



UK Tentative List of Potential Sites for World Heritage Nomination: Application form

Please save the application to your computer, fill in and email to:
UKTL.Application@culture.gsi.gov.uk

The application form should be completed using the boxes provided under each question, and, where possible, within the word limit indicated.

Please read the [Information Sheets](#) before completing the application form. It is also essential to refer to the accompanying [Guidance Note](#) for help with each question, and to the relevant paragraphs of UNESCO's *Operational Guidelines for the Implementation of the World Heritage Convention*, (OG) available at: <http://whc.unesco.org/en/guidelines>

Applicants should provide only the information requested at this stage. Further information may be sought in due course.

(1) Name of Proposed World Heritage Site

Merthyr Tydfil

(2) Geographical Location

Name of country/region

Wales, United Kingdom

Grid reference to centre of site

NGR SO 038 068

Please enclose a map preferably A4-size, a plan of the site, and 6 photographs, preferably electronically.

(3) Type of Site

Please indicate category:

Natural Cultural Mixed Cultural Landscape

(4) Description

Please provide a brief description of the proposed site, including the physical characteristics. 200 words

Merthyr Tydfil occupies a natural basin at the head of the Taf Valley, approximately 20 miles to the north of Cardiff. The surrounding tributary valleys offer the town a perfect aesthetic as well as mineral resource which has shaped the town to its present day form; which remains a potent example of an internationally renowned and permanent reminder of man's exploitation of the landscape.

The primarily late 18th to 19th Century landscape comprises copious relict remnants and foci set within the present landscape – comprising an Ironmaster's house with ice-house, kitchen garden and meadows located within rolling parkland overlooking its formerly associated furnace bank within a plateau containing water power leats, bridges, tramroads, limekilns and viaducts.

South of these workings lies Merthyr Tydfil Town Centre, a cluster of urban development strategically located as a focal point to the main Ironworks' of the town, providing a commercial centre, characterised by narrow side streets and attractive facades. The town rises prominently to the east overlooking the vast mineral resource of Cwm Glo, separated from the town by the River Taf and former Glamorganshire Canal. This extractive landscape displays a complex evolution of works such as scouring, quarrying, pit works and transport infrastructure set within a scarred industrial landscape.

(5) History

Please provide a short summary statement of any significant events in the history of the site. 200 words

The rapid growth of coal and iron industries in the 19th Century transformed Merthyr Tydfil from a modest village in the 1750s to the largest iron-making town in the world by 1801. The first Ironworks at Cyfarthfa (1765) began when a tract of 4,000 acres of leased mineral land to the west of Merthyr Tydfil and became the first ironworks in Merthyr Tydfil to change to bar iron production, ultimately leading to it becoming the largest ironworks in the world by 1806. It was quickly followed by ironworks at Dowlais (1759), Plymouth (1763), and Penydarren (1784).

It was Cyfarthfa, which began when a tract of 4,000 acres of leased mineral land to the west of Merthyr Tydfil, which became the first ironworks in Merthyr Tydfil to change to bar iron production, ultimately leading to it becoming the largest ironworks in the World by 1806.

Merthyr Tydfil's geographical constraints generated extraordinary levels of engineering innovation to maintain an edge on its other town. Due to the geographical constraints of the Town in comparison to its better situated rival at Ironbridge. These include the first ever iron railway bridge to be built in 1793; the site of the first working steam-hauled locomotive and first constructed railway tunnel by Richard Trevithick in 1804; the notable industrialist house of Cyfarthfa Castle in 1825; the Taff Vale Railway by IK Brunel in 1841; the first industrial use of the Bessemer conversion process for manufacturing in 1857; Cefn Viaduct in 1868 along with the construction of watercourses and canals, providing a complex set of water infrastructure.

The town continued to develop until 1861, when a decline in population and iron production declined due to the increasingly disadvantageous inland location for production. However, the legacy of the iron age still remains.

(6) Why do you think this site should be inscribed as a World Heritage Site?

Give reasons. 200 words

Inscription will facilitate the holistic management of the site, allowing coordination between the different elements to create a heritage site which is accessible and clearly illustrates the huge significance of Merthyr Tydfil as a world renowned centre of industry and innovation.

