



United Nations  
Educational, Scientific and  
Cultural Organization

Venice  
Office  
Maltese  
National Commission  
for UNESCO



Istituto di Ricerca per la Protezione Idrogeologica

## Training Workshop on Disaster Risk Reduction

*for UNESCO Designated Sites in the Mediterranean*

**14-19 November 2015  
City of Valletta, Malta**

### Rationale

Natural hazards, including the effects of climate change, are increasing their impacts on the life of people as well as on our valued heritage resources, drawing the concern of the international community. Disasters do happen, and while most cannot be avoided, preparatory measures can mitigate or effectively reduce their impacts. At the same time, investing in risk preparedness can avoid spending large sums of money in post disaster recovery stage. Furthermore, it has been recognised through experience that the heritage itself can contribute towards reducing the effects of disasters in various ways. For example, traditional knowledge systems, embodied in physical planning and construction, can be useful for mitigation purposes, as can local management systems and ecological solutions, which not only prevent or mitigate the impact of disasters, but also provide sufficient coping mechanisms to deal with post-disaster situations. Cultural properties have also proved to serve as safe havens for surrounding communities for their temporary relocation during emergencies.

The World Heritage Committee, in particular, has adopted in 2007 a *Strategy for Reducing Risks from Disasters at World Heritage Properties* which encourages all States Parties to develop disaster risk management plans for the World Heritage properties in their respective countries. Moreover, the newly internationally endorsed Sendai Framework for Disaster Risk Reduction 2015-2030, clearly emphasizes the importance to reduce disaster risk in cultural heritage sites.

In cooperation with:



United Nations  
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City of Valletta  
inscribed on the World  
Heritage List in 1980



UNIMORE  
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MODENA E REGGIO EMILIA

Heritage Malta

Finally, cultural and natural heritages constitute in several cases socio-economic assets and ecosystems of paramount importance for the wellbeing and survival of local communities and people whose resilience should be strengthened in a comprehensive fashion with the sites at stake. Nevertheless, disaster risk management is still at a preliminary stage among heritage professionals. In line with the above, the UNESCO Regional Bureau for Science and Culture in Europe is proposing a training workshop aimed at bringing together heritage professionals from selected countries and heritage sites from the Mediterranean areas (Malta, Albania, Cyprus, Croatia, Greece, Italy, Montenegro, and Turkey) to introduce disaster risk reduction principles in World Heritage Sites management plans. The workshop will be developed through a participatory methodology and upon the *UNESCO World Heritage Resource Manual: Managing Disaster Risks for World Heritage (2010)*. Special focus will be devoted to geohazards risk preparedness, with particular emphasis on landslides, earthquakes, wild fires and floods, through the participation of an interdisciplinary team of highly qualified international experts.

## Objectives

- To raise the awareness among professionals and responsible agencies for the need to develop appropriate disaster risk management plans;
- To raise capacity in developing appropriate regimes of risk management in major cultural sites of the Mediterranean and the South East European Area;
- To lay the ground for mainstreaming disaster risk management principles in the management systems of the WHS of the Mediterranean and South East European areas, using the WHS of Malta<sup>1</sup> as a learning model to be further applied to the whole Region.

## Scope and Methodology

The workshop intends to bring heritage professionals from Malta and the targeted countries in the Mediterranean in order to provide them with the knowledge on current thinking, methods and tools available for identifying, assess and manage multiple natural-derived risks and preparatory measures to mitigate their impact and harms both at material and human level in the UNESCO designated properties.

The methodology used is based upon the World Heritage Manual on disaster risk management. Using the Manual and analysing the specific context of the selected sites, a broader framework will be developed. This will be done through an interdisciplinary approach, bringing together Civil protection representatives with

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<sup>1</sup> Properties inscribed on the World Heritage List in Malta are: Cultural City of Valletta (1980); Megalithic Temples of Malta (1980); Hal Saflieni Hypogeum (1980).

WHS managers working in teams with dedicated in-class and in-field exercises. The work done will constitute the basis to deliver a final presentation at a conclusive workshop scheduled at the end of the training. Finally, trainees will be praised with personal certificate of attendance.

## Target audience

About 20 professionals (selected World Heritage sites managers, civil protection authority representatives)

## Time period

14-19 November 2015

## Venue

### Training:

University of Malta, Valletta Campus, Old University Building, St. Paul Street Valletta

### Final Presentations:

Italian Cultural Institute “Old Chancellery” building, St. Georges Square in Valletta

## Resource Persons

### A. *International resource persons:*

- 🏢 Rohit Jigyasu UNESCO Chair professor at the Institute of Disaster Mitigation for Urban Cultural Heritage at Ritsumeikan University, Kyoto
- 🏢 Chris Marrion specialist in fire based risk disasters and WHS
- 🏢 Alessandro Pasuto, CNR-IRPI, specialist in Geo-hazards
- 🏢 Adriana Bernardi, CNR ISAC, specialist in microclimate for Cultural Heritage Conservation
- 🏢 Mauro Soldati, University of Modena and Reggio Emilia, specialist in Geo-hazards
- 🏢 Davide Poletto, Project Officer SC - UNESCO Regional Bureau For Science and

## Culture in Europe (Venice)

- Irina Pavlova, Section on Earth Sciences and Geo-Hazards Risk Reduction  
Natural Sciences Sector

