



Cost to the UK food industry of Food Standards Agency regulation and Food Law

A KPMG report for the Food
Standards Agency

January 2018



Important notice

This document has been prepared by KPMG LLP for the Food Standards Agency (FSA) (the Client), in accordance with the terms of KPMG LLP's Engagement Letter with FSA dated 10 July 2017, exclusively for the benefit of FSA. The analytical activities that KPMG conducted to provide a basis for this document focused on specific areas as agreed with FSA. This document is not suitable to be relied on by any other party wishing to acquire rights against KPMG LLP for any purpose or in any context. Any party other than FSA that obtains access to this document or a copy (under the Freedom of Information Act 2000 or otherwise) and chooses to rely on it (or any part of it) does so at its own risk. To the fullest extent permitted by law, KPMG LLP does not assume any responsibility and will not accept any liability in respect of this document to any party other than FSA.

In particular, and without limiting the general statement above, since KPMG LLP has prepared this document for the benefit of FSA, it has not been prepared for the benefit of any other person or organisation that might have an interest in the matters discussed in this report. Nothing in this document constitutes a valuation, audit or legal advice.

The information in this document is based upon publicly available information and information provided to KPMG LLP by FSA and other third parties. It reflects prevailing conditions and views as of this date, all of which are accordingly subject to change. In preparing this report, KPMG LLP have relied upon and assumed, without independent verification, the accuracy and completeness of the information upon which the document is based, including that available from public sources and that provided by third parties.

Whilst KPMG LLP has undertaken the analysis in good faith, no warranty, expressed or implied, is made in respect of the accuracy, completeness or appropriateness of its assumptions, calculations or results. No reliance may be placed upon the analysis by any party, except where specifically referred to in an agreed KPMG LLP letter of engagement. All users are accordingly advised to undertake their own analysis and due diligence before making any decision or entering into any commitment based on the information in this report.

Contents

1	Executive Summary	1
2	Introduction	10
2.1	The Food Standards Agency's role in regulating Food Business Operators (FBOs)	10
2.2	The landscape of FBOs in England, Wales and Northern Ireland	11
2.3	About the study	12
3	Approach to estimating the cost of FSA regulations and Food Law	14
3.1	Our approach to information and data collection	14
3.2	Our approach to analysing the costs of regulation	18
4	Cost of regulation for individual FBOs	22
4.1	Costs associated with the FSA's regulatory regime	22
4.2	Costs to FBOs of complying with Food Law	28
4.3	Wider quality management approaches adopted by FBOs	55
5	Regulating our future (ROF)	56
5.1	The ROF programme	56
5.2	FBOs' views on the benefits of current FSA regulation and Food Law	56
5.3	Business' view of the ROF programme	58
Appendix 1	Sample sizes	59

1 Executive Summary

The Food Standards Agency (FSA) is an independent Government department with statutory objectives of ensuring that public health is protected from risks associated with the consumption of food and protecting consumers' interests in relation to food. The FSA has responsibility at a central level for the regulatory regime in place in England, Wales and Northern Ireland to monitor compliance by food businesses with the requirements set out in food related legislation ("Food Law"). Food Law, for the most part, is established at a European Union (EU) level.

The FSA is currently considering potential changes to the regulatory regime across England, Wales and Northern Ireland as part of its Regulating Our Future (ROF) programme. To inform its future regulatory work, the FSA commissioned KPMG to conduct a study to assist it in better understanding the financial and time-related costs to FBOs of complying with Food Law and the costs associated with the regulatory regime in place to monitor and enforce compliance (referred to in the report as "FSA's regulation"). In particular KPMG was asked to assess the cost to FBOs in the following main areas:

- Costs incurred by FBOs in relation to the FSA's regulatory regime, including: inspections and other types of intervention undertaken by the FSA itself or by Local Authorities (LAs) (referred to in the report as "inspections") that FBOs are subject to; and addressing any non-compliances identified.
- Costs incurred by FBOs in complying with aspects of Food Law, including: registering with their LA and the FSA; putting in place food safety management systems; meeting specific premises and equipment requirements; and adhering to food safety procedures set out in Food Law.

The analysis set out in this report only attempts to estimate the cost of FSA regulation and Food Law to FBOs. This analysis is based on self-reported time spent and financial costs gathered from a sample of 767 FBOs in England, Wales and Northern Ireland via a survey and qualitative insights in to the costs of FSA regulation and Food Law gathered through interviews conducted with a number of FBOs. Details of our surveying and interview approach are included in Section 3.1 of the report.

While the time and cost data and wider insights gathered from FBOs cannot be viewed as representative of all FBOs, by business type, across England, Wales and Northern Ireland, given constraints on sample sizes¹ and potential biases including self-reporting, recall bias and self-selection bias in those responding, the analysis and supporting evidence gathered through interviews provides an insight into the potential scale of costs of FSA regulation and Food Law compliance and the key areas of requirements driving these costs. It also provides some insights into how these costs differ across different types of FBOs.

The scope of our study does not include an assessment of the costs to the FSA or LAs in setting and enforcing food related standards and regulations. The study also does not estimate the benefits of the regulatory regime in monetary terms. However, the benefits of the regulatory regime are analysed at a high level, drawing on evidence captured as part of our study.

¹ Response rates were such that sufficient responses were not received for statistically representative samples across individual types of FBOs. However, given the different Food Law and regulatory requirements for different types of FBOs, we analysed the results by business type to provide greater insights in to the costs reported by different types of business. The analysis is based on the responses that we received from businesses in those categories for different questions.

Cost to FBOs of the FSA's regulatory regime

The vast majority of the detailed legislation on food standards in place for FBOs in England, Wales and Northern Ireland originates from the European Union. The FSA and Competent Authorities² are responsible for enforcing this in the UK through the regulatory regime, the main part of which is the inspections (Food Hygiene and Food Standards inspections) that are undertaken to check that FBOs are complying with the legal requirements.

Across England, Wales and Northern Ireland there were 573,583³ food establishments registered in 2016/17⁴, with different premise types, from primary producers to retailers and restaurants. Over 70% of the total number of FBOs located in England, Wales and Northern Ireland are restaurants or caterers⁵. Not all of these FBOs will be inspected each year as the frequency of inspections is determined by the intervention rating scheme specified in the Food Law Codes of Practice⁶. In 2016/17, 447,000 inspections were undertaken by LAs across England, Wales and Northern Ireland for both Food Standards and Food Hygiene

Survey respondents were asked to provide details of the time incurred⁷ and non-time related (i.e. financial) costs incurred in relation to inspections of their establishments and addressing any non-compliances identified during the inspections. FSA data indicates that 1% of premises inspected receive at least one formal enforcement whilst approximately one quarter of businesses receive written warnings.

We have presented our results in “box and whisker” plots, which show the distribution of results across all our responses, by FBO type. The main box of the box and whisker plot shows the lower quartile, median and upper quartile values of costs reported for each FBO. The bottom line of the box is the lower quartile, while the line running horizontally through the box is the median value. The top line of the box is the upper quartile value. The “whiskers” are the vertical lines coming out of the top and bottom of the box plot. The bottom whisker line runs to the minimum value. Meanwhile the top whisker line, runs to the maximum. In some cases throughout the report, the maximum whisker lines will go off the chart as they are much greater than the upper quartile. Where this is the case the maximum value is reported.

Figure 1 below sets out the summary of the estimated reported annual costs incurred by different types of FBOs, associated with assisting with the inspection(s) and correcting non-compliances.

² The FSA is the Central Competent Authority for the regulation of food businesses that are located in England, Wales and Northern Ireland. Food Standards Scotland (FSS) is a separate Central Competent Authority with responsibility for regulating food businesses in Scotland.

³ This only includes businesses which have been inspected by Local Authorities, it will not include any businesses that are inspected by the FSA such as slaughterhouses, producers of dairy products, producers of egg products and producers of meat and meat products.

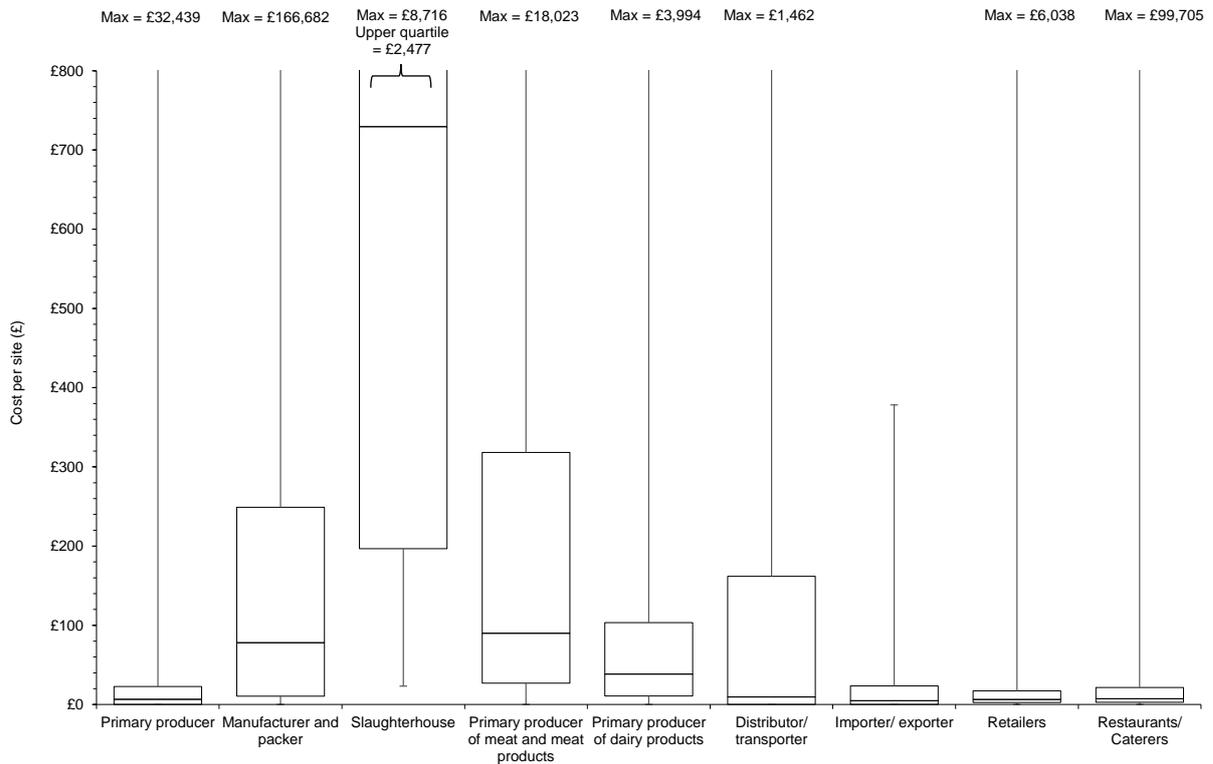
⁴ Food Standards Agency (2017) Annual report on UK local authority food law enforcement.

⁵ This category includes: caring premises; hotels/ guest houses; mobile food units, pubs/ clubs; restaurants; cafés; canteens (including in schools/ colleges); and take-away food shops.

⁶ This takes into account a variety of factors, including the inherent food risks in the business, the compliance level of the business found at the time of inspection and confidence in management controls including previous compliance history.

⁷ For the analysis, the time related costs of regulation were converted in to monetary terms, based on salary data obtained from the Office for National Statistics (ONS). The average hourly wage (excluding overtime) for all employees working in the most relevant Standard Industrial Classification (SIC) code for each of the FBO categories was used. Further detail of the approach used is provided in section 3.2.

Figure 1: Annual ongoing cost per site associated with the FSA regulatory regime, by FBO type⁸



Source: KPMG analysis

In addition to assisting with inspection(s) and correcting non-compliances, FBOs can incur additional costs by voluntarily conducting their own checks and/or employing the services of a consultant to carry out checks.

With the exception of slaughterhouses, for all FBO types the median reported total cost of inspections, addressing any non-compliances and conducting their own checks of compliance is less than £4,500 per year. The median costs reported by slaughterhouses are markedly higher. However, this is likely due to the higher frequency of inspections of these FBOs, with inspections taking place on a more frequent basis and taking place both prior to and post slaughter. But despite the costs incurred by FBOs in relation to inspections, those we interviewed generally had a positive view of them, and found the Environmental Health Officers (EHOs) and other enforcement officers or inspectors (referred to throughout the report as EHOs) conducting the inspections to be helpful and extremely pragmatic. However, a small number of businesses highlighted issues in relation to the burden of proof placed on them and inconsistencies in the interpretation and enforcement of Food Law across LA areas and between EHOs.

We note that FBOs are not required to undertake their own internal checks of compliance as part of the regulatory regime. However, 95% of respondents indicated that they did undertake their own regular checks/inspections to assess their compliance with Food Law, with 25% employing external consultants to assist them with this. Many FBOs that we interviewed indicated that conducting their own checks was an important part of ensuring compliance and reduced the risk of any non-compliances being identified during inspections. While this drives up the reported costs set out in the Figure 1 above, and drives the high maximum costs reported by some FBO types, particularly larger

⁸ Please note that where we refer to primary producers and manufacturer and packer FBOs these exclude any slaughterhouses, primary producers of dairy products and primary producers of meat and meat products.

retailers, without these checks (and the associated costs) it may be the case that the costs of addressing non-compliances could be higher.

Cost to FBOs of complying with Food Law

In addition to the costs that FBOs incur due to inspections, there are requirements under Food Law that businesses are legally obliged to comply with. The legislation in place, which predominantly stems from the European Union, covers areas such as: general food safety principles; general hygiene requirements; and food information for customers. It requires that FBOs:

- register with the relevant authorities;
- ensure that anyone in their business who is handling food is supervised or trained in food hygiene to reflect their role;
- comply with specifications with regards to equipment and premises;
- undertake and document specific food safety procedures as part of their ongoing operations;
- meet food presentation requirements, including for labelling; and
- adhere to product recall and withdrawal requirements.

These requirements differ by FBO premise types dependent on the food-related activities that they undertake, for example whether or not they produce food of animal origin, produce food of non-animal origin or supply food to end customers in restaurants. Given this, the complexity of meeting the requirements and thus the costs of compliance will vary across FBO types. It was also clear through the interviews conducted that different FBOs put in place a different range of systems, processes and activities to meet the requirements (e.g. dependent on the overall scale of their operations). This is also likely to drive different levels of compliance costs.

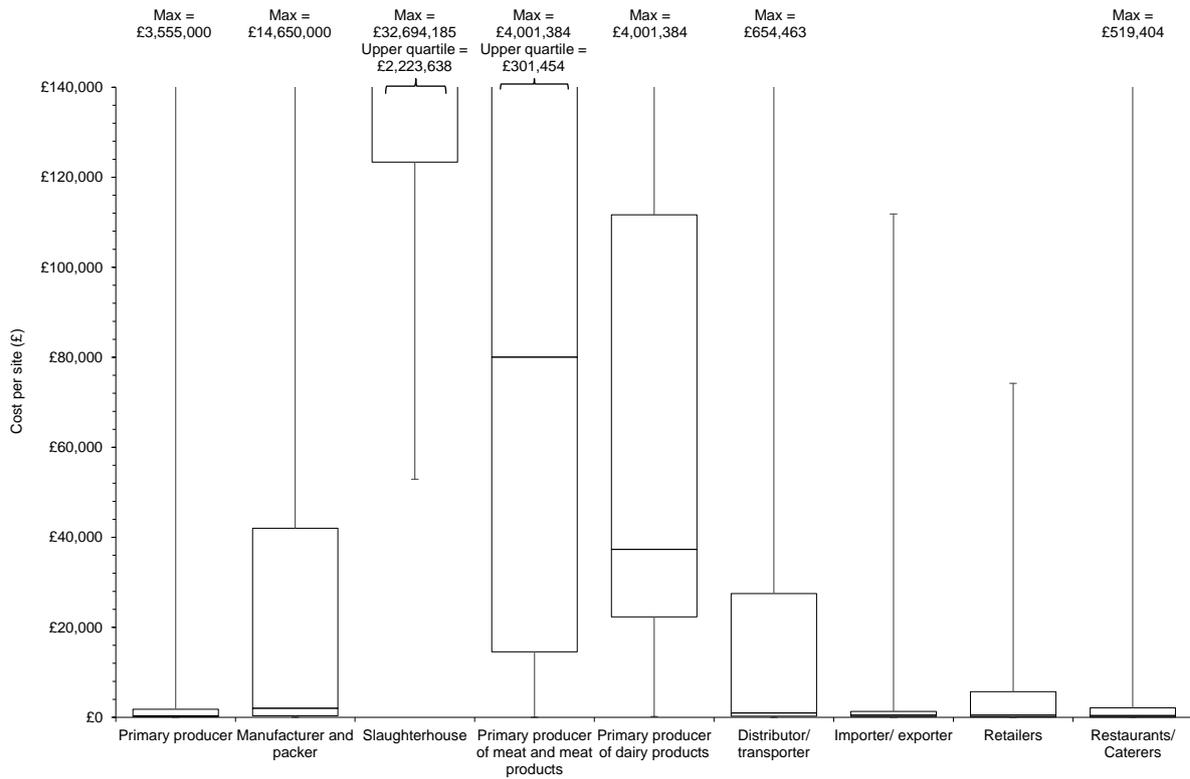
Despite the range of legislation in place and the differing requirements placed on different FBOs, FBOs surveyed and interviewed, in general indicated that this did not pose significant problems for their operations. Over 80% of survey respondents indicated that they strongly agreed or agreed that it was easy for them to understand the requirements that applied to them. This was also the consensus view emerging from the qualitative interviews conducted.⁹ Fewer than 20% of survey respondents indicated that they had used the services of an external consultant in order to help them to understand the requirements that applied to their business.

Through the survey, we gathered data relating to the costs FBOs incur in complying with the Food Law requirements relevant to their business.

Respondents were asked to report one-off costs that would not be incurred on an annual basis. Some examples of one-off costs that FBOs may incur include: registering as a food business; investment in the design and fitting of premises so that it is compliant with Food Law; and setting up a food safety management system. Figure 2 below sets out the total one-off costs of these regulatory requirements for different premises types.

⁹ We note that this may be due to the types of businesses that responded to the survey and participated in interviews. It could be the case that businesses that responded are more likely to be engaged with Food Law and therefore have a deeper understanding of the requirements.

Figure 2: Total one-off cost per site associated with complying with Food Law requirements, by FBO type

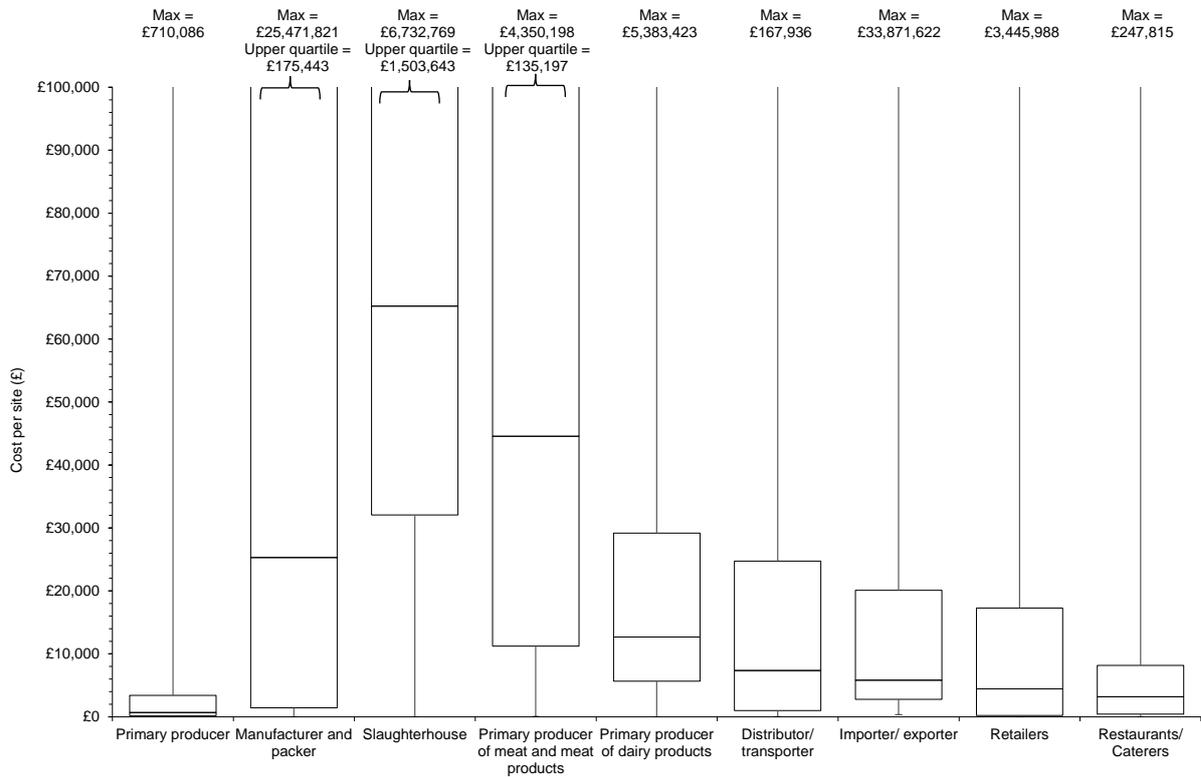


Source: KPMG analysis

Overall the results from our survey suggest that the one-off cost associated with Food Law varies significantly across different food businesses. With the exception of slaughterhouses and producers of meat and meat products, all FBO types reported a median total one-off cost per site of meeting Food Law requirements of £40,000 or less. For restaurants and caterers this median reported cost was much lower at under £300. However, the median one-off costs reported by producers of meat and meat products and particularly slaughterhouses are much higher. These higher costs are primarily driven by upfront investments to meet specific requirements for their premises, equipment and food safety procedures.

While there are some Food Law requirements that impose one-off costs on FBOs that are not incurred each year, to ensure compliance FBOs undertake a range of activities on an ongoing basis, with associated annual costs. These activities include staff training in Food Law; maintenance of premises and equipment; maintaining the required documents and records; and time spent undertaking food safety procedures. Figure 3 below, presents the total reported ongoing annual cost per site for FBOs in complying with Food Law.

Figure 3: Total annual ongoing cost per site associated with complying with Food Law requirements, by FBO type



Source: KPMG analysis

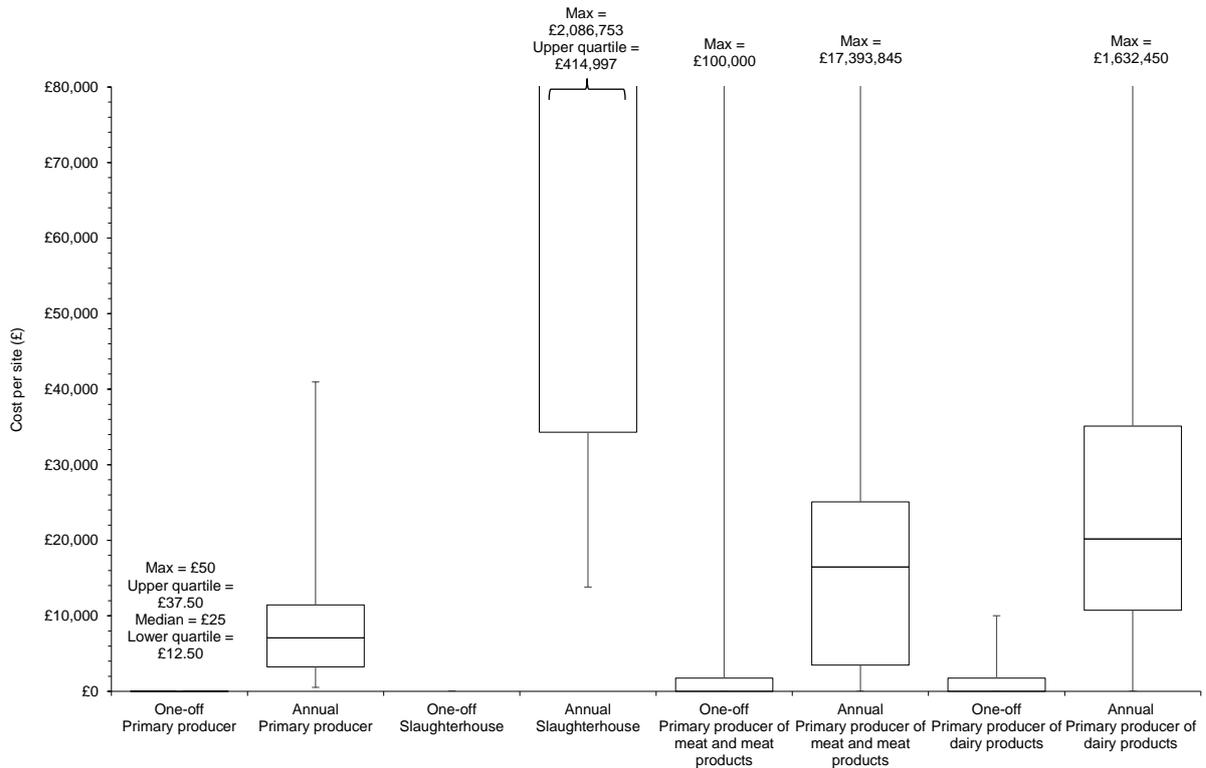
In comparison to the one-off costs, the annual ongoing costs are greater across all FBO types. And again there is substantial variation in costs across respondents, with total cost per site ranging from a median cost of under £700 per year reported by primary producer respondents up to a median cost of over £65,000 per year reported by slaughterhouses. In general, slaughterhouses report higher costs across all areas which is driving the comparatively higher annual ongoing costs for slaughterhouse respondents than other FBO types.

