

FSA Science Council Annual Report

1 April 2020 - 31 March 2021



Contents

Foreword

I can't really talk about the last year without touching on COVID-19. The ongoing pandemic affected everyone in 2020 in a multitude of ways. Social distancing has meant changes to the way we work and the way we live. The Science Council has had to find new ways of collaborating and working, increasingly using video conferencing and remote tools. What has been surprising is how quickly members adapted to this new way of working.

Much of the credit for this goes to our secretariat who have found technological and logistical solutions to make events we thought near impossible (such as remote stakeholder workshops on food hypersensitivity) work well. And of course, remote workshops have supported participation of people who were previously geographically far flung and might have struggled to take part in a physical meeting. However, face to face discussion remains the preferred option and I look forward to a time in 2021 when the Council can meet in person again.

I am pleased with what the Science Council has delivered for the FSA over the last year. Looking to the future, we are planning reviews that will focus on some significant issues for the FSA: namely net zero carbon and potential emerging risks in the food system after EU Exit and COVID-19.

I am confident that the Science Council's plans over the next year will enable it to continue to provide high-level, expert strategic insight, challenge and advice on the FSA's use of science to deliver FSA objectives of a safe food system.

Prof Sandy Thomas, OBE Chair of the Science Council





"Last year was a challenge for everyone, but FSA has worked tirelessly throughout the COVID-19 pandemic to ensure UK consumers continue to be provided with food that is safe and what it says it is. I have been delighted and impressed by how the Science Council has delivered several major projects despite the challenging year and has continued to provide invaluable advice to the organisation on its use of science. It is exciting to see the progress already underway on the future reviews proposed by the Council, looking at the impact of net zero carbon on the food system and identifying potential disruptors to the food supply chain, and I look forward to discussing their findings in the near future."

Prof Robin May FSA Chief Scientific Advisor

Who are the Council Members?

The FSA's Science Council is an independent expert committee comprising a Chair and seven members. It was established in April 2017 and its role is to provide high-level, expert strategic insight, challenge and advice to the FSA's Chief Scientific Adviser (CSA), the Board and Executive on the FSA's use of science to deliver its objectives is now well established.

Professor Sandy Thomas (Chair)

Professor Sandy Thomas OBE is Director of the Global Panel on Agriculture and Food Systems for Nutrition, and Emeritus Professor at the Science Policy Research Unit at the University of Sussex .She has extensive experience of leading, convening and generating cross-disciplinary analysis and strategic science to inform policy.

Professor John O'Brien

Professor O'Brien is founder of the Food Observatory, UK and a visiting Professor at Ulster University, Coleraine .Until 2018 he led Nestlé's global competence centre for Food Safety & Quality and their Food Safety & Integrity Research Programme in Lausanne, Switzerland .He is former head of food safety for Danone Group in Paris .

Professor Sarah O'Brien

Professor O'Brien is the Elizabeth Creak Professor of Translational Agritechnology in the School of Natural & Environmental Sciences at Newcastle University. She was Professor of Infection Epidemiology & Zoonoses in the Department of Public Health and Policy, University of Liverpool and first Director of the NIHR Health Protection Research Unit in Gastrointestinal Infections.

Who are the Council Members?

Dr Paul Turner

Dr Turner is MRC Clinician Scientist and Clinical Senior Lecturer in Paediatric Allergy & Immunology at Imperial College London, and Clinical Associate Professor at the University of Sydney. He leads a research programme on various aspects of allergy, including understanding drivers of severity in food allergy, allergen risk management, and novel diagnostics.

Professor Patrick J. Wolfe

Professor Wolfe holds Chairs in statistics and computer science at University College London, where he specialises in the mathematical foundations of data science.

A Royal Society Research Fellow and EPSRC Established Career Fellow in the Mathematical Sciences, he is Executive Director of UCL's Big Data Institute and its Centre for Data Science

Claire Nicholson (new in 2020)

Claire Nicholson is the Council member representing consumer interests She has held similar roles including having been Independent Director to represent consumer interests on the Board of Red Tractor; the consumer member of the Advisory Committee on Novel Foods and Processes; a member of the Food Standards Agency Consumer Advisory Panel; and a member of the Advisory Committee on Consumer Engagement.

