An Evaluation of Food Chain Information (FCI) and Collection and Communication of Inspection Results (CCIR)

Final Report – Project FS145002

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MLCSL

MLCSL (Meat and Livestock Commercial Services Limited), is a subsidiary of the Agriculture and Horticulture Development Board (AHDB).

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EXECUTIVE SUMMARY

The objective of this study was to evaluate the implementation of Food Chain Information (FCI) and the Collection and Communication of Inspection Results (CCIR) for all species in the UK. This is part of a wider review by the FSA of the current official controls on meat to identify potential changes that would support an improved system.

The objectives were to:

1. Review the relevance of the current FCI/CCIR system to help Food Business Operators (FBOs) to reduce the public health risk on their meat and for farmers to improve their production systems, resulting in better animal health and welfare standards and the reduction of public health hazards.

2. Evaluate the extent to which the current FCI/CCIR system is operating and how the FCI is being used by FBOs of slaughterhouses and their Official Veterinarians (OVs) and livestock producers and their veterinary advisers, so as to meet the objectives of its implementation.

3. Assess if the FCI/CCIR system could be improved in ways that would impact on the meat production chain for the different species and on the organisation of official meat controls in cost effective ways.

The work to fulfil these objectives was carried out through a combination of desk research, analysing the information contained in the Food Standards Agency (FSA) ante-mortem (AM) and post-mortem (PM) databases and national surveys. These used structured interview techniques to investigate the experiences and attitudes of livestock producers and the food business operators of slaughterhouses and their official veterinarians, towards the operation of the current FCI/CCIR system, and the changes and improvements they would like to see.

The report concluded that the FCI requirement should be maintained. It is being complied with and used effectively in the poultry and pig sectors, particularly by large scale, integrated, producer processors, where it is seen by most as providing essential information for the production of quality products. However, this view was not reflected as fully by the smaller producers in these sectors or by those in the other sectors and the FBOs of the plants they supply.

In the cattle and sheep sector in particular, there was still a tendency by many producers and FBOs to view the FCI requirement (for a variety of reasons set out in the report) as only an ‘administrative chore’, rather than an important process in the marketing of animals. This also caused some concern amongst FBOs and OVs as regards the accuracy of some of the information provided, within the limitations of the ‘minimum elements’. This, together with the inconsistent correlation to inspection outcomes, led to some uncertainty about its usefulness in making the necessary interventions and targeted inspection practices that could improve on existing food safety and animal health and welfare outcomes.

At the same time, it was felt that there was a sufficient base of understanding on which to build and, in the cattle and sheep sectors, the results of the survey confirmed that if implemented fully it would have a positive impact. In addition, it was felt in all sectors that there was some merit to deepen the FCI requirement by

forming better links with farm assurance schemes, so that more 'additional information' was available about the conditions of the flock/herd on farm, as well as about individual animals. Where required and possibly on a risk basis, producers should transmit this information to the plants for use by the OVs/FBOs, preferably before the livestock are sent to the abattoir.

The investigations uncovered a similar picture as regards the operation of the CCIR system. Whereas in theory this operated well within the larger poultry and pig chains, with detail available through the electronic inspection results recording system (although the extent to which farmers interrogate it is unknown), the majority of cattle and sheep producers interviewed maintained that they did not routinely receive the results of inspections.

The report recommended the following improvements to the current system:

1. Carry out a risk analysis for each species. This should take account of the differences in the various structured (often complex) systems of livestock production and marketing that exist, in order to determine the 'key information', other than the 'minimum elements', that should also be provided to assess the health of the animals. This should be linked with the inspections required to protect public health.

2. Provide farmers with background information on the conditions of key concern that may affect their livestock and why it is important to provide this information on FCI forms. For example, a species specific list of the top five conditions of concern to both public health and/or animal health. In principle, the majority of AM conditions can be recognised by farmers and could be recorded on FCI. This information should not be restricted to those that may affect public health but should also include information on conditions that affect animal health and animal welfare.

3. For conditions of key concern, consideration should be given to setting trigger points in the cattle, sheep and pig sectors (as with poultry) for the number of cases of a particular condition in a herd or flock. This information should be provided as part of FCI with any other animals sent for slaughter from the same herd or flock.

4. Improve the knowledge and understanding of the role FCI plays in the public and animal health chains. This will combat the attitude amongst some farmers that their responsibility for the livestock they produce ends at the point of sale. It will also stress that the returns they can expect will be enhanced if they have a good reputation for delivering healthy livestock that meets all the FCI requirements. To this end, an enhanced communications programme should be targeted at cattle and sheep producers, pig farmers outside the integrated chain and smallholders who keep livestock.

5. FCI should, as far as is possible, be provided in advance. This will allow the FBOs and OVs the time needed to respond to issues and make arrangements that reduce the risk from specific groups of animals. Ideally, electronic data transfer should become the norm for all commercial farmers but with a paper option or hybrid for smaller/hobbyist producers. FCI should also be exhibited with or

before animals are sold within livestock markets, so that it forms part of the decision making process for purchasers.

6. The enhanced communications programme to the farming sectors identified above should also promote farmer ownership of FCI. Changing farmers attitudes towards the FCI requirement (i.e. to overcome the view amongst some that it is merely an 'administrative chore') is seen as an important step to improving the quality and trust that FBOs and OVs have with some of the FCI data supplied by cattle and sheep farmers in particular. If this still remains an issue it may be necessary to introduce a system to verify farmer compliance with the FCI requirement, identifying what are considered to be 'high risk', farms that have a history of poor/inadequate compliance with the FCI requirements, for greater scrutiny and remedial action. Explore the use of information from third party assurance schemes for the purpose of Food Chain Information. Use the enhanced communication programme to also remind farmers of the inspection information that should be available to them through the operation of the CCIR system and which can be requested if it is not made available. This should help them improve the health/welfare of their livestock (and thus their productivity).

7. Develop a programme to improve the FBOs appreciation of the information that is provided to them and the actions they should be taking as a result of that information, to improve the safety of the products they produce. FBOs should also be encouraged to support the messages being given in the enhanced communications programme to farmers.

8. Improve the extent to which CCIR happens as a matter of course in the cattle and sheep sectors in particular. All such inspection results should be returned, in the first instance, to producers (as there is evidence that far fewer cattle and sheep producers have regular contact with their farm veterinarian, than is the case in the pig and poultry sectors). Information should be sent to veterinary advisers where requested.

9. Review the operation of the system for the verification of inspection results, so that the consistency of results within and between plants is such to ensure the accuracy of PM information and extent of CCIR. Building trust in AM/PM inspection results will gain respect for the system.

10. Encourage assurance schemes of abattoir standards to introduce a requirement, whereby the FBO of a slaughterhouse has to act together with the OV to improve the provision to producers of the results of the inspections of their livestock.

1. Introduction

1.1 Background

Providing Food Chain Information (FCI) has been a legal requirement since the consolidated EU food hygiene regulations were introduced (with the reference to food chain information in Regulation (EC) 853/2004 and 854/2004)[1]. In Britain the requirement for poultry was introduced in 2006[2], pigs in 2008 and cattle and sheep since 1st January 2010. In Northern Ireland similar information has been available through the operation of the Animal and Public Health Information System (APHIS) for cattle since 1998. In 2006 it went live for sheep and pigs. APHIS records ante and post mortem inspection results for cattle, sheep and pigs but not for poultry.

In practice the FSA had sought to implement the requirements for food chain information in such a way that the so called 'minimum elements' can be met simply and easily using model documents (see examples in Annex 6), thereby minimising the burden on food business operators.

The 'minimum elements' consist of statements to confirm that:

a) The holding is not under movement restrictions for animal disease or public health reasons (e.g. TB) – excluding the 6 day standstill.
b) Withdrawal periods have been observed for all veterinary medicines and other treatments administered to the animals while in this and previous holdings.
c) That the livestock as far as the producer is aware, are fit and healthy and not showing any signs of a disease or condition that may affect food safety.
d) No analysis of samples taken from animals on the holding has shown that animals have been exposed to any disease or condition or to substances that may affect the safety of the meat.

FCI may arrive with the animals (with the exception of poultry, for which it must arrive at least 24 hours in advance) but any item of FCI which might result in serious disruption to the slaughterhouse activity must be received in good time before the animals arrive. Currently for cattle, sheep and for most pigs, FCI is most commonly appended to the movement licence[3] and will accompany the animals when they are being transported. FCI for poultry is required at least 24 hours before, except where the ante-mortem (AM) inspection is done at the farm. It is good practice, however, to send the information before the animals are consigned so as to prewarn the abattoir and its official veterinarian of any issues to watch out for (especially important if the animals have been injured prior to consignment).

[1] Regulation EC No 853/2004 (29 April 2004) - laying down specific hygiene rules for food of animal origin. Annex II, Section III – Food Chain Information; and EC No 854/2004 (29 April 2004) – laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption. Annex I, Section I, Chapter II A – food chain information; and Section II, Chapter I – communication of inspection results, Chapter II – decisions concerning food chain information.

[2] According to the FSA, for poultry before this date something similar was required, called 'production reports'.

[3] Or is included on the declaration for emergency slaughter outside of the slaughterhouse.

In specific instances additional information is required (e.g. where the information on the animals does not fulfil the above statements) or can be provided. For pigs and especially poultry, more additional information is mandatory (e.g. for pigs and poultry the requirement to name the private veterinary for the holding/unit; for poultry information on salmonella control) and more can also be provided.

The EU regulations that introduced FCI also made provision for the Collection and Communication of Inspection Results (CCIR). OVs have to record and evaluate the results of inspection activities and are required to:

a) Inform the FBO if inspections reveal the presence of any disease or condition that might affect public or animal health, or compromise animal welfare.
b) Inform the veterinarian attending the holding of provenance, the FBO responsible for the holding of provenance and, where appropriate, the competent authority responsible for supervising the holding of provenance, when the problem arose during primary production.
c) Inform the competent authority if the animals concerned were raised in another Member State or third country.

