



Department
for Environment
Food & Rural Affairs

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Triennial review of Defra's Science Advisory Council

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Executive summary

Defra's SAC is an Advisory Non Departmental Public Body (NDPB) which reports to Defra's science minister. Its main function is to provide expert independent scientific advice to support and challenge Defra's use of scientific evidence in policy making, and ensure the evidence programme meets Defra's needs.

Defra's Minister of State announced the Triennial Review of Defra's Science Advisory Council (SAC) on 25 March 2014. The review's purpose was to determine, using the Cabinet Office's guidance for Triennial Reviews, whether the functions and form of Defra's SAC remain appropriate and, if so, what governance arrangements should be in place.

The review gathered evidence on these issues using questionnaires and interviews with policy/ evidence leads and other key stakeholders, a public consultation, and published reviews and advice.

Conclusions - SAC's functions:

- SAC's overarching function is right, and essential to ensuring public trust in Defra's policy process.
- SAC should focus at a high level, across all aspects of Defra's evidence, not on the detail of specific evidence questions.
- SAC's role should include holding to account and supporting Defra's Chief Scientific Adviser (CSA) to assure:
 - that Defra's plans for obtaining evidence effectively meet its needs now and in the future;
 - the quality of Defra's evidence and scientific/technical advice; and
 - the integrity with which Defra presents and uses evidence in policy.
- SAC should have a higher profile in the department.
- SAC's approach should feel more supportive, particularly to policy teams.

Conclusion - SAC's form: An advisory NPDB is the most appropriate form to deliver SAC's functions, as it is the only model which can deliver these functions independently and transparently, with the right governance, and level of expertise.

Conclusion - SAC's Governance: The review of governance arrangements for Defra's SAC has found that they are appropriate to the size and functions of an advisory NDPB. However, there is no formal process to assess the SAC's overall performance in delivering its functions, as opposed to the performance of individual members. Defra's CSA should report annually on SAC's performance as set out below.

Practical recommendations: The review makes a set of practical recommendations by which to realise these improvements. In summary:

1. SAC's role and remit should be more tightly and clearly defined and focus on:
 - Advising and supporting the department on an effective and efficient strategy for obtaining and using evidence and scientific advice that includes making links with and using external expertise.
 - Advising on and assuring the processes for evidence gathering.
 - Providing strategic oversight and assuring how evidence is used in policy, and providing targeted support where necessary, e.g. in high profile or emergency cases.

With corresponding key objectives to assure that

- Defra's evidence strategy effectively and efficiently delivers Defra's evidence needs, now and in the future.
- In delivering its evidence strategy, Defra both procures high quality research and makes the best possible use of the evidence and advice available to it.
- Defra's CSA is held to account to ensure that Defra's policies are supported by the right evidence.

2. SAC's remit should reflect a consensus on the role of science advice in policy, including clearly defined limits to this role, e.g. potentially to include advising on policy development when asked, but to exclude commenting on policy decisions.

3. SAC's role in emergencies should be reviewed to ensure that it is aligned with the Cabinet Office enhanced Scientific Advisory Group for Emergencies (SAGE) guidance.

4. SAC meetings should be used to deliver SAC's role, with SAC's chair working closely with the CSA to agree the most valuable issues for discussion at each meeting.

5. Defra should support SAC to deliver its role by helping SAC understand the policy process, including by briefing them in confidence on upcoming policy issues.

6. Defra should ensure that appropriate links are made between SAC and the devolved administrations as part of its work to improve its strategy for evidence gathering and use.

7. Defra's CSA should report annually to Defra's Executive Committee, the science minister and the Government CSA. This should coincide with the publication of SAC's annual report and the annual meeting of the SAC chair and minister.

Section 1: Introduction

Defra's Science Advisory Council (SAC) is an Advisory Non Departmental Public Body (NDPB) which reports to Defra's science minister. Its main function is to provide expert independent scientific advice to support and challenge Defra's use of scientific evidence in policy making, and ensure the evidence programme meets Defra's needs.

Defra's Minister of State announced the Triennial Review of Defra's SAC on 25 March 2014. The review, part of the Government's rolling programme of Triennial Reviews, has been carried out in line with Cabinet Office Guidance for Triennial Reviews of NDPBs. Its purpose was to determine whether the functions and form of the SAC remain appropriate and, if so, what governance arrangements should be in place. It was conducted by Defra officials with no direct work or professional involvement in the work of the SAC and incurred no additional costs.

This report presents the review's approach, conclusions and recommendations.

Section 2: Background

Defra's SAC was established administratively in 2004 to challenge and support Defra's Chief Scientific Adviser (CSA) in independently assuring and challenging the evidence underpinning Defra policies and ensuring the evidence programme meets Defra's needs. SAC communicates its advice to the CSA, and through the CSA to Ministers.

An independent review¹ and a separate Arm's Length Body (ALB) review led to the establishment of a new model for SAC, implemented at the end of 2011. Eight members were appointed in August 2011 in line with the Code of Practice issued by the Commissioner for Public Appointments for a three-year term and new terms of reference established.

At the time of the review, SAC consists of a chair and six appointed members, with a vacancy for a further member. It does not employ staff. Defra provides administrative support and the secretariat for SAC.

SAC's working practices are organised in four main ways:

- quarterly meetings;
- monthly teleconferences;
- subgroups on specific policy/evidence areas; and
- Defra official and SAC member pairing scheme.

¹ Godfray (2010) Review of the Science Advisory Council of Defra

For each SAC quarterly meeting they attend, members are currently entitled to claim a preparation fee of up to £137.50 and an attendance fee of £275 per full day. Other meetings which are less than a day are paid at £39 per hour. The chair's fees are £187.50, £375 and £53 respectively. The annual budget for SAC was £36k for 2013/14 reducing to £35k for 2014/15.

As much of Defra's evidence covers both England and Wales, a representative of the Welsh Government attends SAC meetings.

