Interreg Programme Italy-Croatia

AdriaMORE - Adriatic DSS Exploitation for MOnitoring and Risk management of coastal Extreme weather and flooding

Objective

The project AdriaMORE, of which the Abruzzo Region is the Lead Partner, is a Standard+ project funded by the Interreg Italy-Croatia CBC programme - Priority 2, Specific Objective 2.2.. The key objective is to **increase the management capacity** of responding to marine and coastal hazards in the Adriatic basin, and to**mitigate damage impacts** caused by rising water levels, flooding and sea storms on the territory and people living along the coastal regions in Italy and Croatia, as a consequence of increasingly frequent extreme weather conditions.

The 2007-2013 IPA Adriatic CBC programme-funded project CapRadNet developed an integrated system to observe and forecast possible scenarios at high hydro-meteorological risk for civil protection purposes. On this basis, AdriaMORE has the objective to capitalize on the past experience, and reinforce the integrated system implemented in the coastal and maritime area between Italy and Croatia by:

- Providing new observation and prevention systems, and adjusting remote-sensing information delivered by radars and satellites for coastal monitoring of environmental risks;
- Implementing a complex system of paired numerical models capable of forecasting the main hydro-meteorological and marine variables, as well as transport processes and possible leakages into the sea;
- Carrying out 2 pilot actions around the estuaries of the Pescara and Neretva rivers to test the consolidated integrated system.

Specific objectives

- Creating a new version of the hydological model (CHyM), to be used operationally for coastal flood prediction on the Pescara and Neretva river basins was designed.
- Building an air-sea coupled prediction system in the Adriatic area, which was previously tested on two case studies, one for the Abruzzo Region and one for Croatia, enabling to forecast the most important meteorological and marine variables;
- Performing a satellite data processing procedure to evaluate environmental bio-chemical indicators of coastal seawaters in the Adriatic Sea, like total

suspended matter (TSM) and chlorophyll content (CHL);

- Developing numerical model simulations of transport and dispersion in the Adriatic Sea basin and establishing modelling software, in order to simulate Lagrangian trajectories on the sea surface;
- Installing a wind profiler in the Dubrovnik area to improve wind monitoring and forecast;
- Procuring a firefighting boat in Dubrovnik to be used for firefighting operations at sea and tasked with the monitoring of the southernmost part of the Adriatic that is difficult to be reached overland.
- Testing the risk management platform by means two pilot actions around the estuary of the Pescara and Neretva rivers.

Partnership

The project involves 4 partners:

- Abruzzo Region – Service of Territorial Cooperation as the **Lead Partner** (IT)
- Dubrovnik and Neretva Region (HR)
- Meteorological and Hydro-geological Service (HR) Institute of Atmospheric Sciences and Climate (IT)

CETEMPS – Centre of Excellence of Telesensing of Environment and Model Prediction of Severe Events is the scientific implementing body on behalf of the Abruzzo Region.

Total budget

The total project budget is € 1,150,000.

Duration

18 months, from 1 January 2018 to 30th September 2019.

Websites

https://www.italy-croatia.eu/web/adriamore

https://www.regione.abruzzo.it/content/progetto-adriamore-sicurezza-nel-bacino-adriatico