Minute of 2nd SAGE Meeting 19 February 2014
35 Great Smith Street, London
11.30 to 13.30

List of Attendees:

Chair
Mark Walport        GCSA

Attending
Ken Allison        Environment Agency (in place of David Rooke)
Gian Anat          CLG
Jeremy Benn        JBA Consulting Engineers & Scientists
Ian Boyd           CSA, Defra
David Boorman      Centre for Ecology & Hydrology
Hannah Cloke       University of Reading
Andy Croxford      Environment Agency
Jim Hall           Oxford University
Miranda Kavanagh   Environment Agency (in place of Paul Leinster)
Ian Johnson        DECC
Sam Jones          DfT
Owen Lewis         Environment Agency (in place of Doug Wilson)
Paul McClophrie    CCS
David Mackay       CSA, DECC
Matthew Sellick    Drinking Water Inspectorate
Julia Slingo       Met Office
Rod Smith          CSA, DfT
Ian Townend        HR Wallingford (on telecom)
Colin Thorne       University of Nottingham (on telecom till 12:55)
Rob Ward           British Geological Survey
Jeremy Watson      Director of Global Research, ARUP
Bryan Wells        MoD

Secretariat
Ben Edmonds        GO-Science
Nicholas Moiseiwitsch GO-Science
Giles Robertson    GO-Science
Andy Ryan          GO-Science
Elizabeth Surkovic GO-Science
Elizabeth Warham   GO-Science
Detailed Note

1. Welcome

The Chair welcomed participants who introduced themselves around the table and on the teleconference. He reminded participants that the purpose of the meeting was to establish a reasonable worst case scenario for COBR, and better understand the increasing risks of sinkholes.

2. Update since Previous SAGE

GO-Science provided a progress update on the actions from the previous SAGE meeting; clarifying where actions had been completed, and the timescales for those which needed further input (namely the modelling work with a further meeting planned this week). A key issue outstanding related to the improvement of water flow models, as identified at the 1st SAGE meeting.

Key points on other actions not addressed in other agenda items, to note were:

a) Relating to whether there are concerns regarding shipping through the Thames Barrier, EA considered on balance that introducing shipping restrictions in this area was low priority;

b) Drinking Water Inspectorate confirmed they were in close communication with CCS; and

c) BGS have provided data on landslide risks to CCS but uncertain whether it has been received by Gold Command.

3. Situation Report and Risk Analysis

Brief reports on the current weather and flooding situation were provided by the Met Office, CCS and the Environment Agency.

4. Update from Bridge Scouring Technical Cell

Experts discussed the benefit of accessing the recent satellite and remote sensing images of flood areas, and establishing a small group (BGS, CEH and EA) within the week to discuss whether the data was available from current monitoring systems to better predict the likely impact of groundwater.

BGS explained their briefing note outlining the characteristics and occurrence of sinkholes and subsidence hollows. Those appearing in recent weeks were a result of heavy and persistent rain. It was agreed that there was a longer-term piece of work looking at sinkholes, considering both a formal register, and overlaying likely locations with the BGS working database of mines.

The BGS information on landslides was considered really useful, but it was imperative that asset owners are aware of the information available.

BGS made the group aware of a major EPSRC project looking at a river banks.
5. **Critical Analysis of Worst Case Scenario**

EA introduced the temporal and spatial map looking at meteorological, hydrological and geological worst case scenarios prepared with the Met Office, BGS and CEH. Discussion focused on refining this as the reasonable worst case scenario to the end of March for submission to CCS ahead of the COBR meeting in the afternoon. The final agreed slides are attached.

6. **Concluding Remarks**

The Chair thanked everyone for attending and acknowledged the hard work in preparing briefings for the meeting.