Additional costs for FBOs producing food of animal origin and food of non-animal origin

Given that there are additional Food Law requirements placed upon producers of food of animal origin and food of non-animal origin, we sought additional costs estimates from these FBOs to understand the overall costs of Food Law for their businesses.

For producers of food of animal origin, the total one-off and ongoing annual additional costs (over and above the costs detailed above covering the Food Law requirements on all businesses) are presented in the tables in Figure 4 below.

Figure 4: Total one-off and ongoing annual additional costs per site associated with producers of food of animal origin¹⁰



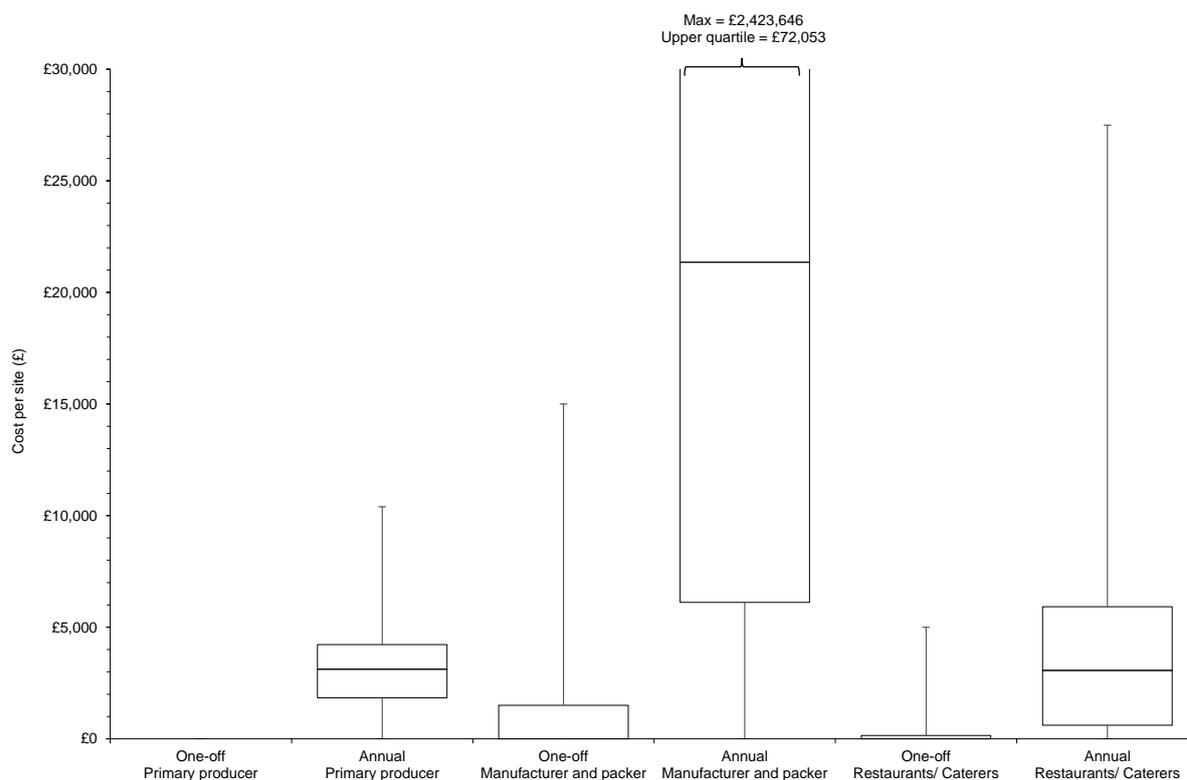
Source: KPMG analysis

Additional requirements placed upon producers of food of animal origin include purchasing and the upkeep of food treatment equipment, veterinary costs and health and identification marks for animal products. As with the other requirements under Food Law, the annual ongoing costs reported by FBOs were higher than the one-off costs and for the ongoing costs the median cost reported by slaughterhouses were generally higher than those reported by other FBO types. The additional ongoing costs of Food Law for producers of meat and meat products were the highest, driven by significant time costs associated with food safety procedures such as cleaning and disinfecting equipment and ensuring the cleanliness of animals for slaughter.

As shown in Figure 4 below, producers of food of non-animal origin reported relatively low additional one-off costs per site compared to the total one-off costs incurred by all FBOs. Some additional ongoing costs of meeting Food Law requirements were reported, however.

¹⁰ Slaughterhouses did not report any additional one-off costs associated with producing food of animal origin.

Figure 5: Total annual ongoing and one-off additional costs per site associated with producers of food of non-animal origin¹¹



Source: KPMG analysis

When comparing the median additional annual costs for producers of food of non-animal origin against the total cost of general Food Law requirements (as detailed in Figure 3 above), producers of non-animal origin reported incurring between £3,000 and £21,400 additional in annual costs, in median terms. In terms of one-off costs, however, a number of FBO producers of food of non-animal origin reported no additional one-off costs as a result of the extra requirements placed upon them.

FBOs' views of current FSA regulation and Food Law

As part of the interviews with a sample of FBOs, we sought views on the benefits of the current FSA regulatory regime and Food Law requirements and priorities to address as part of the FSA's ROF programme.

Although evidence from the survey indicates that FBOs incur a range of costs associated with the FSA's regulatory regime and Food Law, the majority of businesses we interviewed indicated that they consider that the current FSA regulatory regime and Food Law requirements strike the right balance between protecting consumers and giving FBOs "peace of mind" that if they follow the Food Law requirements the food products they produce will be safe.

Despite the range of different FBOs interviewed, in terms of both size and FBO type, there was a general consensus in terms of the key issues raised, the main benefits identified and the areas in which regulation of FBOs could be improved:

- Food Law requirements were generally viewed as "common sense" and relating to processes/ activities that FBOs would undertake irrespective of the regulations. Indeed, some FBOs put in

¹¹ Primary producers did not report any additional one-off costs associated with producing food of non-animal origin.

place additional processes over and above the requirements, such as those required as part of a third party accreditation scheme, to drive higher quality standards.

- The prescriptive nature of the regulations were considered to make it easy for FBOs to know what is required of them and assist in their ability to comply. Resources available from the FSA, LAs and EHOs were also noted as helping FBOs, particularly small businesses and start-ups, to understand the requirements and comply.
- Food hygiene ratings were viewed as a means of driving better compliance and a good signalling tool that customers and consumers could rely upon.
- Food Law and the regulatory regime was frequently reported as helping to create a level playing field on which businesses can compete effectively, given that all businesses, regardless of size or location, have to comply with the same regulations and safety standards cannot be cut in attempts to reduce operating costs.
- All FBOs interviewed welcomed the idea of the ROF programme and felt that there were elements of the current regulatory system that could be improved. The three key areas identified as priority areas that would benefit from revision were: consistency in the implementation of the requirements; greater consideration of specific circumstances of different types of food businesses; and more active communication from the FSA, for example in relation to changes in requirements and product recalls and withdrawals.

2 Introduction

2.1 The Food Standards Agency's role in regulating Food Business Operators (FBOs)

The Food Standards Agency (FSA) is an independent Government department with statutory objectives of ensuring that public health is protected from risks associated with the consumption of food and protecting consumers' interests in relation to food. This includes guarding against risks associated with the production and supply of food by setting the standards and regulations for Food Business Operators (FBOs) to adhere to and checking compliance against these. The FSA's role is to support those businesses that want to do the right things for consumers in relation to food safety, whilst also making sure that those food businesses who put consumers' health and confidence in the food sector at risk are dealt with appropriately¹².

The FSA is the Central Competent Authority for the regulation of food businesses that are located in England, Wales and Northern Ireland. Food Standards Scotland (FSS) is a separate Central Competent Authority with responsibility for regulating food businesses in Scotland.

The production, processing, distribution, retail, packaging and labelling of food stuffs are governed by a wide range of laws, regulations, codes of practice and guidance. The vast majority of the Food Standards legislation originates from the European Union (EU), which the FSA and Local Authorities (LA) are responsible for enforcing in the England, Wales and Northern Ireland. This legislation includes:

- General Food Law Regulation (EC) 178/2002;
- Food Information to Consumers Regulations (FIC) 1169/2011;
- Official controls for Feed and Food Law 882/2004 (with parallel legislation across England, Scotland, Wales and Northern Ireland). The Food Safety Act 1990 (applicable in England, Wales and Scotland with similar legislation in Northern Ireland);
- The General Food regulations 2004 (Scotland and Wales only with similar legislation in Northern Ireland);
- The Food Safety and Hygiene (England) Regulations 2013; and
- The Food Standards Act 1999, which established the FSA and gave it its powers and functions.

The legislation in place covers areas such as: general food safety principles; general hygiene requirements; food information for consumers; and specific hygiene requirements for FBOs which handle products of animal origin. However there is also a substantial amount of legislation which sets out the compositional requirements of these legislative requirements.

Although the FSA is the government body with overall responsibility for enforcing legislation in relation to food safety in England, Wales and Northern Ireland, it has set up a Framework Agreement with LAs. This Framework Agreement is in place to enable LAs to undertake a range of food related activities referred to in law as "Official Controls". This includes "inspections"¹³ of food businesses, on behalf of the FSA, to ensure that they are complying with legislative requirements in relation to food safety as well as audits and sampling visits. This means that each of the LAs are responsible for inspecting and enforcing food legislation for food businesses which are located within their LA area,

¹² Food Standards Agency: Innovation and Regulation. Accessed at <https://www.food.gov.uk/sites/default/files/fsainnovationinregulation.pdf>

¹³ The term "inspections" has been used to cover the two different types of inspections which FBOs are subject to. This includes Food Hygiene and Food Standards inspections. Please see Section 4.1.1 for further detail.

with the exception of responsibility of meat establishments, dairy establishments and for egg establishments in England, Wales and Scotland, for which the FSA and FSS retain control¹⁴. For these businesses, the FSA also undertakes inspections on behalf of Department for Environment, Food and Rural Affairs (Defra) to assess animal health and welfare. In Northern Ireland, the Department for Agriculture, Environment and Rural Affairs (DAERA) Veterinary Public Health Programme carries out Meat Hygiene Official controls in approved slaughterhouses, establishments handling game and cutting plants on behalf of the FSA.

The FSA considers that the work LAs are doing to ensure that FBOs are complying with regulations is causing standards to “continue to rise”¹⁵. In 2015/16, based on inspections undertaken by the LAs, and the Food Hygiene Rating Scheme where FBOs received a score of 0-5, more than 94% of food businesses in England, Wales and Northern Ireland had a ‘Generally satisfactory’ rating or higher (3 or above) and 66% have a hygiene rating of 5 (‘Very good’)¹⁶.

2.2 The landscape of FBOs in England, Wales and Northern Ireland

The agri-food sector contributes significantly to the UK economy. Collectively across England, Scotland, Wales and Northern Ireland, FBOs in the agriculture, manufacturing, wholesaling, retailing and catering industries generated £110 billion of Gross Value Added (GVA)¹⁷ in 2015, equivalent to 6.6% of UK GVA. The sector also employs 3.9 million people, which was equivalent to 13.2% of national employment in 2016.¹⁸

The importance of the sector to the overall economy reflects that households spend a notable proportion of their total expenditure on food products. Total consumer spending on food, drink and catering has increased by 2.1% in 2016 to £203 billion¹⁹. It is estimated that this accounted for 11% of all household spending in 2016²⁰.

The value chain for the production and supply of food includes a wide range of food businesses, including agriculture, manufacturing, wholesaling, retailing and catering businesses.

In England, Wales and Northern Ireland there were 579,146 food establishments registered in 2016/17. The table below provides a breakdown for the total number of FBOs located in England, Wales and Northern Ireland, by main premises type²¹.

¹⁴ In Northern Ireland the inspections are undertaken by the Department of Agriculture and Rural Development on behalf of the FSA.

¹⁵ Food Standards Agency, Annual Report and Consolidated Accounts 2016/17. Accessed at: <https://www.food.gov.uk/sites/default/files/fsa-consolidated-accounts-2016-17.pdf>

¹⁶ Food Standards Agency, Annual Report and Consolidated Accounts 2016/17. Accessed at: <https://www.food.gov.uk/sites/default/files/fsa-consolidated-accounts-2016-17.pdf>. This includes businesses which are not part of the FHRs but where an equivalent score has been calculated.

¹⁷ GVA is a measure of the economic value of goods and services produced by a firm, sector or activity. At a national level GVA is output minus intermediate consumption.

¹⁸ Food Statistics Pocketbook 2016, Defra. Accessed at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/608426/foodpocketbook-2016report-rev-12apr17.pdf

¹⁹ Food Statistics Pocketbook 2016, Defra. Accessed at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/608426/foodpocketbook-2016report-rev-12apr17.pdf

²⁰ Food Statistics Pocketbook 2016, Defra. Accessed at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/608426/foodpocketbook-2016report-rev-12apr17.pdf

²¹ Where an FBOs premises is involved in multiple activities, it is categorised based on the main activity of that premises.

Figure 6: Registered food establishments in England, Northern Ireland and Wales, 2016/17

Premises type ²²	England	Northern Ireland	Wales	Total
Primary producers	8,383	376	733	9,492
Manufacturers and packers	14,722	1,153	1,097	16,972
Importers/Exporters	1,322	44	11	1,377
Distributors/Transporters	8,384	430	372	9,186
Retailers	113,394	4,106	7,419	124,919
Restaurants & Caterers	376,347	15,444	25,409	417,200
Total	522,552	21,553	35,041	579,146

Source: FSA, Annual report on UK local authority Food Law enforcement, 2016/17 and approved premises data from the FSA website downloaded in October 2017

As shown in the table above the majority of FBOs, over 70%, are in the Restaurants and Caterers category. FBOs within this category include: caring premises; hotels/ guest houses; mobile food units, pubs/ clubs; restaurants; cafés; canteens (including in schools/ colleges); and take-away food shops.

2.3 About the study

KPMG was commissioned by the FSA to undertake independent primary research and analysis to estimate the cost to all types of FBOs, across England, Wales and Northern Ireland, of complying with Food Law and the FSA regulatory regime.

The FSA commissioned this study in order to better understand costs of regulation for FBOs and to establish an estimated cost base which can help in assessing the potential impact of future regulatory changes. In particular, these estimated costs will be used by the FSA to help it to inform its own assessments of the benefits that may be achieved from changes to the regulatory regime that will be taken forward as part of the FSA Regulating Our Future (ROF) programme. Further details of the ROF programme are included in Section 5.

KPMG was asked to analyse the cost to FBOs of Food Law and FSA regulation in the following main areas:

- Financial and time-related costs incurred by FBOs in relation to the FSA’s regulatory regime, including: undergoing the inspections that FBOs are subject to as part of the FSA’s monitoring programme (carried out by LAs); and addressing any non-compliances identified.
- Financial and time-related costs incurred by FBOs in complying with other aspects of Food Law, including: registering with their LA and the FSA; putting in place food safety management systems; meeting specific premises and equipment requirements; and adhering to the food safety procedures set out in Food Law.

The analysis set out in this report only attempts to estimate the cost of FSA regulation to FBOs and does not include the costs to the FSA or LAs in setting and enforcing food related standards and regulations. The study also does not estimate the benefits of the regulatory regime in monetary terms. However, the benefits of the regulatory regime are analysed at a high level, drawing on evidence captured as part of our study.

Our analysis is based on a range of data sources, including primary evidence gathered through a survey of a sample of FBOs in England, Wales and Northern Ireland and a number of interviews with

²² Please see annex B of the Local Authority Enforcement Monitoring System (LAEMS) Guidance 2017 for a full definition of establishments. Accessed at: <https://www.food.gov.uk/sites/default/files/multimedia/pdfs/enforcement/laemsguidance.pdf>

FBOs to gain more detailed qualitative insights in to the costs of FSA regulation. Details of our surveying and interview approach are included in Section 3.1.

In addition, our study draws on data and information provided by the FSA and LAs and wider publicly available information, such as data produced by the Office for National Statistics (ONS).

It should be noted that the estimated cost of regulation in this report is based on the total costs that businesses reported to incur in relation to both the FSA's regulatory regime, as well as legislative requirements under Food Law. Due to difficulties in the attribution of costs, and the attribution of specific business behaviours to FSA and Food Law requirements, the analysis does not separate out the costs that FBOs would incur even if certain food related practices were not required by law.

3 Approach to estimating the cost of FSA regulations and Food Law

3.1 Our approach to information and data collection

In order to establish the cost to FBOs of FSA regulation and Food Law we drew on a range of data sources, including primary evidence gathered through a survey of a sample of FBOs in England, Wales and Northern Ireland and a number of interviews with FBOs to gain more detailed qualitative insights in to the costs of FSA regulation and Food Law compliance. We also drew on data provided by the FSA and LAs in relation to the population of FBOs in England, Wales and Northern Ireland. Our approach to information and data collection in each of these areas is outlined below.

3.1.1 Data on the population of FBOs

In order to design the survey and interviews, in particular to define a sample of FBOs to obtain evidence from a survey and interviews, it was important to work with the FSA to collect information to establish the total population of FBOs that the FSA and LAs are responsible for regulating.

As part of its regulatory regime, the FSA and LAs collect information relating to all FBOs. The main data sets held are:

- Local Authority Enforcement Monitoring System (LAEMS) database which provides an overall breakdown of registered food businesses, by business type, for which LAs are the Competent Authority.
- Food Hygiene Rating System (FHRS) dataset which contains premises' latest FHRS scores.
- Specific datasets available from the FSA website which provide data in relation to raw milk and dairy businesses, egg establishments, meat products businesses, fishery businesses and poultry and game businesses.

While these data sets collectively provided information on the total number of FBOs, within different categories of FBO, to allow us to establish the number of FBOs from whom evidence would need to be obtained to achieve a sample drawn from across the whole population of FBOs, the data sets did not provide sufficient detail relating to each individual business, such as size, duration of operation and inspection ratings. The data also did not include contact details for the FBOs, which we required in order to contact them to participate in our survey.

Therefore, to source this contact information, we worked with the FSA to obtain the data from individual LAs, drawing on the registration information that each LA collects. While it would have been preferable to contact all LAs across England, Wales and Northern Ireland, the FSA was concerned about the burden this may place on them, therefore requested that we adopt a selective approach to contacting LAs to obtain additional data on the FBOs under their responsibility.

Across England, Wales and Northern Ireland, 37 LAs were contacted to provide additional details for all FBOs located in their LA area. The 37 LAs from whom additional data was sought were selected based on the number of FBOs located in the LA and to achieve broad geographic coverage across the three countries, including a split across rural and urban LA areas. Of the 37 LAs that we requested information from, 23 provided further detail, 17 of which were able to provide the information needed for us to conduct our survey. This data was supplemented with data held by KPMG on the FBOs that

it works with – mainly larger FBO clients. However, due to the need to select only a small sample of all LAs and the incompleteness of the data received from them this affected our ability to survey a fully representative sample of the total FBO population.

In total we were able to source the data required to survey 11,485 FBOs across England, Wales and Northern Ireland out of the total 579,146 FBOs. This provided us with a broad cross section of FBOs who could be contacted to participate in our primary evidence gathering, although as noted above this sample was not fully representative of the total FBO population and is a limited sample of the total number of FBOs in operation.

3.1.2 Online survey of FBOs

Our main approach to gathering data on the time and financial costs incurred by FBOs of complying with FSA regulation and Food Law was to conduct an online survey of a sample of FBOs across England, Wales and Northern Ireland. The survey was undertaken using SmartSurvey - an online surveying tool.

The survey was designed based on a detailed review of the regulations and laws in place that may impact on FBOs. From this we identified the types of costs these may impose on FBOs – one-off costs, ongoing costs and both financial and time-related costs.

Given the complexity and scope of regulations and laws in place, and the resultant range of cost drivers these pose for FBOs, we worked with the FSA to design a survey that would meet its information requirements for the study. This was to ensure we were able to obtain sufficiently detailed information on each area of regulation and Food Law and to prioritise the evidence gathering to focus on the main areas of the regulatory regime that the FSA is considering amendments to as part of the ROF programme (see Section 5).

As the survey was being sent to all FBO types (for whom the Food Law requirements and regulation varies), when constructing the survey, we used question routing to ensure that businesses were only asked questions relevant to their specific operations, whilst also ensuring all costs driven by Food Law were captured in the responses.

When designing the survey we were aware that the complexity of the Food Law requirements for businesses may mean that estimating the costs of food regulations could be challenging. Businesses will have in place a range of different practices to ensure compliance with Food Law and regulation and to meet other quality standards required by their customers. Distinguishing between the different types of costs and attributing them to Food Law, regulation, and other factors, including 'business as usual' costs may be difficult and could lead to an underestimation or overestimation of costs. And the potential for self-reporting bias may also lead to inaccuracies in the cost estimates captured through the survey.

However, to try to overcome some of these challenges and to reduce the possibility for FBOs misinterpreting the questions and the cost information sought, the survey was piloted with a small number of FBOs, across different types of business and sizes. This pilot provided feedback on the questions posed and the overall complexity of responding. Based on this feedback the survey was amended, as far as possible, to address the issues raised. For example, when piloting the survey, we received feedback that it may be challenging to provide specific cost information as an overall business when FBOs could operate a range of different food related activities such as production as well as retail. Therefore, to address this we adapted the survey to allow FBOs to provide multiple responses with information relating to different segments of the overall business or to answer on behalf of the entire FBO. We also made clear that best estimate costs could be provided where detailed financial costs attributed to individual business areas or activities were not available.

The revised survey was distributed on 14th August 2017 to all 11,485 FBOs for whom contact details were available to us. The survey was sent with a two week completion period, which was then extended by an additional week to try to boost the response rate. The survey was closed on 4th

September 2017. Efforts were made throughout this period to boost response rates, including through issuing email reminders and posting details on the FSA's social media accounts.

Over this period, the survey achieved 381 completed responses and 1,585 partial responses. Of these partial responses 386 contained sufficient information to be included within the analysis.

Figure 7 below breaks down the number of completed and useable partial responses by FBO type.

Figure 7: Responses from KPMG survey

Premises type	Completed responses	Partial responses (useable for analysis)	Total
Primary producer	27	84	111
Manufacturer and packer	33	48	81
Slaughterhouse	9	0	9
Meat and meat products	35	4	39
Dairy products	30	9	39
Distributor/transporter	11	12	23
Importer/exporter	9	6	15
Retailers	26	34	60
Restaurants/ Caterers	201	189	390
Total	381	386	767

Source: KPMG survey responses

The partial responses that are set out in Figure 7 above are defined as those respondents who answered questions beyond the introduction, or where any financial information was provided. This means that survey responses from any business that provided time or cost information were included for the analysis or the relevant cost questions that they answered. In addition, there are also some completed responses where not all questions were answered, either as not all questions were appropriate for the business (and therefore they were routed away from these questions when completing the survey), or where the business chose not to provide an answer to a specific question(s).

