

SMARTeST: Future Research Briefing

The European Geosciences Union conference (EGU 2012) being held in Vienna this week has seen the EU's 7th Framework Project, SMARTeST hold a special session on the future of flood resilience research in Europe. This followed a seminar session on flood resilience that featured leading speakers from research and industry around Europe.

The SMARTeST project (www.floodresilience.eu) seeks to build on the drive for Flood Resilient (FRe) technology that has developed in recent years. The extent and consequences of recent flood events in Europe and worldwide showed that the existing flood defence structures do not guarantee a sufficient protection level for people and properties. Considering the uncertainty of future conditions shaped by main drivers of urban development such as climate change, and rapid urbanization the situation is getting even more severe. Where defences exist, the residual risk will increase as the probability will increase that they fail or be overtopped by severe floods. In this unfavorably changing environment, a substantial rethinking of the existing strategies and paradigm shift from the traditional approaches is required in order to cope with future flooding in an adequate way. The development of smart products that work within in system of flood resilience and can be modeled and implemented within the national regulations and policy is the basis of the project. Other 7th Framework projects such as FloodProbe and CORFU were represented in the seminar session.

The special session called for further research in flood resilience technology, systems and tools to protect vulnerable urban areas. The session recommended that there is a need for demonstration projects that can demonstrate the findings of SMARTeST and other EU projects in at risk urban areas. The session further recommended that the development of standards for technology and tools should be the focus of further research, with unified test standards for FRe technology being a matter of increasing urgency. Relevant FRe tools and models should see the development of standards for data management and presentation of results and uncertainty to decision makers.

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Conveners of Seminar Session, Research on Flood Resilience and Europe at EGU 2012.

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SMARTeST is holding an international conference and FRe technology exhibition, in Athens in September 2012 (see www.floodresilience.eu), further national events are being held in the seven partner countries (for the UK, see www.bre.co.uk/events_of_14_June_2012).