



**Strengthening Disaster Risk Reduction
at World Heritage Properties:
the Olympia Protocol for International Cooperation**

UNESCO WORLD HERITAGE CENTRE

2009

1. INTRODUCTION: WHAT IS THIS DOCUMENT AND HOW TO USE IT

This document is part of the outcome of a *Workshop on Disaster Risk Management at World Heritage Properties*, jointly organized in November 2008 at Olympia (Greece) by the Hellenic Ministry of Culture and the UNESCO World Heritage Centre, with a financial contribution from the UNESCO Goodwill Ambassador Mrs. Marianna Vardinoyannis.

During this workshop, which gathered experts and heritage site managers from various regions, participants discussed the scope and contents of a possible “Programme” for reducing disaster risks at World Heritage properties, which would assist States Parties to the 1972 Convention in translating into action the “*Strategy for Reducing Risks from Disasters at World Heritage Properties*” adopted by the World Heritage Committee in 2007¹. The present document provides a summary of the discussions held at Olympia with regard to this possible Programme.

The participants in the Olympia Workshop recognised that a Programme for reducing disaster risks at World Heritage properties would have a considerable scope and require the joint effort of all the actors engaged in the implementation of the World Heritage Convention. Considering the difficulty of identifying resources for the entire Programme in one time, it was suggested that its implementation could proceed in steps, depending on the availability of funds and the interest of potential donors. It was not to be expected, thus, that this Programme be implemented within a given time frame as a standard project under a single, comprehensive funding, but rather that it may provide a framework under which separate, but related activities could be developed, funded and carried out. For this reason, the present Document makes reference to a “Olympia Protocol for International Cooperation”, named after the venue of the above-mentioned Workshop, rather than to a Programme in the more traditional sense.

It is hoped, indeed, that States Parties would use this document as a general framework, or protocol, for developing cooperation among them – possibly through partnerships and twinning arrangements among World Heritage properties sharing similar disaster risks - in the area of disaster risk reduction at World Heritage properties. At the same time, States Parties and other potential donors are encouraged to provide support to enable the UNESCO World Heritage Centre and other partners to ensure the overall coordination of the initiative as well as the implementation of the proposed activities at global level, within the framework of the Strategy approved by the World Heritage Committee.

Some activities foreseen under this Document have already been carried out and others may be implemented with funding through the International Assistance scheme under the World Heritage Fund, or with support from States Parties and other donors. The majority of them, however, are currently not funded. The more resources can be

¹ See Document WHC-07/31.COM/7.2, available online from:
<http://whc.unesco.org/archive/2007/whc07-31com-72e.doc>

mobilised, the larger the scope of the initiative that will be implemented and the more World Heritage sites that will benefit from it.

The present document includes an initial chapter explaining the rationale for its establishment (i.e. why such a protocol is needed), an outline of its main objectives and a description of proposed activities. The latter include both initiatives that would need to be implemented by UNESCO, owing to their global scope, and actions (the majority) that could be carried out directly by States Parties, individually or, more appropriately, in the framework of twinning arrangements among World Heritage sites, as mentioned above. Both the global and individual activities would be framed within a single, coherent strategy, where each step contributes to the achievement of the broader aims of the Protocol.

2. RATIONALE: WHY REDUCING DISASTER RISKS

World Heritage properties, as with all heritage properties, are exposed to natural and man-made disasters, which threaten their integrity and may compromise their values.

By disaster we mean here a sudden event whose impact exceeds the normal capacity of property managers, or of a community, to control its consequences.

The loss or deterioration of these outstanding properties would negatively impact the national and local communities, both for their cultural importance as a source of identity and of information on the past, and for their socio-economic value. Experience, moreover, has demonstrated that the conservation of cultural heritage and the transmission of traditional technology, skills, and local knowledge systems, are not just important *per se*, i.e. for their intrinsic historic, artistic or scientific significance, but because they may contribute fundamentally to sustainable development, including the mitigation of disasters. Heritage-sensitive practices, in fact, can assist in significantly reducing the impact of disasters, before, during and after they have taken place.

