Resource Manual

GUIDANCE AND TOOLKIT FOR IMPACT ASSESSMENTS

World Heritage

in a World Heritage Context

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Publication Coordinators: Laura Frank (UNESCO), Eugene Jo (ICCROM)

Authors: Sarah Court (ICCROM), Eugene Jo (ICCROM), Richard Mackay (ICOMOS), Mizuki Murai (IUCN), Riki Therivel (Impact Assessment Specialist)

Copyeditor: Julie Wickenden

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NORWEGIAN MINISTRY OF CLIMATE AND ENVIRONMENT

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SHORT SUMMARY

Our World Heritage faces threats – Impact assessments offer solutions

As the World Heritage Convention celebrates its 50th anniversary in 2022, over 1100 sites around the world are recognized as World Heritage - places that are so valuable to humanity that there conservation has been deemed our collective responsibility. Yet many of these exceptional places face increasing pressure from diverse types of development projects within and around the sites. Assessing the impacts of such projects – before deciding to proceed with their implementation – is essential to both prevent damage to World Heritage and identify sustainable options.

The *Guidance and Toolkit for Impact Assessments in a World Heritage Context* is the go-to reference that explains the process for achieving these goals. Offering practical tips and tools including checklists and a glossary, it provides a framework for conducting impact assessments for cultural and natural heritage sites.

Developed by UNESCO and the Advisory Bodies to the World Heritage Committee, ICCROM, ICOMOS and IUCN, this manual fosters cross-sectoral, multidisciplinary collaboration to identify solutions for both protecting World Heritage sites and supporting good quality and appropriate development. States Parties to the World Heritage Convention, heritage managers, decision-makers, planners and developers are invited to use it to help realise our collective commitment to passing on our precious heritage to future generations.

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'Since wars begin in the minds of men and women it is in the minds of men and women that the defences of peace must be constructed'

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ABOUT THE WORLD HERITAGE RESOURCE MANUAL SERIES

Since the World Heritage Convention was adopted in 1972, the World Heritage List has continually evolved and is growing steadily. With this growth, a critical need has emerged for providing guidance to States Parties on the implementation of the Convention. Various expert meetings and results of Periodic Reporting have identified the need for more focused training and capacity development in specific areas where States Parties and World Heritage site managers require greater support. The development of a series of World Heritage Resource Manuals is a response to this need.

The publication of the series is a joint undertaking by UNESCO as the Secretariat of the Convention and the three Advisory Bodies to the World Heritage Committee (ICCROM, ICOMOS and IUCN). The World Heritage Committee at its 30th session (Vilnius, Lithuania, July 2006) supported this initiative and requested that the Advisory Bodies and UNESCO proceed with the preparation and publication of a number of thematic Resource Manuals.

The Resource Manuals are intended to provide focused guidance on the implementation of the Convention to States Parties, heritage protection authorities, local governments, site managers and local communities linked to World Heritage sites, as well as other stakeholders in the identification and conservation process. They aim to provide knowledge and assistance in ensuring a representative and credible World Heritage List consisting of well-protected and effectively managed properties.

The manuals are being developed as user-friendly tools for capacity-building and awareness-raising on the World Heritage Convention. They can be used independently for self-guided learning as well as material in training workshops and should complement the basic provisions for understanding the text of the Convention itself and the *Operational Guidelines* for implementation.

The titles in this series are produced as PDF online documents which can be freely downloaded and accessible at https://whc.unesco.org/en/resourcemanuals/.

FOREWORD BY THE DIRECTOR OF WORLD HERITAGE

Over more than 75 years since its foundation, UNESCO has developed a body of international standard-setting instruments for safeguarding the world's creative diversity. UNESCO's conventions, declarations and recommendations cover all aspects of tangible and intangible cultural heritage, collectively forming a network of legal tools designed to support Member States in their efforts to protect heritage and creativity in all regions of the world.

The 1972 *Convention concerning the Protection of the World Cultural and Natural Heritage*, widely known as the World Heritage Convention, is considered one of the most successful international instruments for conserving heritage sites. As the first ever international legal instrument to encompass both natural and cultural heritage, it represents a unique and powerful link between the instruments dealing with cultural heritage and those addressing issues such as natural heritage conservation, biodiversity, or climate change. Furthermore, the network of over 1,154 properties currently inscribed on the World Heritage List reflects the great diversity of heritage and has become a crucial testing ground for all aspects of heritage conservation.

With the celebration, in 2022, of the 50th anniversary of the World Heritage Convention, all World Heritage actors are critically reflecting on the extraordinary results achieved since 1972, as well as on the road ahead, in the spirit of "The Next 50: World Heritage as a source of resilience, humanity and innovation." This publication touches on many critical areas of reflection after half a century of World Heritage in action: climate change and heritage conservation, sustainable tourism, the growing role of digital communication, and the inherent resilience of exceptional heritage that plays a role in the life of communities.

One of the World Heritage Committee's recurring concerns when reviewing the state of conservation of properties remains the reliability and timeliness of assessments for projects that may have an impact on the Outstanding Universal Value of World Heritage properties. Addressing development needs, the well-being of communities and the protection of heritage can be challenging, and dedicated tools are required to help States Parties to the Convention fulfil their duties to the highest possible standards.

Over the past decades, the Advisory Bodies to the World Heritage Committee (ICCROM, ICOMOS, IUCN) developed dedicated guidance documents to assist States Parties in following the current best practices for heritage conservation: the 2011 *ICOMOS Guidance on Impact Assessment for Cultural World Heritage Properties* and the 2013 *IUCN World Heritage Advice Note on Environmental Assessment*. Since their publication, the Committee has invited States Parties to make good use of these guidance documents when it requests the commissioning and review of impact assessments.

This Guidance and Toolkit is a joint publication of UNESCO and the Advisory Bodies to the World Heritage Committee. A unique contribution to the heritage field, it aims to guide its users along the required steps to carry out impact assessments for projects of all types and scopes at all World Heritage properties – cultural, natural or mixed – using the same adaptable framework. Therefore, this publication would not have been possible without the technical expertise as well as deep and continuous engagement of the Advisory Bodies.

Created over several years and aligned with the highest current methodological standards, this framework provides States Parties, project stakeholders and independent experts with practical guidance on how to commission, conduct and review impact assessments for heritage sites. In the spirit of the 1972 *UNESCO Recommendation concerning the protection, at National Level, of the Cultural and Natural Heritage*, this methodology is also designed to apply to all forms of heritage beyond those inscribed on the World Heritage List.

I am particularly pleased that the revised Guidance also provides a resource for capacity building and awareness raising about the management of World Heritage properties, which can be used either as part of organised group training activities or for self-study. This additional tool, directly inspired by the guiding texts and principles of the World Heritage Convention, was designed to be as user-friendly and adaptable as possible and will doubtlessly have a very positive impact on exceptional heritage across the globe.

Finally, I would like to extend UNESCO's thanks to the Norwegian Ministry of Climate and Environment, which supported the development of this guidance through the ICCROM-IUCN World Heritage Leadership Programme. I do not doubt that, as many stakeholders make use of the Guidance and Toolkit, they can take further steps in mobilising support and action to preserve and protect our shared heritage for the benefit of future generations.

Lazare Eloundou Assomo
Director of World Heritage

FOREWORD BY THE ADVISORY BODIES TO THE WORLD HERITAGE COMMITTEE

This Guidance and Toolkit is a joint publication of UNESCO, the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), the International Council on Monuments and Sites (ICOMOS), and the International Union for Conservation of Nature (IUCN). This work has been generously supported by the Norwegian Ministry of Climate and Environment, through the framework of the ICCROM-IUCN World Heritage Leadership Programme.

The objective of this document is to provide impact assessment guidance for World Heritage properties, using a framework that can be applied to both natural and cultural properties and to small- or large-scale projects, either within broader Environmental and Social Impact Assessments (ESIA), or as a stand-alone Heritage Impact Assessment (HIA).

The scoping, research and collaborative drafting process, which included numerous meetings and workshops in many parts of the world, started in September 2018. In line with current best practice in impact assessment methodologies, this Guidance has been prepared using an integrated approach, taking into account the numerous requests and needs that were identified by diverse stakeholders of the World Heritage Convention through ICCROM's related capacity-building activities. It incorporates and replaces the 2011 ICOMOS Guidance on Impact Assessment for Cultural World Heritage Properties and the 2013 IUCN World Heritage Advice Note on Environmental Assessment, and is now the most updated reference on conducting and reviewing impact assessments for all World Heritage properties. The methodology in this Guidance can also be used for other diverse types of heritage place.

The document provides an outline of the World Heritage system, high-level principles and an explanation of the process for undertaking ESIAs or HIAs. There is also a glossary, suggested toolkit and checklists for application. The new Guidance will help States Parties, heritage managers, decision-makers, project proponents, communities and others in managing World Heritage properties where a transformative action is proposed or undertaken in or around the property which may affect the property's Outstanding Universal Value (OUV).

In addition to providing a framework in which to conduct impact assessments in the context of World Heritage properties, the Guidance also serves as a resource for capacity building and awareness raising about the management of World Heritage properties. It will form the basis of related capacity-building activities provided by the World Heritage Centre, Advisory Bodies, and the UNESCO Category 2 Centres, and can also be used independently for self-directed learning. It is intended to support implementation of the World Heritage Convention, along with the Operational Guidelines.

The Advisory Bodies are positive that this resource manual will be useful to all those involved with World Heritage, to identify solutions for both protecting World Heritage sites and supporting good quality and appropriate sustainable development.

ICCROM, IUCN, ICOMOS

CONTENTS

1. INTRODUCTION

This Guidance explains how impact assessments can be used to protect the Outstanding Universal Value of World Heritage properties in order to manage continuity and change by informing good decision-making in the context of UNESCO's Convention Concerning the Protection of the World Cultural and Natural Heritage – the 'World Heritage Convention' (UNESCO, 1972). The Convention was adopted at a time of great concern about the effects of rapid transformations taking place in the modern world. Fifty years later, the Convention has been ratified by 194 States Parties, who have put forward more than 1,000 heritage places for inscription, which are celebrated for their Outstanding Universal Value. At the same time, these transformations have become even more intense, and do not always benefit from prior reflection on the need to preserve the balance between people and their natural and cultural environment. Both the natural and the cultural heritage are important to the entire global community – and global cooperation is essential to ensure that heritage is not only protected but also given a role in contemporary society and handed over to future generations in the best possible condition.

Changes both within and outside World Heritage properties need to be managed in line with the Convention's objectives. Impact assessment can be critical for this and indeed has long been used as a tool in the context of World Heritage properties. The World Heritage Committee has requested that impact assessments should give greater consideration to the Outstanding Universal Value of World Heritage properties, thereby supporting States Parties in meeting their obligations under the Convention.

This Guidance is aimed at both individuals familiar with impact assessment and those involved in the management and governance of World Heritage. It is structured as follows:

- **Section 2** contains the underlying principles for impact assessments in the context of World Heritage
- **Section 3** explains World Heritage and the concepts on which it is based
- **Section 4** discusses the need for impact assessment and describes the different types of assessment
- **Section 5** addresses cases where an impact assessment is mandatory within a national or other framework and World Heritage considerations also need to be included
- **Section 6** addresses cases where an impact assessment is required to meet World Heritage obligations but would not otherwise be carried out within the national framework (a 'stand-alone assessment')
- A detailed **Glossary** explains the technical terms used in this Guidance
- **Appendices** contain tools which can be used by practitioners during an impact assessment at a World Heritage property. The tools are provided as general templates to suggest one of many possible approaches, and they may be further adapted and improved as appropriate.

2. PRINCIPLES

This section discusses the principles that should underpin all impact assessments of proposed actions that could affect World Heritage properties and their Outstanding Universal Value.

1. By signing UNESCO's Convention Concerning the Protection of the World Cultural and Natural Heritage, each State Party has pledged to protect and conserve World Heritage.

The States Parties to the Convention have an obligation to identify, protect, conserve, present and transmit to future generations their cultural and natural heritage, as well as ensuring that the heritage has a function in the life of the community. Decisions about any proposed actions should ensure the protection and conservation of the Outstanding Universal Value of their World Heritage properties. In turn, this may require protection of other heritage/conservation values. Should a World Heritage property deteriorate to the extent that it has lost those characteristics which determined its inclusion on the World Heritage List, the World Heritage Committee can ultimately decide to delete the property from the List.

➜ **World Heritage Convention Articles 4, 5 etc.**

2. Impact assessment can help achieve sustainable development that is compatible with the protection and conservation of World Heritage.

States Parties have committed to protect and conserve World Heritage while optimizing its potential to contribute to sustainable development. Impact assessment can be used to evaluate the need for a proposed action, and its consequences, so that environmental, social and economic outcomes can be achieved without damaging Outstanding Universal Value. It can also identify fundamental incompatibilities between proposed actions and the primacy of protecting Outstanding Universal Value.

➜ **Operational Guidelines para. 14*bis*; Policy for the Integration of a Sustainable Development Perspective into the Processes of the World Heritage Convention; UN 2030 Agenda for Sustainable Development**

3. States Parties have an obligation to notify the UNESCO World Heritage Centre in advance before considering any proposed action that may have an impact on World Heritage.

This applies to any proposed action that could reasonably be expected to affect the World Heritage property's Outstanding Universal Value, whether in the property itself, its buffer zone or the wider setting. The World Heritage Committee or the UNESCO World Heritage Centre may also request that an impact assessment be prepared and submitted, which should be done before any irreversible decisions are taken. The impact assessment should inform the decision to proceed with a proposed action or not, so a decision should never be taken before the assessment, or influence its outcome.

➜ **Operational Guidelines para. 110, 112, 118*bis*, 172**

4. Any impact assessment on a World Heritage property should address Outstanding Universal Value specifically, as well as other heritage/conservation values.

In many countries, proposed actions that may have an impact on World Heritage will be evaluated through national or other frameworks as part of an Environmental and Social Impact Assessment or Strategic Environmental Assessment. In these cases, World Heritage should be addressed specifically within the broader assessment. When a proposed action is not subject to this type of planning process, a stand-alone Heritage Impact Assessment should be carried out. In both cases, the assessment needs to clearly address potential impacts on the attributes of the property which convey Outstanding Universal Value, as well as other heritage/conservation values.

➜ **Operational Guidelines para. 110, 118*bis***

5. Impact assessment should begin at the earliest consideration of a proposed action that may impact on World Heritage, and should continue during and after the action's development and execution.

Any decision about whether impact assessment is needed ('screening') should treat World Heritage properties as sensitive and valued. A precautionary approach should be taken: an impact assessment should always be carried out, unless it can be clearly shown that the proposed action will not affect the World Heritage property and its Outstanding Universal Value. This is the case even if the proposed action would have no other impacts. This allows heritage to be adequately considered in advance, and for the proposed action to be adjusted, relocated or prevented, if necessary, before commitments are made or irreversible activities occur. If the proposed action proceeds, follow-up will be needed during and after its implementation and, when appropriate, during decommissioning and recovery. Monitoring will indicate if and when further responses are needed to ensure that World Heritage is continuously protected.

➜ **Operational Guidelines para. 110, 118*bis*, 172**

6. Impact assessment should be carried out by specialists with the relevant expertise.

The team of specialists carrying out impact assessments together should have relevant expertise in:

- The World Heritage Convention
- The specific heritage place (including attributes which may be affected)
- The proposed action

While some exceptions may be possible, a multisectoral, multidisciplinary and independent team will be needed.

➜ **Operational Guidelines para. 14**

7. Impact assessment should promote and encourage the effective, inclusive and equitable participation of rights-holders, including Indigenous peoples, local communities and other stakeholders.

One of the World Heritage Committee's Strategic Objectives is to 'enhance the role of communities in the implementation of the World Heritage Convention'. All rights-holders and other stakeholders should be identified early and consulted, to allow their views and concerns to be meaningfully considered in the assessment. The United Nations 2007 Declaration on the Rights of Indigenous Peoples also states that Indigenous peoples have the right to free, prior and informed consent before the approval of any project affecting their lands or territories and other resources. States Parties are encouraged to use human rights-based approaches, and to seek the free, prior and informed consent of rights-holders where appropriate.

➜ **Operational Guidelines para. 12, 14*bis*, 39, 119**

➜ **UNESCO 2018 Policy on Engaging with Indigenous Peoples**

8. Impact assessment should identify a range of reasonable alternatives, and assess their potential impacts.

Impact assessment should consider both the negative and positive impacts of a proposed action, along with any alternatives, in order to establish the most sustainable option that both protects the Outstanding Universal Value of World Heritage properties and achieves the objectives of the proposed action. These may include alternative locations, scales, processes, site layouts, operating conditions, etc. It is important that the option not to proceed is included.

➜ **Operational Guidelines para. 118*bis***

9. Impact assessment should evaluate broader trends and cumulative impacts.

A proposed action should be assessed within its larger context and not in isolation. Multiple projects of the same type, or a combination of different projects over time, may cause cumulative impacts which compound the impacts of an individual proposed action. Other factors, including climate change, may also make a World Heritage property vulnerable and amplify the impacts of a proposed action. The assessment therefore needs to consider other past, present or reasonably foreseeable future actions that could affect a World Heritage property. Having considered specific impacts in detail, the assessments should also include a final analysis of all potential impacts together.

➜ **Operational Guidelines para. 111*d*, 112**

10. Impact assessment is an iterative, not a linear, process.

Many steps of impact assessment need to be informed by the results of other steps, and updated if necessary. For example, having assessed a proposed action's potential negative impacts and identified possible mitigation measures, the impacts will need to be reassessed to ensure that the heritage/conservation values remain safeguarded by the mitigation measures adopted. Similarly, the results of public consultation on a draft scoping report may lead to the reconsideration of alternatives.

➜ **Operational Guidelines para. 111*c*, *d***

11. Impact assessment processes should be embedded in the management system of the World Heritage property.

The impact assessment's recommendations should inform management decisions, and in turn can draw on existing management frameworks and processes (e.g. the Statement of Outstanding Universal Value, identification of other heritage/conservation values, mapping of attributes, data collection). In a cyclical process, this can contribute to better management, monitoring, risk mitigation and feedback to improve future impact assessments.

➜ **Operational Guidelines para. 108, 110**

3. THE WORLD HERITAGE CONTEXT FOR IMPACT ASSESSMENT

This section provides an overview of the World Heritage system: the **World Heritage Convention**; World Heritage properties and their **values** and **attributes**; World Heritage governance and management; and links to sustainable development.

3.1 THE WORLD HERITAGE CONVENTION

The UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage[1] – the World Heritage Convention – recognizes the importance of both natural and cultural heritage properties, as well as the imperative to protect and conserve them in a rapidly changing world. While **States Parties** pledge to conserve all **heritage** within their territories, the best-known element of the Convention is the World Heritage List of those natural and cultural heritage places that are considered to be of 'Outstanding Universal Value'. To be included on the List, properties must meet at least one of ten criteria of **Outstanding Universal Value** (Box 3.1), along with requirements for **authenticity**, **integrity**, and protection and management (see Box 3.2).[2] There are many different kinds of World Heritage properties, both natural and cultural: places where geological features or processes can be seen, natural and cultural landscapes, ecosystems and natural habitats, architectural complexes, human settlements, archaeological sites, industrial heritage, sacred places, heritage routes and many others. They may also have associated intangible attributes, such as important spiritual practices or related cultural traditions, which are reflected in physical elements of the property.

The wide variety of heritage around the world means that the impacts which can affect World Heritage properties are equally diverse. For example: upstream drainage works that affect water levels at a freshwater site; large buildings that affect views in and out of a **World Heritage property**; incremental changes to an urban layout that was representative of a historical period; blockage of a migration route for an important species; or any development on a site whose pristine characteristics are central to an important cultural tradition. **Impact assessment** is a key tool for identifying, avoiding and minimizing such negative impacts.

The **World Heritage Convention** established a **World Heritage Committee**, an intergovernmental body composed of States Parties which maintains the World Heritage List. The Convention is also supported by a Secretariat within UNESCO, known as the UNESCO **World Heritage Centre**. Three international organizations are named as **Advisory Bodies** to the World Heritage Committee in Article 8.3 of the Convention: ICCROM, ICOMOS and IUCN. The World Heritage Committee meets annually to oversee and guide the implementation of the Convention. This includes deciding which properties are inscribed on, or deleted from the World Heritage List. The Committee also examines reports on the **state of conservation** of properties inscribed on the World Heritage List and may request States Parties to take action when a specific issue affects a property – this can include a request for an impact assessment. Indeed, Committee Decision 39 COM 7 underlined the benefit to States Parties of using impact assessments to manage continuity and change, and encouraged them to integrate impact assessment processes into legislation, planning mechanisms and management planning.

1. https://whc.unesco.org/en/convention/
2. If States Parties intend to put forward a World Heritage nomination in the future, they may place heritage sites on a Tentative List. The principles and methodology of this Guidance can also help to protect and manage heritage at Tentative List properties.

Box 3.1. Criteria for Outstanding Universal Value

The property should:

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. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);

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 on-going ecological and biological processes in the evolution and development of terrestrial, freshwater, coastal and marine ecosystems and communities of plants and animals; and/or

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.

Source: UNESCO, 2021.

Box 3.2 Authenticity, integrity, protection and management

Authenticity applies to cultural heritage, and refers to the degree to which knowledge and understanding of the property's heritage values are understood and believed to be credible: whether their cultural values are truthfully and credibly expressed through attributes including form and design; materials and substance; use and function; traditions, techniques and management systems; location and setting; language and other forms of intangible heritage; spirit and feeling; and other internal and external factors.

Integrity is a measure of the wholeness and intactness of the natural and/or cultural heritage and its attributes: the extent to which the property includes all elements necessary to express its Outstanding Universal Value; whether it is of adequate size to ensure the complete representation of the features and processes which convey the property's significance; and whether it has been protected from adverse effects of development and/or neglect.

Protection and management relates to how a property's Outstanding Universal Value, including its integrity and/or authenticity, are sustained and enhanced over time.

Source: UNESCO, 2021.

3.2 WORLD HERITAGE PROPERTIES

3.2.1 OUTSTANDING UNIVERSAL VALUE

Being included on the World Heritage List means that a **heritage** place has been formally recognized as having '**Outstanding Universal Value**' (**OUV**). The concept of OUV, together with the conditions for its **authenticity** and **integrity**, underpins the **World Heritage Convention**, and all activities associated with properties on the List, including impact assessment (Figure 3.1). Each property on the List has a **Statement of Outstanding Universal Value** which summarizes the justification for the inscription of the property on the World Heritage List, and serves as a baseline for the universally recognized and accepted heritage/conservation values of that place. These statements can be found on the UNESCO **World Heritage Centre**'s website along with other relevant documents, such as the nomination file, management plans, and mission reports, among others.

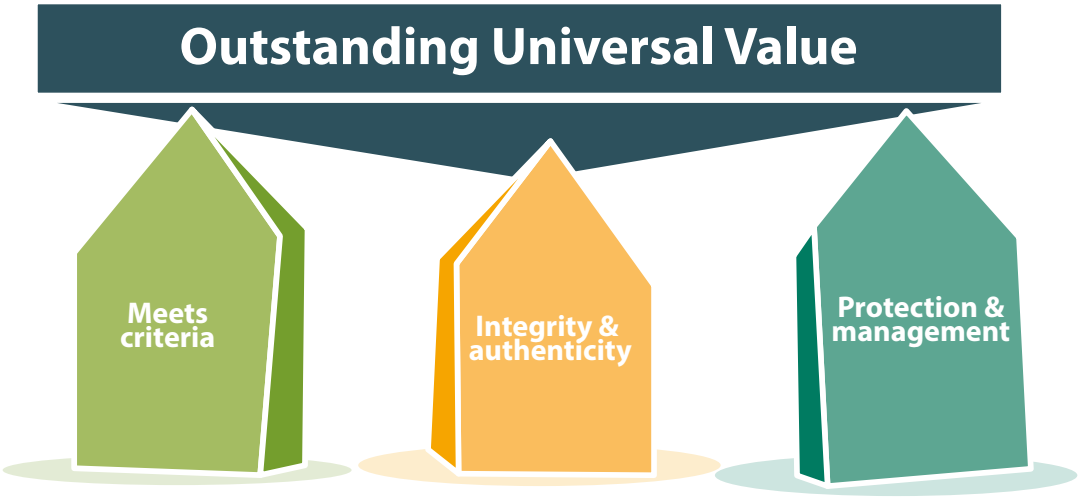


Figure 3.1. The 'three pillars' of Outstanding Universal Value.

