FSA Science Council Working Group Capability and Assurance (Working Group 1)

First meeting, Thursday 28 September 2017

Conference Room 1, 4th floor, Aviation House, London

Participants

Working Group	Secretariat	FSA
Laura Green (Chair)	Patrick Miller	Guy Poppy, Chief Scientific Adviser
Sandy Thomas	Jane Ince	
Sarah O'Brien	Ruth Kennedy	
Patrick Wolfe (via v/c)		
Paul Turner		

Agenda item 1 Welcome and introductions

1. Members of the Science Council declared the following interests potentially relevant to the discussion:
   - Paul Turner is employed by PHE (Public Health England) and working on a grant that will be submitted to FSA.
   - Patrick Wolfe's employer UCL (University College London) also employs a research fellow who is partly funded by the FSA
   - Sarah O'Brien is the ex-chair of the Advisory Committee on the Microbiological Safety of Food, and has held contracts with FSA on norovirus and campylobacter.
2. The Chair and Secretariat agreed these were relevant interests but did not present a conflict in respect of the more strategic level discussions of this Working Group.

Agenda item 2 Draft Terms of Reference

3. Guy Poppy explained that we are taking a phased approach to this work. Phase 1, which is being addressed in this meeting, will cover how the FSA identifies and accesses the scientific evidence, advice and capabilities it needs. Phase 2 will focus on how the FSA uses these inputs to inform its decisions and policies. He noted that he (and the FSA Board) would prefer a principles - or outcomes - based approach rather than a more restrictive one.
4. The Working Group agreed that its recommendations will be more useful if they can be designed to stay relevant as the FSA changes. It will also be important to ensure that the FSA Board understands the advice and how it can be operationalised. It will be important that principles and recommendations can be applied easily and in a practical way.
5. Guy Poppy explained that the likely change in the future is that the need for input from Scientific Advisory Committees (SACs) would grow, and potentially for the whole science base.
6. The WG noted that there is a greater prospect that FSA could increase its externally commissioned science than substantially increase its internal science resource, and the WG would need to reflect on this in future proofing its advice.

Agenda items 3-6 Main discussion of key issues and possible responses or actions

Heat map and key issues

7. Patrick Miller presented a set of slides highlighting key issues in five areas which had been identified by the Secretariat, based on an internal exercise to develop a 'heat map' of FSA's strengths and weaknesses in terms of how science should be feeding into the policy cycle (paper…). The five areas were:

    1. Identifying new science ideas, groups and expertise
    2. Accessing the science we need
    3. SACs and external expert advice
    4. Internal science capability: intelligent customer function
    5. Assurance - how we check and show we are getting it right/improving

8. The Working Group agreed that the key areas and the questions identified for each were a good reflection of the heat map and, on the basis of the information they had seen, identified the key areas where the WG should aim to provide advice - agreeing to add discussion on leveraging funding and capability under accessing science. The WG noted that area 4 and 5 were mostly for Phase 2 so might not be for full discussion at this first meeting, but the WG would need to consider those elements of these areas which related to the first three.

Agenda item 6 Main discussion

Issue 1 – Identifying new science ideas, groups and expertise

9. The WG noted that this issue has some overlaps with the work of Working Group 3 (on horizon-scanning), but the distinction should be that horizon-scanning should identify the emerging issues, and then this work is about how the FSA responds to them.

10. Guy Poppy started by talking about real work examples – such as the FSA's need to develop capability in big data. This was developed through meeting the right people (networking) and ultimately funding a Research Fellow in the UCL Big Data Institute. This activity had been a departure for the FSA in that it was taking our problems to organisations that wouldn't typically have thought about food. The engagement was based on individual personal connections to begin with. More broadly, intelligence gathering works through the Chief Scientific Adviser (CSA) network, through the Science Council and through official-level contacts and networks. Guy noted that what primarily limits his following up on ideas that arrive via intelligence gathering is his capacity – his role is part-time; others within the FSA are also limited in the time they have to develop these kinds of speculative connections.