Professor Jonathan Wastling (new in 2020)

Professor Jonathan Wastling is Pro Vice-Chancellor and Executive Dean at Keele University where he heads the Faculty of Natural Sciences which encompasses subjects ranging from the life sciences and veterinary medicine, through to astrophysics and psychology. He is a Professor of Infection Biology with over 30 years of experience working on the biology of human and animal focusing on host-pathogen interactions, vaccine and drug development.

Professor Peter Gregory (new in 2020)

Professor Gregory is Emeritus Professor of Global Food Security at the University of Reading having previously been Professor of Soil Science at the same university. He is chair of the Recommended List Board for the AHDB and the Board of Crops For the Future UK CIC (maintaining oversight of research development).

Introduction

This report provides a summary of the Science Council's activities in its fourth year (1 April 2020 - 31 March 2021) and reflects on its successes and challenges over the past year as well a forward look into future activities.

The purpose of the Science Council is to help ensure that the FSA identifies, sources, integrates and uses the best scientific evidence and expertise from all relevant disciplines to inform and deliver its work. FSA defines science in a broad and inclusive way, including the natural, physical, social and economic, digital and data sciences. This means the Science Council takes a multidisciplinary approach to deliver and inform its recommendations.

The Council meets four times a year: two open plenary meetings alternating with two closed project meetings. These typically include updates on FSA science activity, progress on ongoing reviews, implementation of previous Council recommendations as well as discussion of science questions with the FSA.

The Council has carried out its work using a mix of approaches with substantial questions being reviewed through Working Groups:

- Working Groups can last between 12-24 months and are chaired by a Council member with experience in the topic under consideration.
- A maximum of two Working Groups are active at any one time.
- All Council members can participate in Working Groups.

This year we have started to develop a more diverse approach to our work portfolio, adding to our existing Working Groups with shorter rapid evidence reviews and medium-term reviews, lasting up to six months and 6-12 months respectively.

This section sets out the reviews which have been ongoing for the Science Council over the period of this report. For each review, the question/request that was put to the Science Council to consider, how it was structured and, where applicable, and its deliverables, are provided below.

Working Group 4 on data usage and digital technology

"How can the FSA better understand the next phase of technology developments, recognising future challenges and opportunities, and having sufficient understanding of them to be able to ensure positive governance of the food system?"

This question was agreed by the FSA Board and the Science Council and the subsequent review was:

- Established in <u>September 2018</u>.
- Chaired by <u>Prof. Patrick Wolfe</u>, an international expert on data science.
- Split into two phases:
 - **Phase 1** was a scoping phase to better understand current FSA data usage across several business areas.
 - **Phase 2** commissioned research to identify future trends and opportunities for data manipulation and utilisation.

The final report of this review, along with the FSA response, were presented to the <u>FSA Board at their meeting on 26 August 2020</u> (Board paper FSA 20-08-07). The report contained the following recommendations to:

- Champion an integrated approach to data standards;
- Champion data access and open data and look to mandate improved data access if in consumer interests;
- Have a more consistent completion of the 'innovation cycle' and long-term monitoring of impact for data innovations;
- Resource to retain internal skillsets, but also endorse flexible means of providing data skills and capabilities for the FSA;
- Encourage the development of data capabilities and skills across the FSA staff base, and grow the FSA's technical leadership for data.

These recommendations were welcomed by the Executive and the FSA Board and progress on their application by the FSA was reported to the Science Council by the Executive in the summer of 2021.

Working Group 4 on data usage and digital technology



Reflections from WG4 Chair: Prof Patrick Wolfe

"This forward look at the opportunities and challenges for the FSA in relation to its use of data and digital technologies was stretching for the Science Council's collective expertise and took us in a timely and important new direction. Our report emphasises the FSA's strong reputation and positioning as a 'data enabled organisation,' providing critical challenge and assurance in how the FSA's capabilities and capacity can be further enhanced by innovative approaches to data analysis and the associated challenges and opportunities.