Based on the completed responses received, the survey achieved a response rate of 3%. The response rate for each question varied, with some questions receiving fewer answers than others. This was particularly the case for questions relating to certain Food Law requirements that do not apply to all business types.

As can be seen from comparing Figure 7 with Figure 6 in Section 2.2 above, the responses that we received do not provide an accurate representation of the total FBO population in England, Wales and Northern Ireland in terms of the proportion of respondents by each type of FBO. Also, response rates were such that sufficient responses were not received for statistically representative samples across individual types of FBOs. However, given the different Food Law and regulatory requirements for different types of FBOs, we analysed the results by business type to provide greater insights in to the costs reported by different types of business. The analysis is based on the responses that we received from businesses in those categories for different questions. The sample sizes for each section of the survey are set out in more detail in Appendix 1. While we recognise that the sample achieved was not statistically representative of all FBOs by business type, it is not possible to determine whether this would lead to an under- or over- estimation of the costs.

There are also a number of other factors that may lead to a skew in the time and financial costs reported.

Despite our piloting of the survey, there remains a possibility that some businesses interpreted the questions differently and/ or provided inaccurate cost estimates which may skew the results. It was not possible to verify the survey responses submitted, for example using financial data for each FBO.

However, results were analysed to look at the range and scale of time and financial costs reported by different types of FBOs dependent on different factors such as their scale of operations and number of sites.

As noted above, there may also be self-reporting bias in the results. Given that data is not consistently held by businesses on the costs of compliance with regulation of Law, and there is no defined accounting approach for separating out these costs or need to report them to the FSA, FBOs had to estimate these. And as the FSA, or KPMG as part of the study, was not seeking to verify these figures FBOs may have been motivated, for example, to overestimate the costs if they felt that this may lead to changes to reduce the overall level of regulation or to demonstrate the efforts they go to as a business to ensure compliance.

Recall bias may also have affected some of the time and financial cost estimates provided by FBO, particularly where FBOs were asked to estimate amounts of time, or costs, associated with activities undertaken over a multi-year timeframe, such as inspections which may have taken place up to three years previously. This bias has the potential to over- or underestimate the time spent by employees, and could have a corresponding impact on the results.

There are also other factors which may cause the overall results of the analysis to be biased based on the responses received, for example, the regulatory costs for businesses may vary with size or age of the business. Larger businesses may be able to benefit from the ability to spread the costs of various requirements across multiple sites, reducing their per site costs of compliance. We were not able to fully test the different drivers of costs based on business size and age in our analysis due to incompleteness of the information available. While we obtained information from respondents on the size and age of their business, the equivalent data was not available from the FSA on the overall population of FBOs. Therefore, we were unable to test whether our sample was representative, in terms of size and age, of all FBOs.

Given possible bias in the time and financial cost information gathered and a lack of statistical representativeness of all FBOs by type, the results of our analysis are reported based on the range of costs and the median cost reported by FBOs, by type. The figures reported are based on all responses provided to questions, including where FBOs reported zero costs.

3.1.3 Interviews with FBOs

In addition to the survey of FBOs, we conducted interviews with a sample of FBOs to supplement our survey findings and to provide qualitative information to inform our study.

The interviews were designed to gather qualitative insights from FBOs on the specific impacts (both benefits and costs) that food regulation and Food Law has on their business, their thoughts on the current regulatory framework and the areas in which they considered that the regime could be enhanced. Given some of the challenges identified when designing the survey in terms of FBOs being able to accurately report the costs of specific regulatory and legal requirements placed on them and the complexities of the requirements and different practices business put in place to comply, we also sought to use the interviews as a means to provide more insights on business activities associated with compliance and the scale and drivers of cost.

Ahead of the interviews being conducted, an interview guide was prepared, drawing on the research conducted to inform the survey development. This helped to ensure that each of the interviews focused on collecting the same evidence across all FBOs interviewed.

The selection of FBOs included in the interview programme was not designed to be statistically representative of all FBOs in England, Wales and Northern Ireland, given constraints on the number of FBOs that could be contacted and interviewed within the FSA's available budget and timeframe for the project. However, efforts were made to interview a broad cross section of FBOs, in terms of size, geographic location and FBO business type.

FBOs contacted to participate in the interviews were initially selected by drawing a random sample of 78 FBOs for whom contact details were available. However, due to a lack of response from many of these FBOs, the interview sample was boosted by reaching out to FBOs who had indicated in their online survey response that they would be happy to be contacted to participate in an interview and further research. We recognise that this may have led to sample selection bias, therefore, our interpretation of the evidence gathered reflects on this.

In total we conducted 37 telephone interviews over the period 21st August 2017 to 11th September 2017. Figure 8 below provides a summary of the FBOs interviewed by business type.

Figure 8: Businesses interviewed by type

Premises type	Number of interviews
Primary producer	5
Manufacturer and packer	7
Slaughterhouse	1
Meat and meat products	1
Dairy products	2
Distributor/transporter	0
Importer/exporter	0
Retailers	3
Restaurants/ Caterers	16
Total	37

Source: KPMG analysis of interviewee FBO types

3.2 Our approach to analysing the costs of regulation

As set out in section 3.1.2, we undertook an online survey in order to collect data from a sample of FBOs relating to the different types of cost their business incurred as a result of Food Law. These survey responses were used in our analysis to estimate the cost of FSA regulation across FBOs.

Ahead of conducting the cost analysis, the raw survey response data was cleaned. This included collating the responses from the same individual business where they provided data in different responses. Where this was the case, the response that was most complete was the response that was used in the analysis. In order to maximise the data provided, we then supplemented this more complete response with any additional information that may have been provided in another response by the same respondent. The least complete response was then deleted from the raw data to ensure that businesses are only counted once in our analysis. In some instances, we were contacted by survey respondents who wanted to supplement their completed survey response with additional information. Where this occurred, the survey response was manually edited to include the additional information provided by the survey respondent. We also corrected inputs to allow uniform data analysis where a combination of text and numerical characters were used in responses.

Where there are outlier responses i.e. those which seem to be significantly higher or lower compared to the majority of other responses, we have not excluded these reported costs from the analysis nor have we validated these outliers by confirming the responses with the individual FBO survey responses.

The survey sought to collect data relating to both financial and time related costs associated with the FSA regulation and differentiated between whether these were one-off upfront costs, for example associated with equipment or premises, or ongoing costs.

For the analysis, the time related costs of regulation were converted in to monetary terms. In order to do this, the salary cost for the period of time for which the employee(s) were undertaking the activity

linked to Food Law was used. This was used as a proxy for the financial cost as it represents the opportunity cost of the employee(s)' time. To reduce the complexity of the survey and due to likely sensitivities with FBOs providing the information, we did not collect employee salary data from individual FBO responses. Therefore, we estimated the salary costs using data obtained from the Office for National Statistics (ONS) on the average hourly wage (excluding overtime) for all employees working in the most relevant Standard Industrial Classification (SIC) code for each of the FBO categories. The figure below sets out the average wages used to convert the time costs to monetary costs in our analysis.

Figure 9: Mean hourly wage for each FBO category, 2016

	Mean hourly wage (£)
Primary producers	£10.00
Manufacturer and packers	£13.84
Distributor/transporters	£15.43
Importer/exporters	£12.25
Supermarket/hypermarkets	£9.45
Retailer excluding supermarket/hypermarkets	£9.45
Restaurants	£8.67
Staff restaurant/canteens	£9.78
Hospital/residential homes	£9.78
Other caring premises	£9.78
School/colleges	£9.78
Hotel/guest houses	£10.79
Pub/Clubs	£8.82
Mobile food units	£8.67
Take-aways	£8.67

Source: KPMG analysis of data from ONS Annual Survey of Hours and Earnings (ASHE): 2016 provisional results

For the purposes of our analysis, we also separated the one-off and ongoing costs and analysed these individually. The costs were categorised predominantly based on the types of questions asked, where costs were provided relating to investments into premises, or set up costs associated with setting up internal systems, processes and frameworks these were treated as one-off costs in our analysis. Ongoing costs are estimated separately, and include ongoing time and financial costs incurred throughout each year, such as staff training, maintaining records and temperature control checks. These ongoing costs are annualised in our analysis. In our analysis of ongoing costs we adopted the following approach:

- Where we asked survey respondents to provide an average weekly cost figure in the survey, we multiplied the response by 52 in order to scale this to an annual figure. This assumes that FBOs operate all year round. This may lead to an overestimation of the ongoing annual costs where FBOs operate for fewer than 52 weeks a year.
- Where appropriate, we also multiplied the hours spent undertaking an activity by the number of staff involved in the activity so that the analysis fully captures the time cost incurred by the business.
- Survey respondents were asked to provide data relating to the number of inspections received over the last 3 years and the average costs (time and financial) associated with a single 'average' inspection. To capture total annual costs associated with inspections we drew on FSA data relating to the number of inspections conducted in 2015/16 (split by hygiene and standards

inspections). The average number of inspections per business was estimated using this data²³ and multiplied by the average cost per inspection to establish an average annual cost of inspection per FBO. This assumes that the cost per inspection of a single hygiene inspection is the same as a single standards inspection. We note that this assumption may not hold in situations where hygiene and food inspections are undertaken simultaneously and the overall inspection time is affected. However, when designing the survey it was deemed unlikely that an FBO would be able to distinguish between a hygiene and standards inspection and would be unlikely to know if both were conducted as part of a single inspection. Therefore, more detailed inspection cost data was not requested from FBOs.

In order to fully capture the cost of FSA regulation and Food Law incurred by FBOs, our survey was designed to capture costs relating to individual aspects of the regulatory regime as well as aspects of Food Law more widely. This was done to ensure that businesses responding to the survey considered all aspects of the regulation and, where applicable, the associated costs incurred. To capture the average cost per FBO (split by FBO type) of complying with the regulations, we adopted the following approach:

- The average cost of regulation per FBO site was estimated using the median value of the costs reported by survey respondents.
- Responses were weighted to reflect the number of sites a single survey response from an FBO covered. Some survey respondents were FBOs operating multiple sites. Where the respondent provided cost estimates across all sites, this was divided by the reported number of sites to give an average cost per site and where a multi-site respondent provided costs for a single site, it was assumed that the costs were representative of all sites operated by that FBO. Given the survey asked the respondent to provide their main activity, this average cost per site would not capture the potential difference in costs across sites, especially where businesses are undertaking multiple activities with different Food Law requirements. Where a respondent did not provide information on the number of sites it operated, in the absence of any other information it was assumed that it was a single site business.
- An average cost per site of complying with regulation and Food Law was estimated. In estimating the average costs per FBO site, where a survey respondent indicated that there is a zero cost associated with a certain regulatory requirement, those zero responses were included in the estimation of the range and averages (both mean and median). This accounted for the fact that some FBOs do not incur costs for certain aspects of Food Law requirements.

We have presented our results in “box and whisker” plots, which show the distribution of results across all our responses, by FBO type. The main box of the box and whisker plot shows the lower quartile, median and upper quartile values of costs reported for each FBO. The bottom line of the box is the lower quartile, while the line running horizontally through the box is the median value. It should be noted, however, that depending on the distribution of responses, the median line will not always run through the exact centre of the box. Finally the top line of the box is the upper quartile value. The “whiskers” are the vertical lines coming out of the top and bottom of the box plot. The bottom whisker line runs to the minimum value. Meanwhile the top whisker line, runs to the maximum. In some cases throughout the report, the maximum whisker lines will go off the chart as they are much greater than the upper quartile. Where this is the case the maximum value is reported.

As noted in Section 3.1.2, due to the potential biases of the data we analysed, as well as the lack of representativeness of many of the samples of FBOs surveyed, the costs presented within this report should be used with caution. The analysis should provide an indication of the level and distribution of the costs incurred by FBOs as a result of the regulatory regime and Food Law.

²³ We used FSA data on the number of inspections at the request of the FSA. The FSA considered that the FBOs surveyed may have difficulty being able to accurately recall the number of inspections that had taken place over the last three years. Therefore, the FSA considered that it was preferable for KPMG to use the inspections data held by the FSA.

This should be considered when drawing conclusions from the box and whisker plots. The sample sizes that the costs reported in each figure are based upon are set out in Appendix 1 of this report. The corresponding table from Appendix 1 is set out in the footnotes below each figure.

4 Cost of regulation for individual FBOs

There are two main areas of costs that FBOs incur as part of their operations. The first area is specifically in relation to the FSA's regulatory regime and the way in which it regulates the FBOs, mainly inspections that are undertaken by Competent Authorities.

The other way in which regulatory costs are driven by FBOs are through the legal requirements that FBOs are required to comply with as part of their operation. Each stage of the food production chain is governed by a wide range of laws, the vast majority of which originate from the European Union, but which the FSA and Competent Authorities are responsible for enforcing in the UK. This legislation includes specific requirements for premises, equipment, training and food safety procedures.

The costs associated with both FSA regulation and Food Law were analysed as part of the study and the results are detailed below.

4.1 Costs associated with the FSA's regulatory regime

4.1.1 Inspections

4.1.1.1 The inspection regime for FBOs

In order to ensure that FBOs comply with the relevant regulations, LAs are responsible for enforcing Food Hygiene laws and Food Standards. In order to monitor whether or not FBOs are complying with these regulations, LAs undertake a range of interventions.

Two types of inspections are undertaken; Food Hygiene and Food Standards inspections. If an FBO is located in a District Council area in England, the LA will undertake Food Hygiene inspections only, with the County Council undertaking the Food Standards inspections. London Boroughs, Metropolitan Borough Councils Unitary Authorities, District Councils in Northern Ireland and LAs in Wales all undertake inspections for both Food Standards and Food Hygiene.

The frequency of inspections is determined by the intervention rating scheme specified in the Food Law Codes of Practice, which take into account a variety of factors, including the inherent food risks in the business, the compliance level of the business found at the time of inspection and confidence in management controls including previous compliance history.

Food Hygiene inspections consider a wide range of elements including: type of food and processing; number and type of consumers potentially at risk; current compliance of the establishment; risk of contamination; and confidence in management. The result of the inspection is a rating on a scale from 0 to 197. The scoring then provides an intervention category of between A and E, which is assigned to the FBO. This intervention category then drives the frequency of the inspection by the LA.

Figure 10: Food Hygiene intervention rating and frequency of interventions

Risk Category	Score*	Intervention frequency
A	≥ 92	At least every 6 months
B	72 to 91	At least every 12 months
C	52 to 71	At least every 18 months
D	31 to 51	At least every 24 months
E	0 to 30	A programme of alternative enforcement strategies of interventions every three years

* In Wales the score for Risk Category C is 42 to 71 and for risk category D is 31 to 41.
Source: FSA, Annual report on UK local authority Food Law enforcement, 2015/16

For Food Standards inspections, a rating score is also given to each establishment to determine the frequency of LA inspections. The Food Standards intervention rating scheme includes: risk to consumers and other businesses; activity of food business; complexity of the laws that apply to the business; number of consumers potentially at risk; current compliance; and confidence in management. The score given at the inspection ranges from 0 to 180, with a higher overall score increasing the frequency of future inspections.

Figure 11: Food Standards intervention rating and frequency of interventions

Risk Category	Score	Intervention frequency
A	101 to 180	At least every 12 months
B	46 to 100	At least every 24 months
C	0 to 45	Alternative enforcement strategy or inspection every five years

NOTE: Establishments rated as low-risk (45 or less) need not be included in the planned inspection programme but must be subject to an alternative enforcement strategy at least once in every five years

Source: FSA, Annual report on UK local authority Food Law enforcement, 2016/17

In addition to the routine Food Hygiene and Food Standards inspections that take place, EHOs may also undertake an inspection following a complaint or as a follow on to a non-compliance that had been found in a previous inspection.

Complaints that are made to either the FSA or the Competent Authority often relate to alleged food poisoning, poor hygiene conditions or problems with food quality. Once a complaint has been received, an intervention may take place. An intervention may take the form of sampling of the food. This can either be a microbiological examination or a chemical analysis.

Follow up inspections can also take place if a non-compliance has previously been identified at the establishment. The Competent Authority will often conduct follow on meetings to establish whether or not FBOs have addressed non-compliances found at the time of the planned inspection.

When EHOs inspect an FBO, they are required to follow the FSA's Food Law Code of Practice.

In 2016/17, 447,000 interventions were undertaken by LAs across England, Wales and Northern Ireland for both Food Standards and Food Hygiene. Figure 12 below provides a breakdown of the interventions undertaken in 2016/17 across the different types of FBO.

Figure 12: LA interventions of Food Establishments in England, Northern Ireland and Wales for 2016/17

Intervention type	England		Northern Ireland		Wales	
	Food Hygiene	Food Standards	Food Hygiene	Food Standards	Food Hygiene	Food Standards
Inspections and audits	211,935	57,723	10,667	4,584	16,614	8,778
Verification and surveillance	46,092	7,066	4,039	765	4,303	650
Sampling visits	9,089	3,562	2,677	1,086	1,312	521
Advice and education	12,756	4,288	1,376	791	816	224
Information/intelligence gathering	26,774	5,345	666	546	1,582	373
Total	306,646	77,984	19,425	7,772	24,627	10,546

Source: FSA, Annual report on UK Local Authority Food Law enforcement, 2016/17

4.1.1.2 Cost to FBOs of inspections

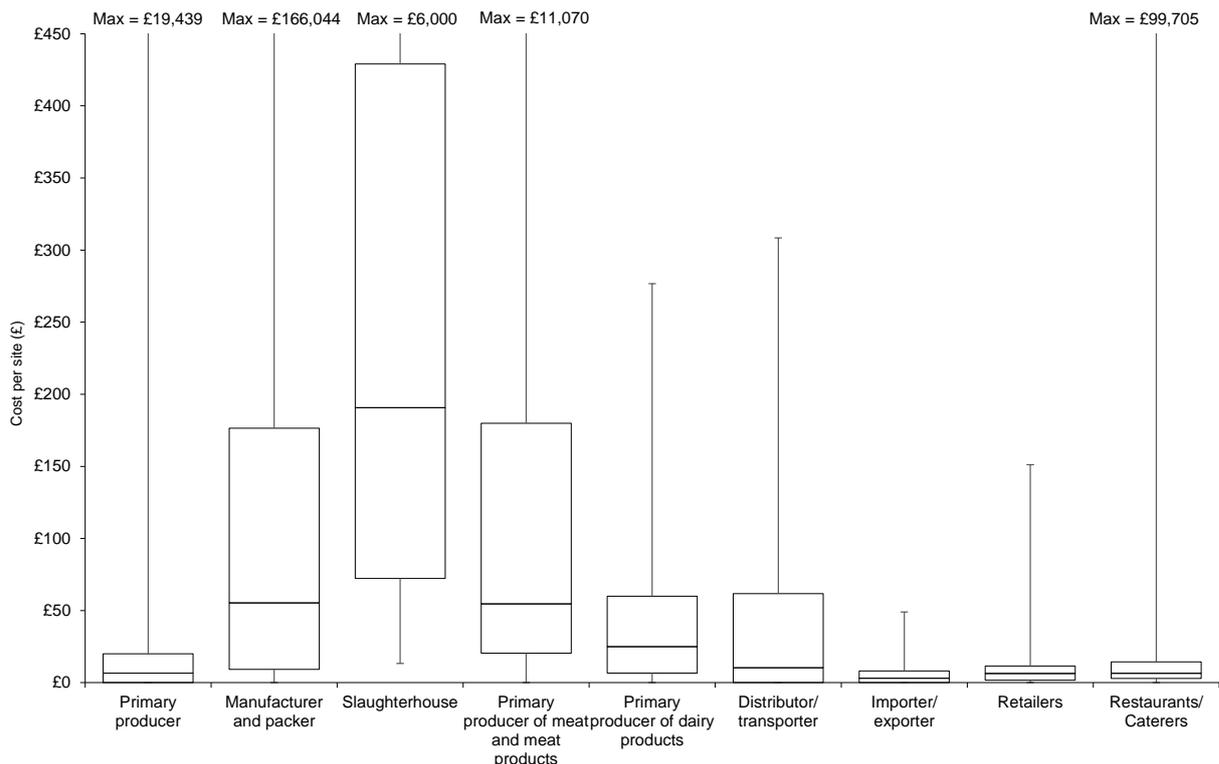
Survey respondents were asked to provide details of the time incurred and non-time related (financial) costs incurred in relation to LA inspections of their establishments and addressing any non-compliances identified during the inspections. As the FSA indicated that FBOs would be unlikely in many cases to be able to distinguish between Food Hygiene and Food Standards inspections, survey respondents were asked to provide information relating to averages for a typical inspection that had been conducted over the last three years (the maximum time that could elapse between inspections for an FBO). The FSA considered that for many FBOs, they will just see the inspector coming from the LA and will often not be aware of the type of inspection or whether it is covering food hygiene or food standards, or both together as can be the case.

The mean number of inspections per site reported by FBO respondents over the last three years was 2.7 inspections over the three year period (i.e. just under one inspection a year). Of the total 726 FBOs that responded to this question, just under 10% of the businesses reported receiving no inspections over the last three years.

Assisting with inspections

Figure 13 below sets out the time costs incurred by FBO respondents in assisting with inspections undertaken by LAs and the FSA. All the costs set out below are on an annual basis.

Figure 13: Annual ongoing cost of inspections by premises type²⁴



Source: KPMG analysis

Figure 13 above shows the time cost associated with inspections undertaken by the FSA and Competent Authorities. The chart shows that the premises type that has the highest median costs are the slaughterhouses, with this premise type also having the highest concentration of costs. Based on the inspections that the FSA undertakes specifically for slaughterhouses, this is what would be expected. Slaughterhouses are inspected on a frequent basis, with inspections taking place both prior

²⁴ The corresponding sample sizes to this box and whisker plot are set out in Figure 35 in Appendix 1.

to and post slaughter. Other than manufacturers and packers, those premises who are not involved with producing goods of animal origin tend to have a lower annual cost of inspection.

On a per inspection basis just over three quarters of FBO survey respondents indicated that an average inspection undertaken of their business takes less than 3 hours. Of this, 10% of businesses reported that an average inspection took less than an hour.

The time cost of inspection includes all members of staff that divert time from undertaking their day-to-day job to participate in each inspection. The median reported number of staff required for each inspection was 1 employee. Nearly 90% of survey respondents indicated that 2 or less staff were required to participate in the inspection. This suggests that the inspections undertaken by the LAs are not particularly time and labour intensive for the majority of FBOs.

The median reported time spent by all staff assisting with an inspection was 2 hours. In monetary terms, this is the time-related cost of this is £21 per inspection.

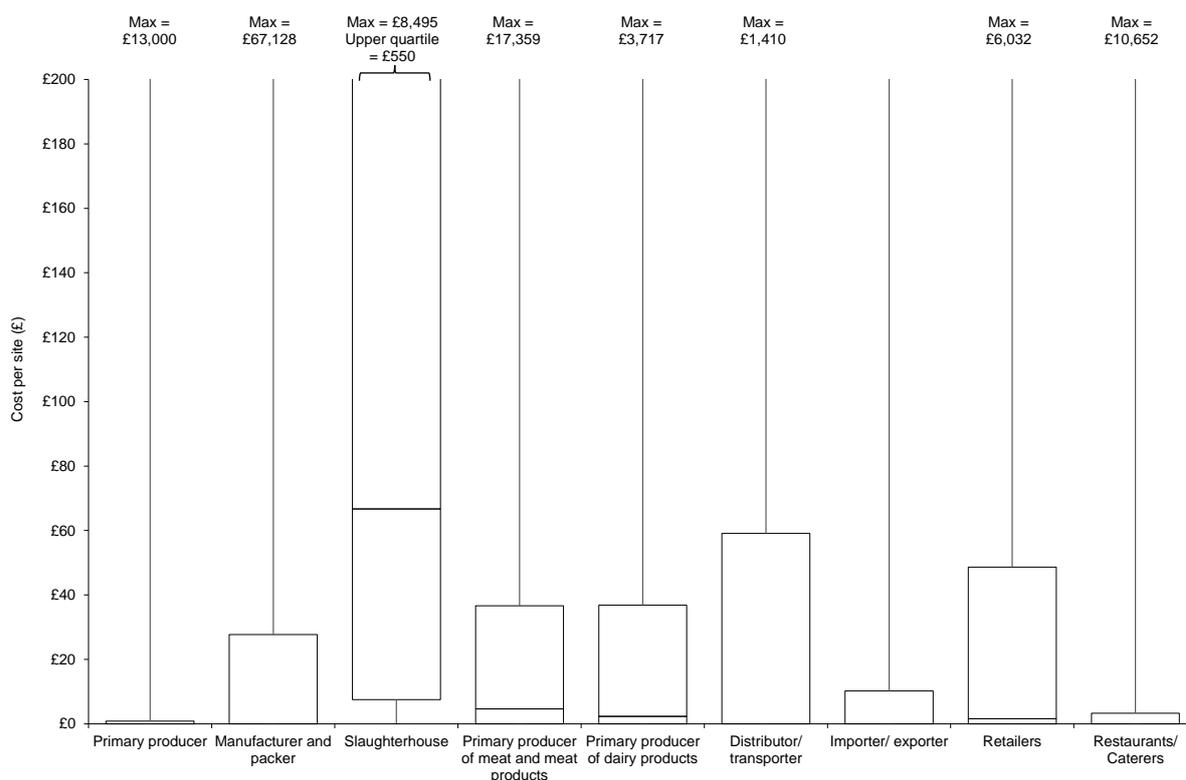
Addressing non-compliances

There may be some additional costs for FBOs as a result of the inspection regime. One possible outcome of an inspection is a finding of non-compliance(s) that must be resolved by the business. The FBO is responsible for the non-compliance and so must meet the cost of resolving it.