11. The WG agreed that this points to a useful principle for the FSA: **When trying to build capability in a new area, outside the FSA's typical areas of expertise, we should always make use of external expertise.**

12. There is perhaps another principle or recommendation about **how engagement with new areas works**: at the initial stages it is appropriate to work directly with key people and organisations, and through personal contacts, and then progressively shift to the more established eventually open tendering and competitive routes as it becomes more mainstream (both as a discipline and within FSA).

13. The Working Group agreed that this is a good example which shows the FSA can deploy the right approaches effectively but this needs to be more formalised as a process, and to happen more often.

14. The importance was highlighted of **the FSA enhancing its scientific reputation, and prestige for researchers of working for them (as compared to a research council).** This is more of a challenge for the FSA than for other departments because of its smaller size, so the FSA needs to be more proactive than others to draw attention to its challenges. On the other hand FSA has features which could make such engagement attractive for researchers - working with a small department, their engagement will be closer and their work is more likely to impact our decision-making. In addition FSA pays full costs of research.

15. The Working Group suggested that other **ways of increasing the FSA's scientific profile and therefore engagement** would be:

    - A more structured and targeted approach to engagement overall
    - Capitalising on 'impact agenda' including by working proactively with 'impact officers' in Universities
    - Regularly attending university events and scientific conferences
    - Increased engagement with early career researchers
    - Building more partnerships and engagement with research councils, and with UKRI
    - Working with learned societies such as the Royal Society or Royal Academy for Engineering for events, networking or research calls
    - Closer engagement with other Government organisations on research – e.g. Public Health England or the Department of Health

16. Increasing FSA's engagement with learned societies and research councils would also have the benefit of leveraging or adding value to FSA research funding (discussed further under issue 2 below)

17. The FSA could also **do more to improve the extent and effectiveness of how it communicates on its science activities and needs.** – for example when FSA staff present at national or international meetings, they should have a corporate slidepack which focuses on exciting science past and future, to build awareness and interest. Other options include posters, social media and internet channels.

18. Overall, the Working Group agreed that the discussion and materials showed that the FSA had some good approaches and was able to use them effectively but the main barrier to improvement and making this the standard is the FSA's capacity rather than the FSA's ability to do it or potential attractiveness to scientists. A greater number of people working on science engagement would enhance the FSA's ability to bring in new ideas and areas of expertise. However, noting that the prospect of a significant increase in FSA staff capacity may be limited, it agreed to consider further how FSA might work more smartly to make better use of the resource available and this would form part of its recommendations.

Action 1: WG to consider further how FSA might work more smartly to make better use of the resource available

Issue 2 - Accessing the science we need

19. Guy Poppy explained that a key question here is about getting a wider field of contractors to bid for FSA tenders (or to work with FSA through other routes). Usually, open calls only receive bids from organisations or individuals with a background in food, rather than any wider. An example of this was the FSA tender for a systematic review of the role of food in anti-microbial resistance in humans, which did not attract a strong response from experts in systematic review.

20. Members of the Working Group highlighted a key **process barrier in connecting with FSA** was the way tenders are only viewable after logging into an registration-only system. In universities, there is usually only one person in the whole of a university registered to access that system, which limits academics' ability to check new tenders and see if they might want to apply (and also their ability to apply if they wish); this also sends the message that the FSA is not interested in attracting new tenders. The WG Chair asked the Secretariat to check and summarise for the WG how calls are currently publicised and how potential contractors can engage with this.

Action 2: **Secretariat to report back to WG on who is notified of research calls and how, and how potential contractors engage with these processes.**

21. Paul Turner highlighted that his experience of working with other scientists to develop a set of research needs and then tenders on adult food allergy had been very effective in raising awareness of the coming call.

22. The Working Group highlighted that the FSA needs to do more on its **engagement and advertising for its science needs**, and made the following suggestions:

    - For large projects and/or in developing new areas, holding large **meetings** to develop and/or notify relevant people of the research calls.
    - Direct advertising by getting in touch with the right people at universities (e.g. impact officers, research officers or relevant academics)
    - Posting advertisements in 'Research Fortnight'
    - a process of **co-creation** when contracting for work in novel areas, through iterating a research call with researchers. This is likely to need a facilitator as otherwise people from very different backgrounds may struggle to speak the same language.

