



## IUCN World Heritage Advice Note

### Environmental Assessment & World Heritage

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*This Advice Note is intended to provide States Parties and other stakeholders with guidance on integrating natural<sup>2</sup> World Heritage Sites within Environmental Assessments (including Strategic Environmental Assessments and Environmental & Social Impact Assessments). Effective integration of World Heritage Sites in these processes is critical to ensuring that the potential adverse impacts of development proposals on a site's Outstanding Universal Value, and alternatives to these proposals, are fully considered in decision-making. Ultimately, the aim of Environmental Assessment is to equip decision-makers with the information necessary to preserve these exceptional sites for future generations.*

#### 1. What are natural World Heritage Sites?

**Natural World Heritage Sites are internationally recognized under the World Heritage Convention and are inscribed on UNESCO's World Heritage List. These sites rank amongst the world's most important natural areas. The UNESCO World Heritage Convention, ratified by 190 countries, provides a unique framework for securing the conservation of these exceptional places, recognized as being of Outstanding Universal Value to humanity (see Section 3).**

World Heritage Sites include many household conservation names such as the Serengeti National Park, Galapagos, the Grand Canyon and the Great Barrier Reef, and are often a last refuge for threatened species, such as the Mountain Gorilla, Giant Panda and Orangutan. There are more than 200 natural World Heritage Sites covering over 260 million hectares, which equates to less than 1 % of the Earth's surface and over 10% of the planet's protected areas (in ha).

Many sites are increasingly faced with threats such as mining, major infrastructure projects, poaching, illegal logging, agricultural encroachment and climate change. Of the 217 natural World Heritage Sites, nearly 8% are on the List of World Heritage in Danger, 25% are affected by serious conservation issues, and the status of many of sites is currently not known.

These sites represent a commitment to future generations that the international community has a duty to uphold, as embodied in Article 6(1) of the World Heritage Convention which states that "...such heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to cooperate." To find out more please see <http://whc.unesco.org/>.

#### 2. Background on Environmental Assessments

**Environmental assessments are intended to identify, evaluate, avoid and mitigate the potential environmental and social impacts of development proposals before a decision on their funding or**

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<sup>1</sup> This guidance note will be finalized following the 37<sup>th</sup> Session of the World Heritage Committee.

<sup>2</sup> For cultural sites there exist guidelines for Heritage Impact Assessment (HIA) which are available here [www.icomos.org](http://www.icomos.org). HIA can also be an integrated part of Environmental Assessments.

implementation is taken. Environmental Assessments are also intended to assess alternatives to development proposals, including the 'no project' option, in order to recommend the least environmentally damaging option to decision-makers.

The benefits of these assessments include:

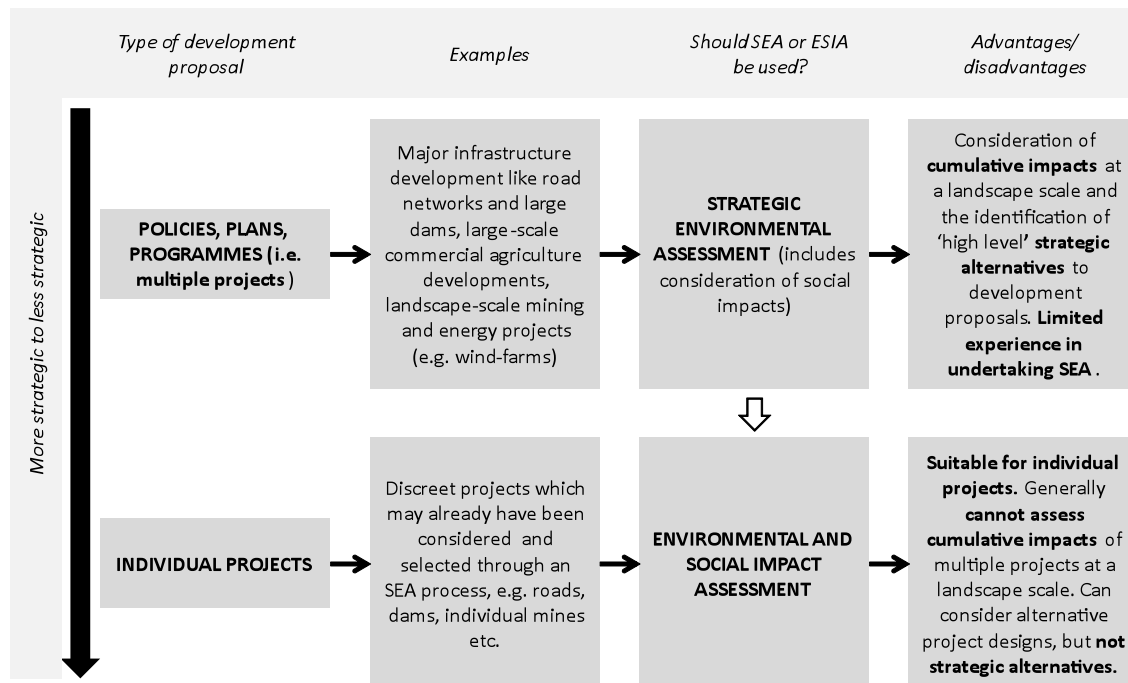
- Early consideration of environmental and social issues in the design and planning processes;
- Greater certainty for local communities and developers over future development; and
- The capacity to achieve better environmental and social outcomes and address cumulative impacts at the landscape level.

There are two main types of Environmental Assessments:

1. **Strategic Environmental Assessment (SEA)**, which applies to policies, plans and programmes (i.e. multiple or very large projects) – SEAs have the advantage of assessing impacts at a strategic level and at a landscape scale before individual projects are decided upon. SEAs can also help identify economic alternatives, e.g. different routes for roads, so as to avoid impacts on a World Heritage Site; and
2. **Environmental and Social Impact Assessment (ESIA)**, which applies to individual projects – because ESIA's generally apply to individual projects that have already been designed, they often focus on assessing different design options for a particular project and are therefore not well suited to assess the cumulative impacts of multiple projects (existing and planned) at a landscape scale or to identify strategic alternatives.

Figure 1 below shows the hierarchical relationship between SEA and ESIA with higher levels of assessment informing subsequent ones. SEA's should support the preparation of an ESIA but do not remove the need for it.

Aside from SEA and ESIA, there exist a number of other environmental assessment tools with different names and differing legal requirements. As all Environmental Assessment tools are broadly similar in purpose and scope to either SEAs or ESIA's, the *World Heritage Impact Assessment Principles* outlined further below in Section 4.2 can be applied to them. Throughout this Advice Note, SEAs, ESIA's and other types of Environmental Assessment are collectively referred to as *Environmental Assessments*.



**Figure 1: Diagram showing the relationship between SEA and ESIA, some of their advantages/disadvantages and when they should be applied. Note that the results of, and data used for, SEAs are intended to support ESIA, but do not remove the need for it.**

### **2.1 Environmental Assessment and land-use planning systems**

Most countries have specific national legislation for Environmental Assessments (e.g. for Environmental and Social Impact Assessments, Strategic Environmental Assessment, Sustainability Appraisals etc). However, the principles and core steps of these assessments are similar and they are all an integral part of land-use planning systems.

Land use planning systems are evolving rapidly, but sometimes present characteristics which complicate the effective integration of natural World Heritage Sites in Environmental Assessments and decision-making. For example, many land-use planning systems have limited resources and staff capacity, there are barriers to communication across government agencies (e.g. the mining agency and the agency responsible for World Heritage Sites), processes for issuing development permits may be unclear, stakeholder consultation processes may be limited or non-existent, and there is often a lack of information available on World Heritage procedures (e.g. the requirement to inform the UNESCO World Heritage Centre of development projects affecting World Heritage Sites).

Often, proponents of developments may not know that a particular protected area is also a World Heritage Site as development projects may be under the responsibility of different government agencies. As a first step to effective screening and integration of these sites in Environmental Assessments, all natural World Heritage Sites should be registered in land-use planning information systems, along with their associated conservation and protection requirements.