Section 3: Functions of Defra's SAC

SAC's main function is to provide independent expert scientific advice to support and challenge Defra's use of scientific evidence in policy making and ensuring the evidence programme meets Defra's needs.

It is responsible for:

- providing independent expert scientific advice to the CSA and ministers; and
- helping to guide Defra's scientific priorities and planning, including long-term planning as well as dealing with immediate risks and opportunities.

SAC's current full terms of reference as set by the minister can be found in Annex A.

Section 4: Assessment of SAC's functions

The review's overarching conclusions on SAC's functions are that:

- **SAC's overarching function is right, and essential to ensuring public trust in Defra's policy process.**
- **SAC should focus at a high level, across all aspects of Defra's evidence, not on the detail of specific evidence questions.**
- **SAC's role should include holding to account and supporting Defra's CSA to assure:**
 - **That Defra's plans for obtaining evidence effectively meet its needs now and in the future;**
 - **The quality of Defra's evidence and scientific/technical advice; and**
 - **The integrity with which Defra presents and uses evidence in policy.**
- **SAC should have a higher profile in the department.**

- **SAC's approach should feel more supportive, particularly to policy teams.**

The review gathered evidence on SAC's functions and their delivery using questionnaires, interviews with policy and evidence leads, a public consultation, and published reviews and advice. The following section gives more detail on, and high level evidence behind, each of these conclusions. Section 6 sets out practical recommendations on how SAC's role can be better defined and managed, and Annex B provides more of the evidence behind the conclusions and recommendations.

SAC's overarching function is right, and essential to ensuring public trust in Defra's policy process.

Published advice states, and all respondents who commented agree, that an evidence-based department needs independent scientific advice. This is also central to the Campaign for Science and Engineering (CASE) recommendation that all departments have a SAC to support and challenge their use of science². Defra's current CSA believes likewise that his role needs to be supported and held to account by a standing advisory committee. This view is shared with other departments' CSAs and is strongly endorsed by the Government CSA.

As recommended in the Cabinet Office good governance guidance for advisory NDPBs, the SAC chair and members should be independent of Defra in case they need to say anything critical of Defra and how the it uses its evidence³.

In delivering its function, SAC should focus at a high level, across all aspects of Defra's evidence, not on the detail of specific evidence questions.

This review supports the Government Office for Science's finding that SACs most effectively provide cross-cutting, strategic support. The previous independent review of SAC⁴ and the Arms-length body review (2010) also supported Defra's SAC taking a strategic role. Consultation responses from Defra colleagues showed that Defra has most valued SAC's advice on strategic issues such as Defra's Evidence Strategy⁵, and also

² House of Lords Select Committee Report: The role and functions of departmental Chief Scientific Advisers, 2012

³ Government Office for Science's Code of Practice for Scientific Advisory Committees states that when differences of opinion arise the SAC Chair should seek to discuss the decision with the sponsoring body's policy makers..... If, after discussion, the Chair still has reservations.....resolution should be sought through engagement with the Departmental CSA.....Where differences remain and cannot be resolved, both parties should be free to express their positions openly."

⁴ Godfray (2010) Review of the Science Advisory Council of Defra.

⁵ SAC's advice led, for example, to Defra's most recent Evidence Strategy including a section on cross-cutting themes and evidence priorities rather than simply focusing on individual policy areas.

SAC's support on high profile, including emergency, issues⁶. Defra's evidence specialists also highlighted the need for more high-level, cross-cutting advice to support the delivery of Defra's evidence strategy.

This review therefore recommends that the SAC should significantly enhance their strategic role, where "strategic" means the process of deciding what evidence Defra needs, now and in the future, and how it should obtain and use it. This means shifting to assuring and providing strategic direction for, rather than directly providing, detailed advice, while retaining a role to provide immediate advice on urgent issues. Section 6 contains a set of detailed recommendations on how to improve the delivery of SAC's role.

Several Defra and SAC respondents commented that SAC's strategic and assurance role should cover all types of evidence supporting Defra's policies, including social science and economics, to ensure that high level advice is brought together. Respondents argued that there is a clear need for this role, and that SAC's position and interdisciplinary membership means they are best placed to fill it.

This role should include holding to account/supporting Defra's CSA to assure: (i) that Defra's plans for obtaining evidence effectively meet its needs now and in the future; (ii) the quality of Defra's evidence and scientific/technical advice; and (iii) the integrity with which Defra presents and uses evidence in policy.

Responses from and discussions with Defra stakeholders have shown that in meeting Defra's need for strategic evidence, SAC should continue to advise, support and challenge Defra's CSA on Defra's evidence strategy, ensuring that it effectively and efficiently delivers Defra's evidence needs now and in the future. SAC should help ensure that, in delivering its evidence strategy, Defra both procures high quality research and makes the best possible use of the evidence and advice available to it, including from its network of science advisory committees and bodies. SAC should support this by drawing in knowledge and advice from the wider academic community and industry research expertise when appropriate. Finally, it should hold Defra's CSA to account, to ensure that Defra's policies are supported by the right evidence.

Respondents also noted that this role should include making the appropriate links with the devolved administrations and the scientific advisory committees of other Defra sponsored NPDBs and executive agencies.

SAC should have a higher profile in the department

The review has found in discussion with senior policy officials that they and the top management team are not consistently well aware of Defra's SAC, its work, and the support it offers. This needs to change for Defra's top officials to help ensure that the

⁶ Examples of SAC support on high profile and or strategic areas include advice on the statistical analysis for Neonicotinoids field trials, advice on the approach to tree health, advice and support on Defra's response to Schmallenberg, and advice on Defra proposed experimental plans for pollinators.

department makes best use of its SAC, particularly in its more strategic role. The review therefore recommends that SAC should have a higher profile within the department so that senior policy leads are able to approach and use SAC at the right times and in the right ways. The CSA, supported by SAC's secretariat should ensure regular contact between SAC and Defra's Executive Committee, including through regular⁷ updates. The CSA and his team, through evidence leads (particularly Evidence and Analysis Deputy Directors), should ensure that policy directors are aware of, and consistently use, the SAC.

