

Annual Science Update from the FSA's Chief Scientific Adviser

FSA 24/06/04 - Report by Professor Robin May, FSA Chief Scientific Adviser (CSA).

1. Introduction

1.1 This is my fourth annual report to the Board as the Food Standards Agency's Chief Scientific Adviser (CSA), and, as ever, I welcome the opportunity to reflect on the last 12 months in the role.

2. Role of the FSA CSA

2.1 To recap, my role as the FSA CSA is essentially threefold:

- a) to provide high level assurance about science within the FSA (including the work of our independent Scientific Advisory Committees), offering independent challenge and advice to the Board, Executive and the organisation more widely.
- b) to maintain strong links with CSAs in other government departments as well as key external stakeholders, representing FSA's interests in the wider (inter)national landscape and ensuring that the organisation benefits from the most up to date scientific findings from other fields.
- c) to act as an ambassador and communicator of science both within the FSA and across government, industry and consumer groups.

3. Outline of this Report

3.1 This is an independent report reflecting on science-related issues across the organisation. Together with colleagues within SERD and across the wider organisation, I have been closely involved in recent and ongoing discussions to develop a robust science strategy for the FSA. These have been discussed with the Board already and will be presented in more detail at the next Board meeting and so will not be covered here, although I would like to note formally that I am supportive of the ongoing approach to consider both short-term and long-term science needs. Consequently, in this report I focus on two broad themes:

- a) Science assurance and integrity, with a specific focus on our Scientific Advisory Committees
- b) Science capability, partnerships and 'future-proofing', with an emphasis on maximising the FSA's potential role in innovative new areas of science.

3.2 Several areas of FSA science touch on both themes, as described below, and in total I recommend 24 actions for the Board to consider and discuss, which are described in detail below

and provided as a summary list in **Annex 1**.

4. Scientific Advisory Committees

4.1 Last year we conducted 'deep-dive' reviews of Science Council and the Advisory Committee on Social Sciences (ACSS), as well as more routine reviews of our other SACs. Since then, I have been in discussion with SAC chairs, SERD colleagues and CSAs in other departments to reflect on how best to maximise the efficacy of SACs more generally.

4.2 SACs are invaluable to the work of the FSA, and I remain deeply grateful to the 145 individuals who give up considerable time to ensure that we have access to the best expert advice across a diverse range of topics. However, SAC workloads have expanded very considerably in recent years, particularly since EU Exit. **Annex 2** provides data on all of our SACs. It is notable that the time commitment required of members is highly variable, but in some cases is far higher than would be typically expected for such a role. This is not sustainable long-term and therefore we have taken steps to try and streamline SAC working, in particular around regulated products, by moving relatively routine applications 'below the line' (for discussion only if SAC members request it) and instead focusing the discussion on the more challenging topics. This is in line with several other government SACs and will undoubtedly help reduce overall SAC workload.

4.3 However, I anticipate that further changes to SAC ways of working will be required in order to maintain manageable workloads going forwards. Some of these are likely to be achieved via regulatory reform work going on more widely within FSA – for instance, in removing the need for some regulated product renewals. In addition, though, I recommend that:

- **Recommendation 1** – FSA should investigate technical/operational enhancements that may streamline SAC working. These range from relatively simple approaches (such as 'clustering' similar applications together, so that they can be considered in one session) to more 'future-facing' enhancements (such as using artificial intelligence approaches to triage applications, summarise dossiers and highlight similar authorisations in other jurisdictions).
- **Recommendation 2** – Our work to make better use of other regulators' opinions in our own risk assessment process is continued and expanded. In particular, I note that there may be opportunities in the future to consider more formal collaborations with other international regulators – for instance, in formally considering applications together, or exchanging expertise in complex, innovative areas such as cell-cultivated proteins.

4.4 There has also been considerable public scrutiny of SACs across government, partly as a consequence of the Covid-19 inquiry but also arising from public interest in more controversial food topics, such as genetic-modification or ultra processed foods. In some cases, this public debate has focused on potential conflicts of interest within SAC membership.

