

## AGENDA

"Earth Observation in support of disasters resilience for the protection of citizens, economies and ecosystems"

16.6.2022 10:00 - 13:00 pm (CEST)

### **Registration (required):**

https://us02web.zoom.us/webinar/register/WN eYVcjhtlRdiHe8-oF28hdA

**10:00-10:05** Welcome and general presentation of the Showcase by the Showcase Coordinator **Haris Kontoes, NOA** 

10:05-10:10 e-shape Immersed | Accelerating Earth Observation solutions (video)

**10:10-10:25** Presentation "EO4D\_ASH - EO Data for Detection, Discrimination & Distribution (4D) of Volcanic ash" by Pilot 1 Leader **Lucia Mona, CNR** 

**10:25-10:30** Testimony by **Tatjana Bolic**, Vice-chair of the JU's Scientific Committee, **Single European Sky ATM Research (SESAR)** 

**10:30-10:45** Presentation "GEOSS for Disasters in Urban Environment" by Pilot 2 Leader **Antonio Parodi, CIMA** 

10:45-10:50 Testimony by Silvia Puca, Italian Civil Protection Department

**10:50-11:05** Presentation "Assessing Geo-hazard vulnerability of Cities & Critical Infrastructures" by Pilot 3 Leader **Pablo Ezquerro, EGS** 

**11:05-11:10** Testimony by **José Manzano Cerón**, Confederación Hidrográfica del Segura (CHS), **Segura River Basin Management Authority** 

**11:10-11:25** Presentation "ReSAgri - Resilient & Sustainable ecosystems including Agriculture & food" by Pilot 4 Leader **Nikos Bartsotas, NOA** 

**11:25-11:30** Testimony by **Chryssa Papagiannouli**, Agronomist, Agricultural Cooperative of Thessaly Tomato Producers "**THESTO**"

**11:30-11:45** Presentation "FRIEND - Flood Risk & Impact assEssment through automatic chaNge Detection of S-1+S-2 images" by Pilot 5 Leader **Marco Folegani, MEEO** 

11:45-11:50 Testimony by Omar Barrilero, Project Officer, SATCEN

**11:50-12:05** Presentation "MountaiNow - a live map of mountain hazards for the Alps" by Pilot 6 Leader **Alexia Massacand, One Earth sàrl - MountaiNow** 

12:05-12:10 Testimony by Jean-Christophe Rossand, Tour Leader, Swiss Alpine Club

#### 12:10-12:50 Q&A and open discussion

12:50-13:00 Closing remarks by the Showcase Coordinator Haris Kontoes, NOA

#### **About this Webinar**

The webinar "Earth Observation in support of disasters resilience for the protection of citizens, economies and ecosystems", is organised by the Disasters Resilience Showcase (SC6) in the framework of the on-going Horizon 2020 project e-shape, and it will be held on Thursday, 16 June 2022.

The webinar will bring together actors of the value chain from the Earth Observation to Disasters Resilience to showcase state-of-the-art products and services in support of disasters resilience for the protection of citizens, economies and ecosystems.

The target audience is stakeholders, including decision makers and key users from both the public and the private sector, as well as the scientific community.

Interaction is foreseen through testimonies of end users for each pilot as well as a Q&A and open discussion session.

# **Objectives**

- To present the six pilots of the e-shape showcase "Disasters Resilience" in interaction with some of their identified end-users, empowering dedicated co-design approaches developed within e-shape;
- To invite other Copernicus EO-based applications or prototypes developers in the domain of Disasters Resilience with identified users, opening the scope to other disaster types, but also considering different time and spatial scales;
- To have an updated overview of the current and emerging Copernicus offers in terms of data, information and cloud services with a focus on the disasters resilience sector;
- To discuss the way forward to develop new applications based on Copernicus to support the disasters resilience in line with the priorities and the goals set by the Sendai Framework on Disaster Risk Reduction and SDGs 2 & 11 and supporting EuroGEO.

# **About e-shape Showcase 6: Disasters Resilience**

The on-going Horizon 2020 project <u>e-shape</u> (2019-2023) aims at bringing together decades of public investment in Earth Observation (EO) supported by recent cloud capabilities offered by the Data and Information Access Services (DIAS) into services for the decision-makers, the citizens, the industry, and the researchers. It allows Europe to position itself as global force in EO through leveraging Copernicus, making use of existing European capacities, and improving user uptake of the data from GEO assets. The project e-shape is meant to be a support to the EuroGEO, dealing with seven showcases of societal challenge: agriculture, health, renewable energy, ecosystem, water, disasters, and climate.

The e-shape showcase "Disasters Resilience" builds on Earth Observation and develops state-of-the-art products and services in support of disasters resilience for the protection of citizens, economies and ecosystems. It deals with a portfolio of natural and human induced disasters (geo-hazards, extreme weather, fires, floods, etc.) in line with the priorities and the goals set by the Sendai Framework on Disaster Risk Reduction and SDGs 2 & 11.

The showcase is composed of six pilots, including two on-boarded in 2020.

- 1. The first pilot, named EO4D\_ASH EO Data for Detection, Discrimination & Distribution (4D) of Volcanic ash, led by CNR, prototypes a system for the detection, discrimination and distribution of volcanic ash, which integrates multisource data and provides the aviation community with tailored information in a unique visualization platform.
- 2. The second pilot, named **GEOSS for Disasters in Urban Environment**, led by **CIMA**, integrates and brings in an operational end-to-end hydro-meteorological forecasting chain to predict the weather evolution and the corresponding hydrological and hydraulic impacts in the urban environment, in support of the Italian Civil Protection.
- 3. The third pilot, named Assessing Geo-hazard vulnerability of Cities & Critical Infrastructures, led by EGS, assesses geo-hazard vulnerability of cities and critical infrastructures and increases urban resilience against geohazards with the use of multimission Earth Observation derived products and the delivery of services.
- 4. The fourth pilot, named **ReSAgri Resilient & Sustainable ecosystems including Agriculture & food**, led by **NOA**, supports resilient and sustainable ecosystems including agriculture and food, providing four services in support of farmers and the insurance sector: Adverse Selection, Damage Assessment, High Level Monitoring, and Early Warning.
- 5. The fifth pilot, named FRIEND Flood Risk & Impact assEssment through automatic chaNge Detection of S-1+S-2 images, led by MEEO, provides both citizens and experts with a Flood Risk and Impact Assessment tool based on indicators, time-series charts, and forecast maps through automatic change detection of S-1+S-2 satellite images and climate data from observations and numerical models.
- 6. The sixth pilot, named MountaiNow a live map of mountain hazards for the Alps, led by One Earth sàrl MountaiNow,, provides an interactive live-map of mountain hazards for Europe and the world offering a unique set of actionable information by combining real-time crowdsourcing, Copernicus and GNSS data exploited through Big Data analytics techniques.