For instance, research in areas affected by seismic activities has shown that buildings constructed with traditional techniques have often proven to be very resilient to quakes, when well maintained, as compared with modern construction. Sustainable land-use practices for agricultural and forestlands act to prevent landslides and floods, which each year cause more casualties than earthquakes in many parts of the world.

Risks related to disasters within heritage sites are a function of their vulnerability to different potential hazards. The recent natural disasters in Bam, Iran, or in the Old Fort of Galle in Sri Lanka are high profile examples of the vulnerability of cultural heritage worldwide. Natural heritage can also be threatened, in exceptional circumstances, by natural disasters. Hazards, however, may be also man-made, such as fire, explosions etc. Accidental forest fires, conflicts, massive refugee movements,

bursting of tailing pond dams as in Doñana, Spain, are certainly a concern to natural WH sites. If natural disasters are difficult to prevent or control, hazards resulting from human activities can be avoided, and the vulnerability of heritage sites to both natural and man-made disasters can be reduced, thus lowering the overall risk threatening a property.

Despite this, most World Heritage properties, particularly in developing areas of the world, do not have any established policy or plan for managing the risk associated with potential disasters. Existing national and local disaster preparedness mechanisms, moreover, usually do not take into account the significance of these sites and do not include heritage expertise in their operations. At the same time, traditional knowledge and sustainable practices that ensured a certain level of protection from the worst effects of natural hazards are being progressively abandoned. As a result, hundreds of sites are virtually defenseless with respect to potential hazards and consequent disasters.

Strengthening disaster risk management for properties inscribed in the World Heritage List, therefore, is necessary to prevent and reduce damage from disasters and preserve their cultural and natural values, thus protecting an essential support for the social and economic well-being of their communities.

UNESCO and other partner institutions such as ICCROM, ICOMOS, IUCN and ICOM, have in the past years developed a number of initiatives aimed at strengthening the capacity of site managers to address disaster risk management for World Heritage cultural and natural properties. These drew from concerns originating after the Second World War and renewed in 1992 because of the high and visible incidence of disasters and armed conflict on television in the early 90s. They were part of a general movement from curative approaches to conservation to a concern for preventive approaches, and from managing interventions to managing sites.

While the need to strengthen disaster risk management for World Heritage has been stressed in the past, governmental commitments have not yet followed. In particular, the *Kobe-Tokyo Declaration* of 1997 and the *Recommendations from the Kobe Thematic Session on Cultural Heritage Risk Management* in 2005 pinpointed the necessity for better integration of concern for risk in cultural heritage management, and recognition of the value of local and indigenous knowledge in disaster risk reduction. The Davos Declaration, adopted in 2006 by the International Disaster Reduction Conference (IDRC), reiterated these principles².

In terms of resource materials, ICCROM has published the *Guidelines for integrating risk preparedness in the management of World Cultural Heritage* (Stovel, 1998) and more recently coordinated the development of a *Resource Manual on Disaster Risk reduction for World Heritage Properties*, jointly prepared with the World Heritage Centre and IUCN. This Resource Manual, which is currently being tested and finalised, is expected to be ready for dissemination during 2009. ICOM, for its part,

² The *Davos Declaration* is accessible online from:
http://www.idrc.info/userfiles/image/PDF_2006/IDRC_Davos_Declaration_2006.pdf

has published in 2003, in the framework of its Museums Emergency Programme (MEP), the *Proceedings of the International Symposium on Cultural Heritage Disaster Preparedness and Response* presenting various worldwide case studies of disaster risk management of movable and immovable cultural heritage. In occasion of the MEP training component, ICOM initiated a partnership with ICCROM and the Getty Conservation Institute to develop the *Teamwork for Integrated Emergency Management* (TIEM) course. Under this partnership, didactical material principally targeted to movable heritage professionals has been produced. ICOM began the MEP project bibliography, available on line at the Getty Conservation Institute Web site, on the subject of disaster risk management for the heritage field. Topics range from specific types of emergencies to the various types of heritage they can affect. The bibliography also reflects the various processes of integrated emergency management—risk analysis, developing plans, response and recovery.

3. OVERALL OBJECTIVES AND STRATEGY FOR IMPLEMENTATION

The overall objective of this Protocol is to provide a general framework for developing cooperation among States Parties in order to translate the *Strategy for Reducing Risks from Disasters at the World Heritage Properties* into concrete actions at the site level.

