With the predicted effects of climate change it is clear that an integrated and diverse range of flood risk management options will be required to manage flooding in the UK in the future. Preparedness to flooding is becoming increasingly important and the UK is about to embark on its largest ever multi-agency National Emergency Response Exercise.

The eight-day exercise - codenamed ‘Watermark’ - is scheduled for March 2011 and will test emergency responses to a major flood by agencies including Police and Fire, as well as the highest level of government involvement through the Cabinet Office Briefing Room.

The exercise has been developed by a specialist and integrated team of government and private sector consultants and involved:

1) Development of a story line - based on an eight day severe storm with devastating surface water, river, reservoir and coastal flooding. Over 50 individual command facilities are playing ‘live’ and will be supplied with more than 10,000 individual pieces of information to stimulate play. Realistic local flood conditions have been developed from a vast array of telemetry data including rainfall depths, river levels and flood forecast alarms.

2) Delivering web-based collaboration software; specialist software to deliver the exercise; and a public website.

3) Managing the event through a central ‘Exercise Control’ base, before evaluating and reporting on the outcomes.

This paper summarises the drivers for the exercise, challenges faced in preparing such an ambitious exercise and the expected outcomes for improving future response to flooding in the UK and abroad.