



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

Offa's Dyke England/Wales Border Earthwork

(2) Geographical Location

Name of country/region

England and Wales (Welsh Marches), counties of Gloucestershire, Herefordshire, Powys, Shropshire, Wrexham and Flintshire.

Grid reference to centre of site

Approximate geographical centre point of Offa's Dyke (129 km of continuous or near continuous monument extant along a 210 km corridor): Newcastle, Shropshire, SO 283 257

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

Offa's Dyke consists of a massive bank and western ditch which together form an imposing west facing earthen wall rising some six metres from the base of the ditch to the top of the bank. The dyke runs on a north-south course between Treuddyn (Flintshire) and Sedbury Cliffs (Gloucestershire), and follows an alignment close to (and sometimes forming) the modern border between England and Wales.

The dyke is cleverly designed to strategically exploit the topographical interface of the Welsh uplands and the English lowlands. Through careful placement within the upland fringe, Offa's Dyke not only commands dominant views into Wales, but also prominently occupies and interrupts key views from Wales into England.

The dyke has inevitably been subject to localised erosion, removal and damage. However, overall its continuous character and landscape presence remains remarkably intact. Well preserved sections of Offa's Dyke are still as much a part of the urban landscapes of the Wrexham area as the rolling pastoral landscapes of Powys and Shropshire.

There is a significant (probably original) break in Offa's Dyke across southern Herefordshire. The World Heritage Site would therefore only incorporate the 129 km of proven continuous or near continuous monument in Gloucestershire, Herefordshire, Powys, Shropshire, Wrexham and Flintshire.

(5) History

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

Offa's Dyke is a product of the migration of the Anglo-Saxon peoples into and across southern Britain in the post Roman period.

It was built in the later 8th century to define the cultural and political border between the Anglian King Offa's midland-centred kingdom of Mercia and the native British peoples/kingdoms in what is now Wales. The combined logistical, political and geographical scale of the undertaking is unique evidence both of the sophistication of the Mercian state and of Offa's wider ambitions on a Western European political stage dominated by the great Frankish leader, Charlemagne.

In the centuries after Offa, the dyke exerted a lasting influence on the way the people living around it came to define their cultural identity. This indelible English line on the landscape contributed to a new sense of common unity among the British peoples to the west – the Welsh. The dyke often served as a local boundary between English and Welsh communities living within the medieval Marcher lordships, and sections of the monument were formally designated as the national border in the 16th century.

In the mid 20th century, Offa's Dyke was the inspiration for the creation of the Offa's Dyke Path National Trail. The path, which was opened in 1971, follows much of the ancient monument.

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

Give reasons. 200 words

The reason for nominating Offa's Dyke is not just that it strongly fulfils key WHS criteria. It is that WHS status would facilitate new and important management, conservation and economic benefits for the dyke and its environs which are unlikely to happen in any other way.

Offa's Dyke is a victim of its very scale, nature, meaning and historical success. It is located in two countries, six local authority areas, multiple ownerships and multiple land-use contexts. The main professional stakeholders – such as the English and Welsh path and heritage management agencies – are organisationally and functionally separate. The ancient monument is now often seen as secondary to the modern path, and heritage advice about individual dyke sections is not generally coordinated via any connected overview of the values of the whole monument. Moreover, despite the lasting legacy of Offa's Dyke for English and Welsh communities alike, there is limited public awareness of the monument and its remarkable link to modern ideas of national identity.

The process of WHS inscription, and the creation and implementation of the Management Plan, would, for the first time since the 8th century, positively enable the management and presentation of Offa's Dyke as a whole monument with a whole value for England, Wales and the communities of the Welsh borders.

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

Offa's Dyke directly represents a key period of Western European history when processes including migration, cultural interaction, and territorial competition resulted in the tangible beginnings of the languages, cultural identities and nation states which we still live with today.

Despite the ongoing legacy of these developments - which ultimately includes the profound subsequent influence of Western Europe and its culture on world development - little visible evidence of the peoples and historical processes of the early medieval period now remains. Offa's Dyke is not only the largest, most impressive, and most complete purpose built early medieval monument in Western Europe. In its linear scale, its careful design as a powerful expression of political and cultural exclusion, and its context marking a cultural/national border which remains to this day, Offa's Dyke precisely exemplifies these core historical developments, and their lasting effect on the landscapes, peoples and cultures of Western Europe.

