FSA Board Meeting - March 2025: Agenda and Papers

Wednesday 26 March 2025 - Doubletree by Hilton, 24 Ferensway, Kingston Upon Hull, Hull, Yorkshire, HU2 8NH

The agenda for this meeting includes:

- Border Target Operating Model – One Year On
- Foodborne Disease Monitoring
- Local Authority Cost-Recovery, Initial Findings and Proposed Way Ahead
- Report from the Chair of the Wales Food Advisory Committee

09:00 - Chair's Introduction

Professor Susan Jebb presents the minutes and actions from the previous FSA Board meeting in December 2024 and presents the Chair's report.

FSA 25/03/01 - Minutes of 11 December 2024 Board Meeting

FSA 25/03/02 - Actions Arising

09:20 - Chief Executive’s Report to the Board

Katie Pettifer presents the Chief Executive's report to the FSA Board.

FSA 25/03/03 - Chief Executive’s Report to the Board

09:50 - Border Target Operating Model – One Year On (FSA 25/03/04)

Anjali Juneja and Jane R Clark present a paper giving an overview of the BTOM's implementation over the past year, highlighting key milestones, challenges, and future direction.

FSA 25/03/04 - Border Target Operating Model – One Year On

10:25 - Foodborne Disease Monitoring (FSA 25/03/05)

Rebecca Sudworth and Natasha Smith introduce a paper discussing the limitations of the current system of monitoring levels of Food Borne Disease.

FSA 25/03/05 - Foodborne Disease Monitoring

11:00 - Break

11:20 - Local Authority Cost-Recovery, Initial Findings and Proposed Way Ahead (FSA 25/03/06)

Julie Pierce and Nathan Barnhouse introduce a paper which focuses on reporting the findings of engagement to date, mainly with public protection teams in local authorities (LAs).

FSA 25/03/06 - Local Authority Cost-Recovery, Initial Findings and Proposed Way Ahead

11:55 - Report from the Chair of the Wales Food Advisory Committee (FSA 25/03/07)

Rhian Hayward provides an update on the activity of the Wales Food Advisory Committee.

FSA 25/03/07 - Report from the Chair of the Wales Food Advisory Committee

12:10 - Report from the Chair of the Audit and Risk Assurance Committee (INFO 25/03/01)

The Chair of the Audit and Risk Assurance Committee (ARAC), Anthony Harbinson, presents a report from the ARAC meeting that took place on 10 March 2025.

INFO 25/03/01 - Report from the Chair of the Audit and Risk Assurance Committee

12:20 - Report from the Chair of the Business Committee (INFO 25/03/02)

The Chair of the Business Committee, Timothy Riley, presents a report from the Business Committee meeting that took place on 17 March 2025.

INFO 25/03/02 - Report from the Chair of the Business Committee

12:30 - Reports from the Chairs of the Food Advisory Committees (Oral Reports)

The Chairs of the Northern Ireland Food Advisory Committee (NIFAC), Anthony Harbinson, and the Wales Food Advisory Committee (WFAC), Rhian Hayward, deliver oral updates from the recent meetings of the two Committees.

12:35 - Any Other Business

12:40 - End of Meeting

Questions to the FSA Board

We are keen to ensure, as far as is practical, that questions are addressed in the discussion at the Board meeting. Notwithstanding discussions on the day, all questions will receive a written reply within 20 working days of the meeting.

Please note questions are listed below in the order in which they were received.

Question 1

From: Claire McGuigan, Chair, Food Allergy Northern Ireland

1. Why is food allergy education not currently mandatory across the food service and production industries, despite the clear risks associated with food allergies and evidence showing knowledge gaps among food service staff with existing food safety certifications?
2. In the FSA Food Safety Communication Toolkit (2021), a whole systems approach using the COM-B framework (integrating non-technical skills such as communication, decision-making, situational awareness, and teamwork) is recommended to improve safety for those dining out with food allergies. Will the FSA commit to commissioning appropriate mandatory education for the workforce using these safety system principles that have proven effective in healthcare and aviation? If so, when?
3. What specific barriers have prevented the implementation of mandatory, tiered food allergy training programmes that consider varying capability levels among food service staff, from entry-level workers to experienced professionals?
4. How can the FSA integrate food allergy education as a specific component of human factors and leadership training across all entry-level programmes in the food industry?
5. What regulatory mechanisms through the Hazard Analysis and Critical Control Points (HACCP) framework would the FSA employ to ensure accountability and governance in food allergy safety practices?
6. We advocate for mandatory training that fosters a safety culture where organisational commitment to food allergy safety is embedded in every aspect of operations. What timeline can we expect for the implementation of such a programme, and what process will be used for ongoing evaluation and improvement?