<u>Strategic Evidence Fund</u>

23. The Working Group suggested that the **Strategic Evidence Fund could be used to pilot these new approaches**. The SEF should be a mechanism to facilitate this type of engagement.

24. Guy Poppy highlighted that not being able to spend the full budget available for SEF to date was also a capacity problem – both in that the team running it does not have capacity to promote it enough and develop all the new project ideas, and that other teams in the agency do not have sufficient capacity to manage and run projects.

25. The Working Group suggested the use of internal **sandpits** to give people across the agency 'permission to think' and to develop new ideas that the SEF could be used for.

26. The Working Group considered the SEF might benefit from a review to see it could be restructured to make it more able to deliver more of the types of work it is aimed at. Over time, the Science Council should develop its role in identifying ideas for the SEF.

Action 3*:* **FSA to consider changes to the structure of the SEF and feed suggestions back to the Working Group (Secretariat)**

27. Appointment of a person on secondment to review or o drive delivery of the SEF design might be a solution. Another possible idea to deliver strategic science might be to fund PhD studentships, which should be though co-funding though schemes led by others to minimise overheads and ensure links to wider capability.

Leveraging funding and capability

28. **Further ways to achieve leveraging should be explored.** It was useful to bear in mind what leverage gives access to, and to look at how the people we fund advertise our support – which would potentially increase the visibility and profile of FSA.

29. The Working Group agreed it should develop its ideas in this area further and take its recommendations to the Council for further discussion and elaboration. These would include defining the ongoing role of the Council in helping the FSA to develop its capability in this area. There may be useful learning from the NIHR which has an approach to measuring leverage in its work.

Action 4 : Share further ideas on how the FSA can increase and get more value from its co-funding and leverage (WG)

Action 5: The FSA was asked to write a note on current position on leveraging of funds to report to the WG (Secretariat)

Issue 3 - SACs and external expert advice

30. Guy noted that in the future the SACs are likely to become more important as their advice will feed into UK decisions which would have previously been made on an EU wide basis. There are also recommendations from the FSA's Triennial Review of its SACs to take on board. FSA is currently consulting on a revised approach to declaring and managing interests in its SACs.
31. A general feature is that it is getting harder to recruit to SACs and some specialties such as toxicology have reducing numbers in university course capacity.
32. The WG noted that there are several areas where the pipeline is also declining including academic and food microbiology. This will affect the pipeline both for FSA staff and for SACs. Improved **advertising** for SAC posts such as in newspapers such as The Guardian and writing a letter in the Veterinary Record with a weblink may help to reach and attract more applicants.
33. **Building a pipeline of people for SACs** is important and this could be done by co-opting or otherwise bringing in new people using subgroups and by targeting academics earlier in their careers. Fellowships with learned societies (such as the Royal Society's FLIPs) could help in this area and FSA should work with these organisations to promote awareness that it wants to operate in this space. A policy mentoring programme might also help. The Academy of Medical Sciences is another body to work with.
34. Remuneration is also a disincentive or barrier particularly for the self-employed (and to a lesser extent those earlier in their careers). The FSA should consider whether it would be possible to increase remuneration and/or to have a flexible approach which would be more attractive.
35. Making contact with those in universities who work on the **impact agenda** could be fruitful. FSA should get the message out that working on committees has impact.

Issue 4 - Internal science capability: intelligent customer function

36. Guy outlined the current position. The FSA has moved from a position where science spend was managed in many respect independently of the other FSA business, to looking at science alongside other resource investments, and as part of this ensuring all science has a clear customer and use. Science spending has dropped in recent years but the FSA now wishes to reverse this trend. The FSA's current and future priorities include new areas such as EU Exit and Regulating our Future where there is not an established staff capability with a science background and there is the need to develop an **intelligent customer function.**
37. The Working Group asked what the relative volume and success rates of bids in the cross-FSA Investment Board for science compared to non-science bids.

Action 6: Feedback to WG on data on numbers of science bids versus others which are approved and not approved (Secretariat)

38. It was felt that time to make bids and the number of science bids being made was most likely to be the issue. Ways to encourage more and better bids would include: ensuing guidance is clear on the need for a link to customer and use; Peer reviews on bids; sharing of good examples.

