



House of Commons
Science and Technology
Committee

**Scientific advice and
evidence in
emergencies:
Supplementary
Government Response
to the Committee's
Third Report of Session
2010–12**

**Sixth Special Report of
Session 2010–12**

*Ordered by the House of Commons
to be printed 8 June 2011*

HC 1139
Published on 14 June 2011
by authority of the House of Commons
London: The Stationery Office Limited
£0.00

The Science and Technology Committee

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Sixth Special Report

On 2 March 2011 the Science and Technology Committee published its Third Report of Session 2010–12,¹ *Scientific advice and evidence in emergencies* [HC 498]. On 3 May 2011 the Committee received a memorandum from the Government which contained a response to the Report, this was published on 17 May 2011 as the Committee's Fourth Special Report of Session 2010–12 [HC 1042]. A supplementary memorandum was received from the Cabinet Office on 6 June 2011 and is published as an appendix to this Report.

Appendix: Supplementary response

1. The Government sent a considered response to the Science and Technology Select Committee's report on "*Scientific Evidence and advice in emergencies*" on the 3 March 2011. This response was structured in a way which was hoped would be most helpful and which avoided duplication by addressing similar recommendations and conclusions in single overarching responses. However as this approach was not explained in the original response, in the interest of clarity a response to each of the concluding paragraphs and recommendations, not explicitly covered by the original response is provided below.

Severe weather is already included as a risk on the National Risk Register. We are disappointed that it appears, from the Secretary of State for Transport's comments, that the GCSA had little or no input to the risk assessments that must have taken place on severe weather (paragraph 55).

2. Paragraphs 17 of the original response referred to recommendation 56 which is linked to this conclusion. This stated that the Government agrees that the GCSA should be formally involved in the NRA process. The Government Office for Science is involved at all stages of the NRA process and this means that the GCSA is fully engaged in the scientific scrutiny of the scientific evidence that informs the NRA via the involvement of his staff in these interdepartmental groups.

3. The interdepartmental NRA groups review the inputs provided by Government Departments for the NRA. As set out in paragraph 15 of our original response, Government Departments are responsible for identifying and carrying out risk assessments for the risks that they own and for their respective areas of expertise. In doing this, Departments are expected to coordinate the necessary expertise and to draw upon their Chief Scientific Advisors and Scientific Advisory Committees to ensure scientific advice is given due consideration.

4. The process described at paragraph 2 and 3 above applies to all risks, including severe weather.

¹ Since the report was published it has been established that the session is expected to continue until 2012

Risk assessment underpins preparedness. In turn, risk assessment should be underpinned by the best available evidence. We were very disappointed to learn that the GCSA has had little involvement with what is a cross-Government process. It appears that, for both the volcanic ash emergency and the recent severe winter weather, the GCSA had been asked to provide advice after the emergency had happened, although we note with interest that the severe winter weather was not deemed an emergency. This is simply not good enough: scientific advice and evidence should be integrated into risk assessment from the start (paragraph 110).

5. Paragraphs 14 to 16, 17, 19 to 20 and 21 of the original response referred to recommendations 54, 56, 65 and 66. These recommendations were all linked to or were summarised in recommendation 110. At these paragraphs, the Government:

- agreed that science is an important element of the NRA process;
- noted that in the first instance, risk owners (Government Departments) are responsible for ensuring that appropriate scientific advice is included in both the assessment and identification of any new risks. This should include the departmental Chief Scientific Advisors and their officials, departmental Scientific Advisory Groups, Heads of Analysis and external advice where appropriate;
- noted that officials from the Government Office for Science and its predecessors have been engaged in the NRA process, through the interdepartmental Risk Assessment Group and Risk Assessment Steering Groups (see paragraph 3), since the first NRA was produced in 2004.
- noted that the GCSA, via his officials presence on inter-departmental NRA groups had a pivotal role in the scrutiny of the scientific evidence that informs the NRA; and
- outlined that work was underway, via the NRA interdepartmental groups to identify ways to strengthen scientific scrutiny within the NRA process and consider how best to more fully engage the GCSA in the process of approving the assessment of risks requiring scientific input and judgement.

It remains unclear to us whether the Code of Practice for Scientific Advisory Committees applies to SAGE and we seek clarification on this issue (paragraph 142).

6. In paragraphs 89 to 90 of the original response the Government clarified that the Government Office for Science's owned "*Code of Practice for Scientific Advisory Committees*" and the "*Principles of Scientific Advice to Government*" applied to all scientific advisory committees that advise government, including SAGE.

