



House of Commons  
Science and Technology  
Committee

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**The Government's review  
of the principles applying  
to the treatment of  
independent scientific  
advice provided to  
government: Government  
Response to the  
Committee's Third Report  
of Session 2009–10**

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**First Special Report of Session  
2009–10**

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## The Science and Technology Committee

The Science and Technology Committee is appointed by the House of Commons to examine the expenditure, administration and policy of the Government Office for Science. Under arrangements agreed by the House on 25 June 2009 the Science and Technology Committee was established on 1 October 2009 with the same membership and Chairman as the former Innovation, Universities, Science and Skills Committee and its proceedings were deemed to have been in respect of the Science and Technology Committee.

### Current membership

Mr Phil Willis (*Liberal Democrat, Harrogate and Knaresborough*)(Chairman)  
Dr Roberta Blackman-Woods (*Labour, City of Durham*)  
Mr Tim Boswell (*Conservative, Daventry*)  
Mr Ian Cawsey (*Labour, Brigg & Goole*)  
Mrs Nadine Dorries (*Conservative, Mid Bedfordshire*)  
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Dr Doug Naysmith (*Labour, Bristol North West*)  
Dr Bob Spink (*Independent, Castle Point*)  
Ian Stewart (*Labour, Eccles*)  
Graham Stringer (*Labour, Manchester, Blackley*)  
Dr Desmond Turner (*Labour, Brighton Kemptown*)  
Mr Rob Wilson (*Conservative, Reading East*)

### Powers

The Committee is one of the departmental Select Committees, the powers of which are set out in House of Commons Standing Orders, principally in SO No.152. These are available on the Internet via [www.parliament.uk](http://www.parliament.uk)

### Publications

The Reports and evidence of the Committee are published by The Stationery Office by Order of the House. All publications of the Committee (including press notices) are on the Internet at <http://www.parliament.uk/science>  
A list of reports from the Committee in this Parliament is included at the back of this volume.

### Committee staff

The current staff of the Committee are: Glenn McKee (Clerk); Richard Ward (Second Clerk); Dr Christopher Tyler (Committee Specialist); Xameerah Malik (Committee Specialist); Andy Boyd (Senior Committee Assistant); Camilla Brace (Committee Assistant); Dilys Tonge (Committee Assistant); Melanie Lee (Committee Assistant); Jim Hudson (Committee Support Assistant); and Becky Jones (Media Officer).

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## First Special Report

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On 14 December 2009 the Science and Technology Committee published its Third Report of Session 2009–10, *The Government's review of the principles applying to the treatment of independent scientific advice provided to government* [HC 158-I]. On 15 February 2010 the Committee received a memorandum from the Government which contained a response to the Report. The memorandum is published as an appendix to this Report.

## Appendix: Government response

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The Select Committee's report, *The Government's review of the principles applying to the treatment of independent scientific advice to Government*, is a valuable contribution to the discussion on these overarching principles. The purpose of the principles is to ensure continued effective engagement between the Government and those who provide independent science and engineering advice and Government is committed to arriving at a good final position.

Although this report came too late to be considered in the production of the draft principles, the Government is considering the Committee's recommendations as part of its consultation.

### Introduction

**1. We welcome the Government's success in improving the mechanisms by which scientific advice can be fed through into policy. The network of Chief Scientific Advisers and scientific advisory committees has the potential to strengthen the UK's ability to make policy decisions that are based on the best available evidence and to make the UK Government's science advisory system an international exemplar. (Paragraph 2)**

Government has worked hard to embed science and engineering advice in the policy-making process and we are grateful that the Committee has recognised this. The appointment of a Chief Scientific Adviser (CSA) to every major science-using government department is a reflection of the value the Government places on scientific advice. Government commitment to science is further highlighted by the Minister for Science and Innovation, Lord Drayson, having a place at Cabinet and the creation of the Cabinet Subcommittee for Science and Innovation.

Government acknowledges the circumstances that prompted this debate and endeavours to further improve its use and management of science, building on an excellent track record in working closely with and valuing the input of scientists.

**2. We consider that the principles should clearly cover evidence-based expert advice, including social science and statistics. (Paragraph 4)**

Throughout this response, science is used in its broadest sense and should be taken to refer to the natural and the social sciences. That said, the Government's proposed principles are aimed primarily at Scientific Advisory Committees and Councils (SACs), the membership of which often includes statisticians and social researchers. Depending on their remit, SACs may be required to provide scientific advice and / or advice on scientific issues, and to frame their advice to take account of social and ethical issues and public and stakeholder concerns.