Our commissioned research projects with The Alan Turing Institute – which crystallised the important roles of data ethics and algorithmic transparency in delivering the FSA's mission now and in the future. The project on The Internet of Food Things informed new FSA capabilities and standards to enable the exchange of data across various parties in business and Government through its Open Federation Ecosystem pilot, which might provide an ability to operate with reduced friction at borders. It also sought further to support the FSA strategic investment in data innovation.

This work was delivered a few weeks ahead of the Government's National Data Strategy (which highlights the FSA's Food Hygiene Rating Scheme and its supporting application processing interface (API) service as a good practice case study) and was warmly received by the FSA Board."

Working Group 5 on food hypersensitivity

The Science Council was asked by the FSA Board to:

1. Consider and advise on future research priorities and direction in respect to food hypersensitivity.

2. Conduct a review of the science and evidence base for addressing food hypersensitivity, and the part the FSA and others should play in enhancing knowledge.

This Working Group is one of the most extensive and challenging initiated by the Science Council and was:

- Established in November 2019.
- Chaired by <u>Dr Paul Turner</u>, an international expert on food hypersensitivity.
- · This review was split into three phases:

1. Consider lessons to be learnt from the previous FSA Food Allergy and Intolerance Research Programme and identify FSA best practice in how science influences decision making.

2. Identify priorities for those affected by food hypersensitivity and then identify key gaps in current understanding of those priorities to provide future research recommendations.

3. Horizon scanning of the food hypersensitivity environment in the next 5-15 years and beyond to inform future long-term FSA research and policy direction.

Dr Turner presented an <u>interim report to the FSA Board on 16 September</u> <u>2020</u> which set out conclusions from the first phase of the work and the timeline to deliver the full review by June 2021.

Working Group 5 on food hypersensitivity



Reflections from WG5 Chair: Dr Paul Turner

"Leading this Working Group with Prof John O'Brien gave me an opportunity to better understand the important research on food allergy and intolerance that the FSA has funded over the past 20 years. We were able to identify both examples of best practice and also the challenges associated with such a significant research programme, and where there was opportunity for future learning.

We used this as a foundation to better understand the role of the FSA as a commissioner of research, and what areas need further evidence in order for the FSA to address its role as a regulator in the future.

During the Working Group, we had extensive discussion with colleagues from the Science Council, FSA staff, external experts, consumers with food hypersensitivity and other stakeholders. Their contribution and insights were key to delivering the final report. We have learnt much from this review, as well as giving the FSA a roadmap to guide future work.

It is very rewarding to see how the FSA is already taking our recommendations to help make "the UK the best place in the world to live for consumers affected by food hypersensitivity."

Rapid Evidence Review 1: Critical Review of Third-Party Evidence

The FSA is increasingly expected to form an independent position in response to a greater volume of evidence submitted by third parties to influence or change its policy. In March 2020 the FSA's Chair of the Board asked:

"How should the FSA evaluate the robustness of evidence submitted by noncommissioned third parties in an effort to change our policy, in order to ensure that the evidence considered to inform our advice and recommendations is sufficiently robust and based on the most up to date scientific information?"

In response, the Science Council set up a rapid evidence review to establish principles and guidelines for assessing the quality of evidence, and provide assurance that the FSA has in place clear, robust and defensible processes for the objective and critical appraisal of third-party evidence submitted to the FSA.

This work was initiated in <u>September 2020</u>; the decision to pursue a rapid review reflected the likelihood of increased external scrutiny of the FSA's advice and recommendations following the end of the EU transition period (31st December 2020).

This review made very good progress given the short period of time available. The Science Council set out current best practice within the FSA and the use of nationally and internationally accepted guidance, which was used to develop the Science Council's high-level principles and guidelines for the assessment of evidence.

The high-level principles and draft report were reviewed and well received by the FSA Executive Management Team (EMT) in February. The final principles, guidelines and report were opened to public consultation in March-April.

Rapid Evidence Review 1: Critical Review of Third-Party Evidence



Reflections from Project Lead: Prof Peter Gregory

"At any time, the FSA can be sent non-commissioned information and asked to respond to it. In this process, it is important to establish a transparent set of principles and guidelines that everyone can work with, and to understand the expectations for the quality information to be provided.

