensemble of nominated properties exhibits specific features that set apart the contribution of the Berlin experience during the period 1910–1933 to the development of social housing in and outside Europe. The six nominated properties were carefully selected out of the set of existing housing ensembles in the city and constitute a very distinguishable example of the solutions proposed by Berlin architects to the provision of housing in the context of specific social, economic and cultural conditions.

ICOMOS considers that 20th century heritage, especially social housing ensembles, constitutes a category underrepresented on the World Heritage List, as highlighted in its study on representativity ("Filling the gaps"). In this context, ICOMOS considers that this nomination makes a significant contribution to the balanced representation of all periods, architectural programmes and trends on the World Heritage List. This is why ICOMOS also invites the State Party to consider the possibility of nominating the Frankfurter housing estates to complete the landmarks of German contribution to the development of housing during the first half of the 20th heritage.

ICOMOS noted that the term "Berlin Modern Style" is not clearly defined in the nomination dossier. Since this concept is not commonly found in literature on modern architecture and urbanism, ICOMOS invited the State Party to provide further information on this expression. The information supplied by the State Party in February 2008 shows that the German concept of *Berliner Moderne* (Berlin Modernism) does not only refer to a local architectural or artistic style; it is more comprehensive and includes the political, social, economic and cultural foundations of the movement which reacted against the tradition and historicism of the 19th century. Its implications go beyond the stylistic and aesthetic dimension of the architecture and point to the reform and modernisation efforts which were intended to permeate all areas of everyday life and urban culture. The term *Berliner Moderne* must be understood as a description of the progressive atmosphere and the successful modernisation initiatives in Berlin in the 1920s. In this favourable climate, the development of a modern architectural approach played a major role. ICOMOS thanks the State Party for the additional information supplied on this issue and is satisfied with the explanatory document. Since the proposed translation of the German term could lead to some confusion of meaning regarding architectural styles, ICOMOS recommends the possibility of changing the name of the nomination to "Berlin Modernism Housing Estates".

ICOMOS considers that the comparative analysis justifies consideration of the nominated properties for inscription on the World Heritage List.

Justification of the Outstanding Universal Value

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

- The social housing settlements built in Berlin during the 1920s unite all the positive achievements of early modernism. They represent a period in which Berlin was respected for its political, social, technical and cultural progressiveness. This creative environment facilitated the development of housing estates that can be regarded as works of art and as social policy achievements. Housing estates became the model and actual instrument for the development of architecture. Their influence could still be felt decades later.
- Greater Berlin with its spacious undeveloped land became the site for the experimental development of modern flats. In their designs, architects sought both to develop functional floor plans that would promote health and family life and to arrange their buildings in larger urban structures.
- The nominated properties reflect better than other housing complexes in Berlin the significance of the architectural design and urban structure from the point of view of the arts, the good condition of the original structure, the social policy intentions of the developers and their international recognition.
- The leading architects of classical modernism were involved in all those developing housing estates in Berlin.

Criteria under which inscription is proposed

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

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

This criterion is justified by the State Party on the grounds that the six Berlin estates exemplify European housing construction, as an expression of the broad housing reform movement. As such, they made a decisive contribution to improving housing and living conditions in Berlin. The construction of housing estates is an urban planning and architectural response to social problems and housing policies arising in regions with high population density. The quality of their urban, architectural and landscape design, as well as the housing standards developed during this period, served as a guideline for the social housing constructed after World War II, and they retained their exemplary function for the entire 20th century.

ICOMOS considers that the nominated properties reflect an important exchange of human values, in this case related to their response to the housing problem of a particular period of history and in a specific political, social, economic and architectural context.

ICOMOS considers that this criterion has been justified.

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

This criterion is justified by the State Party on the grounds that these Berlin housing estates are extraordinary examples of the housing cooperative-based developments achieved during the early decades of the 20th century for the modern industrial society. They were designed in the search for new social living conditions such as Taut's "outdoor living space" and Scharoun's "neighbourhood". Participating architects developed new types of ground plans for houses and flats that responded to modern demands.

ICOMOS considers that the nominated properties are significant examples of urban and architectural typologies of housing ensembles, characterising the development of the modern movement in the 20^{th} century. New responses to the provision of housing and social facilities and technical and aesthetic innovations are among the achievements of the Berliner architects, thus defining a significant stage in the development of 20^{th} century architecture.

ICOMOS considers that this criterion has been justified.

