

# Enhancing decision support and management services in extreme weather climate events

In every disaster and crisis, incident time is the enemy, and getting accurate information about the scope, extent, and impact of the disaster is critical to creating and orchestrating an effective disaster response and recovery effort. The main goal of beAWARE is to provide support in all the phases of an emergency incident. More specifically, we propose an integrated solution to support forecasting, early warnings, transmission and routing of the emergency data, aggregated analysis of multimodal data and management the coordination between the first responders and the authorities. Our intention is to rely on platforms, theories and methodologies that are already used for disaster forecasting and management and add the elements that are necessary to make them working efficiently and in harm under the same objective. The overall context for **beAWARE** lies in the domain of situational awareness and command and control of a disaster response.

#### Ο BJECTIVES

beaware

- 1. Perform a research study on the requirements for emergency services.
- 2. Multilingual speech and written communication analysis in emergency calls
- 3. Aggregate multimodal information from sensor networks, meteorological stations, and social media for decision support, validation purposes and issue early warnings
- Visual context analysis during emergency calls 4.
- 5. Semantic integration of multimodal information from the emergency calls, M2M/IoT
- Multilingual report generation from aggregated emergency data 6.
- Research & development of Main Public Safety Answering Point 7. (PSAP) for emergency multimedia enriched calls
- 8. Design and execute 3 large scale pilots

# P R O J E C T C O O R I N A T O R

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# RTNERS

















## THE THREE PROPOSED SCENARIOS

- 1. Flood: beAWARE will develop an environment capable of creating analysis and exploration tool that allows decision makers to track and understand events, behaviours and trends at the micro (i.e. user) or macro (crowd dynamics) scale.
- 2. Fires: beAWARE technologies will help in the early stages of the development of fires and support decision makers in the emergency management system.
- 3. Heatwave: beAWARE system will offer an early warning regarding the upcoming phenomenon, as well as assist all relative engaged organizations in taking the necessary measures in order to avoid past problems and address the heatwave more efficiently.

## EXPECTED IMPACT

- 1. more effective and faster emergency responses to extreme climate events
- 2. faster analysis of risks and anticipation
- 3. publicly available online and forecasting systems for disasters;
- 4. improved coordination of emergency reactions in the field, including the use of adapted cyber technologies,
- 5. improved capacity to provide adequate emergency
- 6. responses
- 7. shorter reaction time and higher efficiency of reactions target the needs and requirements of emergency users