

FLOOD-Serv Project: Piloting of Public Emergency and Awareness Services Platform

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Abstract—Climate changes increasingly contribute to extreme weather conditions like droughts, hyper hurricanes or floods, all of them representing a growing threat for humans, environment and economies over the globe. Following presentation will present the current state of findings gathered during development and piloting of public flood-awareness service FLOOD-serv, an ICT project funded by the European Union' s research and innovation programme. The overall objective of FLOOD-serv was to develop and provide a proactive and personalized citizen-centric application that will enhance the involvement of the citizen and will harness the collaborative power of ICT networks, i.e. networks of people, knowledge & sensors to raise awareness on flood risks and to enable collective risk mitigation solutions and response actions. Wider combination of participating pan-European pilot countries provided several pre-, post- and in-emergency use-cases of urban and rural character. In order to validate targeted enhancements in awareness- and emergency-services in participating municipalities, three phases of piloting have been designed and employed for a timeframe of 18 months. During this period, involved stakeholders i.e. citizens, municipalities, emergency- and environmental-institutions from Italy, Spain, Portugal, Romania and Slovakia have been trained to test pilot use cases with the platform components. Initial pilot tests indicate positive results in reaching broader institutional consensus around the importance of enhancing situational awareness and proactive citizen participation, both elements playing considerable role in the process of mitigation of flooding impacts when managed with dedicated ICT. Furthermore, a sophisticated integration of flood sensors opened ways for more efficient flash-flood prediction, while use of drone-based photography enabled innovative and affordable ways of territorial analysis in flood-risk areas. The final phase of piloting will target validation of the FLOOD-serv services within a fully integrated public emergency platform.

Keywords—citizens, emergency, flood, participation, situational awareness