THE PILOT SITES OF THE ARGUS PROJECT

In order to test the effectiveness of the technologies implemented in ARGUS, five cultural heritage sites were selected. Risks and threats to which they are exposed will be analysed. Through the installation of remote monitoring systems, these pilot sites will become a model for the preservation of cultural heritage with innovative low environmental impact solutions.

01 Greece
Delos Island

02 Switzerland
Schenkenberg Castle

03 Italy
Monti Lucretili

04 Italy
Sant'Antonio di Ranverso Preceptory

05 Spain
Cellar town of Baltanás

THE CONSORTIUM

ATHENA

Cyprus University of Technology

eurecat

University of Cyprus

ROMA TRE UNIVERSITÀ DEGLI STUDI

CSIC

Fraunhofer IT

core IC

WORLD SENSING

Ephorate of Antiquities of Cyclades

Kneia

CENTRO CONSERVAZIONE RESTAURO LA VENARIA REALE

EPFL

ARGUS

NON-DESTRUCTIVE, SCALABLE, SMART MONITORING OF REMOTE CULTURAL TREASURES

PRESERVING OUR PAST TO VALUE OUR FUTURE

NEW STANDARDS FOR CULTURAL HERITAGE CONSERVATION

ARGUS is a European research project that aims to advance the development of digital tools for the preventive conservation and effective remote monitoring of cultural heritage.
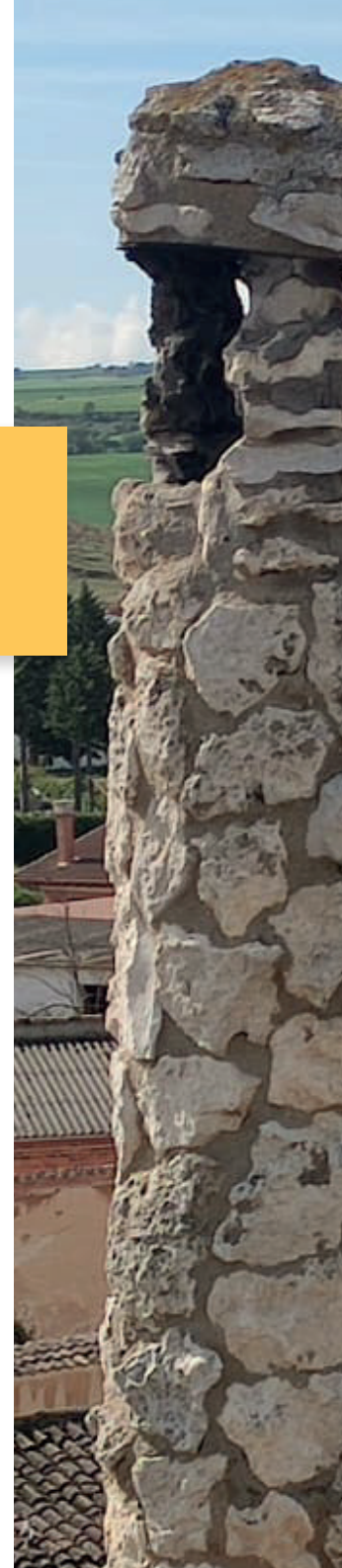
Grant Agreement ID
101132308
Start - End Date
1 December 2023 - 30 November 2026
Total cost and EU contribution
EUR 3 996 147,50

www.argus-project.eu

argus-project

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Cordis: https://cordis.europa.eu/project/id/101132308

MAIN OBJECTIVES AND KEY COMPONENTS OF ARGUS

Risk Identification and Mitigation
ARGUS addresses major threats to remote cultural heritage sites, such as natural disasters, climate change and human activity. The project identifies risks and implements preventive strategies to protect these sites by exploiting twin digital models and multimodal sensing systems.

Advanced Technologies for Heritage Conservation
ARGUS facilitates efficient and accurate heritage conservation using new technologies such as remote monitoring and real-time data collection through advanced sensors. These tools provide in-depth analysis that enables proactive conservation actions.

Sustainability and Citizen Involvement
Sustainability is integrated in all phases of the project. ARGUS also involves local communities, raising awareness and including citizens in the heritage conservation process. This approach ensures the protection of our cultural heritage for future generations.

INNOVATIONS AND IMPACT

Digital Twin Model for Detailed Site Monitoring
ARGUS creates digital twin models of heritage sites, facilitating virtual assessments and enabling experts to plan precise conservation strategies. This model supports early detection of potential threats, improving long-term conservation outcomes.

Data Fusion and Visualisation
ARGUS offers multilevel visualisation that improves heritage management and decision-making for conservation authorities by integrating different data sources through advanced fusion and deep learning.

Non-Invasive Sensing and Monitoring
ARGUS uses non-invasive technologies, such as LiDAR and photogrammetry, for accurate data collection without altering heritage sites. This enables detailed structural and environmental assessments, informing conservation initiatives.

COLLABORATION AND ENVIRONMENTAL COMMITMENT

International Collaborations
ARGUS collaborates with universities, research centres and heritage experts from Italy, Greece, Cyprus, Spain, Germany and Switzerland.

Commitment to Environmental Responsibility
ARGUS prioritises ecologically responsible methods, using energy-efficient technologies and sustainable materials, ensuring that conservation efforts are effective and environmentally friendly.