SAC's approach should feel more supportive, particularly to policy teams.

The issue of the balance between support and challenge has also been raised by Defra colleagues, SAC members and others. They argue that for discussions to be open and collaborative, Defra policy leads must understand SAC's role and consistently see SAC as a "critical friend" whose role is to help ensure that policy is supported by the right evidence, not as an external critic. Meetings should be collaborative and mutually supportive (in particular policy teams should not view them as "challenge sessions") and should encourage a two-way dialogue based on trusted relationships with policy directors and their evidence specialists.

Section 5: Assessment of SAC's form

As set out in Section 4, the review concludes that the SAC's main function is right and remains essential. It follows from this that abolishing the function is not a realistic option. SAC's main function also passes the Cabinet Office's three tests for an NDPB, as set out in Annex C, indicating that it is appropriate for it to remain an NDPB.

The review has concluded that an advisory NPDB is the most appropriate form to deliver the functions of Defra's SAC, as it is the only government delivery model that enables these functions to be delivered independently and transparently, with the right governance, and level of expertise. Annex D presents an appraisal of all the delivery options considered by the review.

Section 6: Practical recommendations to deliver a better role for SAC

This section contains a set of practical recommendations by which to realise the improvements in the delivery of and support to SAC's role set out in section 4. These recommendations reflect evidence gathered from Defra colleagues and SAC members. A summary of all the review's recommendations is in the Executive Summary.

⁷ The form and appropriate frequency (e.g. 6-monthly) of these updates should be agreed between the CSA and the rest of the Executive Committee.

An updated Terms of Reference

The recommendations set out above are consistent with SAC's current terms of reference. However, this is not the role they currently consistently perform. Therefore the review recommends that SAC's role and remit should be more tightly and clearly defined. In consultation with the Government Office for Science and the Government CSA, the SAC chair and Defra's evidence leads; a refined terms of reference should be agreed between Defra's CSA and the science minister, focussing on:

- a. Advising and supporting the department on an effective and efficient **strategy** for obtaining and using evidence and scientific advice that includes making links with and using external expertise.
- b. Advising on and assuring the processes for evidence gathering.
- c. Providing strategic oversight and assuring how evidence is used in policy, and providing targeted support where necessary, e.g. in high profile or emergency cases.

With corresponding key objectives to assure that:

- i. Defra's evidence strategy effectively and efficiently delivers Defra's evidence needs, now and in the future.
- ii. In delivering its evidence strategy, Defra both procures high quality research and makes the best possible use of the evidence and advice available to it.
- iii. Defra's CSA is held to account to ensure that Defra's policies are supported by the right evidence.

This remit should reflect a consensus on the role of science advice in policy⁸, including clearly defined limits to this role, e.g. potentially to include advising on policy development when asked⁹, but to exclude commenting on policy decisions.

⁸ This is summarised by Sir Peter Gluckmann, the New Zealand Government's CSA as "... to communicate what is known and what is not known in such a way as to assist decision-makers in balancing evidence, social values and other imperatives in the policy process" (Address to the conference on Science Advice to Governments, New Zealand, August 2014.)

⁹ The Government Office for Science Code of Practice for Scientific Advisory Committees states: - A committee advising on science would not normally undertake the role of policy making unless it is specifically within their terms of reference. However, it may be asked to comment on policy options set out by government or to provide policy options for government to consider, including advice on risk assessment or management.

SAC's role in emergencies, as set out in the terms of reference, should also be reviewed to ensure that it is aligned with the Cabinet Office enhanced Scientific Advisory Group for Emergencies (SAGE) guidance¹⁰.

Further points relating to each of the three main roles (a-c above) in turn are set out below.

SAC's **strategic role** should include:

- Supporting development of the Evidence Strategy, advising on cross-cutting issues of quality, impartiality, stakeholder involvement, communication of science and risk.
- Advising on when and how best to use internal science advisory committees, and on evidence available externally. Ensuring that links with Defra's science advisory committees are two-way, so that important issues that emerge from detailed discussions are fed into strategic thinking. Ensuring that time-limited advisory groups are set up and disbanded appropriately.
- Providing targeted advice and assurance to the CSA on specific issues where needed, such as commenting on individual network evidence action plans, either directly or with co-opted specialist experts, to assure they are comprehensive, use the right methodologies, and are advised by the right experts.
- Contributing to Horizon Scanning, ensuring that the right people and processes/ methodologies are looking ahead at emerging issues and threats and that the resulting intelligence is used properly in risk management. Also feeding in awareness of issues being discussed in the research communities.
- Doing all of this in close partnership with the economic and social advisory groups to ensure that high level advice on evidence strategy is brought together. This could, e.g., involve a member from each of the economics and social science advisory panels attending relevant meetings, and/or working with senior evidence officials to make links.¹¹

SAC's role in **assuring evidence gathering** should include:

- Supporting the CSA to develop a common approach to high quality delivery of evidence, including ensuring consistent standards in commissioning of evidence and advice¹², Quality Assurance, peer review, etc.

¹⁰ Cabinet Office (2012) Scientific Advisory Group in Emergencies: Enhanced SAGE Guidance.

¹¹ At present the Chair of the Social Research Panel is also a member of SAC but this may not always be the case.

¹² This could include e.g. ensuring that all advisory groups adhere to good practice guidelines and are managed and governed effectively, etc.

- Advising the CSA directly on strategic or high profile evidence issues at his request.

SAC's role in **assuring the evidence used in policy** should include:

- When needed, and in discussion with the CSA, advising on the evidence basis for policy development.
- Advising on and assuring the process by which evidence is used in policy – identifying with the CSA where policy needs expert advice from specialist groups, making links e.g. with other advisory groups, identifying where multi-disciplinary approaches are needed, etc.
- Helping to get the best value from other science advisory groups: identifying specific questions, and issues raised by network evidence action plans, prioritising them in discussion with the CSA and Evidence and Analysis Deputy Directors, and passing them on to the relevant existing committee or, if none exists, forming a time-limited group.
- Ensuring science advisory groups are used consistently, have the right people (where appropriate these could include a SAC member), and use the right approaches.

