



URBANFLOOD NEWSLETTER

December 2012

UrbanFlood is a project under the European Union 7th framework Programme* that developed and tested an internet based early warning system (EWS) for dike breaches. The project started in December 2009 and has been completed on November 30th 2012. The project was carried out by a consortium of Cyfronet (Poland), HR Wallingford (United Kingdom), OOO Siemens (Russia), STOWA, TNO and University of Amsterdam (The Netherlands).

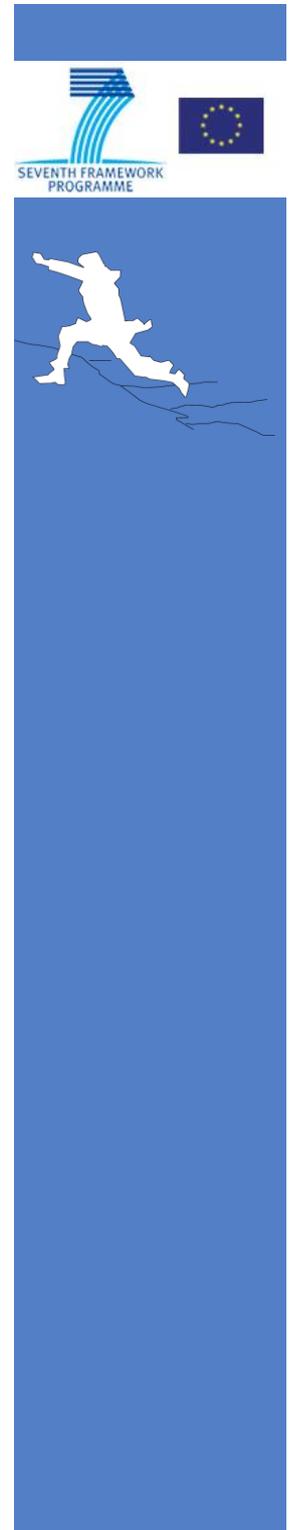
This newsletter informs about the results and impact of the UrbanFlood project.

Project coordinator Robert Meijer: "The European Commission wants to spread technologies that help citizens in urban areas to deal with the effects of climate change. The commission, professionals and citizens can now see the result of our project in The Crystal in London. Just Google for *The Crystal sustainability centre* to be informed on this very exciting place. In the Crystal you will see that UrbanFlood has created a very powerful EWS technology; that its artificial intelligence automatically learns the strength of 10000 km's of dikes based on sensor measurements and warns if the conditions are such that a breach is indicated. This large scale application of artificial intelligence is a major achievement. And we know how this intelligence can be the heart of the monitoring of buildings, bridges and off-shore installations during earthquakes and storms. There are so many applications. I am sure everyone in the Crystal agrees the UrbanFlood system is a real 'Smart City' technology."

"UrbanFlood expensive and complicated? On the contrary. The EWS is designed to minimize the burden for organisations to use the technology. The responsible organisations only have to put sensors in dikes and connect them to the internet. UrbanFlood will then generate a dedicated EWS for these dikes in the "Cloud". Organisations only have to use the web or the UrbanFlood Windows 7/8 multi touch decision support application that they can download. And if you need advice from dike experts when there is an emergency: the experts of HR Wallingford can be switched online and give their advice. While the system is designed as a flood early warning tool it can also be used as a flood defence asset management tool. The bottom line is that you don't get it better and cheaper. Ever."

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3rd and final UrbanFlood Workshop

Thursday 22 November 2012 – Rotterdam, the Netherlands

The final UrbanFlood workshop was held as a part of the FLOODrisk2012 Conference. The session started early on a rainy Thursday morning in Rotterdam; nevertheless we welcomed **48 participants of 13 different nationalities**. On the UrbanFlood website you will find the presented papers and **video presentation** of this very interesting and lively session, including the UrbanFlood video and the discussion at the end of the workshop. ... [more](#)

UrbanFlood exhibition and demonstration at FLOODrisk2012

20 – 22 November 2012

The exhibition of the UrbanFlood demonstration at the FLOODrisk2012 Conference in Rotterdam was a success, the multi-touch table was a big hit. Some quotes from the questionnaires collected at this exhibition.

- *Good job and hope to see an increase in number of sites added*
- *Very exciting and visual product that is of great potential value to decision makers in an emergency*
- *Very intuitive, an exciting tool!*
- *Thanks for the demo!*
- *We will need this kind of technology in the future. The link between monitoring and physical condition / performance needs improving*

UrbanFlood 'The Story'

28 November 2012

'The Story' (deliverable D7.9) is a brochure which will quickly give you an idea of the UrbanFlood Early Warning System, and some background on the project itself. ... [more](#)