3.2.2. VALUES AND ATTRIBUTES

The **Statement of Outstanding Universal Value** includes a description of the values and attributes of the **World Heritage property** for which it was inscribed on the World Heritage List. The **OUV**, including its **authenticity** and **integrity**, must continue to remain protected for any property on the World Heritage List. These concepts are important for carrying out **impact assessment** in a World Heritage context.

Values are what makes a heritage place special, and a particular combination of heritage/conservation values will explain why one specific place is of particular importance. In the case of a World Heritage property, the value that is considered to be 'of importance for present and future generations of all humanity' is its OUV (see Box 3.3 for an example). A World Heritage property may also have **other heritage/conservation values** that need to be considered in impact assessment, for instance, those that underpin national and local heritage designations, and/or the values held by of Indigenous peoples and associated communities. These may be formally designated or informally recognized.

Attributes are the elements of a heritage place that convey its values and makes them understandable. They can be physical qualities, relating to the material fabric and other tangible features, but can also be intangible aspects such as processes, social arrangements or cultural practices, as well as associations and relationships which are reflected in physical elements of the property.

For cultural **heritage** places, attributes can be buildings or other built structures and their forms, materials, design, uses and functions but also urban layouts, agricultural processes, religious ceremonies, building techniques, visual relationships and spiritual connections. For natural properties, attributes can be specific landscape features, areas of habitat, flagship species, aspects relating to environmental quality (such as intactness, high/pristine environmental quality), scale and naturalness of habitats, and size and viability of wildlife populations. Attributes may extend over vast areas and may depend on processes occurring outside a World Heritage property.

Attributes, and the interactions between them, should be the focus of protection, conservation and management actions. The term 'attributes' is particularly used for World Heritage properties to describe how Outstanding Universal Value is identified and conveyed, and a clear understanding of the attributes that convey a property's Outstanding Universal Value is critical for their long-term protection. The spatial distribution of those attributes and their respective protection requirements should inform the boundary of the property, its buffer zone and other management actions.

The term 'attribute' is particularly used for World Heritage properties to describe how Outstanding Universal Value is identified and conveyed (see Box 3.3).

Box 3.3. Example of a Statement of Outstanding Universal Value (extract)

Blue Sea Marine Park and the Old Town of Heritopolis

The property is located in an ecologically and globally outstanding region, the *Blue Sea*. The property covers 400,000 ha with a buffer zone of 600,000 ha comprising both *marine and terrestrial areas*. It is part of a larger *transition area* between northern and southern biogeographic zones and its marine systems have developed unique and different *ecosystems* and *species*, including *endangered ecological communities*. The largely undisturbed *habitats* include rare examples of tropical c*oral reef systems* and unique *soft coral species*. The property and its surrounding area also include seagrass beds and mangrove habitats. These habitats are home to populations of *seabirds, marine mammals, fish, corals, sharks, manta rays* and *marine turtles*, and the site provides important *feeding grounds* for the last remaining healthy population of endangered *orange dugong*. BSMP is an important *larvae source area* and hosts *spawning sites* for commercial *fish species*...

Located on the *Blue Sea* coast, the historic port town of *Heritopolis* has played a role throughout history as a place of interchange between historic cultures over time. While much of the *architecture* reflects the city's golden age of wealth as a trading port in the 18th century, the *buildings* respect the much older *urban layout* that dates back to the 6th century. The 18th-century *urban plan* placed equal emphasis on the *built fabric* as on *public green spaces* within the city centre. In addition, within the urban fabric are a range of significant *monuments* from each stage of the city's history: the *Mausoleum of Eugenius*, the *Basilica of St Helena* and the *Great Mosque* with its *madrasa* and *baths*, are all important *architectural masterpieces* of different periods. The eclectic mix of *vernacular and monumental architecture* reflects the *diverse communities* who have lived in the city for one and a half millennia and who continue to follow *traditional practices* today...

Source: World Heritage Leadership
Note: In this extract, the values have been underlined (values: why is this heritage place special?) and *attributes are in italics* (attributes: how can we see those values if we visit the place?)

National and local values are also conveyed by attributes that may contribute to protect the conditions of **authenticity** and **integrity** of World Heritage properties. The relationship between attributes and values can be complex – one attribute might convey several values, and one value might be conveyed by multiple attributes. For this reason, although it is helpful to identify the OUV, national and local values and attributes, **impact assessment** should recognize that together they form an interconnected system and that a **proposed action** might impact as a whole.

3.2.3. BOUNDARIES, BUFFER ZONES AND THE WIDER SETTING

A **World Heritage property** is defined by a **boundary**, and ideally all the **attributes** of OUV will be located within that boundary. In most cases, a World Heritage property should also be surrounded by a formally recognized World Heritage **buffer zone**(s) which supports the protection of the property's OUV and attributes, e.g. by providing visual access to the sky behind a significant skyline, or by connecting components of a World Heritage property. Buffer zones have complementary legal restrictions placed on their use and development to provide an added layer of protection to the World Heritage property. Maps illustrating both boundaries and buffer zones can be found on the World Heritage website and they are a requirement for the successful submission of a nomination. Depending on the country, different legal, policy and management frameworks will apply to the property and buffer zone.

Every World Heritage property is surrounded by a **wider setting**, which is the immediate and extended environment that is part of, or contributes to, its significance and distinctive character. It may relate to the property's topography, natural and built environment, and other elements such as infrastructure, land use patterns, spatial organization and visual relationships. It may include related ecological and hydrological connectivity, social and cultural practices, economic processes and other intangible dimensions of **heritage** such as perceptions and associations. The wider setting might also play an essential role in protecting the **authenticity** and **integrity** of the property, and its management is related to its role in supporting the **Outstanding Universal Value**.[3]

While buffer zones typically cover the immediate area around the World Heritage property, the wider setting may be unprotected or protected by different legislation. This can lead to the risk that a proposed action is planned for the wider setting without considering the potential impacts on the World Heritage property. The wider setting of the property may be shown on a map, but in many cases will need to be identified as part of the impact assessment **scoping** process. The wider setting may be small or indeed limited to the buffer zone, for example where views are limited for a property whose OUV relates to its architecture; or large, for instance where extensive wildlife corridors are needed to provide a migration route for animals that contribute to the property's OUV (see Figure 3.2). Due to the relationship between a World Heritage property and its wider setting, some proposed actions might have an impact on OUV. Hence, it is important that **impact assessment** looks at the wider setting of the World Heritage property.

3. Partially adapted from: https://www.icomos.org/charters/xian-declaration.pdf

Figure 3.2. Example of World Heritage property (orange), its buffer zone (grey) and interdependency on its wider setting (yellow)

3.3 WORLD HERITAGE MANAGEMENT AND GOVERNANCE AS A FOUNDATION FOR IMPACT ASSESSMENT

3.3.1. MANAGEMENT AND GOVERNANCE

The procedures for managing properties inscribed on the World Heritage List are set out in the Operational Guidelines for the Implementation of the World Heritage Convention.[4] Each State Party has a national authority with a designated National Focal Point to help implement the Convention at the state level. The governance arrangements for properties vary, although a site manager or management team is usually responsible for an individual **World Heritage property**. The UNESCO **World Heritage Centre** can provide contact details for National Focal Points and site managers and provides further information and guidance about the management of natural and cultural World Heritage properties on its website.

3.3.2. PROCESS FOR REQUESTING AN IMPACT ASSESSMENT

The **National Focal Point** is usually responsible for informing the UNESCO World Heritage Centre about **proposed actions** that may affect a property before any irreversible decisions are taken, in line with **Paragraph 172** of the Operational Guidelines. Site management teams may also draw attention to such actions, identifying the need to notify the UNESCO World Heritage Centre and carry out an impact assessment. Civil society representatives and other groups concerned about impacts on World Heritage properties may

4. Published by UNESCO since 1977. Latest revision at the time of writing this document: 2021. https://whc.unesco.org/en/guidelines/

also contact the UNESCO World Heritage Centre, in line with **Paragraph 174** of the Operational Guidelines. In response, the UNESCO World Heritage Centre may request additional information on the proposed action from the State Party, including any impact assessments carried out before actions are taken. The Centre reviews this information in close collaboration with the **Advisory Bodies** and, if the situation at a World Heritage property warrants the attention of the World Heritage Committee, they will put forward a report on the **state of conservation** of a property at the Committee's next session. Upon reviewing the case, the Committee may also request an impact assessment, recommend that revisions be made to an existing impact assessment or take a position on the proposed action. If the Committee requests an impact assessment, it is the State Party's responsibility to ensure that it is carried out and submitted for review, as requested by the Committee following the current Guidance.

Carrying out an **impact assessment** is generally easier and more effective where there is a robust management system with effective governance measures – data collection is more straightforward, public input is more easily facilitated, and impacts are easier to monitor and manage. However, even if a **World Heritage property** does not have a well-functioning management system, impact assessment can help to improve proposed actions. For example, the baseline information collected through the impact assessment process can be used for other management purposes; it can act as a catalyst for **stakeholders** to come together and promote more participatory decision-making; and it can help to define what type of proposed actions are appropriate for the World Heritage property.

3.4 INTEGRATING A SUSTAINABLE DEVELOPMENT PERSPECTIVE INTO THE PROCESSES OF THE WORLD HERITAGE CONVENTION

UNESCO's Policy for the Integration of a Sustainable Development Perspective into the Processes of the World Heritage Convention (2015) explains how World Heritage properties can contribute to the United Nations 2030 Agenda for Sustainable Development (2015) (see Box 3.4). The policy reinforces the requirement to protect **Outstanding Universal Value** while also considering the dimensions of sustainable development (environmental sustainability, inclusive social development and inclusive economic development), together with peace and security. These dimensions are interdependent and mutually reinforcing: none should have priority, and they should work together to achieve their individual objectives. This dual approach also applies to impact assessment in a World Heritage context – **States Parties** should take a proactive approach to managing World Heritage and protecting OUV, which includes working towards sustainable development.

Box 3.4 Policy on the integration of a sustainable development perspective into the processes of the World Heritage Convention (extract)

By identifying, protecting, conserving, presenting and transmitting to present and future generations irreplaceable cultural and natural heritage properties of Outstanding Universal Value (OUV), the World Heritage Convention, in itself, contributes significantly to sustainable development and the wellbeing of people. At the same time, strengthening the three dimensions of sustainable development that are environmental sustainability, inclusive social development, and inclusive economic development, as well as the fostering of peace and security, may bring benefits to World Heritage properties and support their OUV, if carefully integrated within their conservation and management systems.

In addition to protecting the OUV of World Heritage properties, States Parties should, therefore, recognise and promote the properties' inherent potential to contribute to all dimensions of sustainable development and work to harness the collective benefits for society, by ensuring that their conservation and management strategies are aligned with broader sustainable development objectives. In this process, the properties' OUV should not be compromised.

Source: UNESCO, 2015, paras 3 and 4.

4. IMPACT ASSESSMENT FOR WORLD HERITAGE

This section provides an overview of impact assessment and how it can be carried out for World Heritage properties. It addresses cases where an impact assessment is mandatory within a national or other framework and World Heritage considerations also need to be included.

4.1 IMPACT ASSESSMENT

Impact assessment[5] has been described as 'thinking before acting' (Morrison-Saunders, 2018). It informs the decision-making process by exploring consequences that proposed actions may have on the **environment**, or in the case of World Heritage properties, on their **OUV**. It should always be carried out before any irreversible decisions or actions are taken, so that any findings can genuinely inform a final decision. This ensures the best outcomes for the world's most exceptional places and for society, both today and in the future.

There are multiple stages in the development and implementation of a **proposed action** (Figure 4.1). An impact assessment needs to take place early enough to be able to influence planning: the later an impact assessment takes place, the less potential it has to influence the outcome. The final impact assessment report needs to be ready in time to help inform the decision on whether the proposed action should proceed, be modified or not be carried out at all – before construction or any other preparatory actions on the ground take place.[6]

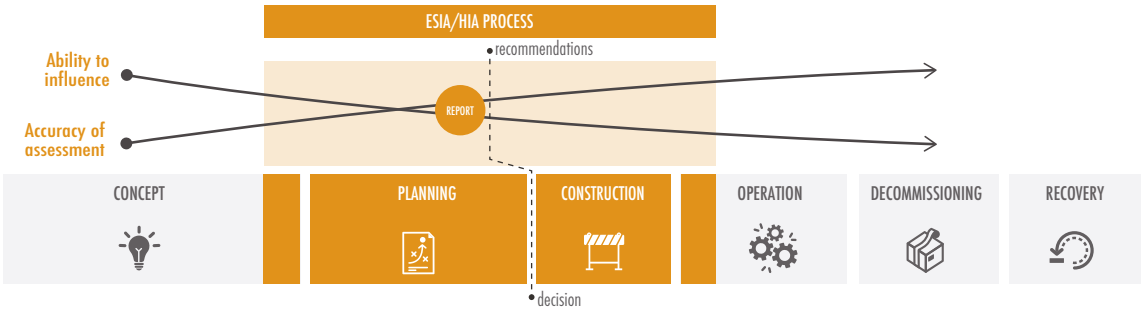


Figure 4.1. Development and implementation of a proposed action. An impact assessment needs to take place at an appropriate point in the lifecycle of a proposed action so that it can influence that planning process and inform decision-making.
Note: depending on the type of the proposed action, the 'construction' phase might instead involve other forms of preparations; while the 'operation' phase could be any longer-term implementation and running of the proposed action.

Impact assessment has been used since the 1970s and is now a well-established system in nearly all countries. Nowadays, many international finance institutions and major commercial banks require borrowers to show that they are safeguarding the natural and cultural **heritage** as a prerequisite to any lending – impact assessment can help with this. By the 1980s, the World Heritage Committee's **Advisory Bodies** had begun to highlight how impact assessment could be used in a World Heritage context; over the last decade, the World Heritage Committee has requested impact assessments for more than 200 World Heritage properties.

5. Different terms may be used for this depending on the country's legal system, e.g. 'environmental impact assessment', 'environmental statement'.
6. Further introductory information on impact assessment can be found at IAIA (1999, 2009), Glasson and Therivel (2019) and Morrison-Saunders (2018).

4.1.1 THE IMPACT ASSESSMENT PROCESS

Impact assessment should start early in the development of a **proposed action**, and inform the entire planning process.

The assessment itself consists of a series of 11 steps (Table 4.1) which are flexible and can be adapted to the type and location of the action being proposed.

Impact assessment is normally carried out by an independent team of specialists, who are commissioned to inform:

i) the proponent's planning of the proposed action

ii) the relevant authority's decision on whether the proposed action should be permitted.

Impact assessment should also include an important component of participation by rights-holders and other stakeholders, including **environmental and heritage authorities** and communities.

Unlike other impact assessment guidance documents, this Guidance advocates that **participation** of **rights-holders** and **stakeholders**, and proactive problem solving should take place throughout the entire impact assessment process. This is because of the importance of involving rights-holders and other stakeholders in the protection and management of World Heritage properties, and because a fundamental purpose of impact assessment is to consider alternatives and **mitigation** to impacts on their **Outstanding Universal Value**.

Table 4.1. Overview of the impact assessment process

	Prompt questions for generic impact assessment *(in italics, additional prompt questions when considering impacts on World Heritage)*
Throughout the impact assessment	
A. Participation	• Who are the rights-holders and other relevant stakeholders? • How should rights-holders and other stakeholders be engaged? • Are there consent issues to be considered (e.g. free, prior and informed consent of Indigenous peoples and possibly others)? • What engagement methods should be used for different groups, including those who have traditionally been disenfranchised?
B. Proactive problem solving	• Is the proposed action necessary? Is it preferable to 'do nothing'? • What are the alternatives to the proposed action? • What would be the preferred or most environmentally benign option for achieving the proposal's objectives? • How can any negative impacts of the proposed action be avoided or minimized? *How can these impacts be avoided/minimized for OUV and its attributes?* • Are there opportunities to provide or enhance any positive impacts of the proposed action? *To enhance the management of OUV?*
Steps of impact assessment	
1. **Screening**	• Is an impact assessment needed? • *What are the property's OUV and other heritage/conservation values?* • *What are the property's attributes?* • *Is the proposed action compatible with the OUV of a World Heritage property?* • *Could the proposed action have an impact on OUV regardless of its location?*
2. **Scoping**	• What data, impacts, geographical area and time period should the impact assessment cover? • What should be the terms of reference for the impact assessment? • What essential information is needed, and is it available? If not, is a valid assessment feasible based on existing information sources? (See also 'A. Participation' above)

Table 4.1. Overview of the impact assessment process (cont.)

	Prompt questions for generic impact assessment *(in italics, additional prompt questions when considering impacts on World Heritage)*
Steps of impact assessment	
3. **Baseline**	• What are the current conditions? • How would the baseline change in the future in the absence of the proposed action? • *What are the current conditions of the World Heritage property and the attributes that support its OUV and other heritage/conservation values?* • *How is the property managed?* • *What was the property's state of conservation at the time of inscription?*
4. **The proposed action and alternatives**	• What is being proposed (plans, description, visualizations etc.)? • How would it be implemented? • Is there enough information to assess the proposed action? • What are reasonable alternatives to the proposed action that would avoid or reduce any negative impacts and still achieve the objectives of the proposed action? (See also 'A. Participation' and 'B. Proactive problem solving' above)
5. **Identifying and predicting impacts**	• What environmental, social and other related impacts would result from the proposed action and any alternatives? • *What changes to OUV and other heritage/conservation values would occur as a result of the proposed action, both positive and negative?*
6. **Evaluating impacts**	• How significant are the impacts of the proposed action and any alternatives? • *How significant are the impacts to the OUV and other heritage/conservation values, given the international importance of World Heritage?*
7. **Mitigation and enhancement**	• What are reasonable alternatives to the proposed action that avoid or reduce any negative impacts and achieve the objectives of the proposed action? • What mitigation measures are necessary to avoid or minimize any predicted negative impacts? • What are the positive impacts? Can they be enhanced? • *Can negative impacts on the OUV and other heritage/conservation values be avoided? If negative impacts cannot be fully avoided, how can they be minimized to a level that they are no longer of concern?* • How significant are the residual (post-mitigation) impacts? (See also 'A. Participation' and 'B. Proactive problem solving' above)
8. **Reporting**	• How should the process and conclusions of the impact assessment be communicated?
9. **Reviewing the report**	• Does the report meet its terms of reference? • Is it 'fit for purpose' for decision-making? (See also 'A. Participation' above)
10. **Decision-making**	• Is the proposed action the best possible, given identified alternatives? • Should the proposed action be given approval? • If so, under what terms or conditions (mitigation measures)? (See also 'B. Proactive problem solving' above)
11. **Follow-up**	• How should the mitigation measures be implemented? • What should be done to monitor and manage the proposed action and by whom?

4.2 TYPES OF IMPACT ASSESSMENT

Broadly speaking, there are two main types of impact assessment that can be carried out at different scales, depending on the nature of the **proposed action**, and can focus on specific issues, including **heritage**:

i) **Environmental and Social Impact Assessment** (ESIA); if the assessment focuses on heritage it may be called a **Heritage Impact Assessment** (HIA).

ii) **Strategic Environmental Assessment** (SEA)

Environmental and Social Impact Assessment (ESIA), also known as an Environmental Impact Assessment (EIA), refers to an assessment of the impacts of a specific proposed action at a project level. The assessment is normally carried out on larger projects, with significant potential environmental impacts, but in some cases can cover small-scale projects at sensitive locations. Almost every country in the world has an existing ESIA system that aims to protect the both the natural, as well as the cultural, **environment**. Large multilateral financial institutions, such as development banks, typically require an impact assessment – including an assessment of impacts on natural and cultural heritage – for particular kinds of projects.[7] Indeed, many international banks that have signed the Equator Principles[8] now include impact assessment as a standard planning tool and use it to screen proposed actions. ESIAs often include assessment of impacts on heritage, as well as other environmental and social considerations. Section 5 of this Guidance explains how World Heritage and OUV should be considered as part of a wider ESIA.

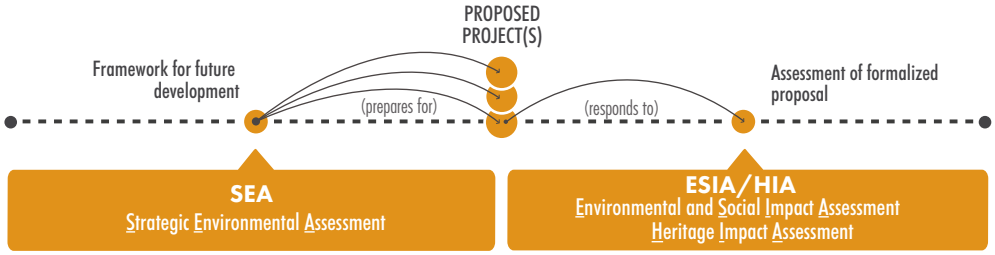
Heritage impact assessments are project-specific assessments that focus on the potential effect on a heritage place's OUV and **other heritage/conservation values**. In the context of World Heritage properties, a Heritage Impact Assessment should focus on identifying and assessing negative and positive impacts on the **attributes** which convey the **Outstanding Universal Value** of the **World Heritage property**. Section 6 discusses how to consider World Heritage issues as part of such an assessment.

In addition to an ESIA, a growing number of countries also require impact assessment of the preceding policies, plans and/or programmes that set the context for individual projects – this is referred to as a **Strategic Environmental Assessment (SEA)**. By proactively considering heritage issues early in the planning process, SEA can inform better decision-making when projects are being considered.

SEA is also better suited than ESIA to assessing the **cumulative impacts** of multiple projects at a landscape/regional scale (including those that do not require ESIA); and at setting strategic and generic **mitigation** measures that can apply consistently to all projects. Figure 4.2 summarizes the main differences between ESIA and SEA.[9]

In impact assessment the word 'environment' includes physical, biological, resource use, social, cultural, health, and economic dimensions, so it can be applied equally to both natural and cultural World Heritage.

7. For example, see the International Finance Corporation's Performance Standard 8: Cultural Heritage (IFC, 2012)
8. https://equator-principles.com/
9. Further information on SEA can be found in OECD-DAC (2006) and UNECE (2012).



	SEA Strategic Environmental Assessment	ESIA/HIA Environmental and Social Impact Assessment Heritage Impact Assessment
Applies to	Policies, plans and/or programmes ('strategic actions')	Projects with significant environmental impacts
Carried out by	Usually a planning authority (public), usually via a consultant	Project proponent (public or private), usually via a consultant
Links to decision-making	Informs decisions on policy/plan/programme development	Informs decisions on project permitting/licensing
Scope of applicability	More limited requirements worldwide: e.g. required for plans and programmes but not policies in European Union countries	Required in most jurisdictions; also by most multilateral financial institutions (ESIA only)
General approach	More strategic, proactive, political, broad-brush	More reactive, technical, specific, detailed
Alternatives	Considers potentially greater number of strategic alternatives: why, how, where	Considers limited number of specific alternatives: where, how
Impact identification	Identifies more general environmental/sustainability implications of the proposed policy/plan/programme	Identifies specific impacts of the proposed project
Cumulative impacts	Focuses on whether thresholds/standards are exceeded	Assesses impacts of other projects jointly with project impacts
Mitigation	Aims to set generic mitigation measures applicable to all projects arising from the policy/plan/programme, with a focus on achieving sustainability objectives	Aims to avoid/minimize impacts of the project

Figure 4.2. The difference between SEA and ESIA. *Source*: Content adapted from CSIR, 1996; World Heritage Leadership.