SAC's quarterly meetings should be used to deliver the roles outlined above, with SAC's chair working closely with the CSA to agree the most valuable issues for discussion at each meeting.

Defra's role

Defra should better support SAC to deliver these three roles by helping them understand the policy process, including by briefing them in confidence on upcoming policy issues. This additional support from Defra would be offset by a reduced need for detailed briefing on in-depth issues.

Defra should also ensure that appropriate links are made between SAC and the devolved administrations as part of its work to improve its strategy for evidence gathering and use. Currently there are good links with Wales, with an official representative at every meeting, and an informal link with Scotland as one of SAC's current members is the CSA (Rural and Environment) for the Scottish Executive. Defra should consider formalising the links with Scotland, and (in discussion with the Northern Ireland Executive) developing more formal links with Northern Ireland, particularly in areas of shared interest. This could be done e.g. through sharing agendas for SAC meetings with the devolved administrations, with an open invitation to attend when there is a shared interest.

Section 7: Governance review

A review of governance arrangements for SAC has shown that they are appropriate to the size and functions of an advisory NDPB. However, there is no formal process to assess SAC's overall performance in delivering its functions. Therefore, this review recommends that Defra's CSA report annually to Defra's Executive Committee, the science minister and the Government CSA. These reports should coincide with the publication of SAC's annual report and the annual meeting of the SAC chair and minister. The report could cover:

- A summary of the work done by SAC during the year;
- The actions that their advice has triggered; and
- A short assessment of SAC's performance against the revised terms of reference.

Annex F contains the complete assessment of the governance of SAC against the code of good corporate governance for advisory NDPBs. The main conclusions of this review are as follows:

Accountability: Defra provides all the secretariat support for SAC which includes managing its budget and costs. Final year accounts are published in SAC's annual report. The minister appoints members, within the Code of Practice set out by the Commissioner for Public Appointments, and is able to remove individuals whose performance or conduct is unsatisfactory. The chair meets at least annually with the minister.

Roles and Responsibilities: There is regular dialogue between Defra's CSA and SAC and the SAC secretariat. Committee members are assessed annually by the chair, the CSA and a senior Defra official and the chair is assessed by the CSA and a senior Defra official. The review recommends that a formal process be established to consider the overall performance of SAC's delivery of its functions.

Role of the Chair and Committee Members: The SAC is led by a non-executive chair who is appointed as per the Code of Practice guidelines. SAC members are independent of Defra and have a diverse range of backgrounds including economics and social science.

Communications: SAC works openly and transparently. Reports, agendas, minutes and papers for SAC are published on SAC's website.

Conduct and behaviour: SAC publishes a register of members' interests. SAC has formal arrangements for members on the acceptance of appointments after they leave the council.

Annexes

Annex A: Terms of Reference of the Defra SAC

1. Defra's Science Advisory Council (SAC) is an advisory Non-Departmental Public Body sponsored by the Secretary of State. Lord de Mauley will act as the lead Minister accountable for SAC, and will:

- set terms of reference for the Council and make appointments to it;
- agree strategic work plans, receive reports and advice;
- receive periodic reviews of the Council's functions and value for money;
- consult other Departments as appropriate about the Council and its work.

2. SAC will challenge and support the Department's Chief Scientific Adviser (CSA) in independently assuring and challenging the evidence underpinning Defra policies and ensuring that the evidence programme meets Defra's needs. In doing so SAC will:

- review, on a rolling basis, the evidence plans put in place to support policy programmes, and identify any gaps in Defra's science or evidence base at present or likely in the foreseeable future;
- provide advice, when asked or on their own initiative, in emergency situations;
- respond to requests for, or provide on their own initiative, ad hoc advice on broad strategic and cross-cutting issues (relating to the use of science or evidence) facing the Department;
- identify and publish advice on substantial strategic and cross-cutting issues of Government-wide as well as Defra concern;
- contribute, as required, to the CSA's quarterly reports to the Defra Supervisory Board;
- support and challenge the CSA in his oversight role with respect to other scientific expert committees of Defra, and include annual updates on the work of such committees in the SAC Annual Report;
- via the CSA, ensure the Defra lead Minister receives the highest quality advice.

3. SAC will achieve this by:

- horizon scanning, and planning and publishing an annual programme of work that best challenges and serves the CSA and the needs of the Department;

- co-opting experts to time limited sub-groups, chaired by a SAC Member, to review Departmental evidence plans or other cross-cutting or strategic issues. Subgroup reports and recommendations will be reviewed and adopted by SAC, forwarded to the CSA, to help him advise Defra, and published;
- working with the CSA to respond to GO-Science or other Government-wide policy initiatives or consultations, as appropriate;
- via the CSA and the SAC Chair, maintaining links with the Government Chief Scientific Adviser (GCSA) and other departmental SAC Chairs;
- maintaining and developing links with Research Councils, other scientific institutions and the Devolved Administrations to further the work, aims and objectives of SAC.
- publishing an Annual Report;
- re-reviewing evidence programmes that have previously been subject to SAC's scrutiny where appropriate, and publishing new advice if necessary;
- contributing to reviews of science bodies within the Defra network as required;
- maintaining open lines of communication with Defra, the CSA and its Ministers;
- operating in line with the Government's Principles for Scientific Advice and the Code of Practice for Scientific Advisory Committees.

4. In line with the Commissioner for Public Appointments Code of Practice an annual appraisal of members' performance will be conducted.

Annex B: Stakeholder Engagement on the functions of Defra's SAC

In reaching the conclusions set out in this report, the review team carried out two stages of stakeholder engagement. The first stage gathered views on the current functions of Defra's SAC, whether they were still necessary and, if so, whether and how they could be improved. The evidence gathered during this first stage, along with evidence from other reviews and published advice, was used to develop initial conclusions and recommendations; these formed the basis for the second stage of stakeholder engagement.