### *B. Experts from involved Institutions of Malta:*

- Pauline Galea and Sebastiano d'Amico, Department of Geosciences  
University of Malta
- John Agius Director CIP Directorate (Critical Infrastructure Protection)
- Mireille Fsadni Chief Architect & Civil Engineer - Head - Rehabilitation Projects  
Office Valletta World Heritage Site Manager - Works and Infrastructure  
Department - Project Implementation Directorate
- Kenneth Gambin, CEO Heritage Malta

## Contact persons

*For queries on the programme agenda:*

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### **UNESCO, Natural Sciences Sector**

#### **Section on Earth Sciences and Geo-Hazards Risk Reduction**

Ms. Irina Pavlova

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# Programme

## Draft Agenda

**14-11-2015 (Saturday)**

Time	Subject	Speaker
9.00	Registration	
9.30	<p><i>Welcoming speeches</i></p> <p><b>Hon. Evarist Bartolo MP</b> - Minister for Education and Employment of Malta</p> <p><b>Mr. Representative of Ministry of Culture-Heritage dept.(TBD)</b></p> <p><b>Prof. Henry Frendo</b> - President Maltese National Commission for UNESCO</p> <p><b>Mr. Peter Paul Coleiro</b> - Senior Operations Manager of the Civil Protection Department-Ministry for Home Affairs and Security</p>	
10.00-10.30	Overview of UNESCO role and strategy in DRR - Programme and trainers' introduction	<b>D. Poletto</b>
10.30-11.00	Presentation of selected participants and major risks related to their sites	<b>Trainees</b>
11.00-11.30	<i>Tea Break</i>	
11.30-12.00	An overview of the Cultural City of Valletta: main features, criteria for their inscription and relevant hazards	<b>Site Management Authorities</b>
12.00-12.30	An overview of the Megalithic Temples and Hypogeum of Malta: main features and criteria for their inscription and relevant hazards	<b>Sites Management Authorities</b>
12.30-14.00	<i>Lunch</i>	
14.00-15.30	Conceptual framework and terminology in natural hazards and risk issues	<b>A. Pasuto/M. Soldati</b>
15.30-16.00	<i>Tea Break</i>	
16.00-17.30	Introducing key concepts and principles for disaster risk management for heritage sites (I part)	<b>R. Jigyasu</b>
17.30-18.00	Open Discussion/Feedbacks	

## 15-11-2015 (Sunday)

Time	Subject	Speaker
9.00-10.00	Landslide monitoring: a fundamental tool for landslide risk assessment and mitigation	<b>A. Pasuto/M. Soldati</b>
10.00-11.30	Disaster Risk Aspects Related to earthquake mitigation and solutions	<b>UOM</b>
11.30-12.00	<i>Tea Break</i>	
12.00-13.30	Aspects Related to Fire (Lecture 1) Fires in Historic Buildings	<b>C. E. Marrion</b>
13.00-14.30	<i>Lunch</i>	
14.30-16.00	How to use the UNESCO Resource Manual? Team work Introduction	<b>R. Jigyasu</b>
16.00-16.30	<i>Tea Break</i>	
16.30-18.00	Team work/ Discussion	<b>Participants &amp; Team</b>

## 16-11-2015 (Monday)

Time	Subject	Speaker
9.30-11.00	Site visit at the case study of Valetta	<b>Participants &amp; Team</b>
11.00-11.30	<i>Tea Break</i>	
11.30-13.00	Site visit at the case study of Valetta	<b>Participants &amp; Team</b>
13.00-14.30	<i>Lunch</i>	
14.30-16.00	Disaster Risk Aspects Related to Fire (Lecture 2) Disaster Risk Management Plans and Fire Fire/Life Safety Features and Systems	<b>Participants &amp; Team</b>
16.00-16.30	<i>Tea Break</i>	
16.30-17.30	Disaster Risk Aspects Related to Fire (Lecture 3) Analysis Methods/Tools Case Studies	<b>C. E. Marrion</b>
17.30-18.00	Team work/ Discussion	<b>Participants &amp; Team</b>

## 17-11-2015 (Tuesday)

Time	Subject	Speaker
8.30-9.00	A multi-hazard based perspective of Malta	<b>J. Agius</b>
9.00 - 9.30	Risk of weathering at Hagar Quin and Mnajdra Temples due to the environmental attack and solutions to reduce its impact	<b>A. Bernardi</b>
9.30-13.00	Field trip to Hagar Quin	<b>Participants &amp; Team</b>
13.00-14.30	<i>Flying Lunch</i>	
14.30-16.00	Field trip to Mnajdra Temples	<b>Participants &amp; Team</b>
16.00-16.30	<i>Tea Break</i>	
16.30-18.00	Team work/Discussion	<b>Participants &amp; Team</b>

## 18-11-2015 (Wednesday)

Time	Subject	Speaker
9.00 - 11.00	Team work	<b>J. Agius</b>
11.00-11.30	<i>Tea Break</i>	
11.30-13.00	Team work	<b>Participants &amp; Team</b>
13.00-14.30	<i>Lunch</i>	
14.30-16.00	Team work	<b>Participants &amp; Team</b>
16.00-16.30	<i>Tea Break</i>	
16.30-18.00	Team work	<b>Participants &amp; Team</b>

## 19-11-2015 (Thursday)

Time	Subject	Speaker
9.30-11.00	Team work	<b>Participants &amp; Team</b>
11.00-11.30	<i>Tea Break</i>	
11.30-13.00	Team work	<b>Participants &amp; Team</b>
13.00-14.30	<i>Lunch</i>	
14.30-16.30	Team work	
17.00-18.30	Final outputs of team work presented at the old chancellor building of the Italian Cultural Institute "Old Chancellery" building, St. Georges Square in Valletta	
	Departure of participants	