The site offers a partial time-capsule effect which clearly displays the story of a key component of the Worldwide Industrial Revolution, which formed the effective beginnings of mass production. Furthermore, the landscape of Merthyr Tydfil is universally recognised as of outstanding value demonstrating its evolution as a World-important town of its era. Human relationship with the landscape during the 18th Century is wholly interpreted within Merthyr Tydfil with large swathes of remarkably untouched extraction landscapes, intact components of the iron-making process, exemplar by-products of the wealth

created by the production of iron and steel, the display of the transformation from agricultural industry to industrialism and the containment of a number of 'World's First' engineering feats and processes.

MTCBC recognises the importance of managing the site effectively for future generations, as reflected in the Merthyr Tydfil Built Heritage Strategy 2009, recent designation of the Cyfarthfa Conservation Area (2009) and conservation management plan has been adopted and prioritised management actions leading to projects aiming to enhance and protect the area's heritage: Pontmorlais Townscape Heritage Initiative; Cyfarthfa Park Story; Cyfarthfa Unearthed Leat Restoration Scheme. A programme is also underway to move the school out of Cyfarthfa Castle to enable its status as a key heritage building to be fully exploited.

(7) Please say why the site has Outstanding Universal Value and specify the main features which underpin its importance. 200 words

Merthyr Tydfil is an organically evolved landscape displaying an era in human development where intense activity has resulted in a substantial change to the material landform of an internationally important part of the World's history.

Semi-natural elements, engineering feats, enhanced conurbation and industrial remnants combine to interpret the story of past development. These elements form a group value, rare on a Worldwide scale:

- Leats, feeders ponds and primitive hydroelectric technology which formed part of the drainage system of the Ironworks, resulting in a significant change in the landscape;
- Engineering projects such as viaducts, tunnels, bridges, railways and canals, which formed part of the innovative and advanced mineral transportation infrastructure of the era;
- Ironmasters housing such as Cyfarthfa Castle and Gwaelodygarth House, reflecting evolving fortunes and aspirations of the former Ironmasters;
- Workers housing such as Gellideg Cottages, Colliers Row, Chapel Row and the civic core of Merthyr Tydfil displaying the living conditions of workers and the initial development of mass conurbations.

Merthyr Tydfil contains a high historic importance and a number of innovative 'World first' engineering processes, which heavily influenced development throughout the World and are considered masterpieces of human genius

(8) Outstanding Universal Value

Please state which of the [10 UNESCO criteria for Outstanding Universal Value](#) the proposed site meets, and describe briefly why the criteria were chosen. Please see criteria note at the end of the form.

UNESCO criterion	<input checked="" type="checkbox"/>	Why was this criterion chosen? 100 words
(i)	<input checked="" type="checkbox"/>	The cultural landscape retains exemplars of a number of human and engineering firsts, such as pioneering iron manufacturing processes, groundbreaking engineering projects and incidents which have had a bearing on the future history of man. Within the hotbed of innovation within Merthyr Tydfil, the effective beginnings of the industrial revolution are set. Furthermore, the extractive landscape to the west of the town retains evidence of efficient resource use, forever

UNESCO criterion	<input checked="" type="checkbox"/>	Why was this criterion chosen? 100 words
		changing the setting of the Town following the 19 th Century.
(ii)	<input checked="" type="checkbox"/>	<p>The landscape of Merthyr Tydfil provides significant evidence of the communications of Ironmasters with people and the adjoining landscape. This is displayed in the influence on the rest of the World through developing pioneering technology within the area which has had a lasting influence and altered the course of the Industrial Revolution.</p> <p>Furthermore, there are displays of the influence that humankind has had on the landscape culminating in a lasting and changed landscape locked in time. Furthermore, the hurried development of housing and industry of the time has influenced and become a characteristic of that within later industrialised areas.</p>
(iii)	<input checked="" type="checkbox"/>	<p>Merthyr Tydfil retains the quintessential character of a unique working class culture, synonymous with the South Wales coalfield. The history of the town interprets the relationship between powerful Ironmasters; who were one of the World's richest families at the time and in history, with his workers. The tension created by this relationship is interpreted by the sub-sized industrial workers housing, living conditions and historical events such as the Merthyr Rising and Chartist activity.</p> <p>The product of this is a remarkably complete surviving landscape depicting this relationship between workers needs and economic gain.</p>
(iv)	<input checked="" type="checkbox"/>	<p>Merthyr Tydfil marks a significant change in human history in interpreting the development which took place in forming the industrial revolution. This is shown with the retention of pioneering technology and engineering feats scattered across the town. Furthermore, a number of internationally important architectural features remain, such as the furnace banks at Cyfarthfa Ironworks, Cefn Viaduct and Cyfarthfa Castle while the mineral extraction landscape, which retains remarkably exemplar workings which formed the fundamentals to industrialisation, form an essential setting offering context to relict features. The landscape displays the evolution of Cyfarthfa to the largest Ironworks in the World.</p>