Answer 1

Thank you for your questions to the Board concerning food allergy training.

The FSA are committed to making lives better for the 2.4 million people living with a food allergy. Ensuring that people with food hypersensitivities (food allergy, intolerance, or Coeliac Disease) have access to clear and accurate information is a fundamental part of our role and remains a priority for the FSA.

We have responded to each of your questions below:

1. Why is food allergy education not currently mandatory across the food service and production industries, despite the clear risks associated with food allergies and evidence showing knowledge gaps among food service staff with existing food safety certifications?

Under Assimilated Regulation 852/2004, food business operators must ensure that food handlers are supervised and instructed and/or trained in food hygiene matters commensurate with their work activity, this includes hazards such as food allergens and their management. All food businesses are also under a legal obligation to provide accurate information on the presence of the 14 regulated allergens in food, so that people who have food hypersensitivities can make safe food choices.

To meet those legal requirements and keep consumers safe, food business operators must make sure that staff receive training on allergens in-line with the area they work in and to enable them to handle food safely. The exact nature of the training is not mandated; we encourage food businesses to consider their own business practices and models in terms of allergen training.

There are a number of food allergen qualifications which are officially recognised by the UK Government which can be found using the Register of Regulated Qualifications from Ofqual.

2. In the FSA Food Safety Communication Toolkit (2021), a whole systems approach using the COM-B framework (integrating non-technical skills such as communication, decision-making, situational awareness, and teamwork) is recommended to improve safety for those dining out with food allergies. Will the FSA commit to commissioning appropriate mandatory education for the workforce using these safety system principles that have proven effective in healthcare and aviation? If so, when?

It is Minsters that have power to make legislation.

At present, we are not commissioning any work in this area. We encourage food businesses to consider their own business practices and models in terms of allergen training for their staff. In March this year we launched best practice industry guidance for the out-of-home sector on providing allergen information to customers in writing, supported with a conversation. The guidance is intended to support businesses to comply with regulations in the most effective ways, and meet consumer expectations by adopting good practices and enabling consumers to make informed choices about the food they eat more easily.

We provide Allergen and Intolerance eLearning, which is free and available to anyone, users include food businesses, local authorities, the education sector, and consumers. We recommend that it is best practice for our eLearning to be retaken annually to refresh knowledge and ensure that users are up to date on any changes which may have occurred. Our recent statistics show that for the month of March 2025, our training had 20,113 new users and 1,198 users who had retaken the course. Since the launch of the training, it has now reached 811,543 users – 781,975 new users and 29,568 who have retaken the course, with food businesses making up 57% and the education sector making up 14%.

3. What specific barriers have prevented the implementation of mandatory, tiered food allergy training programmes that consider varying capability levels among food service staff, from entry-level workers to experienced professionals?

A fundamental understanding of all allergens is important to keeping those with food hypersensitivities safe, the FSA provides training materials and resources for businesses to improve their understanding of food allergens and their management in different environments.

We investigated the feasibility of tiered food allergen training programmes, levels one, two and three, depending on roles. As part of this workstream the FSA spoke to stakeholders to gain a better understanding of the needs of target audiences, proposed content, and the different digital delivery options, and we considered the potential for delivering the training in collaboration with third parties. Knowledge at advanced levels varies based on business models and type of food produced, therefore it is difficult to establish training content and delivery which fits the needs of stakeholders within a tiered approach.

4. How can the FSA integrate food allergy education as a specific component of human factors and leadership training across all entry-level programmes in the food industry?

The FSA has responsibility to develop policies that relate to food safety or the other interests of consumers in relation to food. To support businesses to meet their legal requirements, the FSA provides resources and training materials including free Allergy and Intolerance eLearning which designed to give users an introduction to food allergens and their management, from which this

knowledge can be applied to a variety of practices. Individual businesses should consider their own practices and business models to assess what type and frequency of food allergy training ensures they comply with their legal obligations and keep consumers safe.