The results of inspections are also required to be included in relevant databases.

1.2 Objectives

The objective of this study was to evaluate the implementation of Food Chain Information (FCI) and the Collection and Communication of Inspection Results (CCIR) for all species in the UK. This is part of a wider review by the FSA of the current official controls on meat to identify potential changes that would support an improved system.[4] The specific objectives were to:

1. Review the relevance of the current FCI/CCIR system to help FBOs, reduce the public health risk on their meat and for farmers to improve their production systems, resulting in better animal health and welfare standards and the reduction of public health hazards.

   Involving work to:

   i) Review the relevance of the content of FCI in relation to current public health, animal health, and animal welfare hazards.

   ii) Identify any links between the information provided in FCI and the desired outcomes of live animals and carcase/offal inspections. Those outcomes should help the slaughterhouse FBOs to reduce public health risks on their meat and the farmer to improve their production systems, resulting in better

[4] Food Standards Agency (FSA), Programme MC1 – Future Meat Controls Research, aimed at reviewing the current official controls on meat, to identify how public health could be improved by adopting a more risk and evidence based approach to meat hygiene.

animal health and welfare standards and the reduction of public health hazards.

2. Evaluate the extent to which the current FCI/CCIR system is operating and how the FCI is being used by FBOs of slaughterhouses and their OVs, and livestock producers and their veterinary advisers, so as to meet the objectives of its implementation.

   Involving both qualitative and quantitative survey work, within the different livestock sectors, with:

   i) FBOs of slaughterhouses and their OVs; for plants killing cattle, sheep, pigs and poultry.

   ii) Producers of cattle, sheep pigs and poultry (and their veterinary advisers).

3. Assess if the FCI/CCIR system could be improved in ways that would impact on the meat production chain for the different species and on the organisation of official meat controls in cost effective ways. Taking account of the linkages that could exist to other information systems, such as the assurance schemes and lessons from its operation in other countries.

   Involving work to:

   i) Establish and identify links to other information systems, e.g. herd health plans, third party assurance schemes, with a view to indentify if those should or can become an integral part of FCI.

   ii) Identify ways in which FCI/CCIR could be changed or extended to support an improved system of meat controls in the future and its value to the consumer and the supply chain.

   iii) Establish the effectiveness of systems used to deliver and allow the flow of communication of FCI and CCIR, and the accuracy of the information provided. Identify the benefit an improved FCI/CCIR system could have (i.e. in terms of cost, resources, tasks, other).

   The definition of what would be an improved FCI system and any changes that could be made that would allow:

   a) The FCI and CCIR systems to better meet the objectives (as defined) throughout the supply chains,

   and/or

   b) This to be done in a more cost effective way, that still enable the FCI and CCIR systems to meet their objectives.

1.3 Key Questions

1) Is the FCI requirement being complied with adequately by all the livestock sectors and in all parts of the livestock and meat supply chain (e.g. from the large integrated processing companies to the fragmented artisanal sectors)?
2) How accurate is the FCI supplied to the FBOs and is there any identifiable correlation to the inspection outcomes?
3) Does the information and the current format provide the FBOs and the OVs with the data required to make the necessary interventions or targeted inspection practices which improve the current animal health, welfare and food safety outcomes?
4) To what extent is the FCI being assessed and analysed by the FBOs and the OVs in the different sectors and supply chains and has it become an integral part of the procurement and inspection procedures?
5) To what extent has the introduction of FCI impacted on inspection techniques or altered practice of either the OVs or FBOs?
6) To what extent does the CCIR meet the needs of the different sectors and supply chains and what links and equivalences are there (or not) with other information systems that have similar requirements, such as 3rd party assurance schemes (e.g. is the post-mortem information being supplied and if so does it fit the purpose for improving animal health, welfare and food safety)?
7) To what extent do producers and their veterinary advisers use the information? Is the provision of CCIR valued by the producer as a tool to make production changes and drive efficient production?
8) To what extent would the information from existing FSA databases on the pathological conditions identified by current inspection procedures support the view that good FCI would enable future inspection procedures to be better targeted to improve the system of meat controls and also to improve animal heath and welfare?

2. Relevance of FCI/CCIR in Reducing Public Health Risk and Improving Animal Health and Welfare

2.1 Approaches to Objective 1

To review the relevance of the current FCI/CCIR system to help Food Business Operators (FBOs) to reduce the public health risk on their meat and for farmers to improve their production systems, resulting in better animal health and welfare standards and the reduction of public health hazards.

Involving work to:

i) Review the relevance of the content of FCI in relation to current public health, animal health, and animal welfare hazards.

ii) Identify any links between the information provided in FCI and the desired outcomes of live animals and carcase/offal inspections. Those outcomes should help the slaughterhouse FBOs to reduce public health risks on their meat and the farmer to improve their production systems, resulting in better animal health and welfare standards and the reduction of public health hazards.

2.2 Analysis of AM and PM Databases

An analysis was carried out of the FSA central databases that collate the information on the conditions affecting animals found during ante mortem (AM) and post mortem inspection (PM) at abattoirs in Great Britain (GB). Where possible, the analysis looked at four years of data for cattle, sheep, pigs and broilers, covering the period January 2008 to November 2011.

The total number of slaughtering in GB during the full 4 years are set out in Table 1.

Table 1. Slaughterings in Cattle, Sheep, Pigs GB; Poultry UK (* and England and Wales**)**

	2008	2009	2010	2011	4 year total
Cattle (000)	2,201	2,059	2,244	2,396	8,900
Sheep (000)	16,051	15,017	13,637	14,184	58,889
Pigs (000)	8,134	7,676	7,872 *	8,220	31,902
Poultry – Broilers (million)	791.6 *(651.9)	799.0 *(651.2)	862.6 *(710.0)	854.9 *(701.1)	3,308.1 *(2,714.2)

Source Defra
Note; from 2010 the statistical series was changed, so that only clean pigs are included (i.e. sows and boars are not recorded)

In the following Sections 2.3 to 2.5, the AM and PM results categorised under the sub heading of conditions which were judged by the consultants' to be a cause of public health concern (in the meat derived from the carcases) are shown in Tables 2 and 4 for cattle, 6 and 8 for sheep, 10 and 12 for pigs. The tables show the number of incidences of the condition recorded over the period in question and the consultants' view as to whether or not the farmer could have identified this condition in the FCI sent.

The other conditions recorded were judged to be of concern for animal health and or animal welfare reasons. It is, of course, debatable as to whether conditions should be separated in this way, as all illness is a welfare issue, but for the sake of brevity in the following analysis, it was decided to do this on the basis of the conditions which we thought were of most concern for health or for welfare reasons (some are shown with equal ranking).

The top five AM and PM conditions recorded, and the consultants' view as to whether they are a concern with regard to animal health, animal welfare or public health, whether or not the farmer could have identified this condition in the FCI sent are shown in Tables 3 and 5 for cattle, 7 and 9 for sheep, 11 and 13 for pigs.

Those that are a concern to public health have direct implications for meat safety. Those that affect animal health and welfare may give rise to concerns about the 'wholesomeness' of meat in the eye of the consumer but do not normally directly affect meat safety (although it should be noted that these conditions could, in some circumstances, be accompanied by secondary bacteraemia that could be infectious in nature).

The poultry (broiler) inspection results for conditions of a public health concern and the top five conditions recorded are shown in Section 2.6.

2.3 Cattle AM and PM Inspection Results

2.3.1 AM

The AM data base over the period in question recorded 134,454 incidences of conditions affecting cattle delivered to the slaughterhouse at the point of AM inspection (1.5% of total GB slaughtering over the full four years).

These were categorised under the sub heading of 20 AM conditions, of which four were judged by the veterinary expert on the consultancy team, in liaison with other experts, to be a cause of public health concern. These are shown in Table 2, together with an indication as to whether or not the farmer could have identified this condition in the FCI.

Table 2. AM Conditions Recorded in Cattle in GB of Public Health Concern, over the period Jan 2008 to Nov 2011

Condition	Incidence	Farmer Identification *
Mastitis	17,412	yes
Diarrhoea	2,606	yes
Neurological symptoms	218	yes
Suspect fever	128	no

Note:* Based on the consultants' opinion and knowledge of what farmers report for veterinary advice

The top five conditions reported were:

Table 3. AM Top 5 Conditions Recorded in Cattle in GB, over the period Jan 2008 to Nov 2011

Condition	Incidence	Of concern to	Farmer Identification *
Lameness	55,608	A/W	yes
Mastitis	17,412	A/P	yes
Joint lesion	11,845	A	no
Tumour, wart, papilloma	11,758	A	yes
Abscess	9,463	A	no
% of above of total incidences of conditions	79%		

Note: A = animal health; W = animal welfare; P = public health
* Based on the consultants' opinion and knowledge of what farmers report for veterinary advice

2.3.2 PM

The PM database over the period in question recorded 4,213,807 incidences of conditions affecting cattle delivered to the slaughterhouse at the point of PM inspection (47% of total GB slaughtering over the full four years).

These were categorised under the sub heading of 38 PM conditions, of which eight were judged, by the veterinary expert on the consultancy team, in liaison with other experts, to be a cause of public health concern. These are shown in Table 4, together with an indication as to whether or not the farmer could have identified this condition in the FCI.

