

"EUPROT: EUropean PROTOcol for multi-risk prevention and management" is going to be submitted to the Call 2024 of Cluster 3 "Civil Security for Society" of the EU R&D&I framework program, Horizon Europe.

EUPROT aims to design a decision-support system to enhance disaster management, preparedness, and planning, with a focus on supporting planning authorities and first responder agencies. This system intends to improve citizen preparedness and response in vulnerable areas while facilitating the rapid deployment of first responders during disasters. EUPROT's innovative approach involves engaging scientists, technicians, citizens, civil society, and end users in project development. Building on previous EC-funded projects like VeTOOLS and EVE, the new project extends a systematic multi-hazard methodology to address natural multi-risk at a local, regional, national or continental level.

EUPROT will create a user-friendly, multi-hazard platform comprising a eight-step computational framework with corresponding toolkits: (1) Spatial analysis; (2) Temporal analysis; (3) Simulation models and scenario definition; (4) Impact and vulnerability analysis; (5) Risk analysis; (6) Geospatial data analysis and monitoring system; (7) Alert and Early warning system; (8) Education and communication. This platform will enable the early identification of natural hazards with precise time and spatial specificity, facilitating science communication and interaction between scientists, media, and the public. AI technologies will play a significant role in integrating state-of-the-art early warning systems into existing multi-hazard risk assessment and decision-making tools used by civil protection authorities. The platform will incorporate diverse data, information, and forecasts, requiring cooperation from various sectors and actors, as well as cross-border and cross-sectoral collaboration.

To achieve this complex objective, EUPROT will develop a comprehensive methodology based on quantitative scenarios for present and future risks, considering direct and indirect effects within a multi-risk and climate change context. Close cooperation with key stakeholders and end-users will ensure the methodology aligns with practical needs. The results will be disseminated to the public using a geoethical approach, presenting information in a clear, user-friendly manner to minimize ambiguity. Ultimately, EUPROT aims to create a simple multi-platform system (GNU/Linux, MacOS, Windows) with modules addressing various stages of prevention, preparation, response, and recovery in the face of multi-hazard risks.

EUPROT's goal is to inform decision makers, first responders, and citizens effectively in advance about natural hazards, their causes, impacts, and mitigation strategies.