5. What regulatory mechanisms through the Hazard Analysis and Critical Control Points (HACCP) framework would the FSA employ to ensure accountability and governance in food allergy safety practices?

Local Authorities (LAs) are responsible for enforcement of allergen information regulations, with additional focus on requirements relating to the provision of allergen information being achieved through the inclusion of a specific 'allergen information' compliance risk factor, as part of the Food Standards Delivery Model provided by the Food Law Code of Practice. The provision of allergen information falls under a food standards inspection and does not form part of a food hygiene rating.

However, the general assessment of hygiene procedures during a hygiene inspection includes consideration of the control of cross-contamination, including any allergen-related contamination. These controls should be part of a business's food safety management system and should be considered when completing the assessment for a food hygiene rating.

District Council Competent Authorities in an area for which there is a County Council Competent Authority, have the power to enforce the provisions of Regulation 9(2) of The Food Information Regulations 2014 in relation to allergen requirements for non-prepacked and prepacked for direct sale foods (PPDS). It must be agreed at a local level how enforcement of these provisions will be shared.

6. We advocate for mandatory training that fosters a safety culture where organisational commitment to food allergy safety is embedded in every aspect of operations. What timeline can we expect for the implementation of such a programme, and what process will be used for ongoing evaluation and improvement?

We work closely with industry and charity organisations who provide advice and food allergy training. Although we have no current plans to recommend changes to the legislation, we continue to ensure that FSA training materials and resources are easily accessible, accurate, and up to date for businesses to improve their understanding and management of allergens.

Question 2

From: Abigail Farr

Do you think the Food Standards Agency will come under scrutiny and pressure to reduce costs and/or staff/support to LA's, or be absorbed into a Department following the announcement by the Prime Minister to pledged to slash the costs of regulation with an "active government"?

Whilst I welcome the exploratory work for cost recovery, it seems at odds to the Governments intentions to reduce the burdens on businesses, and I am concerned with the government intentions to reduce the influence/get rid of the NGO's and local government will lose the support of the Food Standards Agency and the National Food Crime Unit. If NHS England can be disbanded, nothing is off the table.

Answer 2

On 13 March the Prime Minister set out the government's aims to cut red tape and kickstart growth.

On 17 March, the Chancellor announced a detailed action plan building on the Prime Minister's speech. The FSA is actively engaging with this plan to support the government in its ambitions for growth and to understand any implications for our regulatory functions. The Chancellor's plan sets out a new approach to ensure regulators and regulation support growth, including a commitment to reduce administrative costs for businesses arising from regulation while recognising the importance of good regulation in protecting public health. The plan also outlines a set of commitments by regulators and government departments to improve the regulatory landscape and support the growth mission, including a number of specific commitments that the FSA will deliver during 2025. The FSA has been working collaboratively with other departments across government as these announcements were developed.

On 7 April, the Chancellor of the Duchy of Lancaster announced further plans to conduct a review of all organisations which come under the umbrella term of arms-length bodies (ALBs). This will include non-ministerial departments like the FSA. The review will support the ambition to create a more responsive government that works best for the public. We will work with our sponsor department, DHSC, as this review is conducted.

We have consistently made clear that the most substantial way in which the FSA can support economic growth is by carrying out our statutory functions well, protecting public health and protecting the economy from the damage that could be caused by a major food incident or loss of public trust in food.

The FSA is a non-ministerial government department, accountable to Parliament through Health Ministers in England, Wales, and Northern Ireland. The FSA operates independently from direct ministerial control, enabling us to offer impartial, evidence-based advice on food safety, food authenticity, and consumer interests related to food. The FSA will continue working collaboratively with the Devolved Governments and other stakeholders to address any potential changes in our regulatory duties and functions.

Delivery of local authority (LA) food services is a statutory requirement and while the FSA is aware of the budgetary pressures that LAs are experiencing, we expect them to meet their statutory obligations. We will continue to work with LAs to ensure that the food and feed frameworks are effective, proportionate and conducive to growth while maintaining high standards of public health and safety. We are at a very early stage of exploring what any the cost-recovery models could look like as, part of this work will be assess the potential impacts on both businesses and local authorities.