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

4. FACTORS AFFECTING THE PROPERTY

Development pressures

According to the State Party, none of the nominated properties is under major pressure from regional development or traffic plans. The only risk to the authentic character of the settlements may arise from changes of use, constructional changes, noise protection requirements or increased privatisation, which may lead to individual changes in houses and gardens or service facilities (e.g. waste bin areas).

Visitors/tourism pressures

All housing estates are visited by groups of people who are interested in architecture. This does not represent a risk for the properties. Berlin has become (particularly after the reunification of the city) an important centre for international tourism. The expected increase in visitor numbers is not anticipated to create any special burden for the housing estate. In the future, care for visitors will be provided by a visitors' management organization.

Environmental pressures

None of the housing estates is exposed to any negative influence beyond those usual for major cities. Specific damage from environmental impacts is unknown. The effect of pollution on façades will be removed during thorough restoration. Particular exposure to noise is identified only in parts of Gartenstadt Falkenberg, the Siedlung Schillerpark and Weisse Stadt.

Natural disasters

Berlin is located in a region where there is no risk of natural catastrophes. There is no special fire risk either.

Impact of climate change

The nomination dossier does not include information with respect to global climate change.

Risk preparedness

Since the State Party does not consider there to be any significant risk factors affecting the properties, the nomination dossier does not refer to risk preparedness.

ICOMOS considers that the main threats to the property relate to potential modifications in use, responses to noise and increased privatisation. In this sense, it recommends that the State Party consider introducing these issues in the management plan.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The nominated zones correspond to the boundaries of each housing estate, including buildings and green areas. The buffer zones have been defined to encompass the surroundings of each housing estate and include, variously, built up and open spaces.

The buffer zone proposed in the nomination dossier was practically inexistent for the Gartenstadt Falkenberg. In the case of Weisse Stadt, the workers gardens that constitute a green boundary to the property were not appropriately protected. At ICOMOS' request, the boundaries of the buffer zones were redesigned for Gartenstadt Falkenberg and Weisse Statd. ICOMOS considers that the proposed new boundaries for both buffer zones are adequate for the proper protection of the housing estates' values and their respective immediate surrounding areas.

ICOMOS considers that the boundaries of the nominated areas and buffer zones are adequate to express and protect the properties' outstanding universal value and their respective surrounding areas.

Ownership

The nominated properties are owned by different organizations. In Gartenstadt Falkenberg and Schiller Park, all buildings are owned by the cooperative. Britz is currently owned by Gemeinnützige Heimstätten-Aktiengesellschaft; several years ago a gradual privatisation of houses began. Wohnstadt Karl Legien is owned by BauBeCon Immobilien GmbH. Weisse Stadt is by owned Gemeinnützige Siedlungs-und Wohnungsbaugesellschaft Berlin mbH (GSW); several years ago a gradual privatisation of the houses began. Grossiedlung Siemenstadt is owned by Gemeinnützige Siedlungs-und Wohnungsbaugesellschaft Berlin mbH (GSW).

Protection

Legal Protection

The nominated properties are protected by the Denkmalsehutzgesetz Berlin (The Berlin Law on the Preservation of Historic Places and Monuments) of 24th April, 1995 as conservation areas (applying for the total premises) and they are entered on the Berlin register of historic places. The protection covers all structures on the housing estate including outdoor facilities and water bodies related to them. Further, the outdoor facilities of Gartenstadt Falkenberg and Weisse Stadt, as well as part of Siedlung Schillerpark, are protected as historic places.

The Berlin Law on the Preservation of Historic Places and Monuments of 24th April, 1995 regulates the tasks, the object and the organisation of heritage protection in Berlin, and applies general regulations on protection, on measures to preserve monuments and historic places, on public grants and on procedures. When the authority for the preservation of monuments and historic places of Berlin declares a place to be monument or historic place and enters it on the Register of Monuments and Historic Places, its owner is obliged to preserve the monument and its immediate environment. Any alteration in appearance, partial or complete removal, repair, reconstruction or change of use of the monument requires the consent of the authority for the protection of monuments.

Since Wohnstadt Carl Legien is part of a formally established preservation area, it is additionally subject to the 2003 preservation regulation. According to this, any removal, alteration of structures or alteration of the utilisation of structures in the covered area requires permission. The district office of Pankow, Berlin, Department for Urban Development, Urban Planning Office, grants the necessary permits. Besides specific protection legislation, planning and management instruments also contribute to the legal framework. Among them are the German Building Code and specific development plans. These codes and plans are discussed in the section *Management* below.