As Figure 4.2 shows, SEA can provide a context and framework for considering individual projects and their ESIAs. SEA and ESIA are complementary processes that can be applied at the same **World Heritage property** when appropriate, and on multiple occasions. SEA has the advantage of being more proactive and strategic, and can consider issues on a larger landscape scale, potentially reducing external pressure on World Heritage and supporting decision-making before any specific projects are proposed. ESIA can then help understand a specific proposed action in detail and ensure there are no potential negative impacts on Outstanding Universal Value. For example, an SEA for a regional or national transport network can provide a framework for the impact assessments of individual transport projects by identifying environmental constraints, preferred alternatives, and likely cumulative impacts. It can also set conditions ('**mitigation** measures') for subsequent projects that help to protect valued assets, including heritage. However, the SEA will not remove the need to undertake ESIAs for the individual transport projects.

The principles and overall approaches outlined in this Guidance are relevant to SEA and a future guidance document will be prepared to address SEA in more detail.

Finally, the various national, regional and international standards developed by the finance sector should be noted.[10] All forms of impact assessment should meet these as minimum requirements and, in a World Heritage context, assessments should aim to reach the most exemplary standards.

10. See World Bank (2018); OECD-DAC (2006); and IFC (2012).

4.3 ASSESSING IMPACTS ON WORLD HERITAGE

Assessment of impacts on World Heritage involves determining whether the proposed action would affect the property's **Outstanding Universal Value** and **other heritage/conservation values** (see **Section 3.2**). As a proposed action should not be detrimental to a property's OUV, the focus of the assessment should change from 'What is the impact of this project/plan?' to 'What is its impact on OUV?'

This requires an understanding of the **attributes** that contribute to the OUV of the **World Heritage property** and its other heritage/conservation values, within its boundary, buffer and **wider setting**, which may then mean that the scope of the assessment should be extended to include the relevant geographical, ecological and landscape areas around the **heritage**, while also considering the direct, indirect and **cumulative impacts** (Figure 4.3).

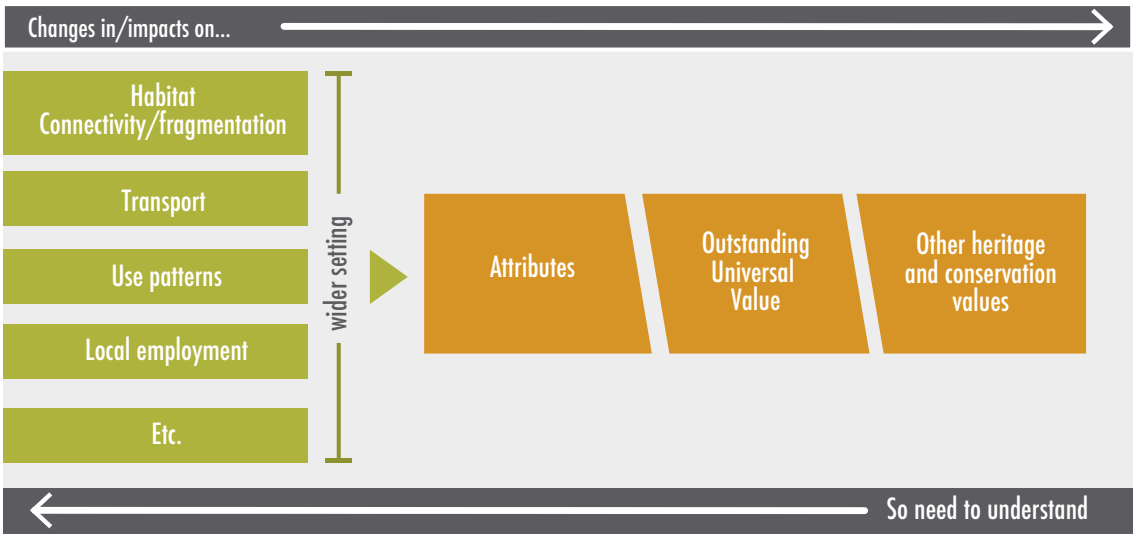


Figure 4.3. Identifying wider changes that could affect OUV. Changes to the wider setting can affect the OUV of a World Heritage property, other heritage/conservation values, and attributes. The scoping stage should identify those wider changes that could affect OUV and include them in the impact assessment to consider all direct, indirect and cumulative impacts.

4.4 DETERMINING THE TYPE OF IMPACT ASSESSMENT NEEDED

Where a **proposed action** has the potential to affect a World Heritage property's **Outstanding Universal Value** and **other heritage/conservation values**, either alone or jointly with other actions ('**cumulative impact**'), then an assessment of the action's effects on the OUV and other **values** should be carried out before the action can go ahead. It is the shared responsibility of the **National Focal Point**, site management and relevant consent authorities of the State Party to ensure that the appropriate form of impact assessment is carried out, normally paid for by the project **proponent**.

World Heritage management authorities must understand the applicable impact assessment legislation and system of operation within their jurisdiction,[11] so that the right form of impact assessment is carried out. If a formal assessment of the proposed action's impacts on the **heritage** would already be required as part of local/national frameworks or donor requirements, then the assessment of OUV can and should be integrated into this **wider impact assessment** (see Section 5). Alternatively, for countries where impact assessment is not required, or where the action would not come under existing impact assessment requirements, a **stand-alone assessment** of impacts on OUV and other heritage/conservation values should be carried out (see Section 6). Figure 4.4 summarizes the process of determining what kind of impact assessment is needed.

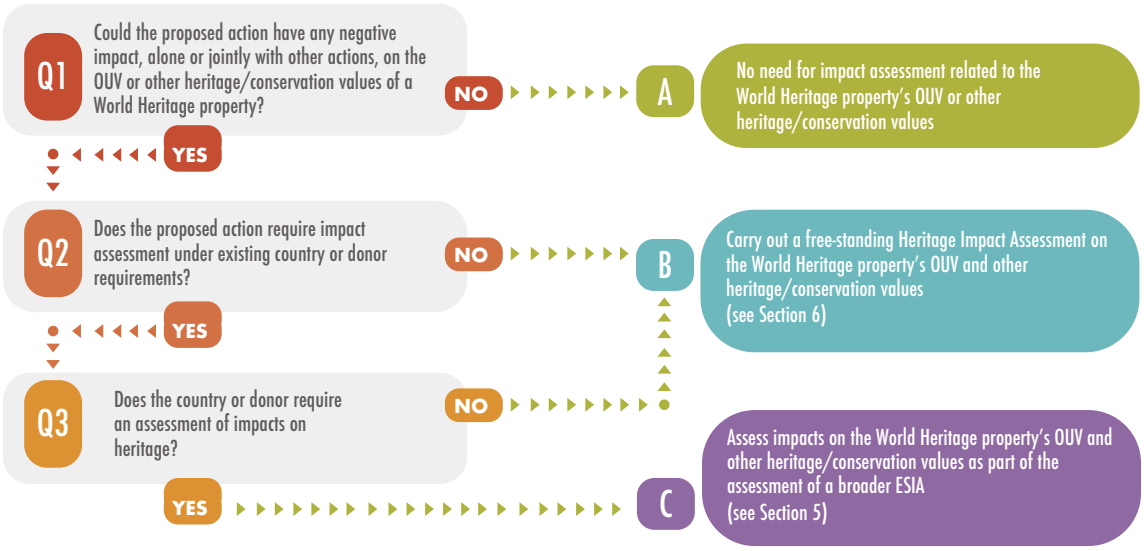


Figure 4.4. Indicative flowchart for determining the type of impact assessment needed for actions potentially affecting World Heritage properties.

11. Where a proposed action in one country could have a significant effect on a World Heritage property in another country, both countries' legislations and operating systems may apply.

5. ASSESSING IMPACTS ON WORLD HERITAGE AS PART OF A WIDER ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

For many years, the World Heritage Committee has requested impact assessments to understand the consequences of **proposed actions** in or near World Heritage properties, and there is a great deal of professional expertise and guidance in this field. However, concerns have been raised about the rigour of these assessments on properties' **Outstanding Universal Value**. A thorough understanding of OUV and **other heritage/conservation values**, and of the **attributes** that convey OUV, is crucial to conducting impact assessment for World Heritage.

Using the process outlined in Table 4.1, this section explains how a wider impact assessment should address World Heritage in order to meet the requirements of the World Heritage Convention.

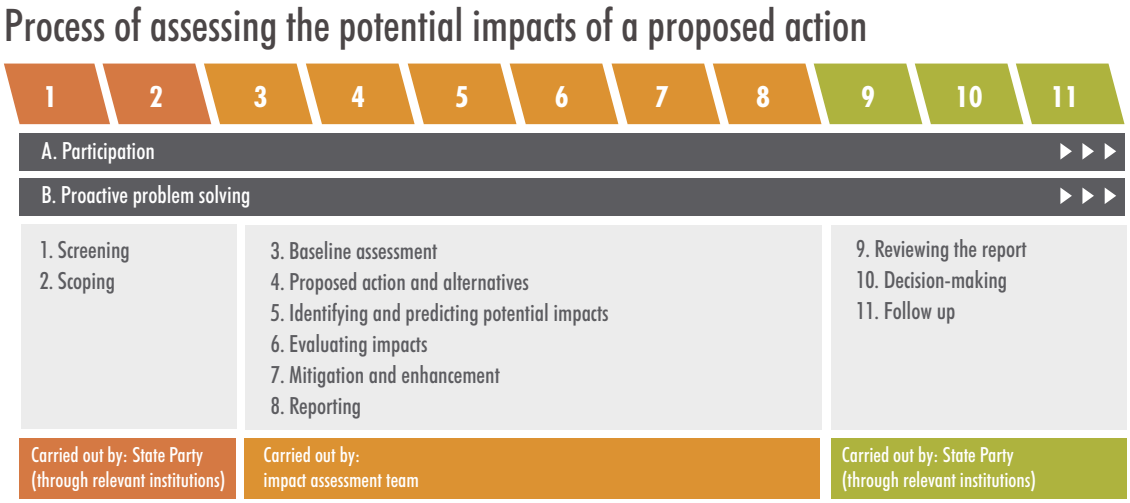


Figure 5.1. The process of an impact assessment conducted for World Heritage.

A. Participation. Local communities, along with **environmental and heritage authorities**, should be involved as early as possible during World Heritage decision-making and impact assessment processes, so that their views can be heard and they can have a meaningful influence on the process. A **human rights-based approach** should be used – for example, if the impact assessment process would not normally include this kind of participation, it should do so to meet the requirements of the World Heritage Convention. Additionally, the United Nations Declaration on the Rights of Indigenous Peoples states that Indigenous peoples have the right to free, prior and informed consent prior to approval of any project affecting their lands, territories or other resources: this approach should be used for Indigenous peoples and should be considered for all local residents. The UNESCO Declarations, Conventions and Recommendations, including the 1972 Convention, contain important provisions regarding human rights, participation, community stewardship and customary practices governing access to culture and benefit sharing. The active involvement of local communities, Indigenous peoples and other **rights-holders** in all aspects of cultural and **heritage** life is also guided by the 2018 UNESCO Policy on Engaging with Indigenous Peoples.

➜ **See also sections 2 and 6.2.**

B. Proactive problem solving involves considering the proposed action throughout its development, to determine whether it is needed, whether an alternative approach would be more sustainable, whether any negative impacts could be avoided or minimized, and whether any positive impacts could be produced or enhanced.

➜ See also section 6.3.

1. Screening: World Heritage properties are of international importance and should always be considered as sensitive and valued. In cases where a proposed action may affect a **World Heritage property** – either directly, indirectly or cumulatively with other actions – an impact assessment on the property and its OUV should be carried out. This applies even if the proposed action would have no other impact.

The **proponent** should prepare a brief screening report based on existing information, which includes:

i. The World Heritage property's name and a map showing its boundary, buffer zone and (where appropriate) wider setting, as adopted by the World Heritage Committee[12]
ii. The World Heritage property's Statement of Outstanding Universal Value
iii. The attributes that contribute to the OUV of the World Heritage property
iv. Other heritage/conservation values of the property
v. For each attribute or value, a preliminary assessment as to whether the proposed action will significantly affect that attribute or value.

Further information on these points will be collected and documented at the baseline assessment stage.

Tool 1 provides more information on identifying **values** and **attributes**, and **Tool 2** provides guidance on identifying impacts. This will give the proponent an early indication of whether the action can go ahead and, if so, what measures might be required to protect the OUV. Mineral, oil and gas exploration or development is in all cases incompatible with World Heritage status. A number of industry leaders have adopted a 'no go commitment' not to explore or exploit for oil, gas or minerals in World Heritage properties, and ensure activities outside World Heritage properties do not negatively affect the OUV.

As the Secretariat of the **World Heritage Convention**, the UNESCO **World Heritage Centre** may ask a State Party to provide an impact assessment for a specific project or action, for example after being notified of a proposed or ongoing action, in line with Paragraph 172 or 174 of the Operational Guidelines. The World Heritage Committee may also request a State Party to carry out an impact assessment, notably upon reviewing a report on the **state of conservation** of a property and/or the outcomes of a Reactive Monitoring mission. If the Committee requests an impact assessment, for the State has the duty to provide this assessment in the timeframe required by the Committee.

In case of uncertainty, States Parties should contact the UNESCO World Heritage Centre early, to ensure that an activity that might negatively impact a World Heritage property's OUV does not proceed. This can also help the proponent to better understand any concerns related to World Heritage and enable them to adjust the preliminary proposal before the formal screening steps of impact assessment.

➜ See also sections 3.3 and 6.4.

12. As adopted by the World Heritage Committee either at the time of inscription or after any subsequent boundary clarification or modification (including extensions). All statutory information, including the cartographic information and associated decisions, is publicly accessible on the UNESCO World Heritage Centre's website.

2. Scoping: The process used to prepare the screening report in Step **1.** will inform the scope of the assessment: the geographical boundary of the assessment (Figure 5.1), the topics analysed, and any possible alternatives. Appendix 1.1 provides a scoping checklist. Consideration should be given to what information is available and, should essential information not be currently available, a decision needs to be made if a valid assessment is feasible based on existing information sources. The scope of the assessment may go considerably beyond what might usually be assessed in order to fully address the World Heritage property's OUV.

➜ See also section 6.5.

3. Baseline assessment: In addition to the standard description of heritage assets, the impact **assessment baseline** should discuss the World Heritage property's OUV, other heritage/conservation values, attributes, boundary, buffer zone and **wider setting**. The identification and breakdown of OUV and attributes should be included in the management planning documents for the World Heritage property, to provide the baseline for all management actions. However, in the case that these are not readily available, this can be done through the use of **Tool 1**.

Although the baseline assessment concerns the current situation, it may be useful to revisit the condition of a World Heritage property at the time of its inscription, so that subsequent changes to OUV and the property's **state of conservation** can be measured and potential vulnerabilities identified. It will also be necessary to consider likely future changes without the proposed action, such as other planned projects, emerging plans, and national or regional trends (e.g. improving air quality, worsening traffic, climate change). This can include a discussion of changes and threats that are less likely, but which would have a significant impact on the World Heritage property and its **OUV**, e.g. flooding, conflict, population displacement or landslides. This discussion of potential future change is particularly useful for identifying and evaluating **cumulative impacts**, showing where the effects of a proposed action may be more significant due to its connection to other actions in the past, present and foreseeable future.

➜ See also section 6.6.

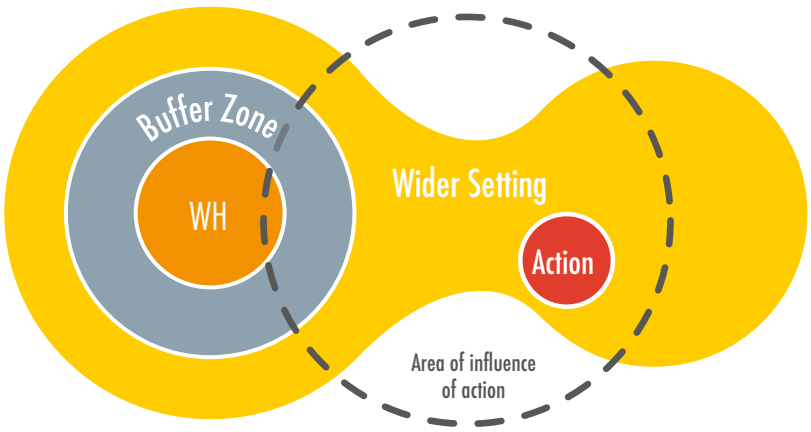


Figure 5.2. Area of influence of a proposed action in relation to the attributes of the World Heritage property. A proposed action can have an impact on OUV even when it is not located within a World Heritage property or its buffer zone. If that is the case it will still need to be assessed. It is also important to be aware of the interdependencies between a World Heritage property and its buffer zone and wider setting.

4. The proposed action and alternatives: The **proposed action** should be described in detail, including any associated works such as infrastructure. If necessary, further information should be sought, or additional documentation should be prepared to ensure that the nature and full extent of potential effects of the action can be understood – particularly how the action might affect the attributes that contribute to the OUV. It will often be useful to map the **area of influence** of the proposed action in relation to the attributes of the World Heritage property (Figure 5.1). Alternatives to the proposed action should be considered in order to establish the most sustainable option that both protects World Heritage and achieves the objectives of the proposed action. The option not to proceed should always be included. Alternatives should be assessed and compared on the same basis as the proposed action.

➜ See also sections 6.3 and 6.7.

5. Identifying and predicting impacts: The **scoping** stage identifies the range of impacts that should be considered in the impact assessment. **Tool 2** shows how an action's impacts on the attributes of a World Heritage property can be identified: each of the impacts identified needs to be explored in more detail in the impact assessment. During impact identification and prediction, it is important to remain aware of how a World Heritage property is interconnected with its buffer zone and **wider setting**, and that it cannot be viewed in isolation.

➜ See also section 6.8.

6. Evaluating impacts: World Heritage should always be considered as a highly sensitive environment. World Heritage is inscribed on the premise that places are of Outstanding Universal Value for the entire global community. The international importance of **OUV**, and the fact that stakeholders are global, needs to be considered when evaluating the significance of any potential impacts. Impacts on OUV and its attributes should be considered separately from other heritage impacts: an **action** may, for instance, have limited impact on heritage/conservation values generally but a significant impact on OUV, or vice versa. It is often helpful to grade or rank the level of impact, particularly in cases where there may be less harmful alternatives. It is not acceptable to lose, damage or alter OUV because OUV is irreplaceable. **Tool 3** provides more information.

➜ See also section 6.9.

7. Mitigation and enhancement: It is always preferable to avoid, rather than minimize, impacts on a World Heritage property's attributes. Any loss of, or damage to **OUV** is unacceptable, which means that rectification, reduction (to less severe but still significant) or offsetting of impacts is inappropriate in a World Heritage context. However, it may be possible to enhance management of the OUV, for instance by providing patrols to prevent illegal activities or removing an obstruction to a view of the World Heritage property.

In cases where the data or technologies available are insufficient to predict potential impacts on the OUV, the **Precautionary Principle** should be applied: alternatives or appropriate mitigation measures should be identified that ensure that the OUV of a World Heritage property is never put at risk. This might mean taking the decision not to proceed with the proposed action due to a lack of information. Any proposed mitigation measures should be put forward in such a way that they can act as planning conditions on the proposed action, and integrated into a future implementation strategy (e.g. Environmental and Social Management Plan).

➜ See also sections 6.3 and 6.10.

8. Reporting: Although various elements of World Heritage may be included in the impact assessment report (e.g. biodiversity, landscape, heritage), there should be a separate section to address the proposed action's potential **impacts** on World Heritage and **OUV**. This section should:

- Present information on OUV, attributes and other heritage/conservation values
- Recommend alternatives, avoidance and mitigation measures, showing how these can be used by the relevant authorities to i) impose conditions on approval, and ii) link them to a future implementation strategy
- If necessary, recommend that the proposed action should not go ahead if impacts on OUV are likely to be significant.

The non-technical summary of the impact assessment report should include key points related to World Heritage.

➜ See also section 6.11.

9. Reviewing: The impact assessment report should be made available to **rights-holders**, other **stakeholders** and the wider public. If requested by the World Heritage Committee, or if the action may affect the OUV of the World Heritage property, then the impact assessment report would be submitted to the World Heritage Centre and reviewed by the Advisory Bodies. In any case where the potential impacts on OUV are not fully addressed, the State Party would be asked to revise the assessment.

➜ See also section 6.12.

10. Decision-making: As part of their obligations under the **World Heritage Convention**, **States Parties** are expected to take decisions on proposed actions that might have a potential impact on World Heritage properties in the light of their obligations under the World Heritage Convention; the impact assessment should help inform those decisions. An impact assessment in a World Heritage context is intended to ensure that a proposed action's potential impacts on OUV are fully considered in decision-making, with the objective of safeguarding these exceptional places. Proposed actions that are not compatible with this objective should not be approved. Where an action is considered broadly compatible with the protection of World Heritage, mitigation measures specific to the protection of OUV should be identified.

➜ See also section 6.13.

11. Follow-up: Should a proposed action be approved, there must be a clear implementation and monitoring strategy for the **mitigation** measures identified in the impact assessment. For a minor project (such as changes to a single building) this may simply be an agreed list of implementation recommendations or commitments. For more complex actions, the mitigation measures should form the basis of a draft **Environmental and Social Management Plan (ESMP)**, to be included in the proponent's tender documentation when seeking contractors. The **impacts** of the proposed action and the effectiveness of the mitigation measures should also be monitored. Information on impacts and mitigation measures linked to the World Heritage property should be overseen by the environmental and heritage authorities, and the management team for the World Heritage property. The National Focal Point is also expected to follow up on implementation of the World Heritage Committee Decisions and Recommendations of the Advisory Bodies in this regard.

➜ See also section 6.14.

6. STAND-ALONE ASSESSMENT OF IMPACTS ON OUTSTANDING UNIVERSAL VALUE

6.1 WHAT ARE STAND-ALONE IMPACT ASSESSMENTS?

This section explains the process of carrying out a stand-alone impact assessment of a **proposed action** that may impact World Heritage. This stand-alone impact assessment on **OUV** and **other heritage/conservation values** is referred to in this Guidance as a **Heritage Impact Assessment**. This may be appropriate where there is no existing impact assessment system or where the proposed action would not require impact assessment under existing legislation. Examples of proposed actions that may not require formal impact assessment but could still have a significant impact on World Heritage include: widening a road, erecting a visitor centre, making the ground impervious in an area upstream from the World Heritage property, or multiple small projects that lead to progressive adverse changes to the **buffer zone** of a **World Heritage property**.

This Guidance should be read in conjunction with other guidance on impact assessment.[13] Heritage Impact Assessment can coexist with, or be incorporated within, other forms of assessment, as illustrated in Section 5.

Impact assessment should start early in the development of a proposed action, and inform the entire planning process of that action. This section discusses the different steps in the Heritage Impact Assessment process, as shown in Figure 6.1. (see Table 4.1 for a list of the steps and supporting prompt questions). While impact assessment can seem like a linear process, the results of many of its steps will influence the conclusions of earlier steps in an **iterative** way. In addition, the participation of **rights-holders** and other **stakeholders** will need to be considered throughout the process, as will the best ways to avoid negative impacts on OUV through proactive problem solving, including the consideration of alternatives and **mitigation** measures.