UNESCO criterion	<input checked="" type="checkbox"/>	Why was this criterion chosen? 100 words
(v)	<input checked="" type="checkbox"/>	The landscape displays a clear exploitation of mineral and natural resources for human gain. The technologies and structures which were gained to harness resource and elements had changed how human settlement had established itself and forms a large part of today's civilisation. The relation between people, industry and the landscape is clearly defined and Merthyr Tydfil displays the long lasting results of irreversible change from a particular industry of Worldwide importance.
(vi)	<input checked="" type="checkbox"/>	<p>The monuments and rare landscape of Merthyr Tydfil signify a potentially World renowned symbol of the effects the industrial revolution. The Ironworks in Merthyr Tydfil were the largest in the World at the time, and are a true interpretation of living traditions of the industrial working class.</p> <p>Events which had happened resulting from the tensions between employer and employee still remain interpreted by standing buildings and pathways whilst there remains a subplot of literary, religious and poetic importance.</p>
(vii)	<input type="checkbox"/>	
(viii)	<input type="checkbox"/>	
(ix)	<input type="checkbox"/>	
(x)	<input type="checkbox"/>	

(9) Authenticity (for cultural or mixed sites only)

Authenticity concerns the current state of conservation of a cultural or mixed site; especially whether its importance, its Outstanding Universal Value, is still obvious from its physical condition. Please outline the condition of the site. 200 words

The true extent of industrial scarring on a landscape as well as human achievements during the late 18th and early 19th Century is shown in a relict landscape clearly displaying past activities, with internationally, nationally and regionally significant buildings and monuments standing next to the more modest, smaller scale remnants of the historic past. The latter providing a genuine context, meaning and functionality to the former. This coexistence is recognised in offering a true value to elements which give the landscape a high group value.

The key components within this cultural landscape benefit from statutory protection, while the whole area is registered within national and local policy as a landscape of Outstanding Historic Interest. The use and function of the landscape is clearly interlinked, each element rely on others for their existence and all displaying a similar and running architectural theme of locally sourced materials and masonry.

The true authenticity of the site remains by virtue with retention of the majority of industrial remnants physically in situ, while the intangible or written heritage, including accounts and documentation of the industrial revolution offers life and form to tangible heritage. The evolution of the landscape is depicted in iconic 19th Century paintings by local artist; Penry Williams.

(10) Integrity

For cultural or mixed sites, please state how much original fabric is included in the proposed site, and its condition. For guidance on how the test of integrity is met for natural sites under criteria (vii) – (x), please refer to the OG 90-94. Information Sheet 6 also provides help on this point. 200 words

The condition of the various components which form this outstanding industrial landscape are described in the below table:

Component	Condition	Description	Protection
Ironworks	Good	6 of the 7 Scheduled furnaces substantially intact, some brick kilns remain, setting altered.	SAM, CA
Transport	Good	Survival in entirety of first railway tunnel, first iron railway bridge, part survival of site of first steam engine journey, part survival of Glamorgan Canal, Penydarren Tramroad and Vale of Neath railway cuttings	SAM, LB, CA
Water	Good	Large sections of Scheduled leats, feeders, balance ponds and other watercourses remain.	SAM, LB, CA

Master's House	Very Good	Currently in use as a school and museum, almost entire original fabric remains, set within functional historic parkland setting.	LB, HP
Extractive Landscape	Excellent	570 archaeological remains, key workings in substantive condition, relict setting almost immaculately preserved	SAM
Related Development	Good	Worker's Housing, Pandy Farm, Commercial Centre, Later Civic Buildings, Religious Buildings, Cemeteries and Public Houses	LB, CA