Having consulted with other Scientific Advisory Committees, Government Departments, and members of the FSA risk assessment community, it is clear that the FSA was already applying internationally recognised standards to the assessment of evidence. This means that the new guidelines are largely based on translating what was already there into a framework.

I am proud of the work we have done. It exemplifies what the Science Council is here to do, namely, to provide independent scientific advice on cross-cutting issues. I would like to thank the hard-working secretariat and colleagues on the Science Council without whom this work would not have been completed within such a tight timeframe."

Future Work

The Science Council is diversifying the type of review that it carries out beyond the current in-depth Working Groups to include short and mediumterm reviews. This is intended to allow more agility, enabling the Council to do the kind of in depth analysis that has been done previously, but also to provide capacity for the delivery of more focused reviews for specific topics that are time sensitive.

The Council is also expanding, with the aim of recruiting two new members by early 2022. This will allow a broader range of expertise and greater capacity to take on new work.

This will include a new topic that the Council is developing through discrete reviews throughout 2021 and beyond:

Food Safety and Net Zero Carbon (NZC): "What are the food safety implications of decarbonisation measures which are going to be taken in the next decade to help achieve net zero carbon emissions?".

The Council will also be looking at the possibility of providing strategic support for other FSA projects such as Food Safety and Key Food Supply Chain Disruptors: "What are the food safety implications of likely significant disruptors to the food supply chain over the next 5 years (including climate change, pandemics and the post EU-Exit trade environment)?"

The Food Safety and NZC review has already started in mid-2021 (ending in Spring 2023) and will be scoped in consultation with relevant stakeholders to ensure it provides a meaningful and focused assessment of the topic.

Post-Reporting Period Update

- Working Group 5 final report on food hypersensitivity areas of future research was presented to the FSA Board on 16 June 2021.
- Rapid Evidence Review of third party evidence had its <u>final framework</u> <u>accepted by the FSA and was published on the food.gov.uk website on 24</u> June after <u>an open consultation</u>.

Annual Costs

The operation of the Science Council is funded by the FSA. For the financial year 1 April 2020 to 31 March 2021 – covering project costs, members' expenses and fees and administrative costs for meetings – total costs:

- Science Council operational costs (incl. T&S, fees, SAC Recruitment, the triennial review etc) were £48,647.00
- Working Group 5 specific spend was £143,674.20
- Total spend was £192,321.20

Information on fee rates and expenses guidance are included in the <u>FSA SAC</u> <u>Guidance on Committee Fees and Expenses</u>.

Appendix: Science Council self-assessment against good practice guidelines for the independent scientific advisory committees

Twenty-nine principles of good practice have been developed by the Chairs of the SACs that advise the FSA. These FSA <u>Good Practice Guidelines for Science</u> <u>Advisory Committees</u> were reviewed and updated in 2012.

Different committees have different duties and discharge those duties in different ways. Therefore, not all of the 29 principles set out below will be applicable to all of the committees, all of the time. This list of principles is considered by each committee annually as part of the preparation of its Annual report and is attached as an Appendix to it.

Response by the FSA Science Council for the period of its second Annual Report (from 1 April 2019 to 31 March 2020)

The role of the Science Council is to provide high-level, expert strategic insight, challenge and advice to the FSA's Board and executive of the FSA and Chief Scientific Adviser on the FSA's use of science to deliver FSA objectives. Its role does not require it to carry out risk assessments or detailed investigations of scientific dossiers on specific risks, products or processes. It did, however, look at how these processes are conducted and make recommendations on good practice. In carrying out its work, the Science Council looked at the evidence to help identify priority areas of research for food hypersensitivity and making recommendations on FSA usage of data and digital technology, and in doing so, sought to abide by the principles of good practice developed by the FSA and Government Office of Science.

Note that in summer of 2020 the Science Council published on its new website updated terms of reference and code of practice. These had been updated as part of an exercise to ensure some consistency between these documents (primarily in the information provided and layout) for FSA Scientific Advisory Committees. This did not represent a significant change to the role or ways of working of the Council from the previous versions.