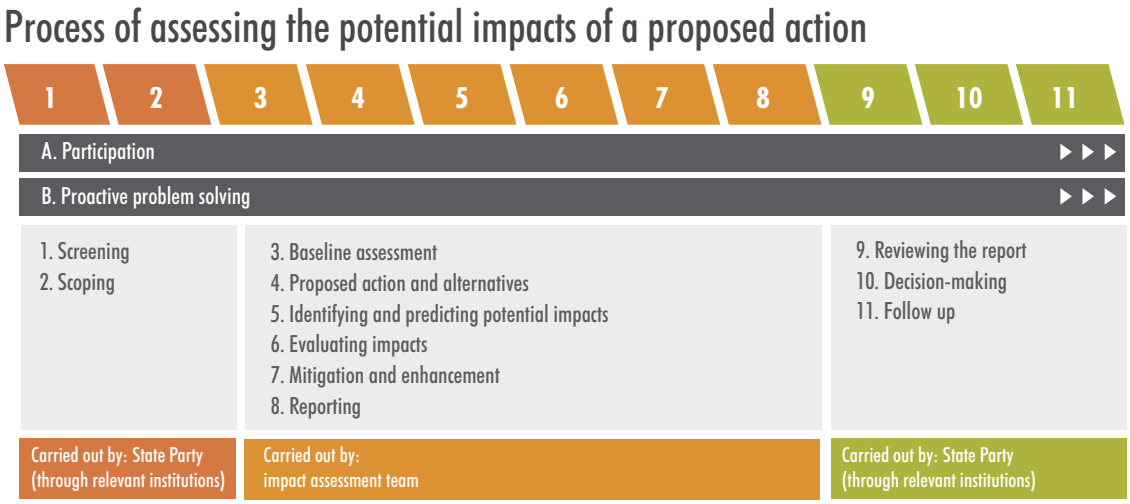


Figure 6.1. The process of an impact assessment conducted for World Heritage.

13. See, for instance, https://www.iaia.org/resources.php.

6.2 PARTICIPATION: HOW SHOULD RIGHTS-HOLDERS, LOCAL COMMUNITIES AND OTHER STAKEHOLDERS BE ENGAGED?

The World Heritage Committee recognizes the critical importance of involving Indigenous, traditional and local communities in decision-making about World Heritage. One of its Strategic Objectives is to 'enhance the role of communities in the implementation of the **World Heritage Convention**'. National legislation and international financial institutions may also require transparent impact assessment processes and public engagement in project planning: these should act as a minimum requirement, but more comprehensive engagement of stakeholders will often be helpful. This issue is discussed here at the beginning of the impact assessment process because it should be integrated as appropriate at each step.

6.2.1 IDENTIFYING RIGHTS-HOLDERS AND OTHER STAKEHOLDERS

The participation of **rights-holders**, local communities and other **stakeholders** (see Box 6.1) in impact assessment should start early and continue throughout the process. A schedule should be prepared at the outset which identifies the different groups, how they relate to the World Heritage property and **proposed action**, their rights and concerns, and their role in decision-making. This will help to determine how and when they should be engaged and consulted. It should also specify a balance of genders, ages, ethnicities and other relevant dimensions; and recognize **factors** that could limit balanced participation, and adjust participation approaches accordingly.

Box 6.1. Rights-holders and other stakeholders in impact assessment

In a World Heritage context:

- **Rights-holders** are those who have legal or customary rights to the heritage place.
- **Indigenous peoples** are inheritors and practitioners of unique cultures and ways of relating to people and the environment. They have retained social, cultural, economic and political characteristics that are distinct from those of the dominant societies in which they live. The United Nations Declaration on the Rights of Indigenous Peoples states that Indigenous peoples have the right to free, prior and informed consent before approval of any project affecting their lands or territories and other resources.
- **Local communities** are groups of people who possess a direct connection to the heritage place. They may range from indigenous or traditional peoples to groups of local peoples who live or work in the heritage place, or who hold associations with it. That connection may be tangible as well as intangible or spiritual and has often endured over time.
- **Environmental and heritage authorities** are those government bodies that have responsibility for, and specialist expertise in, the protection of the cultural and natural heritage.
- **Other relevant authorities** could be municipal or regional authorities, including other countries.
- **Other stakeholders** (individuals, groups of individuals, organizations, etc.) may have direct or indirect interests and concerns about heritage resources, but may not enjoy a legally or socially recognized entitlement to them; or they may be affected by, and interested in, the proposed project. Stakeholders may be represented by organizations, including non-government organizations. In the case of impact assessments, there will also be other stakeholders who are interested in or affected by the proposed action.

Rights-holders, **environmental and heritage authorities**, and some key stakeholders will play a greater role throughout the assessment process than others and should be contacted directly to ensure their early engagement. Rights-holders may have rights that may affect how, or whether, the proposed action can go ahead. Indigenous peoples have the right to free, prior and informed consent: this applies specifically to World Heritage procedures, and should be considered for other stakeholders as well.[14] Environmental and heritage authorities may need to be formally consulted by law.

6.2.2 INVOLVING RIGHTS-HOLDERS AND OTHER STAKEHOLDERS

Information about the **proposed action** and its impacts should be shared with all of these groups in a clear and timely manner, and they should be given the opportunity to contribute to understanding **heritage/conservation values**, raising issues, meaningfully discussing alternatives, and suggesting measures to mitigate any impacts. The nature, scope and frequency of engagement should be proportionate to the nature and scale of the proposed action, its potential risks and impacts, and the group being engaged.

Engagement techniques include running workshops to identify baseline data and identify/assess alternatives; involving local residents in a decision-making panel; or at a minimum, providing and clarifying information about the proposed action and its impacts, with an opportunity to comment.[15] More 'active' techniques that empower communities and promote two-way communication are generally preferable to more 'passive' techniques that merely present information about the proposed action (Figure 6.2), although **factors** like the make-up of any workshops or consultative groups also need careful consideration. It is important that communication with **rights-holders**, local communities and other **stakeholders** is carried out in relevant community languages and with culturally appropriate methods.

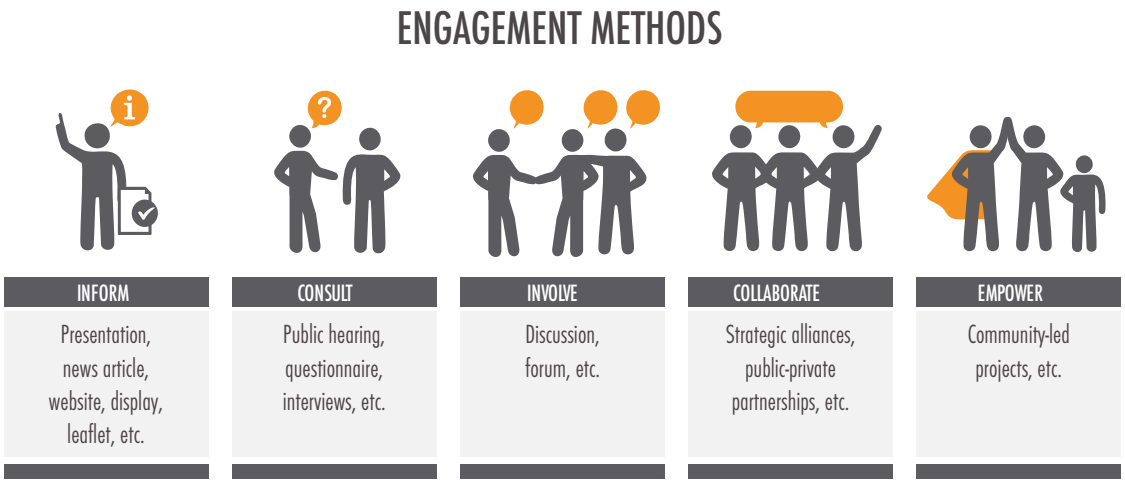


Figure 6.2. Engagement methods for rights-holders, local communities and other stakeholders. Engagement can take various forms throughout an impact assessment. Different approaches will be needed for different individuals and groups, but techniques that provide people with a more active role are generally preferable to passive provision of information.

14. Free, prior and informed consent (FPIC) is also a principle in the Guidance on Developing and Revising World Heritage Tentative Lists, https://whc.unesco.org/document/184566 and is supported by the International Indigenous Peoples World Heritage Forum.
15. Sources of further information on public participation include André et al. (2006), IAPP (nd), IDB (2019), IFC (2007) and UNECE (2015).

There should be an appendix to the final impact assessment report (Section 6.11) which:

- Lists who was consulted, and why
- Explains the participation techniques used
- Summarizes the consultation responses, and explains any changes made in response to these
- Explains, where applicable, why no changes were made.

6.3 PROACTIVE PROBLEM SOLVING

Impact assessment provides an opportunity to think creatively about the **proposed action** and potentially contribute to sustainable development.

As shown in Figure 6.3, this includes identifying broader alternatives and more specific **mitigation** measures, to:

- Avoid entirely or minimize the negative impacts to such an extent that there are no longer any concerns for World Heritage
- Provide or enhance the positive impacts.

Negative impacts on **Outstanding Universal Value** should always be avoided altogether, since the OUV of a **World Heritage property** is irreplaceable and damage to OUV is unacceptable. This should not be limited to a particular step of the impact assessment process: a problem-solving approach can be taken throughout the assessment to achieve the best outcome for World Heritage and wider sustainability. Alternatives are discussed in more detail in Section 6.7, and impact mitigation in Section 6.9 and Section 6.10.

Figure 6.3. Best practice when considering alternatives and mitigation measures. Negative impacts on OUV can be avoided, by considering alternatives and mitigation measures throughout the process. In addition, best practice includes minimizing other impacts and improving the design to achieve greater positive impacts.

6.4 SCREENING: IS AN IMPACT ASSESSMENT NEEDED?

The first step in the **impact assessment** process is to decide whether an assessment is necessary. This is known as '**screening**' and results in a screening decision. Any proposed action should be examined as early as possible to understand whether it is likely to affect a World Heritage property's **OUV** and **other heritage/conservation values**. When the screening process indicates that a **proposed action** would potentially have negative impacts, an impact assessment is required and the proponent should be encouraged to review the proposed action and revise it, if necessary, to avoid or minimize those impacts.

Screening involves consideration of the type, size and characteristics of the proposed action; the sensitivity of the receiving **environment**; and the types of likely impacts (Figure 6.4). It is not only large development projects, or proposed actions near a World Heritage property, that need impact assessment. As **World Heritage properties** are of international importance, any proposed action that may affect the property's OUV should require an impact assessment, regardless of its size or location – within the property, its **buffer zone** or **wider setting** (see Section 3.2). A series of smaller proposed actions, while not needing impact assessment on their own, may also need to be checked for their indirect and **cumulative impacts** on a World Heritage property.

The screening analysis should consider whether the proposed action could affect the **values** and **attributes** that underpin OUV (see Section 3.2). Understanding a World Heritage property should therefore begin with an analysis of its **Statement of Outstanding Universal Value (SOUV)** to identify its values and attributes. **Tool 1** provides a structured approach to identifying values and attributes based on an SOUV.

Figure 6.4. Factors that should be taken into consideration in impact assessment screening in a World Heritage context. Potential impacts on OUV require explicit consideration.

Where the screening stage suggests that no impact assessment is necessary, the **proponent** should prepare a **screening report**, based on existing information, that documents:

1. The World Heritage property's name and a map showing its boundary, buffer zone and (where appropriate) wider setting
2. The World Heritage property's Statement of Outstanding Universal Value
3. The values shown by the World Heritage property
4. The attributes that underpin each value
5. For each attribute: whether the proposed action will significantly affect that attribute or not. Where there is uncertainty about this, a precautionary approach should be used.

The World Heritage Committee has decided that two activities are never considered compatible with World Heritage status: extractive activities[16] and the construction of dams with large reservoirs.[17] The International Council on Mining and Metals has issued a 'No-go commitment' not to explore or exploit for oil, gas or minerals in World Heritage properties, and to ensure operations adjacent to World Heritage properties are not incompatible with OUV. The International Hydropower Association has similarly committed to a no-go for World Heritage and a 'Duty of care commitment'.[18] Leading global companies have joined this commitment, including mining, oil and gas, insurance and banks. Therefore, a recommendation not to proceed with proposed actions of this type can be made at the screening stage. In addition, any proposed dam that could affect properties located within the same river basin will always require an assessment in order to avoid impacts on OUV.

16. https://whc.unesco.org/en/extractive-industries/
17. https://whc.unesco.org/en/decisions/6817
18. https://whc.unesco.org/en/news/2335

The World Heritage Committee may also request an impact assessment, for example, after it has received notification of proposed or ongoing action via the UNESCO World Heritage Centre, in line with **Paragraph 172 or 174** of the Operational Guidelines. If the Committee requests an impact assessment, this becomes the responsibility of the State Party concerned. **States Parties** can use the screening process as an opportunity to proactively inform the UNESCO World Heritage Centre of any proposed actions which may affect a property's OUV, in line with Paragraph 172 of the Operational Guidelines (Section 3.3). The **National Focal Point** is also expected to follow up on implementation of the World Heritage Committee Decisions and Recommendations of the **Advisory Bodies** in this regard.

6.5 SCOPING: WHAT SHOULD BE ASSESSED?

Once the need for an **impact assessment** has been identified (Section 6.4), the first step is to establish the **scope of work**. This details what the impact assessment should include and describes the expected outputs. The scope of work should be drawn up in consultation with **rights-holders**, local communities and key **stakeholders** (Section 6.2). If the **scoping** phase is done well, it can provide a strong foundation for the subsequent impact assessment process, saving time and money, and ensuring that the impact assessment effectively focuses on the key issues. The scoping document can be used again at a later stage to review the quality of the impact assessment and the final report.

Scoping takes a preliminary look at all the issues relevant to an impact assessment. To avoid repetition with later parts of this Guidance, this section only outlines the areas that need to be fully considered.

In a World Heritage context, the scope should include:

- Significant **data** that need to be collected, and particularly data gaps that need to be filled.
- Expected significant **impact**s (Sections 6.7–8). This can be done by bringing together information about the World Heritage property, its buffer zone and wider setting with data on the proposed action. Heritage in general should be covered, plus those attributes that convey OUV and other heritage/conservation values (Section 6.6). Different impacts may occur at different phases of a project (i.e. construction, operation, decommissioning). Relationships between attributes of OUV and **environmental components** should also be identified and described, as this allows the links between direct and indirect impacts to be taken into consideration. Impacts may be added or removed from the scope as the assessment progresses.
- The **geographical area** of the impact assessment. This will include the World Heritage property, the buffer zone where present, and possibly the wider setting. It may be helpful to map the attributes of OUV onto the same map as the area that will be influenced by the proposed action. This allows a geographical area to be defined which will become the focus of the impact assessment.
- The **time period** that will be considered by the impact assessment. This may need to be based on relevant environmental cycles, such as wildlife migrations, or seasonal cultural activities, such as agricultural practices or rituals.
- An initial identification of **alternatives** to the proposed action (Section 6.3). The aim is to establish the most environmentally sound option for achieving the proposed action's objectives while protecting OUV and other heritage/conservation values. The option not to proceed with the proposed action ('no project') should always be considered.

The resulting **scoping report** (Table 6.1) sets the **Terms of Reference** for the full impact assessment. It should be proportionate to the **proposed action**: a small project may only require a short template to be completed with relevant information, whereas a large infrastructure project or a major development plan would merit a thorough, detailed report.

It may become apparent during the scoping process that a proposed action is either incompatible with World Heritage or that it will not have any significant negative impacts on OUV. In these cases, the scoping document should lay out the case clearly for this conclusion, and the relevant authorities can take a decision without the need for any further assessment. The results of the scoping process should be shared with the UNESCO **World Heritage Centre**, especially in those cases where it can be demonstrated that no further assessment will need to be undertaken.

Table 6.1 Suggested contents of a scoping report

The World Heritage property, its values and attributes ➜ *Section 6.6*	• Statement of Outstanding Universal Value (available online in most cases)
	• Preliminary identification of tangible and intangible attributes that convey the OUV
	• Summary of the World Heritage property's other heritage/conservation values of national or local importance, particularly those which:
	  • have strong interdependencies with the OUV
	  • might also be impacted by the proposed action
	  • are essential to management and protection of the World Heritage property
	• Areas where information needed to inform the assessment is missing

Policy context ➜ *Section 6.6*	• Legal provisions, policies, decision-making frameworks and standards relating to heritage • Consistency of the proposed action with existing legal provision, governance arrangements and the management system for the World Heritage property
The proposed action ➜ *Section 6.7 and Section 6.3*	• Description of the proposed action, based on available information, including a map showing its location and footprint • Justified need for the proposed action. Where the type of proposed action is incompatible according to the World Heritage Committee (i.e. extractive activities and the construction of dams with large reservoirs), this should be noted • Initial identification of possible alternatives, including the option not to proceed with the proposed action ('no project' option)
Baseline ➜ *Section 6.6 and Section 6.7*	• The World Heritage property, its buffer zone and wider setting • Specific locations of tangible attributes • Specific locations where intangible attributes take place (in the case of activities or processes which are reflected in physical elements of the property) • Relationship to key rights-holders, local communities or stakeholders (where they live, work, move, use patterns, etc.).

Identification of potential impacts ➜ *Section 6.8*	• Potential impacts of the proposed action on the World Heritage attributes
	• Potential social issues that could impact:
	  i) a property's OUV and
	  ii) rights-holders, local communities and stakeholders connected with the heritage place
	• The area to be considered within the impact assessment, i.e. the area that might be influenced by the proposed action, which might go beyond the World Heritage property and its buffer zone, and include its wider setting or even beyond
	• The time period over which the impacts could take place, split into stages (construction, operation etc.)

Methodology	• Suggested impact assessment methodology (this Guidance can be used as a basis). The approach should be tailored to the type of property, its OUV and other heritage/conservation values, the proposed action, its potential impacts and the attributes that may be affected • Skills and competencies required from the team that will carry out the impact assessment, including areas where specialist input will be needed
Rights-holders and stakeholders ➜ *Section 6.2*	• Initial identification of the rights-holders, local communities and stakeholders who need to be involved in the impact assessment process (making it clear that this is an ongoing process) • Any specific requirements to allow the full participation of any particular rights-holders or stakeholders
Time frame	• A calendar for the whole impact assessment process, including deadlines for reporting and consultation, allowing for sufficient time for processes of the World Heritage Convention (at least two years).

6.6 BASELINE ASSESSMENT

The current state of the **World Heritage property**, its **Outstanding Universal Value** and **attributes** is used as a baseline during the subsequent **impact assessment** stages (Section 6.8), which compare the future of the World Heritage property with and without the **proposed action**. The baseline can also be used as a reference point to monitor the situation during and after project construction, to ensure the **heritage** is protected.

6.6.1 DESCRIBING THE PAST, PRESENT AND LIKELY FUTURE BASELINE

The **scoping** stages should have identified the type and quantity of information needed for the **baseline assessment**. The baseline should describe the current status of the OUV and other heritage/conservation values and the **attributes** that convey them, both at the World Heritage property and in its buffer and **wider setting**. This analysis may be on a much wider scale than a normal heritage assessment: it could involve, for instance, describing migration routes of animals, the local geology, or cultural practices where these are attributes that support OUV. The baseline should also describe any **other heritage/ conservation values** of the World Heritage property: relevant international, national and local level designations in the study area, why they have been designated, and their sensitivities. Box 6.2 lists possible sources of baseline data.

Box 6.2. Possible sources of baseline data

- Nomination file and other documents associated with the World Heritage property's listing including the adopted Statement of Outstanding Universal Value
- Engagement activities with rights-holders, local communities and other stakeholders
- Desk-based studies
- Cultural mapping[19]
- Ethnographic studies
- Site visits
- Building surveys
- Urban heritage mapping
- Socio-economic studies
- Visitor surveys/studies
- Transport assessment
- Landscape characterization studies
- Geological surveys
- Ecological/biodiversity surveys
- Underwater surveys
- Measurement of ecosystem services
- Measurement of ambient baseline noise
- Soil quality evaluations
- Contaminated land surveys
- Air quality assessments
- Pollution monitoring
- Assessment reports of recovery efforts from natural disasters

19. See for instance https://bangkok.unesco.org/content/cultural-mapping

It will also be useful to return to the condition of the World Heritage property at the time of its inscription: this will allow a baseline to be identified for the property's OUV, attributes and **state of conservation**. Any changes that have taken place since inscription can then be identified and consequent vulnerabilities identified.

It will also be necessary to consider likely future changes without the **proposed action**, for instance other planned projects, emerging plans, and national or regional trends (e.g. improving air quality, worsening traffic, climate change). This can include a discussion of less likely changes and threats that would have a significant impact on the World Heritage property and its OUV, for instance flooding, conflict, population displacement, landslides or reconstruction. This analysis of likely and possible future changes is particularly useful for identifying and evaluating **cumulative impacts** (Section 6.9), showing where the effects of a proposed action may be more significant if it is combined with other actions in the past, present and foreseeable future.

6.6.2 CARRYING OUT ADDITIONAL STUDIES

Once existing information has been collected and analysed, any relevant data gaps will need to be filled. New baseline studies might need to be carried out. A rigorous methodology should be developed for the collection of additional data – including a clear geographic and temporal scope – and this should be described in the final report. The timing of baseline studies also needs to be considered. For example, in natural properties, seasonal changes such as breeding, nesting or migratory patterns of species, weather patterns, etc. will affect the accuracy of the data that is collected depending on the timing of surveys. Cultural properties can also be affected by seasonal trends, such as agricultural cycles, festivities or tourism, which should be measured at the appropriate time.

6.6.3 UNDERSTANDING THE LEGAL AND MANAGEMENT SYSTEM

The **values** and **attributes** of a World Heritage property are protected by a system of legal provisions, policies and standards, and a management system of heritage governance. Ideally, these systems will also deliver wider benefits for society. Analysis of the heritage policies, and the heritage governance and management system in place, can greatly improve the outcomes of an impact assessment by clarifying the context in which the new **action** is being proposed. The baseline analysis should review the consistency of the proposed action with these existing policies. The **proposed action** will need to be consistent with relevant legislation and plans: the impact assessment should explain whether it is – and if not, why not.

The policy context can be gleaned by reviewing national, regional and local policies and land-use plans relating to **heritage** and the attributes that support the World Heritage property's **OUV**. Any previous Advisory or Reactive Monitoring mission reports, impact assessments related to the World Heritage property, and SEAs prepared for plans and policies that set the context for the proposed action should also be reviewed. This can identify strategic level alternatives and why they have been eliminated or chosen; expected **mitigation** measures; reasons why previous actions have been permitted or refused; and **cumulative impacts** that could be exacerbated or reduced by the proposed action.

Types of governance and heritage management vary considerably from country to country, and sometimes even from place to place, because they draw on diverse legal and institutional frameworks operating at local, national and international levels, and on a variety of resources (IUCN, 2013*a*) . Responsibility for the components of a single World Heritage property could lie with a public institution, non-governmental organization, Indigenous people's organization or the private sector. That organization or person may be actively managing heritage places, or simply supervising others doing so by enacting and enforcing legislation.

The management system at the **World Heritage property** can be analysed from documents prepared for World Heritage purposes, including the nomination dossier, Committee Decisions, State of Conservation reports, mission reports, and Periodic Reporting. Several guides exist on how to carry out such an analysis, e.g. Enhancing our Heritage (UNESCO, 2008) and Part 4 of Managing Cultural World Heritage (UNESCO, 2013). Such an analysis should identify:

- All relevant rights-holders, local communities and stakeholders who should be involved in the impact assessment process (Section 6.2), to ensure that decision-making will be based on consensus and a greater understanding of the World Heritage property
- Existing policies and plans that affect the proposed action and heritage protection. This can lead to recommendations that are better aligned with statutory processes and operational capacities, and can be more effectively implemented
- Whether the proposed action is consistent with existing policies and plans
- Strengths and weaknesses of the management system that might lead to increased positive or decreased negative impacts on World Heritage. Awareness of these will help inform the recommendations and achieve improved outcomes. This could also identify proactive improvements to the management system which could reduce threats from future proposals
- Management mechanisms that might help successfully implement the recommendations of the impact assessment report and monitor the subsequent situation.