4.5 It is fundamental to public confidence that science advice within government is independent and transparent, and therefore essential that there are robust processes in place to identify and mitigate any conflicts of interest amongst SAC members (as well as others involved in the provision of evidence – such as chief scientific advisers).

4.6 There are robust systems in place to ensure that any interests held by SAC members are openly declared and that members do not participate in any decision regarding a topic on which they may be conflicted. These align with the Government-wide [Code of Practice for Scientific Advisory Committees](#). It is important to put on record that I remain fully confident in this approach, which is in line with that used by other Governmental advisory groups and with regulators around the world. Nonetheless, to ensure continued public confidence in the system, I recommend:

- **Recommendation 3** – That ‘interests’ be clearly defined to include non-commercial arrangements (such as major research interests for those with active research portfolios), memberships of advocacy groups and other potential interests that are not financial in nature.
- **Recommendation 4** – That the declarations of member interests be collated in one area on the FSA website to ensure maximum visibility
- **Recommendation 5** – That the ‘default’ for SACs is to hold at least one ‘open’ meeting each year, which stakeholders and members of the public can attend. I note that this will necessitate careful planning in order to retain the confidentiality of commercially sensitive papers for some SACs and therefore arrangements will need to be individualised for each SAC.
- **Recommendation 6** – That an ‘audit’ of a random selection of SAC members (and other independent advisors, such as the CSA) be carried out by the FSA on an annual basis. This could examine areas such as research funding, publications, paid-for speaking engagements, social media contributions, consultancy work and so forth.

4.7 It is important to note that I disagree with the opinion expressed recently by some commentators in the media that SACs should have no members at all who have had industry funding in the past. Whilst it remains critical that all such funding be openly declared by members, preventing any such individual from serving on a SAC would hamper FSA’s access to the best possible science advice and cutting-edge method development, which is often undertaken by industry, and reduce the pool of available experts. It would also be inconsistent with wider government policy to encourage academic researchers to collaborate with industry. With this in mind, I recommend that:

- **Recommendation 7** - We ensure our policy on conflicts of interest is very clear in any future SAC recruitment campaigns, including that we welcome applications from all sectors of science but that an open and transparent declaration of interests is a fundamental principle underpinning all SAC activities.
- **Recommendation 8** – We formalise a system for assessing and acting on conflicts of interest in the unlikely event of a dispute with a SAC member.
- **Recommendation 9** – We expand on our recent efforts to maximise diversity on SACs, for example through the recruitment of ‘associate’ SAC members, since diversity of opinion is an additional precaution against inadvertent bias.

5. Science Council Update

5.1 The Science Council has a new chair (John O’Brien) and several new members. In recent months they have undertaken two major pieces of work: one brought together a large panel of international experts to prioritise ‘50 questions for the future of food safety’ (from a very extensive long list of around 250 questions) whilst the second considered the evidence base that would be needed to formally integrate ‘wider impacts’ into regulated product considerations. Formal reports on both of these projects will be produced in the coming months, but having attended both workshops I was delighted to see the level of engagement and the valuable insights that attendees provided. I have no doubt that these will prove extremely useful in shaping future thinking within FSA and therefore recommend that:

- **Recommendation 10** – Senior colleagues across the organisation, and not only within SERD, engage closely with the Science Council to design similar activities that the Council might usefully contribute, particularly in areas such as regulatory reform, innovative technology, or international joint working.

6. Risk assessment and related incidents work

6.1 In the last 12 months, our SACs have assisted with five incident risk assessments including the cyanobacterial bloom in Lough Neagh in Northern Ireland, the effects of glycerol in slushy drinks, and the risk of Listeria contamination on enoki mushrooms. SACs have also been closely involved in helping to develop our regulatory approach to Precision Bred foods, alongside advising on the assessment of a steady flow of regulated product applications.

7. Official Laboratories and Sampling

7.1 I have highlighted at previous meetings my concerns regarding a diminishing official laboratory capability across the UK. There are three facets to this: a) following EU exit, some critical methods for sampling and surveillance were available only through international partners, which represents a vulnerability in the event of a major incident, b) several, more specialised, areas of testing are not in themselves commercially viable and therefore UK capacity in these areas has been slowly diminishing, c) there is a shortage of early-career researchers entering public sector laboratory services in certain key areas, such as toxicology.