Of the 636 FBOs that responded to the survey question in relation to non-compliance, nearly two thirds reported that none of the inspections that they had received over the last 3 years had resulted in a non-compliance. This is higher than the wider population of FBOs in England, Wales and Northern Ireland, where only 25% of the population received at least one type of enforcement action or a written warning in 2016/17. The remaining respondents who did report a non-compliance indicated that enforcement approaches by the Competent Authority for these non-compliances ranged from improvement notices to suspension/ revocation of their approval or licence.

Figure 14 below sets out the reported costs incurred by businesses in resolving non-compliances.

Figure 14: Annual ongoing cost per site of resolving non-compliances, for FBOs that reported non-compliances by FBO type²⁵



Source: KPMG analysis

The majority of the costs of correcting non-compliances identified by inspectors were non-time costs, for example, where an FBO site needed to buy specific equipment or change aspects of its premises to comply with particular areas of regulation. These non-time costs incurred by businesses to resolve non-compliances varied across survey respondents. Although half of the 74 FBO respondents indicated that they had spent less than £1,000 to resolve the non-compliance(s), nearly a third of respondents indicated that the cost had been more than £3,000. This is likely to be a result of the wide range of possible non-compliance issues and the associated actions required to resolve them.

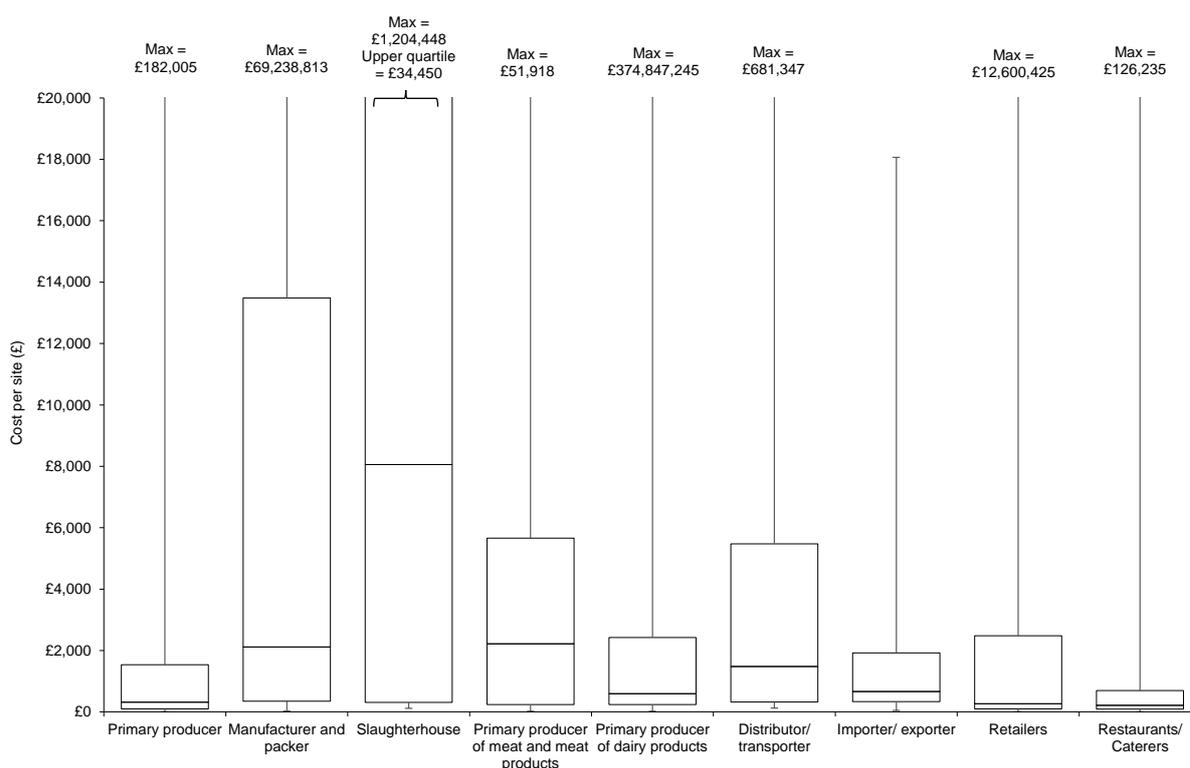
FBOs' own checks/ inspections

In order to ensure that their business is complying with FSA regulations on an ongoing basis, some FBOs may choose to undertake their own internal checks/ inspections, or use external consultants to help undertake checks, of their business' compliance. Although these checks are being undertaken to support an FBO in ensuring that it is complying with Food Law, this is something that is not required under the regulatory regime and goes above and beyond what is formally required by an FBO to ensure that its operations are fully compliant.

Figure 15 below sets out the costs per site incurred by business of undertaking these internal inspections. The costs presented in Figure 15 are based on those reported by the FBOs that carried out their own checks/ inspections. The vast majority of respondents indicated that they did undertake their own regular checks/ inspections to assess their compliance with Food Law. However, 5% of FBO respondents indicated that they did not.

²⁵ The corresponding sample sizes to this box and whisker plot are set out in Figure 35 in Appendix 1.

Figure 15: Annual ongoing cost per site of internal inspections, by FBO type²⁶



Source: KPMG analysis

For those FBOs that indicated they conduct their own checks/ inspections of compliance, the median value of the number of checks that businesses reported that they undertook a year was 12 and ranged from 1 to 900,000 and the reported time for each check/ inspection ranged from 0.01 to 832 hours.

The FBO's cost associated with using external consultants to conduct checks/ inspections is generally higher than the cost associated with conducting internal checks. However, far fewer FBOs use external consultants than carry out internal checks. 25% of survey respondents indicated that they had used external consultants to check compliance. Across all FBOs the minimum reported number of checks per site undertaken was 0.003 and the maximum was 100. Each check was reported to range between 0.2 and 48 hours with a median reported time of 4 hours.

4.1.1.3 FBOs' views on the inspection regime

In the qualitative interviews with FBOs, when discussing FBOs' views of FSA regulation in general, a number of FBOs expressed views in relation to the inspection regime.

Those interviewees that we did discuss inspections with generally had a positive view of the inspections, and found the EHOs conducting the inspections to be helpful and extremely pragmatic when assessing their business. However, a small number of businesses that we interviewed reported that they had a different experience with the inspections. They suggested that they had often been made to feel that they were being inspected under a premise that they were definitely doing something wrong, and that the onus was on them to prove to the EHOs that this was not the case. It is unclear, however, how representative this is of all FBOs given the limited number of interviews conducted with FBOs in this category.

²⁶ The corresponding sample sizes to this box and whisker plot are set out in Figure 35 in Appendix 1.

Another common theme that came through from the interviews was around the consistency of application of Food Law. Some of the multi-site businesses interviewed, and some single site businesses who had moved between different LA areas, stated that there had been instances where the interpretation of Food Law and what businesses needed to be doing varied by LA area and even between EHOs. This was a concern for these businesses as they considered that the outcome of the inspection was often driven by the EHOs interpretation of the Food Law and how they thought it should be enforced, as opposed to there being a transparent and fully consistent way in which the Food Law was being applied.

4.2 Costs to FBOs of complying with Food Law

In addition to the costs that FBOs incur due to inspections, there are requirements under Food Law that businesses are legally obliged to comply with.

These Food Law requirements include ensuring that FBOs are registered with the relevant authorities, that they comply with specifications with regards to equipment and premises and that they undertake specific food safety requirements as part of their ongoing operations.

As with the inspections costs, these costs can be both financial as well as time related, and may occur on a one-off or ongoing basis. The below sections set out the costs by premises type, for each area of legislative requirement.

4.2.1 Registering as a FBO

4.2.1.1 Registration requirements for FBOs

Any business that will be carrying out food operations needs to be registered with a LA. This includes catering businesses run from a residential premises, as well as mobile or temporary premises. Food operations include:

- selling food;
- cooking food;
- storing or handling food;
- preparing food; or
- distributing food.

In order for a FBO to register its premises with a LA, it needs to complete a registration form that can be downloaded from GOV.UK²⁷. Although the information required by each LA is broadly the same, there is some slight variation between forms. In general, as part of registration, FBOs are required to provide information covering: business address; the food operations contact information of the applicant. There is no cost to register and the registration cannot be refused. However, if an FBO is found to not have registered prior to opening, the business owner may be fined, imprisoned for up to 2 years, or both.

Additionally, certain types of FBOs require approval before they open and are able to operate. For example, businesses that are involved in handling meat, fish, egg or dairy products need to be inspected and approved by the LA prior to operating. This is unless these businesses sell direct to the public, or retailers such as caterers, pubs and restaurants, as long as the supply of food is local, marginal and restricted.

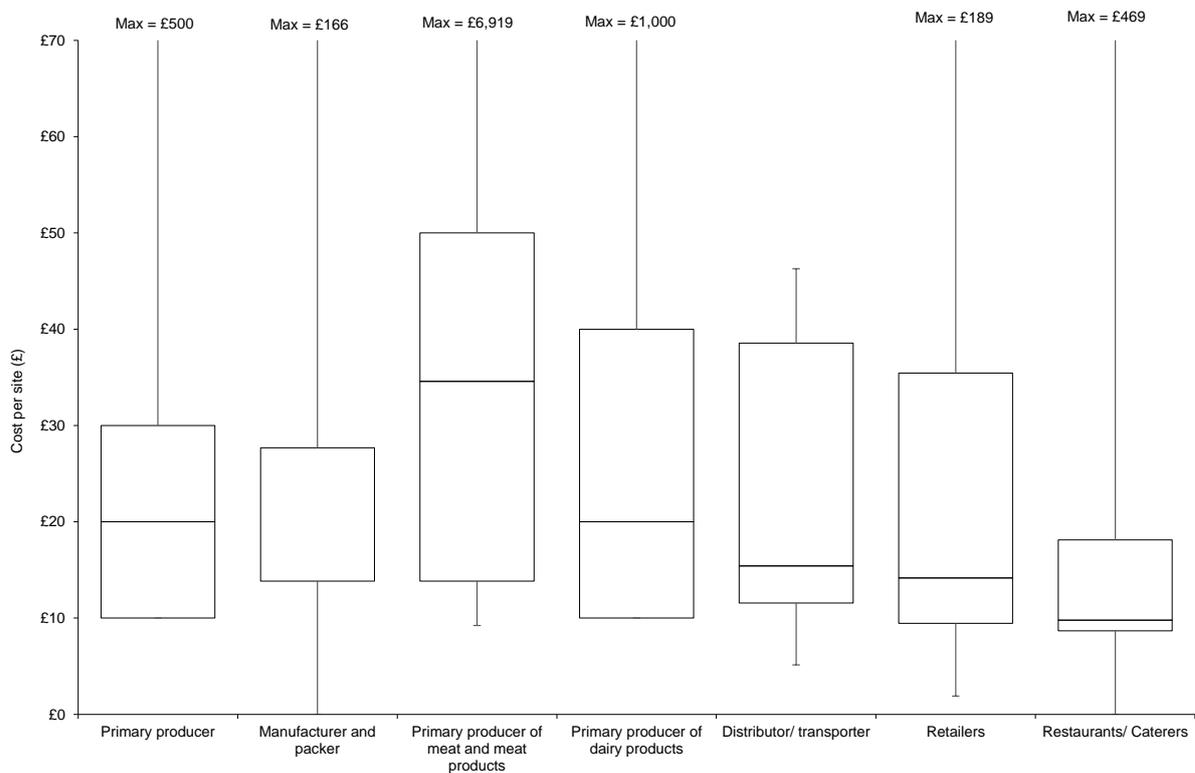
²⁷ The link for Food Businesses to register can be found at: <https://www.gov.uk/food-business-registration>

4.2.1.2 Cost of registration for FBOs

As part of the survey, respondents were asked to provide information about the time incurred as part of registration. Questions on the cost of registration were only asked to businesses who had been in operation for less than five years²⁸.

Figure 16 below, shows the distribution of costs associated with registration across FBO types.

Figure 16: One-off cost per site of registering as an FBO, by FBO type²⁹



Source: KPMG analysis

The survey responses indicate that the cost per site of registering as an FBO is generally low, however there is some variance across FBOs and the wide range suggests that there are outliers in the data. The maximum costs reported range from £46 per site for distributors/ transporters to £6,619 per site for producers of meat and meat products.

82% of the survey respondents indicated that it took less than 3 hours to register their business. The median time to complete the registration across all FBO respondents 1 hour.

Survey respondents were also asked about the ease of obtaining the information that was required to register their business. Of the 287 responses received to this question, 75% either strongly agreed or agreed that it was easy to obtain the information required, 15% said that they neither agreed nor disagreed, and only 10% said that they either disagreed or strongly disagreed.

²⁸ This was done as it was considered that businesses who had been in operation for longer than 5 years may not be able to accurately recall registration time, and therefore could skew the results.

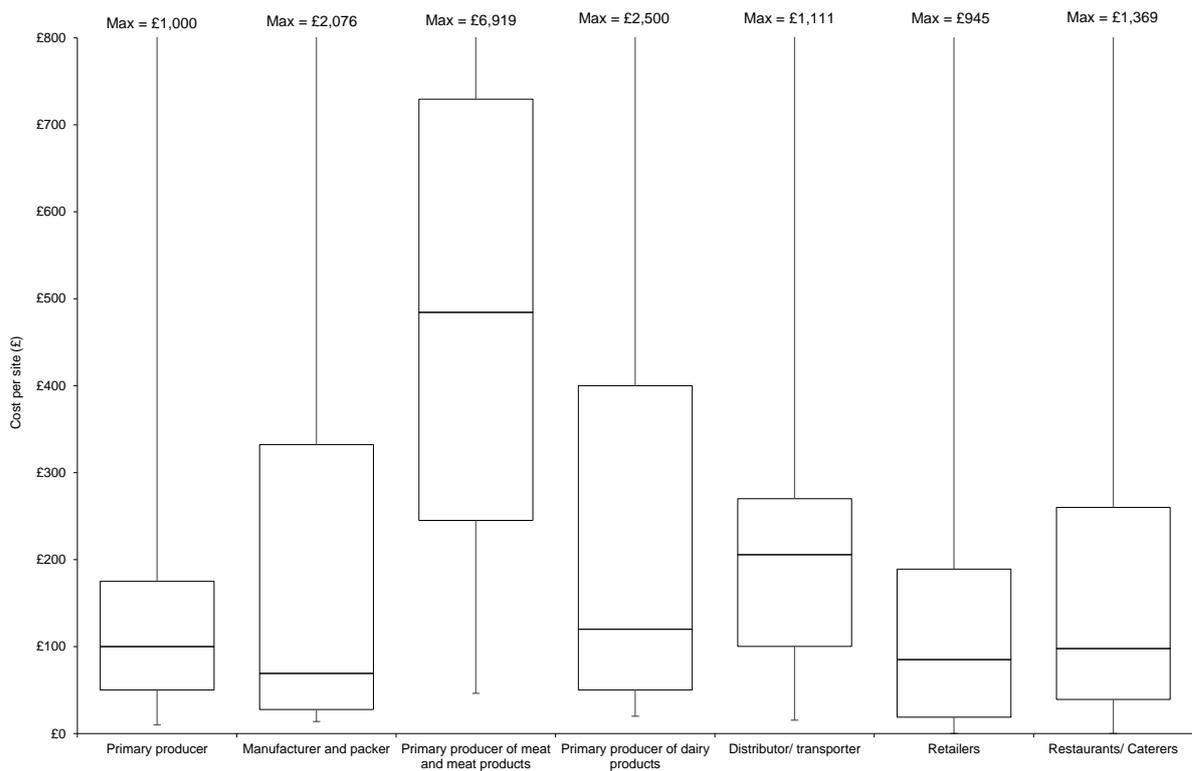
²⁹ The corresponding sample sizes to this box and whisker plot are set out in Figure 34 in Appendix 1.

4.2.2 FBOs' understanding of Food Law

In addition to FBOs having to register as a food business, they also need to have a comprehensive understanding of the regulations that apply to their businesses, to ensure their operations are compliant from the outset.

To understand the costs associated with this, survey respondents were asked to estimate the amount of time that was spent by all staff in the business familiarising themselves with Food Law relevant to the business. Figure 17 below sets out the hours spent by all employees per site and the cost associated with the time spent by all employees per site understanding Food Law as reported by FBOs.

Figure 17: One-off cost per site of familiarising with Food Law, by FBO type³⁰



Source: KPMG analysis

The time spent by all FBO respondents in understanding the regulations that apply to their business varied from 0 to 500 hours, which equates to £6,919 in monetary terms.

Nearly 80% of respondents indicated that they and their staff had spent less than 30 hours on familiarising themselves with the regulations. FBOs interviewed also indicated that they had not needed to spend a significant amount of time familiarising themselves with the regulations. This is likely to either be because respondents already had a degree of awareness of Food Law prior to setting up their business or that they found the Food Law requirements that apply to them relatively easy to understand.

The online survey also asked respondents how easy they found it to understand which requirements applied to their specific business operations. Over 80% of the businesses responded that they strongly agreed or agreed that it was easy for them to understand the regulations that applied to them. This high figure may be due to the types of businesses that responded to the survey. It could be the case

³⁰ The corresponding sample sizes to this box and whisker plot are set out in Figure 34 in Appendix 1.

that businesses that responded are more likely to be engaged with Food Law and therefore have a deeper understanding of the requirements.

The consensus view emerging from the qualitative interviews was also that the FBOs had generally found it easy to understand the regulations. In a lot of these cases, FBOs we interviewed indicated that before starting up their own FBO they had prior experience of working in a food businesses, or had friends or relatives who had an in-depth understanding of food regulations which aided their understanding of the requirements and eased the process.

Those individuals we interviewed who indicated that they had no prior experience in relation to food regulations before starting their FBO indicated that they had found it challenging to understand the regulations.

Approximately a third of businesses interviewed indicated that they had established good relationships with their EHO(s). The EHOs had helped them through the business set up process, in terms of ensuring the premises were suitable for the type of businesses, and ensuring they put the right processes in place to comply with regulations. The FBOs who indicated they used the EHOs in this way suggested that they had found them to be extremely helpful, and found it a useful way in which to establish effective relationships with the EHO for any future inspections. For FBOs who were members of trade associations, they also stated that there was a lot of support provided by the trade association in terms of understanding the specific area of Food Law that applied to the business that they were operating.

We also asked businesses in our online survey whether or not they used the services of an external consultant in order to help them to understand the FSA regulation that applied to their business. Less than 20% of the 285 respondents to this question used external consultants. For those FBO respondents who had employed external consultants to support them, the cost per site ranged from £0 to £15,000, with respondents from both producers of meat and meat products and restaurants/ caterers reporting the maximum cost.

4.2.3 Staff training to meet Food Law requirements

4.2.3.1 FBOs' approach to training staff

Although there is no legal requirement for employees of food businesses to attend a formal training course or to get a specific qualification in relation to food hygiene, FBOs are legally obliged to ensure that anyone in their business who is handling food is supervised or trained in food hygiene to reflect their role. They are also legally obliged to make sure that the employees that are responsible for the development and maintenance of the establishment's food safety management system have received adequate training.

FBOs meet these obligations in a number of ways, for example through on-the-job-training and supervision or through more formal training and qualifications.

There are formal Food Hygiene training courses available to complete either online or in person, that provide employees with various levels of information on Food Hygiene requirements. There are three levels of Food Hygiene course that can be undertaken, Level 1, 2 and 3³¹, depending on the role of the staff member. The Food Hygiene certification received from this formal training does not have an expiry date. It is left to the discretion of the FBO or EHO to decide when a refresher course may be required.

Various food industries also produce industry guides that are recognised by the FSA and set out the EU Food Law requirements that businesses need to follow. There are also a number of food safety

³¹ Level 1 covers basic food hygiene and is aimed at people who work in an area that prepares food but don't handle it themselves. Level 2 is aimed at those who are involved in the preparation of food, and Level 3 is for supervisors of food handlers.

coaching videos available on the FSA website, in addition to FSA online training on food allergy, vacuum packing and food labelling requirements.

FBOs interviewed in general reported that training of their staff in relation to Food Hygiene was delivered through both formal and informal training on the job. Many FBOs interviewed indicated that they had chosen to enrol their staff in the Level 2 Food Safety course, as they considered that this was not expensive and ensured that employees with limited previous experience in Food Hygiene had a basic understanding of the requirements before coming into contact with food. However, given that we only interviewed a small number of FBOs, and the sample was likely to contain businesses most engaged with meeting Food Law and regulatory requirements, these findings may not be representative of all FBOs.

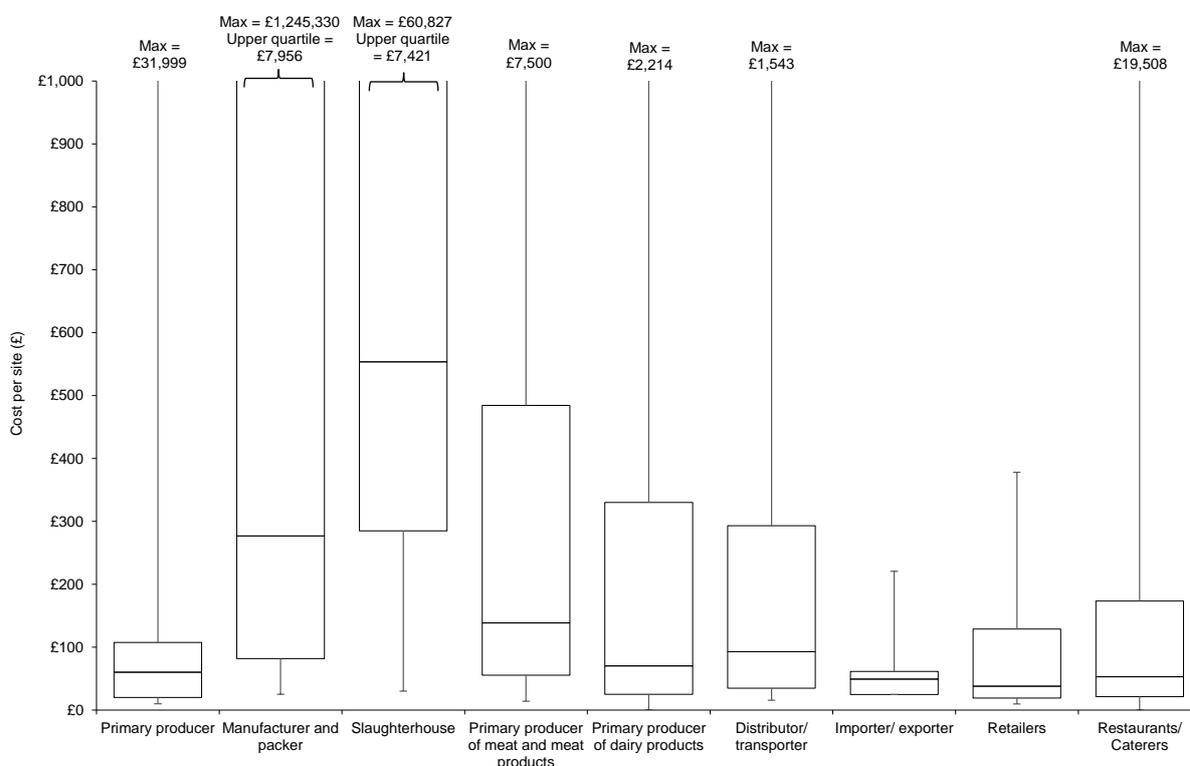
4.2.3.2 Cost of staff training to comply with Food Law requirements

Survey respondents indicated that training employees in relation to Food Law drives costs for their business. This includes time-related costs associated with employees undertaking training for a proportion of time rather than their day-to-day job.