6.7 THE PROPOSED ACTION AND ALTERNATIVES

6.7.1 UNDERSTANDING THE PROPOSED ACTION

Although the proposed action is initially explored during **screening** (Section 6.4) and **scoping** (Section 6.5), much more detailed information is required for the **impact assessment** report. The amount of information should correspond to the scale and size of the **proposed action**. All stages of the proposed action's life cycle should be considered (Figure 6.5) to understand exactly what will take place (directly and indirectly), how, and when. It is also important to understand if any associated facilities or infrastructure are needed to support the proposed action – for example, the creation of an access road or the installation of power lines – as these will also need to be assessed.

Figure 6.5. Stages in the life cycle of a proposed action. An impact assessment should consider the entire lifetime of a proposed action because impacts on Outstanding Universal Value might occur at any phase.

The precise location of all elements of the proposed action needs to be understood and mapped, in particular their relationship to the **World Heritage property** (e.g. within the property, within the buffer zone, upstream of the property, etc.), including all its components. Box 6.3 provides a checklist for the project description. It may be necessary to commission specialist additional documentation (e.g. a photomontage) in order to understand aspects of a proposed action which may affect the OUV.

Box 6.3 Proposed action checklist

The information needed to understand a proposed action will vary, but normally includes the following:

- The need for the proposed action and its objectives
- The alternatives considered, including 'no project'
- Description of the proposed action (including, if appropriate, how it will be built and operated)
- Location(s) and route of the proposed action (on a map)
- The type and duration of the proposed action
- Description of physical characteristics of the proposed action (for all phases of the life cycle)
- Layout and design of all project components (including drawings, visualizations, etc.)
- The nature and quantity of any natural resources that will be needed during all project phases
- Sources and amounts of residues, emissions, pollutants and other nuisances during all project phases
- Safety and security issues
- Access and required transportation
- Associated works, e.g. energy, waste, water infrastructure
- Other associated policies or projects and their geographical location

The **area of influence** for a project will change according to the nature of the proposed action and the **environment** in which it would take place. It might be the area which would be affected by the noise, dust or air pollution arising from construction, operation or closure of a proposed action, or it may be much larger (Figure 5.1). For instance, if the proposed action affects water levels in a river, the area of influence may extend to the entire watershed. The definition of the area of influence should be updated once impacts are identified and understood (Section 6.8).

6.7.2 ALTERNATIVES TO THE PROPOSED ACTION

Identifying alternatives to the **proposed action** at an early stage means that a full range of options can be considered while it is still possible to influence planning decisions, and even avoid negative impacts entirely by not proceeding with the proposed action. Exploring alternatives may also lead to the proposed action being revised or abandoned.

Alternatives can be considered in three steps:

1. **Identify reasonable alternatives**. Various types of alternatives can be identified and explored, with those higher up the 'alternatives hierarchy' (Figure 6.6) generally providing more opportunities to be genuinely sustainable and reduce negative impacts. Strategic alternatives will typically focus on 'why' (Why is the action being proposed? Is 'no project' preferable?), 'what' (What action is needed?) and 'where' (Broadly where should the action be carried out?). More detailed project-level alternatives will typically focus on 'where' (Where precisely should the elements of the proposed action be located?) and 'how' (project management and timing). All alternatives should seek to avoid impacts on OUV, and be technically feasible and economically viable. **Rights-holders**, local communities and other **stakeholders**, including environmental and heritage authorities, should be consulted at this stage, as they may suggest alternatives that the **proponent** would otherwise not have considered. Where alternatives are not reasonable (e.g. for technical or financial reasons), these can be eliminated early on, but for transparency this should be documented, with an explanation as to why they have been eliminated.

2. **Assess and compare alternatives**. The impacts of reasonable alternatives should be assessed and compared using the same techniques and degree of rigour as the assessment of the proposed action (see Section 6.8).
3. **Explain the choice of preferred alternative**. A clear reason should be provided for the choice of the preferred alternative, which should include its environmental, social and economic sustainability, as well as its cost, technical feasibility, local acceptability etc.

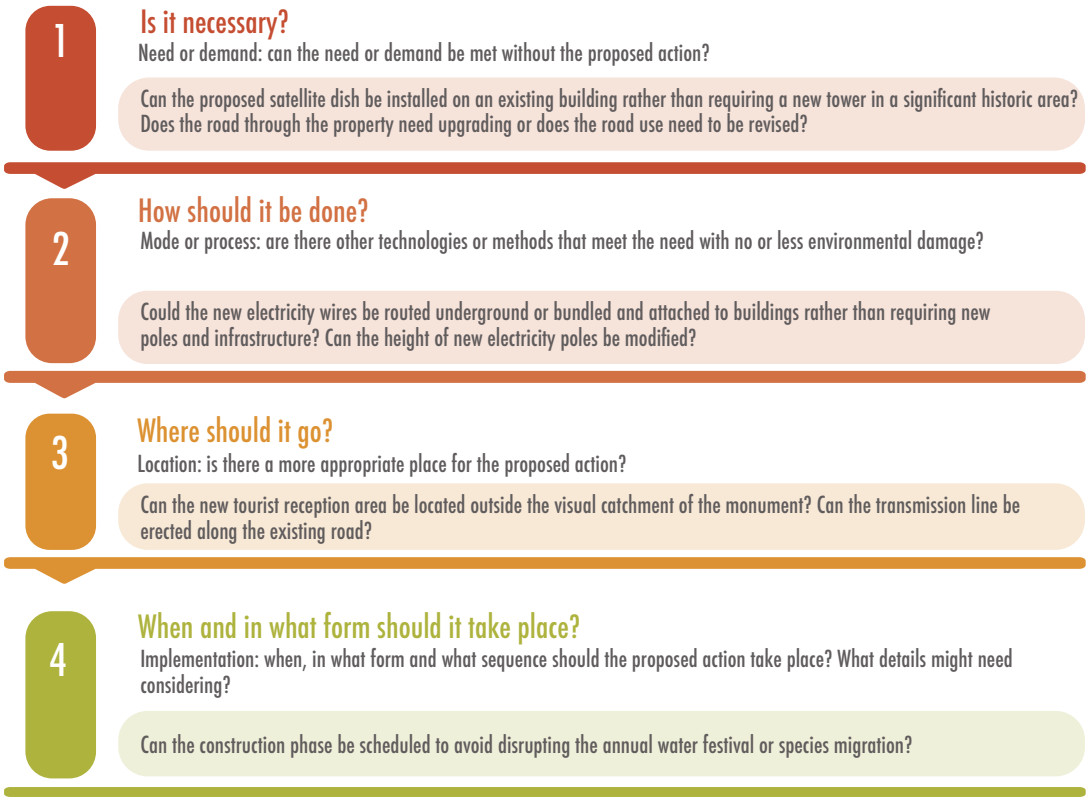


Figure 6.6. The 'alternatives hierarchy'. The higher-level alternatives generally have more potential for reducing negative impacts and promoting sustainability.

6.8 IDENTIFYING AND PREDICTING IMPACTS

Identifying and predicting impacts is a technical step at the heart of the **impact assessment** process and therefore needs specialist contributions from a range of relevant disciplines. At a minimum, it is advisable to confirm the results of the impact prediction and evaluation – and **mitigation** measures for any significant negative impacts – with the **environmental and heritage authorities**. **Rights-holders** and other **stakeholders** should preferably be involved in these stages.

6.8.1 IDENTIFYING IMPACTS

Impact identification brings together information about the **attributes** of **OUV** and **other heritage/conservation values** (Section 6.6) and the proposed action and alternatives (Section 6.3 and Section 6.7), to determine what would happen to the attributes of a World Heritage property if a proposed action took place – for example, Figure 6.7 shows how noise from a proposed action might impact on nesting birds. An impact is the interaction of the **proposed action** with an attribute of the World Heritage property, and this can take either negative or positive forms – biophysical, social, cultural, economic, health, visual, etc. All relevant impacts should be considered, including those on intangible attributes which are reflected in physical elements of the property (Figure 6.9).

Figure 6.7. The impact on nesting birds created by noise from a proposed action. An impact is the interaction of the proposed action with an attribute of the World Heritage property. In this example, the noise from a proposed action may impact on nesting birds, which when disturbed will leave the area. Where birds are an attribute of the World Heritage property, this would lead to a loss of Outstanding Universal Value.

Figure 6.8. The impact on a historic urban environment created by sound and vibration from a proposed action. An impact is the interaction of the proposed action with an attribute of the World Heritage property. In this example, the vibration from a proposed action may have an impact on the buildings and weaken their structural stability. Where these buildings are an attribute of the World Heritage property, this would lead to a loss of Outstanding Universal Value.

Figure 6.9. Examples of elements of a heritage place that could be impacted. A proposed action can significantly affect many attributes of a World Heritage property, and the impact assessment will need to consider all relevant impacts on these.

The proposed action can **directly impact** on the World Heritage property's OUV and other heritage/conservation values. It can also have **indirect impacts**, where a direct impact has follow-on impacts (e.g. more traffic, leading to air pollution, which could then have further follow-on indirect impacts on human health or vegetation). These also need to be formally identified and assessed. The impacts of a proposed action may also combine with those of other past, existing or future actions and other **factors** (such as climate change) that may affect a World Heritage property, and have a **cumulative impact**. There may have been changes at or near the **World Heritage property** since the time of its inscription that need to be taken into consideration when assessing a new proposal. The proposed action may create a precedent which then creates cumulative impacts in the future. For this reason, it is important to be aware of other actions and trends in the past, present and future, and not consider a proposed action in isolation. When **cumulative impacts** are significant, the final impact assessment report will need a separate section to address them clearly.

Box 6.4. Examples of different impacts

Examples of **direct impacts** include:

- Demolition, alteration or addition to a historic building
- Encroachment into a World Heritage property by a road widening project leading to habitat loss
- Development of a visitor centre on a part of the World Heritage property where it affects access, urban layout or spatial planning
- Significant increase in noise levels at a spiritual or ecologically sensitive World Heritage property

Examples of **indirect impacts** include:

- Changes in the natural flow of water downstream from a new dam, affecting a World Heritage property's OUV which depends on natural water fluctuation patterns
- A road built to support a proposed action which also increases vehicular access to the World Heritage property
- Water damage to fragile building materials or buried archaeology when a ground surface is made impervious in an area, resulting in a change to the hydrology downslope
- A land-use plan leading to a significant increase in the population of a historic town, with associated increased recreational pressure on the World Heritage property

Examples of **cumulative impacts** include:

- Multiple projects leading to the progressive loss of natural habitat, which will ultimately have a significant impact on a rare species that is dependent on that habitat
- A single building project within a green space in a historic town with many green spaces. This may not have a significant impact; however, if a large number of those green spaces are converted into buildings over time the cumulative impacts on the urban layout will be significant
- Reconstruction of houses in a historic urban fabric. Reconstruction of a single house may not matter but if a large number are reconstructed then the cumulative impact on the authenticity and integrity of the property can be significant.

When identifying impacts on **OUV**, it is important to remain aware of how a **World Heritage property** is interconnected with its **buffer zone** and **wider setting**, and that it cannot be viewed in isolation. All direct, indirect and **cumulative impacts** occurring in the entire **area of influence** of the proposed action need to be identified and assessed for their potential to impact the World Heritage property.

Impacts may occur at any stage of a proposed action, so the action's entire life cycle needs to be considered (Figure 6.5). For instance, construction may involve a limited number of heavy goods vehicle movements, while operation may involve a larger number of car movements. Many impact assessments have a separate chapter or sections on construction impacts.

While professional judgement can often be used to identify the impacts of a proposed action, there are a number of tools that can help ensure that all the issues are considered in a more systematic way. These include:

- **Overlay maps**: colour-coded plans showing the physical extent of the proposed works and the areas over which any attributes are sensitive (e.g. buffer zones around streams)
- **Checklists**: for some types of project, there are checklists that can be used to identify which impacts are likely to occur, e.g. wind farms (UNDP Serbia, 2010) or irrigation and drainage projects (ICID, 1993). These may need to be adapted to the proposed action and location
- **Matrices**: a matrix can be created with attributes of the World Heritage property along one axis and elements of the proposed action along the other, to show the interaction between the two (see **Tool 2**)
- **Network diagrams**: these visually represent the links between elements of the proposed action and their potential impacts on attributes of the World Heritage property

6.8.2 PREDICTING IMPACTS

Once potential impacts have been identified, an informed prediction can be made about the likely scale and nature of those impacts. The impact prediction should compare the baseline conditions of the **World Heritage property** (Section 6.6) against the situation with the **proposed action**; this should be done for each reasonable alternative as well as the proposed action. This is a technical step and its conclusions should be defendable.

Predictions of potential impacts can include a range of characteristics (Table 6.2). It may be possible to quantify the impact (e.g. likely changes to the population of a sensitive species, or number/area of historic structures that are to be altered); in other cases, a narrative description may be the only option. In all cases, the description of the impact should be as precise as possible. Assumptions underlying the predictions should be clearly disclosed and uncertainties described.

Table 6.2. Characteristics of potential impacts and prompt questions as part of an impact assessment

Impact characteristic	Prompt question	Examples
Magnitude	What change will occur?	A measurable estimate, e.g. number of buildings demolished, concentration of a pollutant
Type	Is the impact positive or negative?	Positive, negative, neutral
Extent	Over what area will the impact take place?	A measurable estimate, e.g. hectares of habitat cleared
Duration	How long will the impact last?	Short-term (days/weeks), long-term (years/ decades), permanent
Frequency	How often will this impact occur?	Once, intermittent infrequent, intermittent frequent, continuous
Reversibility	Can this impact be reversed? Is it easy to reverse?	Naturally reversible, reversible through human intervention, easy or difficult to reverse, irreversible
Likelihood	How likely is it that this impact will occur?	Categories can be defined, such as 'possible', 'probable', 'definite'

Tool 3 provides a structure for predicting impacts, taking into account the characteristics in Table 6.2. While recognizing that some uncertainty will be unavoidable, the prediction should provide as solid and transparent a basis as possible on which to make decisions. Techniques for impact prediction include:

- **Quantitative analysis**: calculating impacts using baseline data and an understanding of the proposed action. Models can be used to analyse more complex situations, including indirect and cumulative impacts
- **Professional judgement**: experienced specialists can offer a more qualitative estimate based on similar projects in heritage places in the same geographic region
- **Case studies**: examining other similar projects or scientific research that has taken place in a similar context, particularly if monitoring data is available.

Predicting impacts quantitatively can allow clear comparisons between the likely future with and without the proposed action, and between the impacts of the proposed action and any alternatives. However, where this is difficult, impacts can be estimated using, for example, 'high', 'medium' and 'low' categories. If there is a high degree of uncertainty, it may also be useful to provide best- and worst-case predictions. Such approaches, including any definitions of the categories used, should be explained clearly in the final report (Section 6.11).

Impact assessment aims to help protect the natural and cultural **environment**, and therefore emphasizes negative impacts. However, impacts can be positive, and these should also be identified and predicted. This allows an understanding of:

- how far the proposed action and any alternatives would meet stated project objectives and targets
- who benefits (or not) from the positive impacts
- how positive impacts could support a State Party's obligation to protect and conserve World Heritage
- how World Heritage can play a dynamic role in sustainable development
- how the **action** can support disaster risk preparedness and resilience.

6.9 EVALUATING IMPACTS

Impact evaluation determines whether the predicted impacts of the **proposed action** are significant or not on the basis of the characteristics of the predicted impacts (Section 6.8). Significant negative impacts on the wider **heritage** will generally be unacceptable, and on a World Heritage property's OUV they will always be unacceptable. As this step directly leads to the recommendations that will form the final **impact assessment** report (Section 6.11), it is important for this evaluation to be transparent and rigorous. **Tool 3** can also be used for impact evaluation.

Although impact evaluation is based on the individual **attributes** that convey a World Heritage property's **OUV**, the proposed action's overall impacts on OUV also need to be assessed. By definition, World Heritage properties are sensitive and internationally important, so even a small change may have a significant impact. Where there is a significant lack of clarity (e.g. insufficient data or technologies to predict potential impacts on OUV; major uncertainty about whether a significant impact on OUV might occur or not, or the effectiveness of proposed mitigation measures), the impact assessment should follow the **Precautionary Principle**: alternatives or appropriate **mitigation** measures should be identified to ensure that World Heritage is never put at risk. In some cases, this might mean taking the decision not to proceed with the proposed action.

The evaluation should result in a clear conclusion about whether the likely impacts of a proposed action on OUV overall are acceptable or not. If the proposed action would have negative impacts on OUV, the report should give one of three conclusions:

- The negative impact would be negligible and raises no concerns
- The negative impact would be significant, but with avoidance and mitigation measures it could be eliminated or minimized to an acceptable level
- The negative impact would be significant and could not be avoided or mitigated, so the proposed action should not proceed.

If the proposed action would have positive impacts on OUV, the report should give one of three conclusions:

- The positive impact is beneficial to the World Heritage property and raises no concerns
- A more positive impact could be achieved by selecting a project alternative or adjusting the project design
- The positive impact does not reach objectives set for the proposed action (e.g. flood defences would not be effective against predicted flooding events), so the proposed action (or that dimension of the proposed action) should not proceed.

While the conclusions should address both positive and negative impacts, these should not be balanced against each other. The analysis needs to reveal rather than disguise the complexities of a proposed action so that potential benefits are not used to justify negative impacts on a World Heritage property.

6.10 MITIGATION AND ENHANCEMENT

6.10.1 MITIGATING NEGATIVE IMPACTS

If impacts are negligible, they may need no mitigation. In all other cases, **mitigation should be considered to avoid or minimize any negative impacts** (Section 6.3), and the revised **proposed action** together with its mitigation measures needs to be re-assessed (Section 6.8). This makes impact assessment an **iterative** process, with final predictions that include the planned mitigation measures.

A 'mitigation hierarchy' is often used in **impact assessment**, ranging from the preferred 'avoidance', through 'minimize', 'rectify' and 'reduce' to 'offset' (Figure 6.10). However, in the case of World Heritage, **OUV** is irreplaceable and cannot be 'offset'. The best outcome for World Heritage is to avoid negative impacts entirely – this includes the dismissal of the proposed action, or its relocation away from the World Heritage property. However, it may involve creative problem-solving to re-think and potentially re-design the proposed action or identify measures that avoid negative impacts. In some cases, it may not be possible to entirely avoid all negative impacts but they should be minimized to acceptable levels that cause no concern for World Heritage by significantly reducing their magnitude, duration, extent, etc.

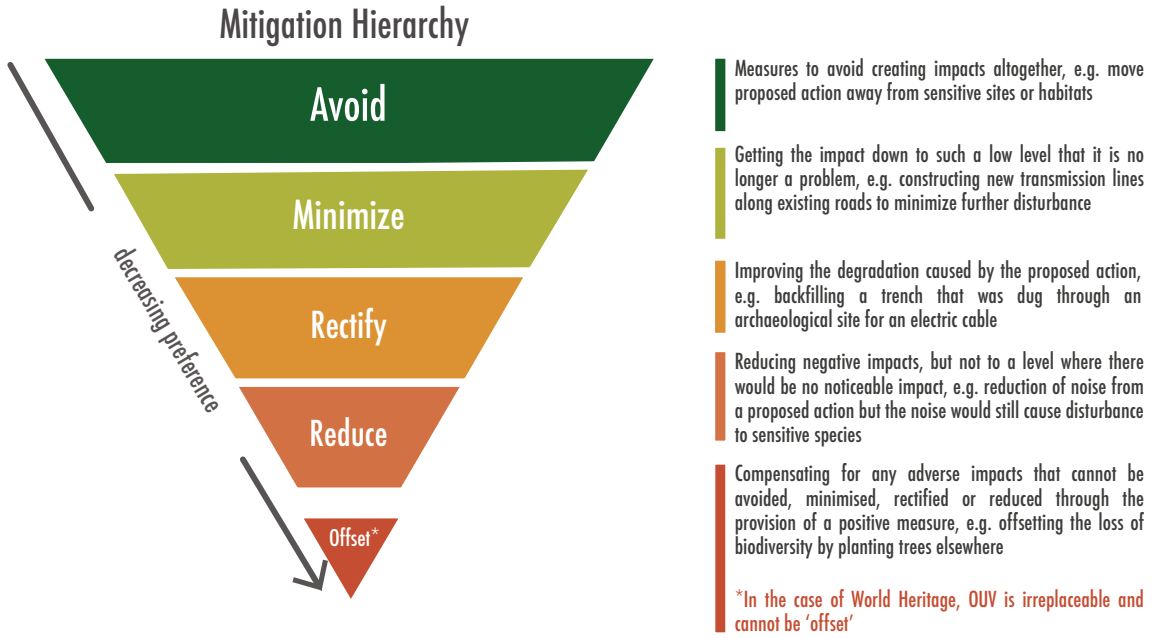


Figure 6.10. The Mitigation Hierarchy.

Box 6.5. Examples of avoidance and minimization of negative impacts

Examples of **avoidance** of negative impacts include:

- Not undertaking a proposed action
- Selecting a different location or route away from the World Heritage property
- Maintaining a buffer zone between (parts of) the proposed action and attributes
- Eliminating a particularly problematic element of the proposed action

Examples of **minimization** of negative impacts include:

- Reducing the scale of a proposed action
- Selecting a different location or route
- Reducing noise or vibrations from a proposed action to such a level that it does not cause disturbance
- Redesigning elements of the proposed action
- Using different technologies

Once mitigation measures have been identified, it is important that they are included in the revised proposed action, which should then be re-evaluated. Any residual negative impacts – those impacts that would still affect the **World Heritage property** even after mitigation has taken place – then need to be addressed. Further mitigation measures may be needed. If significant residual negative impacts on OUV cannot be avoided, the impact assessment report should recommend that the proposed action should not be taken forward.

6.10.2 PROVIDING/ENHANCING POSITIVE IMPACTS

While avoiding negative impacts is at the heart of impact assessment, best practice in impact assessment takes a more proactive and positive approach: proponents should not only aim to 'do no harm', but seek to actively 'do good' while not compromising OUV. The commitment of **States Parties** to integrate a sustainable development perspective into all World Heritage processes (Section 3.4) means that impact assessment offers an opportunity to enhance the positive impacts of a proposed action, or create new ones, for the benefit of both **heritage** and society (see Box 6.6).

Box 6.6. Examples of enhancement of positive impacts

Examples of **enhancement** of positive impacts (where this does not impinge on OUV) include:

- Employing local residents, training them and involving them in the management of the project or World Heritage property
- Enhancing biodiversity by linking 'green' areas via wildlife corridors
- Providing health, community or educational facilities in areas where these are needed
- Remediating contaminated land
- Removing inappropriate interventions such as unsympathetic building additions or impediments to significant views
- Improving human well-being and air quality through new parks and walking/cycling facilities

The **proposed action** may also be able to reduce the impact on the **World Heritage property** of external or cumulative changes and disasters. For instance, it may stabilize unsteady ground to reduce erosion at a geologically fragile World Heritage property (UNESCO, 2010).

6.10.3 ENSURING THAT MITIGATION AND ENHANCEMENT TAKE PLACE

The section of the **impact assessment** report containing **mitigation** recommendations should become a living document that can be used by all parties as the project moves through different stages of implementation, even by those who were not involved in the original impact assessment. This ensures that mitigation measures are understood and implemented by all and can be monitored.

The impact assessment needs to clearly state:

- which mitigation and enhancement measures are necessary in order to sustain OUV and other heritage/conservation values
- who should carry them out
- the timeframe for completion.

In most cases, the **proponent** will be responsible for these actions. The impact assessment recommendations should be provided in a form that can be readily incorporated into an implementation strategy (Section 6.14). For example, they might become part of the commitments made by a project proponent, or used by the relevant authorities to set mandatory conditions for approval which the proponent is obliged to adopt when permission is granted. They should be clearly stated, measurable and binding. To help ensure that mitigation and enhancement take place as required, the impact assessment report should show clear connections between the recommendations and the subsequent steps of decision-making, implementation of the **proposed action**, and monitoring (Figure 6.11).