Table 4. PM Conditions Recorded in Cattle in GB of Public Health Concern, over the period Jan 2008 to Nov 2011

Condition	Incidence	Farmer Identification*
Mastitis	25,175	yes
Suspect fever	24,475	no
Hydatidosis	7,044	no
Cysticercus bovis	2,674	no
Suspect notifiable **	1,234	yes
Sarcocyst	247	no
Suspect residue	156	no
Brucellosis	6	no

Note:* Based on the consultants' opinion and knowledge of what farmers report for veterinary advice
** It should be noted that this is not a condition but a range of signs.

The top five conditions reported were:

Table 5. PM Top 5 Conditions Recorded in Cattle in GB, over the period Jan 2008 to Nov 2011

Condition	Incidence	Of concern to	Farmer Identification *
Fascioliasis	1,764,817	A	no
Kidney lesions	696,893	A	no
Pleurisy/pneumonia	463,778	A	no
Abscess	453,082	A	no
Lung lesion	158,291	A	no
% of above of total incidences of conditions	84%		

Note: A = animal health; W = animal welfare; P = public health
* Based on the consultants' opinion and knowledge of what farmers report for veterinary advice

2.4 Sheep AM and PM Inspection Results

2.4.1 AM

The AM database over the period in question recorded 892,718 incidences of conditions affecting sheep delivered to the slaughterhouse at the point of AM inspection (1.5% of total GB slaughtering over the full four years).

These were categorised under the sub heading of 34 AM conditions, of which four were judged by the veterinary expert on the consultancy team, in liaison with other experts, to be a cause of public health concern. These are shown in Table 6, together with an indication as to whether or not the farmer could have identified this condition in the FCI.

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Table 6. AM Conditions Recorded in Sheep in GB of Public Health Concern, over the period Jan 2008 to Nov 2011

Condition	Incidence	Farmer Identification*
Diarrhoea	4,648	yes
Neurological symptoms	603	yes
Suspect Fever	348	no
Suspect residue	16	no **

Note:* Based on the consultants' opinion and knowledge of what farmers report for veterinary advice
** However, while for all animals on their holding, farmers should know what veterinary medicines have been administered and if the withdrawal periods have been met or not, animals can also be bought in and if so their medical history may not be known to the new owner.

The top five conditions reported were:

Table 7. AM Top 5 Conditions Recorded in Sheep in GB, over the period Jan 2008 to Nov 2011

Condition	Incidence	Of concern to	Farmer Identification*
Lameness	291,020	A/W	yes
Pneumonia	243,685	A	no
Foot rot	88,077	W	yes
Skin condition	62,282	A	yes
Eye condition	39,434	W	yes
% of above of total incidences of conditions	81%		

Note: A = animal health; W = animal welfare; P = public health
* Based on the consultants' opinion and knowledge of what farmers report for veterinary advice

2.4.2 PM

The PM database over the period in question recorded 17,491,512 incidences of conditions affecting sheep delivered to the slaughterhouse at the point of PM inspection (30% of total GB slaughtering over the full four years).

These were categorised under the sub heading of 32 PM conditions, of which five were judged by the veterinary expert on the consultancy team, in liaison with other experts, to be a cause of public health concern. These are shown in Table 8, together with an indication as to whether or not the farmer could have identified this condition in the FCI.

Table 8. PM Conditions Recorded in Sheep in GB of Public Health Concern, over the period Jan 2008 to Nov 2011

Condition	Incidence	Farmer Identification*
Contamination	3,140,498	no
Hydatidosis	267,733	no
Suspect fever	11,386	no
Suspect residue	193	no
Suspect notifiable	85	yes

Note:* Based on the consultants' opinion and knowledge of what farmers report for veterinary advice

The top five conditions reported were:

Table 9. PM Top 5 Conditions Recorded in Sheep in GB, over the period Jan 2008 to Nov 2011

Condition	Incidence	Of concern to	Farmer Identification*
Cysticercus tenuicollis	4,380,584	A	no
Fasciola	3,823,943	A	no
Contamination	3,140,498	A/P	no
Pleurisy/pneumonia	2,198,623	A	no
Abscess	1,190,105	A	no
% of above of total incidences of conditions	84%		

Note: A = animal health; W = animal welfare; P = public health
* Based on the consultants' opinion and knowledge of what farmers report for veterinary advice

2.5 Pig AM and PM Inspection Results

2.5.1 AM

The AM database over the period in question recorded 327,202 incidences of conditions affecting pigs delivered to the slaughterhouse at the point of AM inspection (1% of total GB slaughter over the four full years).

These were categorised under the sub heading of 20 AM conditions, of which two were judged by the veterinary expert on the consultancy team, in liaison with other experts, to be a cause of public health concern. These are shown in Table 10, together with an indication as to whether or not the farmer could have identified this condition in the FCI.

Table 10. AM Conditions Recorded in Pigs in GB of Public Health Concern, over the period Jan 2008 to Nov 2011

Condition	Incidence	Farmer Identification*
Erysipelas like	2,090	yes
Diarrhoea	747	yes

Note * Based on the consultants' opinion and knowledge of what farmers report for veterinary advice

The top five conditions reported were:

Table 11. AM Top 5 Conditions Recorded in Pigs in GB, over the period Jan 2008 to Nov 2011

Condition	Incidence	Of concern to	Farmer Identification*
Lameness	90,575	A/W	yes
Hernia	77,000	A	yes
Fighting wound	63,700	A/W	yes
Abnormal breathing	36,000	A	yes
Coughing	17,000	A	yes
% of above of total incidences of conditions	87%		

Note: A = animal health; W = animal welfare; P = public health
* Based on the consultants' opinion and knowledge of what farmers report for veterinary advice

2.5.2 PM

The PM data base over the period in question recorded 5,014,147 incidences of conditions affecting pigs delivered to the slaughterhouse at the point of PM inspection (16% of total GB slaughter over the four full years).

These were categorised under the sub heading of 28 PM conditions, of which three were judged by the veterinary expert on the consultancy team, in liaison with other experts, to be a cause of public health concern. These are shown in Table 12, together with an indication as to whether or not the farmer could have identified this condition in the FCI.

Table 12. PM Conditions Recorded in Pigs in GB of Public Health Concern, over the period Jan 2008 to Oct 2011

Condition	Incidence*	Farmer Identification**
Septicaemis/toxaemia	960,707	yes
Hydatidosis	181,750	no
Colour change	19,210	no

Note: * rounded to nearest 10
** Based on the consultants' opinion and knowledge of what farmers report for veterinary advice

The top five conditions reported were:

Table 13. PM Top 5 Conditions Recorded in Pigs in GB, over the period Jan 2008 to Nov 2011

Condition	Incidence*	Of concern to	Farmer Identification**
Milk spot	1,574,550	A	no
Septicaemia/toxaemia	960,710	A (P)	yes
Abscess	439,670	A	no
Metritis	356,070	A	no
Nephritis ***	307,490	A	no
% of above of total incidences of conditions	73%		

Note: A = animal health; W = animal welfare; P = public health
* Numbers rounded to nearest 10
** Based on the consultants' opinion and knowledge of what farmers report for veterinary advice
*** Some nephritis could be caused by Leptospira spp

2.6 Poultry (Broiler) Inspection Results

The analysis of the pre and post Innova[5] inspection database over the period in question recorded 63,507,568 incidences of conditions affecting chickens delivered to the slaughterhouse (2% of the UK total over the full four years).

These were categorised under the sub heading of 22 conditions, of which four were judged by the veterinary expert on the consultancy team, in liaison with other experts, to be a cause of public health concern. These are shown together in Table 14, with an indication as to whether or not the farmer could have identified this condition in the FCI.

Table 14. Conditions Recorded in Broiler Chickens in GB of Public Health Concern, over the period Jan 2008 to Nov 2011

Condition	Incidence	Farmer Identification*
Perihepatitis **	12,501,217	no
Ascites oedema ***	6,028,742	no
Hepatitis ****	4,588,326	no
Contamination	2,096,215	no

Note:* Based on the consultants' opinion and knowledge of what farmers report for veterinary advice
** Identified in that e coli, like salmonella, is a major issue of public health concern and that this condition could indicate such an underlying cause
***. In practice the carcase showing this condition is normally septicemic and removed from the line, also for 'quality' purposes but included because if they are rejected they are a public health risk
**** Condition leads to bile contamination, which is a reason for rejection and a public health concern rather than a major risk

[5] Innova is the name of the FSA internal database that records AM and PM inspection information

The top five conditions reported were:

Table 15. Top 5 Conditions Recorded in Broiler Chickens in GB, over the period Jan 2008 to Nov 2011

Condition	Incidence	Of concern to	Farmer Identification*
Perihepatitis	12,501,217	A/P	no
Machine damage	9,787,161		no
Bruising/fracture	7,279,312	A	Yes/no
Ascites/oedema	6,028,742	A/P	no
Abnormal colour/fever	5,291,909	A	no
% of above of total incidences of conditions	64%		

Note: A = animal health; W = animal welfare; P = public health
:* Based on the consultants' opinion and knowledge of what farmers report for veterinary advice

2.7 Observations

Of the incidence of conditions affecting cattle, sheep, pigs and poultry recorded at the points of inspection at the slaughterhouse, the majority are conditions affecting animal health and welfare, as shown in Table 16.

Table 16. Summary of the Number of Conditions Recorded at Point of Inspection over the period Jan 2008 to Nov 2011

	a) Number of conditions recorded	b) Number judged to affect Public Health	% b) of a)	% of b) Farmer could identify
Cattle AM	134,454	20,364	15.1	99.9
PM	4,213,807	61,011	1.4	43.2
Sheep AM	892,718	5,615	0.6	93.5
PM	17,491,512	3,419,895	19.6	0.2
Pigs AM	327,202	2,837	0.9	100.0
PM	5,014,147	1,161,667	23.2	82.7
Broiler Chickens	63,507,568	25,214,500	39.7	

Of the top five conditions reported for cattle and sheep at AM and PM 79 to 84% (depending upon the species) were all conditions affecting animal health and welfare, except for the mastitis recorded in cattle at AM.