Nearly two thirds of FBO respondents indicated that they had training programmes in place for their staff members to ensure that they understand the food regulations that are relevant to the FBO in which they are employed. While this may not be representative across all business types, it suggested that of the businesses that responded to the survey, the majority had training programmes in place.

The reported costs that FBOs have specifically incurred due on the job training are set out in Figure 18 below.

Figure 18: Annual ongoing cost per site associated with on the job training for businesses that provide staff training, by FBO type³²



Source: KPMG analysis

³² The corresponding sample sizes to this box and whisker plot are set out in Figure 36 in Appendix 1.

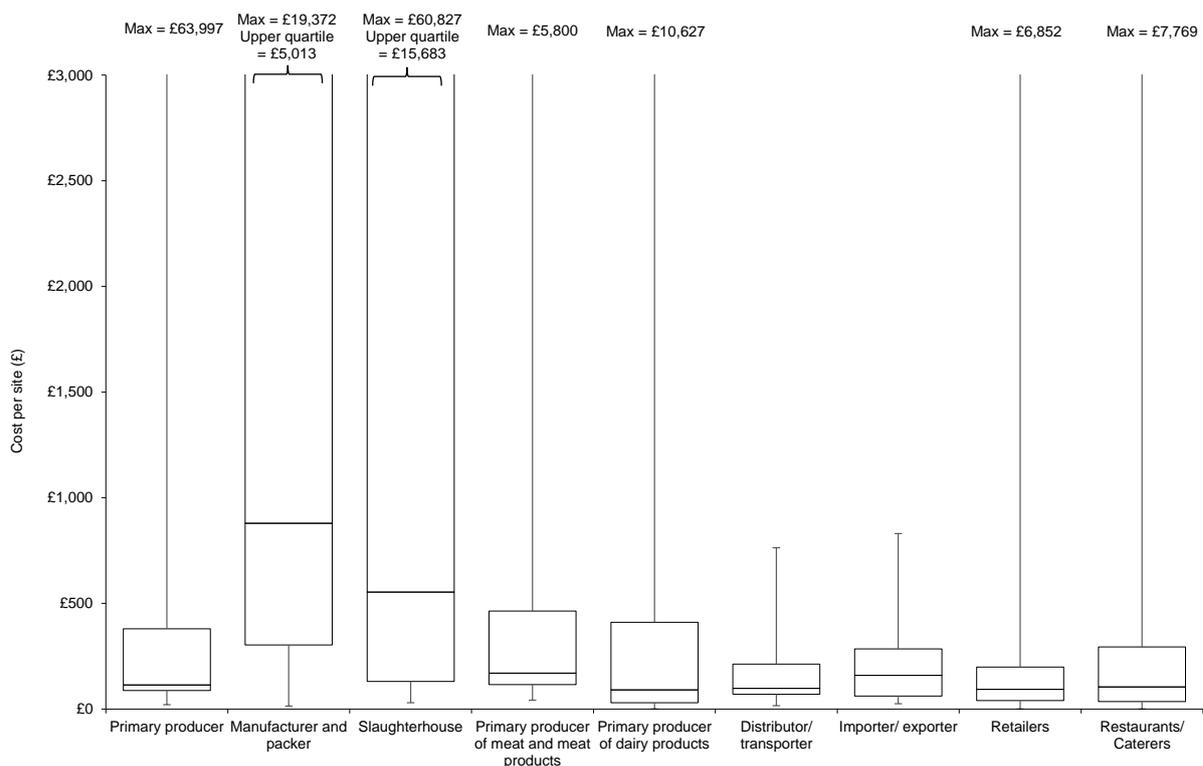
As demonstrated by the differences between the upper and lower quartiles of responses (the size of the box), for some types of FBOs there was a wide range of reported costs. Across the premise types, the distribution for on the job training costs are widest for manufacturers and packers and for slaughterhouses. Although the distributions of the responses are wider for these two premises types, the median cost per premises for all business types are under £560 demonstrating that across the businesses there are, on average, similar costs involved in training staff.

On a per employee basis, those FBOs that indicated they offer on the job training reported a median time of 1.3 hours per employee per annum. In monetary terms this is equivalent to a time-related cost of £14 per employee.

Figure 18 above also highlights that there are some potential outliers in the responses received from some businesses. For primary producers and restaurants and caterers, the majority of responses are clustered around the median, but there are some business that have reported costs that are significantly higher than this.

In addition to on the job training, there is additional formal training that businesses can put in place for their staff. This training can either be delivered externally or internally. Figure 19 below sets out the cost of this formal training on a per premises basis.

Figure 19: Annual ongoing cost per site associated with formal training for businesses that provide staff training, by FBO type³³



Source: KPMG analysis

Formal training covers both formal training that is provided internally and formal training delivered by an external provider. Similar to on the job training, the reported costs associated with formal training are most varied for manufacturers and packers and slaughterhouses. For manufacturers and packers reported cost per site ranges from £14 to £19,372 and for slaughterhouses the range is £30 to £60,827.

³³ The corresponding sample sizes to this box and whisker plot are set out in Figure 36 in Appendix 1.

For the other FBO types, the responses are generally less varied and tend to be more clustered around similar levels, with all other FBO types reporting a median cost of less than £170 per site. However, it should be noted that Figure 19 suggests that there are clear outliers in the responses. For example, primary producers reported a median cost per site of formal training of £114 but one respondent reported a maximum value of £63,997. These differences in cost are likely to be driven not only by business type but also by size. It would be expected that the costs associated with training are higher for larger businesses with a greater number of employees.

There is little difference between the reported time costs for FBO respondents of formal internal training and formal external training. This may be expected given that the time taken to train staff in the requirements should be broadly the same irrespective of who is delivering the training. However, where external trainers are used, there is also likely to be a financial cost associated with the training provision. There may also be a costs associated with preparing training material for internally provided training.

The costs associated with staff training provision covers a number of areas, including the preparation of training materials and the hiring of external providers.

Overall the median cost reported across all FBO respondents of providing formal training to employees was £24 per employee. This included the time costs associated with the provision of staff training such as the preparation of training materials.

The lowest reported non-time cost associated with staff training in food related regulatory requirements was associated with preparing internal training materials. The reported median cost of hiring external providers to train staff is two and a half times more per site. This suggests that a more cost effective way to deliver training, where feasible, may be to deliver internal training to reduce the associated costs.

4.2.4 FBOs' use of food safety management systems

4.2.4.1 Overview of food safety management systems

Food safety management systems are designed to help FBOs manage food safety procedures within their business. All FBOs must develop documented food safety procedures based on Hazard Analysis and Critical Control Points (HACCP) principles. This is required under EU Food Hygiene rules.

In order to assist businesses with developing and maintaining these food safety procedures, the FSA has developed a range of food safety management system documents and guides for different sectors of the food industry. These are:

- **Safer food, better business (SFBB):** There are a number of SFBB food safety management packs developed for different types of business, including: caterers; retailers; childminders; residential care homes; colleges; and for restaurants and takeaways that serve either Chinese or Indian cuisine. These packs are designed to give businesses straightforward advice on food safety and Food Hygiene that applies specifically to the business that they operate. Businesses are able to either print the packs and keep the hard copies of the records, or they can be filled out and maintained electronically.
- **MyHACCP for small food manufacturing business:** MyHACCP is a free web tool that has been developed by the FSA that helps businesses to develop a food safety management system based on Hazard Analysis and Critical Control Point (HACCP) principles. The online tool produces a system that shows how the food business identifies and controls any hazards that may occur in the food it manufactures. The MyHACCP tool is aimed predominantly at small manufacturing businesses in the UK, although businesses in other food sectors are also able to access and use this.

- **Safe Catering:** This is a FSA in Northern Ireland guide to help catering businesses and retailers with a catering function to comply with food legislation. It also aims to help these businesses to produce a food safety management plan based on HACCP principles and to keep the required records.
- **HACCP in meat plants:** This is a short guide to completing a HACCP plan specifically for meat plants. The FSA produced this with industry assistance, to provide more specific guidance for meat producers. It includes a guide with information on training, and manual, CD-ROM, model documents and a food safety management diary.
- **The supply of wild game: a guide to Food Hygiene legislation:** This guide provides specific information on the hygiene regulations that apply to food businesses that supply wild game for human consumption. It also applies to those who hunt wild game and supply it either in-fur or in-feather or as small quantities of wild game meat. There is a specific HACCP plan available as well as examples of good and bad practice that these businesses can use.
- **Butchers: The HACCP Review and Guidance Manual for Retail Butchers:** This guide was produced by the Meat Training Council and provides details to retail butchers as to how they can develop their own tailor made food safety management procedures.

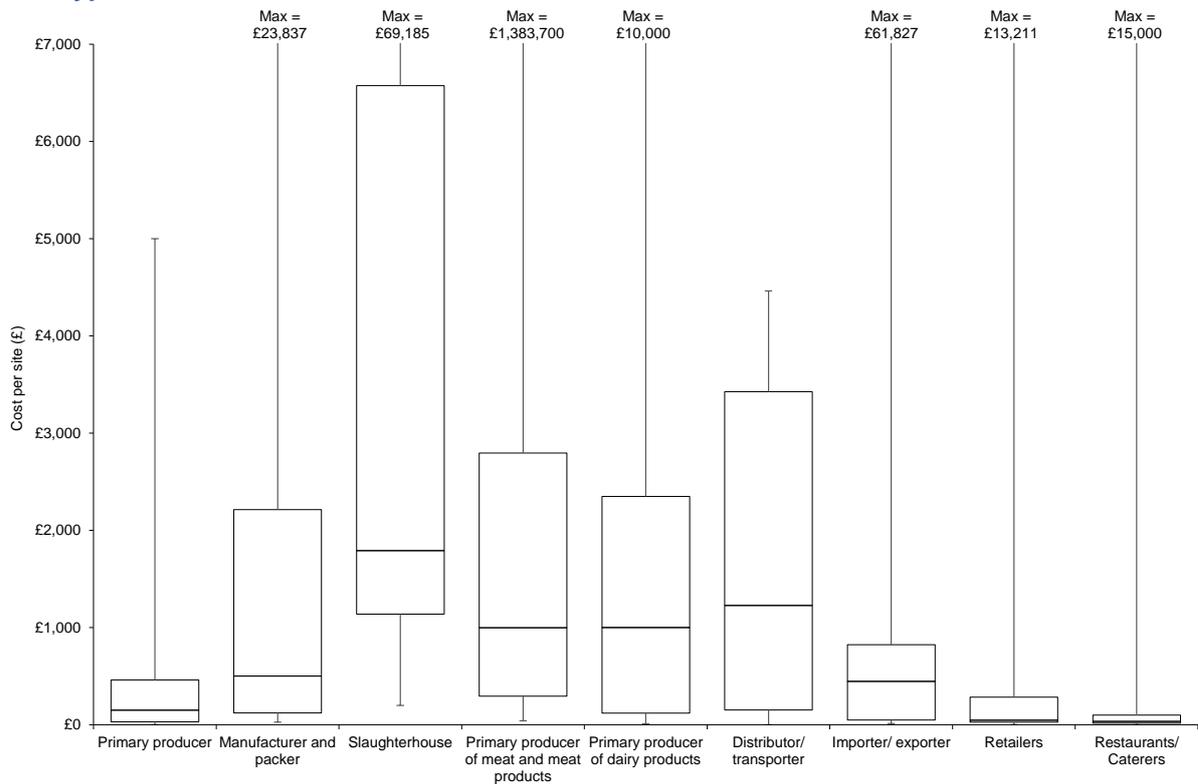
The food safety management system procedures that a business has in place will be reviewed as part of inspections undertaken by LAs.

4.2.4.2 **Cost to FBOs of implementing and maintaining food safety management systems**

Food safety management systems are an imperative part of a business' operations and ensuring that a FBO is able to comply with legislation. There are time and non-time costs driven by setting up and maintaining these frameworks.

Figure 20 below sets out the costs reported by FBO survey respondents in relation to setting up their food safety management system.

Figure 20: One-off cost per site associated with setting up food safety management system, by FBO type³⁴



Source: KPMG analysis

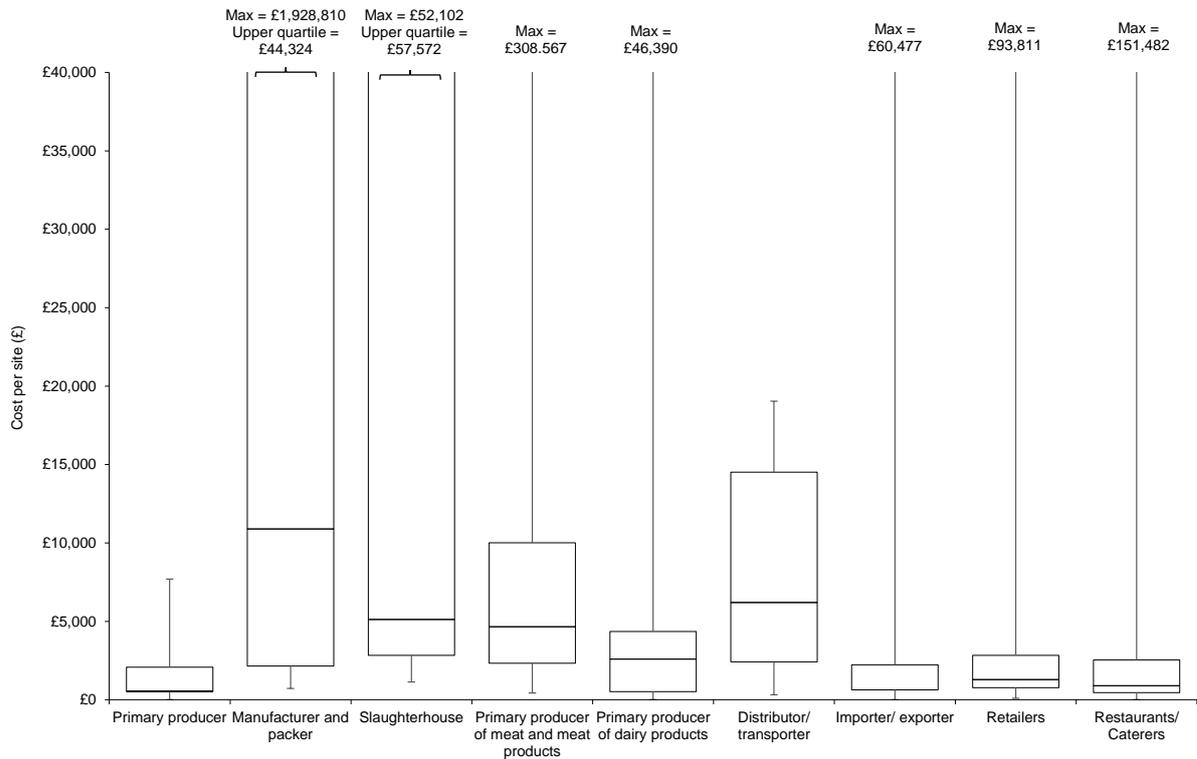
Around 80% of FBO respondents indicated that they did not use an external consultant to establish their food safety procedures, meaning that the majority of businesses set the framework up themselves. The time costs of setting up the system varied by business, with slaughterhouses and producers of meat and meat products spending the most in terms of setting up the system. This may be due to the size of some of the businesses who answered this question and may be reflective of the higher risk nature of these FBOs.

For those FBO respondents that employed an external consultant to assist with setting up a food safety management system, the median reported cost was £2,000 but varied substantially by business type. Overall the cost of external consultants ranged from £0 to £100,000 with retailers reporting the highest cost levels. The respondent that reported the maximum cost level was a large multi-site business that undertakes multiple food related activities and therefore the high cost level may be indicative of the complexity of the business.

FBOs also reported costs in relation to the ongoing maintenance of their food safety management systems and ensuring that the requirements of the frameworks are completed on an ongoing basis. These reported ongoing costs of operation are set out in Figure 21 below.

³⁴ The corresponding sample sizes to this box and whisker plot are set out in Figure 37 in Appendix 1.

Figure 21: Annual ongoing cost per site associated with maintaining food safety management system, by FBO type³⁵



Source: KPMG analysis

Maintaining a food safety management system includes the annual ongoing costs associated with:

- the time spent by employees operating the food safety management system;
- the use of external consultants in the operation of the food safety management system;
- the purchase of equipment associated with the operation of the food safety management system; and
- other costs associated with the operation of the food safety management system.

As shown in Figure 21 above, the costs associated with maintaining food safety management systems varies across FBO types. The reported cost of maintaining food safety management systems ranges from £0 to £1,928,810 with manufacturers and packers reporting the highest costs.

The highest reported costs associated with maintaining the food safety management system are the time costs of employees. This is likely to be driven by the time taken by employees to maintain the records and undertake the checks that are required as part of the food safety management framework.

There are also non-time costs associated with operating the food safety management system, which includes the costs incurred by businesses in using external consultants to ensure that the system is being correctly used on an ongoing basis. However, only 17% of FBO respondents with food safety management systems in place indicated that they used external consultants, with the rest of the FBO respondents using their own internal staff to manage the system.

³⁵ The corresponding sample sizes to this box and whisker plot are set out in Figure 37 in Appendix 1.

FBOs also reported some additional costs associated with operating food safety management systems. Based on some of the qualitative interviews that were conducted, possible examples of what could be driving these costs includes producing food manuals or diaries for the staff to complete as part of the food safety management framework.

4.2.5 FBOs' use of IT systems to comply Food Law requirements

4.2.5.1 Overview of FBOs' use of IT systems to maintain records in order to comply with Food Law requirements

As part of ensuring that businesses are complying with Food Law, food businesses are required to keep records in order to be able to demonstrate to inspectors that the relevant checks and procedures have been completed. These records can either be physical records, or they can be maintained electronically.

In addition to general records that need to be kept on the checks that form part of the food safety management framework, there are also other records that some businesses need to maintain and retain evidence that these have been maintained. Under EU legislation FBOs need to be able to identify any of the suppliers that have supplied any substance that will be used in the food produced, as well as detailed records of the businesses that they have supplied the food to. These records need to be made available to the authorities (either the LA or FSA depending on the type of business being inspected) on demand.

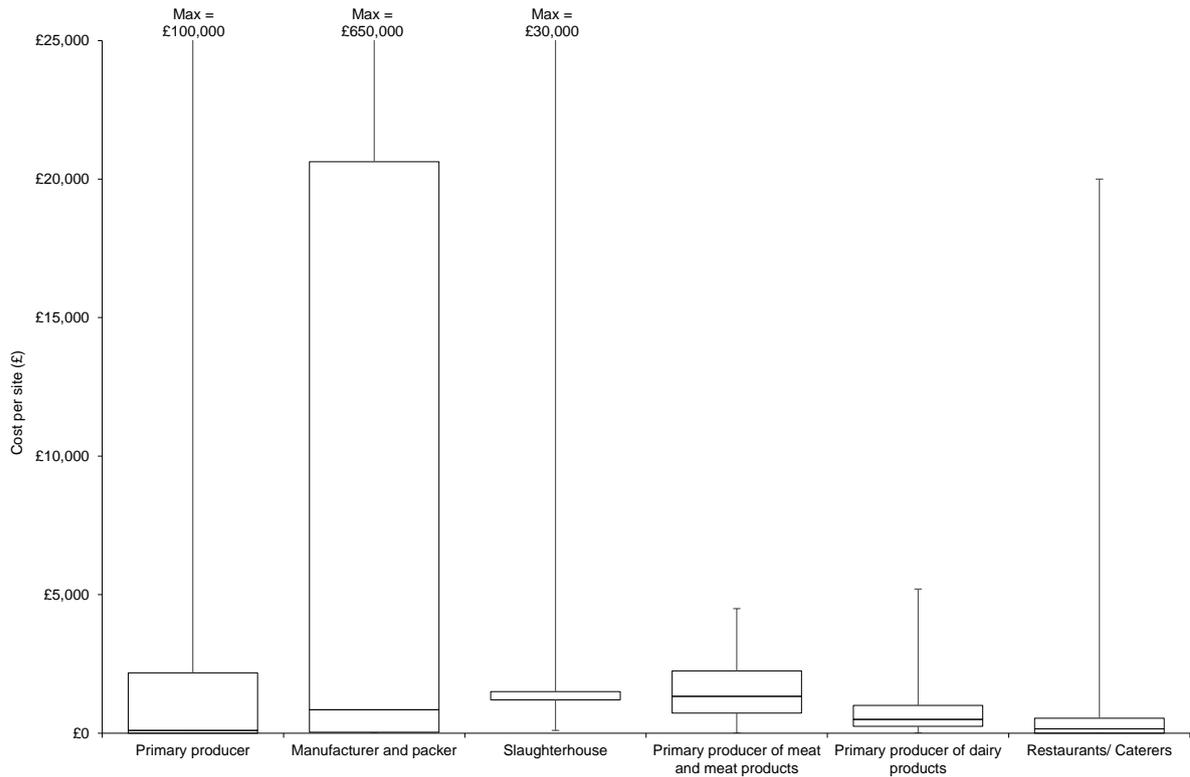
Some FBOs may invest in a specific IT system in order to enable their staff to electronically record the checks that have taken place and to maintain supplier records. This may make it easier for these businesses to comply with the specific regulations in relation to maintaining records.

A fifth of survey respondents indicated that they used IT systems specifically to maintain records to comply with FSA regulations, indicating that most businesses use alternative means in order to maintain their records

4.2.5.2 Cost to FBOs of implementing and maintaining IT systems to maintain records in order to comply with Food Law requirements

As set out above, the FBOs that indicated that they use IT systems specifically to maintain records to comply with FSA regulations are in the minority. However, for those businesses who do use IT systems to maintain records, they reported incurring costs in setting up the specific systems to do this. The reported non-time cost of installing the IT systems specific to complying with Food Law requirements are set out in Figure 22 below.

Figure 22: One-off cost per site associated with the installation of IT system for those FBOs using IT systems, by FBO type³⁶



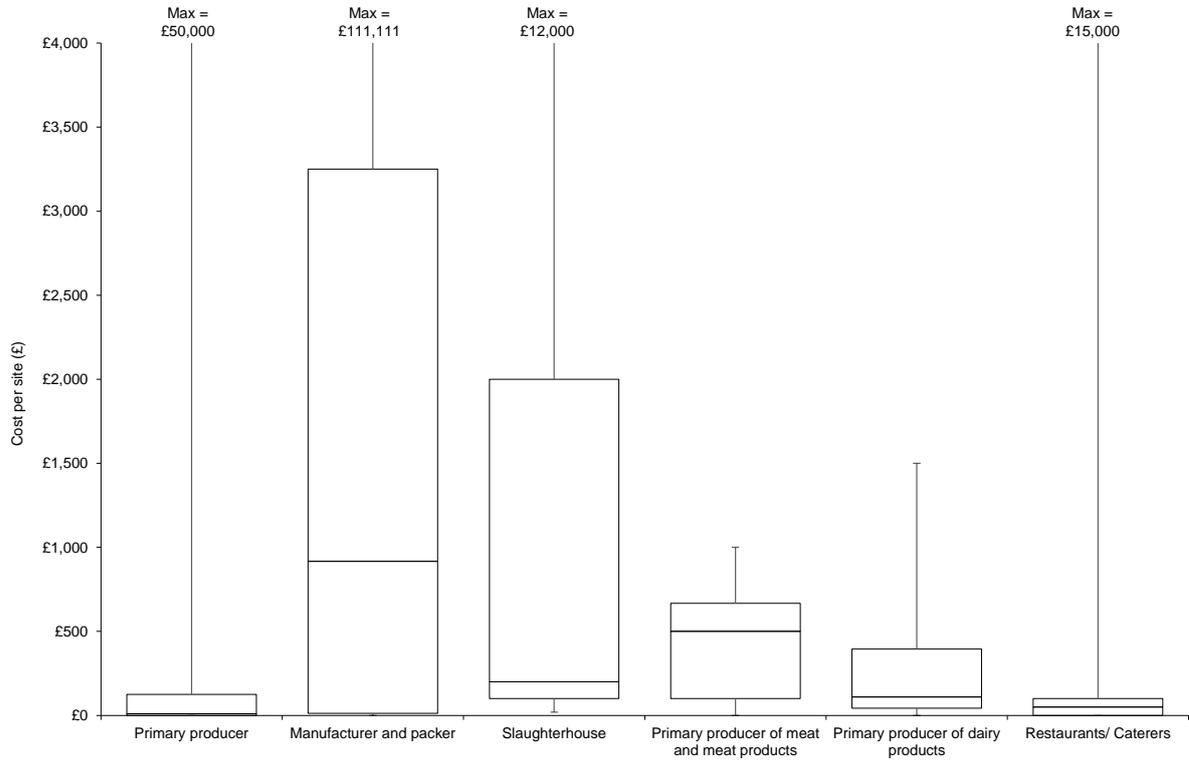
Source: KPMG analysis

The median reported costs of installing IT systems for complying with Food Law record keeping requirements are relatively low with all median costs reported being £1,500 or less. This may be because for larger FBOs in particular, who may be more likely to use IT systems for the purpose of regulatory compliance, these costs may be spread across multiple sites, thus reducing the per site cost. Despite relatively low median reported costs associated with the installation of IT systems, there are high reported maximum values with one manufacturer and packer reporting a cost of £650,000.

