



# Cyber-Physical Disaster in Vienna

## Simulation Targets

Simulation of cyber-attacks (e.g., on a power plant) causing physical disasters (e.g., forest fires) without expensive real-life drills.

Accommodation of realistic training for better preparedness.

Solidification of disaster response & resilience strategies.

Protection of vulnerable populations in the respective areas

Testing of emergency coordination & resource management

## Simulation Key Stakeholders

First Responders – Lead disaster response, rescue & evacuation.

Healthcare Providers – Provide medical care & manage hospital resources.

State Authorities – Oversee management & enforce safety policies.

## Technologies Used

GIS | Weather | IoT | Cybersecurity | Neo4J | UAVs | IoT Sensors | Fire & Infrastructure Impact



## Partners



## Building Tomorrow's Community Disaster Resilience



## Contact!



This project has received funding from the European Union's Horizon Europe programme under Grant Agreement N°101074008.

**Community-Based Smart City  
Digital Twin Platform for Optimised Disaster  
Risk Management operations and Enhanced  
Community Disaster Resilience**



## Wildfire Management in Athens

### Simulation Targets

Simulation of wildfire scenarios & assessment of cascading effects.

Decision support for prevention & resource allocation.

### Simulation Key Stakeholders

Hellenic Fire Service

Hellenic Police, Municipalities, & Prefectures

### Technologies Used

SCDT | IoT Sensors | Satellites | UAVs | Data Sources



## Earthquake Resilience in Athens

### Simulation Targets

Simulation of earthquake impacts based on key variables

Decision support for resource deployment

Enhancement of situational awareness with relevant data

### Simulation Key Stakeholders

Hellenic Police – Traffic control, hazard prevention, resource coordination.

Hellenic Fire Service – Rescue, disaster units, situational awareness, risk prevention.

National Centre of Emergency Assistance (EKAB) – Medical triage, evacuation.

Volunteer Organisations – Rescue, security, evacuation.

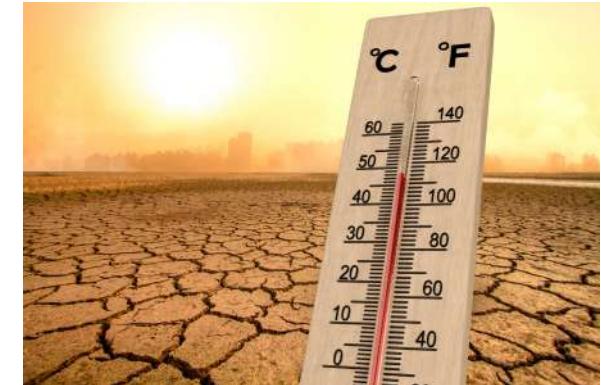


### Technologies Used

SCDT | Satellites | UAVs | Data Sources



## Heatwave in Vienna



### Simulation Targets

Simulation of heatwave scenarios & tracking cascading effects.

Prediction of resource usage & identification breaking points in healthcare systems.

Optimisation of operational planning for personnel, equipment & emergency response.

### Simulation Key Stakeholders

Human Resources Managers – Monitor resource usage during heatwaves.

Volunteer Coordinators – Simulate patient transport & hospital strain.

Command Center Employees – Identify intervention strategies using real-time data.

### Technologies Used

Google Solar API | IoT Sensors | Sentinel Satellite Imagery | Geospatial & Health Data



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