Similarly, in pigs the top five conditions for all AM (87%) and PM (73%) conditions were all conditions affecting animal health and welfare, except for the septicaemia/toxaemia.

With poultry, two of the top five conditions concern public health, with the top five accounting for a lower proportion of the total than with the other species at 64%. However, three of the next five conditions are made up of ones that arise at the plant. These were for dead on arrival, over scald and contamination, which if taken together with the machine damage (in the top five), account for 28% of the total number of recorded conditions.

The concern about some of the recorded conditions that could affect public health is that they indicate an underlying condition, e.g. diarrhoea in cattle, sheep and pigs. However, from a public health perspective it is the conditions causing this sign that is the main cause of concern and these are not found by current AM and PM practices[6].

Because the AM and PM data it is not divided into lambs/adult sheep, dairy/beef the figures are not as helpful to any specific sectors as they could be. The analysis in the above tables shows that the majority of AM conditions could be recognised by the farmer and should be recorded on the FCI; however, farmers only have to provide limited FCI.

There is no action against farmers who send animals with identifiable defects (e.g. lame sheep is an obvious case). One recommendation could be that if there is less veterinary input at the slaughter stage, the producer should be required to provide more information relating to the animal, that is not restricted to a condition that may affect public health but also covers those affecting animal health and welfare.

It should be noted that there were observed to be a number of anomalies in the data and this was also picked up by the VLA report (e.g. can animals be identified as anaemic animals at ante-mortem inspection?)[7].

This supports the view of some of the private and plant veterinarians interviewed who felt that not only could they not trust some of the FCI provided but that some of the CCIR information could also be suspect, because it was alleged that there is too much variation in some of the decisions on certain conditions made by OVs and meat inspectors.

This implies that there should be a system of regular revalidation of meat inspection skills, focusing on the ability to recognise defects and to allocate them the correct diagnosis, if that is possible in the slaughterhouse. There should also be regular validation exercises across premises to ensure the same decisions are made by the different teams.[8]

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[6] In October 2011, the European Food Safety Authority (EFSA) completed the first stage of a major piece of work that will provide the scientific basis for the modernisation of meat inspection and published the first set of scientific opinions covering the inspection of swine. In all livestock such conditions as Salmonella, E coli, Campylobacter are growing meat safety issues. The EFSA opinion of public health risks from pork meat identifies Salmonella, Yersinia enterolytica, Toxoplasma gondii and Trichinella (which has not been found in GB since 1968), as priority targets in the inspection of swine meat at abattoir level, due to their prevalence and impact on human health. It was concluded that current inspection methods do not enable the early detection of the first three of these hazards and, more broadly, do not differentiate food safety aspects from meat quality aspects, prevention of animal diseases or occupational hazards.

[7] MC1001 Review of Historic Ante and Post Mortem Inspection Data 2010.VLA Project Code FS2455001

[8] It should be noted that FSA reported that it has recently completed an exercise across multiple pig sites resulting in recommendations and actions to improve future GB consistency.

3. Survey Approach to Evaluating the Operation of the Current FCI/CCIR System

3.1 Approach to Objective 2

In order to evaluate the operation of the current FCI/CCIR system, a number of surveys to fulfil Objective 2 were carried out with regard to the structure of the supply chains operating in each livestock sector and the number of agents in each chain (i.e. the number of primary livestock producers and the number of abattoirs).

Given the large number of agents (i.e. livestock producers and companies involved in slaughtering livestock) in the different sectors of the supply chain and the timescale envisaged for the work, an indicative sampling methodology, was chosen as the most cost effective means of evaluation and the most productive. This used structured interview techniques for the FBOs/OVs sample, to complete questionnaires for the plant of each company. For the sample of livestock producers, a combination of approaches using structured interviews and self completion questionnaires was used.

3.2 The Indicative Samples

In the slaughtering sector, companies involved in slaughtering livestock were chosen from lists of plants as compiled. These were stratified taking into account regional and plant type factors, as discussed in Annex 1. The statistical robustness of the surveys was built on the consultants' in-depth knowledge of the industry, combined with access to unique throughput information for the red meat sector available within the levy boards. This facilitated the selection of an indicative stratified sample of target plants from FBOs operating within key industry supply chains, to be representative of the FCI and CCIR issues.

If for whatever reason the FBO of a target plant could not be engaged to take part in the survey, the plant was replaced by one of a similar type (depending on the regional and plant type needs) that was carefully chosen by the consultants' so as not to introduce a bias into the results. In total this involved the reselection of five small/medium sized plants and the replacement of a large abattoir in one region by a medium sized plant in the same region.

Such replacement was less to do with FBOs refusing to co-operate but more to do with the fact that, for many, it took a far longer than was envisaged from making an initial contact, to arranging an interview, to completing the structured interview questionnaire. While with many plants (of all types and sizes) it was clear from their initial reception that they would most likely co-operate, events were delaying the process (in some instances by up to six months). With others it was less clear following the initial approach that they would take part and so they were replaced.

In order to help the process of engagement, industry groups such the British Meat Processors Association (BMPA) and the Association of Independent Meat Suppliers (AIMS) in the red meat sector and the British Poultry Council (BPC) in the poultry sector, were engaged to liaise with their members in order to improve the prospects of FBOs engaging with the survey.

In the livestock production sector, the stratification of the number of producers interviewed was based on the proportion of the producers of the main species in England, Wales and Scotland (for dairy and beef cattle, sheep, pigs and broilers), as discussed in Annex 1, with the final allocations shown in Table F.

Individual livestock producers and those representing the views of groups of producers were approached to take part in the survey using the consultant's knowledge of and linkages with the industry. In the first instance, this was from contacts with all sizes and types of livestock producer available through the Agriculture and Horticulture Development Boards levy bodies for English beef and lamb – EBLEX and pigs – BPEX, extended to utilise contacts with similar levy boards in Wales – Hybu Cig Cymru (HCC) – Meat Promotion Wales, and Scotland – Quality Meat Scotland (QMS) and the Livestock and Meat Commission (LMC) in Northern Ireland.

The number of producers contacted to take part in the survey was supplemented by approaches to various bodies representing livestock producers, who circulated questionnaires to their members through their regional committee structures. This involved in particular the National Farmers Union (NFU England, Wales and Scotland), Ulster Farmers Union, the BPC, the National Pig Association (NPA), the National Beef Association (NBA) and National Sheep Association (NSA). In addition, each of the FBOs interviewed was asked for two contacts representing two typical suppliers, who were also approached to complete questionnaires.

This method of approach, to engage commercial livestock producers through a variety of bodies that represent or work for them plus the abattoirs which they supply, has, it is believed, produced a robust sample of responses that represent the views of all commercial livestock producers concerning FCI and CCIR issues.

3.3 Production of the Questionnaires

Initial drafts of the two principal questionnaires for FBOs/OVs and livestock producers was produced and initially piloted with a number of 'friendly' representatives of slaughtering companies and livestock farmers at a number of industry events.

Revised drafts of the questionnaires, taking account of the issues raised during the initial piloting exercise, were then sent to FSA for comments by the FSA Social Science/Statistics team, and their suggestions were incorporated in a second draft questionnaire. Final drafts were produced after a further small number of pilot interviews had been conducted.

One, if not the main issue highlighted by the pilot survey, was the need to include on the farmers questionnaire in particular an introduction that outlined the main reasons for the need for FCI, the 'minimum elements' required and CCIR. This was because many of the livestock producers (and some of the abattoirs) interviewed at the pilot stage were very wary of why we were asking the questions, in the sense that they almost seemed to fear we were trying to catch them out on their understanding of a legal requirement.

This seemed to introduce a note of caution behind their answers to each question, so much so that in some cases it seemed clear that the interviewee overly considered their answers to make sure that those given were what they felt the interviewer wanted to hear! This also extended the interview session to the disgruntlement of both interviewer and interviewee.

The addition of the introduction, which was read out preceding verbal interviews with all FBOs and livestock producers, or was there to be read by livestock producers who were self completing the form, satisfactorily addressed this issue. See Annex 2 Questionnaires.

For the FBOs/OVs a standard questionnaire was used for both multi species plants killing cattle, sheep and pigs, and specialist plants killing cattle, sheep, pigs or poultry.

For livestock producers a standard form of questionnaire was used with three variations for:

a) Beef/dairy and sheep producers
b) Pig producers
c) Poultry producers

This reflected the answers to diseases that producers felt posed the greatest threat to meat safety (Question 5), and the greatest threat to the health and productivity of their livestock (Question 20). Other than for these questions, the questionnaires for each species were identical.

3.4 The FBO/OV Survey

3.4.1 Approach

The stratified sample of FBOs of slaughterhouses and the OVs operating within them, were approached to take part in face to face structured interviews based on the final revised questionnaire.[9]

The objective of the survey, it was explained, was to evaluate:

a) Their attitudes towards having to collect, check and act upon information on the condition of livestock sent for slaughter (i.e. Food Chain Information),

and

b) To what extent was information that was derived from results of the ante and post-mortem inspections (CCIR) being returned to livestock farmers.

It was also stated that the individual answers provided would be confidential and only seen by members of the MLCSL Consulting research team and will only be used anonymously and when combined with those from the other FBOs and OVs interviewed. All the completed survey forms will be held securely and not used for any purpose beyond this specific project.

The majority of the interviews were arranged by telephone and conducted on the premises of the slaughterhouse concerned, with the person representing the FBO and the OV being interviewed separately, usually on the same day. The answers given by the interviewees were transcribed by the interviewer onto the structured

[9] See Annex 2 for the FBO/OV questionnaire used.

interview questionnaire as the interview progressed. Where the answer required a statement/opinion, rather than a box to be ticked, once written was read back to the interviewee to ensure it had been recorded correctly.

