
Using remote access technologies

Lessons learnt from the Remote Access to World Heritage Sites – St Kilda to Uluru Conference

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Policy Brief



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Purpose of Policy Brief

This brief identifies an opportunity for the UK to influence UNESCO policy and take a lead role in promoting good practice in the use of new digital media technologies. The UK is positioned to lead the sector in the development of good practice in sustainable tourism, a developing priority for UNESCO and the World Heritage Centre. The community-led development of the new St Kilda Centre in the Western Isles is an international model for the use of remote access technology to further both local and international interests.

The early adoption of new technologies in the UK is a chance for the UK Government and its devolved administrations such as the Scottish Government, to be at the forefront of innovation and development of remote access digital technology, and position the UK as a key player in this sector.

This brief is also intended to stimulate debate and lead future policy on the use of remote access as a tool for preservation, education, science and innovation, and cultural development in World Heritage Sites (WHS). In particular its potential to benefit local communities, link sites nationally and internationally and present both tangible and intangible cultural heritage (ICH).

Executive Summary

Remote access is a major tool for sustainable tourism that will bring economic benefits to local communities.

The St Kilda Centre is a good practice model for international use and development of remote access media and demonstrates the lead role that the UK can play in this sector.

- Benefits to the UK National Commission for UNESCO (UKNC) and UNESCO of partnership working with other agencies to achieve UNESCO aims for World Heritage and sustainable tourism – sharing funding and good practice
- Benefits to UKNC and UNESCO of new digital media that enable UNESCO and its partners to do more at less cost particularly in terms of education and sustainable tourism
- Benefits to the UK in terms of a key role in the international World Heritage network and promotion of UK World Heritage Sites (WHS)
- Benefits to the UK in terms of strengthening links and dialogue with the World Heritage Centre in Paris
- Benefits to the UK in positioning itself as a world leader in an important emerging technology sector
- Benefits to the UK in terms of promoting UK innovation, enterprise and expertise to new markets

1 / Background

A two day conference ‘I Know Where I’m Going – Remote Access to World Heritage Sites’ was held at the University of Edinburgh 23rd – 24th November 2011. It was attended by delegates from over 20 countries and streamed live on the web to reach a wider international audience. The conference achieved its three main aims:

- To showcase some of the new technologies available worldwide and discuss their applications.
- To debate policy issues linked to the benefits and the challenges which these new technologies present for remote access, whether in terms of visitation, conservation, interpretation or for cultural tourism.
- To encourage site managers worldwide – particularly within the UNESCO World Heritage Sites (WHS) community – to consider the benefits and impact the new technologies could have for their own sites and allow them to investigate those further.

The first day examined the range of technology available and its application. Day two was focused on issues raised by its use and proposed uses, to stimulate discussion and share experiences on how the technology is currently being used and how it can be extended in the future.

The creation of partnerships and sharing of experiences was a key part of the conference. The conference’s accessibility through the live web stream and the opportunity for online questions to speakers and Twitter discussion, ensured that site managers from around the UK and across the world could participate.

The web archive of presentations is one legacy of the conference: <http://vimeo.com/mediascot>.

The online discussion and 44 responses to the online feedback survey are also part of the conference archive.

2 / Current situation

2012 marks the 40th anniversary of the 1972 UNESCO Convention on the Protection of World Cultural and Natural Heritage. 190 countries have ratified the convention to date and there are currently 962 World Heritage Sites (WHS) in 157 countries.

The UK Government has ratified the 1972 Convention and there are 28 World Heritage properties within the UK and Overseas Territories. World Heritage inscription is recognised as a catalyst for more effective conservation management, partnership, learning and education, funding and inward investment. It also has the potential to benefit local communities through economic regeneration and greater appreciation and understanding of cultural and natural heritage.¹

Remote access technology is a new and rapidly developing sector that can be utilised in many different fields to record and manage all types of property and sites. It is increasingly being utilised in the preservation and management of World Heritage property, and in the presentation and dissemination of knowledge.

Investment in the development of this technology can secure the place of the UK in this new and innovative sector.

This brief captures the main issues and recommendations from the conference.

1. Redbanks Consulting and Trends Business Research Ltd (2009) *World Heritage Status: Is there Opportunity for Economic Gain*

