UrbanFlood

Deployment of Internet Services to Combat Climate Change Induced Disasters

Work Package 7 – D7.7

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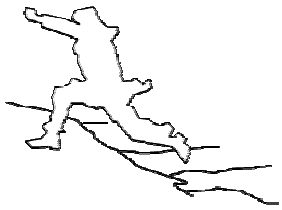
CYFRONET HR Wallingford SIEMENS stowa TNO Kennis voor zaken
SEVENTH FRAMEWORK PROGRAMME

URBAN FLOOD



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1 Introduction

Deliverable 7.7 is a deliverable in the category “other”. The deliverable, “Deployment of Internet Services to Combat Climate Change Induced Disasters”, summarizes UrbanFlood’s contribution to the uptake of monitoring technologies in flood defences. The availability of the technology is not enough to realize this. Even more important is the belief of stakeholders that the technology can reduce flood risks at the lowest possible cost. This deliverable consists of a number of short statements indicating the contribution of UrbanFlood to strengthen that belief. One of the tools to do so is the multi touch table that always succeeds in attracting and keeping the full attention of the public.

1.1 UrbanFlood

UrbanFlood is a project investigating the use of sensors within flood embankments to support an online early warning system, a real time emergency management that UrbanFlood is developing. It is a project under the EU 7th framework Programme which started in December 2009 and will run for 3 years. Partners of UrbanFlood include TNO Information and Communication Technology, the University of Amsterdam and STOWA (Dutch acronym for the Foundation for Applied Water Research) from the Netherlands; HR Wallingford in the UK, ACC Cyfronet AGH in Poland and OOO Siemens in Russia.

1.2 Contributions to deployment of UrbanFlood results

Presentations and demonstrations

During the second year all project partners gave numerous presentations and demonstrations (for a complete overview is referred to the periodic report of year 2). Some events had an extra impact:

- In the St Petersburg Dam Visitors Centre during the official opening of the Dam, Dutch and Russian ministers and CEO’s of large companies attended the demo (August 12, 2011).
- Another high impact event was a presentation in Delft to 24 Chinese majors of 1 million + cities, who learned that Europe has innovative solutions to large scale problems (November 17th , 2011).
- In May 2011 the BBC World News broadcasted UrbanFloods innovative dike technologies to a worldwide audience several times.

These high impact events have an extra positive effect on stakeholders who, one way or another, are already engaged in the UrbanFlood project.

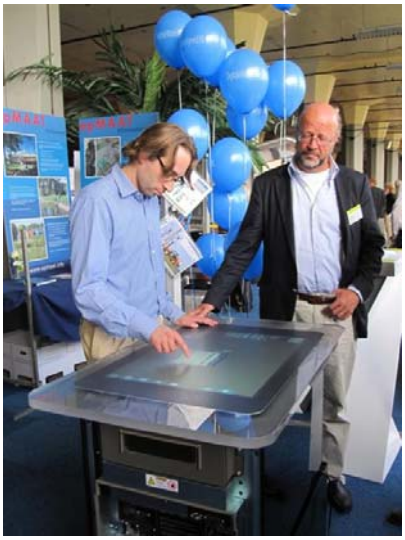
Interaction with stakeholders

- In September 2011 UrbanFlood was presented in Boston to an audience of city officials and people of the Environment Agency. This contributed to the understanding and acceptance of the Environment Agency of the usefulness of the technology.

- As an alternative to the St Petersburg Dam test site we opened discussions with a German water board along the river Rhine, upstream from the Dutch border, and agreed with them to build a test site. This resulted in an implementation of a monitoring system along the Rhine River. This means a bridgehead to Germany for the UrbanFlood technology. A full description is given in Deliverable 3.1A (UrbanFlood Report entitled 'Online dikes – design and installation of sensor systems ').

Follow up projects

- UrbanFlood technology will be applied in the IJkdijk project. During the "Innovation Estafette" (Innovation Fair) in Rotterdam, the Netherlands on Oktober 4th 2011 the IJkdijk project received an extra budget of three million Euros from the Dutch Ministry Infrastructure and Environment (see picture at the front page), bringing the total pledged budget to € 12 million. During this event UrbanFlood demonstrated the state of the art of the UrbanFlood Early Warning System.



- This budget will be used for further experiments, for a series of large scale 'livedikes' (up to 20 km) and for the development of a "Dike Data Service Centre". In one of the validation experiments in

2012 the UrbanFlood technology will be field tested in a large scale dike failure experiment with several new sensor suppliers. UrbanFlood technology will be deployed in the Dike Data Service Centre.

- UrbanFlood technology is already foreseen to be deployed in a number of other projects. UrbanFlood associate partner Waternet (the waterboard of Amsterdam and surroundings) already has four dikes online and wants to apply UrbanFlood technology as soon as it is available. Currently TNO and partner AGT International signed a contract with the Chinese authorities for a project to monitor the Yellow River.

- TNO submitted a proposal called 6thSense in the Call: FP7 ENV 2012.6.5-2 “Demonstration and exploitation of most promising prototypes and tools derived from European research activities”. 6thSense allows, on basis of the UrbanFlood technology, local SME companies to install sensors and connect them to the internet. This willenable human experts anywhere in the world to assert dike safety using the UrbanFlood computer systems. Eventually 6thSense minimizes environmental hazards by an huge scaling up of the number of companies that can deploy early warning systems”.