The interviews were carried out in this way in order to save time and the expense of double visits. However, to achieve this in practice, when combined with the low priority in which the survey was regarded by most of the FBOs contacted (as compared with coping with the day to day problems of running a slaughtering business), meant that the lead time required to set up the visits was much longer than was anticipated.

None of the plants that were contacted declined to take part. A very few of the small and medium sized plants and one large abattoir were very difficult to engage for various reasons (e.g. difficult to contact the owner/manager who was also the FBO to arrange a meeting; did not return telephone calls; meetings were arranged and then cancelled at short notice). After it was considered that enough time had been spent in trying to engage them, they were substituted.

Each interview took on average between 20 and 40 minutes to complete, although in some cases the interviews lasted longer. This was because some of the questions, rather than eliciting a succinct reply, often triggered a discussion about the issues being raised and this greatly extended the time taken for the interview.

3.4.2 The Sample Target and Interviews Completed

Table 17 shows the targets for the plants to be contacted (by region and size/type of plant) and the record of interviews completed

Table 17. Targets for Plants to be Contacted and Interviews Completed

		Red meat		Poultry	
		Target number	***Number interviewed***	**Target number**	***Number interviewed***
1.England	Small/ medium	18	*19*	3	*3*
	Large	15	*14*	1	*1*
2.Wales	Small/ medium	3	*3*		
	Large	2	*2*		
Sub total (1+2)		38	*38*	*4*	*4*
3.Scotland	Small/ medium	4	*3*		
	Large	3	*4*	1	*1*
Sub total 1+2+3)		45	*45*	*5*	*5*
4.Northern Ireland	Large	3	*3*	1	*1*
Total		*48*	*48*	*6*	*6*

Definitions of the size of red meat abattoirs:
Small – 1,500 to 18,000 Cattle units (CU – where 1 cattle beast = 5 pigs or 10 sheep)
Medium – Over 18,000 CU but not part of integrated companies supplying supermarkets
Large – Plants belonging to integrated companies supplying supermarkets

3. 5 The Livestock Producer Survey

3.5.1 Approach

A structured interview technique, similar to that undertaken for the FBO/OV sample, was used for some individual livestock and representative groups of livestock producers. In addition, the questionnaire was designed so that it could be completed by individuals. To this end copies were also sent out to producers identified by their various representative bodies as well as to those identified by the FBOs of the slaughterhouses interviewed (as set out earlier), for such self completion.[10]

The questionnaire began by explaining that the objective of the survey was to evaluate:

a) The attitudes of livestock farmers towards having to supply information on the condition of livestock sent for slaughter (i.e. Food Chain Information),

[10] See Annex 2 for the livestock producer questionnaire used, and the species variants

and

b) The extent to which they receive and use the results of ante and post mortem inspection (i.e. Collection and Communication of Inspection Results).

Farmers were asked to complete the questionnaire if they had sent animals to slaughter in the past 18 months.

It was also stated that the individual answers provided would be confidential and only be seen by members of the MLCSL Consulting research team and only used anonymously and when combined with those from the other producers interviewed. All the completed survey forms would be held securely and not used for any purpose beyond this specific project.

3.5.2 The Sample Target and Interviews Completed

The agreed target for the farm survey was to complete questionnaires for 250 livestock enterprises, stratified by the importance of the species and by the importance of the region (England, Wales, Scotland) within the livestock/meat sector.

Target numbers set out in Table 18, are based on this stratification, with the actual numbers supplemented by additional questionnaires completed by two producers identified by each of the FBOs as typical suppliers to their plants.

The numbers were also increased by questionnaires being completed by managers of groups of producers who, it was maintained, had common practices/views with relation to the key questions (e.g. producers in integrated supply chains), in the pig and poultry sectors in particular.

Table 18 shows the targets for the numbers of livestock producers to be contacted (by region and species) and the record of interviews completed.

Table 18. Target for Questionnaires to be Completed for Livestock Enterprises and Number Completed

	Beef and dairy cattle		**Sheep**		**Pigs**		**Poultry**	
	Target	Number completed	Target	Number completed	Target	Number completed	Target	Number completed
England	84 of which		26	75	44	43 (203)*	33	39 (89)**
Dairy	18	20						
Other	66	113						
Wales	8 of which		11	13	1	1		
Dairy	2	2						
Other	6	15						
Scotland	28 of which		4	9	3	3 (143)*	7	1 (81)
Dairy	6	3						
Other	22	17						
GB total	120	170	41	97	48	47 (346)*	40	40 (170)**

Note:

*Refers to numbers of units represented (e.g. England 43, includes interview with manager of BQP group of 160 Pigs units in England, all operate to the same standards).

** Refers to numbers of units represented (e.g. England 39, interview with manager of integrated supply group of 50 poultry units for Frank Richards in England, all operate to the same standards).

As the survey progressed it was clear that the variability of the answers amongst the same number of producers interviewed was higher in the cattle and sheep sectors than in the pigs and poultry sector. The replies by the pig and poultry producers interviewed to a number of key questions were very similar.

Both ‘a priori’ and following the pilot surveys, this was expected, given the more dominant nature of integrated/ordered supply chains that exist in the pig and poultry sector, compared with the cattle and sheep sectors. When the survey was planned, however, this could not be assumed and targets were set to match species importance, as set out in Annex 1.

The actual number of interviews completed in the pig and poultry sectors closely matched the targets but the number of holdings this represented was higher because it included the replies from integrated groups. In the cattle and sheep sectors a greater number of questionnaires were completed than was originally planned and these showed the same variability in answers to some questions as had been indicated by the pilot surveys.

4. Discussion of the Results of the Surveys of FBO, OV and Livestock Farmers

4.1 Understanding by FBOs of the Reasons for the FCI Requirement

There was a positive response from the FBOs at 94% of the red meat plants and 100% of the poultry plants interviewed, that they understood the reason why the requirement to request, collect, check and act upon Food Chain Information for livestock sent for slaughter was introduced.

Of those that answered that they understood the reason for the FCI requirement, 53% of the FBOs of red meat plants, and 50% of those in poultry plants believed that it was to do with ensuring the integrity of the livestock, expressed in various ways. For example, that livestock should be fit for slaughter, have met withdrawal periods and that here was nothing untoward on the farm. Only 23% of the FBOs of red meat plants were of the opinion that it was about ensuring the safety of meat, expressed in various ways (e.g. that livestock should have no underlying conditions or medication that might make the meat unsafe for the consumer). The remaining 50% of poultry plants answered that it was about integrity and meat safety.

4.2 The Receipt of FCI

All of the FBOs that were interviewed at the plants killing cattle and sheep in the UK maintained that FCI was being received in paper form.

With pigs 40% of plants were now receiving the FCI by electronic means. These were made up of a mixture of large and medium sized pig plants. The introduction of the electronic animal movement licence (eAML) pig service in early 2012, while the survey was being completed, caught a picture of a pig sector in transition. Some large plants still received some by paper or through the bureau service.

Of the poultry plants, two received FCI information by means of both paper forms and web/e mail.

The current practices indicated by the FBO/OV Survey were fully substantiated by the Farmer Survey, in which 90% of those sending cattle for slaughter and 96% of those sending sheep provided FCI as a paper copy sent at the same time as the animals.

With pigs, 69% replied that they were now sending the information by web/e mail, with the majority sending this in advance.

With poultry, over 85%, were now sending the information by web/email, the majority sending this in advance, with only small/medium sized producers sending birds to the smaller regional poultry plants still sending paper forms, usually before the birds were consigned.

Of those sending a paper copy, when asked if they could submit the FCI by web or email means, over 95% of pig and 90% of dairy cattle producers replied that they could, together with 66% of cattle and sheep producers.

For the much smaller number of poultry producers not sending by web or email, there is still an issue about IT use, for what are believed to be mainly small scale producers in some areas.

IT broadband access for all producers was also reported to be an issue in many of the more remote areas of GB, particularly rural Wales, with similar usage issues amongst smaller producers. This was also thought to be one of the reasons why 34% of beef and sheep producers in particular would have a problem with web, email. In addition, it was the opinion of some, that the high age profile of these farmers, compared to pig and poultry producers, was a further reason why many had a lower capability in using IT systems.

FBO Views on How They Would Like to Receive FCI

When asked how they would like to receive it, while many of the plants (particularly those killing cattle and sheep) were happy with paper copies, 37% of those killing cattle, 35% sheep and 60% of the pig plants replied they would now like to receive it via the web/email. The eight plants killing pigs that were still happy with paper were all small/medium plants.

While all of the poultry plants preferred to receive FCI by web/email, one also still would like to keep the paper option for smaller suppliers (their reason was that 'it is good to offer alternatives, as this creates a more flexible source of supply').

OV Views on How They Would Like to Receive FCI

When asked the same question, a large number of the OVs than the FBOs interviewed maintained that they preferred to continue to receive the information on paper copies. However, for both cattle and sheep, 15 of the replies preferring paper came from OVs in small/medium abattoirs, some because they said they had no access to a computer.

Many felt there was a need to move on, with 27% of those in plants killing cattle, 16% in plants killing sheep and 50% in plants killing pigs expressed a desire to receive the information by web/email.

None of the OVs in the large pig plants preferred paper, but some in the large cattle and sheep plants still did, including the OVs in all but one of the Scottish and NI plants. One large poultry plant was happy to receive FCI information by web/email, provided it was in a format that could be easily printed.

4.3 Requirement for FCI to be Sent in Advance

The majority of FBOs interviewed at red meat plants replied that they wanted the FCI no more than 24 hours before the livestock arrived at the plant. With 58% of those killing cattle, 55% killing sheep and 40% killing pigs wanting it on the same day as the animals arrived.