3 / Key considerations

- 1. World Heritage Sites are of Outstanding Universal Value**, and their protection is the responsibility of the State Party. In the UK it is the UK Government as signatory to the 1972 World Heritage Convention. Day-to-day management of many sites in the UK is delegated to site managers working on behalf of steering groups made up of a range of stakeholder organisations. Each site has the dual challenge of protecting and preserving heritage whilst seeking to balance the demands to maximise economic benefit and cater to increasing numbers of visitors searching for an ‘authentic’ experience. Some sites are remotely located, have a fragile environment or are vulnerable to damaging impacts from increased visitor numbers. Remote access technologies can provide a way to both access a site and create economic benefits for local communities.
- 2. Remote access technology** has had increasing application in the recording of important monuments and sites and as an aid to their care and future maintenance. Maintaining accurate digital as well as any existing drawn and photographic images, allows sites to be studied in detail and the impact of any repairs or changes understood. The Scottish Ten Project is a partnership between Historic Scotland (on behalf of the Scottish Government), the Glasgow School of Art and the CyArk Foundation to create accurate digital models of Scotland’s five World Heritage Sites and five international sites, in order to aid the sites’ conservation and management. Additionally, the models can be used to enhance the existing interpretation and education programmes at each site and to develop virtual access to sites that are restricted to the public.
- 3. Opportunities for emerging new technologies** to be used as a tool for inventive interpretation and virtual access for visitors is the background to the November 2011 Remote Access Conference in Edinburgh.

The conference:

- Showcased some of the new technology available and its varied application
- Looked at the benefits and challenges that new technology brings
- Encouraged site managers worldwide to look further at how these can be applied within their own site
- Demonstrated that not all new technology is expensive – mobile and smart phones are being used to open up opportunities particularly in the less developed parts of the world

4. In looking at the conference and the key messages that came out from the presentations, discussions and feedback, what should we take forward and how can it be progressed?

Key messages from the I Know Where I'm Going Conference (IKWIG):

- We need better policies to promote responsible and sustainable tourism that make the link between heritage and economic growth, and benefit local communities
- Remote access technology is a great tool for active site management – but the price needs to come down so we can find ways to make the technology easy to use and utilise for all purposes
- Mobile technology promotes connection and networks. Social media can create online communities that engage with and support a WHS
- Remote access media links tangible and Intangible Cultural Heritage (ICH). ICH can be an expression of community within the presentation and promotion of sites, and ICH is important to overall understanding and a sense of place
- Promote WHS destinations
- Authenticity can be preserved through the concepts of shared responsibility and stewardship
- The St Kilda Centre stands as a case study of how digital technology can present an extraordinary site and provide a focus for community and culture locally
- Partnership and networking are the best ways to spread good practice and get things done, and this is an important message for the 40th anniversary of the World Heritage Convention

Remote Access Technologies are a many faceted tool and the range and diversity of applications is immense, and can be utilised in many ways and for many purposes.

5. Post Conference Feedback:

- Was strongly positive
- Delegates valued the networking and sharing of experience and found the ideas stimulating
- For many attendees it raised awareness of the range of technologies and their diverse application and the immense possibilities for digital technology as a tool
- Delegates are now looking at ways to apply new digitally based media and use it to promote access and understanding
- However – you need people – to interpret the data and make it accessible, and to make it all happen
- There is not one size fits all for technology and WHS – appropriate design and application has to be considered for each place and its needs. Heritage protection requires a multidisciplinary approach
- New technologies don't have to be expensive

The Issues:

- 6. Sustainable tourism and sustainable development** are at the heart of wider benefits that cultural and natural heritage can bring to communities. Income generation is crucial for the continued care and maintenance of many sites, and as James Rebank's presentation to the second day of the conference set out, it is generally the smallest amount of visitor spend that actually goes to the site itself. This is true of sites whether they be in China or Scotland.
- 7. Stewardship** – shared values of preservation and the environment, which leads to a balanced approach to future management.

8. Remote access technologies are a many faceted tool and the range and diversity of applications is immense, and can be utilised in many ways and for many purposes. The case studies and applications demonstrated at the conference show how once the technology is available and in day-to-day use, further applications and uses can be developed by site managers and those actively engaged in the site. From local people using smart phones in Somaliland to monitor heritage sites and check livestock prices, to the educational tools and stories that CyArk develops utilising its 3D images. However it is important to use technology appropriate to the place and which can continue to be maintained and operated. Actions needs to ensure local support for continuing value. Experiences in Ghana are of short-term projects which bring little to the local community. CyArk trains local teams to carry out data gathering and image making with continuing support and mentoring over a number of years.

Mobile phones are more widespread than computers and are increasingly taking over for visitor experiences – mobile apps, for example Mainlimes (Frontiers of the Roman Empire) and Mount Rushmore (Scottish Ten).

9. Knowledge and Understanding – Awareness – the experience in the UK is that whilst some local residents are aware of UNESCO and World Heritage, or are knowledgeable about the history or heritage of a site, many more will have more limited views on the WHS and what the implications are for its preservation and use. Developing sustainable tourism that benefits local people and brings income into the economy is as relevant in the UK as it is in developing countries around the world. At the same time innovative use of technology to promote a site to visitors can also enhance the experience of local people and raise awareness of the role of the wider role of UNESCO and the UK National Commission for UNESCO.

10. A destination, not a site – pressures from visitors are often the result of large numbers of visitors spending the shortest time possible viewing the accessible highlights of a site – such as Petra, Edinburgh or Stonehenge, and then moving on to the next target site. Developing a destination approach, with many and varied opportunities for visitors to spend more time understanding the place and its wider context and links to other sites and areas (i.e. themed linked WHS, transnational sites).