While this Guidance Note is intended to provide general advice on some of the points above, it does not cover the integration of World Heritage Sites within wider land-use planning systems.

### 3. Background on World Heritage Status & Outstanding Universal Value

World Heritage Sites are inscribed on the World Heritage List because they are recognized as being of Outstanding Universal Value to humanity, in accordance with strict criteria, conditions of integrity, and requirements for protection and management.

**Outstanding Universal Value** is defined in the *Operational Guidelines*<sup>3</sup> as “...*natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity.*”

A site’s Outstanding Universal Value is described in its *Statement of Outstanding Universal Value*, which can be found on the UNESCO World Heritage Centre website on the site description page<sup>4</sup>.

The three components of OUV for natural World Heritage Sites are briefly summarized below, and set out in full in the *Operational Guidelines*:

1. **Values:** There are four natural criteria which embody the values of the natural World Heritage Sites. These relate to superlative natural phenomenon and beauty (criterion vii), earth processes (criterion viii), ecosystems (criterion xi), and threatened species and their habitats (criterion x). Note that cultural sites are recognised under criteria i-vi, and mixed sites include both cultural and natural criteria. See Box 1 below for the full wording of the natural criteria.
2. **Integrity:** Integrity is a measure of ‘wholeness’ and requires assessment of the extent to which the site; i) includes all elements necessary to express its OUV; ii) is of adequate size to ensure the complete representation of features and processes which convey its significance; and iii) suffers from negative effects of developments and/or neglect.
3. **Protection and management:** Protection and management is intended to ensure that the site’s Outstanding Universal Value and the conditions of integrity at the time of inscription are maintained and enhanced in the future. The key elements of protection and management are; i) long-term legislative, regulatory, institutional and/or traditional protection; ii) delineated and appropriate boundaries; iii) buffer zones and/or wider protection of the site from threats outside its boundaries and iv) effective management systems.

#### **Box 1: The four natural World Heritage criteria**

*(vii) to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;*

*(viii) to 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) to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;*

<sup>3</sup> Operational Guidelines to the World Heritage Convention: <http://whc.unesco.org/en/guidelines/>

<sup>4</sup> Statements of OUV can be found on World Heritage Site landing pages on the UNESCO World Heritage Centre website at the following address <http://whc.unesco.org/en/list/>. Note that the process of preparing these statements and that some sites do not yet have one.

(x) to 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.

## 4. Preparing Environmental Assessments for developments affecting natural World Heritage Sites

### 4.1 Notification of development proposals that may affect Outstanding Universal Value

All development proposals and/or concessions that could lead to development proposals which may affect the Outstanding Universal Value of a World Heritage Site should be submitted by States Parties to the World Heritage Committee via the UNESCO World Heritage Centre<sup>5</sup> (the Secretariat to the Convention) before a decision on their funding, permitting or implementation is taken by the State Party, in line with Paragraph 172 of the *Operational Guidelines*.

#### **Box 2: Paragraph 172 of the Operational Guidelines**

*“The World Heritage Committee invites the States Parties to the Convention to inform the Committee, through the Secretariat, of their intention to undertake or to authorize in an area protected under the Convention major restorations or new constructions which may affect the Outstanding Universal Value of the property. Notice should be given as soon as possible (for instance, before drafting basic documents for specific projects) and before making any decisions that would be difficult to reverse, so that the Committee may assist in seeking appropriate solutions to ensure that the outstanding universal value of the property is fully preserved.”*

Proposals notified under Paragraph 172 of the Operational Guidelines should be submitted together with whatever documentation is available at the time of submission, e.g. project proposal, terms of reference for the Environmental Assessment, scoping document, draft Environmental Report. IUCN recommends that Environmental Assessments for development proposals affecting natural World Heritage Sites should, as a minimum, meet the *World Heritage Impact Assessment Principles* outlined below in Section 4.2.