We are consulting on the application of the principles but we would expect them to apply to all aspects of SAC working and all scientific advice commissioned by the Government from external independent advisers. They would not apply to departmental Chief Scientific Advisers, or other civil servants that provide scientific advice.

**3. We welcome Lord Drayson's commitment to resolve the concerns. It is important however, that the principles that emerge from the Government review will become part not only of the Code of Practice for Scientific Advisory Committees, but more importantly of the Guidelines on Scientific Analysis in Policy Making and of the Ministerial Code. We consider that it is of equal importance that scientists offer expert advice and ministers respond to that advice in accordance with clearly defined protocols. (Paragraph 9)**

The draft principles published by the Government set out the responsibilities of both the providers of independent scientific advice to Government (including SACs) and the recipients of that advice (Ministers and other government decision-makers).

Government has publicly committed to ensuring that its final statement of principles is reflected both in the updated Guidelines for Scientific Analysis in Policy Making and in any future revision of the Code of Practice for Scientific Advisory Committees (CoPSAC). This remains the Government's intention.

Government will consider how best to reflect the Principles in the Ministerial Code when it is next revised.

### **The content and terms of the principles**

**4. We endorse and support the three broad principles set out in the 6 November statement applying to the treatment of independent scientific advice provided to government: (1) academic freedom; (2) independence of operation; and (3) proper consideration of advice. (Paragraph 14)**

Government agrees with these broad principles and will consider how best to reflect them in its final statement of principles.

**5. In our view Government should include in the revised statement of principles a commitment by the Government to uphold and protect the academic freedom of those providing scientific advice to government and an explicit and clear recognition that experts can comment on government policy. (Paragraph 18)**

Government is clear that SAC members are free to communicate in a professional capacity. We are considering incorporating a specific reference to academic freedom in the final version the principles.

**6. We consider that the 6 November statement of principles strikes a good balance by placing the minimum necessary restrictions on a person serving on a scientific advisory committee speaking publicly on government policy, that is that the person should respect confidentiality, not claim to speak for the Government and should make it clear whether he or she is communicating on behalf of his or her committee. (Paragraph 19)**

Government is clear that advisors serving on SACs are free to pursue, publish and communicate their work and fully exercise their academic freedom.

There is an expectation that scientific advisors will make it clear in what capacity they are speaking publicly. This is outlined in the draft principles:

*Scientific advisers to the Government should make clear in what capacity they are communicating, for example at conferences or in published papers.*

Government accepts, however, that while the onus is on advisors to stipulate what capacity they are speaking in, the media may, in the interest of a story, link an advisor to a committee without their consent.

**7. We recommend that the Government's statement of principles state clearly that scientific advisory committees are independent from government. (Paragraph 20)**

Government is clear that SACs are independent advisory bodies.

**8. We recommend that the Government's statement of principles contain a commitment that the Government will not prejudge the work of scientific advisory committees and will give proper consideration to scientific advice from committees. (Paragraph 22)**

Government is clear that SACs and independent scientific advisers should expect Government to give their advice proper consideration. We will consider how best to articulate this expectation in light of consultation inputs on the draft principles. However the draft principles already include:

*The timing of the Government's response to scientific advice will demonstrably allow for proper consideration of that advice.*

**9. We consider that the definition of the principle on the proper consideration of advice should include recognition that the Government can reject the advice. (Paragraph 23)**

Science and engineering advice is only one factor, albeit an important one, that Government takes into account in developing policy. The Government will consider the need to clarify this point in finalising its statement of principles.

**10. We recommend that requirement in principle 3 that "Reports will not be criticised or rejected prior to publication" be clarified to specify that it refers to public criticism or rejection by Government. (Paragraph 24)**

This recommendation refers specifically to the principles set out in the 6th November statement circulated by the Royal Society and Sense About Science.

Government will consider whether this point needs to be made explicit within the finalised principles in considering the consultation inputs on its statement.

### The process for agreeing the principles

**11. In order to secure broad agreement to the principles, we recommend that once the Government issues a set of principles in December, it should invite all interested parties, including all scientific advisory committees, to comment before they are finalised. (Paragraph 25)**

Government agrees that to be effective the finalised principles will not only need cross-government support, but also the support of the scientific community.

