

Final report from science council working group on food system risks and horizon scanning and FSA response

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1. Summary

1.1 The Board is asked to:

- **consider** the Working Group's report; and
- **agree** the proposed FSA response to the recommendations.

2. Introduction

2.1 This paper:

- presents the final report and recommendations from the FSA Science Council's Working Group on Food System Risks and Horizon Scanning, at Annex 1, and
- sets out the Executive's analysis of the Working Group's recommendations with our proposed response to these.

3. Evidence and Discussion

3.1 The Science Council Working Group (WG) on Food System Risks and Horizon Scanning was established to answer the question set by the FSA in June 2017: *'What should the FSA do to improve its horizon scanning and its understanding of global food systems risks (and opportunities)?'* The WG's report is at Annex 1.

3.2 [The WG's report](#) is informed by a desk study commissioned with RAND Europe¹ (which included a synthesis of wider horizon scanning reports), a joint Council-FSA workshop with expert stakeholders, and insights from horizon scanning carried out in government and elsewhere, both on their analysis of issues in the food system and on what makes an effective horizon scanning function.

3.3 The WG concludes that FSA should develop an enhanced and more systematic horizon scanning function and provides five high-level recommendations for how this could be done. These cover:

¹ <https://science-council.food.gov.uk/sites/default/files/fsafoodsystforesightfinrep.pdf>

- i how to strengthen horizon scanning in FSA, with specific advice on the appropriate timeline, resourcing, and on the inputs, process, outputs and their use and integration with FSA business and horizon scanning elsewhere;
 - ii holding an annual stakeholder expert workshop;
 - iii ensuring follow-up on issues identified by horizon scanning;
 - iv a clear plan of work on implementation – over a period of one year; and
 - v research to develop new tools and approaches to horizon scanning and its use.
- 3.4 The WG also provides an initial analysis of issues in food system and implications for FSA and for UK consumers, drawing on the insights gathered during its work (Annex 2 of WG report).

4. Executive’s Analysis of the Working Group’s Recommendations

- 4.1 The Executive welcomes the recommendations and analysis from the WG. We consider they have the benefit of:
- drawing on synthesis of wider horizon scanning insights and the insights from expert stakeholders and horizon scanning elsewhere, as well as the expertise of the Council; and
 - being tailored specifically to the FSA.
- 4.2 The WG’s recommendations are high-level, reflecting the strategic nature of the Science Council’s remit and the WG’s view that while it can identify key features of effective horizon scanning for FSA, it did not identify an ‘off-the-peg’ model that was proven elsewhere and which FSA could adopt directly.
- 4.3 The working group notes that strong, clear governance of horizon scanning will be key. We agree.
- 4.4 We therefore propose that the outputs of horizon scanning activity should be reported regularly to the Board and we set out below how these should inform and be incorporated into the Board’s considerations of strategy and future priorities.

5. Executive’s Proposed Response to the Working Group’s Recommendations

- 5.1 The FSA should welcome and accept the WG’s recommendations. The FSA should draw on the initial list of issues and drivers in the food system in formulating its own strategic analysis and planning, and in selecting issues on which to pilot the approaches to horizon scanning set out in the proposed response. The key elements of our proposed response are set out below. These address all the WG’s recommendations.

Role of horizon scanning as part of FSA's risk identification and strategic insight and planning

- 5.2 The basis for an enhanced horizon scanning capability is a clear view of what horizon scanning is for and how it fits into and support FSA's wider work. Horizon scanning is part of FSA's suite of activities to identify and respond to risk, which includes our strategy work, as well as surveillance, food crime and incidents, all of which we have been strengthening. Horizon scanning complements these activities by providing insight on wider, longer-term strategic and system issues, to inform strategic planning, resilience of key programmes, and early identification, prioritisation and response to key strategic risks and opportunities that can help or hinder FSA's future ability to operate.
- 5.3 Our enhanced approach to horizon scanning will, wherever possible, align with and build on activities, tools and insights from other elements of FSA's strategic analysis and prioritisation, including risk identification and existing structures and processes. This will be more efficient and will help to ensure that horizon scanning is integrated with FSA business at Board and Executive level (which is a key condition of success identified by the WG).
- 5.4 In terms of process, this will mirror the conceptual model for surveillance - based on improved access to data and structured analysis leading to actionable insights - with sharing of information, insight, analysis, tools and issues between horizon scanning and the other elements of risk identification where possible. This is illustrated in Annex 2 and discussed in more detail below.
- 5.5 In contrast to the other specialist areas of risk identification, which focus on current or imminent issues with a well-defined area of impact, the approach to horizon scanning needs to be based more on discussion and expert elicitation than on data only, as the issues in horizon scanning are more strategic and less focused and defined. Horizon scanning will have a stronger element of opportunity as well as risk – for example to identify and exploit new technologies or new trends in behaviour of people, organisations and systems that can help delivery of FSA objectives. It also operates at a more strategic level, with regular reporting to and oversight by the Board and EMT, to inform their consideration of which risks to focus on, and the balance between short, medium and long-term priorities.