In addition to the one-off cost associated with installing the system, there is also an ongoing cost of maintaining this system as well as the cost of maintaining the records themselves. Figure 23 sets out the cost per site associated with maintaining an IT system for those FBOs that use an IT system.

³⁶ The corresponding sample sizes to this box and whisker plot are set out in Figure 38 in Appendix 1.

Figure 23: Annual ongoing cost per site associated with the maintenance of IT systems for those FBOs using IT systems, by FBO type³⁷

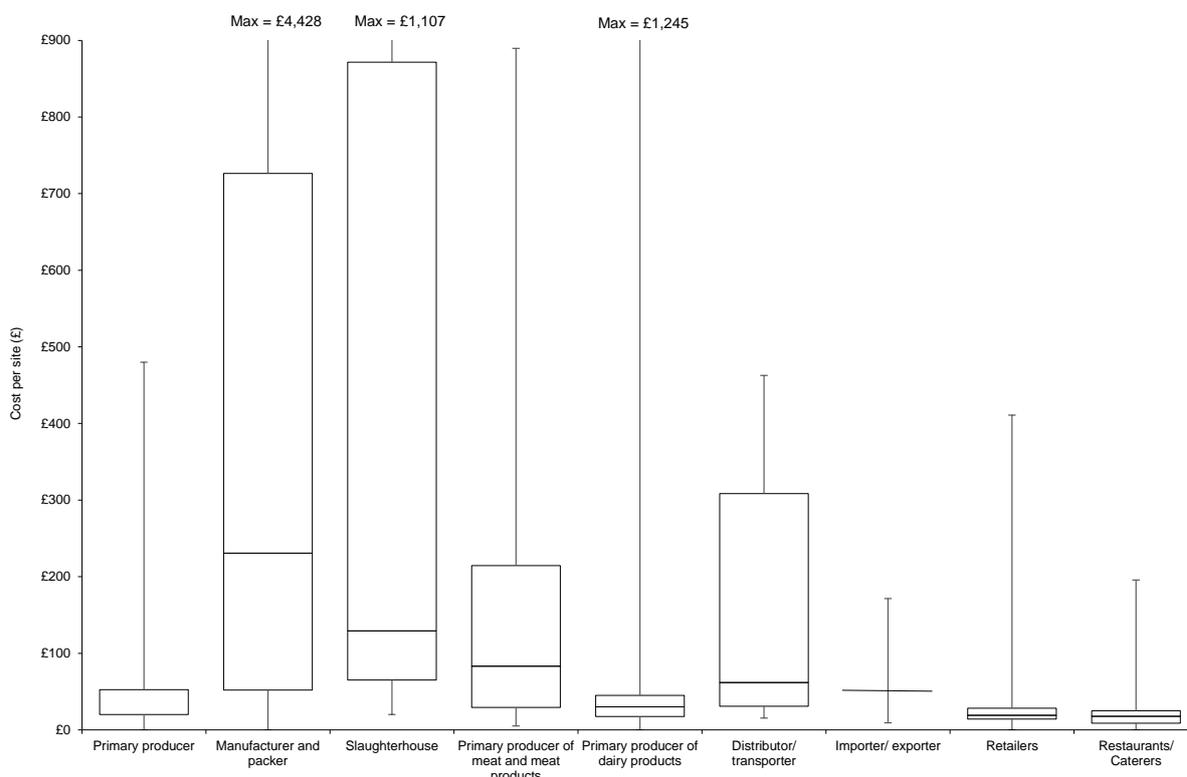


Source: KPMG analysis

The annual cost of maintaining the IT system accounts for the highest costs reported by FBO respondents. However, these costs vary substantially by business category, but this may be driven by the size and complexity of the system set up for each of the business types.

³⁷ The corresponding sample sizes to this box and whisker plot are set out in Figure 38 in Appendix 1.

Figure 24: Annual ongoing cost per site associated with the maintaining of customer and supplier records, by FBO type³⁸



Source: KPMG analysis

Figure 24 shows the annual ongoing cost per site associated with maintaining customer and supplier records. The reported time costs of maintaining the records are comparatively low. Based on the results from the survey, approximately the same amount of time is spent by FBO respondents on maintaining supplier and customer records. This time varies across business type however. This would be expected given that the requirements for records varies, with FBOs in the manufacturer and packer category for example needing to keep detailed records of both its suppliers and customers. Whereas retailers will only need to keep records of their suppliers and not the details of all the customers the food products were sold to. This is reflected in the reported time costs associated with maintaining records of customers for manufacturer and packers, which are the highest costs reported by FBO respondents.

4.2.6 Premises, equipment and food safety procedures

4.2.6.1 Overview of the Food Law requirements in relation to premises, equipment and food safety procedures

There are a series of regulatory requirements in place for FBOs in relation to premises, equipment and food safety procedures. These requirements are fully detailed in the FSA regulations to ensure that FBOs are aware of their responsibilities, in terms of ensuring that their premises are well maintained to allow the FBO to prepare and produce food in a clean and safe environment, that they are using the correct equipment and that they are able to comply with the food safety procedures.

For an establishments' premises to comply with Food Law, there are specific requirements that it needs to meet. These include ensuring that the premises are clean and maintained in good condition, that there are adequate handwashing and toilets, sufficient ventilation and that there is adequate lighting, drainage facilities, and changing facilities. There are additional legal requirements for FBOs

³⁸ The corresponding sample sizes to this box and whisker plot are set out in Figure 38 in Appendix 1.

that apply particularly to rooms where food is prepared, treated or processed. The design of these rooms must allow for good food hygiene practices, including protection against contamination between and during tasks.

Many food businesses use a range of equipment in order to prepare and produce food. In order to ensure that businesses are using this equipment in a safe and hygienic way, there are some specific legal requirements that are set out so that FBOs understand how to use it in order to comply. These include ensuring equipment is made of appropriate materials and kept in good order, repair and condition so they can be kept clean and avoid contamination.

In addition, there are specific food safety procedures that are set out in Food Law that a food establishment needs to comply with. The main procedures include: effectively disposing of and storing food waste; having effective pest control measures; having appropriate transportation facilities and also having food tested to ensure its safety.

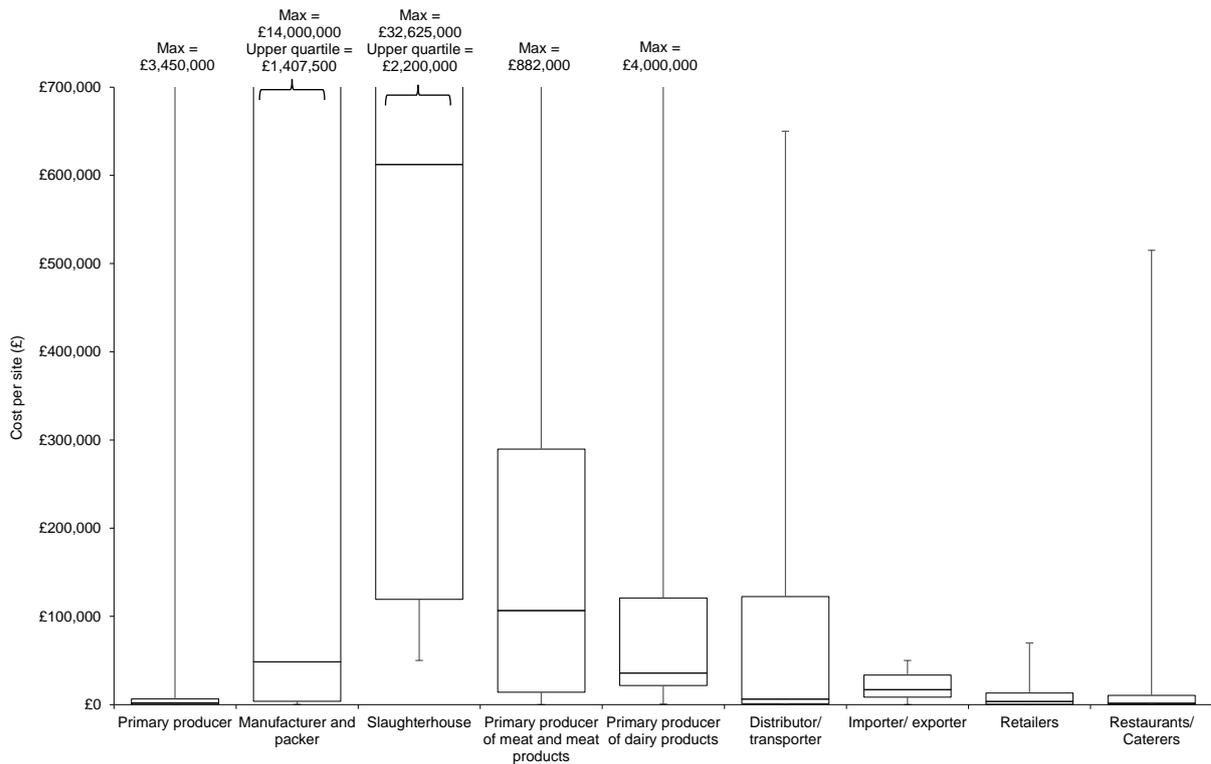
Complying with all the above regulations in relation to premises, equipment and food safety procedures incurs costs for businesses. The estimated costs that FBO survey respondents reported are generated as a result of meeting these requirements are detailed in the following sub-sections.

4.2.6.2 Costs associated with premises, equipment and food safety procedures

In order to capture the costs for businesses that specifically arise due to Food Law, we asked businesses about the costs of complying with the specific requirements set out in Food Law, above the costs they would have otherwise incurred as part of their business as usual (for example, adapting their premises to suit the specific legal requirements of operating as a food business). Through our survey question design we sought to ensure that FBOs were clear that they should only report the additional costs they incur specifically in relation to complying with Food Law.

Figure 25 below sets out the initial investment incurred by FBO respondents in relation to meeting the regulatory requirements set out in Food Law for their premises, transport, equipment and food waste systems.

Figure 25: One-off cost per site associated with premises, transport, equipment and food waste systems, by FBO type³⁹



Source: KPMG analysis

The one-off upfront costs associated with food safety procedures varied substantially across FBO types, with slaughterhouses reporting the greatest level of costs across the minimum, median and maximum. In comparison, importer/ exporters and retailers reported relatively low levels of costs specifically associated with food safety procedures. This may be a reflection of the level of requirements that each type of FBO has to comply with. For FBOs further up the supply chain, such as primary producers and manufacturers and packers, they are likely to have to have more varied and more specialised premises and equipment requirements.

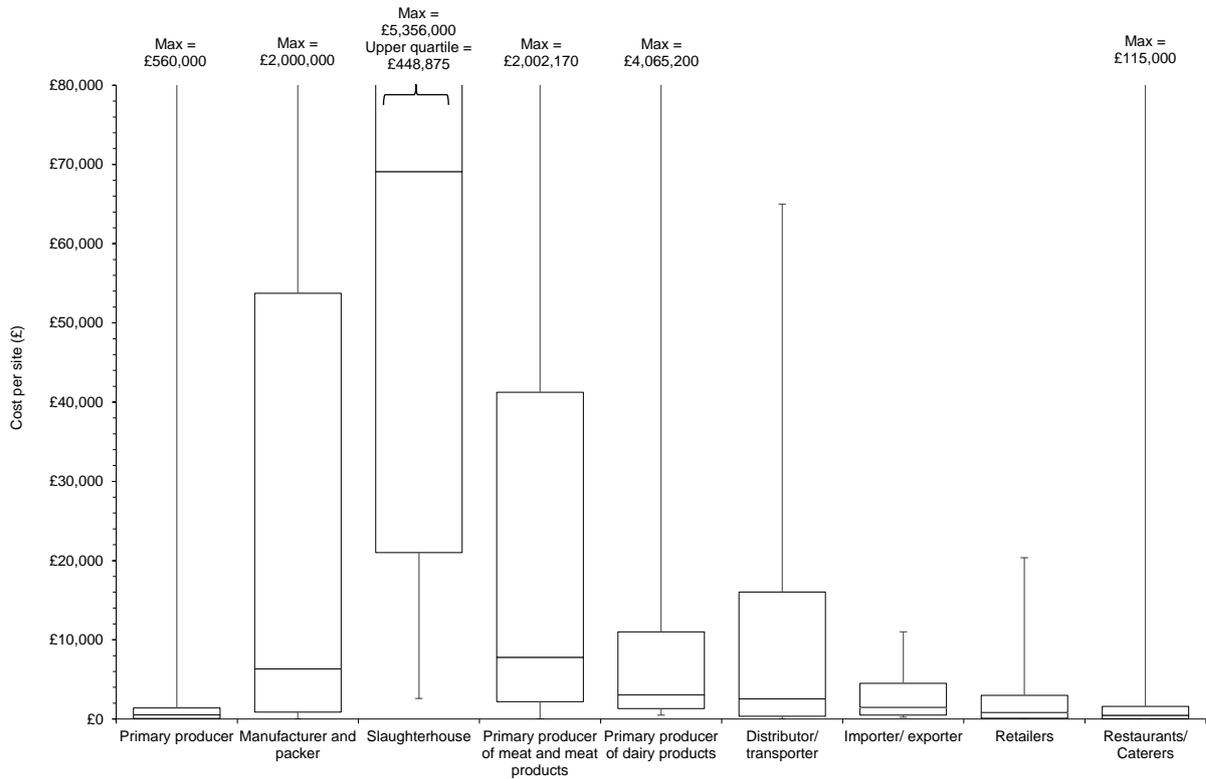
For the majority of the 210 FBOs who reported upfront on-off costs associated with food safety procedures, the premises costs made up more than half of the total upfront costs associated with complying with the food safety procedures Food Law requirements.

However, the level of reported investment made varies by FBO type and the scale of business operations. Approximately 13% of all businesses who responded reported spending over £50,000 on the premises to meet the requirements of Food Law.

In addition to upfront costs, there are also ongoing costs reported associated with the maintenance of premises, transport, equipment and food waste systems to ensure that they continue to comply with Food Law. Figure 26 below, presents the reported annual costs per sites associated with these ongoing activities to meet Food Law requirements.

³⁹ The corresponding sample sizes to this box and whisker plot are set out in Figure 39 in Appendix 1.

Figure 26: Annual ongoing cost per site associated with the maintenance of premises, transport, equipment and food waste systems, by FBO type⁴⁰



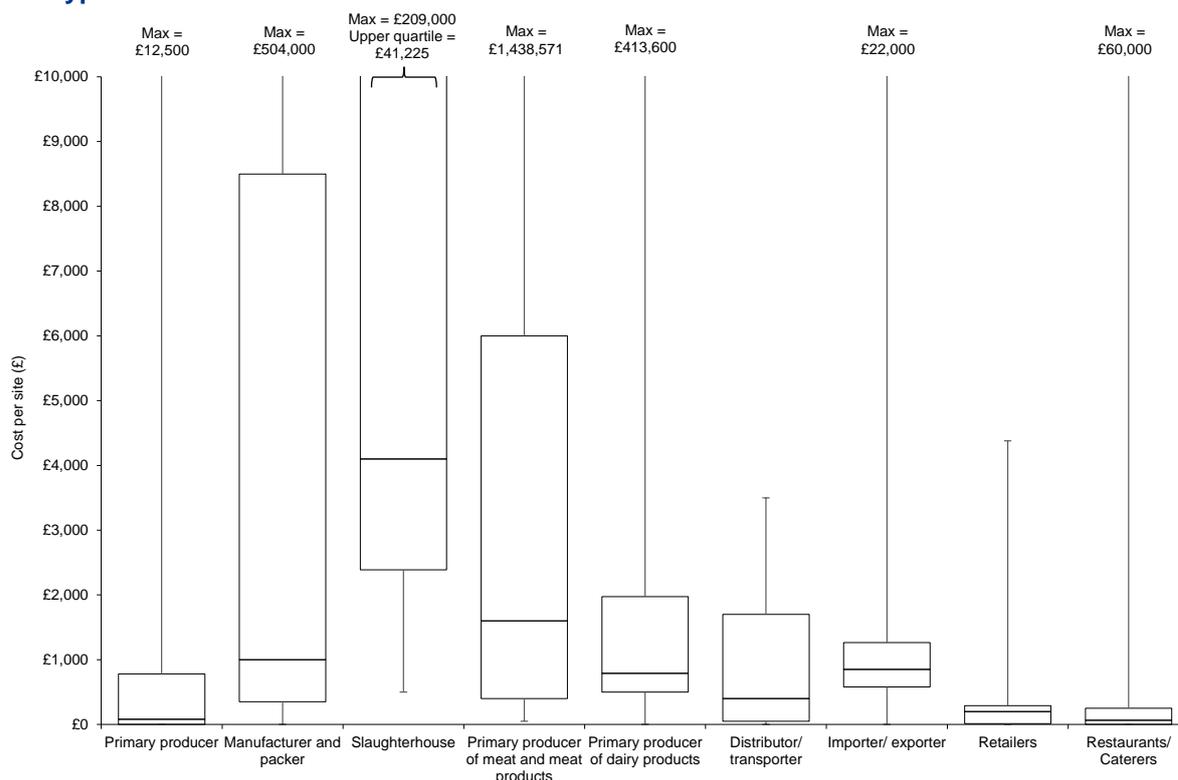
Source: KPMG analysis

As before, the highest costs associated with the meeting the Food Law requirements associated with the ongoing maintenance of premises, transport, equipment and food waste systems, are reported by FBOs higher up the supply chain, such as slaughterhouses and producers of dairy products. Again this is likely to be due to the specific Food Law requirements placed on these FBO types.

In addition to the ongoing requirements associated with premises, transport, equipment and food waste systems, there are also ongoing costs in relation to Food Law requirements relating to pest control measures and laboratory testing. Figure 27 sets out these costs below.

⁴⁰ The corresponding sample sizes to this box and whisker plot are set out in Figure 39 in Appendix 1.

Figure 27: Annual ongoing cost per site associated with pest control and laboratory costs, by FBO type⁴¹



Source: KPMG analysis

Of the total FBO survey respondents, just over a third reported incurring costs associated with pest control measures. There is some variation in the costs associated with pest control across different FBO types, with manufacturers and packers and producers of dairy products reporting the highest costs. However, when looking at the median costs, all FBO types report a median cost of less than £3,000 per site. While pest control measures are required to be put in place under Food Law, these could also be considered as business as usual costs for all FBOs given the need to meet consumer demand for high quality, hygienic and safe food.

The laboratory testing covers the financial costs associated with paying to have the testing undertaken as well as the internal business time cost associated with carrying out laboratory testing in-house. Of all FBO survey respondents, 16% reported that they incurred financial costs for laboratory testing and 10% reported incurred time-related costs associated with laboratory testing.

The total costs per site for laboratory testing varies across FBO types, which would be expected given that it is likely that the primary producers and manufacturers of food products are likely to have high testing requirements, when compared to retailers, for example.

There are further costs incurred by FBO in relation to time spent undertaking food safety procedures.

There are a broad range of activities undertaken by staff at FBO respondents to ensure they are complying with Food Law requirements on an ongoing basis, including carrying out temperature control checks, quality control checks and cleaning and disinfecting equipment.

The reported cost associated with the time spent undertaking food safety procedures varies substantially across FBO types, with retailers reporting the lowest level of costs. The most substantive

⁴¹ The corresponding sample sizes to this box and whisker plot are set out in Figure 39 in Appendix 1.

time cost incurred by FBO respondents related to time spent by staff cleaning and disinfecting equipment.

4.2.7 Specific Food Law requirements for producers of food of animal origin

4.2.7.1 Overview of specific regulations and requirements for producers of food of animal origin

In addition to the above Food Law requirements that apply to all FBOs, for businesses that produce foods of animal origin (including slaughterhouses) there are a range of additional legislative requirements that businesses are required to abide by. These are in place due to the higher risks that are associated with these FBOs.

The specific additional requirements include:

- **Storage facilities:** where necessary there needs to be suitable temperature-controlled handling and storage conditions of sufficient capacity for maintaining foodstuffs at appropriate temperatures. There needs to be enough storage capacity for the meat to be kept at the appropriate temperatures. If the meat is being manufactured, handled or wrapped, there needs to be a separate storage for raw materials and processed materials.
- **Food treatment equipment:** for food that is put on the market in hermetically sealed containers, any treatment equipment should not allow the product to become contaminated. Any food processing that is undertaken needs to conform to an internationally recognised standard (for example, pasteurisation, ultra-high temperature or sterilisation).
- **Veterinary:** a veterinarian must undertake regular health checks of the animals to ensure that they are free from disease, and must also undertake ante mortem inspections.
- **Health and ID markings on animal products:** Identification marks must be applied to the product before it leaves the establishment where it was produced. The mark must include the name of the country where the establishment is located and the approval number of the establishment.

There are also further regulatory requirements for slaughterhouses associated with food chain information. It is set out in legislation that slaughterhouses must, as appropriate, request, receive, check and act upon food chain information. Food chain information includes the animals' health status, details of any medicinal products or other treatments administered to the animal, results of any samples taken from the animal etc. Slaughterhouses also face additional inspection requirements.