Environmental Assessment reports for developments that will, or may, impact an natural World Heritage Site should include **a separate chapter presenting clear conclusions on the proposal(s) potential negative impacts on all relevant aspects of Outstanding Universal Value**, including on values, integrity and protection and management. Such conclusions should also consider social issues (displacement of populations, creation of new settlements, reduction of local people’s livelihoods etc.

### 4.2 World Heritage Impact Assessment Principles

The eight World Heritage Impact Assessment Principles below can be applied to all types of Environmental Assessments, including SEAs and ESIAs.

Environmental Assessments which do not meet these basic criteria are unlikely to constitute an adequate basis for decision-making.

<sup>5</sup> Contacts for the UNESCO World Heritage Centre can be found here <http://whc.unesco.org/en/world-heritage-centre/>

**IUCN strongly recommends that for large-scale proposals, proposals including multiple projects or landscape-scale land use proposals, Strategic Environmental Assessments are undertaken**, e.g. for major infrastructure development like road networks and dams, large-scale commercial agriculture developments, landscape-scale mining and energy projects (e.g. wind-farms), multi-sectoral development projects etc.

Environmental Assessments for proposals affecting natural World Heritage Sites should:

1. **Take place as early as possible in the decision-making process** in order to provide effective input to decision-makers and anticipate, avoid, and/or minimize negative impacts on the site's Outstanding Universal Value, or to stop a particular project as appropriate.
2. **Identify and evaluate reasonable alternatives to the proposal** in order to enable the selection of the option that is the least likely to damage the site's Outstanding Universal Value, including the 'no project' option.
3. **Assess the likely environmental and social effects of the development proposal(s) on the Outstanding Universal Value of the site**, including direct, indirect and cumulative effects. This assessment should consider the site's values, integrity and protection and management, as well as its connection to the wider landscape.
4. **Identify adequate mitigation measures for any residual negative impacts on Outstanding Universal Value that cannot be further reduced** and indicate how these measures will be implemented, who will implement them within what timeframe, and what resources are secured for their implementation.
5. **Include a separate chapter on World Heritage impacts in the Environmental Assessment report**, presenting clear conclusions on the proposal's potential negative impacts on Outstanding Universal Value.
6. **Be publicly disclosed and subject to thorough public consultation** in order to ensure that the relevant stakeholders are involved, including local communities, indigenous peoples, scientists, relevant government agencies, and non-governmental organizations. Feedback from consultation must be fully considered in the assessment of the project proposal.
7. **Propose, implement and independently audit an environmental management plan** detailing designing, operating, monitoring and restoration conditions, in relation to the site's Outstanding Universal Value. The developer must set aside funds from the outset to cover the costs of independent auditing of the implementation of the Environmental Management Plan at regular intervals.
8. **Effectively integrate the conclusions of the assessment into the decision-making process**, in order to ensure that the potential impacts of a development proposal(s) on a site's Outstanding Universal Value, as well as alternatives to the proposal(s), are fully considered in land-use planning decisions with the objective of preserving these exceptional sites for future generations.

#### **4.3 Environmental Assessment steps and World Heritage – which questions should you ask?**

The diagram below illustrates the core steps in the Environmental Assessment process and the key questions that should be answered at each step concerning the potential impacts of a development proposal(s) on a World Heritage Site's Outstanding Universal Value:

*When is an Environmental Assessment needed for proposals affecting natural World Heritage Sites?*

*Which issues relating to Outstanding Universal Value should be assessed and who should be involved in the assessment?*

