PANTHEON

Building Tomorrow's Community Disaster Resilience

Community-Based Smart City Digital Twin Platform for Optimised DRM operations and Enhanced Community Disaster Resilience

The PANTHEON approach

The PANTHEON consortium will focus on developing a Community-based Digital Ecosystem for Disaster Resilience utilising Smart City Digital Twin (SCDT) technology and other emerging innovations to…

- advance the existing risk assessment methods

- mitigate potential vulnerabilities

- build a strong community disaster resilience foundation

Project Objectives

- ✓ PANTHEON Disaster – Resilient Communities Model

- ✓ Decentralised and Participatory Governance & Tools

- ✓ Development of a Smart City Digital Twin (SCDT) for Community Disaster Resilience management (DRM)

- ✓ Development of a Synthetic Environment

- ✓ Interactive User Interface for a Holistic Simulation Environment

- ✓ Intelligence, CM-SCDT Processes and Optimal DRM Operations

- ✓ Data Delivery Scheme and Remote Sensing for Community-based SCDT
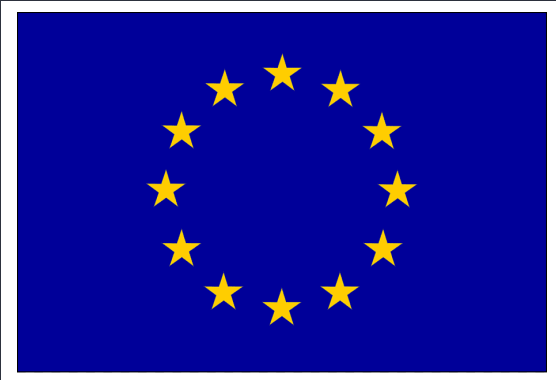
Current Challenges

In the past two decades, the international disasters database EM-DAT has recorded 7,348 natural disasters resulting in the loss of 1.23 million lives and affecting over 4 billion others. These environmental catastrophes have caused a total of US$2.97 trillion in economic damages worldwide, without even including biological or technological disasters.

At present, the field of community resilience management is diverse yet fragmented, as current methods are not readily applicable or measurable. Collaboration for successful practical implementation of an ecosystem of tools in at-risk communities is not currently promoted, and systematic research and development of policies are stalled.

The Pantheon Consortium

To materialise the PANTHEON ambitious goals, a consortium of partners from European and associated countries has been assembled with the purpose of designing and developing a Community-based Digital Ecosystem for Disaster Resilience based on Smart City Digital Twin (SCDT).

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