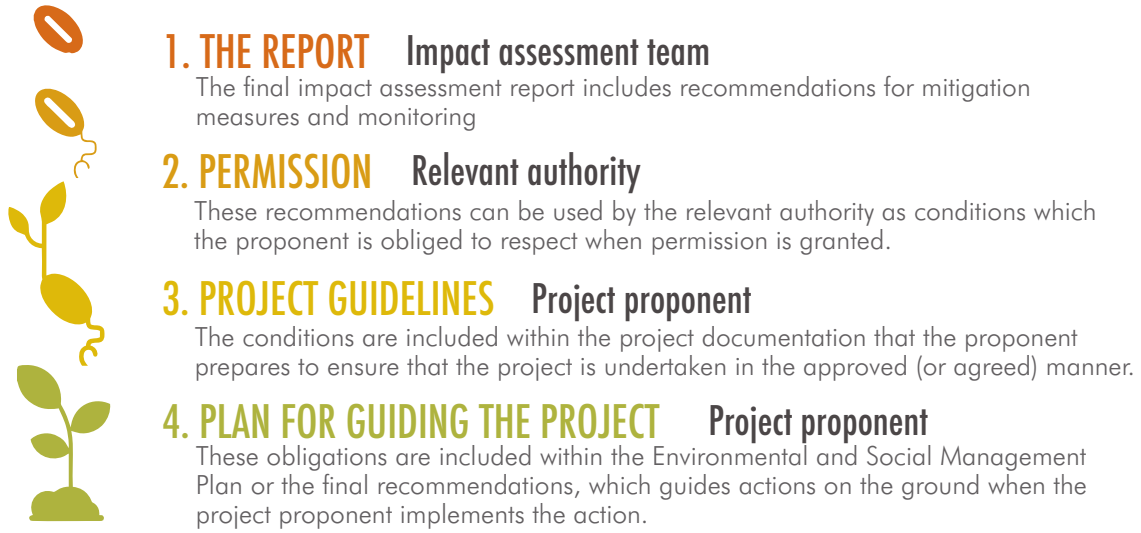


Figure 6.11. Taking into account the report's recommendations in each step of decision-making and implementation. In order for the impact assessment to ensure that the proposed action is taken forward in the best possible way for World Heritage, the recommendations should be taken into consideration at each subsequent step of decision-making and implementation.

6.11 REPORTING

The methodology and findings of the previous sections should be clearly documented in an **impact assessment** report.[20] The report should be made available for comment to a range of interested parties, both expert and non-expert. The findings should be laid out clearly so that all readers can follow the analysis and understand why the assessment makes certain recommendations based on protecting **OUV** and **other heritage/conservation values**. During the impact assessment process, it is important to reflect on the contents of the report, to better inform the decision-making process later on. The level of detail needed and the length of the report will depend on the complexity of the **proposed action** and the property.

Section 5 explained how impact assessment for World Heritage can be integrated into a wider impact assessment report. In a stand-alone assessment, the impact assessment report will have a narrower scope: the World Heritage context, and OUV in particular, as well as the wider heritage.

The report should clearly focus on:

- the framework provided by the World Heritage Convention and the Operational Guidelines
- the OUV, other heritage/conservation values, and attributes that convey them
- the impacts of the proposed action on those attributes of OUV and other heritage/conservation values
- the overall impact on OUV
- recommended alternatives, avoidance and mitigation measures proposed to deal with any impacts on OUV, provided in a form that can be used by the relevant authorities to impose conditions for approval, and linked to a future implementation strategy (Section 6.14). If necessary, a recommendation for the proposed action to not go ahead if impacts on OUV are likely to be significant.

The report can be sent to the UNESCO **World Heritage Centre** as part of a State Party's notification in line with **Paragraph 172** of the Operational Guidelines (Section 3.3). Once the report is sent to the UNESCO World Heritage Centre it will usually be shared with the **Advisory Bodies** for review.

In some contexts, the format of the impact assessment report is set by the government or funding body. If there is no template, the list in Table 6.3 can be used as a basis. The report's non-technical summary should include key points related to World Heritage.

Table 6.3 Indicative contents of an impact assessment report

Non-technical summary	• A clearly written summary of the report and its key findings and recommendations, in particular: identification of the World Heritage property, its OUV and attributes; the proposed action's impacts on OUV and other heritage/conservation values; and recommendations and conclusions
Contractual information and acknowledgements	For transparency it is helpful to provide information on: • Who funded and commissioned the report • The role played by any institutions or agencies responsible for overseeing or reviewing the process • Who carried out the impact assessment work, including key authors and other contributing specialists • A statement by the authors declaring no conflict of interest • Any independent expert review

20. Often called environmental assessment report, environmental impact assessment report or environmental impact statement. These 'reports' are increasingly being presented in an interactive form online.

Table 6.3 Indicative contents of an impact assessment report (continued)

Methodology	• A summary of the methodology used for the impact assessment (e.g. this Guidance) • Dates when various stages of the proposed action planning and impact assessment were carried out • How rights-holders and stakeholders were involved and how their views were taken into account (an appendix on the consultation process can list all those who participated in various ways when anonymity is not required) • Any knowledge gaps or uncertainties relating to the baseline data and/or the impact identification and prediction • Specific methodologies used for establishing the baseline or predicting impacts can be included in an annex
Baseline ➜ *Section 6.6*	• Statement of Outstanding Universal Value • Description of the World Heritage property and its wider setting, including the tangible and intangible attributes of OUV and other heritage/conservation values, its authenticity (in the case of cultural properties) and integrity • Information on the current state of conservation of attributes of the World Heritage and any changes since the time of inscription • Summary of other heritage in or near the property which may also be impacted by the proposal • Relevant legal, regulatory and policy frameworks, including the World Heritage Convention • Analysis of the governance and heritage management system for the World Heritage property
The proposed action and alternatives ➜ *Sections 6.3 and 6.7*	• The need for the proposed action and its objectives • A description of all stages (construction, operation, decommissioning, recovery) of the proposed action, with sufficient detail for the report to be read as an independent document. Further detailed information may be included as an annex • Maps, plans and illustrations of the project location and/or route in relation to the World Heritage property • Alternatives which were considered, including the 'no project' alternative.
Identification and evaluation of impacts ➜ *Sections 6.8 and 6.9*	• Identification of the potential positive and negative impacts of the proposed action on the World Heritage property, including cumulative impacts • Prediction of the characteristics of these potential impacts, including disclosure of any uncertainty • Evaluation of the significance of potential impacts on the attributes which sustain OUV and on other heritage/conservation values
Mitigation measures ➜ *Sections 6.3 and 6.10*	• Necessary mitigation measures, including responsibilities and funding sources • Description of any residual impacts after mitigation
Recommendations ➜ *Section 6.11*	• Recommendation for proceeding with the proposed action, a preferred alternative, or not proceeding in the light of impacts
Follow-up ➜ *Section 6.14*	• Description of monitoring needed should the proposed action take place, including monitoring of the baseline and the implementation of mitigation measures • For major projects, a proposed Environmental and Social Management Plan (or similar) for the proponent can be added as an annex
Annexes	• Terms of Reference • Any detailed information gathered to describe the baseline for the World Heritage property (e.g. inventory of attributes of OUV and other values; information on other heritage; surveys; scientific studies; relevant information gained from the consultation process; illustrations and photographs, etc.) • Supporting technical information with regard to the prediction of impacts

6.12 REVIEWING THE REPORT

The **impact assessment** report (Section 6.11) should be made available for comment to **rights-holders**, the local community and other **stakeholders** with direct or indirect interests in the **World Heritage property**, the **States Parties**, World Heritage Committee, **World Heritage Centre** and **Advisory Bodies**. Based on the comments received, the report may need to be revised before a final version is formally submitted to decision-makers alongside a planning/licence application or similar (Section 6.13). The aim of the review is to determine whether the assessment methodology and outcomes are adequate, notably in terms of the analysis of impact on **OUV**; and whether they are fit for purpose in terms of transparency and usability. A good review process leads to confidence in the conclusions of the impact assessment.

Reviews of an impact assessment report can take different forms:

- When the impact assessment is commissioned by the **proponent**, the proponent often checks, among other issues, that the assessment has been carried out according to the **Terms of Reference**
- When the impact assessment has been requested by the World Heritage Committee, the report and the proposed action will usually be subject to a technical review by the Advisory Bodies
- When the impact assessment is carried out within a national framework, there is usually a responsible authority who will check against relevant legislation and policy. They may also involve other appropriate departments or agencies for comment
- The report should be shared with all relevant rights-holders and other stakeholders so they have an opportunity to comment meaningfully. Many national frameworks provide an opportunity for public review, and it is good practice to do this even where it is not legally required
- An independent review of an impact assessment may be commissioned through appropriate and accredited independent specialists; this can be particularly helpful in sensitive cases where the quality and transparency of the impact assessment needs to be ensured.

Box 6.7 presents a checklist for conducting a review of an impact assessment report.

Box 6.7 Impact assessment review checklist

- Does the report address the issues raised in the scoping document?
- Is the report consistent with relevant requirements (e.g. national legislation, donor requirements) on impact assessment?
- Does the report fully address the World Heritage context and the OUV of the property?
- Does the report explain whether the proposed action is consistent with relevant policy and regulations on heritage?
- Have rights-holders and other stakeholders been involved in the impact assessment process, and have their views been adequately taken into account?
- Was the impact assessment carried out in line with good impact assessment practice and with this Guidance?
- Is the information provided in the report reliable and technically accurate? Are the conclusions of the report based on adequate evidence? Are there any significant data gaps that require use of the Precautionary Principle?
- Has the report clearly identified mitigation measures needed to avoid or minimize impacts on OUV and other heritage/conservation values?
- Is the report clear, complete and fit for the purpose of supporting decision-making?

After the review(s) have taken place, the impact assessment team should incorporate any reasonable feedback or requests into the report as it is finalized. Where the team decides not to incorporate the feedback into the final report, it should explain why this has not been done. The final revised report should be made public. In sensitive cases where this is not feasible, as much transparency as possible should be provided by sharing content that is not problematic and offering a non-technical summary and/or a public presentation to rights-holders and other stakeholders.

6.13 DECISION-MAKING

Decisions about a **proposed action** are made throughout the impact assessment process. For example:

- Relevant authorities and proponents make decisions about whether planning for a proposed action should proceed or not at the **screening** (Section 6.4) and **scoping** stages (Section 6.5)
- A **proponent** may decide to change the appropriate action's location, design, technology, etc. as the action's impacts are identified and evaluated during an impact assessment (Section 6.8–Section 6.9)
- Major investors, such as development banks or other international financial institutions, use the final impact assessment report to make decisions about whether to fund the proposed action or not
- Relevant authorities will use the final impact assessment report as the basis on which to make a decision regarding the approval for the proposed action and, if it goes ahead, under what conditions.

The ultimate decision on whether a proposed action should be approved or not will be made by the relevant national authorities. There are three options for such a decision:

- Approval is given, including specific conditions (e.g. mitigation measures). This should only happen where the proposed action, with conditions, would avoid all negative impacts on OUV, or if any negative impacts are too minor to merit further consideration
- Approval is deferred, for example, awaiting additional information or on the basis of requests for the proposed action to be redesigned
- Approval is denied.

States Parties are expected to take these decisions in light of their obligations under the **World Heritage Convention**; the impact assessment should help inform those decisions. **An impact assessment in a World Heritage context is intended to ensure that a** proposed action**'s potential impacts on OUV are fully considered in decision-making, with the objective of safeguarding these exceptional places**. All proposed actions, whether they are located in or near the World Heritage property, should be considered in terms of whether they are compatible with the long-term conservation of OUV. The assessment should also consider the property's connections to its **wider setting**, as World Heritage cannot be considered in isolation. Proposed actions that are not compatible with this objective should not be approved.

6.14 FOLLOW-UP

Should a **proposed action** be approved, longer-term follow-up mechanisms will be needed to monitor and implement the **mitigation** measures necessary to ensure that **OUV** is protected and any sustainable development objectives are attained (Table 6.4). While those involved at the **World Heritage property** will not be responsible for all such follow-up activities, their ongoing support is critical to ensure that long-term obligations are met with respect to the protection of OUV.

The **impact assessment** should indicate necessary conditions – required mitigation measures – for approval, which form the basis for a clear implementation strategy. For a minor project, this could be a simple list of agreed recommendations. For a major project, it could be a draft **Environmental and Social Management Plan** which is included in the contract documentation for the proposed action. The implementation strategy will guide the development of the proposed action on the ground: it should clearly explain how the impact assessment's required mitigation measures will be implemented and monitored.

Where a major project is approved, it is good practice for the proponent to draw up an Environmental and Social Management Plan (ESMP) which describes how the project will be implemented in respect of relevant legislation and agreed mitigation measures. Heritage institutions and World Heritage site management teams should be consulted when an ESMP is drawn up for a project that could affect OUV. Once agreed mitigation measures and other safeguards are included, the ESMP can become a good basis for holding proponents to account, monitoring how the project progresses, and discussing any necessary adjustments as it proceeds (Section 6.14). It is also useful for ensuring everyone involved in the project implementation is aware of the results of the impact assessment, even if they were not part of it.

It is the proponent's responsibility to ensure that the proposed action causes no negative impacts during its implementation. This will typically be overseen by the **environmental and heritage authorities** and can be followed by citizens' committees, joint commissions or other arrangements appropriate to the local governance. The management team for the World Heritage property should review internal monitoring and evaluation processes. The State Party Focal Point can include an update on the project and implementation of the impact assessment's recommendations in the Periodic Reporting and/or **State of Conservation** reporting to the UNESCO **World Heritage Centre**. This is especially the case where such reporting has been requested by the World Heritage Committee. The impact assessment process can suggest additional areas that may usefully be monitored over time. This not only provides extra checks on the implementation of the proposed action, but it also ensures that more reliable and long-term data are available for the baseline for any other future actions (Section 6.6).

Table 6.4. Follow-up activities after the proposed action has been approved

Follow-up activity	What needs to happen?	Who is responsible?
Implementation of required mitigation measures	Documentation of the impact assessment's recommendations for mitigation measures, and implementation of these as part of the development of the proposed action. For major projects, the implementation strategy should be integrated into the proponent's Environmental and Social Management Plan. The UNESCO World Heritage Centre should be provided with updates on the progress of implementation to ensure OUV is protected	• Proponent
Baseline monitoring	Ongoing collection of information about the World Heritage property's attributes, which can be used to check against the baseline data collected during the impact assessment (Section 6.6) and the impact assessment predictions, to determine if the situation is proceeding as planned or if something needs doing	• Proponent • State Party • World Heritage property management team • Citizens
Compliance monitoring and auditing	Ongoing collection of information and review against the conditions set as part of planning permission, to ensure that the conditions are being met	• Relevant authorities • Citizens
Management	If monitoring indicates that issues have arisen that require action, then the management systems in place (for the management of both the proposed action and the World Heritage property) can be used to respond promptly	• Proponent • World Heritage management team
Communication	Informing rights-holders and other stakeholders (who may be directly involved) of the results of follow-up activities. For cyclical actions (e.g. ten-year land-use plans), the baseline monitoring will provide reference information for the next plan's impact assessment	• Proponent • State Party • World Heritage property management team
Enforcement	Where a World Heritage property's OUV is shown to be negatively affected by the project due to unforeseen circumstances, new situations or inadequate follow-up and implementation of the mitigation measures, the project should be immediately halted. The World Heritage Committee may examine the case and may request a mission to the World Heritage property to provide advice	• World Heritage Centre • Advisory Bodies • World Heritage Committee • Citizens

ABBREVIATIONS

This Guidance tries not to use abbreviations, so that the text is as clear as possible to readers who are unfamiliar with some new terms. However, in order to cross-reference with other documents that regularly use abbreviations, it is useful to take note of the following:

EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
FPIC	Free, prior and informed consent
ICCROM	International Centre for the Study of the Preservation and Restoration of Cultural Property
ICOMOS	International Council on Monuments and Sites
IUCN	International Union for Conservation of Nature
OUV	Outstanding Universal Value
SEA	Strategic Environmental Assessment
SOUV	Statement of Outstanding Universal Value

GLOSSARY

Term	Definition
Action	A policy, plan, programme or project.
Advisory Bodies	The three international organizations which are named in the World Heritage Convention to advise the World Heritage Committee in its deliberations are ICCROM (International Centre for the Study of the Preservation and Restoration of Cultural Property), ICOMOS (International Council on Monuments and Sites) and IUCN (International Union for Conservation of Nature). The Advisory Bodies have the following functions: • Advise on the implementation of the World Heritage Convention in the field of their expertise • Provide expert advice on how to conserve and manage properties included on the World Heritage List • Assist the World Heritage Centre in preparing the Committee's documentation, the agendas of its meetings and in implementing the Committee's decisions • Assist with the development and implementation of the Global Strategy for a Representative, Balanced and Credible World Heritage List, the World Heritage Capacity Building Strategy, Periodic Reporting, and the strengthening of the effective use of the World Heritage Fund • Monitor the state of conservation of World Heritage properties (including through Reactive Monitoring missions at the request of the Committee and Advisory missions at the invitation of the States Parties) • Review requests for International Assistance • Attend meetings of the World Heritage Committee and the Bureau in an advisory capacity. The Advisory Bodies are involved in the review of proposed actions and any related impact assessments when they are requested by the World Heritage Committee.
Area of influence	The area of influence of a proposed action is the geographical area in which direct, indirect and cumulative impacts may occur. This concept recognizes the area which a proposed action will actually occupy, as well as the wider area which a project will influence (e.g. through air emissions, traffic or economic activity). It should also consider relevant boundaries for affected attributes of a World Heritage property and other environmental components (e.g. population boundaries, administrative boundaries, wildlife home ranges). Baseline information about this area should be collected during the impact assessment.

Term	Definition
Attributes	Attributes are the elements of a heritage place which convey its heritage/conservation values and enable an understanding of those values. They can be physical qualities, material fabric and other tangible features, but can also be intangible aspects such as processes, social arrangements or cultural practices, as well as associations and relationships which are reflected in physical elements of the property. For cultural heritage places, they can be buildings or other built structures and their forms, materials, design, uses and functions but also urban layouts, agricultural processes, religious ceremonies, building techniques, visual relationships and spiritual connections. For natural properties, they can be specific landscape features, areas of habitat, flagship species, aspects relating to environmental quality (such as intactness, high/pristine environmental quality), scale and naturalness of habitats, and size and viability of wildlife populations. Attributes, and the interactions between them, should be the focus of protection, conservation and management actions. The term 'attributes' is particularly used for World Heritage properties and a clear understanding of the attributes that convey their Outstanding Universal value is critical for their long-term protection. The spatial distribution of those attributes and respective protection requirements should inform the boundary of the property and other management actions.
Authenticity	World Heritage properties that are nominated under criteria (i) to (vi) (i.e. cultural heritage) must meet the conditions of authenticity. Depending on the type of cultural heritage and its cultural context, properties may be understood to meet the conditions of authenticity if their cultural values (as recognized in the nomination criteria proposed) are truthfully and credibly expressed through a variety of attributes including: ● form and design ● materials and substance ● use and function ● traditions, techniques and management systems ● location and setting ● language, and other forms of intangible heritage ● spirit and feeling ● other internal and external factors.
Baseline assessment	A baseline assessment is an adequate description of the affected environment i) as it is currently, ii) how it was at the time of World Heritage inscription and iii) as it could be expected to develop if the project were not to proceed. This should encompass all dimensions of the environment: physical, biological, resource use, social, cultural, health and economic. The effectiveness of an impact assessment is directly dependent on how well these conditions are understood.
Buffer zone	For World Heritage properties, a buffer zone is an area surrounding the property which has complementary legal and/or customary restrictions placed on its use and development in order to give an added layer of protection to the property. This should include the immediate setting of the property, important views and other areas or attributes that are functionally important as a support to the property and its protection. The area constituting the buffer zone should be determined in each case through appropriate mechanisms. The delineation of buffer zones is adopted by the World Heritage Committee; any modifications to or creation of buffer zones subsequent to inscription of a property on the World Heritage List must be approved by the World Heritage Committee following a formal request as defined in Paragraphs 163-167 of the Operational Guidelines.

Term	Definition
Cumulative impacts	A cumulative impact results from the environmental impacts of a project combining with the same environmental impacts of other past, existing or reasonably foreseeable future projects or activities, including those that may be enabled by the project.
Decommissioning	Decommissioning occurs at the end of a project's lifetime and involves fully removing structures and other elements of a project, usually by those who constructed it. The aim is to restore the place to its previous conditions.
Direct impacts	A direct impact is the result of a cause-and-effect relationship between a project and a specific attribute of World Heritage or other environmental components. See also: **Impact**, **Indirect impacts**, **Cumulative impacts**
Disaster risk management (DRM)	Designing, implementing and evaluating strategies, policies and measures in order to: • improve the understanding of disaster risk • foster disaster risk reduction • transfer and promote continuous improvement in disaster preparedness, response and recovery practices The explicit purpose of disaster risk management is to increase human security and well-being, as well as sustainable development.
Environment	The term 'environment' varies widely among different jurisdictions and organizations. However, in a World Heritage context a comprehensive definition needs to be used, and this includes the physical, biological, resource use, social, cultural, health and economic dimensions of the project environment.
Environmental and heritage authorities	Environmental and heritage authorities are governmental organization(s) primarily responsible for ensuring the protection and management of natural and cultural heritage within their countries. These authorities would also be responsible for the implementation of activities related to the Convention within their countries.
Environmental and Social Impact Assessment (ESIA)	Environmental and Social Impact Assessment, also known as Environmental Impact Assessment (EIA), refers to project-level assessment (e.g. of a hydropower or highway project). See also **Heritage Impact Assessment**, **Impact assessment**, **Strategic Environmental Assessment**

Term	Definition
Environmental and Social Management Plans (ESMPs)	During an Environmental and Social Impact Assessment, impact management involves impact avoidance and minimization during project planning and design. During the implementation phase, Environmental and Social Management Plans (ESMPs) form part of the planning process for impact management, and are often embedded within an Environmental and Social Management System. Individual ESMPs are typically prepared by a proponent for different stages of a project as and when they are needed, e.g. construction, operation, and decommissioning and closure. ESMPs generally address specific needs such as: ● Emergency preparedness and response ● The management of: • Land, soil and biodiversity • Hazardous materials and waste • Water quantity and quality • Air quality • Noise and vibration • Community health and safety • Cultural heritage. Each ESMP will specify roles and responsibilities for carrying out planned activities, including supervision, monitoring, and reporting. It is useful for the World Heritage site management team to be aware of the ESMP so that they can discuss the monitoring processes and ensure they are appropriate for heritage protection.
Environmental components	Environmental components are the specific elements of a heritage place which may be affected by a proposed action, including the landscape, soil, water, air and atmosphere, plants, wildlife, ecosystems, human population and settlements, other cultural heritage, etc. In impact assessment, some of these components are identified as Valued Environmental Components (VECs). These are the components of the environment that are considered to be important, for various reasons, to project stakeholders, the general public, government administrators or other key participants in an impact assessment. They are a way to organize the issues that need to be studied in an impact assessment, as identified through scoping, into manageable packages. In a World Heritage context, the attributes of Outstanding Universal Value are to be considered Valued Environmental Components.
Factors	Everything that can affect, positively and negatively, the values and attributes of the heritage place and its state of conservation. Negative factors are usually called threats. How factors affect a property needs to be analysed through a series of parameters namely the underlying causes that are the source of the factor, their origin (if originating within or outside the property), the current and potential impacts deriving from the factor and the extent and severity of the impacts on the attributes of the heritage place.
Heritage	All inherited assets which people value for reasons beyond mere utility. Heritage is a broad concept and includes shared legacies from the natural environment, the creations of humans and the creations and interactions between humans and nature. It encompasses built, terrestrial, freshwater and marine environments, landscapes and seascapes, biodiversity, geodiversity, collections, cultural practices, knowledge, living experiences, etc.