Water Innovation Award 2012

28 November 2012

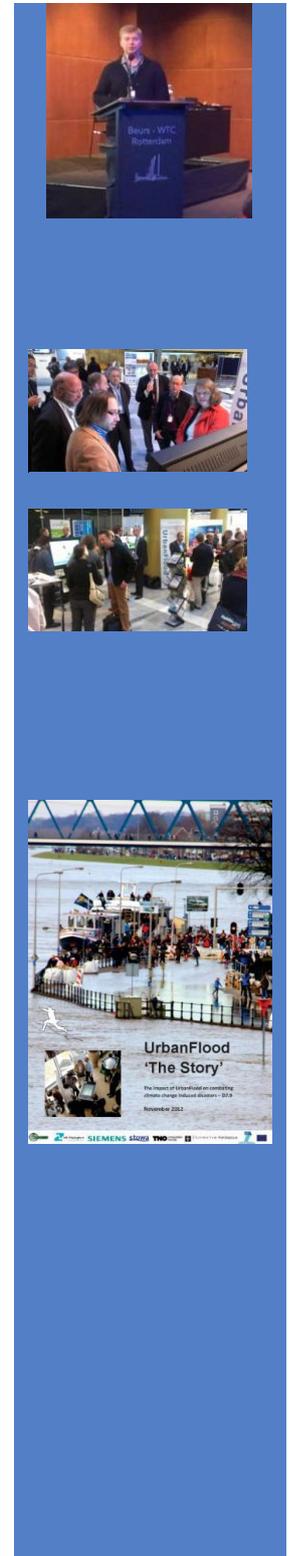
On Wednesday 28 November the Water Innovation Award 2012 is awarded in four categories in 'De Rode Hoed' Amsterdam. In the category Companies wins DMC System from Friesland, an advanced sensor technology for dike monitoring. ... [more](#) (Dutch).

The Soft Dike Software

- Using Sensors and Software Against the Flood

14 November 2012

Climate change is here. The poles are melting. Sea levels are rising. Storms of the century like "Katrina" or "Sandy" come every few years. They mostly threaten coastal cities - and New York was the latest. Together with UrbanFlood partners, Siemens Corporate Technology developed an early warning system for dike breaches and flooding. The idea: insert sensors into the dike which measure water pressure, temperature, and shifting. The measured data flows into a software in order to realize the danger of dike breaches at a very early stage... [more \(video\)](#)





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Final IJkdijk experiment and a new LiveDijk-project

3 October 2012

This autumn UrbanFlood participated in the final IJkdijk experiment at Bellingwolde, Groningen, in the Netherlands. It was a so-called "All-In-One Sensor Validation Test". Before the experiment no one knew the failure mechanism by which the two test dikes, both filled with sensors, would collapse. **The results showed that both the UrbanFlood Artificial Intelligence module as well as its Virtual Dike finite element model indicated the two dike breaches well in advance.**

And: A new LiveDijk project just started in the Province of Utrecht, the Netherlands. Two dikes are now monitored in real-time using sensors inside these dikes: the 'Grechtdijk' in Woerden and the 'Voorhavendijk' at the 'Beatrix Locks' in Nieuwegein. UrbanFlood partners STOWA and TNO are involved in this LiveDijk project as a member of the IJkdijk Foundation. ... [more](#) (Dutch)

Life after UrbanFlood

30 November 2012

On 30 November UrbanFlood ended its project activities. The consortium is proud of its achievements and the consortium members look back on a period of hard and extremely innovative work in a pleasant atmosphere. The concrete commercial leads in Europe and Asia will lead to a formal agreement on further collaboration in February 2013 and the continuation of the technical EWS services in 2013 and beyond.

In February 2013 Euronews will film the achievements of the UrbanFlood project. We will also have a demonstration video of the UrbanFlood EWS ready by then, so check the website.

In April 2013 the consortium will forward another proposal to the EU, on a related topic where the UrbanFlood technology provides a head start.

On behalf of the entire UrbanFlood team we wish you a happy Christmas and a good and innovative 2013!

Events

UrbanFlood European Commission Review

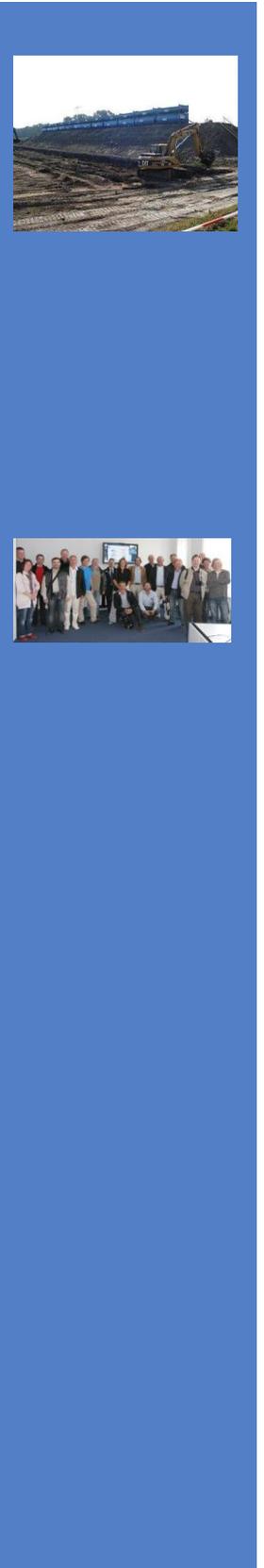
25 January, 2012

Location: Amsterdam, The Netherlands ... [more events](#)

UrbanFlood Newsletter

As the project was completed a few day ago this is the last UrbanFlood Newsletter. You can find all UrbanFlood Newsletters on the [website](#). For inquiries regarding this newsletter you can contact the UrbanFlood webmaster, Jacqueline Bredius at newsletter@urbanflood.eu.

UrbanFlood is a European project under the EU 7th framework Programme*. For more details please visit the UrbanFlood website www.urbanflood.eu or contact the project coordinator: robert.meijer@tno.nl (+31(0) 88 86 65753).





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