(Ffos-y-Fran Land Reclamation Scheme, Environmental Statement, 2003 (Archaeology p.114-115))

* SAM – All or part Scheduled Ancient Monument
 LB – All or part Listed Building
 CA – Within Conservation Area
 HL – Within Historic Parkland

The key elements of the site have been actively conserved throughout their lifespan and are protected by statutory designations. Very little reconstruction to any elements of the area has been undertaken, but all works have been done to conservation standards. A number of usable buildings have been altered over time and changes of use have occurred to maintain a beneficial use. All key structures within the area are original and there are no replicas of heritage features in place.

Some new buildings have been added over the past century, adding to the evolving nature of the town.

The size of the proposed heritage site reflects a complete representation of features which aided Merthyr Tydfil in becoming the largest Town of its kind in the World, offering a high collective group value.

(11) Are there other examples of this kind of site already on the World Heritage List?

Yes No

If yes, please list. 100 words

- Blaenavon, Wales;
- Ironbridge Gorge, England;
- Völklingen Ironworks, Germany;
- Zollverein Coal Mine Industrial Complex, Germany;
- Engelsberg Ironworks, Sweden.

(12) What distinguishes this site from other similar sites?

150 words

Merthyr Tydfil has a unique characteristics which make it different to these sites.:

Cyfarthfa is a unique heritage area and possibly the only surviving example in the world where the Ironmaster house overlooks the iron works and the related elements such as the farm, kitchen walled garden, lake and feeder, worker cottages, quarry still exist today.

However, its Cyfarthfa Ironworks had earned Merthyr Tydfil the title of Iron capitol of the World, offering the largest scale of production ever witnessed. This output allowed for Cardiff to expand and become capitol city of Wales. Merthyr Tydfil also fills a chronological gap in the World Heritage Listed between the peak of Ironbridge and Blaenavon. This is exemplified as Blaenavon was partially inscribed for advancements in the Bessemer process of Iron production however the very process itself was pioneered in Merthyr Tydfil, ironically resulting in its decline.

Furthermore, a number of engineering advancements are associated with Merthyr Tydfil during the 19th Century, adding to its special interest, and offering interpretation of these technological gaps.

Finally, Merthyr Tydfil retains some elements which other similar sites do not have, such as an Ironmaster's house with associated subplots of conflict between worker and master, an advanced transport and water system, a tradition of Spanish, Jewish and Irish immigration as well as poetic, literary and cultural associations.

(13) How does the site contribute to meeting UNESCO's priorities for a balanced World Heritage List?

200 words

The proposed site will help strengthen the credibility of the World Heritage List in addressing and interpreting a chronological gap in the history of the World Industrial Revolution between the mid 18th and mid 19th Century. Furthermore, Merthyr Tydfil has an additional offer in being the largest Ironworks in the World during the early 19th Century and is the location of a number of 'World's first' feats. This history is not widely acknowledged, and World Heritage Status would aid this interpretation.

There appears to be an underrepresentation of cultural landscapes within the World Heritage List. Merthyr Tydfil remains a living cultural landscape, characterised by man's exploitation of the landscape and natural resources

culminating in its irreversible, yet historic form. It is considered that this lasting legacy of the industrial revolution and its effect on a World-important region will add further diversity to the World Heritage List.

The site acknowledges the effect of industry within a social context. The site retains evidence of the hierarchical structure maintained between the ironworks masters and their workers, displaying gulfs in the standard of properties, aspirations and locations. This facet of social identity displays the disparities in human communication during the late 18th and early 19th century.

(14) What benefits do you think World Heritage Site inscription would bring?

Please indicate the main opportunities and benefits.

Education	<input checked="" type="checkbox"/>	Tourism	<input checked="" type="checkbox"/>	Regeneration	<input checked="" type="checkbox"/>
Conservation	<input checked="" type="checkbox"/>	Protection	<input checked="" type="checkbox"/>	Other benefits	<input checked="" type="checkbox"/>

Please describe. 100 words.