Direction for the stakeholder engagement was provided by the Defra SAC Triennial Review Oversight Group which consisted of:

- The Director for Strategic Alignment (Tom Holton) (chair),
- The Chief Scientific Adviser (CSA) (Ian Boyd),
- The Director for Strategic Evidence and Analysis (Ulrike Hotopp),
- A policy director (Lee McDonough),
- An Evidence and Analysis Deputy Director (Fiona Harrison),
- A Welsh Government representative (Chris Lea),
- The Head of the SAC secretariat (Chris Jacobs), and
- An independent member (Patrick Miller, FSA).

Stakeholder engagement: stage one

During the first stage, questionnaires were sent to:

- Defra stakeholders (including, the CSA, the Chief Vet, the Director-General responsible for policy, the Director of Strategic Evidence and Analysis, and policy directors and their Evidence and Analysis Deputy Directors¹³);
- The SAC chair and members; and
- The chairs of Defra's other scientific expert committees and some advisory NDPBs.

In addition:

- The EFRA Select Committee was informed of the review and given the opportunity to comment.
- The Government Office for Science and the devolved administrations were consulted.
- The CSAs, or representatives, from Defra's network bodies were consulted during a meeting of Defra's Strategic Network Evidence Group.

¹³ In some cases questionnaires were completed by the TR team during interviews.

- A public call for comments was made at the launch of the review.

Stakeholder engagement: stage two

During the second stage, the TR team took views on the review’s draft conclusions and recommendations from:

- Defra stakeholders (including a presentation of final conclusions to Defra’s evidence directors and deputy directors);
- The SAC chair and members;
- The chairs of Defra’s other scientific expert committees and some advisory NDPBs;
- Government Office for Science: and
- the devolved administrations.

Summary of stakeholder responses

Category	Number of responses
SAC members	6
Defra policy	11
Defra evidence ¹	2
Defra science advisory committees/other advisory NDPBs	6
Other government departments ²	1
Devolved administrations	2
External ³	1
Total	29

¹ Evidence and Analysis Deputy Directors are included under Policy

² Government Office for Science

³ The Royal Society

Summary of stakeholder evidence against the review's key conclusions and recommendations

SAC's overarching function is right, and essential to ensuring public trust in Defra's policy process.

All 20 respondents who explicitly commented on this agreed that an evidence-based department needs independent scientific advice to support and assure how it gathers and uses scientific evidence in policymaking.

In delivering its function, SAC should focus at a high level, across all aspects of Defra's evidence, not on the detail of specific evidence questions.

During the first stage consultation the majority of respondents¹⁴ also agreed that SAC was most effective when providing cross-cutting, strategic support to Defra or when providing advice on immediate or high profile areas. In addition several Defra respondents noted that the role of deep diving into specialist areas should be undertaken by specialist scientific advisory committees and SAC's role should be to support the CSA to ensure that these committees were working effectively.

During the second stage consultation no respondents disagreed with the conclusion that SAC's role should focus more on strategic direction-setting and assuring, and less on detailed advice.

This role should include holding to account/supporting Defra's CSA to assure: (i) that Defra's plans for obtaining evidence effectively meet its needs now and in the future; (ii) the quality of Defra's evidence and scientific/technical advice; and (iii) the integrity with which Defra presents and uses evidence in policy.

These three points represent the key focus for SAC's more high level, strategic role. During the first stage consultation respondents offered a range of suggestions as to how this role could be best achieved. The review team drafted three key points based on these suggestions; they were then honed in discussion with the oversight group and others, and presented during the second stage. No respondents disagreed with these key roles.

The previous independent review of SAC recommended that SAC's remit should be broadened to strengthen co-ordination of science advice received by Defra from its other

¹⁴ Of the 16 stakeholders that commented on this issue, 13 supported a strategic role for SAC. Of these 13, 9 were Defra respondents. Only one Defra respondent thought that SAC's focus should be at a detail level.

science advisory committees. This was again well supported by respondents¹⁵ during this review.

SAC should have a higher profile in the department.

It was noted by four Defra respondents and one SAC respondent that to date SAC has not engaged with large areas of Defra's responsibilities. Three Defra respondents commented that the SAC has low visibility in some parts of Defra with, e.g., some policy directors not being familiar with the SAC and the support it offers. Likewise, Defra's policy Director-General noted that Defra's Executive Committee could be better aware of the SAC's work and the influence it has had.

SAC's approach should feel more supportive, particularly to policy teams.

The issue of the balance between support and challenge was raised by several Defra and SAC respondents. It was noted that the balance between challenge and support has changed over time in favour of more support, and greater use of SAC for ad-hoc advice. However there was still a sense, e.g. from Defra policy colleagues, that the tone of meetings is at times too challenging. There was broad agreement that discussions between Defra and SAC should be open and collaborative.

Practical recommendations to deliver a better role for SAC

The recommendations given in section 6 of this report reflect evidence gathered by the review, both from Defra colleagues and SAC members during the first stage of stakeholder engagement. They were supported by all respondents during the second stage of stakeholder engagement.

Updated terms of reference

Several stakeholders, both in Defra and SAC, told us that the existing terms of reference for SAC were too broad for SAC to be able to deliver them all well in the time available. Key stakeholders in Defra found SAC's work to be of most value when working strategically and on high profile and urgent issues.

Defra's roles: Helping SAC understand the policy process, and ensuring links are made with the devolved administrations.

Defra's proposed role in giving SAC a better understanding of the policy process and upcoming issues is supported by Defra stakeholder views that in some cases SACs advice

¹⁵ Of the 21 stakeholders that commented on this 19 supported a role for SAC in the coordination of science advisory committees.

had less impact because it either came too late in the evidence/policy cycle, or was too critical when evidence gathering was at an early stage.

