

Code of Practice for Scientific Advisory Committees

A response to the Government Chief Scientific Adviser

Introduction

The Academy welcomes the update to the *Code of Practice for Scientific Advisory Committees* and has previously responded to The House of Commons Science and Technology Committee's inquiry on *Scientific advice and evidence in emergencies* in September 2010¹; and the Government Chief Scientific Advisor's consultation on *Guidelines on scientific advice in policy making*² in February 2010.

The Royal Academy of Engineering is one of four UK national academies. The Academy has a strong interest in the provision of independent advice to government and in the principles that underpin that provision. As well as providing advice directly, the Academy acts as a portal into the engineering expertise to be found across the profession. Another key role for the Academy lies in helping government select the best candidates for a range of advisory roles.

In the *Guidelines on scientific advice in policy making* response, the Academy made the point that while it is important that the scientific and engineering advice used by government should be independent, at the height of a crisis, the level of independence could be less of a priority as expert knowledge becomes more important. To take example of BSE, at the inception of the crisis, it would have been unhelpful not to use the expertise of stakeholders such as farmers and vets directly involved, despite their having a direct investment in the issues. Later, as the issues became clearer, a broader group of experts with fewer direct interests would be appropriate to advise on mitigation and recovery.

The Code of Practice for Scientific Advisory Committees, first published in 2007, is comprehensive with the core principles still relevant. The formalisation of the processes for government seeking external advice and its embedding into the policy making process of government is welcomed by the Academy.

¹ http://www.raeng.org.uk/societygov/policy/responses/pdf/Response_to_Scientific_advice_evidence_emergencies.pdf

² http://www.raeng.org.uk/societygov/policy/responses/pdf/Scientific_Analysis_in_Policy_Making.pdf

Consultation questions

Maintaining strong relationships

Question 1: It is key that Ministers, sponsoring departments and independent scientific advisers develop and sustain effective working relationships.

a) What role should be played by and what expectations should the SAC Chair have with regard to relationships between:

i) The SAC and its sponsoring Department;

The sponsoring department should regard the advice given as being of significance and the importance such that the SAC should be asked its opinion in all relevant departmental matters.

If possible, the Chair should be an independent member of the departmental board or have the duty of attendance as an observer. There should be a designated senior official to act as Secretariat for the SAC.

ii) The Minister or departmental Chief Scientific Advisor to whom the SAC reports?

The Chair should meet with the Chief Scientific Advisor (CSA) outside the SAC for briefings at least before SAC meetings and preferably more frequently, and the CSA should brief the SAC on key issues and seek their views. The Chair should meet with the Minister on appointment and on a scheduled basis thereafter.

It is essential that both sides understand the decision making environment and the wider working relationships.

iii) The Chairs of other SACs whose interests may overlap?

There should be regular meetings scheduled by the Government CSA with CSAs of each department and the chairs of their SACs to discuss common ground.

b) What steps can be taken for SACs to maintain their independence and objectivity?

Independence and conflicts of interest

Independence from the political decision making process is an absolute requirement. Independence of systemic bias towards or against any particular vested interest is also crucial.

Anyone with sufficient level of expertise on an SAC is bound to be involved in the sector whether in industry or academia, therefore potential conflicts of interest need to be declared and balanced as a whole on a committee.

It is important to distinguish independence from impartiality. It is rare to find an expert in the science and engineering fields who are truly without a vested interest in their subject and therefore entirely independent. It is reasonable to expect members of the SAC to act impartially, to declare any interests and to withdraw from contributing to matters on which they cannot be impartial.

Advice, analysis and judgement

A distinction should be made between 'advice' and 'analysis': this is fundamental to developing a robust Code of Practice. The Code of Practice is about scientific analysis but the remit of SACs is to give scientific advice. 'Analysis' is capable of replication and validation whereas 'advice' calls on judgement as well as analysis. The members of the SAC should know or be able to commission analysis; they should then use their judgement to create advice based on the science. Engineering in particular relies heavily on the exercise of judgement.

It is in the exercise of judgement that the collision with policy-making occurs since non-scientific considerations may be brought in, either deliberately or inadvertently.

The issues on which scientific advice is sought from a SAC are rarely describable in terms of established facts and hard evidence. The advice will have to call upon the collective judgement of the SAC on how to handle incomplete information, disputable 'evidence' and the consequent uncertainty. This means that 'objectivity' is simply not achievable. The real question is how to ensure rigour in the elicitation and exercise of judgement by the members of the SAC and the aggregation of the judgements in a collective view. This should be done in a way that is as transparent as possible.

Judgement is inevitably subjective but the SAC should offer reasoned judgement. It should seek traceability when objectivity is impossible. It follows that, once it has set out the reasons, it is possible for the advice to change if the evidence that informs those reasons changes.

c) How might SACs best resolve disputes between members or with Ministers and/or sponsoring departments?