The Protocol is based on a combination of global and site-based activities complementing each other and contributing to its overall goal. Its main components are:

1. The establishment of a Clearing House on Disaster Risk reduction;
2. The organization of International Workshops to introduce the 2007 Strategy for Disaster Risk reduction at World Heritage Properties and the scope and contents of the present Protocol for Cooperation. These workshops should also facilitate the identification of pilot sites – and the establishment of twinning arrangements among them – for the implementation of the Protocol;
3. The development, mostly through partnerships or twinning arrangements, of disaster risk reduction strategies on pilot properties inscribed on the World Heritage List, selected among those more vulnerable to possible hazards in different regions of the world, and also using, as a methodological reference, the recently developed World Heritage Resource Manual for Disaster Risk Reduction;
4. The organization of International Workshops to review the progress made at different pilot sites, harmonise the approaches and share the lessons learnt. The experience resulting from these activities will be widely disseminated through publications regional meetings, on line communications, etc.;

5. The development of complementary capacity-building, educational and communication initiatives.

4. ACTIVITIES AND EXPECTED RESULTS

A detailed description of the proposed activities is provided here below, arranged according to the three most relevant strategic objectives of the World Heritage Convention, i.e. Conservation, Capacity-Building and Communication, taking into account that the strategic objective of “Community” – adopted by the Committee in 2007 - is integrated within each of these. Activities that could be implemented directly by the States Parties, for example in the framework of twinning arrangements, are marked with an asterisk.

Conservation

4.1 Establishment of a Clearing House on Disaster Risk Reduction

It is proposed to develop a Clearing House of resource materials on Disaster Risk Reduction – possibly at the World Heritage Centre or at ICCROM - including policy texts, guidance, case studies and illustrations, drawing also from submission by States Parties in the context of Nominations and the Periodic Reporting exercise. This would include information on existing initiatives and twinning arrangements between World Heritage properties. ICOM will continue to collect and put at disposal resource material concerning principally the disaster risk reduction of movable heritage.

Expected result: Information and reference materials on disaster risk reduction for World Heritage are accessible to those concerned.

4.2 International Workshops³ to introduce the Protocol, to identify pilot sites and facilitate the establishment of twinning arrangements

These international workshops (as many as appropriate and feasible) would involve bringing key management personnel from selected sites together with disaster risk reduction experts for cultural and/or natural heritage, depending on the selected sites. The Protocol for International Cooperation and its strategy for implementation will be presented, and case studies reviewed. In selecting potential sites, attention will be paid to ensure diversity of typologies (including presence of movable heritage), of disaster risks – with consideration given to post-disaster areas and linkages with Climate Change - and of geographical regions, with priority given to properties exposed to multiple hazards.

Expected result: The objective and scope of the protocol for cooperation as well as a methodology for developing disaster risk reduction strategies for each site are introduced. Experiences on disaster risk reduction are shared among management

³ The Olympia Workshop of November 2008 intended to achieve these objectives, as well as serving as an opportunity for the launching of the Programme and this Protocol for International Cooperation.

personnel, while concrete twinning arrangements among partner World Heritage sites are developed; understanding of the “Strategy for Reducing Risks from Disasters at World Heritage Properties” (adopted by the World Heritage Committee in 2007) is increased.

4.3* Workshops to build capacities of concerned stakeholders and launch the development of appropriate disaster risk reduction strategies at selected sites.

These workshops, to be organized once two or more World Heritage properties have decided to cooperate in the framework of a twinning arrangement, will involve key management personnel from each site, local and national-level authorities responsible for reducing disaster risks in each country concerned (i.e. civil defense officials) and international resource persons. A general introduction on Disaster Risk Reduction will be provided, based on the selected sites’ case studies, and modalities for long-term cooperation will also be identified through the establishment of time-framed action plans. This would be the first step towards the development of appropriate disaster risk reduction strategies at the concerned World Heritage properties.

Expected result: Capacities among the key stakeholders are built, and a concrete time-framed plan of action is defined for the implementation of activities in the context of established cooperation agreements (e.g. twinning) among States Parties and other partners.

