

SUMMARY - DISCUSSION TOPIC 3: Improved management of urban pluvial flooding

By Laurie Thraves and Marie-Claire ten Veldhuis

The workshop group identified two key benefits of improved information on local flood risk. First, it can help local authorities make better decisions about the location of investment in flood risk management infrastructure. One delegate argued that, at present, local authorities had to contend with an unacceptable level of uncertainty when making decisions about the place of expensive infrastructure. On a less critical scale, improved data could help local authorities make improved decisions about the location of SUDs.

A second benefit of improved information is that it can help local authorities provide more effective challenge as part of the planning process. There was a strong feeling from delegates that the majority of flooding issues are created by poor development control. Improved information on local flood risk at the household and business level would help ensure that developers made flood risk a more active consideration and invested in flood risk mitigation strategies by building-in green and blue architecture from the initial stages of a project.

There was a general agreement that planning decisions had improved over the years and most flooding issues were “legacy issues”. However, three significant obstacles were identified that could put this improvement in flood risk management at risk.

- First, the planning reforms. There was agreement that, although PPS 25 was to some extent skewed towards pluvial flooding, it was a helpful document. Current uncertainty about the status of this guidance was unhelpful to the work of planning committees.
- Second, the current reduction in local government budgets. This has seen a large number of significant capital projects, which often rely on a combination of local and national funding, mothballed. It also puts at risk investment in small-scale, community level projects such as SUDs.
- Third, priorities. Several delegates made the point that local government, in a tough spending round, will struggle to prioritise investment in flood infrastructure over issues such as health, social care and education.

More confidence, however, was expressed about the potential for improved information on flood risk at the community, property and business level to drive better decision-making by individuals, developers, communities and the private sector.

- First, it was argued that knowing that their property was specifically at risk could motivate homeowners to investigate flood mitigation measures. The responsibility of local councils in this situation is to provide clear next steps to concerned home owners. This could range from low-cost options, such as installing waterproof plaster, to significant investment and modifications.
- Second, it was argued that knowing the potential flood risks associated with a development site could help motivate developers to get hydrologists involved at a far earlier stage than is currently the case. Third, it could motivate communities to invest money or (more likely) time in the establishment of



SUDS. There was agreement that a key part of motivating communities in this regard is emphasising the benefits SUDS can provide as a community amenity, not just as flood infrastructure. The role of the private sector, in particular the water companies, in supporting and motivating investment by property owners was also discussed.

The potential benefits and challenges associated with surface flood warnings were also discussed during this session. Some conclusions on this regard are the following:

- Lead local authorities consider early surface flood warnings could provide significant benefits, even with short lead times (the minimum “acceptable” lead time is approximately 30 min). Simple actions such as checking and cleaning highway gullies and water courses, deviating traffic, amongst others, could be implemented with short lead times.
- It is important to share information with the public at the earliest stage, while leaving judgment (i.e. how to act) to people.
- Different warning levels could be used, with different lead-times and degrees of certainty: long lead time, lower certainty / shorter lead time, higher certainty.
- Warnings should include actions that could be taken depending on the magnitude of the forecasted event and on the lead time and level of uncertainty of the warning.
- False alarms: tolerance is expected to be high, but it depends on type of information and actions required from the public: if it is just information, tolerance to false alarms is ok; if the alarm demands action, tolerance may be lower.
- The way in which information is communicated to the public will depend on the frequency of information sharing, on lead time and on the type of public.
- Lead local flood authorities wish for more geographically focused warnings. At the moment they receive Extreme Rainfall Alerts, which cover large areas.
- Public awareness to surface flooding is low; getting the public to take actions to protect themselves is difficult and more work on this regard is necessary.
- In London automatic subscription to a warning system is needed, given the constant population change (high turnover rates), especially in hot spot areas.