Merthyr Tydfil is an area of high deprivation with a rich industrial legacy and assets. Inscription would build on regeneration initiatives aiming to generate economic and social development through conserving, protecting and promoting the area's rich industrial heritage, and making it accessible and sustainable for future generations

Beneficiaries: children and young people; older people; businesses; community and voluntary groups; social enterprises; residents; visitors.

Social benefits: sense of place & local/regional confidence; education, training and skills development in heritage, tourism, conservation; positive external perceptions.

Economic benefits: increased visitor numbers; inward investment; increased visitor spend; sustainable investment in important heritage features.

(15) Are there any known threats to the proposed World Heritage Site?

Yes No

Please indicate any proposed developments, or other potential impacts on the site.

Impact	<input checked="" type="checkbox"/>	Please describe. 100 words for each issue.
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Development	<input checked="" type="checkbox"/>	A fundamentally important area of the site, consisting of an internationally important mineral resource area formed by a number of Scheduled Ancient Monuments and in excess of 570 other archaeological features, is at risk of development by means of open cast coal mining. To date, a planning application and appeal has been refused relating to this use, however; there still remains an outstanding appeal pertaining to this proposed use. Designation as a World Heritage Site would fortify the protection of this important site from development.
Environmental	<input type="checkbox"/>	
Other	<input type="checkbox"/>	

(16) Legal Protection

Please list any legal and other protections, including cultural and natural designations, which cover the whole or part of the proposed site. 200 words

<p>The site comprises of the following statutory designations:</p> <ul style="list-style-type: none"> • 4 Conservation Areas designated under s.69 of the Planning (Listed Buildings and Conservation Areas) Act 1990; • 114 Listed Buildings, listed under the Planning (Listed Buildings and Conservation Areas) Act 1990; • 17, and 6 further proposed Scheduled Ancient Monuments under the provisions of the Ancient Monuments and Archaeological Areas Act 1979. <p>The site also contains the following non-statutory designations, which offer protection through the Planning system:</p> <ul style="list-style-type: none"> • 62 Locally Listed Buildings; • 447 Archaeological Features on the Sites and Monuments Record; • Landscape of Outstanding Historic Interest in Wales; • The Countryside Council for Wales 'Landmap' designation considers the

Merthyr Tydfil's landscape to be of 'Outstanding' cultural and historic value.

A number of incidental ecological designations also pertain to the site. This comprises of:

- 11 Sites of Importance for Nature Conservation;
- 2 Sites of Special Scientific Interest;
- 1 Local Nature Reserve;
- 1 European Geopark.

(17) Ownership

Please list the main owners of the site, where possible.

Merthyr Tydfil County Borough Council
Plymouth Estates (statement of support being sought)
The Forestry Commission (statement of support being sought)
(statement of support being sought)
Merthyr Village Ltd (statement of support being sought)
St Tydfil's Shopping Centre (Statement of support enclosed)

Do the owners support the application? Yes No

A statement of support from the principle owners of the proposed site should be attached to the application, preferably electronically.

(18) Local Authority support for the site

Please list all Local Authorities with an interest in the proposed site.

Merthyr Tydfil County Borough Council - Approved Cabinet report 9 June 2010 attached

Does the proposed site have local Authority support? Yes No

Please attach a statement of support from each one in relation to the application.

Please indicate whether the site is included in the local plan/s by specific policies.

Yes No Partly

Please describe. 200 words.

Adopted Local Plan (1999)

A large portion of the proposed World Heritage Site, Cyfarthfa Heritage Area is protected by Policy BH1 of the Local Plan. The policy protects the character, setting and appearance of the various heritage features of the area, including unlisted and unscheduled features.

Furthermore, Policy BH2 affords protection for the four Conservation Areas contained within the site, Policy BH3 protects monuments and archaeologically important areas from adverse development, and Policies BH4 and BH5 respectively protect the setting and character of Listed and Locally Listed Buildings.

Emerging Local Development Plan (2010)

The replacement plan (LDP) is currently undergoing a Public Examination, and is anticipated to be adopted once this process is complete.

94ha of the proposed World Heritage Site (similarly to the Local Plan) is protected by Policy AS15 of the LDP. The area is acknowledged for its leisure and tourism potential. Furthermore, Policy AS4 prescribes the protection, conservation and enhancement of the Merthyr Tydfil Historic Landscape, containing the proposed WHS and its setting. Policy AS19 also aims to maintain the vitality and attractiveness of the Town Centre.