7.2 At a departmental level, the FSA has continued to invest in sampling programmes, a number of which are delivered via the official laboratories. These include the FSA's retail and imported foods surveillance programmes and the FSA's food standards directed sampling programme, which targets specific areas of known risk to increase compliance. Over the last year we have sought to bolster this capability by awarding approximately £600k of capability building grants to four official labs. Funding has enabled the introduction of less labour-intensive processes, improving UK capacity, turnaround time for analysis and the range of available testing. Public Analyst training events have also been delivered to support MChemA students.

7.3 I note also that the cyanobacterial bloom that affected Lough Neagh in Northern Ireland during 2023 highlighted the need for continual vigilance around sampling. I am pleased that the FSA are working toward the development of an accredited method of toxin detection with the NI National Reference Laboratory, with the view to training Official Laboratories in due course, so that will have the capability to roll out rapid testing if and when the bloom reappears. I am also pleased that we have recently received funding to sample fish from Lough Neagh during this financial year to get a better baseline of levels of cyanotoxins in fish and review our risk assessment and advice to businesses and consumers as needed.

7.4 The situation in Lough Neagh is reflective of the wider challenge around ensuring sampling capabilities are in place for a range of potential food-related incidents. Given the changing international landscape, in my view it would be timely to review this national capability in order to inform future investment and therefore I recommend that:

- **Recommendation 11** – FSA undertake a review (perhaps led by Science Council) of the existing UK capability to deliver official testing in line with (inter)national reference requirements and identify priorities for future investment and/or formal international partnering agreements

7.5 Although the large, systemic challenges around sampling/laboratory capability cannot be resolved by FSA alone, I am pleased to report that there has also been some progress over the last 12 months via wider, cross-governmental initiatives. The UK's reassociation to Horizon means that we once again have access to cutting-edge research across the EU and other '3rd country' members. This is a major step forward in ensuring the UK national laboratories remain abreast of emerging methods and have robust collaborations with international partners, including in terms of training and recruiting staff.

7.6 Secondly, together with other government departments and UKRI, we have been exploring possibilities for specialist training in key areas. Whilst any major investments in this area will be dependent on the outcome of future spending reviews, there is nonetheless a clear shared

ambition to establish such schemes and hopefully reverse recent declines in young people entering this career.

7.7 Finally, we have been closely involved in strategies to develop alternative training in specialist areas, most notably in work being led by the British Toxicology Society, who are developing module (largely online) training in this area, which is due to go live later this year. I hope this will provide a flexible 'vehicle' for toxicology training, as well as a potential model to develop similar training in other key areas in the future.

7.8 Long-term investment in scientific expertise is critical to the FSA and so I recommend that:

- **Recommendation 12** – SERD colleagues continue to engage closely with learned societies, UKRI and other interested parties to create enhanced provision of specialist training via both 'classical academic' (degree, MSc, PhD) and alternative (online, modular, part-time, etc) training mechanisms.
- **Recommendation 13** – FSA work closely with other regulators and government departments to make the strongest possible case to Treasury at the next Spending Review for increased investment in specialist STEM training, especially in areas of regulatory science.
- **Recommendation 14** – FSA capitalises on international collaboration in this area, both through formal project collaborations and via the provision of secondments/staff exchanges with other national regulators in countries with comparable food standards.

8. Science Engagement and Partnerships

8.1 It has been a very productive year for wider science engagements, both for me specifically and for the FSA more widely. A list of my significant visits is given in **Annex 3**, but I would particularly like to highlight a couple of visits.

8.2 Colleagues at the British Embassy hosted Natasha Smith (Deputy Director of Food Policy) and myself on a visit to Israel last year, where we visited a number of companies working on cell cultivated products. More recently, I have made visits to companies based on the UK undertaking similar work and all of these have been hugely useful in providing details about the technology and components that go into producing these highly innovative types of food.

8.3 I have also had the pleasure of visiting several organisations providing essential laboratory functions to the agri-food industry, such as Campden BRI, Microsearch and the UK Centre for Ecology and Hydrology. Such hands-on visits are invaluable in providing a deep understanding of evolving methods and new challenges in the food testing space and I am very grateful to all of those who took time to talk during the visits.

