

FSA SCIENCE COUNCIL WORKING GROUP ON FOOD SYSTEM RISKS AND HORIZON SCANNING

Terms of Reference

Background

At the first meeting of the Science Council on 16 June 2017 the FSA Chairman Heather Hancock introduced the main issues and challenges on which the FSA would like input from the Science Council in the next two years.

This working group has been established to answer the following question:

What should the FSA do to improve its horizon scanning and its understanding of global food systems risks (and opportunities)?

Why – Part of the rationale for our Regulating our Future approach is that we want to be more on the front foot, anticipate future risks and harness innovation.

The background to this question and the role of the Council are set out in a paper for the FSA Board meeting in June 2017¹. Some key points from this paper are:

- The Council will have a central and ongoing role in supporting and advising the FSA on its horizon scanning and foresight activity. This activity is intended to provide input into FSA's future strategic plans and improve resilience for existing and new programmes, and to help FSA to build capability to access and use evidence from horizon scanning and futures.
- FSA's current approach to horizon scanning and its developing approach to surveillance provide a capability in terms of identifying and acting in relation to specific current and near- or medium-term risks and opportunities. But on their own, they are not sufficient as they do not deliver an informed and integrated view of the global food system and of systemic risks and issues over the next five to ten years as a starting point for a more strategic, longer-term view.
- First, in terms of the breadth of our scope, these activities tend to concentrate on day-to-day advice on specific issues and surveillance, with occasional forays into strategic advice on innovation. Second, in terms of our time horizon, they tend to work at the level of near-term insights and medium-term trends, rather than longer-term foresight.
- Developing and maintaining HS capability will have resource implications, and there will be a relationship between the certainty and confidence we can ascribe to insights from horizon scanning and related work, and the resources committed. The Council will need to consider these issues and reflect in its advice to FSA the resource implications associated with the benefits and confidence expected from options to develop HS capability.

¹ <https://www.food.gov.uk/sites/default/files/fsa170606.pdf>

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Approach

The Working Group will undertake two work streams in the first instance to address the question set out above:

1. How can FSA get a sound and useful understanding of global food systems risks and opportunities and of how it can respond to these.

- i. Work with FSA to develop a specification for a desk study which will synthesise and analyse existing evidence and identify key drivers of change for the global food system to 2030 and their implications for FSA. The study will be commissioned using the FSA Chief Scientific Adviser's Strategic Evidence Fund.

The WG will advise on the key questions for the study to address. These include *[STRAW MAN QS:*

1. *What are they key novel or emergent features of the potential future food system to 2030 that the FSA needs to understand and respond to and why?*
 2. *Which potential features, changes, trends or dynamics in the system have the most significance for FSA and why? How can the FSA assess and review their priority?*
 3. *What are the principle options open to FSA to respond to these issues?*
 4. *What sources (such as further evidence, analysis, insights, expertise, networks) could FSA draw on to better understand and respond to these issues?*
 5. *What approaches and inputs could FSA use to keep this analysis up-to-date (for example for an annual refresh and/or for a five-yearly deeper review)?*
- ii. Identify inputs needed for this review and provide peer review input on the report of the study.
 - iii. Consider the outputs from the study, consider and, as necessary, elaborate on the implications for FSA (such as food safety and authenticity and their regulation, and the impacts for and perspectives of UK consumers) and develop recommendations to FSA for actions to be taken in response to these issues. This could include actions to address issues directly, or things the FSA should do in order to develop a detailed response (for example in terms of strategic planning). Recommendations should include advice on what other inputs FSA will need in order to implement its response including people or groups to work with (and perhaps where the Council can help).
 - iv. As part of (iii) the WG will convene/take part in a workshop with relevant experts and stakeholders to further elaborate the key issues and implications for FSA, based on the study's findings. The WG will develop a report on its initial recommendations, drawing on the outcomes of the study and from the workshop.
 - v. The WG will advise on the approach participants for the workshop.

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2. What should the FSA do to improve its horizon scanning capability in the longer term?
 - i. Consider what FSA should seek to achieve from its access to and use of horizon scanning.
 - ii. Identify any gaps or opportunities to improve the way FSA accesses and uses evidence from horizon scanning, with reference to (i) and to current approaches and capabilities in the FSA and relevant approaches elsewhere.
 - iii. recommend how FSA could address these. This should include estimates of potential resources required and the benefits and confidence expected from different approaches. Recommendations should cover (among other things):
 - a) how can FSA make optimum use of evidence, expertise and resources elsewhere?
 - b) which activities (if any) should be ongoing/regular and which would be 'one-off' or periodic and with what frequency (this includes advising on how often an exercise such as that in stream 1 should be undertaken).
 - c) what the ongoing role of the Council could be in further developing and delivering the FSA's access and use of HS in the longer term.
 - d) how the FSA's HS activity should interface with the FSA's new approach to surveillance to create an effective, integrated view of future food risks (including recommendations on where and how HS could make use of the same inputs or analysis as surveillance).

Outline of timeline

- Heather Hancock's request is for the Council to provide advice within 12 months.
- First Working Group meeting 5 October 2017.
- Tender for desk study Oct - commission by Dec 2017, aim to complete end April 2018.
- Interim update and/or recommendations to the Science Council's second meeting 13th December 2017.
- Workshop of WG and external experts (April/May) 2018 to (i) consider outputs of desk study and (ii) discuss and recommendations on improving FSA capability to assess and use HS
- Update on progress in Council Chair's report to the FSA Board in March 2018].
- Recommendations to Council 3rd meeting, date tbc (May/June 2018).