In terms of Borough-wide policies, the distinctive landscape of Merthyr Tydfil is protected by Policy BW5 and its townscape and heritage assets of national and local importance are protected by Policy BW6.

(19) Stakeholders

Please list the main parties with an interest in the site. 100 words

Merthyr Tydfil County Borough Council
Merthyr Tydfil Heritage Trust
Friends of Cyfarthfa Park

(20) How will the Site be managed?

Please outline the management arrangements for the proposed World Heritage Site, including where the responsibilities lie. 200 words

Management of the site will derive from a working group established by Merthyr Tydfil County Borough Council, comprising expertise possessed internally. The group will be responsible for general preservation and management of the site as well as the responsibility for vetting any potential proposals within the WHS with a taught principle of preserving or enhance the character and outstanding value of Merthyr Tydfil. Below is an indicative division of roles and responsibilities:

Department / Officer	Roles and Responsibilities
Physical Regeneration	Achievement of funding and division of schemes to preserve and enhance the character and setting of the WHS and Town Centre.
Estates	Compulsory Purchase of land and maintenance of Council-owned features within the WHS.
Leisure and Tourism	Promotion of World Heritage site and curatorial duties of Cyfarthfa museum and other interpretation locations.
Planning Policy	Devise Policies and Guidance for appropriate protection of the WHS.
Development Control	Decisions on planning applications within the area and enforcement of inappropriate change
Heritage and Conservation Officer & Glamorgan-Gwent Archaeological Trust	Heritage and Conservation management issues, expertise incorporated into schemes, statutory consultee on planning consents within WHS
Landscape Architect	Landscape management issues, expertise incorporated into schemes, statutory consultee on planning consents within WHS
Countryside / Biodiversity Officer	Countryside and Biodiversity management issues, expertise incorporated into schemes, statutory consultee on planning consents within WHS

Outside of the Council, expertise will also be incorporated from the amenities societies. The Council retains access to expertise from the Countryside Council for Wales, Cadw, Glamorgan-Gwent Archaeological Trust and the Royal Commission for the Ancient and Historical Monuments of Wales. The collective remits of such groups are to preserve the countryside, landscape, heritage and archaeology of Merthyr Tydfil. It is anticipated that such groups will be incorporated into the management of the site.

If successful in this initial application, a thorough property conservation management plan (CMP) and framework will be compiled offering improved and fully defined detail on accountability, stakeholders, management processes and the cycle of responsibilities. This will complement information already compiled within the Cyfarthfa CMP and Merthyr Tydfil Ironworks Landscapes CMP.

(21) Funding: the nomination

Please indicate how the preparation of the nomination would be funded.
100 words

MTCBC will allocate staff time and will seek to access funding through the Heads of the Valley's Programme and Valley's Regional Partnership and other bodies such as CADW

(22) Funding: management

Please outline how the future management would be funded. 100 words

MTCBC will allocate staff time and will seek to access funding through the Heads of the Valley's Programme and Valley's Regional Partnership and other bodies such as CADW

Name and Contact Details of Applicant

Name	Gareth Chapman
Status	Deputy Leader and Director of Schools Governance and Technical Directorate
Address	Merthyr Tydfil County Borough Council Civic Centre Castle Street Merthyr Tydfil United Kingdom CF47 8AN
Telephone	
Email	

Completed applications should be forwarded, preferably in electronic format, to the World Heritage Team, Department for Culture, Media and Sport at the following email address: UKTL.Application@culture.gsi.gov.uk

Any material that cannot be sent electronically should be sent to the following address:

World Heritage Team, Department for Culture, Media and Sport
2-4 Cockspur Street
London
SW1 5DH

The closing date for applications is 11th June 2010

UNESCO's criteria for the assessment of Outstanding Universal Value
(para 77 of the Operational Guidelines)

- (i) represent a masterpiece of human creative genius;
- (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;
- (iii) bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- (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;
- (v) be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
- (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.
- (vii) contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- (viii) be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
- (ix) be outstanding examples representing significant ongoing ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
- (x) contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.