*What are the likely effects of the proposal(s) on Outstanding Universal Value?*

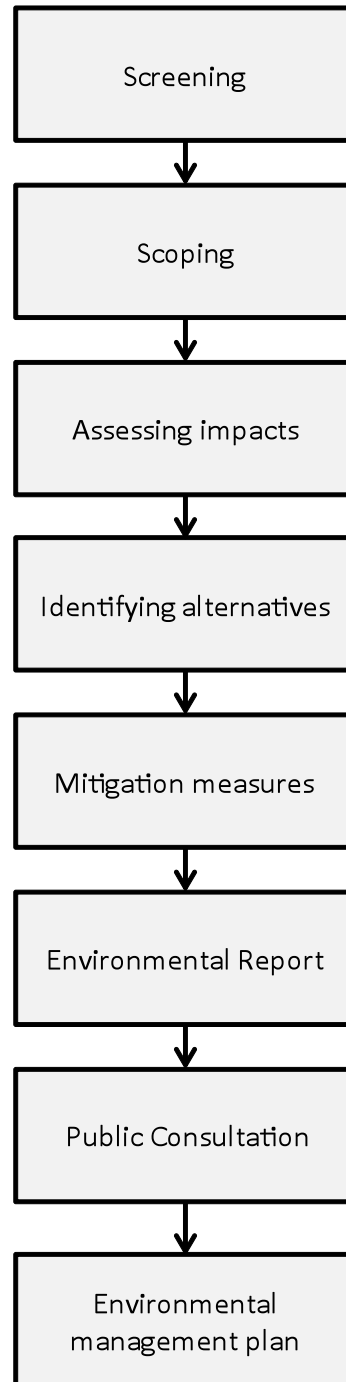
*What are the least damaging alternatives/ scenarios in relation to Outstanding Universal Value and can they be implemented?*

*How should measures to minimize residual negative effects on Outstanding Universal Value be identified and implemented?*

*What information should be provided to decision-makers on World Heritage impacts, when and in what format?*

*Which stakeholders should be consulted and how?*

*What type of plan should be implemented to manage and monitor any residual impacts on OUV by whom, with what funding and when?*



#### **4.4 Step by step guidance**

Brief guidance is provided below on how to integrate World Heritage throughout the different steps of the Environmental Assessment process:

#### **Screening – When is an Environmental Assessment needed for proposal(s) affecting natural World Heritage Sites?**

→ **All proposals that may adversely affect a natural World Heritage Site will require an Environmental Assessment**

Many countries have national environmental assessment regulations which specify different categories of projects which require appraisal. However, all proposals which may adversely affect a World Heritage Site, whether they are located within or outside its boundaries, should be subject to a comprehensive and rigorous environmental assessment process, such as an Environmental and Social Impact Assessment or Strategic Environmental Assessment, prior to considering whether to grant consents and licenses.

→ **Proposals located outside World Heritage Site boundaries should also be considered**

Development proposals located outside the boundaries of a World Heritage Site may have serious negative impacts on Outstanding Universal Value depending on the nature and scale of the proposals. For example, a mining proposal located 30km away from a site may, depending on the terrain, have serious implications for the hydrology of a site and also cause secondary effects, such as demographic changes leading to unsustainable natural resource use (e.g. illegal hunting). World Heritage Sites, like other protected areas, are integral to the wider landscape and cannot be considered independently from wider ecosystem processes.

→ **Strategic Environmental Assessments should be undertaken for large-scale or multi-sectoral development proposals**

IUCN strongly recommends that Strategic Environmental Assessments are undertaken for large-scale proposals, proposals comprised of multiple projects or landscape-scale land use proposals (e.g. large dams, multiple road development proposals, and large-scale commercial agriculture development). The cumulative impacts of these types of proposals may have a serious negative effect on OUV and are best assessed early on through a process that is designed to consider ‘high-level’ strategic alternatives. For example, multiple proposals for the development of a regional road network are best assessed through a single comprehensive SEA than through several project-specific ESIA, which are unlikely to consider the cumulative effects of the proposals as a whole, or alternative routes for the road network. See Section 2 and Figure 1 for more detail on the difference between SEA and ESIA.

→ **Mining and oil/gas projects are incompatible with World Heritage status**

The World Heritage Committee’s position is that mineral and oil/gas exploration and exploitation projects (including associated infrastructure and activities) are incompatible with the Outstanding Universal Value of World Heritage Sites and should not be permitted within these sites.



Mineral and oil/gas exploration and exploitation outside World Heritage Sites should not have negative impacts on their Outstanding Universal Value. For more information see the *IUCN World Heritage Advice Note on Mining and Oil/Gas Projects*<sup>6</sup>.

