



## Improving European Wildfire Emergency Information Services

Conrad Bielski (1), Ceri Whitmore (1), Victoria O'Brien (1), Gunter Zeug (2), Milan Kalas (3), Ignasi Porras (4), Josep Maria Solé (4), Pedro Gálvez (4), Maria Navarro (4), Pertti Nurmi (5), Juha Kilpinen (5), Kaisa Ylinen (5), Cesare Furlanello (6), Valerio Maggio (6), Azra Alikadic (6), and Claudia Dolci (6)

(1) EOXPLORE UG, Germany, (2) Terranea UG, Germany, (3) Kajo s.r.o., Slovakia, (4) Meteosim S.L., Barcelona, Spain, (5) Finnish Meteorological institute, Helsinki, Finland, (6) Predictive Models for Biomedicine and Environment, Fondazione Bruno Kessler, Trento, Italy

European wildfires are a seasonal natural hazard that many regions must battle regularly. However, as European urbanization continues to encroach on natural areas and the climate changes it is likely that the frequency of wildfires will increase likewise the number of areas prone to wildfires. It is therefore paramount not only to increase public awareness of this natural hazard but also to be prepared by improving wildfire hazard forecasting, monitoring, and mapping.

As part of the H2020 funded project entitled Improving Resilience to Emergencies through Advanced Cyber Technologies: I-REACT (Grant Agreement #700256) , there is a task with the goal to develop models and implement technologies to improve the support around the entire emergency management cycle with respect to wildfire hazards.

Based on operational weather forecasts, pan-European geospatial data as well as regularly acquired Earth Observation imagery through the Copernicus program, and other sources of information such as social media channels a European wildfire service is being developed. This will be achieved by improving on the successes of the European Forest Fire Information Service (EFFIS) and the guidance of emergency managers experienced in wildfire hazards. Part of the research will be to reduce the number of false alarms. However, once a wildfire has been identified, the system focuses on the disaster region to provide situational information to the decision makers applying state-of-the-art approaches to improve disaster response. Post-wildfire information will continue to be produced for damage and recovery assessments. Ultimately, I-REACT expects to reduce wildfire costs to life, property and livelihood.

This work will improve wildfire disaster emergency management through the development and integration of new data and technologies respectively as well as the knowledge from emergency managers who not only understand the hazard itself but also can provide insights into the information that can help them do their jobs better.