Identification and analysis of the implication of drivers, issues and insights

- 5.6 Given the strategic, systematic nature of horizon scanning, much of the initial data from scanning is not specific to FSA, or to food at all. The value for the FSA comes more at the stage of analysis; to draw out implications and issues for FSA and UK consumers. As the WG notes, it is these 'live encounters', drawing on expert insight, that add value for FSA. We propose to focus our efforts on developing our analysis, internally and with external partners, rather than carrying out extensive original scanning ourselves.

5.7 The main strands of activity will be:

- building closer links to other specialist elements of strategic planning and risk identification including surveillance, food crime and incidents;
- improving our access to and use of information and insight from other FSA activities in risk identification and from horizon scanning activities across government and more widely;
- initiating specific lines of work to get insight on technology foresight, trade data, and to link with wider work on data science;
- making our engagement with the SACs on horizon scanning more structured, through collective activity across them rather than in each committee separately. We will consider piloting a Delphi-type exercise to gather insight and commentary across the SACs (and potentially from a wider group of experts and stakeholders in further waves of input);
- strengthening inputs from social science, including through joint working between the Advisory Committee on Social Sciences and the Science Council;
- holding an annual expert stakeholder workshop, building on the successful pilot carried out with the WG, and co-sponsored with the Council. This will be a key part of an annual cycle, drawing together insights from our horizon scanning activity and others, including from the SACs. This will generate a collective, regularly updated view on the top issues and corresponding actions and owners, which will in turn inform FSA's core analysis on high-level food system insight to inform subsequent strategic planning and prioritisation by the Board and where appropriate EMT;
- developing a system to track prioritised issues, actions and expected outcomes over time; and
- as a medium-term priority (from 2020 on), exploring opportunities for research to improve tools and approaches for doing horizon scanning, including ways to handle relevant food system data². Work on data aspects would be integrated with FSA's wider work on data and digital, and informed by, among other things, the insights from the Science Council WG4 on data science, which is expected to report at the end of 2019. Work to develop approaches to horizon scanning is a good candidate for working across government.

5.8 We will base our approach on the 5- to 10-year timeline recommended by the WG, with flexibility to consider longer and shorter timelines where relevant either in our own work or in drawing in insight from others (for example, the Government's 20-year AMR strategy).

² Dependent on the outcome of the 2019 Spending Review.

Clear links of outcomes to action and business processes to ensure impact

5.9 As the WG notes, it is essential that horizon scanning is integrated into FSA business, so it is informed by FSA's wider priorities and capabilities and that the outcomes from horizon scanning are actionable insights with clear owners and mechanisms for action. The main types of outcome and the corresponding actions and owners are listed below and illustrated in Annex 2):

- strategic, system insights will feed into annual and longer-term strategic planning by the Board and EMT, to inform their consideration of which risks to focus on, and the balance between short, medium and long-term priorities;
- implications of specific system issues prioritised by the Board or EMT for FSA strategic priorities and programmes will be explored through deep dives (including or example further analysis and workshops) to test and build resilience (this includes implications for how we identify or assess the factors considered to inform risk analysis);
- where we need to understand an issue better in order to respond or exploit opportunities, we will carry out further research, expert analysis, including rapid evidence reviews, drawing on the Strategic Evidence Fund (SEF), internal/SAC/wider expert analysis, or other research funding;
- where horizon scanning identifies more concrete, focused or potentially more imminent issues, these will feed into the issue identification at step 1 of [Risk Analysis Framework](#), along with other risk identification activities³;
- we will ensure hand-over of issues better suited to be picked up in other strands of work, such as surveillance, food crime and incidents, and reciprocate by picking up issues identified in those strands which fit better with horizon scanning.

5.10 As noted, horizon scanning deals with system issues and these cut across departmental as well as national boundaries. For all the activities above, we will identify where a co-ordinated approach with other partners is needed, and where issues fall to others to lead, ensure we share our insight and evidence with them. This would include exploring opportunities to:

- work with Defra and DHSC, including in relation to wider food system and 'One Health' initiatives such as the developing UK Food Strategy and the proposed Strategic Priorities Fund (SPF) initiative '*A Food Systems Approach for Healthy People and a Healthy Planet*'⁴;
- work with the government wider Artificial Intelligence and data community including ODI, DCMS, Centre for Data Ethics and Innovation; and

³ <https://www.food.gov.uk/sites/default/files/media/document/fsa-19-03-08-annex-b-risk-analysis-process.pdf>

⁴ Further detail on the SPF initiative is given in the CSA's March 2019 report to the Board: <https://www.food.gov.uk/sites/default/files/media/document/fsa-19-03-06-annual-science-update-from-fsas-csa-report-final.pdf>

- identify and make linkages to international food system projects, including at a European and global (Codex) level.

