Research Project Fact Sheet

Title of Project	Earthquake Risk plAtform for european cities Cultural Heritage protection
Project Acronym	ERA4CH **ERA4CH**
Funding Program	HORIZON-MSCA-2021-SE-01
Project Identifier	HORIZON-TMA-MSCA-SE
Total Budget	€791 200.00
Starting – Ending Date	01/2023-12/2026
Consortium	1. Alma Sistemi SRL (ALMA) 2. Politechnico Di Milano (POLIMI) 3. Polytechneio Kritis (TUC) 4. Frederick University (FREDU) 5. Geomatics (Cyprus) Ltd (GEM) 6. Euphia Tech Ltd (EUT))
Project Objectives	Seismic activity significantly impacts the structural stability of Cultural Heritage (CH) sites, which often feature older construction methods and materials in densely populated areas. Recent earthquakes in central Italy, for example, caused €2 billion in damage to CH assets and resulted in fatalities. Recognizing that preventive measures are more cost-effective than post-disaster rehabilitation, authorities aim to minimize CH vulnerability and economic losses by prioritizing risk-informed mitigation. The ERA4CH project addresses these needs by developing tools that integrate AI, structural stability models, remote sensing, image processing, geotechnics, and cadastral data in a GIS-based application. This toolkit will support damage assessment and long-term monitoring of historic sites, enabling preventive interventions where damage is most likely. ERA4CH will pilot its solutions in three historic centers—Narni (Italy), the historic center of Chania (Crete, Greece), and Strovolos (Nicosia, Cyprus)—to demonstrate effective strategies for monitoring and protecting these vulnerable sites, ultimately enhancing disaster resilience for future generations.
Work Packages	WP1 Analysis of methods and data WP2 Software Applications WP3 Platform development WP4 Demonstration WP5 Dissemination, communication and transfer of Knowledge WP6 Project Office & Exploitation
External References	