

## **AN EUROPEAN PROJECT FOR THE PRESERVATION OF UNESCO CULTURAL HERITAGE**

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WAR FREE WORLD HERITAGE LISTED CITIES project is designed and co-financed within the framework of the EC ENP Instrument through the CIUDAD program. It is an international cooperation project between the Council of the United Municipalities of Byblos (Lebanon), the Head of the Board of the City of Mtskheta (Georgia), the World Association for the protection of Tangible and Intangible Cultural Heritage in times of armed conflicts – WATCH (Italy) and their associate partners, the Friends of Cultural Heritage Society – FOCUH (Turkey) and the Network per il Restauro Avanzato – NEREA (Italy). To this latter research unit the authors of this paper belong.

The project focuses on urban and regional planning for cities that are registered in the World Heritage List and located in critical areas being exposed to the threats of conflict and natural hazards such as earthquakes or flood. As case studies, Risk Preparedness Plans and Risk Mitigation measures will be defined for the cities of Byblos and Mtskheta abiding with the Guidelines issued in 2009 by UNESCO for the implementation of the Second Protocol of the 1954 Hague Convention for the Protection of Cultural Properties in times of armed conflicts. During its thirty months of duration, the project has developed a strategy to create the required conditions for both Byblos and Mtskheta to be candidates for enhanced protection status to UNESCO. A new approach to urban planning when local authorities, urban planners and the concerned institutions design the city of the future taking into consideration the worse case scenarios for CH sites. The project gained institutional support and backstopping by several international organizations including UNESCO, ICCROM and the International Institute for Humanitarian Law.

After over 56 years since its first formulation, the 1954 Hague Convention is gaining the interest of the concerned actors. However, so far, still too few initiatives were concretely implemented to secure safety conditions of cultural heritage threatened by armed conflicts. The first of its kind, War Free World Heritage Listed Cities represents a challenge and a concrete contribution within the international arena by proposing an international participatory approach for the protection of the cultural patrimony of humanity. The successful conclusion of the project will inspire and encourage other concerned authorities worldwide to undertake similar initiatives for the protection of the unique human cultural heritage that they host.

In another paper, we discuss the risk plan for the archaeological site of Byblos, while here we consider two sets of possible often interrelated hazard events that can be listed according to the following two categories :

- Natural hazard events as earthquake, flood, tsunami, fire, volcano eruption, landslide, landscape and soil degradation, etc.
- Human-induced events : War conflict, terrorism, vandalism, urban development, etc. This may also involve hazards from nuclear power plant accidents and other risks of radioactive contamination, industrial plants and relevant pollution, etc.

It is worth outlining that the above-mentioned events act on very different time scales; while slow-acting and fast-acting hazards affect differently cultural heritage, however the slow-acting hazards can interact with fast ones to enhance the scale of emergency and the possible damages.

Preventive Conservation requires a strong integration between Operational Guidelines for the Implementation of the World Heritage Convention, 2005 (part of management systems, threats and preventive protection) and Guidelines for the Implementation of the 1999 Second Protocol to the Hague Convention (HC) of 1954 for the Protection of the Cultural Property in the Event of the Armed Conflict; in particular, three criteria have to be fulfilled, namely the greatest importance for humanity, adequate domestic, legal and administrative measures of protection (preventive protection is ruled by Article 10 b and 12 HC 1999), no military use of the site, making a declaration during peace time.

Moreover, important actions refer to military planning the National Defense by taking into consideration HC 1999; training military, civil officers and public; protective legislative measures (criminal legislation). The HC Operational Guidelines list the following essential modules of a management plan: Legislative, regulatory and contractual measures for protection, boundaries for effective protection, buffer zones, management systems, sustainable use.

It is important to create hazard and/or risk maps that can overlap with other layers of the cultural heritage site in order to evaluate their effect and how damaging they can be. It is not necessary to prepare such maps by the site managing authority as they can be already available from other national agencies (such as environmental agency) or sometimes from international centers (for example, earthquake hazards), but the site management authority should insert all this information in a suitable GIS (a web GIS could represent the best choice, even if not strictly necessary).

Therefore, the following sets of actions in the case of hazardous events must be planned, namely peace-time preparatory measures, emergency actions and post-emergency actions. It is essential, in our opinion, to have two separate yet collaborating units for monitoring activities and risk management, respectively.

Peace-time preparatory measures for moveable cultural heritage property require cataloguing and implementation and validation of a digital archive on remote servers, including decision and information for safe storage of each item (physical and chemical data about material composition, state of conservation, fragility, etc.); to identify and/or prepare suitable storage sites for moveable cultural heritage objects in collaboration with national authorities; to plan the suitable transfer of moveable objects to storage buildings in safety conditions, including package, transportation and collocation; to have a list of responsible people for each action.

As for immovable cultural heritage property, recording and relevant digital information about immovable cultural heritage (archaeological surveys, for instance); digital wireless sensors and monitoring of historical buildings, monuments, archaeological sites, museums, archives and libraries, churches and monasteries, religious buildings, etc. through a remote control system.

According to the present advanced technology and generally availability of low-cost yet efficient devices, it is suggested to provide microclimate control, video-surveillance, fire safety installation, etc. Technical skills should be transmitted to the staff responsible for monitoring hazards. It is essential to ensure anti-seismic prevention for archaeological sites, historical buildings and CH storage buildings; to provide alarm thresholds for detecting emergencies or unpredictable risks; to define interventions on private items according to domestic laws; dissemination, training and handbooks, protocols for emergency actions; to carry out exercises (lifetime drills) and train people in response to accidents, hazardous events and so on.

Emergency actions foresee to contact responsible persons for implementation of security procedures; to inform concerned people and population about emergency; moving of cultural heritage objects in safety conditions to storage buildings; protection of the weak parts of the structures (doors, windows, gates, etc.) by suitable means; safety procedures and actions for immovable cultural heritage property, including Blue Shield identification.

Finally, post-emergency actions reckon on check inventories to identify missing or damaged objects, so as to inform responsible authorities; verifying the structural stability of cultural heritage property and provide safety measures when needed; performing preliminary restoration of damaged objects and structures; returning, when possible, moveable cultural heritage properties to the original location.