SAC Principles

Defining the problem and the approach

1. The FSA will ensure that issues it asks a SAC to address are clearly defined and take account of stakeholder expectations in discussion with the SAC Secretariat and where necessary the SAC Chair. The SAC Chair will refer back to the FSA if discussion suggests that further iteration and discussion of the task is necessary. Where a SAC proposes to initiate a piece of work, the SAC Chair and Secretariat will discuss this with FSA to ensure the definition and rationale for the work and its expected use by the FSA are clear.

Complies: The FSA's Chief Scientific Adviser (CSA) attends most Science Council meetings and discusses the rationale for the questions posed to the Council with them. The Science Council Chair also has regular meetings with the FSA's CSA, Chair and the Chief Executive where any questions from the FSA or initiated by the Council are further fleshed out. FSA contributions to Working Groups (such as meetings with staff who lead on relevant policy/science areas and contributions to meetings) enables ongoing discussion, clarification and

Seeking Input

2. The Secretariat will ensure that stakeholders are consulted at appropriate points in the SAC's considerations. It will consider with the FSA whether and how stakeholder views need to be taken into account in helping to identify the issue and frame the question for the committee.

Complies: Science Council holds full plenary meetings twice a year in public. Working Groups do not meet in public but report their work to plenary meetings during open sessions. Working Groups consult stakeholders and the FSA's SACs as and when appropriate. For Working Group 5 (WG5) on food hypersensitivity (FHS), the Science Council commissioned a survey of stakeholders affected by FHS to identify key issues of concern. These responses were assessed for priority at a stakeholder workshop and used to develop research questions for the FSA to consider. For the rapid evidence review of the quality of third party evidence, SACs were engaged to gain insight to their practices in this area as were other Government Departments and risk assessors within the FSA.

3. Wherever possible, SAC discussions should be held in public.

Complies: Science Council full meetings are held in public twice a year. Working Groups do not meet in public but report their work to plenary meetings in open session.

4. The scope of literature searches made on behalf of the SAC will be clearly set out.

Complies: The Council's WG5 on food hypersensitivity commissioned a literature review (a Rapid Evidence Assessment (REA)) to identify existing research carried out on topics that had been prioritised as being key concerns with respect to FHS. The approach and scope were clearly set out in the report provided by the contractor (RSM) which carried out the review along with a description in the final report of this review (published after this reporting period in June 2021).

5. Steps will be taken to ensure that all available and relevant scientific evidence is rigorously considered by the committee, including consulting external/additional scientific experts who may know of relevant unpublished or pre-publication data.

Complies: The Science Council does not routinely consider detailed primary scientific documents, but it does examine rigorously the evidence that is presented. Members and secretariat are expected to bring relevant additional materials to the attention of the Council. For WG5 as part of the specification of the literature review, experts were contacted to identify relevant pre-publication for inclusion.

6. Data from stakeholders will be considered and weighted according to quality by the SAC.

Complies: The Science Council weighed all relevant information according to quality, irrespective of its source. In fact, with the Rapid Evidence Review of the quality of third party evidence, the Science Council is supporting the establishment of a framework to support the submission of better quality un-commissioned data to the FSA.

7. Consideration by the Secretariat and the Chair (and where appropriate the whole SAC) will be given to whether expertise in other disciplines will be needed.

Complies: The Science Council kept this under review and it has the option to co-opt or invite external input where necessary, through mechanisms such as the FSA's Register of Specialists. For example, Ipsos/MORI were contracted to do a survey which informed workshops carried out under WG5. The Science Council commissioned the services of independent facilitators experienced in nominal group techniques through the FSA's Register of Specialists framework.

8. Consideration will be given by the Secretariat or by the SAC, in discussion with the FSA, as to whether other SACs need to be consulted.