Question 3

From: Fiona Quinn, East Suffolk Council

I have two questions for the board, they are:

- To know what science, data or evidence has been collected and used to support the conclusions drawn in the Board Paper, namely that the BTOM has "contributed positively to the ability to manage risk" when it is noted from the report that the BTOM implementation is not complete, IT systems have suffered critical issues, controls on the West Coast have not been implemented, data cannot be accurately reported and that both the case studies and EFRA Committee raised concerns?
- What action is the FSA actively engaged in to contribute to the resolution of the issues identified in the report, and, when do they anticipate the full implementation of the BTOM?

Answer 3

Thank you for your questions sent to the FSA Board.

The BTOM Board paper concludes that the BTOM has “contributed positively to the ability to manage risk”. As the paper makes clear, this is a qualitative assessment that is based upon the initial position that was in place when the BTOM began to be implemented, compared to the position now.?We did discuss this point at the Board, and you can review that discussion here.

The paper acknowledges that more work is required before the BTOM is fully implemented. However, we have moved from a position where no checks were taking place on EU imports, and the introduction?of?checks in EU imports, albeit not complete, represents a change in our ability to manage food and feed safety risks.

At the beginning?of?2024 although imports into the UK originating from the EU (and EFTA) already required prenotification, this requirement was not resulting in checks. Starting at the end?of?January 2024 this position changed with the requirement for export health certification for all medium risk products?of?animal origin and documentary checks commenced. This was followed in April 2024 with a phased approach to the introduction?of?physical and identity checks on EU imports.

The UK Government can react to both serious and emerging public and animal health risks in the EU, for example, the actions taken in response to the recent outbreaks?of?Foot?and Mouth Disease in Germany, Hungary and Slovakia that swiftly led to a suspension?of?commercial imports?of?susceptible animals and a list of products from affected areas. As well as responding to animal health risks, we can take action where there is a significant threat to food or feed safety. For example, additional checks may be applied by?imposing?Intensified?Official Controls or Imposed Checks to specific establishments where there are serious or repeated breach?of?import requirements.

Additionally, movements of non-qualifying Northern Ireland Goods sent from Northern Ireland must meet the requirements of the BTOM from the 25 February 2025, and the UK Government has committed to provide a further update on controls for movements of SPS commodities arriving at West Coast ports in the summer of this year.

The FSA has also carried out multiple runs?of?the risk model (IDM+) using an increasingly wide set?of?data, incorporating ongoing improvements to the model. The outputs, which have been challenged with the FSA's Chief Scientific Advisor, Professor Robin May, show that the risk posed to public health by food and feed has been broadly stable.??This work provides an important assurance of our identification and management?of?risk and supports our conclusion that the?current inability to update risk categories administratively does?not, at this point, mean that we cannot continue to protect consumers.

In response to your second question, the FSA works closely with other parts?of?government to ensure that food and feed safety continue to be important considerations in the implementation?of?the BTOM. The concerns identified in the report have been raised by our Chair with Ministers in Defra, the lead department for BTOM implementation.

Question 4

From: Lucy Spinks, Associate, Mills & Reeve LLP

Is there any progress on the FSA reforms of the Market Authorisation Service? In particular any updates regarding the below:

- outcome of the planned review of roles and responsibilities between the FSA and ministers, where (as a result of assimilated EU legislation) differences between EU and UK functions have resulted in additional inefficiencies and bureaucracy for the service. Is the FSA planning any changes as a result of this review?

- plans for enhancements to FSA pre-application support offer?
- any news on which international regulator's safety assessments will be considered by the FSA as part of an application for Market Authorisation?

Answer 4

The Food and Feed (Regulated Products) Amended, Revocation, Consequential and Transitional Provision) Regulations 2025 successfully completed the parliamentary process and came into force on 1 April 2025. These reforms streamline the administrative processes by:

- removing 10-yearly renewal requirements for authorised products; and
- allowing authorisations to come into effect following ministerial decisions and then be published in a public register rather than prescribed by SI.

As part of these reforms, our online guidance on how to make an application for the market authorisation for a regulated product has been updated and the flow of pages improved. The new registers are also now available, making information on authorisations more accessible.
For the next stage of reforms, FSA and FSS are developing proposals to reduce delays and will prioritise those that will speed up approval timelines significantly, without compromising safety, transparency and accountability. These will be presented at the FSA Board meeting in June.