While an initial lack of balance on SAGE can be later addressed through the addition of members or formation of sub-groups, we consider that it would be desirable to strike a suitable balance of expertise from the start. The first step is to ensure that key experts are identified through the NRA process. We conclude that, if risks and Lead Government Departments can be identified in advance, the Government could also pinpoint possible expert advisers who may be called upon to provide advice in the event of an emergency (paragraph 154).

7. Paragraphs 62 to 63 of the original Government response referred to recommendation 155, which linked to this conclusion. In these paragraphs of the original response the Government:

- agreed that SAGE members should be identified in advance;
- noted that the identification of relevant subject matter experts would be the responsibility of the Lead Government Departments, which is done as far as possible in advance;
- noted that the new Amplified Science Guidance would recommend that Lead Government Departments consult their Chief Scientific Advisors (CSAs), Heads of Analysis and if appropriate their Chief Medical Officers (CMOs) and/or Chief Veterinary Officers (CVOs) to identify and maintain lists of potential SAGE members;
- noted that CSAs would be expected to consult their own networks (such as from academic, National Academies and societies and international networks) and the Government Chief Scientific Advisor (GCSA); and
- highlighted the importance of flexible and resilient lists of experts that avoided reliance on specific individuals.

8. Paragraphs 10 to 12 of the original response clarifies how LGDs are identified and outlines how this is regularly reviewed.

It is important that the existence of SAGE and how it can be accessed is made known during an emergency so that those with alternative, credible scientific views can contribute. Such input would need to be screened and evaluated, but that would be part of SAGE's challenge function (paragraph 165).

9. Paragraphs 67 of the original Government response referred to recommendation 166, which linked to this conclusion. In this paragraph the Government stated its commitment to publishing SAGE information in a place where it can easily be found. In circumstances where the Government Office for Science and Cabinet Office jointly provide the SAGE secretariat, details of members, minutes and papers are posted on the Government Office for Science website. Where there is a Lead Government Department, SAGE information will be published on their website, with links to this provided on the Government Office for Science website. To maximize transparency, the Government also believes that links to SAGE scientific advice should be provided on the Cabinet Office website, given they own UK crisis management mechanisms and their website might be considered by many an obvious place to look.

We are concerned that the SAGE mechanism operates under a presumption of secrecy rather than transparency and openness, and this was particularly and unnecessarily so during the volcanic ash emergency (paragraph 168).

Paragraphs 67 and 68 to 70 of the Government original response referred to recommendation 166 and 167, which linked to this conclusion. In these paragraphs, the Government:

- agreed that SAGE should operate on the principles of openness and transparency. Government has published membership, minutes and key transcripts from all three SAGE activations to date and is committed to continuing this for future emergencies;
- noted that SAGE members are not prevented from publically stating that they are a member of SAGE or from talking about their own opinions and work; and
- noted its commitment to learning lessons from each SAGE activation.

We have stated previously that the ability to draw upon an existing SAC to form the swine flu SAGE was helpful. However, it must be made clear how SAGE retains a SAC's level of independence from Government. We conclude that clarifying a code of conduct and publishing the names of members of future SAGEs, with their declarations of interest, could only be useful in this respect (paragraph 176).

10. Paragraphs 60 to 61 and 67 of the original Government response referred to recommendations 152 and 166, which linked to this conclusion. Paragraphs 89 to 90 of the original response referred to recommendation 189, which among other things, summarised this conclusion. In these paragraphs in the original response the Government:

- agreed that SAGE should operate from a presumption of openness;
- agreed that SAGE membership and their declarations of interest should be published with the permission of SAGE members;
- clarified that the Government Office for Science owned “*Code of Practice for Scientific Advisory Committees*” and the “*Principles of Scientific Advice to Government*” apply to all Government scientific groups, including SAGE;
- noted that the need for SAGE to adhere to these codes would be publically clarified in the new Amplified Science Guidance; and
- highlighted that the Government is “*committed to reviewing and revising the SAGE “Terms of Reference” and “Confidentiality agreements” to ensure they clearly reflect the Government’s commitment to transparency*”.

While we take the view that there is merit in combining the forces of SACs such as SPI and JCVI under a SAGE for future influenza pandemics, we do not consider that the CAA’s work on resolving the issue of ash tolerances of engines and aircraft during the volcanic ash emergency could have been carried out as quickly under the umbrella of SAGE, because of SAGE’s more limited membership (paragraph 183).