11. Connection and networking – Technology can be utilised in each place to manage a WHS, develop educational tools and skills and engage people in the site, but it is also invaluable in linking sites, in promoting links for managers and visitors and in a continuing connection to a site through social media. The Jurassic Coast values its Tweeting friends and Facebook provides a day-to-day link for an increasing number of people. Wikimedia in Scotland extends ownership of ICH and the emerging database.

12. Tangible and Intangible Cultural Heritage – The conference has shown how ICH adds value to physical sites – engaging local people by making the links between culture and practices and physical sites – in Orkney and Somaliland, and in promoting this to visitors. For visitors, remote access media can provide an additional layer of understanding of culture, customs and associations which evoke the spirit or sense of a place. CyArk links its digital preservation to the stories of a place bringing to life. At Uluru it represents a way for indigenous people to explain the cultural reasons why access is restricted. The concept of social capital, the bonds that connect places and individuals to a place, has been shown to enhance wellbeing and quality of life.

13. Partnership – Working together at site management, national and international levels, and the support of the developed world for the developing world (Swiss commitment to engage in Somaliland, Nordic countries backing for sustainable tourism initiatives). Sharing good practice and sharing technologies enhances opportunities.

14. Case Studies – The promotion of good practice and raising awareness of potential uses of remote access media. There is a role for UNESCO to showcase examples from around the world and provide a forum for networking and experience sharing. Case studies such as the development of the St Kilda Centre demonstrate shared values and shared opportunities as a result of promoting a site through its culture and customs and evoking the sense of place.

4 / Options

Remote access technology is a developing sector with significant economic, cultural and environmental implications. Future development and access to the technology itself will be driven by market forces and there is an opportunity for the UK to promote innovation and enterprise to position itself to take a leading role.

- a. There is an opportunity to support the remote access network and build on the success of the I Know Where I'm Going (IKWIG) conference to help the UK position itself within this innovative sector and take a lead role in relation to the work of the UNESCO World Heritage Centre.

Or

- b. To take no further action allowing the sector to develop but without a clear role for the UK.

5 / How can we promote remote access technologies more widely and develop longer term opportunities?

1. Sharing technology – share good practice on both preservation and presentation.
2. Remote access media links to all aspects of UNESCO's mission – education, science and culture. The conference highlighted a role for UNESCO in promoting partnerships and providing a forum for sharing good practice around the world.
3. Partnerships around the world between developed and developing countries can share the technology and opportunities. The UK is already involved in promotion of this through the UK Department for International Development (DFID) and there is a role for cultural and natural heritage to spread innovation and positive change. The Scottish Ten is the Scottish Government's existing commitment to preservation using remote access technology that is being shared with a number of cultural sites around the world. That project provides an opportunity to use the data and images in imaginative ways which will have a wider interest and application.
4. Within the UK, remote access media can link cultural and natural sites to share experiences and promote the links between sites. The UK is a destination and shared applications will highlight the diversity of national culture to visitors.
5. Create multidisciplinary opportunities from preservation and recording projects. For example the CyArk Foundation promotes this within its mission to record the CyArk 500.
6. Sustainable development and sustainable tourism are key ways to utilise new digital technology for local economic benefit.

7. Remote access media is not just for visitors – it is also an important way of connecting places with ICH, and enhance and share knowledge and understanding of a place within local communities and all generations.
8. The accessibility of mobile technology creates opportunities for promoting education and culture widely around the world and has implications for wider agendas, such as the role of women in many developing countries where education and awareness is often the key to improve the lives of individuals and communities.

6 / Recommendations

UNESCO, the UK and World Heritage Sites can gain a great deal from utilising the latest technological developments. IKWIG has given the UK a leading role within this network. There should be support for the development of the network, which will help to maintain a leading role for the UK in the future.

The UNESCO World Heritage Centre has recognised that the St Kilda Centre is a model project and plans to make it an important case study for remote access within its Sustainable Tourism Strategy. This should be supported as a means of strengthening the UK role in developing UNESCO policy and promoting greater partnership for future UNESCO/World Heritage Centre initiatives.

7 / Acknowledgements

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The views contained in this policy brief are those of the UK National Commission for UNESCO and its Scotland Committee and do not necessarily reflect those of the UK Government, its devolved administrations or the individuals or organisations which have contributed to this report or the remote access to World Heritage Sites conference sponsors.

8 / References

Beyongolia Conference Report (see Appendix Two)

Fielden, B M and Jokilehto, J. *Management Guidelines for World Cultural Heritage Sites* (ICCROM/UNESCO/COMOS)

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Appendices

Appendix 1: I Know Where I'm Going: Remote Access to World Heritage Sites
Key interventions summary

Appendix 2: I Know Where I'm Going: Remote Access to World Heritage Sites
webcasting report

To download the appendices please visit www.unesco.org.uk/briefs