It is important to have an experienced Chair with good working knowledge of government departments and their ways of working.

Disagreements are inevitable. If disputes about the science arise within the committee, all that is exposed is a lack of scientific consensus and that is a valid finding in itself. The SAC is advisory, and if disagreement cannot be resolved the disagreeing parties should produce a minority report; the majority/minority report process should be enshrined in the SAC processes and the TOR.

Ministers need to be exposed to the complexity of science. If there is a real uncertainty on a given issue, Ministers need to make their decisions in full light of what is known and not known. It is the SAC's job to gather the science and present it, along with advice on the degree of confidence and consensus within the scientific community.

Openness and transparency

Question 2: It is important for SACs to operate in an open and transparent manner whilst ensuring the need to protect sensitive information.

- a) In some cases, for example national emergencies, publication of advice in the public domain may not be possible in advance of government**

decision making. How can this process be best communicated and managed?

It is inevitable that certain deliberations should be “in camera” for such reasons, and the proceedings of such discussions should simply be redacted if they are classified. The SAC should be able to publish proceedings that are not deemed “restricted” or a more restricted classification, however.

Transparency means that the recommendations should be made public even if they are not adopted.

b) How can SACs ensure that non-disclosure agreements (NDAs) are used appropriately? In what circumstances are NDAs appropriate?

Non-disclosure agreements (NDAs) are appropriate when commercial interests and intellectual property protection (such as research in companies and in universities) are to be part of committee discussions. A standard NDA should be developed and published to be used by all departments.

c) What training should be provided to SAC Chairs and members to assist in their interactions with the media?

A clear protocol should be in existence for media handling. There have, in the past, been instances when an advisory committee might have benefited from media advice independent from the department it reports to. This would be a significant extra cost to the committee and only rarely required, so it may be more appropriate for departmental media advisors to have clear protocols as to how to support committees even when conflict exists with departmental objectives.

d) What should the considerations in selecting a nominated spokesperson be, and should this be tailored to the programme of work, for example, is there a benefit in having a nominated spokesperson per project?

The Chair should normally speak for the SAC after consultation with the CSA. If a senior person is appointed to a sub-committee of the SAC they should be expected to liaise with the Chair and the CSA before speaking to any media.

In this case it is essential that this person should receive/have received basic media training.

Engaging the scientific community and succession planning

Question 3: In order to maintain the effective provision of scientific advice to government, SACs need to seek feedback on the advice they provide, consider the outgoing need for their advice and consider succession planning.

a) It is important to have a balance of expertise between scientific knowledge and other areas on both SACs and their secretariat.

i) How can the balance of expertise on SACs between scientific experts, those from other professions and key partner organisations be determined?

The balance of expertise on SACs should be determined by ensuring a broad base to draw candidates from and by the departmental requirements defined and set into the Terms of Reference of the SAC, worked out by the departmental CSA.

The Royal Academy of Engineering, with our links into the engineering profession, can and does advise on potential members for SACs.

ii) How can the balance of expertise required for SAC secretariats be determined?

Ensure that selection accounts for previous experience and recognised expertise. Departments commissioning engineering advice, whether from the profession, academia, industry or a commercial consultancy, need to be “intelligent customers” for the commissioning and reviewing process. This is a reason to embed engineering skills within commissioning departments and the relevant SAC secretariats.

b) What steps can SACs take to ensure that expertise is maintained and future skills needs identified? What practical steps might be taken to broaden the pool of potential candidates?

A regular turnover of new advisers with appropriate skills and an annual self-assessment one-day programme by the SAC, discussed with the CSA the Private Secretary (PS) and the Minister.

It would be useful to build a database of potential SAC members and seek their agreement to include a short summary of their expertise and background. The Academy would be interested in helping design and deliver such a scheme.

c) How might the broader scientific and engineering community feed into the work of SACs, the consideration of future work priorities and any potential refocusing of priorities?

An SAC should keep closely in touch with the science and engineering community through its members being active in research and industry, professional bodies and participating in open debates. This is so that they are aware of the state of play on issues requiring judgement and can reliably transmit a ‘consensus’ view of the relevant scientific community to the SAC rather than relying specifically on individual views.

The national Academies and professional bodies have a strong role to play in this and The Royal Academy of Engineering would be willing to assist further on this issue.

General

Question 4: Is there any other information that could be usefully included in the Code of Practice?

Audit Committees Guidelines

The Academy views the Code of Practice as already quite substantial, however, should the Government Office for Science wish to look further in-depth at revising the

Code of Practice it would be useful to study the guidelines set out for Audit Committees by the Treasury and adapt these for the needs of the SACs. There are effective guidelines as to what processes should be in place which contain many points that are relevant to SACs.

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