8.4 There has also been significant work to build better partnerships with other funders, in order to leverage external funding to support research that is relevant to the FSA. For instance, we co-funded (together with UK Research & Innovation) the establishment of the Food Safety Research Network (FSRN), providing a platform to allow industry partners to share data on pathogen testing results and discover trends that would not be visible within any single dataset. The FSA has also taken a proactive approach to ensure we become partners in the new UK Alternative Protein Innovation & Knowledge Centre (with funding of £18M over five years from UKRI), which will be announced this summer. Internationally, the FSA's economics and social science networks allow us to share resources and harmonise approaches with other food regulators such as FDA, EFSA and FSANZ, for example on measuring trust or on consumer understanding of precautionary allergen labelling.

9. PATH-SAFE

9.1 The cross-departmental project PATH-SAFE, which FSA has been leading on, was originally due to finish this spring. However, based on progress thus far, I was delighted that the Treasury agreed to fund an additional year of work, to enable an expansion of the programme in key areas.

9.2 Like many large, collaborative research programmes, it is only really now (3 years into the work) that the value of PATH-SAFE can start to be measured. However, now that the different projects within the programme are starting to produce final data outputs, it is clear that the programme has been very successful not only in 'plugging gaps' in our knowledge of foodborne pathogen populations (for instance, in quantitating the carriage of antimicrobial resistant pathogens by certain livestock, and in identifying the most promising 'point-of-detection' technology to be used for genomic pathogen surveillance in ports and on farms) but also in bringing together a broad range of organisations to work together on problems that go far beyond the remit of any individual stakeholder.

9.3 As the programme enters its 'extension year', it will be critical to take steps to ensure a lasting impact. Specifically, I recommend:

- **Recommendation 15** – Each individual project within the programme is carefully appraised in terms of a) output and b) value for money and then a decision taken about whether (aspects of) work within the project should be continued and, if so, which department will formally 'own' that activity going forwards. Without this, there is some risk that beneficial strands of work will fall between two stools.
- **Recommendation 16** – All partners in the programme take every opportunity to identify datastreams that could usefully be integrated into the PATH-SAFE 'data system', thereby maximising the impact of that system on public health. It will also be important to make that data system available to the wider research community (whilst continuing to ensure the confidentiality of sensitive data within it) over the coming months, so that independent research groups can critique and extend on the work.

9.4 One of the major challenges within PATH-SAFE has been the sharing of (sensitive) data between different government departments – for instance, between those agencies with responsibility for human versus animal health. This is a widely acknowledged problem across many sectors, but it strikes me that the PATH-SAFE collaboration provides a unique opportunity to help tackle these challenges. The Cabinet Office and Government Office for Science have expressed a strong desire to develop mechanisms (such as pre-agreed memoranda of understanding) that would facilitate data sharing across agencies. I would therefore recommend that:

- **Recommendation 17** – FSA/PATH-SAFE colleagues engage closely with those discussions over the coming months and to emphasise at every opportunity the huge benefits to be gained from rapid and effective sharing of information, particularly in the context of infectious disease incidents.

10. Future Challenges and Opportunities

10.1 As ever, it remains very difficult to predict challenges and opportunities within the medium to long term future of the food system. However, there are a number of topics that, in my opinion, are likely to grow significantly in importance over the coming years and therefore that I recommend the organisation starts to consider in more detail.

10.2 *Artificial Intelligence (AI)*. Every corner of society is likely to be profoundly altered by the remarkable developments that we are seeing in AI, and the food sector is no exception. Specific examples might include the use of AI in predicting the toxicological or allergenic risk of a novel food, in preparing or even assessing regulatory dossiers, or in 'inventing' novel foods by

combinatorial chemistry. I therefore recommend:

- **Recommendation 18** – Generally, that FSA remains closely involved with other government departments and other international regulatory bodies in assessing developments in this sector and how they may be best exploited for improved food safety.
- **Recommendation 19** – More specifically, that FSA considers how existing AI approaches might be employed for regulatory benefit, for instance in a) risk assessment or b) in using image- or audio-based AI approaches to enhance data-gathering and regulation of busy, complex food environments such as abattoirs or catering establishments.