Offa's Dyke connects the culture of the ancient Anglo-Saxon and British peoples with the culture of living English and Welsh peoples. It has

Outstanding Universal Value not just as a unique evidence of the cultural origins of modern Europe, but as rare monumental evidence of the origins of cultural identity generally.

(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 type="checkbox"/>	
(ii)	<input type="checkbox"/>	
(iii)	<input checked="" type="checkbox"/>	Offa's Dyke provides unique testimony both to the lost culture of the Anglo-Saxon peoples (and the Anglian/Mercian people in particular), and to the living culture of the English and Welsh peoples. It is the largest civil engineering project ever undertaken by an Anglo-Saxon state, and the most impressive Anglo-Saxon monument to now survive in the UK or the Anglo-Saxon homelands. It is the best example of the distinctive Anglo-Saxon monumental dyke building tradition, and directly represents core aspects of Anglo-Saxon culture including kinship affiliation, royal power, conspicuous display and interaction with adjoining peoples.
(iv)	<input checked="" type="checkbox"/>	Offa's Dyke is an outstanding illustration of a key stage of Western European history when processes including migration and territorial conflict created the languages, cultural identities and nations which still exist today (and which underpin the profound subsequent influence of Western Europe on world development). The late 8th century dyke effectively marks the western limit of Mercian expansion across former British lands, and the beginnings of Anglo-Saxon (English)/British (Welsh) cultural coexistence. As such, Offa's Dyke is unique monumental evidence not just of the genesis of England and Wales, but of the political basis of modern Europe.

UNESCO criterion	<input checked="" type="checkbox"/>	Why was this criterion chosen? 100 words
(v)	<input type="checkbox"/>	
(vi)	<input checked="" type="checkbox"/>	Offa's Dyke is directly associated with the development of profoundly rooted ideas of English and Welsh cultural identity. Over the last thousand years, the enduring landscape presence of the dyke has continually re-affirmed the living tradition of English and Welsh origins for the peoples on either side of the monument. These ideas of cultural belonging have not just fundamentally informed the political life and relationship of both nations up to the present. They have also become a basic strand in the cultural makeup of the United Kingdom, and have significantly contributed to the important post medieval influence of the British and their culture on world history.
(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 Outstanding Universal Value of Offa's Dyke is embodied in attributes principally including the form of the monument as an imposing west facing bank and ditch, its careful design as a continuous monumental structure commanding and interrupting views to and from Wales, and its physical presence as a functional landscape boundary. Despite over a thousand years of surrounding landscape change, these attributes are still substantially intact.

The bank and ditch are extremely well preserved in many places, sometimes with the western counterscarp bank still remaining. Even where lengths of the dyke have been destroyed, the bank reduced, or the ditch filled in, the presence of better preserved adjoining sections generally serves to reference and preserve the overall intelligibility of the structure.

The setting of the dyke has been effectively lost in particular environmental contexts including some wooded and built up areas. However, it is typically still possible to see and experience Offa's Dyke from key locations as the 'performative' landscape monument its designers intended (especially in the

central Marches).

The dyke everywhere still forms a tangible boundary, often visually reinforced by the evolution of the monument as a hedged and tree lined corridor. Some dyke sections remain in use as the modern England/Wales border.

(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

Archaeological excavations along Offa's Dyke have confirmed that the monument is essentially a single phase structure which has not generally been subject to subsequent alteration. The only significant modifications to surviving dyke sections are associated with localised medieval and later re-use for purposes such as flood defence (Severn Valley), town defence (Knighton), and as roads or tracks. Such re-modelling applies to a small percentage of the extant earthwork, and even in these cases much of the original form and fabric typically survives.

In recent times, small scale conservation repairs have principally focused on stabilising erosion scars. Such work is fully recorded, is designed to be readily detectable in the event of future excavation, and involves an in-fill technique which does not require any disturbance of remaining original earthwork.