Stakeholders told us that since the independent review of SAC in 2010, which recommended the removal of the devolved administrations from SAC's standing membership, that there has been no formal mechanism for sharing information between the devolved administrations other than with the Welsh Government.

Annex C: NDPB status – three tests

Cabinet Office Triennial Review guidance states that to remain as an NDPB, a body should satisfy one or more of the following three tests.

- Is this a technical function that requires external expertise to deliver?

External expertise is required in order to provide independent scientific advice to support and assure how the department gathers and uses scientific evidence in policymaking.

- Is this a function which needs to be, and is seen to be, delivered with absolute political impartiality?

Again, independent scientific advice and assurance needs to be, and be seen to be, delivered with political impartiality.

- Is this a function which needs to be delivered independently of Ministers to establish facts and/or figures with integrity?

As with the second question, arms-length delivery means that the assurance of the scientific evidence (“facts and figures”) used by the department is clearly independent.

Therefore, Defra’s SAC passes all three tests.

Annex D: Alternative delivery models considered

All of the delivery models set out in Cabinet Office guidance have been assessed with reference to Defra's SACs functions. Some of these models are clearly not appropriate and did not require extensive analysis.

a. Abolish

This option has been discounted. All respondents agreed that an evidence-based department needs independent advice to support and assure its use of scientific evidence in policy-making. Defra's current CSA believes that the support of a standing advisory council is essential to his role. This view is shared with other departments' CSAs and is strongly endorsed by the Government CSA.

b. Bring in-house

The secretariat for Defra's SAC is already delivered in-house but SAC's function cannot be provided by Defra's own staff as it requires external support and challenge. Typical in-house models such as a stakeholder advisory groups or public sector working groups (where the majority of members are ex-officio) are not appropriate for delivering SACs main function as they are not independent. Even if a group of departmental officials were supported by some independent members with the requisite breadth of experience, such an internal group would not be seen by others outside government as independent.

There is also no obvious cost saving under this model, since the group would still require similar membership and support. There would be a 'one-off' cost in effecting the transition. For these reasons, the review has ruled out this delivery model for the Defra SAC.

c. Move out of central government

SAC's function relates to England, England and Wales, and in some cases UK-wide policy therefore local government delivery is not appropriate. It is unlikely that the voluntary sectors have sufficient relevant expertise to deliver the function.

It might be possible to source expert advice through the private sector through consultancy under commercial terms. However, to buy on a consultancy basis the skills, experience and time provided by the Defra SAC would be much more costly. The additional administrative layer would further increase costs. There is also a risk that this option would undermine the independence and transparency of the advice received by Defra and that the expertise would not be drawn from the widest pool that is possible with the individual appointments process. For these reasons the review has ruled out this delivery model for Defra SAC.

d. Merge with a similar body

This review has considered whether there are similar bodies with sufficient synergies with Defra's SAC functions to warrant a merger.

A number of other ministerial government departments have overall Science Advisory Councils (often in addition to subject specific scientific advisory committees). A Review of Science Advisory Councils undertaken by the Government Office for Science in 2013¹⁶ found that the different departments legitimately used different models of councils according to their identified needs. Even where other departments' SACs carry out similar functions to Defra's SAC, there is little, if any, overlap in their actual work, so efficiencies are unlikely. Indeed the administration overhead of a combined body is likely to increase as the secretariat would have to coordinate across departments and manage reporting to different ministers.

Some Defra sponsored NPDBs and executive agencies have SACs that advise their boards directly, although these are not constituted as advisory NDPBs. These SACs play a very different role to Defra's SAC, as they give detailed scientific advice on the delivery issues specific to each body. This needs specific expertise, and therefore merging these bodies would require SAC's membership to increase to cover the expertise required by the Network bodies. This would make the body unwieldy and potentially unfocused. This in turn would conflict with the conclusion of the 2010 review¹⁷ that the SAC should be small and agile, and with the central conclusion of this review that SAC's focus should be on strategic oversight, not detailed advice.

For these reasons the review has ruled out merging Defra's SAC with a similar bodies. However, the SAC have recently improved information sharing with some other government departments (DFID and DECC) and the CSAs or equivalents in other Defra sponsored NPDBs and executive agencies to ensure that they can also benefit from the advice that SAC provides when appropriate and relevant.

e. Create a new Executive Agency

This option has been discounted. The volume of the work carried out by SAC and the flexible way that they conduct this work means setting up a new agency would not be cost-effective. Executive Agencies are usually only considered viable in cases where significant numbers of staff are employed.

¹⁶Government Office for Science (2013) Review of Science Advisory Councils 2013

¹⁷ Godfray (2010) Review of the Science Advisory Council of Defra

f. Remain as an advisory NDPB

The review concludes that this is the only appropriate delivery model for SAC. The functions of SAC pass the three tests necessary for NDPB delivery. Remaining as an advisory NDPB ensures that the SAC can continue to deliver its functions independently and in an open and transparent way, which is essential to ensuring trust in Defra's policy process, and at low cost.

Annex E: Assessment of Governance of SAC

Assessment of the governance of SAC against the Advisory NDPBs: Corporate Governance Arrangements (Cabinet Office, December 2012)

1. Accountability

Principle: The minister is ultimately accountable to Parliament and the public for the overall performance, and continued existence, of the advisory NDPB.