The three red meat plants wanting the information more than 48 hours in advance were all large pig plants

All of the poultry plants wanting the information 72 hours before, all require the information to be sent on a Friday before the next weeks kill.

When asked the same question, the views of the OVs closely mirrored those of the FBOs but with a large proportion in the red meat plants replying that they wanted it on the same day as the animals arrived. It was thought by some OVs that if the farmer knows there are livestock with abnormalities, they should be informed 24 hours before, but that many smaller/medium abattoirs are not skilled with computers and a pre-slaughter web/e mail system should not be imposed upon them.

4.4 Satisfactory Provision of 'Minimum Elements' of FCI

The FBOs at all plants answered that over 50% of the FCI that accompanies each animal/batch to their plant, satisfactorily provided information on the 'minimum elements' required, while the majority maintained that this was over 75% (representing 90% of plants that killed cattle, 87% sheep, 80% pigs and 100% poultry).

However, this should not be interpreted that the abattoirs completely trusted the accuracy of the completed forms. As the answers to other questions will illustrate, for some of the livestock delivered (particularly from livestock markets) the answer given should be thought of as a general statement about the batch, rather than their satisfaction with the information about individual animals.

4.5 Provision of 'Additional' FCI

A large number of the FBOs interviewed at red meat plants (representing 68% of those killing cattle, 71% sheep and 60% pigs) plus two of the six poultry plants, maintained that fewer than 25% of livestock suppliers provided 'additional information', to the 'minimum elements' of FCI required. While in the red meat sector between 15 and 17% said they received no additional information.

Of the six plants killing cattle and four killing sheep that said more than 25% of their suppliers provided 'additional information', four of the cattle plants and three of the sheep plants were in Scotland.

Of the five pig plants answering that 'additional information' came from more than 25% of suppliers, three were specialist pig plants (although for some the 'additional information' only came with casualty animals).

Some of the smaller plants (that tend to have closer links with regular individual suppliers) maintained that farmers, rather than completing forms, will convey any problems with incoming animals, usually by word of mouth (i.e. telephone before the animals arrive), to alert the plant.

This picture of the extent of 'additional information' supplied was mirrored by the replies to the Farmer Survey, particularly in the cattle and sheep sectors, with over 60% of those interviewed maintaining that they 'never' supplied such additional information. These proportions were much lower in the pig and poultry sectors, with many providing additional information as a matter of course.

The small number of private veterinarians interviewed replied that when asked, they advised clients about FCI but this was only infrequently (i.e. when dealing with questions such as fitness to travel, post treatment movement and drug withdrawal issues and emergency slaughter).

4.6 Most Farmers See the Provision of FCI as Important

The replies to whether the FBOs believed that their producer suppliers saw the provision of FCI as an important final stage of sending an animal to slaughter, was high in poultry plants, with five of the six interviewed replying that is was seen as important by over 75% of suppliers (and one by over 50%). In red meat plants the replies varied relatively evenly across the species, with the plants replying that it was seen as important by less than 25% of their suppliers representing 48% of plants killing cattle and sheep and 30% of pigs. FBOs at only small/medium sized plants tended to see the provision of FCI as 'not important'.

The Farmer Survey showed not unexpectedly, that a very large proportion of the pig and poultry producers interviewed expressed that they had a good understanding of why they have to provide FCI. This was also the position of 53% of beef cattle, dairy and sheep producers, while a further 42% of the total admitted that their understanding was vague but only 5% said that they did not understand the reason for it.

However, when asked for their view on what was the main reason, a large percentage of the cattle and sheep producers were of the understanding that it was about observance of veterinary medicine rules and to make sure the meat is not contaminated with residues. For this group (representing 36%) food safety did not implicitly form part of their answer, although it did for 33% (others referred to traceability as the main reason).

Nevertheless, many of the FBOs interviewed, thought that many of their suppliers saw the FCI requirements as a chore, who while they may understand the importance of FCI (some albeit, only as a legal requirement), they do not see the paperwork as important, are not keen to complete it and do not see the value.

This concern about the attitude of farmers towards the provision of FCI was mirrored in the varying replies given by the OVs interviewed about how the inspection outcomes correlate with conditions indicated by FCI.

While in the poultry sector, the OVs interviewed replied that the outcomes correlated closely or very closely for most animals, in the red meat sector 36% of those in plants killing cattle, 52% sheep and 30% pigs replied that the outcomes do not correlate very closely.

There were many comments denigrating the usefulness of the FCI forms, as many farmers do not complete them properly and that much of the information, particularly in the cattle and sheep sectors, is only on the 'minimum elements' from which little relating to meat safety can be deduced.

This was also seen as a particular problem for information that accompanied livestock from auction markets.

Two other comments stood out as representing wider views The first, from an OV at a small/medium plant in England, that outcomes do not correlate with FCI for cattle and sheep, as farmers do not really have the information on the issues that are identified at inspection. The second, from an OV at a large cattle and sheep plant in Northern Ireland, that there are issues with the forms, in that the wording refers to

abnormalities or conditions, but does not spell out what can affect meat safety and no farmer can judge whether the condition is related to meat safety.

For ante-mortem, five out of the six poultry plants replied positively that the FCI supplied did enable them to determine specific inspection procedures.

However, about 35% of the OVs at plants killing cattle, sheep and pigs replied that it did not and they required more information, specifically on the general condition of livestock on the farm.

For post-mortem the answers from the OVs at poultry plants were split 50/50 between those that thought the FCI supplied did enable them to determine specific inspection procedures and those that thought it did not and they required more information.

At plants killing cattle, sheep and pigs, about 30 to 35% of the OVs interviewed, replied that depending on the species, the FCI supplied did not enable them to determine post-mortem inspection procedures and they required more information.

Again there were a number of typical comments made to back up this attitude to FCI that tied in with the comments made in reply to other questions. For example, direct quotes included *'that as few suppliers put anything significant (or anything) on the form, it is difficult to assess the accuracy of the information and, therefore, to determine procedures'*; another – *'that many farmers seem to regard the current forms as tick box exercises*'.

In the main, because the large majority of farmers would not knowingly sell animals that are not healthy, there is scepticism about the FCI information. There was also a view that the attitude amongst some farmers is to put as little information as possible, as this will decrease the chances of rejection.

4.7 Usefulness of FCI in Helping FBOs to Aid the Arrangements for Slaughtering and Processing

The majority of the replies from 38 plants in the red meat sector in Great Britain were positive (answered Yes), that the FCI received did provide the best information available to aid arrangements for the slaughtering and processing of livestock.. However, of these 28% of plants killing cattle, 29% sheep, 38% pigs and 17% poultry believed that further information could be sent.

When asked what additional information they required, 39% of plants expressed views in various ways that *'the current FCI information that is provided is very basic, particularly for cattle and sheep, it does not inform about underlying conditions or the history of the livestock (rearing and growing issues) and that more notification in advance is required about certain conditions'*. However, there was a concern expressed that you have to believe what is written!

The remaining 61% of plants either had no comment or, despite replying that more information was required, agreed with others that they saw the current system as a tick box exercise that was too bureaucratic and thought that a new approach was needed that provided the information that was required.

All of the plants that answered 'No' (nine plants killing cattle, seven sheep and four pigs), and thought that improvements could be made, were either small/medium plants in GB, plus the plants interviewed in NI (of which three killed cattle and two sheep). All of the NI plants wanted more information, while those in GB either made no comment or expressed a desire to do away with the requirement for FCI altogether.

Some plants, including large cattle and pig plants, did not see that FCI added anything, other than proving due diligence and that as their field staff will alert the plant over any issues with livestock before they arrive at the plant, it was unnecessary and for smaller plants, created excessive administration.

4.8 Ability of FCI in Providing Information to Aid Food Safety Decisions about Meat

When the FBOs were asked if the FCI provided information to aid food safety decisions about meat, about 50%-60% (depending on the species slaughtered) of the red meat plants and all the poultry plants replied 'Yes' that it did, with the remainder replying 'No' and that improvements could be made.

The view from 52% of the red meat plants interviewed, expressed in various ways, was that improvements should be made to ensure that the FCI was completed properly.

There was a view from the red meat plants that many farmers do not complete the forms correctly and the best improvement would be to encourage them to do so. Some were concerned that the form is very basic; others that they have to trust what farmers tell about such as withdrawal periods.

It was generally felt by the red meat plants slaughtering cattle and sheep in particular, that farmers need a better understanding of what FCI is about, in order to overcome the views of many who see the current forms as a 'tick box' exercise. Some were concerned that there was no information about underlying conditions and that there should be more feedback from farmers to plants (i.e. with better information on animal health testing, medicines used/medical histories, farm assurance status) and that few farmers asked for feedback from plants.

One red meat plant and four of the poultry plants thought that food safety decisions about meat could be best improved by moving to a system of 'exception reporting', this would simplify the current system and concentrate producers minds to only report on key issues (which, for the poultry plants, were concerns about the salmonella status of farms and the arising issues at slaughter).

In the Farmer Survey, as expected from replies to other questions, the majority of pig and poultry producers believed that current FCI provided can help improve meat safety. 72% of cattle and sheep producers also replied positively to this.

Amongst the 28% of cattle and sheep producers that did not think it improved meat safety, there were some clear views about the 'Worth' of the information provided, with 84% maintaining that it gave no useful information (i.e. who would send livestock for slaughter if they thought the animal was unfit for such and then say so?). In addition some were of the view that all the answers to the 'minimum elements'

depend on the producer's honesty but only a very small proportion of producers would lie, as they would be found out during inspection.

The remainder (16%) thought of the FCI requirement as 'Unnecessary', seeing the withdrawal period notification as important, which most abide by but anything else was seen as an unnecessary bureaucratic requirement. A small proportion saw it as 'unnecessary' as it duplicates what the Farm Assurance status implies.