10.3 *Ultra processed foods (UPFs)*. Recent media and political interest in this topic means that it is likely to remain high-profile and that the food industry will respond both via new innovations and through reformulation. The current debate has highlighted a number of areas where I feel FSA could play a key role and therefore, I recommend:

- **Recommendation 20** – That FSA engage closely with other departments and funders in pursuing key areas of research on UPFs that are recognised as currently lacking, such as randomised controlled trials and detailed population level consumption/health data, or ‘mechanistic’ studies to determine the potential biological effects of UPFs or their components on health.
- **Recommendation 21** – That FSA colleagues collaborate with other international regulators to consider how complex, multi-component interactions between ingredients (such as additives, emulsifiers and colours) may be best considered within risk assessment approaches.
- **Recommendation 22** – That FSA engage with industry and other stakeholders to consider how long-term product impacts (both good and bad) on consumers might best be analysed, for example, via post-authorisation market monitoring approaches or similar.

10.4 *Microbiome modification*. Data on the human microbiome is expanding exponentially, but a recent rapid project that FSA undertook together with MHRA and GO-Science highlighted a lack of evidence on the health impact of so-called ‘microbiome modification approaches’ (such as prebiotics, probiotics or nutritional supplements). However, this situation is likely to evolve rapidly and very soon I anticipate that food products intended to modify individual microbiomes in highly specific ways will start to emerge. I therefore recommend that FSA works closely with DHSC/MHRA to:

- **Recommendation 23** – Consider developing a joint working group to examine how best to assess, authorise and regulate food products that are intended to have specific effects on the microbiome of healthy consumers (such as on physical fitness or mental health).

10.5 *Alternative proteins and cell-cultivated products*. The pace of development within this sector has been considerably faster than anticipated. Like any emerging market, the field is likely to evolve rapidly and unexpectedly over the coming years, as innovations succeed or fail, and as smaller companies grow or are taken over. I therefore recommend that FSA:

- **Recommendation 24** – Continues to focus attention on this sector and to consider carefully how best to regulate highly innovative cell-cultivated products, particularly those that are far-removed from any existing food types (such as cell-cultivated products produced from extinct species, or multi-species ‘hybrids’).

11. Conclusions

11.1 The last few years have been marked by enormous shifts in the food system, driven partly by global events such as Russia’s invasion of Ukraine, but also by the remarkable pace of change within the food sector. This has been a period of intense innovation in the food sector and one in

which public and political interest in food production, health impacts and the wider 'food landscape' has never been higher. All of this makes the role of the FSA more important than ever. In a year in which more than 50% of the world's adult population are voting, including the population of the UK, it is critical that the FSA maintains its reputation as a global leader in food regulation. That reputation is built on a solid foundation of science and evidence, and I very much look forward to FSA science continuing to thrive over the next twelve months.

Annex 1

Recommendations to Board

- Recommendations 1, 3, 4, 5, 6, 7, 8, 9 and 15 are related to assurance and integrity.
- Recommendations 2, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23 and 24 are related to partnerships, capabilities and 'future-proofing'.