The FSA, alongside Food Standards Scotland (FSS), has been successful in a bid for £1.6 million from the Department of Science, Innovation, and Technology's (DSIT) Engineering Biology Sandbox Fund to run a regulatory sandbox on cell-cultivated products. Over the course of its 2-year life, the sandbox will provide the opportunity to pilot approaches such as enhanced pre-application support that will benefit the wider market authorisation service.

DSIT has also awarded the FSA £1.4 million to support a new innovation hub. This hub will develop and expand specialist expertise in regulating innovative technologies such as precision fermented foods, making sure these products are safe to eat before they are sold. This funding will be used to build capability and capacity to support the regulation of these new and innovative technologies. We will also use it to test new models of support for food innovators, which will be in addition to the business support service offer that we are offering cell-cultivated product applicants as part of the regulatory sandbox.

Question 5

From: Lucy Spinks, Associate, Mills & Reeve LLP

Please can the board given update on the progress of gathering feedback from local authorities regarding the ABC proposals. Is there any feedback or findings that can be shared at this time? If not when is this information likely to be available?

Answer 5

At the FSA Board in September 2024, the Board asked officials to undertake extensive stakeholder engagement regarding the ABC proposals, and in December 2024 they confirmed they would focus on intensive engagement on the proof-of-concept trial and immediate next steps from it.

Since then, there has been a detailed walkthrough of the Enterprise Level Regulation trial to c400 people working across Local Authorities in England and Wales, District Councils in Northern Ireland, and multiple other interested parties.

A Senior Steering Forum has been set up to help co-design the immediate next steps, and this forum has met monthly, with two further meetings scheduled ahead of the FSA Board in June, where we will share the outcomes of this work.

Question 6

From: Simon Dawson, Policy Advisor, AIMS

Question relates to the actions from last meeting concerning the Evaluation of the Meat Charging Regime. When this subject was discussed at the Board meeting on 11th December a number of Board members asked for the impact of any changes to be assessed on various parts of the meat sector – for example on Northern Ireland, on small and medium sized abattoirs, on the Wales agricultural sector etc. What progress have FSA made on this impact assessment and when will it be published?

Answer 6

During the discussion at the Board meeting on 11 December 2024 on the FSA's evaluation of the discount to meat charges, Board members indicated that the impacts of any changes to the discount scheme proposed in the light of the evaluation should be assessed. FSA officials will ensure that this happens which is a normal part of policy development process.

The Board directed FSA officials to continue stakeholder engagement to gather further information. Engagement has continued with face-to-face meetings with industry stakeholders held in Belfast, Cardiff and London over the past few weeks. No proposals have yet been formulated or decisions taken.

Evidence gathered via during the evaluation exercise will inform a further paper for discussion by the FSA Board at its June 2025 open meeting and advice the FSA provides to ministers who will ultimately take a decision on the nature and purpose of any future support for the sector.

Question 7

From: Sian James, Chair of Environmental Health Wales

We note the qualitative assessment of the BTOM framework is that it (the BTOM) has contributed positively to our ability to manage risks posed to food and feed from the EU and has maintained the assurances that already applied to rest of world imports.

We ask the Board to review this statements evidential standing as an independent agency with a mission of assuring consumers with "food you can trust ". Our evidence for this position is that the delay in the implementation of SPS controls at West Coast Ports does observably enable imports from the EU and Rest of World to enter GB, without any verified documentary, identity check or physical inspection which would occur in a English port of entry. Thereby creating a far lower threshold of public or animal health evidence when entering through a western facing port, and, we note the use of auto clearance without review to facilitate west coast trade movement and note that in practice IPAFFS auto clearance overrides verifiable safeguard requirements which occur in South and East GB ports of entry, compromising in our view public and animal heath.

We further note that imported feed, a key feature of the food chain, is currently overlooked within the paper.

Consequently, We do not believe that the report reflects an accurate position, and the absence of control in western ports positively contributes to manage the risks of food and feed safety in a

positive manner.

Answer 7

Thank you for your question sent to the FSA Board.

The BTOM Board paper concludes that the BTOM has “contributed positively to the ability to manage risk”. As the paper states, this is a qualitative assessment that is based upon the initial position that was in place when the BTOM began to be implemented, compared to the position now.?

The paper does refer to both food and feed throughout. The assessment is therefore considering the whole imported food and feed system and BTOM implementation at different ports across Great Britain, including those handling imports through the West Coast ports.