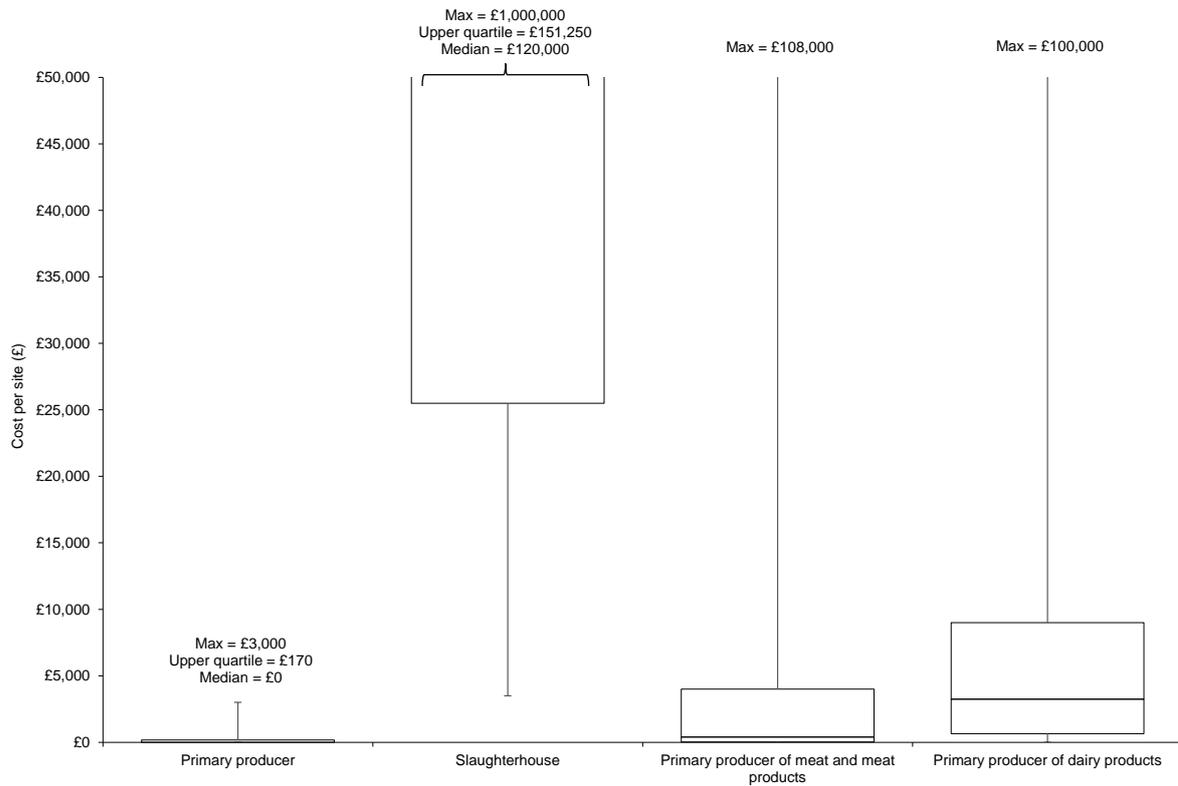
4.2.7.2 Costs associated with specific regulations and requirements for producers of food of animal origin

FBO survey respondents that produce food of animal origin were asked to provide information on costs incurred in relation to the additional requirements in place to ensure that the food produced is safe.

Just over a third of FBO respondents indicated that their main business activity is production of food of animal origin. Just over half of these businesses primarily dealt in meat and meat products, and nearly a third of businesses produced dairy products.

Figure 28 below sets out the additional non-time costs that these FBO survey respondents indicated that they incur in complying with the specific Food Law requirements relating to producing food of animal origin. Non-time costs include maintaining food treatment equipment; veterinary costs; and the cost of using consultants in relation to health and identification markings.

Figure 28: Annual ongoing non-time cost per site associated with regulations relating to producing food of animal origin, by FBO type⁴²



Source: KPMG analysis

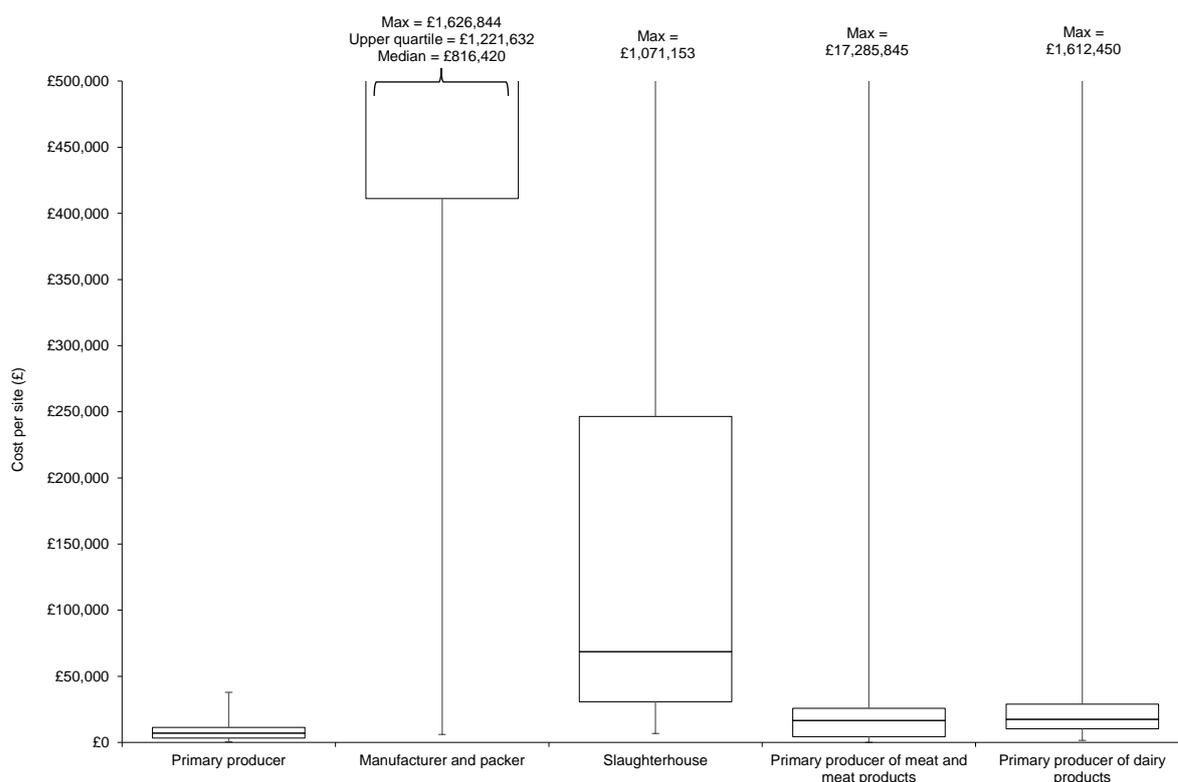
In order to comply with Food Law there are specific requirements in place in terms of food treatment equipment. Many FBO respondents reported that they did not incur a cost specific to food treatment equipment, resulting in a median cost of zero for both producers of dairy products and producers of meat and meat products. The mean and maximum values across FBO respondents reflects that for those FBO respondents that did report incurring a cost, this could be quite substantial.

Veterinary costs can be significant for FBOs which have large amounts of livestock, as veterinary checks need to regularly undertaken to comply. The cost of this is borne in part by the FBOs, FBO respondents reported that these costs can be significant, with the maximum reported annual cost being £1,000,000.

In addition to the non-time costs reported by FBO respondents that produce food of animal origin, respondents also reported time related costs in complying with regulations. These are set out in detail in Figure 29 below.

⁴² The corresponding sample sizes to this box and whisker plot are set out in Figure 40 in Appendix 1.

Figure 29: Annual ongoing time cost per site associated with regulations relating to producing food of animal origin, by FBO type⁴³



Source: KPMG analysis

There are a range of time costs that FBO respondents reported in relation to ensuring that they are specifically complying with these legislative requirements. These include:

- cleaning and disinfecting the premises and equipment;
- ensuring the cleanliness of animals to slaughter;
- checking animals for disease and undertaking disease prevention measures;
- waste management to prevent contamination;
- preparing health and identification markings on animal products; and
- preparing paperwork to accompany consignments of products.

Cleaning and disinfecting premises and equipment drive a large part of the time costs reported by FBOs. The median reported time spent each week to clean and disinfect premises is 8 hours a week, with a median additional 7 hours of staff time reported for cleaning and disinfecting equipment.

When FBOs involved in the production of food of animal origin then deliver consignments of the products that they produce, they are also required to meet certain requirements. Across the FBO respondents, it was reported that the median time spent on preparing paperwork for consignments was two hours a week, with the median reported cost being £1,076 per year.

⁴³ The corresponding sample sizes to this box and whisker plot are set out in Figure 40 in Appendix 1.

Slaughterhouses have additional specific regulatory requirements that they have to abide by in order to comply with the regulations. One of these is in relation to reviewing food chain information. Across these respondents their employees spend a median time of four hours per week on reviewing food chain information. This is equivalent to a cost of £3,619 per site per year.

4.2.8 Specific Food Law requirements for primary producers of food of non-animal origin

4.2.8.1 Overview of specific regulations and requirements for primary producers of food of non-animal origin

Similar to producers of food of animal origin, producers of food of non-animal origin must also comply with additional specific requirements, including:

- **Storage facilities:** where necessary there needs to be suitable temperature-controlled handling and storage conditions of sufficient capacity for maintaining foodstuffs at appropriate temperatures.
- **Food treatment equipment:** for food that is put on the market in hermetically sealed containers, any treatment equipment should not allow the product to become contaminated. Any food processing that is undertaken needs to conform to an internationally recognised standard (for example, pasteurisation, ultra-high temperature or sterilisation).
- Cleaning and disinfecting the premises and equipment.
- Ensuring the cleanliness of plants products.
- Reviewing the results of analyses carried out on samples that may impact human health.
- Waste management to prevent contamination.
- Maintaining records.

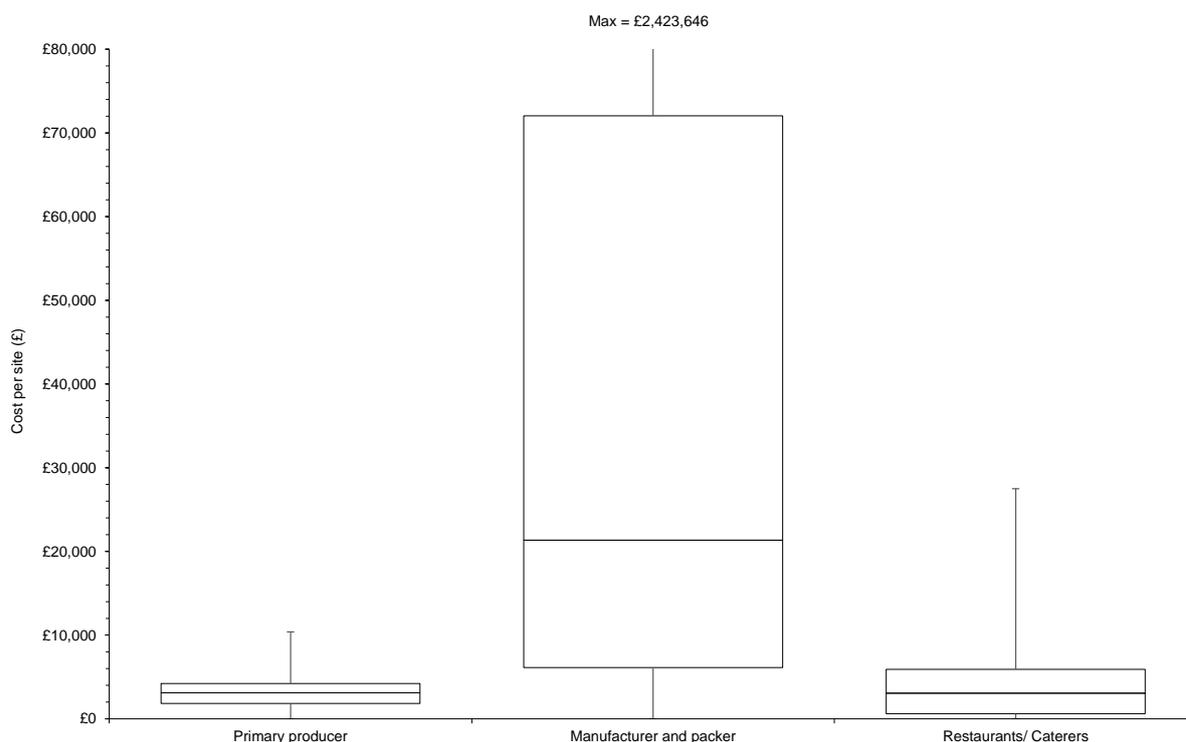
The costs set out in Section 4.2.8.2 below are those associated with these requirements for producers of food of non-animal origin only. However, it should be noted that some of these requirements may also be applicable to primary producers of food of animal origin. The associated costs for producers of food of animal origin have been set out in Section 4.2.7.

4.2.8.2 Costs associated with specific regulations and requirements for producers of food of non-animal origin

FBOs reported that the specific additional requirements associated with producing food of non-animal origin result in their business incurring additional time and costs to comply. The majority of these additional costs for businesses are driven by time costs, due to specific cleaning and monitoring requirements. However, FBOs may also be required to invest in specific equipment to ensure that they are complying with the regulations.

In addition to the financial investment costs incurred by FBO respondents to meet the specific regulations for producers of food of non-animal origin, there are also time costs incurred by businesses in order to comply with these specific food safety producer regulations. The reported time related costs are set out in Figure 30 below.

Figure 30: Annual ongoing time costs per site associated with producers of food of non-animal origin food safety procedures, by each FBO type⁴⁴



Source: KPMG analysis

The highest median time cost reported by FBO respondents relate to time spent by staff cleaning and disinfecting both the premises and the equipment. Over 90% of FBO respondents reported that their staff spend over an hour a week specifically cleaning the premises, with 40% of respondents saying that more than 5 hours a week is spent on this particular activity. This is broadly in line with reported time spent on cleaning equipment. Nearly 95% of respondents indicated that their staff spend more than an hour a week cleaning equipment, and nearly 50% reported spending over 3 hours a week.

The time costs incurred by FBO respondents vary by FBO type, although the reported mean cost for manufacturers and packers are markedly higher than other FBO respondents. This appears to be driven by responses from a number of large businesses in this category who provided relatively high cost estimates.

4.2.9 Food Law requirements relating to the presentation of food

4.2.9.1 Overview of Food Law requirements relating to the presentation of food

In order to ensure that the food produced by FBOs and sold to the public is safe, and to ensure that consumers fully understand the contents of the food they are purchasing and consuming, there are a number of presentation requirements that have been established in legislation, stemming from the European Union. This is consequently enforced by the LAs. The legislation specifies the information that needs to be provided on food products, covering three main areas:

- **Food Allergens:** It is stipulated that it is the responsibility of every FBO in the supply chain to ensure that the allergen information that has been provided on food products is accurate. If any products that are listed to cause allergies or intolerances that are used in the manufacture or

⁴⁴ The corresponding sample sizes to this box and whisker plot are set out in Figure 41 in Appendix 1.

preparation of food and are still present in the finished product (even in an altered form), they need to be listed on the finished product.

- **Food contact materials:** There is specific requirement with respect to materials and articles that are in contact with food. This is to ensure that any materials that food comes into contact with are safe. More specifically, the regulations state that Food Contact Materials⁴⁵ must not release constituents into food at levels harmful to human health, and also must not change food composition, taste and odour in any unacceptable way.
- **Food labelling:** In addition to the specific requirements for information on food allergens, there are additional labelling requirements for all food. The labels on food products must include various mandatory particulars including: name of food; list of ingredients; allergens; quantity of certain ingredients; net quantity of food; “use by” date; any special storage conditions; name and address of FBO; country of origin; and nutritional information. The regulations also stipulate the size of the label in terms of the mandatory particulars and the size of font that should be used.

4.2.9.2 Cost of Food Law requirements relating to the presentation of food

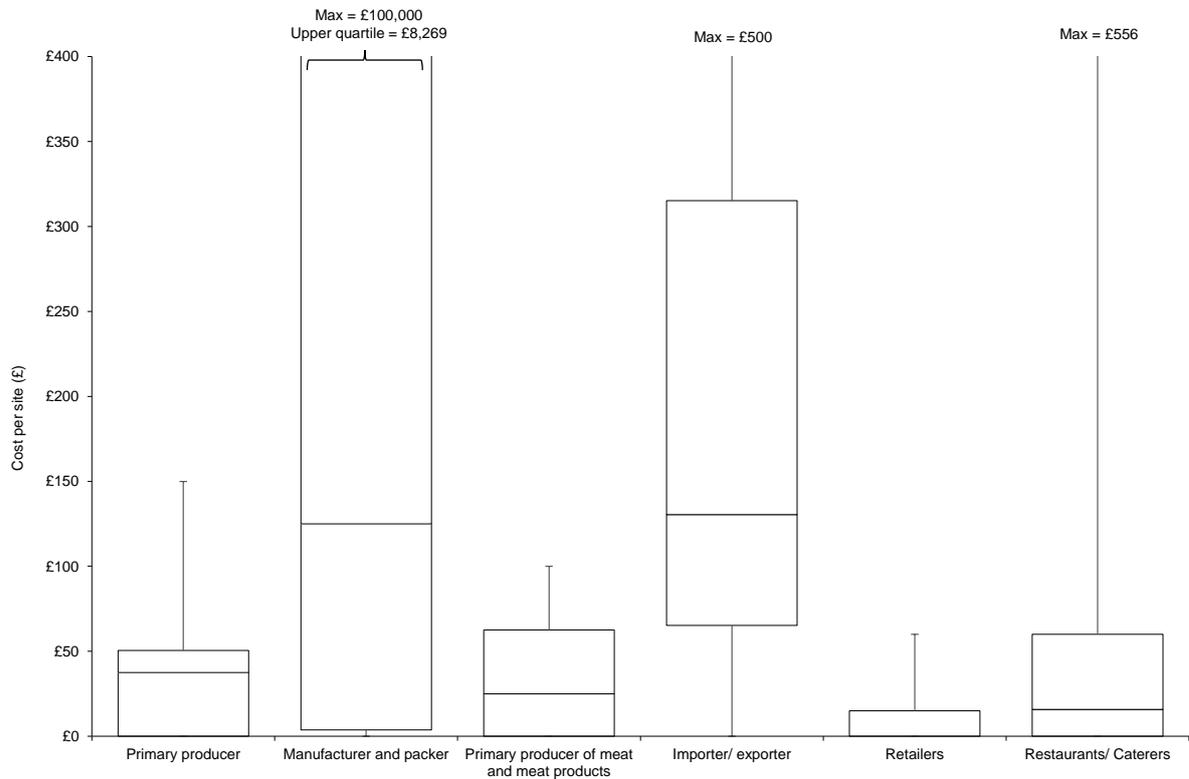
In order to comply with these requirements FBOs may incur various time and non-time costs, not only to check the information of the ingredients that are in food products, but also to check that the labels that are being presented include the information required to comply.

Figure 31 below presents the annual ongoing costs reported by FBO survey respondents associated with providing food allergen information. Food allergen information must be put on food that is pre-packaged or sold unpackaged. FBO respondents indicated relatively low cost levels associated with providing food allergen information, with the median cost reported across all respondents being less than £150 per site. For some FBO types, such as retailers, the low reported costs may be as a result of FBOs further up the supply chain incurring these costs. This may be indicated by the higher reported costs reported by manufacturers and packers, who reported a maximum cost of £100,000 per site for providing allergen information.

Although survey respondents reported relatively low costs, when we consulted with FBOs, providing food allergen information was mentioned as one of the key requirements that had impacted their business, both in terms of cost and additional processes.

⁴⁵ Food contact materials are all materials and articles intended to come into contact with food, such as packaging and containers, kitchen equipment, cutlery and dishes.

Figure 31: Annual ongoing cost per site associated with providing food allergen information, by each FBO type⁴⁶



Source: KPMG analysis

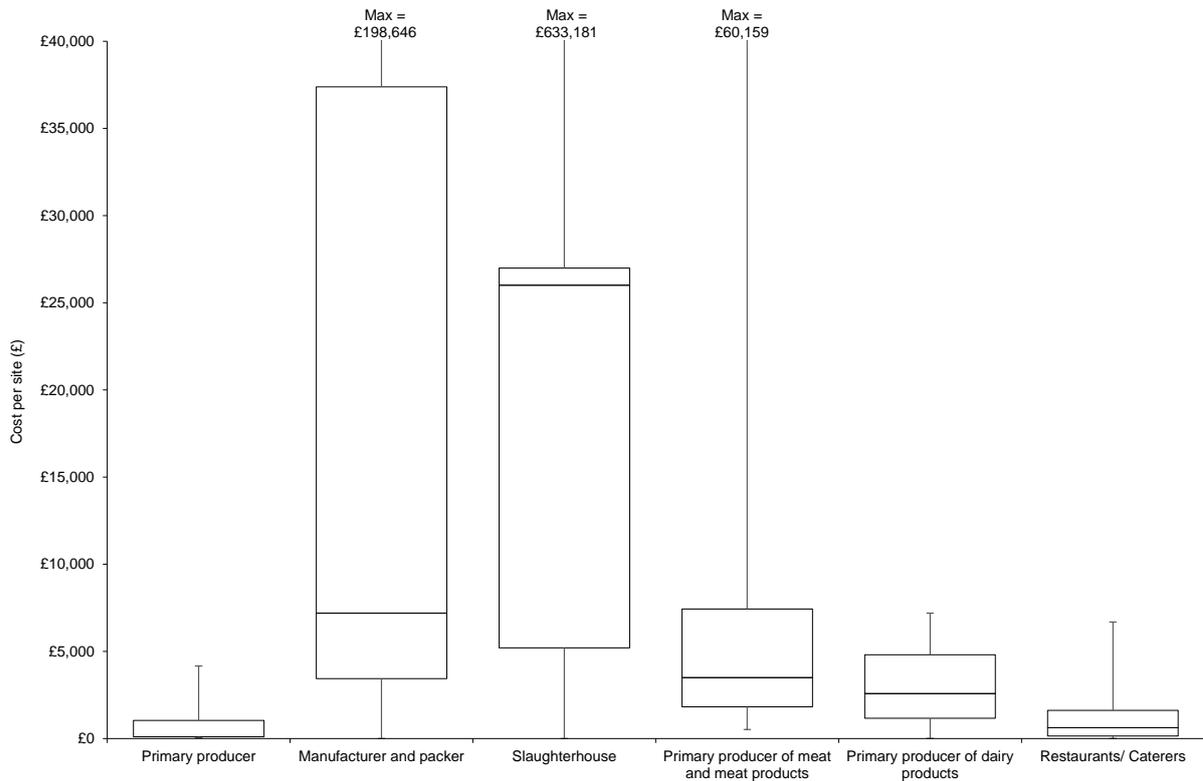
In addition to the labelling requirements associated with allergens information, as noted above there are wider labelling requirements. 54% of FBO respondents to our survey indicated that they employ internal staff members whose main role is to oversee the labelling of products to meet food labelling regulations. And the median staff time reported by these FBO respondents on labelling was 6 hours per week.

An alternative option for FBOs to ensure that their food labels meet the Food Law requirements is to use the service of external food labelling specialists. However, only a fifth of FBO respondents indicated that they used external consultants.

Figure 32 below sets out both the time and non-time costs associated with the various presentation of food requirements reported by FBO survey respondents.

⁴⁶ The corresponding sample sizes to this box and whisker plot are set out in Figure 42 in Appendix 1.

Figure 32: Annual ongoing cost per site associated with the presentation of food, by each FBO type⁴⁷



Source: KPMG analysis

4.2.10 Product recall and withdrawal

4.2.10.1 Overview of Food Law requirements relating to recall and withdrawal procedures

There are certain circumstances in which it may be necessary for an FBO to withdraw or recall a product. If an FBO has reason to believe that food that it has imported, produced, manufactured or distributed is not compliant with food safety requirements, the business must immediately initiate procedures to withdraw the food from the market and inform the Competent Authorities.

If the food has already reached consumers, the FBO must inform the consumers of the reason for the withdrawal of the product. If other measures are not sufficient to achieve a high level of health protection, the FBO must recall from consumers' products which have already been supplied to them.

The cost of having to recall or withdraw a product can be significant to a FBO, depending on the scale of the recall or withdrawal and the level of risk to public health that the food product presents.