Supporting provisions	Draft assessment of Defra's SAC against principles of good corporate governance
The minister and sponsoring department should exercise appropriate scrutiny and oversight of the advisory NDPB. This includes oversight of any public monies spent by, or on behalf of, the body.	This requirement is met. Defra provides the secretariat for the SAC and this includes managing its budget and costs. The final year accounts for SAC are published in SAC's Annual Report.
Appointments to the advisory NDPB should be made in line with any statutory requirements and, where appropriate, with the Code of Practice issued by the Commissioner for Public Appointments.	This requirement is met. All appointments to the SAC, including the chair, are made within the requirements of the Office of the Commissioner for Public Appointments (OCPA) Code of Practice.
The minister will normally appoint the chair and all board members of the advisory NDPB and be able to remove individuals whose performance or conduct is unsatisfactory.	This requirement is met. The minister appoints the chair and members of SAC and can remove individuals whose performance or conduct is unsatisfactory. All appointments to the SAC are made within the requirements of the OCPA Code of Practice.
The minister should meet the chair on a regular basis ¹⁸ .	This requirement is met. The chair and minister meet at least annually.
There should be a requirement to inform Parliament and the public of the work of the advisory NDPB in an annual report (or equivalent publication) proportionate to its	This requirement is met. SAC publish an Annual Report. The first Annual Report of the reconstituted SAC after the last independent review covered a period of 18 months to allow time for an induction

¹⁸ Departments should define an appropriate timetable of such meetings with the NDPB, however such meetings should take place at least annually

role ¹⁹ .	period for the new chair and members.
The advisory NDPB must be compliant with Data Protection legislation. The advisory NDPB should be subject to the Public Records Acts 1958 and 1967.	This requirement is met by the secretariat. All data and information held by SAC is managed by the secretariat using Defra systems and procedures.

2. Roles and responsibilities

Principles: (i) The departmental board ensures that there are appropriate governance arrangements in place with the advisory NDPB. (ii) There is a sponsor team within the department that provides appropriate oversight and scrutiny of, and support and assistance to, the advisory NDPB.

Supporting provisions (Depending on the risks to the department's wider objectives and/or the size of the body)	Draft assessment of SAC against principles of good corporate governance
The departmental board's agenda should include scrutiny of the performance of the advisory NDPB proportionate to its size and role ²⁰ .	The Chief Scientific Adviser (CSA) provides verbal updates on the work of SAC to Defra Executive Committee meetings. However, there is no formal process to assess SAC's overall performance in delivering its functions. Therefore this review recommends that Defra's CSA report annually to Defra's Executive Committee, the science minister, and the Government CSA. These reports should coincide with the publication of SAC's annual report and the annual meeting of the SAC chair and minister.
There should be a document in place which sets out clearly the terms of reference of the advisory NDPB. It should be accessible and understood by the sponsoring department and by the chair and members of the advisory NDPB. It should be regularly reviewed and updated.	This requirement is met. The terms of reference for SAC are published on SAC's website and in the Annual Report. The Triennial Review has recommended that these are revised and updated.

¹⁹ See Chapter 6 of Public Bodies: A Guide for Departments for more information this is available on the Cabinet Office website www.cabinetoffice.gov.uk

²⁰ Such scrutiny should take place on at least an annual basis, and in line with the department's broader policy and processes on organisational performance management.

<p>There should be a dedicated sponsor team within the parent department. The role of the sponsor team should be clearly defined.</p>	<p>The sponsor for SAC is the CSA and he is supported in this role by officials from the Strategic Evidence and Analysis (SEA) team in Defra. Senior officials in SEA also oversee the work of SAC's secretariat.</p>
<p>There should be regular and ongoing dialogue between the sponsoring department and the advisory NDPB.</p>	<p>This requirement is met. There are monthly teleconferences between CSA, officials from SEA and SAC on top of the full quarterly meetings. The CSA and the SAC chair also met before each quarterly meeting plan ahead and discuss agendas and meeting papers.</p>
<p>There should be an annual evaluation of the performance of the advisory NDPB and any supporting committees – and of the Chair and individual members²¹.</p>	<p>An annual appraisal of members' performance is conducted in line with recommendations detailed by the OCPA Code of Practice. The evidence-based appraisal, conducted by the CSA and the SAC chair, evaluates members' contributions against the appointment criteria. The CSA, and another senior Defra official who has been involved in SAC, appraise the SAC chair. This review has identified that there is currently no formal process to assess SAC's overall performance, and has recommended that that Defra's CSA report annually to Defra's Executive Committee, the science minister, and the Government CSA (see above).</p>

3. Role of the chair

Principle: The chair is responsible for leadership of the advisory NDPB and for ensuring its overall effectiveness.

<p>Supporting provisions</p>	<p>Draft assessment of SAC against principles of good corporate governance</p>
<p>The advisory NDPB should be led by a non-executive chair.</p>	<p>This requirement is met. SAC has an external chair who is recruited within the requirements of the OCPA Code of Practice.</p>

²¹ The sponsoring department is responsible for assessing the performance of the Chair. The Chair is responsible for assessing the performance of non-executive board members.

There should be a formal, rigorous and transparent process for the appointment of the chair. This should be compliant with the Code of Practice issued by the Commissioner for Public Appointments ²² .	This requirement is met. The appointment process for the chair is compliant with the OCPA Code of Practice.
The chair should have a clearly defined role in the appointment of non-executive board members.	Typically the SAC chair would be a member of recruitment panel. However in the most recent recruitment exercise the chair and the members have been recruited at the same time.
The duties, role and responsibilities, terms of office and remuneration (if only expenses) of the chair should be set out clearly and formally defined in writing.	This requirement is met. The duties, role and responsibilities and remuneration are set out formally in writing and provided to the chair on appointment. Defra-wide terms and conditions (T&Cs) are used.
Terms and conditions must be in line with Cabinet Office guidance and with any statutory requirements.	This requirement is met. Defra's Public Appointments Team ensures that Defra-wide T&Cs used for advisory NDPBs comply with Cabinet Office guidance and with any statutory requirements.

4. Role of other members

Principle: The members should provide independent, expert advice.

Supporting provisions	Draft assessment of SAC against principles of good corporate governance
There should be a formal, rigorous and transparent process for the appointment of members to the advisory NDPB. This should be compliant with the Code of Practice issued by the Commissioner for Public Appointments ²³ .	This requirement is met. The appointment process for members is compliant with the OCPA Code of Practice.
Members should be properly independent of the Department and of any vested interest (unless serving in an ex-officio or representative capacity).	This requirement is met. All members of the SAC are external to Defra, and Defra's executive agencies and other NDPBs.