Term	Definition
Heritage Impact Assessment	A Heritage Impact Assessment is an activity-specific or project-level assessment that is focused on identifying and assessing the potential effect of a proposed activity or project on the heritage/conservation values of a natural and/or cultural heritage place. In the context of World Heritage properties, a Heritage Impact Assessment should be particularly focused on identifying and assessing negative and positive impacts on the attributes which convey the Outstanding Universal Value of the World Heritage property.
Human rights-based approach or Rights-based approaches	Rights-based approaches to conservation can be understood as integrating rights norms, standards and principles into policy, planning, implementation and outcomes assessment to help ensure that conservation practice respects rights in all cases, and supports their further realization where possible. Adopting rights-based approaches to conservation serves to ensure that the protection of rights and biodiversity conservation are mutually reinforcing.
Impact	The effects or consequences of a factor on the attributes of the heritage place, both in terms of the attributes' state of conservation and their ability to convey the heritage/conservation values. An impact is the difference between a future environmental condition with the implementation of a development project, and the future condition without it. Note that for there to be an impact, there must a source of impact (e.g. noise from an industrial site), a receptor or attribute of the World Heritage property that is affected (e.g. residents living nearby) and a pathway or route by which the harmful action or material is able to reach the receptor (e.g. the air). Impacts can be positive or negative, as well as direct or indirect, current or potential and originating within the heritage place, any existing buffer zone(s) and even beyond it. See also: **Direct impact**, **Indirect impacts**, **Cumulative impacts**
Impact assessment	Impact assessment is the process of identifying, predicting and evaluating the potential environmental impacts of proposed actions prior to major approval decisions being taken and commitments made. It is undertaken for the purpose of avoiding or mitigating adverse impacts, and enhancing beneficial impacts. More generally, impact assessment can be appreciated as a way of thinking and planning that can be applied to all scales of activity. Impact assessment can be applied to development proposals at various levels – projects, plans, programmes and policies. See also: **Environmental and Social Impact Assessment**, **Heritage Impact Assessment**, **Strategic Environmental Assessment**
Indirect impacts	Indirect impacts are impacts on the environment which are not a direct result of the project, often produced away from or as a result of a complex pathway. Sometimes referred to as 'second' or 'third-level' impacts, or 'secondary' impacts. See also: **Impact**, **Direct impacts**, **Cumulative impacts**
Integrity	All properties nominated for inscription on the World Heritage List shall satisfy the conditions of integrity. Integrity is a measure of the wholeness and intactness of the natural and/or cultural heritage and its attributes. Examining the conditions of integrity therefore requires assessing the extent to which the property: a. includes all elements necessary to express its Outstanding Universal Value b. is of adequate size to ensure the complete representation of the features and processes which convey the property's significance c. suffers from adverse effects of development and/or neglect
Iterative	A term used to describe the impact assessment process, which is not linear – stages in the process recur as new information is gathered.

Term	Definition
Mitigation	By definition, mitigation is 'the action of reducing the severity, seriousness or painfulness of something'. It aims to prevent negative impacts from happening and to keep those that do occur within an acceptable level. Mitigation measures are first identified and, as appropriate, adopted during project feasibility studies when considering alternatives and design options to avoid or reduce impacts. They then become part of the project implementation plan to address impacts that are expected to occur during construction, operation, decommissioning and closure. Mitigation can include both structural measures (e.g. design or location changes) and non-structural measures (e.g. institutional and policy instruments; provision of community services; and training and capacity building). Where impact assessment typically explores a range of mitigation measures within a mitigation hierarchy (from avoidance to offsetting), not all of these options are appropriate in a World Heritage context. In fact, avoiding negative impacts entirely or minimizing them to acceptable levels are the only types of mitigation that should be considered. Note that 'mitigation' usually applies to dealing with negative impacts. Projects may well also have positive impacts, especially if designed with preserving or enhancing biophysical or social values in mind.
National Focal Point	Governmental organization(s) primarily responsible for ensuring the implementation of activities related to the Convention within their countries, and which act as the communication channel between the Secretariat (UNESCO World Heritage Centre), national public authorities and other stakeholders.
Operational Guidelines (OG)	The Operational Guidelines for the Implementation of the World Heritage Convention (first published in 1977, latest edition: 2021) is a document that aims to facilitate the implementation of the World Heritage Convention by setting forth the procedures for: • the inscription of properties on the World Heritage List and the List of World Heritage in Danger • the protection and conservation of World Heritage properties • the granting of International Assistance under the World Heritage Fund • the mobilization of national and international support in favour of the Convention.
Other heritage/ conservation values	In the context of this Guidance, these are heritage/conservation values that a property may have in addition to Outstanding Universal Value. They may include the reasons behind the designation of a World Heritage property as being of national or local heritage importance, and Indigenous values attributed to the property. They may also include other aspects of the place which, while not sustaining OUV, are nevertheless of aesthetic, historic, scientific, social or other value.
Outstanding Universal Value (OUV)	Cultural and/or 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. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole.

Term	Definition
Paragraph 172 or 174 notifications	Paragraph 172 of the Operational Guidelines for the Implementation of the World Heritage Convention invites States Parties to notify the Committee, through the UNESCO World Heritage Centre, of any proposed actions which may affect the Outstanding Universal Value of a World Heritage property before taking any decisions. Paragraph 174 provides that civil society can also submit information to the UNESCO World Heritage Centre, if they consider that a property has seriously deteriorated or that the necessary corrective measures have not been taken within the time proposed, in which case the UNESCO World Heritage Centre will contact the State Party to verify the information.
Precautionary Principle	The Precautionary Principle enables decision-makers to adopt precautionary measures when scientific evidence about an environmental or human health hazard is uncertain and the stakes are high. The Rio Declaration (United Nations, 1992) defines the Precautionary Principle: 'Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation'.
Project development area (PDA)	The project development area is the anticipated area of physical disturbance associated with the construction and operation of a project. It includes the main project site or route, as well as the area of any new infrastructure needed to support it such as access roads, power transmission lines, and water supply reservoirs and pipelines. See also: **Area of influence**
Proponent	An individual, group or organization that proposes an action and then mobilizes a team to take the proposed action forward. The proponent could be the site management team of the World Heritage property, another government institution, a developer, an organization, an Indigenous People's Organization, a community group or other stakeholder.
Proposed action	See: **Action.**
Residual impacts	Impacts that still remain, even after the design of mitigation measures. See also: **Impacts**, **Mitigation**
Rights-holders	Actors socially endowed with legal or customary rights with respect to heritage resources. In cases where there are Indigenous people involved, they have the right to free, prior and informed consent before approval of any project affecting their lands or territories and other resources, and need to participate in impact assessment.

Term	Definition
Scoping	Scoping identifies the issues that are considered to be important enough for planning and decision-making to be included in an Environmental and Social Impact Assessment, and eliminates or limits consideration of those issues that are of little or no concern. It allows an impact assessment to focus on important issues and to avoid wasting time and resources on unnecessary investigations. Scoping is a process that occurs early in an Environmental and Social Impact Assessment, usually after screening. It normally occurs during prefeasibility studies when the nature and scope of a project is being developed at a fairly high level with little or no detail. Thus, scoping is generally a *qualitative* assessment of potential environmental risks and impacts (while a subsequent impact assessment is more *quantitative*). Typically, the scoping process results in a document designed to direct the conduct of an EIA study. This document can take various forms, and have various names, in different impact assessment systems, e.g. Initial Environmental Examination, Scoping Report, Environmental and Social Impact Assessment Guidelines, Terms of Reference, and Project Brief.
Screening	Screening is the first step in the impact assessment process, and helps to decide whether an assessment is necessary. When the screening process indicates that a proposed action would potentially have negative impacts on a World Heritage property's OUV and other values, an impact assessment is required and the proponent should be encouraged to review the proposed action and revise it, if necessary, to avoid or minimize those potential impacts in the early stages.
Stakeholders	In a World Heritage context, stakeholders are those who possess direct or indirect interests and concerns about heritage resources, but do not necessarily enjoy a legally or socially recognized entitlement to them. In impact assessment, stakeholders are individuals or groups that may be affected by a project, or someone or an organization who represents such people. Collectively, the two are sometimes referred to as 'interested and affected parties'.
State of conservation	The state of conservation refers to the conditions (including, but not limited to, physical state, authenticity and integrity) of a World Heritage property, its vulnerabilities, affecting factors and the conservation measures in place to maintain its Outstanding Universal Value. In the World Heritage context, the term 'state of conservation' is often used to refer to the statutory process of Reactive Monitoring regulated by the Operational Guidelines. Information on the state of conservation of a property might be brought to the attention of the UNESCO World Heritage Centre, the Advisory Bodies and the World Heritage Committee through state of conservation reports transmitted by the State Party concerned to fulfil the requirements of paragraphs 169 and 172 of the Operational Guidelines, or by other sources, as per paragraph 174, within the Reactive Monitoring processes. These processes can include impact assessment.
Statement of Outstanding Universal Value (SOUV)	The official statement adopted by the World Heritage Committee when a property is inscribed onto the World Heritage List (or retroactively, for inscriptions dated before 2007). It summarizes the reasons why the property is deemed to be of Outstanding Universal Value, how it satisfies the relevant criteria, the conditions of integrity (and, for cultural properties, authenticity) and the protection and management arrangements and requirements that are in order to protect the property and sustain its Outstanding Universal Value in the long term. The adopted Statement of Outstanding Universal Value represents an essential reference for the management and monitoring of the property and of its state of conservation.
States Parties	The countries which have adhered to the Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) (UNESCO, 1972).

Term	Definition
Strategic Environmental Assessment (SEA)	Strategic Environmental Assessment applies impact assessment to strategic levels of decision-making such as policies, plans and programmes. It is generally understood as impact assessment that aims to mainstream biophysical, social, cultural, economic and health issues in strategic decision-making. Its purpose is to inform planners, decision-makers and affected publics on the sustainability of such decisions, to facilitate the search for the best alternative, and to enhance the credibility of the consequent decisions.
Terms of Reference	The Terms of Reference (ToRs) is a document typically given to the impact assessment team, describing the assessment which must be carried out, which issues should be considered and any particular methods to be used. This document is often adapted from the scoping report.
Values	In the context of heritage conservation, values are the qualities for which a heritage place is considered important to be protected for present and future generations. Values are determined by a range of social and cultural factors. What is valued by one section of society may not be valued by another, or may be valued for different reasons, or one generation may value it but it may not be valued by the next generation. Heritage places normally have a range of values: aesthetic, architectural, biological, ecological, historic, geological, social, spiritual, etc. These values are embodied in and conveyed by the attributes of the heritage place.
Wider setting	The wider setting of a World Heritage property may relate to the property's topography, natural and built environment, and other elements such as infrastructure, land-use patterns, spatial organization and visual relationships. It may include related social and cultural practices, economic processes and other intangible dimensions of heritage, such as perceptions and associations. The wider setting might also play an essential role in protecting the authenticity and integrity of the property, and its management is related to its role in supporting the Outstanding Universal Value.
World Heritage Centre	The UNESCO World Heritage Centre is a technical administrative body within UNESCO, established in 1992 and appointed by the Director-General of UNESCO. It acts as the Secretariat of the World Heritage Convention, is the focal point and coordinator within UNESCO for all matters related to World Heritage, and ensures the day-to-day management of the Convention.
World Heritage Convention	The Convention Concerning the Protection of the World Cultural and Natural Heritage is an international treaty adopted by the UN in 1972 that defines the kind of natural or cultural sites which can be considered for inscription on the World Heritage List for their Outstanding Universal Value for all humankind. Commonly known as the World Heritage Convention, it establishes how the international community as a whole is responsible for the protection of such heritage and sets out the duties of States Parties in identifying potential sites that may be eligible for inscription onto the World Heritage List and their role in protecting and preserving them. By signing the Convention, each country pledges to conserve not only the sites situated on its territory that have been recognized as being of Outstanding Universal Value, but also to protect its national heritage and to be involved in international efforts to protect, conserve and promote the heritage of humankind.
World Heritage property	A cultural, natural or mixed heritage place inscribed on the World Heritage List and therefore considered to be of OUV for humanity. The responsibility for nominating a property to the World Heritage List falls upon the State(s) Party(ies) where it is located. The World Heritage Committee decides whether a property should be inscribed on the World Heritage List, taking into account the technical recommendations of the Advisory Bodies following rigorous evaluation processes. When used as a general term, World Heritage refers to all the natural, cultural and mixed properties inscribed on the World Heritage List.

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APPENDIX: TOOLS

NOTES ON HOW TO USE TOOL 1 HERITAGE/CONSERVATION VALUES AND ATTRIBUTES

The purpose of this tool is to present a step-by-step approach to using the **Statement of Outstanding Universal Value** as a basis for the World Heritage component within a broader **Environmental and Social Impact Assessment (ESIA)**, or as a stand-alone **Heritage Impact Assessment**. The Statement of Outstanding Universal Value is a short narrative text that describes why a **World Heritage property** was considered so exceptional that it was inscribed on the World Heritage List. However, in order to be able to use the Statement, it is useful to analyse the content and break it down into **values** and **attributes**. The following pages illustrate how this might be done. The tool is provided as a general template to suggest one of many possible approaches, and it may be further adapted and improved as appropriate.

STEP 1: FIND THE STATEMENT OF OUTSTANDING UNIVERSAL VALUE

The website of the **World Heritage Centre** (https://whc.unesco.org/en/list/) has a dedicated section for each World Heritage property, including its Statement of Outstanding Universal Value. Properties are listed by country, or a search can be performed to find the specific property by name. The Statement of Outstanding Universal Value can be found on the first page of the property's listing.

STEP 2: ANALYSE THE STATEMENT OF OUTSTANDING UNIVERSAL VALUE

As a first approach to this text, it is useful to highlight different parts of the Statement of Outstanding Universal Value that describe values and attributes.

Heritage/conservation values
Some phrases in a Statement describe *why* a World Heritage property is considered to be exceptional, interesting, different or special – its values. The example in Box A1.1 explains how the Blue Sea Marine Park and the Old Town of Heritopolis is considered to be exceptional because its '*marine systems have developed unique and different ecosystems and species*' (values in red, italic).

Attributes
Some words in the Statement will describe the attributes that convey the Outstanding Universal Value (OUV). It is often helpful to think of attributes as those elements of a World Heritage property that are the focus of management and conservation activities at the property; the elements that we want to protect and pass on to future generations. They can be physical qualities, relate to material fabric and other tangible features, but can also be intangible aspects such as processes, social arrangements or cultural practices, as well as associations and relationships which are reflected in physical elements of the property. Examples of attributes (underlined) in Box A1.1 include 'seagrass beds', 'orange dugong' and 'reef zones'.

Box A1.1 Extract from the Statement of Outstanding Universal Value for a fictitious site of the Blue Sea Marine National Park and the Old Town of Heritopolis, with examples of values (*red, in italics*) and attributes (underlined)

The property is located *in an ecologically and globally outstanding region*, the Blue Sea. The property covers 400,000 ha with a buffer zone of 600,000 ha comprising both marine and terrestrial areas. It is *part of a larger transition area between northern and southern biogeographic zones* and its *marine systems have developed unique and different ecosystems and species*, including endangered ecological communities. The largely *undisturbed habitats* include rare examples of tropical coral reef systems and unique soft coral species. The property and its surrounding area also include seagrass beds and mangrove habitats. These habitats are *home to populations of seabirds, marine mammals, fish, corals, sharks, manta rays and marine turtles*, and the site *provides important feeding grounds for the last remaining healthy population of endangered orange dugong*. The Blue Sea Marine National Park is *an important larvae source area and hosts spawning sites* for commercial fish species.

The property *contains impressive natural phenomena and areas of great natural beauty* and *is relatively undisturbed*. It *contains an array of habitat types*, such as extensive coral reef complexes, mangroves, seagrasses and intertidal and mudflat areas which all enable the survival (breeding, feeding and resting) of endangered *orange dugong*, sharks, manta rays, dolphins and migratory birds. The different bio-physiographic reef zones, each *providing typical coral reef assemblages, support a wealth of marine life and breathtaking underwater vistas*.

Located on the Blue Sea coast, the historic port town of Heritopolis has *played a role throughout history as a place of interchange between historic cultures over time*. While much of *the architecture reflects the city's golden age of wealth as a trading port in the 18th century*, the *buildings respect the much older urban layout that dates back to the 6th century*. The *18th-century urban plan placed equal emphasis on the built fabric as on public green spaces* within the city centre. In addition, within the *urban fabric are a range of significant monuments from each stage of the city's history*: the Mausoleum of Eugenius, the Basilica of St Helena and the Great Mosque with its madrasa and baths, are *all important architectural masterpieces of different periods*. The eclectic mix of vernacular and monumental *architecture reflects the diverse communities who have lived in the city for one and a half millennia and who continue to follow traditional practices* today. *For centuries merchants, travellers and pilgrims have come to Heritopolis thanks to its bustling port which is connected to a widespread shipping network. Many of these visitors became residents over time, bringing their traditions and religious beliefs*, which are reflected in the ongoing festivals and traditions that are still carried out in particular neighbourhoods and associated with specific monuments, as well as *connected with spiritual beliefs connected to the natural world*. The *city continues its historic port function* and is a significant node in surrounding trade routes.

STEP 3: EXTRACT THE HERITAGE VALUES AND ORGANIZE THEM

The next step is to list the values that have been identified from the Statement of Outstanding Universal Value. It is not possible to rewrite the Statement; however, when the values are extracted, the format sometimes needs adjusting, e.g. forming a complete sentence or merging two similar values into a single sentence (Box A1.2).

Box A1.2. Example list of values related to Heritopolis and BSMNP's OUV

Heritopolis and Blue Sea Marine National Park is exceptional because...
... an ecologically and globally outstanding region
... The marine systems have developed unique and different ecosystems and species, including endangered ecological communities
... It provides important feeding grounds for the last remaining healthy population of endangered orange dugong
... Its architecture reflects the city's golden age of wealth as a trading port in the 18th century and its monuments are important architectural masterpieces of different periods
... The city continues its historic port function and is a significant node in surrounding trade routes

STEP 4: IDENTIFY ANY OTHER HERITAGE/CONSERVATION VALUES

In addition to the Outstanding Universal Value, it will also be necessary to identify other heritage/conservation values. These may be values recognized through other international, national and local designations, i.e. other reasons why the heritage property is considered to be important and of interest. There is no hierarchy of values – indeed, Outstanding Universal Value is usually interdependent with other values. In particular, values related to intangible heritage should not be forgotten.

For example, Heritopolis is considered of national importance because the community's relationship to their natural environment is reflected in their art and architecture of their religious places and celebrated in many traditional festivities.

STEP 5: INSERT THE VALUES RELATED TO OUV AND OTHER HERITAGE/CONSERVATION INTO A VALUES AND ATTRIBUTES TABLE

Once the values have been identified, they can then be inserted in the first column of a values and attributes table (Table A1.1). All the values that have been extracted from the Statement of Outstanding Universal Value can be inserted in the 'OUV' for level of recognition; other heritage/conservation values can be inserted in national or local values.

NB: in order for a value to be recognized as being of Outstanding Universal Value, it must have first been recognized as important at local and national levels. For this reason, it is not necessary to repeat the same value at every level of recognition.

Table A1.1 Example values and attributes table: Inserting values

Level of recognition	Heritage/Conservation values	Attributes	Sources of information
OUV	It is an ecologically and globally outstanding region		
	The marine systems have developed unique and different ecosystems and species, including endangered ecological communities		
	It is home to populations of various species		
	It provides important feeding grounds for the last remaining healthy population of endangered orange dugong		
	Its architecture reflects the city's golden age of wealth as a trading port in the 18th century and its monuments are important architectural masterpieces of different periods		
	Festivals and traditions are still carried out in particular neighbourhoods and associated with specific monuments, as well as connected with spiritual beliefs connected to the natural world		
	The city continues its historic port function and is a significant node in surrounding trade routes		
National			
Local			

STEP 6: INSERT THE ATTRIBUTES INTO THE VALUES AND ATTRIBUTES TABLE

Once the values have been inserted into the table, it is now time to return to the Statement of Outstanding Universal Value, analysed in Step 2, to extract the attributes. Remembering that attributes convey the heritage values, they can be inserted in the third column of the table, next to each value they support (Table A.1.2).

Table A1.2 Example values and attributes table: Inserting attributes

Level of recognition	Heritage/Conservation values	Attributes	Sources of information
OUV	It is an ecologically and globally outstanding region	Blue Sea, marine and terrestrial areas	
	The marine systems have developed unique and different ecosystems and species, including endangered ecological communities	Ecosystems, species, endangered ecological communities, rare examples of tropical coral reef systems and unique soft coral species, seagrass beds and mangrove habitats	
	It is home to populations of various species	Various species populations (e.g. seabirds, marine mammals, fish, corals, sharks, manta rays and marine turtles)	
	It provides important feeding grounds for the last remaining healthy population of endangered orange dugong	Feeding grounds, orange dugong	
	Its architecture reflects the city's golden age of wealth as a trading port in the 18th century and its monuments are important architectural masterpieces of different periods	18th-century architecture, port, Mausoleum of Eugenius, the Basilica of St Helena and the Great Mosque with its madrasa and baths	
	Festivals and traditions are still carried out in particular neighbourhoods and associated with specific monuments, as well as connected with spiritual beliefs connected to the natural world	Festivals, traditions, neighbourhoods, residents, monuments, spiritual beliefs connected to the natural world, natural environment	
	The city continues its historic port function and is a significant node in surrounding trade routes	Port, port functions, trade routes	

STEP 7: REFINING THE ATTRIBUTES IN THE VALUES AND ATTRIBUTES TABLE

Attributes might need to be refined and some research may be necessary in order to do so. This is because:

- Some Statements of Outstanding Universal Value do not specifically mention all the attributes that convey the heritage values. These will need to be added.
- Some attributes which are mentioned in the Statement of Outstanding Universal Value are very general and need to be more specific. In the Heritopolis example, 'species' and 'monuments' may need to be reviewed and explained in more detail. In addition, 'ecosystems' may be considered holistically, but more details may be needed during the impact assessment process.
- The features that convey other heritage/conservation values will also need to be listed.

STEP 8: IDENTIFYING INFORMATION SOURCES

The final column of the table can then be completed with references to sources of information that are available on the attributes (Table A1.3). These sources can range from knowledge held by people, bibliographic references, datasets, photographs, GIS, archival material or any other relevant material. Listing these can help guide research in the next steps of the **impact assessment** or highlight where new data needs to be gathered.

Some information about the World Heritage property may be highly sensitive and will need to be managed carefully to maintain confidentiality. This is particularly the case for sacred secret knowledge of Indigenous peoples. However, this can be noted in the table if appropriate.

Table A1.3 Example values and attributes table: Inserting information sources

Level of recognition	Heritage/Conservation values	Attributes	Sources of information
OUV	It is an ecologically and globally outstanding region	Blue Sea, marine and terrestrial areas	Della Corte et al. (2002). *Assessment of habitat management system of the Blue Sea Marine National Park and its Orange Dugong Habitat.*
	The marine systems have developed unique and different ecosystems and species, including endangered ecological communities	Ecosystems, species, endangered ecological communities, rare examples of tropical coral reef systems and unique soft coral species, seagrass beds and mangrove habitats	Mizuku et al. (2008). *Coral Reef Management Plan: Field Survey and Analysis.*
	Its architecture reflects the city's golden age of wealth as a trading port in the 18th century and its monuments are important architectural masterpieces of different periods	18th-century architecture, port, Mausoleum of Eugenius, the Basilica of St Helena and the Great Mosque with its madrasa and baths	Makee et al. (2012*a*). *Cultural Heritage and Urban Values Assessment.*
	Festivals and traditions are still carried out in particular neighbourhoods and associated with specific monuments, as well as connected with spiritual beliefs connected to the natural world	Festivals, traditions, neighbourhoods, residents, monuments, spiritual beliefs connected to the natural world, natural environment	Kim, F (2014). *Ancient Histories: The Architecture and History of Heritopolis.* Oral history (NB: potentially sensitive). Heritopolis Community Archives Project.