Localised erosion is an ongoing issue often associated with agricultural management, the continuing local boundary function of the dyke, and other modern land-use pressures such as walkers on the Offa's Dyke Path. These erosion impacts do not individually constitute an immediate threat to the overall historical integrity of this physically massive monument, but they do represent a potentially progressive management problem for some dyke sections.

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

Yes No

If yes, please list. 100 words

Offa's Dyke is an ancient artificial cultural/national boundary which still has relevance for modern people linked to its original purpose (and which still directly functions as the modern English/Welsh border in some places). There are no existing World Heritage Sites of this kind, and, indeed, no existing World Heritage Sites associated with the early medieval Anglo-Saxon or British peoples.

The only current World Heritage Sites which have a nominal similarity to Offa's Dyke are the small group defined as 'fortified boundaries'. These include the Frontiers of the Roman Empire (Hadrian's Wall, Antonine Wall, German Limes Frontier) and the Great Wall of China.

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

150 words

Offa's Dyke is unique evidence of ancient Mercia, the migration of the Anglo-Saxon peoples and the lasting emergence of new national/cultural affiliations in the early medieval period. In these ways, its meaning, value and historical context is entirely different to that of an imperial military frontier such as Hadrian's Wall (which also has no political and cultural relevance today). Although Offa's Dyke may have had a defensive dimension, the fact that it was not primarily intended as a fortified frontier is emphasised by the absence of any known associated roads, fortifications or other military infrastructure.

Offa's Dyke can be compared with other boundary dykes known across the former Anglo-Saxon lands (including Wat's Dyke, Wansdyke and Devil's Dyke in the UK and the Danevirke in Denmark). Offa's Dyke is by far the longest and most distinctive of these structures, the only one associated with a known monarch and a clear context, and the only one with a direct legacy.

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

200 words

GLOBAL STRATEGY

Under-representation of living cultures (Offa's Dyke directly associated with living English and Welsh culture).

Human coexistence with the land: movement of peoples (Offa's Dyke directly representative of the Anglo-Saxon migrations).

Human beings in society: human interaction and cultural coexistence (Offa's Dyke directly representative of early medieval Anglo-Saxon and British interaction and subsequent English and Welsh coexistence).

FILLING THE GAPS

B3.9 Western and Northern Europe: only 9 early medieval sites, none in the UK (Offa's Dyke the largest early medieval monument in Europe).

C1b.1 Identity: only 15 sites (Offa's Dyke directly representative of the cultural identity of the Anglo-Saxons and the Anglian/Mercian people in particular, and of the subsequent development of English and Welsh cultural identity).

C2 Creative Responses/Continuity (Offa's Dyke directly representative of the creation of national political/cultural boundaries, no such category currently identified, and no current sites comparable to Offa's Dyke).

C5a Migration: only 7 sites (Offa's Dyke directly representative of the Anglo-Saxon migrations).

It should additionally be noted that, as an innovative cross-national site (England and Wales), Offa's Dyke would also fulfil the objective of more linked international inscriptions.

(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 type="checkbox"/>
Conservation	<input checked="" type="checkbox"/>	Protection	<input checked="" type="checkbox"/>	Other benefits	<input checked="" type="checkbox"/>

Please describe. 100 words.

EDUCATION AND AWARENESS

Enabling local people to engage with the importance of Offa's Dyke, and to take ownership of their heritage through that understanding.

CONSERVATION AND PROTECTION

Focused management informed by an overall Management Plan. Very important for issues such as the balanced protection of the setting of the dyke.

TOURISM

Particular value for urban and less well known rural dyke sections (especially outside AONBs). These are typically in areas with high multiple deprivation scores and little current tourism (e.g. Wrexham urban fringe).

CROSS SECTOR WORKING

Better integration of dyke, path, owner, community and local authority stakeholders.