The farmers understanding of what diseases/conditions posed the greatest threat to meat safety was reasonably good, with key concerns such as Salmonella, Campylobacter and E coli, featuring highly in the response to the question about this. However, only the pig and poultry farmers had good information on the health status of their stock with regard to Salmonella that they could provide to abattoirs. This was not the case for the cattle and sheep producers who had no information on all three conditions.

4. Additional Information Required to Improve the Usefulness of FCI

When the OVs were asked what additional information was needed to enable inspection resources to be better targeted on tasks that will improve food safety, animal health and welfare, there were two main replies from those in red meat plants. These were expressed in various ways as better information on:

a) General condition of livestock on the farm. Of the OVs interviewed, 77% replied that inspection resources could be better targeted if more information was available about issues on the farm, e.g. the results of on farm testing (for pigs – salmonella), major disease issues, contact with notifiable disease; general health and welfare of livestock on the farm.

b) However, the remainder (apart from two 'no comments') were of the opinion that what was required was simply that it should be better explained to farmers what the purpose of FCI is, so as to ensure that farmers completed the forms properly.

It was the opinion of some that the current system relied too much on the integrity of the farmer, many of who see current system seen as merely a tick box exercise. This view was backed up by the small number of private veterinarians interviewed. Their consistent view about what could be done to improve the FCI system was to better educate the farmer to give them a better understanding of the need, coupled with training and guidance on how to complete it. This is a recurring theme with regard to improved knowledge and understanding from all respondents.

The OVs in the six poultry plants were divided between those who were happy with the current provision of FCI and had no views on what 'additional information' may be required, to the view in two plants (that corresponded with the view from red meat plants) that more information on the condition of livestock on the farm would be useful, and one who questioned the relevance of FCI, on the grounds that knowing in advance will make no difference to the AM and PM inspection procedure (i.e. this is not to say that it is not required – just that it is only a prerequisite to inspection).

When asked if the guidance available given in the FCI forms and/or in model documents, enabled farmers to complete the food chain information required, again it was the cattle and sheep producers who were most critical that the guidance

available did not allow them to do this to the best of their ability. Again a training need is identified.

While over 70% of pig and over 80% of poultry producers were happy with the guidance given, over 45% of beef and dairy cattle and almost 60% of sheep producers, thought the guidance could be improved.

Providing the Name of the Private Veterinarian

The view of the OVs as to whether the omission of the contact details of the private veterinarian normally attending the holding of provenance ever causes a problem, was overwhelming 'Yes' from OVs in poultry plants but 'No' from 65% of OVs in red meat plants.

For the poultry plants in GB, the 'Yes' referred to poultry FCI forms which include the private veterinary details relating to the holding at which the 'crates' of birds originated.

The 35% in red meat plants that answered 'Yes', mainly saw it as an issue when there was a problem with the animals and/or carcase and if they wanted to verify information but found communication with the farmer supplier either difficult or vague. This was often because of what they saw as the poor attitude of many farmers in the cattle and sheep sector in particular towards FCI, who see the FCI paperwork as a chore rather than something intrinsically important to the meat supply chain.

Some plants were already logging the names of the private veterinarian into their systems, as do all red meat plants in NI, where the name of the private veterinarian is already logged onto the APHIS system.

The replies to the Farm Survey showed that all of the producers interviewed in the poultry sector and the majority in the dairy and pig sectors employed the services of a private veterinarian to regularly advise them on animal health issues.

In the beef and sheep sector there were still 30% of those interviewed that replied that they only use a private veterinary as required and not for regular advice. (Note: EBLEX maintain they also have evidence to support this finding, especially in the sheep sector).

Of the producers that currently received information on the results of inspections, over 58% of the cattle and 69% of the sheep producers interviewed, were concerned that the private veterinary used by the farm should not be regularly informed of issues arising from the results of inspections. This was also a concern for over 40% of the pig and poultry producers.

Of those that answered that the private veterinarian should be informed, over 80% of cattle and sheep producers and 66% of pig producers said that if anyone was to inform the private veterinary about the results of inspections, it should be the livestock producer. Poultry producers were less equivocal about this but over 40% of them still thought it should be the livestock producer who informed the private veterinary about issues concerning their livestock.

The reply from some of the small number of private veterinarians interviewed, was that the OV and the practice veterinarian needed to develop a better relationship, similar to that being done for those who sign up to the British Pig Health Scheme.

4.10 The Impact of FCI on Plant Operations

Rejections for Slaughter

Most of the FBOs at red meat plants, representing 83% of those killing cattle, 87% sheep and 85% pigs and the FBOs at all of the poultry plants maintained that no livestock in the past year has been rejected for slaughter for human consumption as a result of the receipt of FCI and for the remainder it was less than 25% of the time.

Many commented that PM inspections are where carcases are rejected and these are not based on FCI. Only those handling TB cattle, although answering 'None', commented that they have rejected cattle based on FCI because of TB. In one plant that answered 'less than 25% of the time', this mainly referred to cases where the slaughter was delayed due to the FCI arriving late.

Two NI plants said that any rejection was usually because of the wrong withdrawal period or where animals have required casualty slaughter

Use in Organising Routine Slaughter Programmes

While FCI is used to an extent by plants to organise their routine slaughter programmes, there were still 49% of plants killing cattle, 58% sheep and 60% pigs who said they never used it to do this. Some of the FBOs at these plants replied that AM inspection will cause such changes but not FCI. While others replied that they will normally re-arrange slaughter following pre-notice by farmers, e.g. through a telephone call to the abattoir if a beast has a problem, rather than wait for FCI to arrive.

When asked what 'additional information' would make them alter their routine slaughter programmes, 63% of the red meat plants and five of the six poultry plants replied more information about the general condition of livestock on the farm. This was expressed in varying ways as relating to information about issues on the farm (i.e. result of on-farm testing for pigs and particularly poultry for salmonella), other major disease issues, contact with notifiable disease; general health and welfare of livestock on the farm.

Others commented that they would be more likely to do this if the information on withdrawal periods could be trusted. One large cattle and sheep plant in England believed (as more of a commercial wish) that additional information should be made available about the ages of cattle, to assist the grouping for slaughter.

None/no comment was given as an answer by 27% of the remaining red meat plants and the one poultry plant.

The Changes by FBOs, and Interventions by OVs that can be made to Alter Routine Slaughter Programmes

All the FBOs in reply to this, apart from one no comment, answered these could be to do with the order of kill and/or line speed, except for three small/medium plants that said they would make no changes (barring exceptional circumstances).

For the poultry plants the order of kill will reflect the status of the birds delivered, e.g. for one large plant the normal order was – organic first, then free range, then shed but salmonella issues could alter this.

All the OVs, when asked a related question, of what actions/interventions can they take in the slaughterhouse to improve the effectiveness of decisions on the safety of meat including inspection, also answered in a fairly standard way. They said they could change the order of slaughter (isolate animals and detain carcases), alert the FSA staff on the line of what to watch out for and at the extreme, remove animals and carcases from the food chain

4.11 Recording of AM and PM Inspection Results

The OVs in many of the cattle and sheep plants begin recording the AM and PM results on paper or using notes. For AM this was the case in 73% of the plants killing cattle and 77% sheep and for PM for 66% of the plants killing cattle and 74% sheep.

All of the OVs in plants killing cattle and sheep stating that they use paper and notes, are either directly transcribing the AM and PM results or at the end of the day transcribing onto FSA standard AM and PM forms. These are then consolidated at the end of the week for onward transmission to FSA by fax or email.

The four OVs at plants killing pigs who said they were doing this for AM results and four for PM results were all at small/medium plant. All of the pig plants are using the Innova system, as were all five of the poultry plants interviewed in GB (with the large poultry plant in NI using the plants own electronic system).

For AM results, the OVs at two large plants in GB using electronic systems said they were using the plants own electronic systems (which were Hellenic systems), but in the case of one which was a large pig plant, data had to be transcribed onto the Innova system as there was no connection between the two. The other were NI plants linked into the NI APHIS system.

For PM results, the OVs at two large cattle and two large pig plants in England who said they were using an electronic system for PM results, also maintained that these were the plants own electronic systems – Hellenic, but in the case of one which was a large pig plant data had to be transcribed onto the Innova system as there was no connection between the two. One of these large pig plants was using a touch screen PM system.

Many of the larger pig and poultry plants in GB, at the point of PM inspection, were using ‘clickers’ to record observed conditions.

For PM results at one large cattle and one large cattle and sheep plant in Scotland, the OVs said that they were using an electronic system, as were all three red meat

plants in NI. In NI this was linked into the APHIS system and, it was maintained, was backed up by paper notes (Note: APHIS does not extend to NI poultry plants).

4.12 The Provision of Inspection Results to Livestock Suppliers

Return of Information by FBOs

The following table shows a summary of the replies from the FBOs of plants interviewed killing cattle, sheep, pigs and poultry as to whether they sent the results of the inspections to their livestock suppliers and/or to their veterinary advisers.

	Yes, on all individual animals	**Yes**, but only for some animals with major issues -	**No**
Cattle	6*	23	12
Sheep	2	19	10
Pigs	7**	9	4
Poultry	5***	1	

Notes:

* four of these were in Scotland and some of these replied 'Yes' because they believed it was sent back through the FSA system (i.e. from the OV but it is possible that they are assuming this and do not really know).

** four were large pig plants and their reply referred to animals from a batch identified by slap marks with the information sent via the Innova system.

*** the information usually related to flocks and batch/loads from each supplying flock which was sent utilising the Innova system. Although one of the large poultry plants thought that the format that comes out of the Innova system was unintelligible, and they intended to re-format it into their own system for passing back to farmers.