4.4* Risk Assessment at selected pilot properties

An analysis and assessment of the risks threatening the selected pilot sites and the people living in them will be led by responsible site managers, in collaboration with local civil defense officials and in consultation with disaster risk experts, taking into account existing records of disasters, potential hazards and the vulnerability of the property. This assessment will also provide a complete understanding of existing policies and measures for reducing the impact of disasters (if any) on the World Heritage property, and opportunities for cooperation with other concerned institutions.

Expected result: Risks to the World Heritage property are defined, which will have to be reduced through appropriate identification of potential hazards and vulnerabilities of the site,. Priorities for intervention are set up.

4.5* Socio-economic analysis and research on traditional skills and local knowledge systems relevant to disaster risk reduction

This activity will enable the understanding of the opportunities and threats, resulting in particular from the interaction between the local communities and the selected World Heritage properties, with regard to the risks associated to disasters. Research will be carried out on traditional land-uses, skills, knowledge systems etc. whose continuation or revitalization might be beneficial to strengthen the preparedness to disaster for the protection of the World Heritage property. Research on traditional knowledge related to movable heritage disaster risk management will also be carried out. At the same time, the study will take into consideration the social and economic feasibility of the integration of this traditional knowledge in the management of risks within the property, making suggestions for its adaptation to modern constraints and requirements.

Expected result: Essential information is provided for the establishment of consultations with the local community and valuable insights on its possible participation in the reduction of disaster risks in the context of the management of their World Heritage property.

4.6* Inter-institutional Workshops on Disaster Risk Reduction at site level

At this stage of the Protocol for Cooperation, it is proposed to organise an Inter-institutional Workshop at each of the pilot-sites, including representatives from the heritage agency responsible for the protection of the property, and of all other institutions and agencies, both at national and local levels, concerned with disaster risk reduction. The workshop, moderated by an international resource person, will facilitate the exchange of information on perceived risks at the World Heritage property and existing policies and procedures to mitigate the impact of disasters. This will provide essential input for the integration of concern for disaster risks within Management Plans for the World Heritage property.

Expected result: An understanding of the respective needs, roles and capacities with respect to disaster risk reduction for the World Heritage property is shared among participating institutes, and possible weaknesses and the scope for better coordination and integration are identified.

4.7* Seminars with local community

A Seminar with representatives from the local communities will be held at each selected property in order to sensitize them to the risks from disasters affecting the World Heritage site in or around which they live, and the possible impact of a hazard on their persons and well-being. The Seminar will present and discuss the results of the research (see points 4.4 and 4.5 above) and solicit a reaction from the local

communities on its possible direct involvement in disaster risk reduction activities for the protection of the World Heritage property, and the appropriate ways of achieving this.

Expected result: A full understanding of the opportunities and constraints for the integration of local community concerns and capacities related to disaster risk reduction into the Management Plan for the World Heritage property are shared among local communities.

4.8 Mid-term International Workshop to review progress of the activities and validate methodologies for developing an appropriate risk management strategy at site level.

This international workshop, gathering representatives from the pilot sites where activities are being implemented, will enable the review of experiences and learning among the participating sites, and compare proposals for finalising their respective risk-sensitive management plans.

Expected result: The approach and methodologies being developed within each site are confirmed or reoriented, best practice are shared, and the network among all participants in the initiative is strengthened.

4.9* Development of disaster risk reduction strategies at selected World Heritage properties

When activities 4.1 to 4.7 are completed, Heritage Conservation Agencies, assisted by international resource persons, will develop the appropriate Disaster Risk Reduction Strategies for their properties, taking into account all the elements gathered throughout the Programme. These will be integrated on one hand into Management Plans for the properties, if existing, and into existing Disaster Preparedness, Response and Recovery Plans at national and local levels. They will include the identification of indicators for monitoring the effective management of disaster risks at the sites.

Expected result: conservation at selected World Heritage properties is strengthened through improved disaster risk reduction strategies.

4.10* Follow up at Pilot Properties

A follow-up evaluation is suggested, at each pilot World Heritage property, to assess the impact of the activities carried out on the conservation and management of the sites. This evaluation could take place two years after the completion of activity 4.9 above.

Expected result: lessons from past activities are learnt and corrective measures identified.

