

FLOOD-serv Semantic Wiki

Flood Serv semantic wiki based on ontology evaluation

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Semantic wiki module is a multi-lingual component to accompany the educational and the emergency management facilities of the FLOOD-serv system and will represent a specific ontology for floods, based on an existent ontology for hazard management and early warning

The multi-lingual semantic wiki aimed to accompany the emergency management facilities of the FLOOD-serv system will be built upon the vulnerability ontology, containing knowledge necessary for increasing the awareness of the general public. This component will also introduce references towards simulations of flood situations, built upon practical information available for understanding strategies in the decision making process. The ontology will be represented by a knowledge acquisition system and stored in a standard format, with the possibility to export it into a variety of formats, including OWL, RDF (Resource Description Format) and XML (Extensible Markup Language) Schema. The study of the semantic Wiki content and its navigability capabilities are expected to increase the comprehension level of the general public and to raise awareness and cooperativeness.

The FLOOD-serv SW solution will consist of a front-end and a back-end and other external services. The front-end of the solution consists of the software applications and thin clients that directly interact with the users (human actors): interested citizen involved or affected by the hydrological hazards; public authorities and emergency personnel. The backend of the solution implements software components for: Decision support; Data analysis; Emergency Management Console and Databases. External services integrated into the solution are represented by the Social Media collection and communication system; Open data sources and Semantic wiki. The data sources are: apps in the front-end (from all actors), social media and open data sources.