Responding to the Working Group's initial analysis of system drivers and issues

- 5.11 The WG's initial analysis of issues and drivers in the food system draws on a sound base of evidence and expert/stakeholder opinion. We propose to use this as a core input to FSA's strategic analysis and planning by the Board and where appropriate EMT. This will inform their consideration of which risks to focus on, and the balance between short, medium and long-term priorities, and the selection of issues on which to pilot the approaches to horizon scanning set out above, including the deep dives and exploratory research projects.
- 5.12 Insights from the WG's work have already informed the analysis of strategic risks and opportunities for FSA science in the reports to the FSA Board in March 2019 from the CSA's and the Science Council Chair and have been reflected in the CSA's input to FSA's strategic planning. We have used the SEF to commission a review on alternatives to plastic in the food system and have two projects in the pipeline to explore social science perspectives on future food system issues.

Resourcing

- 5.13 We will need to develop the detailed operational and resourcing model to operationalise the response, within the high-level framework recommended by the WG. As there is no existing model for this, we propose to start with an agile approach to develop, pilot and test the detail of our new approach including how we bring together dedicated roles, virtual teams and external inputs. This will be done initially within existing resource, through adaptation of roles and resources, use of the SEF to fund pilots and analyses, and alignment and integration with other work on risk identification and strategic planning. We will keep this under review as the work develops and identify what options and associated additional resource would allow us to implement and embed a fully-elaborated approach. This would inform proposals to future resource planning rounds.
- 5.14 At this stage we can identify some key elements of the resourcing model, reflecting the WG's advice. We will need to increase the FTE devoted to horizon scanning, in a more formal and structured way – partly to increase total effort in this area and, equally, to ensure the plurality of insight and of the 'live encounters', which the WG identifies as what adds value. This may need reallocation of resource and a new model to team across different business areas.
- 5.15 The lead for horizon scanning would sit in the Science, Evidence and Research Directorate (SERD). The next layer out would be a 'core group' with the other areas of strategy and risk identification and response, including strategy, surveillance, food crime, incidents, trade, import/exports, and policy. This would not be focused on horizon scanning only but build on existing work to co-ordinate and share information and insight across these areas.

Governance and next steps

5.16 We agree with the WG that strong, clear governance is essential to ensure our horizon scanning activity has effective leadership, support, direction, integration and oversight. We propose to use existing structures where possible, both for efficiency and to ensure discussion on horizon scanning is fully integrated with other strategic discussions about risk and prioritisation. The main elements of the proposed governance are:

- regular reports to the Board on strategic insights to enable review and prioritisation of the FSA response;
- annual reports to the Board on progress with implementation of the horizon-scanning programme;
- bi-annual discussion at EMT to review strategic system insights and priority actions, and implementation of the FSA response;
- an overall operational lead in SERD to ensure close alignment with wider evidence and analysis, the CSA function, SEF, the SACs and FSA's core internal expertise;
- initially the Deputy Director of SERD would be SRO and the Director of Science would be sponsoring Director. This arrangement would evolve with the potential formation of FSA Strategy Hub;
- a dedicated horizon scanning programme co-ordinator role in SERD;
- the CSA to provide independent advice and challenge and a link to wider discussions and resource from the wider CSA and expert networks;
- regular discussion by Business Development Group on horizon scanning insights and implications across FSA business, informed by Board and EMT priorities; and
- an ongoing role for the Science Council to provide expert insight, advice and assurance on horizon scanning analysis, potential co-sponsorship of the annual workshop, and independent challenge and advice on implementation of the FSA response.

5.17 If the Board agrees the high-level response, we will develop a detailed plan for implementation at operational level and use this to track and report progress to the EMT and the Council. We will plan implementation over 12 months as recommended by the WG, with a first review after one year, and triennial review thereafter.

5.18 The Executive will provide a report to the Science Council on implementation of the FSA's response to the recommendations within 12 months (target: Board June 2020).

6. Conclusions

6.1 The Board is asked to:

- **consider** the Working Group's report; and
- **agree** the proposed FSA response to the recommendations.

**Annex 1 Final report from the Science Council Working Group on Food System
Risks and Horizon Scanning**

This report is provided separately.

Annex 2 Outline of Proposed Horizon Scanning Model