²² <http://publicappointmentscommissioner.independent.gov.uk/>

²³ <http://publicappointmentscommissioner.independent.gov.uk/>

<p>Members should be drawn from a wide range of diverse backgrounds, but should have knowledge and expertise in the field within which the body has been set up to advise ministers. The advisory NDPBs as a whole should have an appropriate balance of skills, experience, independence and knowledge.</p>	<p>SAC provides a wide breadth and depth of knowledge and expertise. Members are drawn from a range of science disciplines including economics and social science. In addition, particular attention has been paid to recruiting members for their ability to take a broad strategic overview of Defra's remit.</p>
<p>The duties, role and responsibilities, terms of office and remuneration of members should be set out clearly and formally defined in writing. Terms and conditions must be in line with Cabinet Office guidance²⁴ and with any statutory requirements.</p>	<p>This requirement is met. Defra-wide terms and conditions are used. Defra's Public Appointments Team ensures that Defra-wide terms and conditions used for advisory NDPBs comply with Cabinet Office guidance and with any statutory requirements.</p>
<p>All members must allocate sufficient time to the advisory NDPBs to discharge their responsibilities effectively.</p>	<p>The approximate time commitment required from members is set out in the terms and conditions. The annual assessment process ensures that these expectations are met.</p>
<p>There should be a proper induction process for new members. This should be led by the chair. There should be regular reviews by the chair of individual members' training and development needs.</p>	<p>This requirement is met. A training and induction package, created in line with Cabinet Office guidelines 'Making and Managing Public Appointments' and 'Welcome to the Board', is provided to all new members. Training for members is an on-going activity.</p>
<p>All members should ensure that high standards of corporate governance are observed at all times. This should include ensuring that the advisory NDPB operates in an open, accountable and responsive way.</p>	<p>In addition to the following the Seven Principles of Public Life set out by the Committee on Standards in Public Life included in their terms and conditions, they must comply with the Code for Practice for Scientific Advisory Committees.</p>

²⁴ Making and Managing Public Appointments, Cabinet Office, 2006 – this is available on the Cabinet Office website www.cabinetoffice.gov.uk.

5. Communications

Principle: The advisory NDPB should be open, transparent, accountable and responsive.

Supporting provisions	Draft assessment of SAC against principles of good corporate governance
The advisory NDPB should operate in line with the statutory requirements and spirit of the Freedom of Information Act 2000.	This requirement is met by secretariat. SAC's information is held in Defra systems and SAC is subject to the Freedom of Information Act in the same way as Defra.
The advisory NDPB should make an explicit commitment to openness in all its activities. Where appropriate, it should establish clear and effective channels of communication with key stakeholders. It should engage and consult with the public on issues of real public interest or concern. This might include holding open meetings or annual public meetings. The results of reviews or inquiries should be published.	This requirement is met. All reports, including the annual report and the agenda, minutes and papers for SAC meetings, are published on the SAC website. Open meetings have not been held in recent years but may be held in specific circumstances.
The advisory NDPB should proactively publish agendas and minutes of its meetings.	This requirement is met. SAC have recently reinstated the principle of sharing agendas more widely with other relevant/interested government departments, other Defra sponsored NPDBs and executive agencies and with the secretariats of Defra's scientific advisory committees with an invitation for a representative from those organisations to attend any relevant agenda items.
There should be robust and effective systems in place to ensure that the advisory NDPB is not, and is not perceived to be, engaging in political lobbying. There should also be restrictions on members attending Party Conferences in a professional capacity ²⁵ .	This requirement is met. Restrictions on political activity including compliance with Cabinet Office rules on attendance at Party Conferences and on lobbying for NDPBs are included in the terms and conditions for the SAC chair and members.

6. Conduct and behaviour

Principle: Members should work to the highest personal and professional standards. They should promote the values of the advisory NDPB and of good governance through their conduct and behaviour

²⁵ See the Cabinet Office website www.cabinetoffice.gov.uk

Supporting provisions	Draft assessment of SAC against principles of good corporate governance
<p>A Code of Conduct must be in place setting out the standards of personal and professional behaviour expected of all members. This should follow the Cabinet Office Code²⁶. All members should be aware of the Code. The Code should form part of the terms and conditions of appointment.</p>	<p>This requirement is met. The Cabinet Office Code of Conduct is provided along with the SAC terms and conditions on appointment.</p>
<p>There are clear rules and procedures in place for managing conflicts of interest. There is a publicly available Register of Interests for members. This is regularly updated.</p>	<p>This requirement is met. A Register of Interests (which includes guidance by which SAC members have provided information on their interests) is published on the SAC website. The register is reviewed annually by the secretariat. Members are expected to draw attention to any potential conflicts of interest during the course of meetings.</p>
<p>There must be clear rules in place governing the claiming of expenses. These should be published. Effective systems should be in place to ensure compliance with these rules.</p>	<p>This requirement is met. Rules governing the claiming of expenses are included in the terms and conditions for the chair and members and payment of expenses is overseen by the secretariat and the Defra sponsor team. Travel and subsistence rates for the chair and members are the same as those agreed for all staff in the department.</p>
<p>There are clear rules and guidelines in place on political activity for members and that there are effective systems in place to ensure compliance with any restrictions.</p>	<p>This requirement is met. Restrictions on political activity are included in the terms and conditions for the SAC chair and members. In addition the chair and members are regularly reminded of the restrictions placed on them, particularly prior to periods of purdah and Party Conferences. SAC chair and members are asked to seek advice from Defra's sponsor team prior to undertaking any significant political activity not already restricted by the terms and conditions.</p>
<p>There are rules in place for members on the acceptance of appointments or employment after resignation or retirement. These are enforced effectively.</p>	<p>This requirement is met. The rules on the acceptance of appointment or employment for two years after leaving the SAC are included in the terms and conditions provided on appointment.</p>

²⁶ Code of Conduct for Board Members of Public Bodies, Cabinet Office, 2011 – this is available on the Cabinet Office website www.cabinetoffice.gov.uk