Complies: Working Groups consult the FSA SACs as appropriate. The Council is developing its engagement with the SACs and, as well as the Council Chair attending the regular workshops of SAC Chairs, some Council members are paired with a SAC relevant to their expertise, for regular updates and cross-engagement. For the Rapid Evidence Review of third party evidence the Science Council interviewed other SACs on their experience and approach to data quality. For Working Group 4 (WG4) on data usage and digital technology, the draft final report and recommendations were shared with the Advisory Committee on Social Science (ACSS) to have a social science perspective. The ACSS was also engaged in the development of the WG5 review and reviewed the draft final report.

Validation

9. Study design, methods of measurement and the way that analysis of data has been carried out will be assessed by the SAC.

10. Data will be assessed by the committee in accordance with the relevant principles of good practice, e.g. qualitative social science data will be assessed with reference to guidance from the Government's Chief Social Researcher.

11. Formal statistical analyses will be included wherever appropriate. To support this, each SAC will have access to advice on quantitative analysis and modelling as needed.

12. When considering what evidence needs to be collected for assessment, the following points will be considered: the potential for the need for different data for different parts of the UK or the relevance to the UK situation for any data originating outside the UK; and whether stakeholders can provide unpublished data.

13. The list of references will make it clear which references have been subject to external peer review, and which have been peer reviewed through evaluation by the Committee, and if relevant, any that have not been peer reviewed.

Science Council complies, to the extent these criteria apply to its work: The Science Council does not generally consider the type of detailed reviews and analyses of scientific data that are the primary focus of these criteria. However, it does advise on best practice, governance and assurance of the FSA's use of science.

Uncertainty

14. When reporting outcomes, SACs will make explicit the level and type of uncertainty (both limitations on the quality of the available data and lack of knowledge) associated with their advice.

15. Any assumptions made by the SAC will be clearly spelled out, and, in reviews, previous assumptions will be challenged.

16. Data gaps will be identified and their impact on uncertainty assessed by the SAC.

17. An indication will be given by the SAC about whether the evidence base is changing or static, and if appropriate, how developments in the evidence base might affect key assumptions and conclusions.

Science Council complies to the extent these criteria apply to its work: The Science Council does not generally consider the type of detailed reviews and analyses of scientific data that are the primary focus of these criteria. However, it does advise on best practice, governance and assurance of the FSA's use of science.

Drawing Conclusions

18. The SAC will be broad-minded, acknowledging where conflicting views exist and considering whether alternative interpretations fit the same evidence.

Science Council complies to the extent these criteria apply to its work: This is implicit in the Science Council's role to provide high-level, expert strategic insight, challenge and advice to the FSA's Board and executive and Chief Scientific Adviser on the FSA's use of science to deliver FSA objectives.

19. Where both risks and benefits have been considered, the committee will address each with the same rigour, as far as possible; it will make clear the degree of rigour and uncertainty, and any important constraints, in reporting its conclusions.

Science Council complies to the extent these criteria apply to its work: The Science Council does not carry out assessments of risks and/or benefits as such. It would consider the advantages and disadvantages of different options in making its recommendations.

20. SAC decisions will include an explanation of where differences of opinion have arisen during discussions, specifically where there are unresolved issues, and why conclusions have been reached. If it is not possible to reach a consensus, a minority report may be appended to the main report, setting out the differences in interpretation and conclusions, and the reasons for these, and the names of those supporting the minority report.

Science Council complies to the extent these criteria apply to its work: This is covered explicitly in the <u>Science Council Code of Practice</u>.

21. The SAC's interpretation of results, recommended actions or advice will be consistent with the quantitative and/or qualitative evidence and the degree of uncertainty associated with it.

Science Council complies to the extent these criteria apply to its work: Science Council aimed to follow this principle. For example, a Rapid Evidence Assessment (REA) was chosen over a Quick Scoping Review (QSR) for the literature review carried out under Working Group 5 as this provides a critical appraisal of both relevancy and robustness of the evidence found.

22. SACs will make recommendations about general issues that may have relevance for other committees.

Science Council complies to the extent these criteria apply to its work: This is implicit in the Science Council's role to provide high-level, expert strategic insight, challenge and advice to the FSA's Chief Scientific Adviser, the Board and the executive of the FSA on the FSA's use of science to deliver its objectives.