39. It would also be important to consider internal **marketing of science** as well as external marketing. Several **activities** were discussed from shadowing and mentoring to rotating, surgeries on how to do things and internal sandpits to discuss and develop ideas. Sharing exemplars where someone had demonstrated an intelligent customer function would be a good idea. People in teams who are good at introducing others and brokering should be identified and encouraged.

40. There is also a need to ensure that the **culture and leadership** of the FSA is clear that the organisation needs science and that this is support across all areas of the FSA, not just science- it should support a reciprocal endeavour to identify access and use science. This type of message needs to come from the Board at the top and permeate the whole of the structure. The CSA has a key role in fostering and supporting this culture.

41. It is not clear whether there are rewards in place for the best accessing and use of science. There are competing priorities which take up valuable time – such as deadlines on EU Exit work. Those who are not intelligent customers will not bring in science and analytics when needed.

Issue 5 – Assurance

42. Guy and Patrick Miller outlined the current position: FSA has a number of guidelines, frameworks and processes around assurance but these do not current provide a complete. Systematic overview of how well things are working in practice or sufficient confidence we would pick up serious failures at an early stage - although serious problems are rare.

43. There WG discussed a number are several possible types of assurance which could be developed or used. One option would be for processes should to be **audited**, either internally and/or through **periodic external peer review**. Internal audit could for example check compliance with key processes such as the Science Checklist and the Business Case. The old system of Departmental Science Reviews led by the GCSA might offer a model, although these were highly resource intensive and FSA could develop a lighter exercise following similar principles. Another option might be seek a review from a similar department in another country.

44. A **survey** could ask about the FSA staff views of FSA science. It could test understanding of science and intelligent customer capacity, and attitude to business cases. A focus group could be another approach.

45. The WG recalled that a number of points regarding peer review had been raised at the first Council plenary meeting, which were relevant here. Currently the SACs assist with review of risk assessment and reports get external peer review. Any periodic review would need to take account of the context of some science that is it needs to be done fast – it needs to be good enough and fit for purpose.

46. It was noted that there will need to be put in place a method to evaluate the success of the implementation of the Science Council advice on capability and assurance – a framework might help to set out how this is operationalised and to check how it is put into practice.

47. Evidence of adhering to principles and **development of exemplars** would be a way of tackling this. Could an audit trail be created on following the principles?

Agenda items 7 and 8 Feedback and Next steps

48. Member noted that some of the material which was stated to be in the induction packs was not there. It would be helpful in future to develop a web-based platform to share documents so they are all in one place. The WG had identified a number of actions for further work following the meeting, both for the WG and the members. These would be captured in the note and fed back to members as a priority.

49. The WG would work with the secretariat to develop its draft report and recommendations to the Council meeting on 13 December. There should be continuing interactive dialogue between the WG and Secretariat in this; feedback from the FSA on its response to the recommendations would also be useful. The secretariat would also continue to garner input from FSA colleagues to inform the development of the WG advice and report to the Council.

50. The report could include principles as well as recommendations for specific actions which would help address or operationalise these principles and check their operation in practice the secretariat should make a start on drafting this, drawing on the discussion form this meeting, and perhaps starting to structure these around themes/principles and related groups of recommendations/actions.

51. The WG asked the Secretariat to arrange a 1-2 hour teleconference so that the WG could discuss the draft report and recommendations collectively, as well as commenting by correspondence.

SUMMARY OF ACTIONS

Action		**Owner(s)**	**Due Date**
1	Consider further how FSA might work more smartly to make better use of the resource available	Working Group	Initial ideas by 31 Oct
2	Report back to WG on who is notified of research calls and how, and how potential contractors engage with these processes.	Secretariat	3 Dec
3	FSA to consider changes to the structure of the SEF and feed suggestions back to the Working Group	Secretariat	3 Dec
4	Share further ideas on how the FSA can increase and get more value from its co-funding and leverage	Working Group	Initial ideas by 31 Oct
5	Provide a note to the WG on the current position on leveraging of funds	Secretariat	3 Dec
6	Feedback to WG on data on numbers of science bids versus other bids to the Investment Board which are approved and not approved.	Secretariat	3 Dec