The paper acknowledges that more work is required before the BTOM is fully implemented. This includes checks at West Coast ports. With the exception of some ports in England, the only arrivals at these ports are from the EU, predominantly Ireland. Checks in BCP for rest of the world imports remain in place at relevant ports.?

Additionally, the movements of non-qualifying Northern Ireland Goods sent from Northern Ireland must meet the requirements of the BTOM from the 25 February 2025, and the UK Government has committed to provide a further update on controls for movements of SPS commodities arriving at West Coast ports in the summer of this year.

During 2024 imports into the UK originating from the EU (and EFTA), which already required prenotification, started to be checked through the implementation of the BTOM. Starting with the requirement for export health certification for all medium risk products of animal origin and documentary checks. This was followed from April 2024 with a phased approach to the introduction of physical and identity checks on EU imports.

Across the system we have moved from a position where no checks were taking place on EU imports, so?the introduction of checks in EU imports, albeit not complete, represents a change in our ability to manage risk when considered on a system wide basis.

The UK Government can react to both serious emerging public and animal health risks in the EU. As an example, the actions taken in response to the recent outbreaks?of?Foot?and Mouth Disease in Germany, Hungary and Slovakia that swiftly led to a suspension?of?commercial imports?of?susceptible animals and certain untreated products from affected areas. As well as responding to animal health risks, we can take action where there is a significant threat to public health. For example, additional checks may be applied by?imposing?Intensified?Official Controls or Imposed Checks to specific establishments in instances where there are serious or repeated breach?of?import controls.

The FSA has also carried out multiple runs?of?the risk model (IDM+) using an increasingly wide set?of?data, incorporating ongoing improvements to the model. The outputs, which have been challenged with the FSA's Chief Scientific Advisor, Professor Robin May, show that the risk posed to public health by food and feed has been broadly stable.??This work provides an important assurance of our identification and management?of?risk and supports our conclusion that the? current inability to update risk categories administratively does?not, at this point, mean that we cannot continue to protect consumers.

The FSA works closely with other parts?of?government to ensure that food and feed safety continue to be important considerations in the implementation?of?the BTOM. The concerns identified in the report have been raised by our Chair with Ministers in Defra, the lead department for BTOM implementation.

Question 8

From: Martin Walker

1. How will the FSA ensure that the complex risk ratings set out in the BTOM are correctly applied by IPAFFS as this is not the case at the moment?
2. Will the Board amend its Agreed Board Principles (Annex A) to include ‘public health risks arising from the consumption of food’ rather than just ‘food and feed safety’ thereby meeting World Health Organisation recommendations to align more closely with capacity building under the WHO International Health Regulations 2005?

Answer 8

Thank you for your questions sent to the FSA Board.

The IPAFFS system is led and operated by Defra and is used by importers of Sanitary and Phytosanitary (SPS) goods in order?to?pre-notify?imports, and by PHAs to help inform their work prioritisation as well as for record keeping. It is a core part of the imports system and all importers of SPS goods will interact with it.

The FSA agrees that the risk ratings in the BTOM are nuanced and can therefore be complex. It is therefore essential that the information provided to businesses is accurate. Defra provides detailed advice as well as a look up tool for the use of businesses to identify what risk category applies to their commodity so that they can complete IPAFFS correctly and also know what documentation is required, for example, export health certification. The guidance on using the IPAFFS system and how to ascertain the correct risk category is available on GOV.UK.

The FSA has worked closely with Defra to quality assure the advice provided online and has notified updates to Defra, as the lead department. If you have any specific concerns about the accuracy of the information provided then it would be helpful if you could advise us of the details so that officials can investigate, and, if necessary, request changes.

The Board principles were agreed at the outset of the development of the BTOM.?

The Food Standards Act 1999 established the Food Standards Agency stating that “the main objective of the Agency in carrying out its functions is to protect public health from risks which may arise in connection with the consumption of food (including risks caused by the way in which it is produced or supplied) and otherwise to protect the interests of consumers in relation to food” and the FSA’s remit extends to the risks attached to the consumption of food more widely.

However, the paper and the Board principles relate specifically to the BTOM and how it relates to food and feed safety as it arrives at the border. This BTOM therefore supports the broader health risks you outline as part of the wider food and feed system.