Communicating SAC's conclusions

23. Conclusions will be expressed by the SAC in clear, simple terms and use the minimum caveats consistent with accuracy.

Science Council complies to the extent these criteria apply to its work: Given the high-level strategic advice the Science Council provides, this tends to lend itself minimal use of jargon and technical terms and it aimed to make its reports clear and concise to the lay audience. The Science Council's website has also been updated to allow clearer navigation and all documentation published from the June 2020 open meeting onwards has been reviewed against accessibility criteria so the Council's work is more inclusive.

24. It will be made clear by the SAC where assessments have been based on the work of other bodies and where the SAC has started afresh, and there will be a clear statement of how the current conclusions compare with previous assessments.

Science Council complies to the extent these criteria apply to its work: Science Council meeting papers and minutes made clear the origin of issues under discussion. It put its conclusions in the context of other work where appropriate. For example, Working Group 5 considered previous reviews of the FSA food allergy and intolerance research programme as part of an assessment of past practice, which was made clear in the <u>interim report published in</u> <u>September 2020</u>.

25. The conclusions will be supported by a statement about their robustness and the extent to which judgement has had to be used.

Science Council complies to the extent these criteria apply to its work: The Science Council made clear the basis for its recommendations and any assumptions and caveats.

26. As standard practice, the SAC secretariat will publish a full set of references (including the data used as the basis for risk assessment and other SAC opinions) at as early a stage as possible to support openness and transparency of decision-making. Where this is not possible, reasons will be clearly set out, explained and a commitment made to future publication wherever possible.

Science Council complies to the extent these criteria apply to its work: The Science Council did not carry out risk assessment or assessment of detailed scientific data of the type that is the focus for this criterion.

27. The amount of material withheld by the SAC or FSA as being confidential will be kept to a minimum. Where it is not possible to release material, the reasons will be clearly set out, explained and a commitment made to future publication wherever possible.

Science Council complies to the extent these criteria apply to its work: The Science Council followed this criterion.

28. Where proposals or papers being considered by the FSA Board rest on scientific evidence produced by a SAC, the Chair of the SAC (or a nominated expert member) will be invited to the table at the Open Board meetings at which the paper is discussed. To maintain appropriate separation of risk assessment and risk management processes, the role of the Chairs will be limited to providing an independent view and assurance on how their committee's advice has been reflected in the relevant policy proposals, and to answer Board Members' questions on the science. The Chairs may also, where appropriate, be invited to provide factual briefing to Board members about particular issues within their committees' remits, in advance of discussion at open Board meetings.

Science Council complies to the extent these criteria apply to its work: This did not apply directly, since the Science Council did not carry out risk assessments or detailed reviews of scientific evidence. This is because the Science Council reviews topics of strategic science interest and presents recommendations based on those reviews, but does not carry out risk assessment or assessment of detailed scientific data. However, Science Council activity and reports are presented to the FSA Board, in most cases by the Science Council Chair and the Chair of the relevant Working Group.

The Science Council Chair (Prof. Sandy Thomas) provided her <u>annual update to the FSA Board</u> <u>in March</u> which summarises the Council's activity during this reporting year. The results of Working Group 4 (WG4) on data usage and digital technology, were presented by Prof Patrick Wolfe (Working Group Chair), accompanied by the Science Council Chair. Dr Paul Turner (Working Group 5 Chair) presented the <u>interim report for this review of food hypersensitivity</u> <u>at the September 2020 FSA Board meeting</u>.

29. The SAC will seek (and FSA will provide) timely feedback on actions taken (or not taken) in response to the SAC's advice, and the rationale for these.

Science Council complies to the extent these criteria apply to its work: When submitting recommendations at the end of a review, the Science Council asks for feedback and reports from FSA on progress in acting on these recommendations (typically 12 months from the review report being presented to the FSA Board).

Feedback was provided on utilisation of the recommendations of Working Group 3 on Global food systems and horizon scanning at the 7th Science Council open meeting (24 June 2020). At the same meeting an update on development of an FSA Risk Communications Toolkit was provided, which build on recommendations from Working Group 2 on risk and uncertainty. Feedback on the recommendations of WG4 are expected in summer 2021.