Effectiveness of protection measures

The protective measures have proved to be effective, since the properties exhibit a good state of conservation, both in buildings and open spaces.

ICOMOS considers that the legal protection in place is adequate.

Conservation

Inventories, recording, research

Because of the importance of the nominated properties in the history of 20th century architecture, they have been inventoried and their records are constantly sought for research work. Local and national inventories and international registers, like those of DOCOMOMO, include some of the nominated estates in the International Selection. The nomination dossier includes a detailed list of recent publications where the results of research works have been included.

Present state of conservation

According to the State Party, the nominated properties exhibit a good state of conservation, in both buildings and open spaces. The nomination dossier presents a detailed description of each nominated property. Generally, restoration works have reached different stages of completion; they are complete in the estates Falkenberg (2002) and Carl Legien (2005). The restoration work at Siedlung Schillerpark is largely completed in all four development phases. In only a few sections of façades, originally of painted smooth plaster, the post-war plaster rendering remains. The large estates at Britz, Weisse Stadt and Siemenstadt have regained about two-thirds of their original appearance. Parts of these properties need more extensive restoration, since the first restoration works were carried out more than twenty years ago and some buildings restored then, now show some damage (buildings by Scharoun and Häring at the Ringsiedlung).

ICOMOS considers that the nominated properties, including buildings, open spaces, streets and pedestrian paths exhibit a good state of conservation.

Active Conservation measures

The nominated properties have been restored and conserved from the 1950s onwards. Repair and maintenance works of buildings and open spaces are constantly being carried out by the concerned governmental agencies, cooperatives and owners.

ICOMOS considers that the nominated properties present a good state of conservation in both buildings and open spaces and that the conservation measures, including the interaction between different social actors, have resulted in adequate preservation of the properties' values.

Management

Management structures and processes, including traditional management processes

According to the information supplied by the State Party, the management process includes the participation of public agencies and owners. The relevant authority for the protection of monuments may require owners to carry out certain measures for preserving the monument. Alternatively, and in cases of imminent danger to monument, the relevant authority for the protection of monuments may carry out the necessary measures on its own initiative.

The authority for approval is in each case the respective district office of Berlin represented by the Lower monument preservation authority. On the basis of the Law on the Preservation of Historic Places and Monuments, it will decide on the monument preservation both for projects which require a building permit and for projects which do not normally require a building permit under the building regulations. The Lower monument preservation authority will make its decisions in agreement with the relevant special purpose authority (Landesdenkmalamt, state monument preservation office of Berlin). Where the two authorities are unable to agree, the Berlin government office for urban development in its capacity as Supreme monument preservation authority will decide, after hearing both the Lower monument preservation authority and the state monument preservation office.

The cooperatives that constructed the housing ensembles play a significant role in the management structure, since they reinvest the income from flat rentals into the maintenance of the ensembles. Private gardens are maintained by owners on the basis of specific recommendations.

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

The management of the nominated properties is based on the following plans:

- Development plans and monument preservation plans

According to the Baugesetzbuch (German Building Code BauGB) development plans are the most important instruments for guiding and controlling the urban development of a community. They must take into account the interests of monument preservation. The preparation of development plans is divided into a preparatory phase, setting up non-binding development plans (land-use plans) and district area development plan for the entire territory of the community. There are binding development plans for individual parts of the community territory, connected with requirements of the land-use act, which defines the kind and extent of structures, type of buildings and degree to

which the land may be built up. The Building Code regulates the permissibility of projects and, in the specific urban development legislation, stipulates the establishment of rehabilitation, development and preservation areas. Due to the division of Berlin after 1945, building legislation developed differently in East and West Berlin and these differences still influence current valid building legislation, even after the re-unification of the two German states. The western districts still apply the 1958/60 land-use plan, which has been transferred as development plan under the 1960 Federal Building Act (renamed Building Code in 1987). In the practice of development law, the land-use plan now acts as an alternative development plan. A comparable set of instruments covering the entire area does not exist for the East Berlin districts. Legally binding development plans for these districts were established in 1990. In those areas of the East Berlin which are not covered by development plans, building permits are granted under Section 34 of the Building Code.

The urban development department of each district office establishes its own development plans in coordination with the other district authorities, as well as with the development departments of the governmental urban development authorities and with the special purpose authority, the Landesdenkmalamt, of Berlin. The Landesdenkmalamt or the relevant monument preservation authority may require the establishment of monument preservation plans, catalogues of preservation measures, maintenance documentations, etc. Specific planning regulations have been defined for each property included in the serial nomination.