In drawing up the proposed principles, the Minister for Science and Innovation and the Government Chief Scientific Adviser (GCSA) held a series of meetings with the SACs, Learned Societies, representatives of the science media and colleagues across Government. All of these parties, and the wider public, were invited to input further as part of the consultation on the GCSA's Guidelines for the Use of Scientific Analysis in Policy Making.

### The operation and application of the principles

**12. We therefore recommend that the Government put the agreed principles and the supporting protocols before the House for endorsement. (Paragraph 27)**

As the principles will be a non-legislative paper, there is no mechanism for providing it to the House for endorsement. Furthermore, parliamentary business over the next few months is such that no time is available to debate the statement in either Westminster Hall or the main chamber.

Government will, of course, provide its finalised statement of principles to the Committee.

**13. In our view it is critical that the principles promulgated by the Government are fully implemented in the working arrangements of the Government and scientific advisory committees. We therefore recommend that, once a set of principles have been agreed, the Government: (Paragraph 28)**

- a) issue a statement setting out how the principles will be upheld and enforced and how disputes about their interpretation and applicability resolved; (Paragraph 28(a))
- b) ensure that in their review of the Guidelines that it fully supports and implements the principles; (Paragraph 28(b))
- c) ensure that the Code of Practice makes reference to the principles and is consistent with them; and (Paragraph 28(c))
- d) consider incorporating relevant aspects of the principles into the Ministerial Code. (Paragraph 28(d)).

Government agrees that it is essential the principles be fully embedded in its working practices. Both the Minister for Science and Innovation and the GCSA will write to colleagues across Government setting out the principles, and their expectation they are adhered to.

The draft principles published by Government already propose a process for raising and resolving concerns over their application, or the application of other guidance on scientific advice in policy-making (the Guidelines, for example):

*Government departments and their independent scientific advisers should raise issues of concern over the application of the principles, or other guidance, with the relevant departmental Chief Scientific Adviser. If the matter of concern cannot be effectively resolved or is especially serious CSAs should approach the Government Chief Scientific Adviser (GCSA), and Ministers should approach the Minister for Science to escalate the issue to ED(SI).*

As set out in the Government's response to Recommendation 3 of the Committee's report, the Government will consider how best to reflect the Principles in the Ministerial Code when it is next revised.

**14. We conclude that the Government Office for Science should be given responsibility for advising members of scientific advisory committees, government departments and ministers they advise on the interpretation and applicability of the principles. (Paragraph 30)**

The Government Office for Science (GO-Science) is responsible for the GCSA's Guidelines and CoPSAC. It also provides advice and support to the network of Scientific Advisory Committees (SACs) across Government, for example delivering workshops for the secretariats of SACs.

GO-Science will continue to support government departments and Ministers in the interpretation and application of these guidance documents, and in embedding of the finalised principles.

**15. We recommend that in reviewing the Guidelines the Government bring forward arrangements for resolving disputes between members of scientific advisory committees and government departments and ministers. (Paragraph 31)**

Government's draft principles set out the proposed process for raising and resolving concerns over their application. Government will consider the Committee's recommendation alongside other responses to its consultation on the Guidelines.

**16. We recommend that in its review of the Guidelines the Government bring forward arrangements governing the dismissal of a member of a scientific advisory committee for breach of the principles or the Code of Practice. (Paragraph 33)**

The procedural and contractual arrangements governing the membership of SACs vary. It is therefore difficult to formulate a single process for the dismissal of Committee members. Government will nonetheless consider this issue further in the light of responses to the current consultation. These will inform whether there is a need to update CoPSAC.

**17. We recommend that, where the Government rejects the advice of expert advisory committees, it makes clear in writing to the chairman what part of the advice it is rejecting: scientific advice or other kinds of expert advice. Regarding scientific advice, the Government should only reject an expert committee's assessment of the scientific evidence in exceptional circumstances, and in these circumstances its reasons should be clearly laid out (Paragraph 35)**

Government is clear that policy-makers should, wherever possible, make public the evidence base for a policy decision. This is already set out in the GCSA's Guidelines, and reaffirmed in the draft principles:

*The Government will explain the reasons for policy decisions, particularly when the decision appears to be at odds with scientific advice.*

*If Government is minded not to accept the advice of a scientific advisory committee or council particularly on matters of significant public interest, the relevant minister will normally meet with the chair to discuss the issue before a final decision is made.*

## Press Office

**18. We reiterate the recommendation we made earlier this year that a small press office be set up within the Government Office for Science, to serve the press needs of GO-Science and all the scientific advisory committees across Government. (Paragraph 40)**

As part of consulting on its draft principles, Government has sought views on potential mechanisms for the provision of media support to SACs. We will consider the Committee's recommendation on this issue, together with all other consultation inputs.