11. Paragraphs 77 to 81 and 82 to 84 in the original Government’s response referred to recommendation 182 and 184 which link to this conclusion. In addition paragraphs 62 and 64 of the original response refer to SAGE membership (in response to recommendation 155). In these paragraphs in the original response the Government outlined that:

- it disagreed with the statement that the volcanic ash SAGE made little contribution – “SAGE made significant contributions to the understanding of the risks associated with volcanic hazards by providing a peer review mechanism for the

modelling which underpinned decision making” (see paragraphs 77 to 81 of the original response for further details);

- key CSAs and experts provided advice in COBR as soon as the Government became aware of the issue, before the volcanic ash SAGE was formally activated;
- the volcanic ash SAGE comprised a range of experts that included volcanologists, meteorologists and a CAA representative; and
- the new Amplified Science Guidance would, when published, outline that lists of potential SAGE members should include “an appropriate range of scientific and technical specialities”.

12. As outlined in paragraph 8 of the original response, the Japan SAGE activated very quickly (two days after the earthquake). The speed of this activation was a response to the lessons learnt by previous SAGE activations.

13. For the reasons outlined above, the Government does not agree that the more limited membership and activation times for SAGE, limits its potential to effectively coordinate scientific evidence and advice in an emergency and add value.

We conclude that it is essential that the Department for Transport and the CAA sustain the ability, in the face of any new hazard, to access the full range of science, engineering, operating and regulatory resources necessary to determine whether existing regulations are adequate and appropriate (paragraph 223).

14. Paragraphs 103 to 105 and 106 to 107 of the original response refer to recommendation 222 and 224 which links to this conclusion. In these paragraphs in the original response the Government outlined that:

- it is confident that the CAA continues to demonstrate world-leading abilities as a specialist aviation safety regulator;
- the Department for Transport supported the CAA efforts during the volcanic ash disruptions of April 2010 to develop a new approach to reducing airspace disruption;
- the Secretary for State for Transport, who is accountable in parliament for the overall performance of the CAA, has set out his current priorities for the CAA. These include; *“maintaining and developing the CAAs good reputation and influence both in Europe and internationally on those matters in which it has regulatory and technical expertise and specifically that the CAA supports and develops the effective management of EASA.”*; and
- it recognised that *“there is still much more important technical work to be done following the volcanic ash incident last year to ensure we are better prepared for any future incidents of this nature”* (Secretary for State for Transport).

15. In addition, since the original Government response was published a expert group to review the observational data and modeling relating to volcanic ash has been established.

This group will be chaired by the GCSA and includes experts from a wide-range of specialties.

We are concerned that the Government's attitude to scientific advice is that it is something to reach for once an emergency happens, not a key factor for consideration from the start of the process. We conclude that scientific advice and an evidence-based approach must be better integrated into risk assessment and policy processes early on (paragraph 229).

16. As outlined in the introduction to the original response the Government is committed to effective, proportionate evidence based emergency management which draws upon a range of sources, including science. The Government welcomed the committee's conclusion that "*science is used effectively to aid the response to emergencies*" and believes this is testament to its planning and preparations. Significant steps have been taken to ensure scientific advice informs decision making at all stages of crisis management. Paragraphs 2 to 3 of the original response outlines how science is used to inform risk assessment, whilst paragraph 4 explains how it informs planning and preparations.

17. Paragraph 1 of the original response highlights that the Government is committed to continuously improving the way in which advice is coordinated and used in emergencies. Both the original response and this supplementary response seek to outline how the Government is taking the recommendations of the Select Committee forward.

We do not accept that SAGEs should be given a *carte blanche* to operate however they please just because an emergency is occurring. We conclude that the Government Office for Science should take responsibility for ensuring that all future SAGEs operate in a more organised, transparent and accessible manner and adhere to a published code (existing or new) (paragraph 230).

18. Paragraphs 60 to 61, 67 and 68 to 70 of the original Government response referred to recommendations 152, 166 and 167, which linked to this conclusion. Paragraphs 89 to 90 of the original response referred to recommendation 189, which among other things, summarised this conclusion. In these paragraphs of the original response the Government:

- agreed that SAGE should operate from a presumption of openness;
- agreed that those SAGE papers which would have been made public following an FOI request should be published;
- agreed that SAGE membership and their declarations of interest should be published with the permission of SAGE members;
- noted that for most emergencies a number of FOI exemptions were likely to apply (e.g national security and pre-empting decisions). For this reason it noted that some SAGE advice would need to be redacted and/or its release delayed until the decisions it informs are made;
- clarified that the Government Office for Science owned "*Code of Practice for Scientific Advisory Committees*" and the "*Principles of Scientific Advice to Government*" apply to all Government scientific groups, including SAGE;

- noted that the need to adhere with these codes would be highlighted in the new Amplified Science Guidance; and
- highlighted that the Government is “committed to reviewing and revising the SAGE *“Terms of Reference”* and *“Confidentiality agreements”* to ensure they clearly reflect the Government’s commitment to transparency”.