- Management Plan

The nomination dossier includes information on the Management Plan, which is structured under the sections: Fundamentals, Objectives, Actors, Instruments and Fields of Action and Control and Reporting (Monitoring).

ICOMOS considers that the Management Plan in the nomination dossier is adequate for the common management of the six properties and recommends that the State Party approve and implement it as soon as possible.

With respect to visitors' management, the publicly accessible parts of the estates may be visited at any time; visits are usually individual ones. Any potential increase in visitors is not expected to cause a risk to the properties. Within the Grossiedlung Siemenstadt the housing company set up information boards along the public pedestrian paths in 2003 on the history and significance of the property. The authorities intend to issue, for each property, information material on history, architecture, urban development and garden architecture as well as on the significance of the monuments and restoration measures. It is also intended to offer on-line information on the Berlin World Heritage properties. In Wohnstadt Carl Legien, two flats have been restored with the original colour scheme and may be visited. There are plans to make a flat in each property publicly accessible after restoration. No further facilities for visitors exist.

Involvement of local communities

Inhabitants of the nominated properties are sufficiently aware of the historic and architectural values of the housing ensembles. They actively participate in conservation, preservation and monitoring, as explained in the specific sections of this report.

Resources, including staff levels, expertise and training

The preservation and maintenance of the housing estates is supported by the scientific staff of the Berlin monument preservation authorities. Relevant employees are trained art historians, architects, landscape architects or restorers. With their experience, the members of the state monument council give recommendations or support the involved parties, if specific plans are produced. The state monument council (Landesdenkmalrat) is an expert autonomous body, and pursuant to Section 7 of the Berlin Law on the Preservation of Historic Places and Monuments, it acts as consultant to the member of the Berlin government responsible for the preservation of monuments.

Owners also have experienced employees for repair and maintenance measures. Most are architects and civil engineers. When thorough refurbishment works have to be planned or supervised, the relevant contracts are often awarded to architects with experience in the preservation of monuments. Berlin has a sufficient number of architects, landscape architects, restorers and engineers experienced in the heritage preservation. Several university departments and technical colleges are engaged in research and training in this field. Berlin and the surrounding state of Brandenburg have a sufficient number of suitable companies to carry out the works.

Among the employees of the Lower monument preservation authorities and the Landesdenkmalamt are graduated architects, garden and landscape architects, art historians and civil engineers. They make independent decisions. Maintenance must be provided by the relevant owners who are obliged to adhere to the provisions of the Berlin Law on the Preservation of Historic Places and Monuments.

ICOMOS considers that the management system for the property is adequate. Nevertheless, ICOMOS recommends that the State Party approve and implement the Management Plan presented in the nomination dossier as soon as possible.

6. MONITORING

The State Party has defined a set of key indicators to monitor the state of conservation of the nominated properties. The monitoring system is based on an interactive recording of indicators carried out by the monument preservation authorities, other special authorities and the owners. Key indicators to be employed by the monument preservation authorities include state of preservation, and repair of the monuments, state of restoration, amount of grants paid for preservation and restoration, approvals for restoring and maintaining the monument preservation measures and personnel available for the preservation of the monuments.

Records on the following indicators are made in cooperation with other special purpose authorities: planning (amendments of the development plans), infrastructure (number and location of parking lots, type of servicing, pavements), traffic loads (road and air traffic), social structure of the inhabitants, average rents and land values, information material and number of visitors. Records of the following indicators are made in cooperation with the owners: implementation of restoration concepts, state of preservation, financial costs of repairs, maintenance and care by owners (privatisation), administrative structure, utilisation (disused flats, commercial and service facilities).

Monument preservation authorities are responsible for the regular monitoring of the nominated properties. They carry out the regular monitoring and corresponding reporting. In addition to other special purpose authorities, the owners (housing companies) are invited to participate in monitoring activities. These activities are based on the key indicators contained in the questionnaires, and occasionally on further investigations in the state (for instance photographs and planning documents). The questionnaires and data are continuously recorded. In addition to the above, employees of the owners monitor the state of the six housing companies) have, within the housing estates themselves, offices for administering them.

ICOMOS considers that the key indicators and monitoring arrangements are adequate to properly record the state of conservation of the nominated properties.