1. FSA should investigate technical/operational enhancements that may streamline SAC working. These range from relatively simple approaches (such as 'clustering' similar applications together, so that they can be considered in one session) to more 'future-facing' enhancements (such as using artificial intelligence approaches to triage applications, summarise dossiers and highlight similar authorisations in other jurisdictions).
2. Our work to make better use of other regulator's opinions is continued and expanded. In particular, I note that there may be opportunities in the future to consider more formal collaborations with other international regulators – for instance, in formally considering applications together, or exchanging expertise in key areas.
3. That 'interests' be clearly defined to include non-commercial arrangements (such as major research interests for those with active research portfolios), memberships of advocacy groups and other potential interests that are not financial in nature.
4. That the declarations of member interests be collated in one area on the FSA website to ensure maximum visibility
5. That the 'default' for SACs is to hold at least one 'open' meeting each year, which stakeholders and members of the public can attend. I note that this will necessitate careful planning in order to retain the confidentiality of commercially sensitive papers for some SACs and therefore arrangements will need to be individualised for each SAC.
6. That an 'audit' of a random selection of SAC members (and other independent advisors, such as the CSA) be carried out by the FSA on an annual basis. This could examine areas such as social media contributions, research funding, publications, paid-for speaking engagements, consultancy work and so forth
7. We ensure our policy on conflicts of interest is very clear in any future SAC recruitment campaigns, including that we welcome applications from all sectors of science but that an open and transparent declaration of interests is absolutely essential at all stages of SAC involvement.
8. We formalise a system for assessing and acting on conflicts of interest in the unlikely event of a dispute with a SAC member.
9. We expand on our recent efforts to maximise diversity on SACs, for example, through the recruitment of 'associate' SAC members, since diversity of opinion is an additional precaution against inadvertent bias.
10. Senior colleagues across the organisation, and not only within SERD, engage closely with the Science Council to design similar activities that the Council might usefully contribute, particularly

in areas such as regulatory reform, innovative technology, or international joint working

11. FSA undertake a review (perhaps led by Science Council) of the existing UK capability to deliver official testing in line with (inter)national reference requirements and identify priorities for future investment and/or formal international partnering agreements

12. SERD colleagues continue to engage closely with learned societies, UKRI and other interested parties to create enhanced provision of specialist training via both 'classical academic' (degree, MSc, PhD) and alternative (online, modular, part-time, etc) training mechanisms.

13. FSA work closely with other regulators and government departments to make the strongest possible case to Treasury at the next Spending Review for increased investment in specialist STEM training, especially in areas of regulatory science.

14. FSA capitalises on international collaboration in this area, both through formal project collaborations and via the provision of secondments/staff exchanges with other national regulators in countries with comparable food standards.

15. Each individual project within the programme is carefully appraised in terms of a) output and b) value for money and then a decision taken about whether (aspects of) work within the project should be continued and, if so, which department will formally 'own' that activity going forwards. Without this, there is some risk that beneficial strands of work will fall between two stools.

16. All partners in the PATH-SAFE programme take every opportunity to identify datastreams that could usefully be integrated into the 'data system', thereby maximising the impact of that system on public health. It will also be important to make that data system available to the wider research community (whilst continuing to ensure the confidentiality of sensitive data within it) over the coming months, so that independent research groups can critique and extend on the work.

17. FSA/PATH-SAFE colleagues engage closely with those discussions over the coming months and to emphasise at every opportunity the huge benefits to be gained from rapid and effective sharing of information, particularly in the context of infectious disease incidents.

18. Generally, that FSA remains closely involved with other government departments and other international regulatory bodies in assessing developments in this sector and how they may be best exploited for improved food safety.

19. More specifically, that FSA considers how existing AI approaches might be employed for regulatory benefit, for instance in a) risk assessment or b) in using image- or audio-based AI approaches to enhance data-gathering and regulation of busy, complex food environments such as abattoirs or catering establishments.

20. That FSA engage closely with other departments and funders in pursuing key areas of research on UPFs that are recognised as currently lacking, such as randomised controlled trials and detailed population level consumption/health data, or 'mechanistic' studies to determine potential biological effects of complex combinations of additives.

21. That FSA colleagues collaborate with other international regulators to consider how complex, multi-component interactions between ingredients (such as additives, emulsifiers and colours) may be best considered within risk assessment approaches.

22. That FSA engage with industry and other stakeholders to consider how long-term product impacts (both good and bad) on consumers might best be analysed, for example, via post-authorisation market monitoring approaches or similar

23. Develop a joint working group to consider how best to assess, authorise and regulate food products that are intended to have specific effects on the microbiome of healthy consumers (such as on physical fitness or mental health).

24. Continues to focus attention on this sector and to consider carefully how best to regulate highly innovative cell-cultivated products, particularly those that are far-removed from any existing food types (such as cell-cultivated products produced from extinct species, or multi-species 'hybrids').