Capacity building and Communication

4.11 Publications and dissemination of materials on the web

After the completion of the work at the selected pilot sites, a publication will be prepared, and translated into the official languages of UNESCO. Complementing the “Resource Manual” developed by ICCROM, IUCN and the World Heritage Centre, this publication will provide concrete references and best practices showing how the methodology outlined in the Resource Manual can be applied in practice. The Resource Manual will be also made available on the web, possibly in a more user-friendly format.

Expected result: Publications and materials (including on the web-site of the World Heritage Centre) on disaster risk reduction are disseminated to site managers around the world.

4.12 Distribution of information for each Region

Distribution of the results from the above activities will also take place in conjunction with scheduled regional meetings for each of the five geographic regions of the world, i.e. Africa; Arab States; Asia and the Pacific; Europe and North America; and Latin America and the Caribbean. The staff members of the Heritage Conservation Agencies for each pilot site will be asked to contribute to information sessions and presenting the above-mentioned publication, and to share their experience in helping completing the risk-sensitive Management Plan for their site in the context of their particular region. This component *will complement the above publication in building capacities among the various regions of the world.*

Expected result: Firsthand knowledge about the development of disaster risk reduction strategies from the pilot sites exchanged.

4.13 Development of a curriculum for a Training Course on Disaster Risk Reduction

Building on the experience of the activities carried out, and on the methodology outlined in the “Resource Manual”, it is suggested to develop a curriculum for a short (one or two weeks) course on World Heritage Disaster Risk Reduction, which could possibly become a regular feature of ICCROM’s Training programmes. This Course could be offered in different regions of the world, in partnership with the various

Category 2 Centres on World Heritage that are being established, using one of the pilot World Heritage properties taking part in the initiative as a case study.

Expected result: Progress is made towards the development of a much-needed training programme which would build capacity on reducing disaster risks among those responsible for the conservation of World Heritage properties.

4.14 Development of a component on Disaster Risk Reduction within the World Heritage in Young Hands School Kit and activities

It is proposed to expand the current School Kit “World Heritage in Young Hands” by introducing a component on Disaster Risk Reduction. The related activities could envisage visits to sites exposed to disaster risks and activities to reduce underlying risk factors.

Expected result: Educational material is developed which would contribute to sensitising the young people to the threats posed by disasters to World Heritage properties and the urgent need to reduce the related risks.

4.15 International Day of Disaster Risk Reduction at World Heritage Properties

It is proposed to celebrate the International Day of Disaster Risk Reduction at World Heritage Properties, in coordination with the existing International Day of Disaster Risk Reduction (early October, every year), to give visibility and raise awareness about this important issue. This annual event will also provide opportunities for conducting drills and educational activities, including exhibitions, at World Heritage properties.

Expected result: Awareness is raised at the local and global level on disaster risks that affect World Heritage properties and ways to reduce them. At the same time, preparedness for effective response is strengthened at site level.

5. IMPLEMENTATION MODALITIES

If resources were made available, the activities under this Protocol for International Cooperation could be coordinated by the World Heritage Centre of UNESCO, possibly through the establishment of a Focal Point, and implemented by various partners according to different modalities, including – as mentioned above – bilateral twinning arrangements.

Global activities such as International Workshops, publications and training course will be implemented directly by the World Heritage Centre in collaboration with Advisory Bodies and other appropriate partners, including ICOM, the Blue Shield and the UN International Strategy for Disaster Reduction.

As already explained, considering the difficulty of identifying resources for all activities proposed under this protocol for Cooperation, it is envisaged that its implementation could proceed by steps, depending on the availability of funds and the interest of potential donors. The activities described in Section 4 above, on the other hand, lend themselves to a certain degree of flexibility. Site-based activities, for example, could be implemented independently from global ones in the framework of specific “packages”, and the number of sites concerned would also depend on the availability of resources and the number of twinning arrangements established.

When the Programme reaches a critical mass of ongoing activities, it is proposed to establish an Advisory/Steering Group involving, of course, the Advisory Bodies to the World Heritage Convention, but also UN-ISDR, ICOM and other Members of the Blue Shield, the Council of Europe and other relevant Institutions. The role of this Steering Group would be to review the progress of the Programme and provide orientation for its improvement.