7. CONCLUSIONS

ICOMOS considers that this serial nomination constitutes a valuable contribution to the World Heritage List, since modern housing estates are clearly under-represented so far. The State Party presented an appropriate selection of cases, which illustrate the development of urban and architectural typologies between the 1910s and the 1930s. The additional information supplied by the State Party in February 2008 contributes to strengthening the significance of the properties and their contribution to the development of urban, architectural and landscape design and, at the same time, they bear testimony to social, aesthetic and technical achievements.

The outstanding universal value and the required conditions of integrity and authenticity have been demonstrated, and the protection and management systems are adequate. The boundaries of the core zones are adequate to express and protect the outstanding universal value; the boundaries of the buffer zones are adequate to ensure the proper protection of the nominated properties and of their surroundings.

Recommendations with respect to inscription

ICOMOS recommends that the Housing Estates in the Berlin Modern Style, Germany, *be inscribed* on the World Heritage List on the basis of criteria (ii) and (iv).

Recommended statement of Outstanding Universal Value

The set of housing estates in the Berlin Modern Style provides outstanding testimony to the implementation of housing policies during the period 1910 - 1933 and especially during the Weimar Republic, when the city of Berlin was characterised by its political, social, cultural and technical progressiveness. The housing estates reflect, with the highest degree of quality, the combination of urbanism, architecture, garden design and aesthetic research typical of early 20^{th} century modernism, as well as the application of new hygienic and social standards. Some of the most prominent leading architects of German modernism were involved in the design and construction of the properties; they developed innovative urban, building and flat typologies, technical solutions and aesthetic achievements.

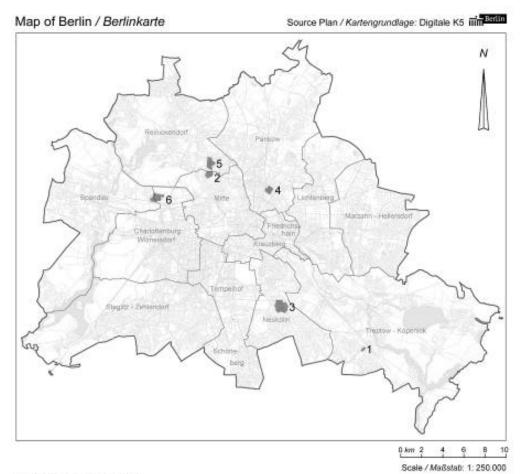
Criterion (ii): The six Berlin housing estates provide an outstanding expression of a broad housing reform movement that made a decisive contribution to improving housing and living conditions in Berlin. Their quality of urban, architectural and garden design, as well as the housing standards developed during the period, served as guidelines for social housing constructed since then, both in and outside Germany.

Criterion (iv): The six Berlin housing estates are exceptional examples of new urban and architectural typologies, designed in the search for improved social living conditions. Fresh design solutions and technical and aesthetic innovations were incorporated by the leading modern architects who participated in their design and construction.

The six properties were selected out of the ensemble of housing estates of the period existing in the city, on the basis of their historical, architectural, artistic and social significance and the fact that, due to their location, they suffered little damage during World War II. Even though minor reconstruction and interior changes were carried out in the post war period, restoration works within the framework of the protection law of 1975 and their current state of conservation achieve a high standard of integrity and authenticity.

Adequate protection is ensured by the legislation in place, especially by the Berlin Law on the Preservation of Historic Places and Monuments (1995). The properties, buildings and open spaces, are in a good state of conservation. The management system, including policies, structures and plans, proves to be adequate and includes all concerned stakeholders. ICOMOS further recommends that the State Party:

- consider the possibility of changing the name of the nomination to "Berlin Modernism Housing Estates".
- approve and implement the Management Plan included in the nomination dossier, in order to ensure the optimisation of the management system and the common management of the six properties.
- consider the possibility of including provisions related to possible changes of use and privatisation in the management plan, in order to ensure the proper protection of the nominated properties.
- consider the possibility of nominating the housing estates constructed in Frankfurt during the Weimar Republic period, in order to complete the German contribution to the development of housing ensembles during the first half of the 20th century.



- 1 Gartenstadt Falkenberg
- 2 Siedlung Schillerpark
- 3 Großsiedlung Britz (Hufeisensiedlung)
- 4 Wohnstadt Carl Legien
- 5 Weiße Stadt
- 6 Großsiedlung Siemensstadt (Ringsiedlung)

Map showing the location of the nominated properties



Row of houses in Gardenstadt Falkenberg



Wohnstadt Carl Legien



Residential Buildings, Grossiedlung Britz (Hufeisensiedlung)



Show apartment restored to its original state