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Safeguarding Cultural Heritage against Climate Change and Natural Hazards through Stakeholder Involvement

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Europe's cultural heritage is among the richest in the world, and draws millions of visitors to archeological sites, museums, monuments, castles, and other sites each year. The protection and conservation of European heritage is of utmost importance for our society, not only in order to preserve the European cultural identity, but also because cultural heritage is a wealth creator bringing tourism-related business opportunities on which many communities depend. However, Europe's heritage assets are extremely exposed to climate change and natural hazards, which threatens their integrity and may compromise their value. The goal of the STORM (Safeguarding Cultural Heritage through Technical and Organisational Management) project is to provide critical decision-making tools to European cultural heritage stakeholders affected by climate change and natural hazards. Here, the STORM project will be presented with a focus on climate change and natural hazard risk communication to the involved stakeholders. However, climate change communication is not a one-way process, and discussions with stakeholders are necessary to identify their specific needs. Hence, the STORM concept is tested through pilot site studies in five different countries: the Diocletian Baths in Rome, Italy; the Mellor Heritage site, Manchester, UK; the Roman Ruins of Tróia, Portugal; the Historical Centre of Rethymno on Crete, Greece and Ephesus, Izmir, Turkey. Furthermore, the past and future climatic conditions at the project's pilot sites are analysed in terms of mean state and extreme events (for example temperature and precipitation changes evident from observations and climate scenarios), which will be discussed with regard to their relevance for the local cultural heritage protection based on discussions with the stakeholders.