Hyperion: a new European project for the preservation of tangible cultural heritage

Hyperion is a new project received funding from the European Union's Horizon 2020, it is just started in June and will last until November 2022.

The purpose of Hyperion is to provide an integrated resilience assessment platform that, through the evaluation and understanding of risk, provides guidance on the best preparation for dealing with the danger and offers a faster, adapted and efficient response to the sustainable reconstruction of historical areas.

The deterioration of Cultural Heritage sites is one of the biggest challenges in conservation; landslides and earthquakes as well as climate change could have very strong impact on historic areas.The project, leveraging existing tools and new technologies, will focus on this aspects, considering the role of building technologies/materials, structural responses, preventive measures and restoration strategies, resilience and adaptation methodologies.

Currently there is no specific process for understanding and quantifying the effects of climate change on historical areas; Hyperion aims to introduce a research framework for climate and atmospheric composition downscaling.

The project will collect data and perform analyses that will help provide adequate adaptation and mitigation strategies and support sustainable reconstruction plans for CH damage.

A vulnerability map (based on the produced climate risk regional models) will be produced to guide the local authorities in their strategies to preserve heritage sites.

In Hyperion ?resilience? is a fundamental concept that offers an overarching strategy:

- risk management,
- identification of threats
- prevention of damages through protection and preparation
- planning and promotion of reconstruction strategies
- preparation and promotion of long-term strategic approaches to adapt to Climate Change and to wield policy tools for

economic resilience

The project will provide specific tools to support resilience:

- physical tools
- organizational tools
- financial tools.

Hyperion will work closely with Pluggy, another important and successful European project.
More information for the project are available on the project official website: https://www.hyperion-project.eu/