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Space Culture: New Processes of Public Engagement in Space through Culture and Art (9)

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THETIDA: SAFEGUARDING UNDERWATER AND COASTAL CULTURAL HERITAGE THROUGH INNOVATIVE AND INCLUSIVE METHODOLOGIES

Abstract

Coastal areas have always been the cradle of primary social communities, ancestors of modern society, owing to numerous resources including fishing and trade. These communities left a footprint, a testimony of our evolution, that is now an integral part of our cultural heritage and embodies their livelihoods and values. Coastal areas have always been exposed to natural hazards, but the effects of climate change exacerbate the threats to underwater and coastal heritage, threats that can be monitored and anticipated through space capabilities. In THETIDA, 17 partners will collaborate to develop and connect innovative technologies and participatory processes in 7 pilot sites, selected to represent diverse climatic conditions.

The THETIDA project aims at promoting, testing and demonstrating innovative and sustainable modelling tools and decision support systems to protect underwater and coastal cultural heritage from climate change and hazards, and to respond efficiently to those risks. Taking full advantage of the Copernicus Climate Change Service to model and predict the impact of climate change on the sites, the tools developed will enhance stakeholders' awareness, response times, and efficiency, and provide the basis for evidence-based and inclusive decision making within the Living Labs (LLs). LLs are multi-stakeholders' platforms and interaction spaces in which multiple actors meet, co-create future scenarios, and build roadmaps for the climate resilient future of heritage sites.

The circular approach of the project reflects these connections. Earth Observation (EO) and InSAR satellites, complemented by in-situ sensors, enable partners to identify and map risks. The data fuels LLs, allowing local stakeholders to take evidence-based decisions. LLs enable partners to understand local stakeholders' needs and to channel their work accordingly. Diversity and inclusivity are key to ensure that all facets of the cultural heritage site are covered.

This paper aims to provide first-hand examples of local stakeholders and end-users' active engagement and to illustrate how cultural heritage can support the uptake of space capabilities. It demonstrates how the holistic and users-centred approach of THETIDA enables the development of multiple hazard assessment tools answering to actual stakeholders' needs. Motivated by a growing demand from European actors and a momentum on cultural heritage, the THETIDA project recognizes contemporary users' needs and acknowledges the peculiar and central role of cultural heritage in communities, and the necessity to preserve it to build a sustainable future.