Annex 2

Information on SAC's

Name	Number of members as of April 2024	Number of posts advertised 23/24 financial year	Number of members recruited 23/24 financial year	Number of meetings for 23/24 financial year	Number of papers considered over 23/24 financial year	Number of papers (if any) came back to multiple meetings over 23/24 financial year	Number of requests from OGD	Average time (days) contributed per member to support the committee function in 23/24 financial year	Cost of running the committee in 23/24 (inc. fees and all expenses)
SC	1 Chair 10 Full Members	6	1 Chair 4 Full Members	Committee meetings: 4 closed meetings Key research questions for the future of food safety Event: 1	14	None	None	6	£31,153
ACSS	1 Chair 1 Deputy Chair 8 Full Members	0	N/A	Committee meetings: 2 Networking Event: 1	16 at Plenary Meetings	None	None	7.5	£23,122
COT	1 Chair 24 Full Members 2 Co-opted Members 6 Associate Members ¹ (Number of members as of April 2024 includes members from the main committee and sub-groups: COT PFAS subgroup; COT PDD subgroup; COT Titanium Dioxide Subgroup)	7	4 Full Members 2 Lay Members	Committee meetings: 7 Workshops: 1	53 (including Update on other SACs: 60)	8 ²	3 ³	7.5	£172,223.1.0 This includes the cost of the subgroups listed below

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COT Per- and Poly-Fluoroalkyl Substances (PFAS) Subgroup	6 Full Members 2 Co-opted member 1 Associate Member	0	N/A	2 meetings	N/A	N/A	N/A	14	£3,768.75
COT Plant Based Drinks (PBD) Working Group joint with SACN – joint responsibility	1 Chair 1 Full Member 1 Co-opted Member	0	N/A	1 meeting	N/A	N/A	N/A	1.5	£450.00
COT Titanium Dioxide Subgroup	3 Full Members 1 Co-opted Member	0	N/A	2 meetings	N/A	N/A	N/A	4.5	£2,300.00
COT Folic Acid Risk Assessment Group	Group finished in the 23/24 financial year	0	N/A	1 meeting	N/A	N/A	N/A	1.5	£0 (time donated by members for free)
COT Codex Subgroup	Group finished in the 23/24 financial year	0	N/A	3 meetings	N/A	N/A	N/A	6.5	£2,509.75
COT Microcystins Risk Assessment Group	Group finished in the 23/24 financial year	0	N/A	1 meeting	N/A	N/A	N/A	1.5	£450.00
ACAF	1 Chair 14 Full Members 1 Associate Member ¹	4	1 Full Member	Committee meetings: 7 No subgroups	37	15 ⁴	None	1.8	£82,724
ACMSF	1 Chair 16 Full Members 10 Co-opted members (Number of members as of April 2024 includes members from the main committee and sub-groups: AMR Subgroup; Incidents Subgroup; New Emerging Pathogens Subgroup; Regulated Products)	5	2 Full Members	Committee meetings: 3 plenary meetings	17	N/A	N/A	3.5	£57,883 This includes the cost of the following subgroups: 1. ACMSF Subgroup Incidents 2. New Emerging Pathogens 3. AMR Subgroup

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ACMSF subgroups Incidents	3 Full Members	0	0	Paper reviews via emails: 3	4	0	0	3-4	£5,150
New Emerging Pathogens	3 Full members 1 Defra rep	0	0	Paper review: 1	1	0	0	1	£1,500
AMR subgroup	4 Full members 8 Co-opted	0	0	Meetings: 3 standard ones and 1 review of terminology paper	12	2 ⁵	0	4-5	£14,600
Regulated Products Subgroup	5 Full Members 2 Co-opted members	0	0	Paper view: 1	0	0	0	3	Paid by ACNFP
ACNFP	1 Chair 25 Full Members 2 Co-opted members 3 Associate Members (Number of members as of April 2024 includes members from the main committee and sub-groups)	4	4 Full members	5 full meetings 2 half day extraordinary meeting (to cover the PB Technical guidance and CBD)	38	10 ⁶	0	13	£132,000 (including Subgroup costs listed below)
ACNFP and COT Joint CBD Subgroup	12 Full Members	0	N/A	4	9	2 ⁵	N/A	4	ACNFP costs: £4,632 COT Costs: 6,451.07 Total: £10,083.07
ACNFP – PGT subgroup	10 Full Members 2 Co-opted members	0	0	6	15	0	N/A	8	£29,500 (not including any work on the PB Technical Guidance that Policy is paying for)