TOOL 1 HERITAGE VALUES AND ATTRIBUTES

Level of recognition	Heritage/Conservation values	Attributes	Sources of information
OUV			
National			
Local			

TOOL 2 IDENTIFYING POTENTIAL IMPACTS

The purpose of this tool is to illustrate a step-by-step approach to identifying impacts which might arise when an element of a **proposed action** interacts with one or more **attributes** of a **World Heritage property**. The tool is provided as a general template to suggest one of many possible approaches, and it may be further adapted and improved as appropriate.

The impact on nesting birds created by noise from a proposed action. An impact is the interaction of the proposed action with an attribute of the World Heritage property. In this example, the noise from a proposed action may impact on nesting birds, which when disturbed will leave the area. Where birds are an attribute of the World Heritage property, this would lead to a loss of Outstanding Universal Value.

STEP 1: LIST THE ATTRIBUTES OF THE WORLD HERITAGE PROPERTY

Tool 1 Values and attributes was designed to help identify the attributes that convey the Outstanding Universal Value of a World Heritage property. In Tool 1, the third column lists all the attributes, as shown in Table A2.1.

Table A2.1 Example values and attributes table

Level of recognition	Heritage/Conservation values	Attributes	Sources of information
OUV	It is an ecologically and globally outstanding region	Blue Sea, marine and terrestrial areas	Della Corte et al. (2002). Assessment of habitat management system of the Blue Sea Marine National Park and its Orange Dugong Habitat.
	The marine systems have developed unique and different ecosystems and species, including endangered ecological communities	Ecosystems, species, endangered ecological communities, rare examples of tropical coral reef systems and unique soft coral species, seagrass beds and mangrove habitats	Mizuku et al. (2008). *Coral Reef Management Plan: Field Survey and Analysis.*
	Its architecture reflects the city's golden age of wealth as a trading port in the 18th century and its monuments are important architectural masterpieces of different periods	18th-century architecture, port, Mausoleum of Eugenius, the Basilica of St Helena and the Great Mosque with its madrasa and baths	Makee et al. (2012a). *Cultural Heritage and Urban Values Assessment.*
	Festivals and traditions are still carried out in particular neighbourhoods and associated with specific monuments, as well as connected with spiritual beliefs connected to the natural world	Festivals, traditions, neighbourhoods, residents, monuments, spiritual beliefs connected to the natural world, natural environment	Kim, F (2014). *Ancient Histories: The architecture and history of Heritopolis.* Oral history (NB: potentially sensitive). Heritopolis Community Archives Project.

These attributes can be listed in the first column of Tool 2 (Table A2.2). Attributes may appear multiple times in Tool 1 but only need to be listed once in Tool 2.

Table A2.2 Example impact identification table: Inserting the attributes

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Tool 2	Identifying potential impacts												
2														
3														
4		Element of a proposed action that has the potential to cause an impact												
5	**Attributes**													
6	Ecosystems													
7	Coral reef systems													
8	Unique soft coral species													
9	Seagrass beds													
10	Mangrove habitats													
11	18th-century architecture													
12	Mausoleum of Eugenius													
13	Basilica of St Helena													
14	Great Mosque, madras and baths													
15	Festivals, traditions, neighbourhoods													
16	Port													
17	__ etc													

STEP 2: UNDERSTAND THE PROPOSED ACTION

The details of the proposed action need to be understood. All stages of the proposed action should be considered – construction, operation, decommissioning, recovery – to understand exactly what will take place (directly and indirectly), how and when for the proposed action's entire lifetime.

Stages in the life cycle of a proposed action. An impact assessment should consider the entire lifetime of a proposed action because impacts on Outstanding Universal Value might occur at any phase.

It is also important to understand if any associated actions are proposed (for example, the creation of an access road or the installation of power lines), and to assess the impacts of these as well. Likely indirect consequences of the proposed action should also be considered – for example, increased visitor numbers to a heritage place due to a new hotel complex, or the reduction of sales in traditional shops due to a new mall. However, at this stage of the impact assessment it is not necessary to evaluate if these elements of the proposed action might have positive or negative impacts: it is simply important to identify them all.

A list can be created which describes all the elements of the proposed action that might affect the World Heritage property. Some examples are provided below but the specific details of each proposed action will need to be understood.

- Demolition of buildings
- Construction of new buildings
- Construction of new access routes
- Relocation of residents
- New construction workforce
- Traffic related to site works
- Operation of new buildings
- Operation of new access routes
- New operational workforce

STEP 3: INSERT THE ELEMENTS OF THE PROPOSED ACTION INTO TOOL 2

Once the list of elements of the proposed action has been compiled, it can then be inserted into Tool 2 (Table A2.3).

Table A2.3 Example impact identification table: Inserting the elements of the proposed action

	A	B	C	D	E	F	G	H
1	Tool 2	Identifying potential impacts						
2								
3								
4		**Element of a proposed action that has the potential to cause an impact**						
5	**Attributes**	Demolition of buildings	Construction of new buildings	Construction of new access routes	Operation of new access routes	Relocation of residents	New construction workforce	__ etc
6	Ecosystems							
7	Coral reef systems							
8	Unique soft coral species							
9	Seagrass beds							
10	Mangrove habitats							
11	18th-century architecture							
12	Mausoleum of Eugenius							
13	Basilica of St Helena							
14	Great Mosque, madras and baths							
15	Festivals, traditions, neighbourhoods							
16	Port							
17	__ etc							

STEP 4: UNDERSTAND HOW THE ELEMENTS OF THE PROPOSED ACTION WILL POTENTIALLY INTERACT WITH THE ATTRIBUTES

This step involves understanding which elements of the proposed action may interact with the attributes of the World Heritage property. In some cases, there would clearly be an interaction; in other cases, maps and plans could be used to understand the precise locations of both the proposed action and the attributes. In complex cases, specialists may be needed to identify these interactions – for example, a bird specialist might be able to indicate whether the noise and disturbance caused by construction would impact on a particular species of bird during its nesting season; or whether a proposed underground train line might cause vibrations that could affect historic buildings in the area above.

Each potential interaction between an element of the proposed action and an attribute should be noted in Tool 2. This ensures that the proposed action has been systematically analysed at each stage, thereby identifying the full range of its potential impacts.

If this tool is being used at a **scoping** stage of an impact assessment or in preliminary analysis, then this identification of the interactions may be enough to outline the areas that will need further attention during the impact assessment process and which specialists and **stakeholders** might need to be involved.

Table A2.4 Example impact identification table: Noting each potential interaction between proposed actions and attributes

	A	B	C	D	E	F
1	Tool 2	Identifying potential impacts				
2						
3						
4		**Element of a proposed action that has the potential to cause an impact**				
5	**Attributes**	**Construction of new resort buildings**	**Operation of new resort**	**Demolition of buildings for new rail line and stations**	**Operation of new rail line and stations**	**... etc**
6	Coral reef	X	X		X	
7	Mangrove habitats	X			X	
8	Dugong	X	X		X	
9	Monuments (e.g. Mausoleum, Basilica)		X		X	
10	Residents	X	X	X	X	
11	Urban layout			X	X	
12	Historic port				X	
13	... etc					

STEP 5: DESCRIBE HOW THE PROPOSED ACTION WILL POTENTIALLY INTERACT WITH THE ATTRIBUTES

Once the potential interactions between elements of the proposed action and attributes have been identified, it can be useful to begin to describe them. This allows a more sophisticated analysis of the different types of positive and negative impacts that might occur, as well as a better understanding of the specific issues that need to be investigated. Therefore, notes can be included in this table with additional details so that it serves as a summary.

Table A2.5 Example impact identification table: More details are added for each potential impact to provide a summary of the issues that will need to be addressed in the impact assessment

Tool 2	Identifying potential impacts				
	Element of a proposed action that has the potential to cause an impact				
Attributes	**Construction of new resort buildings**	**Operation of new resort**	**Demolition of buildings for new rail line and stations**	**Operation of new rail line and stations**	**... etc**
Coral reef	Construction along shoreline could affect water quality in the marine environment	Increased tourism activities may damage coral		New access routes may increase access to protected areas	
Mangrove habitats	Mangroves cleared in construction area			New access routes may increase access to protected areas	
Dugong	Construction activities may disturb sensitive dugong	Increased tourism activities may disturb sensitive dugong		New access routes may increase people causing disturbance	
Monuments (e.g. Mausoleum, Basilica,		Increase in tourism pressure		New transport links may bring increase tourism	
Festivals and traditions		Potential economic opportunities as more people attend festivals (+) Increased tourism may change festivals and traditions (-)		Pilgrimage and procession routes may have to change when the rail line cuts through the town	
Urban layout			Demolitions may affect urban layout	Rail line may cut off some neighbourhoods from	
Historic port				New transport links may reduce port functions	
... etc					

TOOL 2 IDENTIFYING POTENTIAL IMPACTS

	ELEMENT OF A PROPOSED ACTION THAT HAS THE POTENTIAL TO CAUSE AN IMPACT						
	ELEMENT OF A PROPOSED ACTION	ELEMENT OF A PROPOSED ACTION					
ATTRIBUTES							

TOOL 3 EVALUATING POTENTIAL IMPACTS

The purpose of this tool is to illustrate a step-by-step approach to evaluating impacts, which includes a detailed consideration of how a proposed action will impact attributes of World Heritage. This tool should only be used after research has been carried out on the World Heritage property and the proposed action – it is not a substitute for research. Rather, Tool 3 allows the more complex data gathering and analysis to be summarized in a table so that the conclusions can be presented clearly and shared. The tool is provided as a general template to suggest one of many possible approaches, and it may be further adapted and improved as appropriate.

STEP 1: CARRY OUT RESEARCH ON THE IDENTIFIED POTENTIAL IMPACTS

In **Tool 2**, potential impacts were identified by noting the likely interaction between an element of the proposed action and an attribute:

Table A3.1. Example impact identification table with interactions noted

Tool 2	Identifying potential impacts				
	Element of a proposed action that has the potential to cause an impact				
Attributes	**Construction of new resort buildings**	**Operation of new resort**	**Demolition of buildings for new rail line and stations**	**Operation of new rail line and stations**	**... etc**
Coral reef	Construction along shoreline could affect water quality in the marine environment	Increased tourism activities may damage coral		New access routes may increase access to protected areas	
Mangrove habitats	Mangroves cleared in construction area			New access routes may increase access to protected areas	
Dugong	Construction activities may disturb sensitive dugong	Increased tourism activities may disturb sensitive dugong		New access routes may increase people causing disturbance	
Monuments (e.g. Mausoleum, Basilica,		Increase in tourism pressure		New transport links may bring increase tourism	
Festivals and traditions		Potential economic opportunities as more people attend festivals (+) Increased tourism may change festivals and traditions (-)		Pilgrimage and procession routes may have to change when the rail line cuts through the town	
Urban layout			Demolitions may affect urban layout	Rail line may cut off some neighbourhoods from	
Historic port				New transport links may reduce port functions	
... etc					

Each impact will need to be explored in order to be evaluated. This should be done on the basis of research, both qualitative and quantitative.

STEP 2: INSERT THE ATTRIBUTES AND ELEMENTS OF PROPOSED ACTIONS INTO TOOL 3

Based on the research conducted, each potential interaction identified in Tool 2 now needs to be entered into **Tool 3**. For each interaction, the **elements** of the proposed action should be listed in the **first column** and the **attributes** in the **second column** (Table A3.2)

Table A3.2. Example impact evaluation table: Inserting elements of proposed actions and attributes that will potentially interact

Tool 3	Evaluating potential impacts	
Element of proposed action	**Attribute**	**Description of potential impact**
Mangroves cleared in construction area	Mangrove habitats	
Operation of new resort	Dugong	
Operation of new resort	Festivals and traditions	
Operation of new resort	Festivals and traditions	

STEP 3: DESCRIBE HOW THE ELEMENT OF THE PROPOSED ACTION MAY IMPACT THE ATTRIBUTE

On the basis of the research conducted, the third column can now be completed with a description of how the element might ***impact*** the attribute (what will happen when they interact). This should be a short summary (Table A3.3).

Table A3.3. Example impact evaluation table: Inserting descriptions of potential impacts

Element of proposed action	Attribute	Description of potential impact
Mangroves cleared in construction area	Mangrove habitats	50 hectares of mangrove habitat would be removed, the area drained and levelled ahead of construction
Operation of new resort	Dugong	Planned tourism activities in coastal waters (including small boats and scuba diving) would cause dugongs to relocate
Operation of new resort	Festivals and traditions	Estimated 17,000 visitors to the resort per year will potentially visit local festivals, increasing funding for traditional events and providing secondary economic opportunities for local residents
Operation of new resort	Festivals and traditions	Proposed tourism strategy may change organization of festivals in terms of participants, logistics and sense of place

STEP 4: CHARACTERIZE THE ELEMENT OF THE PROPOSED ACTION

Columns **4**, **5** and **6** in Tool 3 explore the element of the proposed action in more detail:

- **How often** would this potential action take place? *Will it happen once? Or intermittently? Or continuously?*
- **How long** would this potential action last for? *Will it be short-term or long-term?*
- Is this potential action something that could be **changed back in the future**? *Is the action reversible or irreversible?*

The answers to these questions should be inserted in Tool 3 for each of the potential impacts listed. The responses for these questions need to be justified with sufficient data and research within the impact assessment report.

Table A3.4. Example impact evaluation table: Inserting the characteristics of elements of the proposed action

Evaluating potential impacts

Attribute	Description of potential impact	Frequency of action	Duration of action	Reversibility of action
		Once/ intermittent/ continuous	Short-term/ long-term	Reversible/ irreversible
Mangrove habitats	50 hectares of mangrove habitat would be removed, the area drained and levelled ahead of construction	Once	Long-term	Irreversible
Dugong	Planned tourism activities in coastal waters (including small boats and scuba diving) would cause dugongs to relocate	Continuous	Long-term	Irreversible
Festivals and traditions	Estimate 17,000 visitors to the resort per year will potentially visit local festivals, increasing funding for traditional events and providing secondary economic opportunities for local residents	Continuous	Long-term	Irreversible
Festivals and traditions	Proposed tourism strategy may change organization of festivals in terms of participants, logistics and sense of place	Continuous	Long-term	Irreversible

STEP 5: DEFINE THE CHANGE THAT WILL OCCUR TO THE ATTRIBUTE

Steps 3 and 4 have described the element of the proposed action. These answers should then inform columns **7**, **8**, **9** and **10**, which define the expected change to the attribute:

- Could the change to the attribute be **changed back in the future**? *Is the impact reversible or irreversible?*
- **How long** would that change to the attribute last? *Would it be temporary or permanent?*
- **How much** would the attribute change? *Would there be no change? Would there be negligible, some or large change?*
- What is the **quality** of that change? *Would it be positive or negative change?*

The responses for these questions need to be justified with sufficient data and research within the impact assessment report.

Table A3.5. Example impact identification table: Defining the nature of changes to the attribute

	Frequency of action	Duration of action	Reversibility of action	Reversibility of change to the attribute	Longevity of change to the attribute	Degree of change to the attribute	Quality of change to the attribute
	Once/ intermittent/ continuous	Short-term/ long-term	Reversible/ irreversible	Reversible/ irreversible	Temporary / permanent change	None/ negligible/ some/large change	Positive/ negative change
e removed, the area n	Once	Long-term	Irreversible	Irreversible	Permanent	Large	Negative
s (including small ngs to relocate	Continuous	Long-term	Irreversible	Irreversible	Permanent	Large	Negative
ear will potentially traditional events and ies for local residents	Continuous	Long-term	Irreversible	Reversible	Temporary	Some	Positive
ganization of and sense of place	Continuous	Long-term	Irreversible	Irreversible	Permanent	Some	Negative

STEP 6: EVALUATE THE IMPACT

The last column (**11**) of Tool 3 provides a final evaluation of each identified impact. It should reflect the **description** of the impact, as well as the **characteristics** of both the action and the **changes** to the attribute that were defined in the previous steps.

The following categories of impact can be either negative or positive:

- **Neutral**: Research into the potential impact reveals that no change would occur to the attribute.
- **Minor**: Research into the potential impact shows that the change would be negligible.
- **Moderate**: Research into the potential impact shows that there would be some change to the attribute.
- **Major**: Research into the potential impact shows that there would be large change to the attribute.

Table A3.6. Example impact identification table: Evaluating the degree of impact

y of	Duration of action	Reversibility of action	Reversibility of change to the attribute	Longevity of change to the attribute	Degree of change to the attribute	Quality of change to the attribute	Evaluation of impact
t/	Short-term/ long-term	Reversible/ irreversible	Reversible/ irreversible	Temporary / permanent change	None/ negligible/ some/large change	Positive/ negative change	Neutral/minor/moderate/major impact (negative and positive)
	Long-term	Irreversible	Irreversible	Permanent	Large	Negative	Major negative impact
	Long-term	Irreversible	Irreversible	Permanent	Large	Negative	Major negative impact
	Long-term	Irreversible	Reversible	Temporary	Some	Positive	Moderate positive impact
	Long-term	Irreversible	Irreversible	Permanent	Some	Negative	Moderate negative impact

STEP 7: USE THE EVALUATION OF IMPACTS TO CONSIDER ALTERNATIVES AND MITIGATION

The results from Tool 3 can be used to inform plans for the proposed action, which should be changed in order to avoid any potential negative impacts on Outstanding Universal Value, or at least reduce them so that they are minimized to an acceptable level. Potentially positive impacts can also be studied to understand if they can be reinforced.

The evaluation process is iterative – once the proposed action has been revised, it will need to be evaluated again using Tool 3.

STEP 8: USE THE EVALUATION OF IMPACTS FOR REPORTING

Once all the proposed actions and their potential impact have been evaluated, the impact boxes in the final column can be coloured, depending on the nature and degree of the impact, in order to communicate the final evaluation effectively.

Table A3.7. Example impact identification table with degree of impact shown by colour

y of	Duration of action	Reversibility of action	Reversibility of change to the attribute	Longevity of change to the attribute	Degree of change to the attribute	Quality of change to the attribute	Evaluation of impact
t/	Short-term/ long-term	Reversible/ irreversible	Reversible/ irreversible	Temporary / permanent change	None/ negligible/ some/large change	Positive/ negative change	Neutral/minor/moderate/major impact (negative and positive)
	Long-term	Irreversible	Irreversible	Permanent	Large	Negative	Major negative impact
	Long-term	Irreversible	Irreversible	Permanent	Large	Negative	Major negative impact
	Long-term	Irreversible	Reversible	Temporary	Some	Positive	Moderate positive impact
	Long-term	Irreversible	Irreversible	Permanent	Some	Negative	Moderate negative impact

TOOL 3 EVALUATING POTENTIAL IMPACTS

ELEMENT OF PROPOSED ACTION	ATTRIBUTE	DESCRIPTION OF POTENTIAL IMPACT	FREQUENCY OF ACTION	DURATION OF ACTION	REVERSIBILITY OF ACTION	REVERSI-BILITY OF CHANGE TO THE ATTRIBUTE	LONGEVITY OF CHANGE TO THE ATTRIBUTE	DEGREE OF CHANGE TO THE ATTRIBUTE	QUALITY OF CHANGE TO THE ATTRIBUTE	EVALUATION OF IMPACT
			Once/ intermittent/ continuous	Short-term/ long-term	Reversible/ irreversible	Reversible/ irreversible	Temporary / permanent change	None/ negligible/ some/large change	Positive/ negative change	Neutral/minor/ moderate/major impact (negative and positive)
										Major negative impact
										Moderate negative impact
										Minor negative impact
										Neutral
										Minor positive impact
										Moderate positive impact
										Major positive impact

CONTACT INFORMATION

Name and address	Brief details	Responsibilities within the Convention
ICCROM International Centre for the Study of the Preservation and Restoration of Cultural Property Via di S. Michele, 13 00153 Rome, Italy Tel: +39 06.585-531 E-mail: iccrom@iccrom.org www.iccrom.org	ICCROM (International Centre for the Study of the Preservation and Restoration of Cultural Property) is an intergovernmental organization with headquarters in Rome, Italy. Established by UNESCO in 1956, ICCROM's statutory functions are to carry out research, documentation, technical assistance, capacity building and public awareness programmes to strengthen conservation of immovable and movable cultural heritage.	The specific role of ICCROM in relation to the Convention includes: • being the priority partner in training for cultural heritage, • monitoring the state of conservation of World Heritage cultural properties, • reviewing requests for International Assistance submitted by States Parties, and • providing input and support for capacity-building activities.
ICOMOS International Council on Monuments and Sites International Secretariat 11 rue du Séminaire de Conflans 94 220 Charenton-le-Pont France Tel: + 33 (0) 1 41 94 17 59 E-mail: secretariat@icomos.org www.icomos.org	ICOMOS (International Council on Monuments and Sites) is a non-governmental organization with headquarters in Paris, France. Founded in 1965, its role is to promote the application of theory, methodology and scientific techniques to the conservation of the architectural and archaeological heritage. Its work is based on the principles of the 1964 International Charter on the Conservation and Restoration of Monuments and Sites (the Venice Charter).	The specific role of ICOMOS in relation to the Convention includes: • evaluation of properties nominated for inscription on the World Heritage List, • monitoring the state of conservation of World Heritage cultural properties, • reviewing requests for International Assistance submitted by States Parties, and • providing input and support for capacity-building activities.
IUCN International Union for Conservation of Nature Rue Mauverney 28 1196 Gland Switzerland Tel: +41 22 999-0000 E-mail: worldheritage@iucn.org www.iucn.org	IUCN (International Union for Conservation of Nature) was founded in 1948 and brings together national governments, NGOs, and scientists in a worldwide partnership. Its mission is to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable. IUCN has its headquarters in Gland, Switzerland.	The specific role of IUCN in relation to the Convention includes: • evaluation of properties nominated for inscription on the World Heritage List, • monitoring the state of conservation of World Heritage natural properties, • reviewing requests for International Assistance submitted by States Parties, and • providing input and support for capacity-building activities.
UNESCO World Heritage Centre 7, place de Fontenoy 75352 Paris 07 SP France Tel: +33 (0)1 45 68 11 04 whc.unesco.org	Established in 1992, the World Heritage Centre is the focal point and coordinator within UNESCO for all matters relating to World Heritage. Ensuring the day-to-day management of the Convention, the Centre organizes the annual sessions of the World Heritage Committee, provides advice to States Parties in the preparation of site nominations, organizes international assistance from the World Heritage Fund upon request, and coordinates both the reporting on the condition of sites and the emergency action undertaken when a site is threatened. The Centre also organizes technical seminars and workshops, updates the World Heritage List and database, develops teaching materials to raise awareness among young people of the need for heritage preservation, and keeps the public informed of World Heritage issues.	

Guidance and Toolkit for Impact Assessments in a World Heritage Context

The objective of this publication is to provide impact assessment guidance for World Heritage properties, using a framework that can be applied to both natural and cultural properties and to small or large-scale projects, either within broader Environmental and Social Impact Assessments (ESIA), or as a stand-alone Heritage Impact Assessment (HIA).

In addition, the Guidance also serves as a resource for capacity building and awareness raising about the management of World Heritage properties. It will form the basis of related capacity building activities provided by UNESCO, the Advisory Bodies, and the UNESCO Category 2 Centres, and can also be used independently for self-directed learning. It is intended to support implementation of the World Heritage Convention itself, along with the Operational Guidelines.

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