4.2.10.2 Costs to FBOs of Food Law requirements relating to product recall and withdrawal procedures

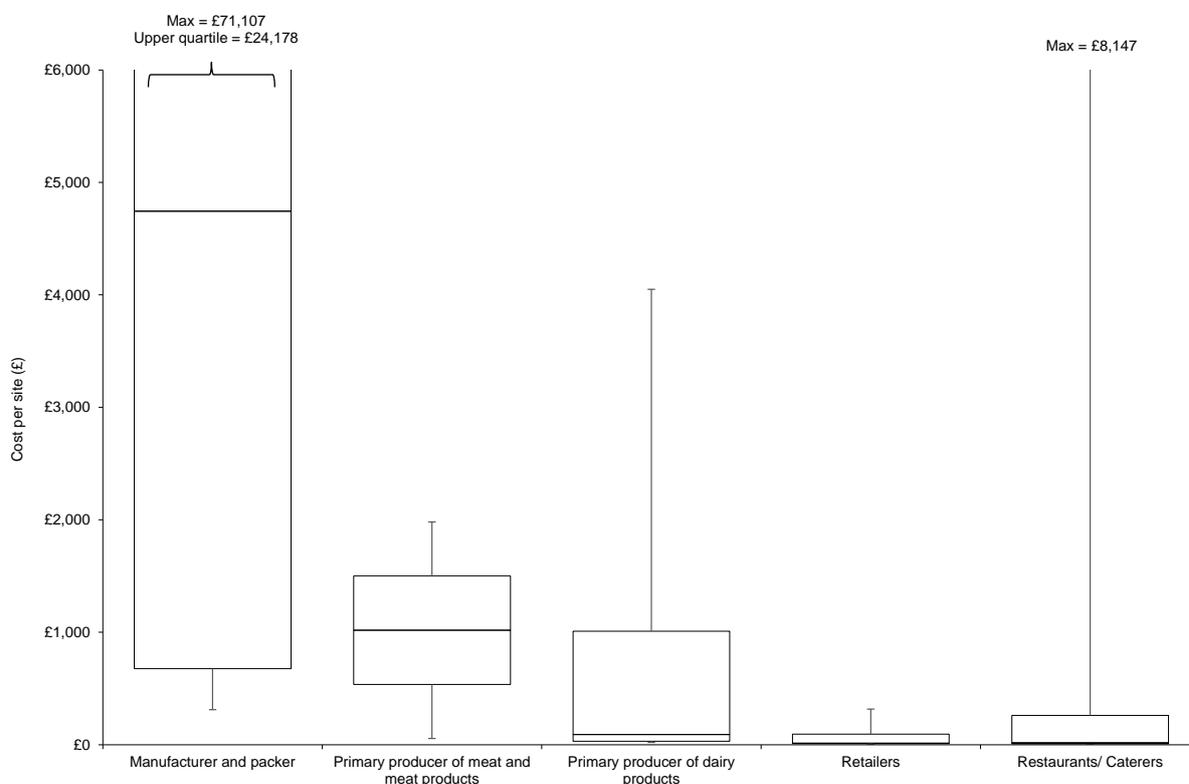
Of the 368 businesses that answered survey questions in relation to product recall and withdrawal, only 9% of these businesses reported that they had been required to recall or withdraw a product in order to comply with food safety or hygiene regulations.

⁴⁷ The corresponding sample sizes to this box and whisker plot are set out in Figure 42 in Appendix 1.

For the FBOs who reported having to recall or withdraw products, nearly 97% reported that they had withdrawn products fewer than 10 times in the last 5 years.

The reported costs associated with these withdrawals/ recalls are summarised in Figure 33 below.

Figure 33: Total costs per site associated with product recalls, by each FBO type⁴⁸



Source: KPMG analysis

For producers of meat and meat products, importer/ exporters and retailers the reported level of lost revenues due to product recalls is relatively low, remaining below £150 for the most recent recalls. However, the reported costs are greater for primary producers, slaughterhouses and distributor/ transporters, with the maximum reported cost rising to £6,780 for a primary producer.

In addition to the lost revenues, when a product has to be withdrawn or recalled, there are a number of steps that a business has to undertake. The relevant Competent Authority will need to be contacted, and if the products have reached consumers then they also need to be contacted and told about the potentially unsafe product that they have purchased. There may also be an internal investigation that takes place within the businesses to understand how the recalled or withdrawn product reached consumers, and where in the production chain the product was made unsafe. These are all time costs that are incurred by businesses, and as can be seen in Figure 33 below.

These annual time costs reported by FBO respondents are fairly low. The most significant cost for FBO respondents in relation to recalled and withdrawn products was reported to be the lost revenue from the products. The reported costs varied across respondents, however, and is likely to be driven by the scale of production and the number of batches of the product that were impacted, as well as whether the FBO has internal traceability systems in place. The highest cost reported by an FBO respondent was £71,107, demonstrating the significant financial impacts that product withdrawal and recall can have on an affected FBO.

⁴⁸ The corresponding sample sizes to this box and whisker plot are set out in Figure 43 in Appendix 1.

4.3 Wider quality management approaches adopted by FBOs

Although there are a wide range of specific requirements that FBOs must meet in order to comply with FSA regulation and Food Law, some FBOs put in place additional processes to drive higher quality standards within their business.

One example of wider quality management processes is where FBOs opt to be part of a third party accreditation scheme, such as British Retail Consortium (BRC)⁴⁹ or Red Tractor⁵⁰. In the qualitative interviews that we undertook, FBOs that opted to be part of these third party accreditation schemes reported that the audits that these schemes undertake of their businesses set a standard that is above that required by the FSA regulations. Interviewees indicated that this provided them comfort that their business is complying with a set of standards above those set by the FSA.

In addition, some FBOs interviewed cited wider benefits that were derived from being part of these accreditation schemes. One of these benefits reported was the universal knowledge by those in the food industry of the standards set by these schemes. Some FBOs interviewed indicated that they had found this to have a positive impact on their ability to win new business with customers and clients.

Furthermore, some interviewees indicated that they are required to be part of these accreditation schemes as part of contractual agreements they have with their clients or suppliers. For example, some manufacturers and primary producers we spoke to are required to be members of certain accreditation schemes as part of their contracts with supermarkets.

We were also informed as part of the interviews that outside of these third party accreditation schemes and across many parts of the food supply chain, businesses impose their own set of requirements that need to be followed, such as specific supplier principles. These businesses indicated that they also tend to undertake their own audits on businesses in their supply chain to check they are maintaining the required standards.

As part of the survey, we asked respondents to report the extent to which they considered that they had control and management systems in place that go beyond what is required by Food Hygiene and Safety regulation. Over half of respondents indicated that they either strongly agreed or agreed that they had. This suggests that many food businesses are ensuring that their business operations are above and beyond the FSA regulations and that they are committed to ensuring that the food they are producing for consumers is safe. Therefore, the costs reported by FBO respondents in relation to the activities that they undertake to meet the various FSA regulations may be inflated if it also captures costs associated with going above and beyond the requirements.

⁴⁹ BRC is a trade association for UK retailers and represent all forms of retailers. More information can be found on <https://brc.org.uk/about-brc>

⁵⁰ Red Tractor is a British organisation that promotes and regulates food quality. It licences the Red Tractor quality mark, a product certification programme that includes a wide range of farm assurance schemes for food products. More information can be found on <https://www.redtractor.org.uk/choose-site>

5 Regulating our future (ROF)

5.1 The ROF programme

After being in place for over 30 years, the FSA considers that the current system of food regulation needs to be adapted to the changes that have taken place in the industry. As a result, the FSA is currently undertaking a regulatory change programme: Regulating our Future (ROF). Details of the ROF programme are available on the FSA's website and can be accessed at: <https://www.food.gov.uk/enforcement/regulation/regulating-our-future>.

The FSA has indicated that the ROF programme aims to improve the way in which the FSA delivers regulatory controls and aims to ensure that the system is well-suited to deal with the emerging challenges that a modern food industry presents.⁵¹ This includes moving away from a 'one size fits all' approach to regulation and considering new types of businesses entering the market, such as online retailers and independent food safety certification schemes.⁵²

In addition, the FSA considers that the current regulatory system is not flexible enough to deal with future risks in the food industry.⁵³ At present, the UK food sector is highly reliant on the EU for both imports and exports. For example currently 80% of the UK's agricultural exports are to the EU. Therefore, the UK's decision to leave the EU will likely to lead to a change in the patterns of food production, trade and consumption across the UK. The new regulatory system will need to keep pace with the changes in the economy and in the food industry.

The FSA has developed a high level blueprint for the new regulatory model. This is currently being tested through collaboration with a broad range of industry stakeholders; including consumer groups and other UK regulators. However, the changes being planned cannot all be implemented immediately and so the new regulatory change programme will be implemented in an incremental manner that will aim to provide reassurance and support to consumers and food businesses.

While our study did not include a detailed review of the areas of regulatory change being considered under the ROF programme, or seek detailed views from FBOs about the programme, our findings in relation to the costs of FSA regulation will be used by the FSA to understand the potential impact of regulatory changes. We also sought high-level views from the FBOs on the current regulatory system and where they thought changes would have the most beneficial impact. These findings will be used by the FSA as part of the ROF programme.

5.2 FBOs' views on the benefits of current FSA regulation and Food Law

As part of the interviews with a sample of FBOs, we sought their views on the benefits of the current FSA regulatory regime and the requirements on FBOs under Food Law. It should be noted that where we discuss the FSA regulatory regime we are referring to regime under which FBOs are inspected by LAs, and for some FBOs the FSA. All other requirements outside of inspections, mentioned under this section, are relevant to Food Law rather than the FSA's regulatory regime.

Broadly, the majority of businesses we interviewed indicated that they consider that the current FSA regulatory regime and Food Law requirements are set at the right level in terms of striking the right

⁵¹ <https://www.food.gov.uk/enforcement/regulation/regulating-our-future>

⁵² <https://www.food.gov.uk/enforcement/regulation/regulating-our-future>

⁵³ <https://www.food.gov.uk/enforcement/regulation/regulating-our-future>

balance between protecting consumers and giving FBOs “peace of mind” that if they follow the Food Law requirements that the food products they produce will be safe.

Many of the businesses interviewed viewed the Food Law requirements as “common sense” and relating to processes/ activities that they would undertake irrespective of the regulations. Despite this, it was thought generally that a benefit of having these activities set out in regulation was that it provided businesses with a focus on what needs to be done to ensure a minimum standard of food hygiene and safety.

Many businesses felt that the prescriptive nature of the regulations meant that it was easy to know what is required of them. This level of prescription was particularly important for small businesses, who indicated that they are less likely to be able to employ regulatory specialists or external consultants to help them understand the regulations that apply to their business. Many businesses we interviewed also felt that the level of prescription provided them with reassurance that they were remaining compliant over time.

Furthermore, resources the FSA provides on its website, in particular the Safer Food, Better Business guides, were mentioned as key in helping many small businesses to operate in a manner that is compliant with Food Law.

The food hygiene ratings were also viewed as a positive outcome of a business demonstrating compliance with food hygiene legal requirements. Many businesses we interviewed viewed the hygiene ratings as an important indicator of food safety that customers and consumers could rely upon. Some businesses indicated that they used the hygiene ratings when advertising to customers, with a number of businesses voluntarily displaying their hygiene ratings despite it not currently being a legal requirement in England. For those businesses who are supplied by other food businesses, many also stated that when looking for new suppliers they frequently used hygiene ratings as a safety indicator.

On the other hand, a number of businesses understood the potential impact that receiving a poor hygiene rating could have on sales. One interviewee stated that if one of their sites received a hygiene rating of three or below, it could reduce sales by up to 20%. Therefore, businesses are motivated to comply with the regulations and receive a high hygiene rating or they risk the potentially detrimental knock-on effects of a low score.

Another benefit of the Food Law requirements that was frequently reported in the interviews was that it creates a level playing field on which businesses can compete effectively. It was felt by a number of businesses that as all businesses, regardless of size or location, have to comply with the same regulations. This is especially important for small businesses we interviewed who suggested that they could operate knowing that their competitors cannot reduce safety standards in attempts to reduce operating costs.

Finally, a number of businesses interviewed reported that a benefit of the current regime is that LAs and EHOs were an important resource for them of information to aid the understanding of FSA regulatory regime and the Food Law requirements that apply to their business. It was suggested that this was particularly helpful when first starting a food business, and also when considering any major renovations to premises or changes in product offerings. The accessible nature of this information and help was highly valued by the FBOs we interviewed, particularly by interviewees who indicated that they had opened and were running a small business but had limited prior in-depth understanding of the regulations.

5.3 Business' view of the ROF programme

All of the FBOs we interviewed welcomed the idea of the ROF programme and felt that there were elements of the current regulatory system that could be improved.

Overall, there were three key areas identified by the FBOs we interviewed as priority areas that they considered would benefit from revision:

- 1) **Consistency in the implementation of the regulations:** A number of businesses we interviewed felt there could be greater consistency in the way that the regulations were enforced across different businesses and LA areas. A number of businesses interviewed reported experiencing instances of different sites across their business receiving different hygiene ratings despite having in place the same infrastructure and processes.
It was felt that offering consistent training to all EHOs on the interpretation and implementation of the regulations, and making the regulations clearer and more specific, would limit the ability for different parties to interpret the regulations differently. Therefore, it was considered that this would lead to a more consistent application of the rules by FBOs as well as more consistent enforcement across LA areas.
- 2) **Greater consideration of specific circumstances of different types of food businesses:** In general, FBOs we interviewed indicated that the FSA and LAs should have a greater consideration of the size, type and relative risk of food businesses, as well as the businesses position within the supply chain, when determining the frequency of, and the depth of, inspections. For example, a number of interviewees suggested that there could be less frequent inspections for businesses which are low risk and /or had previously received high hygiene ratings⁵⁴. It was also felt that other factors should be taken into consideration when rating businesses. For instance, one interviewee who operates a restaurant, felt that the time of day that an inspection is carried out should be considered, as this can determine practices and also the availability of staff to assist with inspections. Overall, it was felt this would result in the regulations being more proportionate across different businesses.
- 3) **More active communication from the FSA:** An area in which FBO interviewees felt more could be done was associated with the communication between the FSA and the FBOs in relation to changes in regulations and product recalls and withdrawals. At present, FBOs reported that the onus is on them to find this information for themselves. However, for businesses which do not have dedicated compliance expert(s) and/or are not members of industry bodies, the FBOs we interviewed suggested that this could be a particularly time consuming task. Among interviewees it was felt that increased communication from the FSA or LAs, such as email alerts and/or a dedicated phone helpline that FBOs could use to obtain more information, would help improve compliance and reduce the burden on some FBOs.

⁵⁴ We note that it is currently the case that the frequency of inspections is linked to previous inspection ratings as well as the type of FBO.

Appendix 1 Sample sizes

In total our survey achieved 384 completed responses and 1,585 partial responses. Of these partial responses 386 contained sufficient information to be included within the analysis. However, the response rate varied across different questions.

Lower response rates will mean that some of the results presented in Section 4 may not be statistically significant.

Figure 34 to Figure 43 set out the number of survey responses by each FBO type that were received for each cost and time category.

Registering as an FBO

Figure 34: Number of responses to non-time and time costs associated with registering as an FBO, by FBO type

	External consultants	Completing business registration form	Familiarising with food law
Primary producer	9	49	47
Manufacturer and packer	5	19	19
Slaughterhouse	0	0	0
Primary producer of dairy products	4	15	15
Primary producer of meat and meat products	5	12	12
Distributor/ transporter	2	7	7
Importer/ exporter	1	1	1
Retailers	4	18	17
Restaurants/ caterers	35	140	139

Source: KPMG analysis

Inspections

Figure 35: Number of responses to non-time and time costs associated with inspections, by FBO type

	Correcting non-compliances	External inspections	Assisting with inspections	Resolving non-compliances	Self-checks	External consultant checks
Primary producer	7	16	100	52	60	17
Manufacturer and packer	11	25	76	52	49	25
Slaughterhouse	3	2	8	8	8	2
Primary producer of dairy products	7	15	38	26	31	15
Primary producer of meat and meat products	6	13	38	26	37	15
Distributor/ transporter	4	8	19	13	16	10
Importer/ exporter	1	6	14	11	10	5
Retailers	7	4	51	26	34	4
Restaurants/ caterers	28	35	353	202	278	43

Source: KPMG analysis

Staff training on Food Law

Figure 36: Number of responses to non-time and time costs associated with staff training on Food Law, by FBO type

	Cost of training - Preparing training materials	Cost of training - Hiring external providers	Cost of training - Other	Familiarising with food regulations	Training - Formal internal	Training - Formal external	Training - On the job
Primary producer	2	2	2	65	7	5	13
Manufacturer and packer	16	15	9	50	20	11	20
Slaughterhouse	4	3	2	7	6	4	7
Primary producer of dairy products	11	14	10	35	15	10	14
Primary producer of meat and meat products	13	12	5	35	19	15	15
Distributor/ transporter	4	5	4	15	7	5	6
Importer/ exporter	4	4	5	9	6	4	5
Retailers	12	8	8	33	10	6	11
Restaurants/ caterers	58	67	39	261	107	75	80

Source: KPMG analysis

FBOs' use of food safety management systems

Figure 37: Number of responses to non-time and time costs associated with FBOs' use of food safety management systems, by FBO type

	Food safety management system - consultants	Ongoing food safety management - consultants	Ongoing food safety management - equipment	Ongoing food safety management - other	Setting up food safety management system	Operating food safety management system
Primary producer	8	6	10	5	28	23
Manufacturer and packer	8	10	15	6	30	31
Slaughterhouse	3	4	5	5	8	8
Primary producer of dairy products	9	7	8	4	17	15
Primary producer of meat and meat products	13	14	18	10	30	30
Distributor/ transporter	4	3	2	1	6	6
Importer/ exporter	3	1	0	0	7	7
Retailers	3	4	9	5	19	18
Restaurants/ caterers	16	25	59	25	182	176

Source: KPMG analysis

FBOs' use of IT systems to comply with Food Law

Figure 38: Number of responses to non-time and time costs associated with FBOs' use of IT systems to comply with Food Law, by FBO type

	IT System - installation	IT System - maintenance	Maintaining records – supplier	Maintaining records - customer
Primary producer	9	8	32	31
Manufacturer and packer	18	18	28	25
Slaughterhouse	5	5	8	8
Primary producer of dairy products	13	12	24	23
Primary producer of meat and meat products	8	9	31	29
Distributor/ transporter	3	1	8	9
Importer/ exporter	3	3	5	5
Retailers	4	3	19	18
Restaurants/ caterers	16	17	158	136

Source: KPMG analysis

Premises, equipment and food safety procedures

Figure 39: Number of responses to non-time and time costs associated with premises, equipment and food safety procedures, by FBO type

	Premises - upfront investment	Premises - design	Premises - maintenance	Transport - upfront investment	Transport - maintenance
Primary producer	20	16	19	13	11
Manufacturer and packer	20	16	19	15	14
Slaughterhouse	4	5	4	7	5
Primary producer of dairy products	30	20	28	21	20
Primary producer of meat and meat products	28	25	29	26	27
Distributor/ transporter	7	6	7	7	8
Importer/ exporter	2	2	4	1	1
Retailers	15	13	16	13	13
Restaurants/ caterers	120	100	114	95	92

Source: KPMG analysis

	Equipment - upfront investment	Equipment - maintenance	Food waste systems - upfront investment	Food waste systems - maintenance	Pest control	Laboratory costs
Primary producer	15	13	8	9	22	22
Manufacturer and packer	18	19	16	18	33	33
Slaughterhouse	5	7	4	6	8	8
Primary producer of dairy products	27	28	17	18	35	33
Primary producer of meat and meat products	25	27	22	26	32	32
Distributor/ transporter	7	8	8	7	9	9
Importer /exporter	2	3	1	3	8	7
Retailers	17	15	13	15	21	19
Restaurants/ Caterers	114	110	93	96	158	144

Source: KPMG analysis

	Food law - Temperature control checks	Food law - Separation & storage of raw materials	Food law - Quality control of stock	Food law - Labelling and storage of hazardous and/or inedible substances	Food law - Cleaning & disinfecting equipment
Primary producer	17	16	17	14	20
Manufacturer and packer	29	29	30	29	31
Slaughterhouse	8	8	8	7	8
Primary producer of dairy products	29	26	25	25	30
Primary producer of meat and meat products	34	32	33	31	34
Distributor/ transporter	9	9	9	8	9
Importer /exporter	4	4	5	3	4
Retailers	25	18	20	18	25
Restaurants/ caterers	161	152	150	137	159

Source: KPMG analysis

	Food law - Waste management activities related to food regulations	Food law - Cleaning vehicles in between loads	Food law - Separating products into different loads to prevent cross contamination	Food law - Pest control	Food law - Laboratory testing
Primary producer	16	16	15	15	14
Manufacturer and packer	29	26	27	29	28
Slaughterhouse	8	8	8	8	8
Primary producer of dairy products	26	23	24	29	25
Primary producer of meat and meat products	31	30	28	31	29
Distributor/ transporter	9	9	9	9	7
Importer /exporter	4	4	3	5	4
Retailers	19	17	16	18	15
Restaurants/ caterers	144	125	127	129	123

Source: KPMG analysis

Specific Food Law for primary producers of food of animal origin

Figure 40: Number of responses to non-time and time costs associated with specific regulations for primary producers of food of animal origin, by FBO type

	Food treatment equipment - upfront investment	Food treatment equipment - maintenance	Vet costs	Markings - initial cost of consultants	Markings - consultant follow-up
Primary producer	2	2	5	1	1
Manufacturer and packer	1	1	2	0	0
Slaughterhouse	4	4	7	0	2
Primary producer of dairy products	15	15	29	1	1
Primary producer of meat and meat products	18	15	18	5	5

Source: KPMG analysis

	Lost revenue from delays	Cleaning and disinfecting premises	Cleaning and disinfecting equipment	Ensuring cleanliness of animals for slaughter	Checking animals for disease and undertaking disease prevention measures
Primary producer	0	6	6	4	6
Manufacturer and packer	0	2	2	1	1
Slaughterhouse	6	8	8	8	7
Primary producer of dairy products	0	25	26	18	26
Primary producer of meat and meat products	0	29	29	18	17

Source: KPMG analysis

	Waste management to prevent contamination.	Health and identification marks for animal products	Paperwork accompanying consignments	Reviewing food chain information (slaughterhouses only)
Primary producer	5	5	8	0
Manufacturer and packer	1	2	2	0
Slaughterhouse	6	7	7	8
Primary producer of dairy products	25	23	27	0
Primary producer of meat and meat products	24	22	27	0

Source: KPMG analysis

Specific Food Law for primary producers of food of non-animal origin

Figure 41: Number of responses to non-time and time costs associated with specific regulations for primary producers of food of non-animal origin, by FBO type

	Food treatment equipment - upfront investment	Food treatment equipment - maintenance	Cleaning and disinfecting the premises	Cleaning and disinfecting equipment
Primary producer	6	6	13	13
Manufacturer and packer	6	7	19	19
Slaughterhouse	0	0	0	0
Primary producer of dairy products	2	2	2	2
Primary producer of meat and meat products	4	3	4	4
Distributor/ transporter	1	1	1	1
Importer /exporter	0	0	3	2
Retailers	1	1	5	4
Restaurants/ caterers	15	14	33	32

Source: KPMG analysis

	Ensuring the cleanliness of plants products	Reviewing results of analyses carried out on samples that may impact human health	Waste management to prevent contamination	Maintaining records
Primary producer	9	8	11	12
Manufacturer and packer	16	17	17	17
Slaughterhouse	0	0	0	0
Primary producer of dairy products	1	2	2	2
Primary producer of meat and meat products	3	3	3	3
Distributor/ transporter	1	1	1	1
Importer /exporter	3	1	1	2
Retailers	3	1	2	2
Restaurants/ caterers	24	23	27	31

Source: KPMG analysis

Food Law relating to the presentation of food

Figure 42: Number of responses to non-time and time costs associated with specific regulations relating to the presentation of food, by FBO type

	Food allergen information	Special packaging	External food labelling specialist	Ensuring labelling
Primary producer	12	3	0	2
Manufacturer and packer	20	5	1	13
Slaughterhouse	0	0	1	4
Primary producer of dairy products	3	1	1	5
Primary producer of meat and meat products	4	7	3	10
Distributor/ transporter	1	1	0	2
Importer /exporter	3	0	0	0
Retailers	4	1	0	2
Restaurants/ caterers	32	10	1	8

Source: KPMG analysis

Product recall and withdrawal

Figure 43: Number of responses to non-time and time costs associated with product recall and withdrawal, by FBO type

	Product recalls - lost revenues	Product recalls - Informing the relevant authorities	Product recalls - Contacting purchasers	Product recalls - Internal investigations	Product recalls - Other
Primary producer	0	0	0	0	0
Manufacturer and packer	7	7	7	7	4
Slaughterhouse	0	0	0	0	0
Primary producer of dairy products	4	4	4	4	1
Primary producer of meat and meat products	2	2	2	2	0
Distributor/ transporter	0	0	0	0	0
Importer /exporter	2	2	2	2	1
Retailers	4	5	5	5	3
Restaurants/ caterers	6	4	4	5	3

Source: KPMG analysis

© 2018 KPMG LLP, a UK limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative (“KPMG International”), a Swiss entity. All rights reserved.

For full details of our professional regulation please refer to ‘Regulatory Information’ at www.kpmg.com/uk

The KPMG name and logo are registered trademarks or trademarks of KPMG International Cooperative.