(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.
Development	<input checked="" type="checkbox"/>	<p>Although the physical fabric of Offa's Dyke is generally protected from development impacts (see Question 16), the Outstanding Universal Value attribute associated with the particular relationship of the monument to its setting is vulnerable to modern landscape change.</p> <p>There is currently no overall definition of the setting of Offa's Dyke, and the task of recognising and responding to development threats is typically handled on a disconnected case by case basis via the relevant local heritage agencies. Wind farm applications close to the monument have recently emphasised this weakness, and this issue will be a significant future challenge for Offa's Dyke.</p>

Environmental	☒	<p>The nature of Offa's Dyke as a 'living' monument within a working landscape (be it as a field boundary, hedgerow, road or path) does pose ongoing erosion threats to its physical fabric.</p> <p>These condition issues are not technically difficult to mitigate, and they do not in any given case significantly compromise the overall Outstanding Universal Value of the monument. However, they do emphasise the need for continuous conservation management using mechanisms such as agri-environment schemes.</p> <p>It is also likely that the effects of climate change and future shifts in agricultural priorities will create new pressures on the fabric of Offa's Dyke.</p>
Other	☒	<p>The geographical scale of Offa's Dyke, and its continuing identity as a marginal feature which is not the central or exclusive concern of any of the national, regional or local stakeholders involved in its care, does pose a significant threat to the future protection of the dyke's Outstanding Universal Value.</p> <p>One example is the functional and professional separation of the two sets of national natural environment (path) and heritage (dyke) agencies. Although issues such as the quality of the Offa's Dyke Path walking experience and the protection of the setting of Offa's Dyke are clearly linked, they are not generally pursued through joint working and policy.</p>

(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

SCHEDULED MONUMENT

All sections of Offa's Dyke in England and Wales which survive as earthworks, or where significant buried remains (essentially the ditch) are known to exist, are designated as a Scheduled Monument. This does not generally include buried elements of the monument which may survive under roads or other built structures.

SITE OF SPECIAL SCIENTIFIC INTEREST/SAC

Offa's Dyke is incorporated within a number of SSSIs along its route. This includes much of the monument within the semi-ancient woodlands of the Lower Wye Valley which also have SAC and (within Highbury Woods) National Nature Reserve status.

AREA OF OUTSTANDING NATURAL BEAUTY

In Gloucestershire, the 10 km dyke section which follows the eastern lip of the Lower Wye Valley is within the Wye Valley AONB. In Shropshire, the 20 km 'switchback' dyke section through the Clun hills is within the Shropshire Hills AONB.

PUBLIC RIGHTS OF WAY

The line of Offa's Dyke is mostly designated as a Public Right of Way (including footpaths, bridleways and byways). Between Sedbury Cliffs (Gloucs.) and Chirk Castle (Wrexham) the monument is directly followed or is closely shadowed by the Offa's Dyke Path National Trail. The Offa's Dyke Path leaves the dyke north of Chirk, but the monument is still largely a PROW through Wrexham and southern Flintshire.

(17) Ownership

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

Offa's Dyke is in multiple ownership. This includes publicly owned lengths (e.g. Wrexham crematorium, Forestry Commission in the Wye Valley, local authority owned highways), but principally the dyke is in private ownership. Some significant sections are within large estates (e.g. Chirk and Powis estates), although the majority is in relatively small landholdings including domestic gardens in urban areas.

Given the number and variety of Offa's Dyke owners, it was not felt to be appropriate or practical to undertake landowner contact at this preliminary stage. Landowner consultation would be a key process in support of the further development of the World Heritage Site application.

It is, however, immediately relevant to note that the combination of the existing

designated status of Offa's Dyke (see Question 16) and the long established presence of the Offa's Dyke Path generally creates a high level of owner awareness of the monument. Past experience suggest this awareness typically translates into positive owner engagement with the public, heritage and local economic values of Offa's Dyke.

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.

The six principal local authorities along Offa's Dyke are:

Gloucestershire County Council
Powys County Council
Herefordshire Council
Shropshire Council
Wrexham Borough Council
Flintshire County Council

Letters of local authority support are included with this application. In addition, a statement of support has also been provided by the Offa's Country Sustainable Tourism Partnership which includes full Offa's Dyke local authority representation (as well as a range of other English and Welsh government linked agencies)

It should also be noted that the aim of pursuing World Heritage Site status for Offa's Dyke was first identified in the 2000 'Offa's Dyke Conservation Statement' (<http://www.cpat.org.uk/offa/odcs.htm>). The Conservation Statement was produced and endorsed by an Advisory Committee including Cadw, English Heritage and the above local authorities.