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Membership:

Working Group members	Secretariat	FSA input
John O'Brien (WG Chair)	Patrick Miller	Guy Poppy
Mark Woolhouse	Gwen Aherne	
Sandy Thomas	Misty Gilbert (Surveillance Team)	
Laura Green		
Mark Rolfe		
Patrick Wolfe		

FSA inputs

Procurement and finance input to commissioning of global food systems desk study

Funding from Strategic Evidence Fund for study

Other inputs as required by the WG, but likely to include:

HS leads/contacts in other government departments including Go-Science and Defra network

As a first and ongoing task - considering what other inputs the Working Group needs in terms of expertise/insight/commentary as well as of written material.

Outputs

Council outputs will need short executive summary with clear recommendations; ideally power point style with infographics. To include:

- Report of desk study (the tender specification will set this out in more detail, but will include an executive summary, a more detailed discussion, and full references/links to material considered and used.
- Council recommendations on key issues, implications and actions for FSA arising from report on global food system risks
- Council advice on how FSA can improve its capability to access and use horizon scanning

Annex 1

Background notes from minutes of the 1st meeting of the Science Council, 16 June 2017

Clarifying the question

1. There is a central and ongoing role for the Science Council in supporting and advising the FSA on its horizon scanning and foresight activity.
2. The FSA wants to:
 - be more on the 'front foot' and agile;
 - understand and to be able to harness innovation;
 - be able to start from a big picture understanding of the global food system and to then apply different filters to this to identify implications for FSA priorities and for UK consumers.
3. This includes identifying and prioritising issues FSA is responsible for but also to flag to others when responsibilities lie elsewhere or are shared, which relates to FSA role in protecting consumers' wider interests in relation to food. Horizon scanning is critical for this stage of delivering the Regulating Our Future programme.
4. Heather Hancock said the FSA needs a medium term big picture view of the global food system to which we can then apply filters to pick out things relevant to FSA priorities - e.g. food safety, impacts on UK consumers authenticity, fraud. This will also allow FSA to pick up wider system issues.
5. Guy Poppy noted that there is a lot of external activity on horizon scanning; there is scope for undertaking a gap analysis and for synthesising existing materials and exercises, to put material together, and pick out from this what the priority issues are for the Council, for FSA and for others. FSA is well connected to academia and learned societies etc. but links with industry and other Government Departments on horizon scanning could be improved. Two key areas for focus are i) to consider the global system through a safety/authenticity lens and ii) through the lens of the UK consumer.

Key issues or questions the Council plans to consider in developing its advice:

1. The Science Council Chair noted her significant expertise in horizon scanning and foresight and that she can advise on a tailored approach.
2. The Council noted that there were links between the three questions which would need to be reflected in its approach and advice; part of the approach to foresight and HS and to risk would be about capabilities; while an effective capability in horizon scanning would identify new needs for capability and use of science, and new risks and challenges to understanding and communicating risks.
3. The Council noted that while FSA might not expect to have significant additional funds to address these challenges, there were significant resources elsewhere which could help (examples include the Industrial Challenge Fund led by UKRI), and part of the addressing these questions would be to identify where and how FSA could better link to external resource, information and capability. Science Council could help identify frameworks that FSA could harness at national level.

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4. FSA Scientific Advisory Committees could benefit from doing horizon scanning together rather than in silos and to aid prioritisation. They have found a longer term look more difficult to do.
5. The Council requested illustrative materials to support them to effectively deliver a framework for advice. Heather said that snapshots of current approaches and connections to wider work could be provided. John O'Brien offered to share work from the EFSA emerging risks panel.
6. On the key issues or questions for the Council to consider in developing their approach and advice, the Council Chair noted the following:
 - A number of activities could be part of a developing and/or delivering capability - including commissioning work, adapting work by others, workshop to synthesise a view of global trends.
 - There are many approaches, two which seem relevant are:
 - i) Identifying emerging technologies (readiness, investment, priorities). This often relies on opinion, albeit informed opinion, so is subjective, though it can be possible to look at confidence levels. As well as looking at specific innovations, it can be useful to get an overview of technologies that allows FSA to identify priorities and understand connections and how innovations in one area affect others.
 - ii) Identifying drivers of change, of which there are many in the global food system (e.g. climate, sustainable development, investment, economics, trade, business models, etc.) and understanding how these affect the food system. There is a lot of existing work but this does not always look at the system as a whole.
 - A key question is how far is it useful to look ahead – this could be medium term 2025-30, as beyond this becomes increasingly uncertain, but 2050 could be useful for looking at big systems and major trends e.g. demographic change. Confidence levels in outputs will vary depending on timescale.
 - In both approaches, it is key to consider how to manage uncertainty. Outputs need to help FSA understand the best pathways for policy that are resilient to these uncertainties. Put another way, how to better understand the risk spectrum and how to turn the dial on this.
 - Consider technology for foresight including data capture and data analysis.
7. The Council Chair and Guy Poppy will talk about options and outputs with a range of utilities (e.g. that would help to increase the Board's confidence and support Guy).