### Scoping – Which issues relating to Outstanding Universal Value should be assessed and who should be involved in the assessment?

→ **Many of the issues that should be included in the assessment can be identified by referring to the site's Statement of Outstanding Universal Value**

An Environmental Assessment for a development proposal(s) affecting a natural World Heritage Site should assess likely impacts on the site's Outstanding Universal Value, including on values, integrity and protection and management. A site's OUV is described in its *Statement of Outstanding Universal Value*, which can be found on the UNESCO World Heritage Centre website on the site description page<sup>7</sup>.

→ **Social issues must also be assessed**

Potential social issues that could impact a site's Outstanding Universal Value and local communities should also be carefully assessed. These should be identified in consultation with local communities.

→ **Consultation should begin at the scoping stage and the scoping document should be publically available**

It is useful to consult stakeholders at the scoping stage as they can support the identification of issues that should be included in the assessment. These stakeholders may include government agencies, such as the agency responsible for World Heritage and/or protected areas, as well as non-governmental organizations, the site manager, community groups etc. Scoping documents should be publically available.

→ **Terms of reference and scoping documents and draft environmental reports should be submitted as early as possible to the World Heritage Centre**

IUCN encourages early submission to the World Heritage Centre, as per Paragraph 172 of the *Operational Guidelines*, of terms of reference, scoping documents and draft Environmental Assessment reports as they offer early and effective opportunities to provide advice on the issues that should be considered in the assessment.

### Assessing impacts – What are the likely effects of the proposal(s) on Outstanding Universal Value?

→ **All likely effects should be assessed, including direct, indirect and cumulative**

An Environmental Assessment for a proposal affecting a natural World Heritage Sites should assess the likely effects of the proposal(s) on the site's Outstanding Universal Value, including direct,

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<sup>6</sup> [www.iucn.org/worldheritage](http://www.iucn.org/worldheritage)

<sup>7</sup> <http://whc.unesco.org/en/list/>

indirect and cumulative effects. Potential social issues that could impact on the site's Outstanding Universal Value should also be carefully assessed.

### **Identifying alternatives and scenarios – What are the least damaging alternatives/scenarios in relation to Outstanding Universal value and can they be implemented?**

- **Alternative proposals/ development scenarios should be identified and assessed, including the 'no project' option and the least damaging options in relation to OUV**

The Environmental Assessment should clearly identify and evaluate alternatives to development proposal(s), including the 'no project' option and the least damaging options in relation to OUV. This is one of the most important steps in the Environmental Process. The different development options/scenarios should be clearly communicated to decision-makers, and those that are least damaging in relation to OUV should be highlighted, including in some cases the 'no project' option. Very often, economically viable and feasible alternatives can be found to development proposal(s) that may be damaging to a World Heritage Site's Outstanding Universal Value. A detailed consideration and assessment of alternatives can enable the identification of these economically viable alternatives.

### **Mitigation measures – How should measures to minimize residual negative effects on OUV be identified and implemented?**

- **Mitigation measures should be identified for minor residual negative impacts on OUV that cannot be avoided**

In some cases, there may be minor residual negative impacts on OUV that cannot be avoided by changing project design or by choosing a different project option or the 'no project' option. In such cases, adequate mitigation measures for any negative impacts on OUV that cannot be further reduced should be identified. The Environmental Assessment should indicate how these measures will be implemented, who will implement them within what timeframe, and what resources are secured for their implementation. Biodiversity enhancements should also be incorporated into plan, programme, project development as a matter of course in order to enhance OUV.

### **The Environmental Report – What information should be provided to decision-makers on World Heritage impacts, in what format and when?**

- **A separate chapter on World Heritage impacts must be included in the Environmental Assessment report, and a summary of this chapter reflected in the Executive Summary**

This chapter should:

- Present clear conclusions on any likely negative impacts of a development proposal(s) on Outstanding Universal Value, including for both environmental and social impacts.
- Based on the identification and evaluation of all alternatives, recommend a preferred development proposal option/scenario, e.g. the least damaging options/scenarios in relation to OUV, the 'no project' option/scenario as appropriate.