## The treatment of scientific advice across government

**19. We recommend that the Government appoint a panel to carry out a review and report within six months on the treatment of scientific advice across Government, in particular, the implementation of, and compliance with, the recommendations of the Phillips report issued following the BSE crisis and on the adequacy of the arrangements to protect the independence of scientific advice provided to Government. (Paragraph 42)**

Understanding the way that science and engineering advice is used in Government departments is one of the core functions of GO-Science. There are a number of formal and informal mechanisms already in place to ensure that this is done on a continuous basis. The GCSA has routine meetings with the network of departmental Chief Scientific Advisers and the subject is also kept under review by Ministers on the Cabinet sub-committee on Science & Innovation.

GO-Science's formal performance assessment mechanism is the Science and Engineering Assurance (SEA) process. The SEA process looks at all aspects of the management and use of science and engineering in Government through reviews of individual departments. SEA assessments are made by an external panel of scientists and senior industry or government officials, and agreed by the GCSA and Departmental Permanent Secretary.

## Conclusion

**20. In our view the principles published on 6 November fully accord with the thrust of the conclusions and recommendations made in our earlier Reports. We endorse and support the broad principles as proposed by Lord Rees and others and published by Sense About Science on 6 November 2009 and recommend a number of changes which we consider will clarify and enhance the application and operation of the principles. (Paragraph 44)**

Government welcomes the Committee's input to its consultation on the draft principles.

*February 2010*

## List of Reports from the Committee during the current Parliament

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The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

### Session 2009–10

First Report	The work of the Committee in 2008–09	HC 103
Second Report	Evidence Check 1: Early Literacy Interventions	HC 44
Third Report	The Government's review of the principles applying to the treatment of independent scientific advice provided to government	HC 158-I (HC 384)
Fourth Report	Evidence Check 2: Homeopathy	HC 45

### Session 2008–09

First Report	Re-skilling for recovery: After Leitch, implementing skills and training policies	HC 48-I (HC 365)
Second Report	The Work of the Committee 2007–08	HC 49
Third Report	DIUS's Departmental Report 2008	HC 51-I (HC 383)
Fourth Report	Engineering: turning ideas into reality	HC 50-I (HC 759)
Fifth Report	Pre-appointment hearing with the Chair-elect of the Economic and Social Research Council, Dr Alan Gillespie CBE	HC 505
Sixth Report	Pre-appointment hearing with the Chair-elect of the Biotechnology and Biological Sciences Research Council, Professor Sir Tom Blundell	HC 506
Seventh Report	Spend, spend, spend? – The mismanagement of the Learning and Skills Council's capital programme in further education colleges	HC 530 (HC 989)
Eighth Report	Putting Science and Engineering at the Heart of Government Policy	HC 168-I (HC 1036)
Ninth Report	Pre-appointment hearing with the Chair-elect of the Science and Technology Facilities Council, Professor Michael Sterling	HC 887
Tenth Report	Sites of Special Scientific Interest	HC 717 (HC 990)
Eleventh Report	Students and Universities	HC 170-I (HC 991)

### Session 2007–08

First Report	UK Centre for Medical Research and Innovation	HC 185 (HC 459)
Second Report	The work and operation of the Copyright Tribunal	HC 245 (HC 637)
Third Report	Withdrawal of funding for equivalent or lower level qualifications (ELQs)	HC 187-I (HC 638)
Fourth Report	Science Budget Allocations	HC 215 (HC 639)
Fifth Report	Renewable electricity-generation technologies	HC 216-I (HC 1063)
Sixth Report	Biosecurity in UK research laboratories	HC 360-I (HC 1111)
Seventh Report	Pre-legislative Scrutiny of the Draft Apprenticeships Bill	HC 1062-I (HC (2008–09)262)
First Special Report	The Funding of Science and Discovery Centres: Government Response to the Eleventh Report from the Science and Technology Committee, Session 2006–07	HC 214

**Session 2007–08 (Continued)**

Second Special Report	The Last Report: Government Response to the Thirteenth Report from the Science and Technology Committee, Session 2006–07	HC 244
Fourth Special Report	Investigating the Oceans: Government Response to the Science and Technology Committee's Tenth Report of Session 2006–07	HC 506 [incorporating HC 469–j]