

HARMONIA project has made significant progress developing the Integrated Resilience Assessment Platform (IRAP) with the support of European municipalities. The platform will improve the resilience of urban environments using a multi-hazard approach in risk monitoring and evaluation, which is recommended by the Sendai Framework, taking under consideration Climate Change effects and geohazards. The IRAP will be working on top of GEOSS, quantifying Climate Change effects on urban areas using satellite and auxiliary data available on GEOSS, DIAS, urban TEP, GEP and similar platforms.

Check <u>what is currently happening</u> in the project and how you can <u>get</u> <u>involved!</u>



### Citizen's involvement

Since autumn 2022 citizens from Milan (Italy), Piraeus (Greece), Sophia (Bulgaria), and Ixelles (Belgium) can help their cities better understand the impact of air pollution, heat fluxes, climate index, floods and geological hazards. Through initiative called Citizen-As-Observatory, local residents share their experiences and observations using an online survey. Collected input will be used by municipalities and platform developers to confirm and enrich scientific data.

In the first half of 2023 municipalities and HARMONIA team are organizing meetings with the citizens to spread the word and invite them to join the initiative.

Contribute if you are based in: Milan Piraues Sofia Ixelles









# End-users workshop between Piraeus Municipality and Geosystems Hellas at 30 January 2023

End-users workshop between Piraeus Municipality and Geosystems Hellas at 30 January 2023

On Monday the 30th January 2023 the end-users workshop for the Municipality of Piraeus took place, in the city's Town hall, between Piraeus Municipality and Geosystems Hellas (GSH).

The participants of the meeting included representatives from both organizations as well as the municipality's director of the IT department, the head of civil protection and the head of tourism extroversion and European programs.

During the workshop, the main aspects, aims and technical challenges were presented and also the role of the Piraeus as an end-user was extensively discussed. GSH as the HARMONIA's WP6 leader highlighted the multidimensional and diverse outputs of HARMONIA, that are under development, aiming to provide an important tool for the municipal authorities, policy-makers, citizens, and other stakeholders.

Additionally, some critical issues that have to be taken into account to assess the individual perils and hazard scenarios as well as the priorities of Piraeus under the concept of civil-protection and climate change have been stressed out.





## End-users workshop between Piraeus Municipality and Geosystems Hellas at 30 January 2023

HARMONIA project as well as its outcomes might play a significant role in the scientific research of Climate Change in the urban domain. To share the gained knowledge, HARMONIA team is dedicated to publish relevant publications elaborating not only on the developed platform but also on the used data and challenges the cities are facing. In the previous months, HARMONIA team published the following articles:

- "Seismic fragility assessment of high-rise stacks in oil refineries" by Karaferis, N.D., Kazantzi, A.K., Melissianos, V.E. et al.
- "HARMONIA: strategy of an integrated resilience assessment platform (IRAP) with available tools and geospatial services" by J N Tzortzi, A Doulamis, I Rallis, M S Lux, G Barbotti and I Tzortzis.
- Vavassori, A., Pugliese, A., Brovelli, M.A. (2022). <u>Using open data to reveal factors of urban susceptibility to natural hazards and man-made hazards: case of Milan and Sofia</u>. GeoScape, 16(2), 93-107.
- Puche, M., Vavassori, A., Brovelli, M.A. (2023). Insights into the Effect of Urban Morphology and Land Cover on Land Surface and Air Temperatures in the Metropolitan City of Milan (Italy) Using Satellite Imagery and In Situ Measurements. Remote Sensing, 15(3), 733.



### **Upcoming events**

Don't miss your chance to meet with HARMONIA team and learn more about the project and the use of the Earth Observation in the urban domain, keep an eye on the upcoming events and workshops:

- CAO workshops to be held in Milan, Piraeus, Sofia, and Ixelles check our website to stay tuned
- JURSE Conference 16-19 May 2023
- EXPANDEO 13-14 June /2023
- <u>FRINGE</u> 11-15 September 2023





#### **Consortium**

Project Harmonia gathers a community of 22 partners, working together to help urban communities manage more efficiently climate change and its effects. This consortium includes 4 pilot cities: Milan (Italy); Sofia (Bulgaria); Piraeus (Grece); and Ixelles (Belgium) as well as 4 Academias, 9 Companies, 4 Research institutes, and 1 NGO.













































Keep in touch with us on our website and social media!

http://harmonia-project.eu/



oharmonia.h2020

m HARMONIA Project





The HARMONIA project has received funding from the EU Horizon 2020 research and innovation programme under agreement No. 101003517.