- Outline how any minor residual negative impacts on OUV that cannot be avoided will be mitigated and monitored through a budgeted Environmental Management Plan.
- Clearly document how stakeholder views were taken into account within the assessment.

A summary of this chapter must be reflected in the Executive Summary of the assessment.

→ **All development proposals and their environmental assessments should be submitted to the World Heritage Committee via the UNESCO World Heritage Centre**

All development proposals which may affect the Outstanding Universal Value of a World Heritage Site should be submitted by State Parties to the World Heritage Committee via UNESCO's World Heritage Centre before a decision on their implementation is taken, in accordance with Paragraph 172 of the *Operational Guidelines* to the Convention.

These proposals should be submitted together with the Environmental Assessment documentation available at the time of submission, e.g. project description, terms of reference, scoping document, draft Environmental Report etc.

### Public Consultation – Which stakeholders should be consulted and how?

→ **Thorough public consultation is key**

The assessment should be publicly disclosed as early as possible and subject to thorough public consultation via appropriate means, including at the scoping stage. The Environmental Report should clearly document how stakeholder views were taken into account within the assessment.

### Environmental Management Plan - What type of plan should be implemented to manage and monitor any residual impacts on OUV by whom, with what funding and when?

→ **The Environmental Management Plan must relate to OUV**

An Environmental Management Plan should be included in the Environmental Assessment report and should detail designing, operating, monitoring and restoration conditions relating to Outstanding Universal Value throughout the life cycle of the proposal. The Environmental Management Plan (EMP) should ensure that the measures necessary to assess and monitor residual adverse effects are in place and that remedial action is taken when impacts are worse than predicted.

→ **The implementation of this plan should be independently audited at regular intervals**

The developer should set aside funds from the outset to cover the costs of independent third-party auditing of the implementation of the Environmental Management Plan at regular intervals. This budget should be specified in the EMP and verified by regulators.

## 5. IUCN's review process for Environmental Assessments related to World Heritage

Within its role as technical Advisory Role on nature to the World Heritage Committee, which includes evaluation of nominations for new natural sites, monitoring of the state of conservation of existing sites and capacity building, IUCN also provides technical comments on Environmental Assessments to support the work of the World Heritage Committee, and of States Parties to the World Heritage Convention.

IUCN's review process is outlined below:

### → For Terms of Reference and Scoping Reports

- Brief technical comments may be provided to States Parties on terms of reference and scoping documents that are officially submitted through the UNESCO World Heritage Centre under Paragraph 172 of the *Operational Guidelines*.
- IUCN strongly encourages early submission of terms of these documents, as they offer early and effective opportunities for engagement.

### → For draft Environmental Assessments

- IUCN may provide technical and strategic comments on draft Environmental Assessments to States Parties and to the World Heritage Committee, but does not systematically provide in-depth reviews.
- **If an Environmental Report does not include a dedicated chapter on World Heritage impacts, including detailed conclusions on all three elements of Outstanding Universal Value – values, integrity and protection and management - IUCN will recommend that the assessment is not adequate and that it is amended to include such a chapter, before it is re-submitted to the World Heritage Centre for review.**
- **Technical comments on Environmental Assessments are incorporated into *State of Conservation Reports***, which constitute IUCN's and the World Heritage Centre's advice to the World Heritage Committee.
- **Independent reviews** can be commissioned through IUCN's network of environmental experts, and other appropriate and accredited independent advisers. IUCN encourages States Parties to undertake such independent reviews of developments that may impact World Heritage Sites. This can be particularly valuable where Environmental Assessments have been carried out by developers, to ensure that an independent view of the quality of the assessment has been provided.

If States Parties wish to commission an independent review of an Environmental Assessment, IUCN may be able to facilitate this advice by recommending consultants or advisers who can be commissioned by the State Party. However, States Parties are advised that the outcomes of such a review do not constitute IUCN's official position but the views and advice of the expert involved.