UK 2nd National Observers Group Meeting

Date & Time: Tuesday 16th April 2013, from 09:30 to 16:00
Venue: London City Hall, The Queens Walk, London, SE1 2AA

By Susana Ochoa-Rodriguez

RainGain Project Meeting, Paris, 22nd October 2013
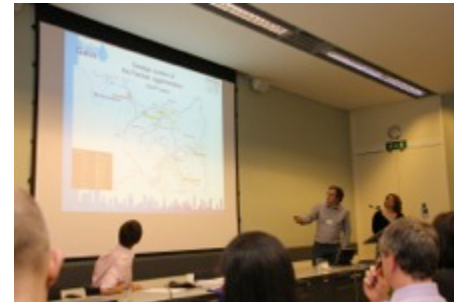
UK 2ⁿᵈ NOG Meeting

- **56 attendees:**

  - 29 observers, including practitioners, academics and local and central government policy-makers from the UK

  - 27 project partners

- **Presentations on management of surface water flooding in RainGain partner countries:**

  - Senior national and local government officials from the UK

  - Water managers / local authorities from other RainGain partner countries

Presentations – Surface water flood risk management in the UK:	Presentations – Surface water flood risk management in RainGain partner countries:
• Andy Johnston, Local Government Flood Forum	• Daniel Goedbloed, Province Holland Zuid, The Netherlands
• Andy Lane, UK National Flood Forecasting Centre	• Philippe Bompard & Natalija Stancic, Conseil Général du Val-de-Marne / Seine-Saint-Denis, France
• Alex Nickson, Greater London Authority	• Johan van Assel, Aquafin NV, Belgium
• David Stewart, Torbay Council	

UK 2nd NOG Meeting

- **UK RainGain partners** ICL, Met Office and LGFF outlined progress to date


- The day concluded with a **breakout discussion session** on the **way forward for surface water flood forecasting and warnings in the UK**:

  - The audience was split into groups, each of which comprised rainfall, modelling and flood management experts

  - A questionnaire with pre-defined questions was used to lead the discussion

ALTERNATIVES FOR IMPROVING CURRENT SURFACE WATER FLOOD FORECASTING AND WARNING SYSTEMS

General approach?

Single national service   OR   Two-tier national/local service
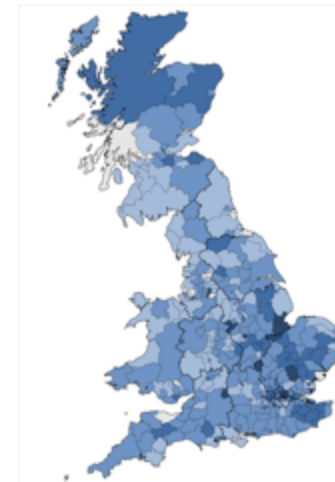
- Rainfall (weather forecast) from national service (FFC)
- Local system, especially for hotspots, operated by LAs in collaboration with EA

ALTERNATIVES FOR IMPROVING CURRENT SURFACE WATER FLOOD FORECASTING AND WARNING SYSTEMS

What kind of system?

In general, flood forecasting systems can be of 3 types (Hénonin et al. 2010):

a) **Empirical scenario-based system:** warning thresholds based on knowledge of the area (e.g. Extreme Rainfall Alert service)

b) **Pre-simulated scenario-based system:** results catalogue built from previous hydraulic simulations (e.g. data-driven models)

c) **Real-time simulations-based system:** real-time hydraulic modelling

- The main input for all 3 systems is rainfall forecast

- All 3 systems could benefit from complementary hydro telemetry data

ALTERNATIVES FOR IMPROVING CURRENT SURFACE WATER FLOOD FORECASTING AND WARNING SYSTEMS

What kind of system?

Type of system	Accuracy/Quality	Cost/ease of implementation	Cost/ease of operation
(a) Empirical scenario-based	🔴	🟡	🟡
(b) Pre-simulated scenario-based	🟢	🔴	🟡
(c) Real-time simulations-based system	🟡 / 🟢	🔴	🔴 / 🟢

- **Technically:** all systems are feasible

- **Monetary and human resources availability:** only (a) and (b) for the time being

ALTERNATIVES FOR IMPROVING CURRENT SURFACE WATER FLOOD FORECASTING AND WARNING SYSTEMS

What kind of system?

Type of system	Accuracy/Quality	Cost/ease of implementation	Cost/ease of operation
(a) Empirical scenario-based	🔴 (sad)	🟡 (happy)	🟡 (happy)
(b) Pre-simulated scenario-based	🟢 (neutral)	🔴 (sad)	🟡 (happy)
(c) Real-time simulations-based system	🟡 (happy) / 🟢 (neutral)	🔴 (sad)	🔴 (sad) / 🟢 (neutral)

- **Type (b):** good balance between cost, benefits and practical delivery
- Gradual capacity building until more sophisticated systems can be implemented

ALTERNATIVES FOR IMPROVING CURRENT SURFACE WATER FLOOD FORECASTING AND WARNING SYSTEMS

What are the main constraints for better and more effective warnings?

Main constraints:

- Insufficient accuracy of rainfall estimates and forecasts

- Lack of capacity at local authorities

- Low-levels of public flood risk awareness

- Limited budget

Actions/Solutions:

- Met Office and academics are working hard on it!

- Capacity must be built gradually

- Work underway, must continue

- Working in partnership, open source models, web-services

UK 2ⁿᵈ NOG Meeting - General overview

- This meeting provided a great opportunity for project partners from BE, NL and FR to share experiences in flood risk management with their counterparts from the UK.

- Very useful discussion during break-out session

- The meeting generated great interest of stakeholders in our project:

    – Afterwards we were invited to give presentations in national events (e.g. Innovyze Users Days – June 2013, Annual Conference of the UK Chartered Institution of Water and Environmental Management – November 2013)

    – Attendees expressed their interest in adopting the techniques developed as part of the RainGain project (e.g. MWH Global, Scottish Environment Protection Agency).