Name	Number of members as of April 2024	Number of posts advertised 23/24 financial year	Number of members recruited 23/24 financial year	Number of meetings for 23/24 financial year	Number of papers considered over 23/24 financial year	Number of papers (if any) came back to multiple meetings over 23/24 financial year	Number of requests from OGD	Average time (days) contributed per member to support the committee function in 23/24 financial year	Cost of running the committee in 23/24 (inc. fees and all expenses)
AEJEG	1 Chair 8 Full Members 4 Co-opted members	3	2 Full Members	Committee meetings: 7	9	9 ⁷	0	9.5	£17,506
AEJEG subgroup: Smoke Flavourings	13 Members (including the Chair)	0	0	Subgroup meetings: 13	25	6 ⁶	0	13.5	£57,627
FCMJEG	7 Full members	0	0	Committee meetings: 7	24 (this includes OBP and can coating papers) 20 (Total number of regulated product papers only)	6 ⁸	0	1.5	£33,299

Examples of recent SAC reforms:

As described above, in recent months we have been implementing a number of reforms to try and improve efficiency and reduce unnecessary workload on SACs. Some examples of these are given below:

- A more thorough suitability check of applications. Some committees have identified patterns in the information that members commonly request and so are able to request this from the applicant before papers reach the Committee for the first time.
- Use of an offline template where member's comments are captured and made available to each other ahead of the meeting.
- Use of a system of rapporteurs that facilitates discussion and efficiency at the meeting.
- Secretariat taking responsibility for certain sections of applications to generate Requests for Information (RFIs) ahead of the meeting with firm, clear deadlines to applicants.
- Clearance of RFIs offline when queries do not require a full discussion at a meeting.
- Taking a tougher approach with RFIs, to avoid issuing multiple questions on the same topic.

Annex 3

List of engagements

Table 1 - Events

Date	Title of event
8 June 2023	Risk workshop - Risk appetite for precision breeding
14 June 2023	Food and Drink Federation - Food Safety Networking event-

Date	Title of event
14 June 2023	Perspectives on Plant Breeding Innovation and New Genomic Techniques
12 July 2023	Academy of Medical Sciences event
7 September 2023	ARI database launch
21 September 2023	BBSRC Annual Strategic workshop
8 November 2023	Annual Report on Food Standards event
14 November 2023	Innovation in Biosurveillance event
11 January 2024	Microbiology Society: Knocking out AMR surveillance workshop
28 February 2024	PATH-SAFE Biosurveillance Conference
15 April 2024	Go Science Microbiome Roundtable
7 May 2024	House of Lords Engineering Biology Inquiry
9 May 2024	House of Lords Food Diet and Obesity Inquiry
16 May 2024	The World Together Solving the Antibiotic Emergency, Royal Society

Table 2 – Site Visits

Date	Place visited
27-29 June 2023	Israel, Food Sec & Tech Conference
14 September 2023	Harper Adams University
10 October 2023	Animal Plant Health Agency (APHA)
24 October 2023	Reading Scientific Services Ltd (RSSL)
25 January 2024	Health and Safety Executive (HSE) Research Facility
27 February 2024	'Meatly' laboratory
4 March 2024	Campden BRI
19 March 2024	Microsearch
30 April 2024	UK Centre for Ecology and Hydrology (UKCEH)

Table 3 - Media engagements

Date	Engagement
14 July 2023	BBC interview on Aspartame
12 October 2023	The Telegraph interview on CBD announcement
22 November 2023	BBC Radio 4 You and Yours interview on CBD
13 February 2024	Good Morning Britain interview on glycerol in slushies
13 February 2024	ITV news interview on glycerol in slushies
28 February 2024	BBC Radio 4 Food programme on food fraud
1 March 2024 (aired 10/3)	BBC Morning Live interview on food fraud
7 March 2024	BBC Radio Ulster Lough Neagh interview
14 March 2024	Daily Telegraph interview on mould in food
21 March 2024	ITV news interview on raw pet food