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.

Although the potential for development of Offa's Dyke as a World Heritage Site was first identified in the local authority endorsed Offa's Dyke Conservation Statement (2000), the Offa's Dyke ancient monument is not generally identified by name within existing Local Plan/UDP policies.

This reflects its high level protection by national designations (principally Scheduled Monument), its effective inclusion within over-arching Local Plan historic environment, tourism and countryside thematic policy frameworks, and the incorporation of key geographical sections within AONB landscapes where Offa's Dyke is already specifically linked to targeted management plans (Shropshire Hills and Wye Valley). The Offa's Dyke Path is directly identified in the Powys UDP and the former South Shropshire District Council and former Oswestry District Council Local Plans.

It should also be noted that all existing UDP and Local Plan documents are currently in the process of replacement by Local Development Frameworks, so the stated policies within those documents have limited value going forward.

(19) Stakeholders

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

The principal identified stakeholders are:

The many communities along the 210 km course of Offa's Dyke;

Community groups including organisations such as the ODA and Leader partnerships;

Offa's Dyke landowners, including farmers and other land managers;

Individual dyke 'users' and visitors, including Offa's Dyke Path walkers;

Local businesses and tourism/accommodation providers who benefit from Offa's Dyke (principally linked to the path);

Tourism groups and other linked agencies (including the Offa's Country Sustainable Tourism Partnership);

The local authorities along Offa's Dyke;

Natural England, Countryside Council For Wales, English Heritage and Cadw.

(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

The management of the Offa's Dyke WHS would build on and develop existing Offa's Dyke management structures, with an emphasis on facilitating greater management integration between different stakeholders/agencies, realising coordinated overall presentation and promotion of Offa's Dyke in all its guises, and putting in place improved practical conservation and protection.

In principle, it is suggested that the management process would be coordinated by an Offa's Dyke WHS steering group, with a series of subsidiary working groups (corresponding to, and growing from, existing monument, path, and tourism promotion management forums). As a large and dispersed site, it may or may not be judged appropriate to adopt a WHS coordinator model, and available financial resources would clearly be a significant practical factor in designing an appropriate management approach.

Key management responsibilities would be:

Monument conservation and protection - Cadw, EH, landowners;

Path and visitor access - NE, CCW, local authorities, landowners, communities;

Promotion/tourism - local authorities, tourism groups, communities, local businesses, Regional Development Agencies, Offa's Country Partnership, ODA;

Education and community engagement - community groups (e.g. ODA), local authorities, NE, CCW, EH, Cadw.

(21) Funding: the nomination

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

In principle, it is suggested that the nomination would be jointly funded by an Offa's Dyke World Heritage Site Partnership consisting of the local authorities and key Offa's Dyke stakeholders (see Question 19). Subject to the outcome of the Tentative List 'first sift', no partner funds have yet been firmly committed to Offa's Dyke nomination development.

Clearly, developing a nomination funding model would be a key part of the partnership process at the next application stage. It should be noted that the Offa's Dyke Association would make a significant funding contribution to the nomination process, and there is also identified potential for private donor support.

(22) Funding: management

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

Core management funding would be a continuation of established Offa's Dyke funding streams. These include Cadw, EH, and agri-environment schemes (monument conservation), NE and CCW (path management and development), Regional Development Agency, Welsh Assembly and local authority (tourism infrastructure), private sector (tourism and economic development) and other project linked contributions from interested agencies such as the Offa's Dyke Association.

The management objectives of the Offa's Dyke WHS are likely to require further specific funding input, and developing that support will be a key element of the WHS development process.

Name and Contact Details of Applicant

Name	Offa's Dyke Association (ODA)
Status	Registered Charity No. 503821, long established Offa's Dyke management/partnership agency.
Address	Ian Bapty Hon Secretary Offa's Dyke Association Offa's Dyke Centre West Street Knighton Powys LD7 1EN
Telephone	01547 528753 [REDACTED]
Email	oda@offasdyke.demon.co.uk

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.