



Development of a Support System for Improved Resilience and Sustainable Urban areas to cope with Climate Change and Extreme Events based on GEOSS and Advanced Modelling Tools: The «Harmonia» project

Programme HORIZON 2020

Project The HARMONIA project aims to develop integrated solutions for the urban environment adapted to European needs for safety, health, well-being in relation to the harmful effects of climate change. The HARMONIA project will combine multiple Earth observation satellite data sets, including the GEOSS and Copernicus data sets, with models and socio-economic data under the Paris Agreement on climate change. Given that Sustainable Urban Development is of prime importance, the HARMONIA project argues that the use of Earth observation systems is a critical tool for the development of resilient cities and the evaluation of urban imagery to promote equality and prosperity for all.

In particular, the project focuses on two pillars:

A) Natural and man-made hazards enhanced by climate change (floods, degradation of soil quality and hazards such as landslides, earthquakes, etc.) and

B) Anthropogenic hazards, such as urban heat island phenomenon, ambient air quality

Role of Municipality of Piraeus HARMONIA tests computer applications and EU satellite data, in 4 municipalities, including Municipality of Piraeus, in the context of climate change based on the Paris Agreement.

Partnership

1. POLITECNICO DI MILANO (POLIMI), Coordinator
2. INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMS (ICCS)
3. RESILIENCE GUARD GMBH (RG)
4. GEOSYSTEMS HELLAS IT KAI EFARMOGESGEOPLIROFORIAKON SYSTIMATON ANONIMI ETAIREIA (GSH)
5. CREOTECH INSTRUMENTS SPOLKA AKCYJNA (CTI)
6. UNIVERSITATEA DE VEST DIN TIMISOARA (UVT)
7. KUNGLIGA TEKNISKA HOEGSKOLAN (KTH)
8. ISTITUTO NAZIONALE DI GEOFISICA E VULCANOLOGIA (INGV)
9. IDRYMA TECHNOLOGIAS KAI EREVNAS (FORTH)
10. URBASOFIA SRL (URBASOFIA)
11. AGENCY FOR SUSTAINABLE DEVELOPMENT AND EUROINTEGRATION – ECOREGIONS (ASDE)
12. ILMATIETEEN LAITOS (FMI)
13. ASSIMILA LTD (ASSIMILA)
14. EUROPEAN ASSOCIATION OF REMOTE SENSING COMPANIES (EARSC)

15. HUMANITAS MIRASOLE SPA (HUMANITAS)
16. EURONET CONSULTING EEIG (EURONET)
17. COMMUNE D' IXELLES (IXELLES)
18. COMUNE DI MILANO (MILAN)
19. STOLICHNA OBSHTINA (SOFIA)
20. DIMOS PEIRAIA (PIRAEUS)
21. DATAREADY LIMITED (DATAR)
22. MPLEGAL (MPL)

Duration 42 months (June 2021-December 2024)

**Budget for
the
Municipality
of Piraeus** 123.125,00 €