MappERS-C and MappERS-V. The crowd source for prevention and crisis support

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The responsibilities within natural hazards at local/regional levels involve citizens and volunteers as first actors of civil protection and territorial management. The prevention implicates the capacities of professional operators and technical volunteers, but the priority implies now the involvement and awareness of the citizens over the territory they inhabit. The involvement of population creates context-specific strategies of territorial surveillance and management, skipping the limit to face risks only when they have to bear impacts on their lives. MAppERS (Mobile Application for Emergency Response and Support) is a EU project (funded under programme 2013-2015 Humanitarian Aid and Civil Protection, ECHO A5) which empowers "crowd-sourced mappers" through smart phone applications and sensors, with geo-tagged information, detailed gathered parameters, field-check survey in a contest of geospatial response. The process of development includes feedback from citizens, involving them in training courses on the monitoring as long term objective (raising public awareness and participation). The project deals with the development and testing of the smart phone applications (module MAppERS-V for volunteers, module MAppERS-C for citizens) according to Android SDK environment. A first research described a desk-based investigation on consequences of disasters impacts and costs of prevention strategies in pilot countries. Furthermore a review of state-of-the-art of database management systems (DBMS) in pilot countries and involvement of volunteers/citizens in data collection/monitoring collected basic info on data structure for the development. A desk-based research proposed communication methods/graphic solutions within mobile technologies for disaster management in pilot countries and available smartphone applications linked to centralized web/server database. A technical review is compulsory for a useful design-line for MappERS development, and it is linked with on-site feedback about volunteers and citizens needs within pilot groups activities. The app modules will be later re-designed according to the methodological and technical feedback gained during pilot study. Training curricula for citizens are planned to increase awareness, skills on smart phone utilities and efficient jargon for hazard contest. The expected results are: a) an easy-to-use interface for "human-data" in crisis support, b) a maximised utility of peer-produced data gathering, c) the development of human resources as technical tools d) a self-based awareness improvement.