However, the seemingly positive message that a great deal of information that is collected from inspection procedures is sent back, is misleading. This is because the answer 'Yes for some', given by the majority of plants, usually referred only to the information on rejections (condemnation notes) and other major issues being sent back as a matter of course (for relatively few animals). While other information could be provided on request, it rarely happened, and if it did, was based on carcase issues. Even fewer gave it on offal, i.e. on such as the incidence of liver fluke.

Of the plants that said 'No' they did not send information back, two were small/medium plants killing cattle and three sheep, purchasing mainly from live markets. All of the plants in NI replied 'No – not my responsibility' as it is available through the APHIS system.

Of those red meat plants that replied 'No', three large plants replied they intended to set up return procedures, 20 replied that they had no intention to set up such procedures were all from small/medium plants and three made no comment.

Return of Information by OVs

When asked what percentage of the results of inspections are sent by email to the livestock producers, there was a clear difference between those OVs interviewed in plants killing cattle and sheep and those in pig and poultry plants.

In plants killing cattle, 73% of the OVs replied that currently they where sending no information back to the producers and for sheep it was 77%. The 10% (four plants) of cattle and one sheep plant in which the OVs replied that all the results of inspections are sent back, were all large and what could be termed progressive supply chain development orientated plants, supplying large supermarkets (with one in England, two in Scotland and one in Northern Ireland).

In those cattle and sheep plants where the OVs replied that information is sent back on less than 50% of the livestock (that represented the remaining 17% of cattle and 19% of sheep plants), this information was believed to be only related to major rejections and irregularities. In some of these, additional information is sent on request.

The replies indicate that for the large pig and poultry plants a great deal of information on the results of inspections is being returned to suppliers. The OVs interviewed in over 40% of the plants killing pigs (eight plants), and all of those killing poultry, replied that the incidence of information sent back on the results of inspection was over 75%. This answer, it is believed, is linked to the view that as the information is being made available on the Innova system, it is available for the farmers to interrogate it (although the extent to which they did was unknown to the OVs).

Receipt of Information by Livestock Producers

The replies from the OVs were mirrored by the replies from the livestock producers. Over 50% of cattle and sheep producers maintained that they did not routinely receive the results of inspection on animals sent for slaughter. They maintained that if they received any information direct from abattoirs it was only kill sheet data (that typically set out weight, grades/classification, prices and deductions), or related to major rejections and condemnations and irregularities.

Those that were sent to slaughter via livestock auction markets (representing in the sample over 10% of cattle and 40% of sheep) the routine information received was even less detailed.

This impression given by cattle and sheep producers that in most cases detailed information was not received as a matter of routine was backed up by the comments from the small number of private veterinarians interviewed. When asked if their client consulted them about matters arising from inspection results, all answered Yes but only to a small extent and in many cases it was only when there were significant rejections that they were informed.

For the pig and poultry producers, the answer for all except for a very few small scale producers was positive, although in the pigs sector for 50% of those replying ‘yes’, the information returned was related to the batch (with identification of individual animals relying on slap marks).

When the producers were asked what inspection information they would you like to receive to enable them to improve the health and productivity their livestock, the majority of answers were from beef, dairy cattle and sheep producers.

While 57% of cattle and sheep producers made no response to this question, there were two main answers from the others. These were expressed in various ways with 27% expressing a desire for more information on conditions that have affected the internal organs , with particular comments relating to liver fluke and other parasites; 13% expressed a desire for more feedback on all information obtained from inspection (it was suggested perhaps detailed in kill sheets), together with specific issues that arise in lairage, slaughter line or the condition of the animals as they are unloaded (with dairy farmer interested in the lameness of their cull cows).

Conditions of Most Concern to Livestock Producers

The response of the livestock producers, to their view about the conditions which most concerned them as posing the greatest threat to the health and productivity of their livestock, produced a range of concerns.

Cattle:

Amongst the beef cattle and dairy producers, respiratory disease (pneumonia, IBR) and parasites (including lung and gut worms, fluke) were identified as concerns by the largest number (22% and 23% respectively).

The analysis of the national PM databases, referred to in Section 2, showed that of the total number of conditions identified in cattle at the point of PM inspection in GB in the four years 2008 to 2011, two conditions – fasciolasis and pleurisy/pneumonia – accounted for 53% of the total number of incidences across all 38 categories of conditions.

Sheep:

For sheep producers, respiratory disease (pneumonia) scored the highest, being identified as a concern by 34% of those interviewed, followed by parasites at 29% and lameness at 23%. In the case of parasites and to a lesser extent respiratory disease, a large proportion said that they did not have information on the health status of their stock, with regard to these conditions, that they could provide to abattoirs.

The analysis of the national AM databases, referred to in Section 2, showed that of the total number of conditions identified in sheep at the point of AM inspection in GB in the four years 2008 to 2011, two conditions – lameness and pneumonia – accounted for 60% of the total number of incidences across all 34 categories of conditions. In the PM data base for sheep over the same period, three conditions – Cysticercus tenuicollis, fasciola and pleurisy/pneumonia also accounted for 60% of the total number of incidences across all 33 categories.

Pigs:

For pig producers, respiratory disease was also a major issue, identified by 32%,, followed by swine dysentery at 21% and gut diseases (ileitis, post weaning diarrhoea) at 17%. A large proportion said they had information on these conditions relating to the health status of their stock that they could pass on to abattoirs.

The analysis of the national PM databases referred to previously, showed that of the total number of conditions identified in pigs at the point of PM inspection in GB in the four years 2008 to 2011, two conditions enteric disease and pleurisy - accounted for 7% of the total number of incidences across all 28 categories.

Poultry:

With poultry producers, concern about conditions that posed the greatest threat to the health and productivity of their livestock was more evenly spread amongst the conditions identified. The main difference with the poultry producers was that in all cases for the major conditions identified, they had information on the health status of their stock that they could pass on to abattoirs, except on campylobacter.

4.13 Utilisation of CCIR by Livestock Producers

The majority of the livestock producers that were in receipt of CCIR information (however detailed), replied that they received it within a week of their animals being slaughtered. Over 60 % of these, depending on the species, received it within 2 to 3 working days, except for sheep producers amongst whom 49% received it within 2 to 3 working days.

Over 70% of those who were in receipt of information (90% of poultry), maintained that they had taken action based on this information. Over 20% of the remaining cattle, sheep and pig producers said that although they had not made best use of the information to date, they would be looking to make better use in the future (although they did not specify how they would do this).

Almost all of the producers maintained that at some time they had consulted a private veterinarian about the results of the inspections they had received on their livestock, but fewer did this as matter of course (between 16 and 24% of cattle sheep and pig producers but 33% of poultry producers). The small number of private veterinarians interviewed confirmed that they were only asked to advise about inspection results, to a minor extent, and in many cases it was only when there were significant rejections that they were informed.

In the poultry and pig sectors, 95% of the poultry producers and 52% of the pig producers maintained that they used the results of inspections to calculate the loss in the value to their farm business from problems that are identified (as a result of the impact of the British Pig Health Scheme in the pig sector). A further 41 % of pig producers said that they were looking to make better use of the information to do this in the future. However, less than 40% of cattle and sheep producers said they were doing this, although over 40% replied that they were looking to make better use of the information to do this in the future.

The majority of the poultry producers (apart from a few very small scale producers), believed that they had sufficient information to help them make the best use of the results of inspections. While this view was matched by cattle, sheep and pig producers, 44 to 54 % depending upon the species, thought that they had sufficient information only on some issues.

When asked to identify the most important source of information (from those identified) on the diseases that may affect their animals, 62% relied on their own background knowledge/education/experience, and 34% on veterinary advice/ guidance literature.

For the 'second most important' source of information, 27% relied on their own background knowledge/education/experience and 46% on veterinary advice/ guidance literature, followed by the trade press at 11%.

The 'third most important' source of information, the trade press was voted higher at 44%, followed by levy board advice at 18% and consultants at 10%.

The results show that for most farmers their most important source of information on the diseases that may affect their animals, is their own knowledge gained from education and experience. This is refreshed by discussions with their veterinary advisers and the guidance literature which they see, kept up to date by their scanning of the trade press. All other sources of information for most livestock farmers are secondary. It is worth noting that the levy boards put out a large volume of material that is used by the trade press, for example the information on liver fluke distributed by EBLEX, and so indirectly are more important as a source of advice than the 18% score above would indicate.

4.14 The Improvement in Meat Safety due to the FCI System

The view of the FBOs at most plants about the veracity of the overall system of FCI was that it did improve meat safety, although 19% of red meat plants answered that it did not. However, of those that answered that it did, 54% believed it did this but to only a small extent. They were not specific about what they meant by this.

4.15 The Impact of the Introduction of the FCI/CCIR System on Animal Health and Welfare

The FBOs at all of the poultry plants were of the view that the introduction of the requirement for Food Chain Information (and the return of the results of inspection), has contributed to higher standards of animal health and/or animal welfare.

However, this view as regards animal health and welfare was only shared by some in the red meat sector.

There was a view from some of those interviewed, that farm assurance and other supply chain work has done more to improve animal health and welfare than the FCI/CCIR system so far and that this system is not a key driver for improvement. Some of the large Scottish cattle plants, for example, believed that as a result of the FCI/CCIR system there was some evidence that offal yields have increased in some cases and that there have been improvements to the health status of livestock with reference to such as liver fluke issues but much more remained to be done.

4.16 Farm Assurance Schemes as a Source of Information Similar to FCI

Less than 35% of the FBOs of red meat plants replied that they also received information from some of their livestock suppliers as a result of them being in a producer club or a farm assurance scheme, that provided similar assurance about compliance issues (e.g. on withdrawal periods) to that provided by the current FCI system.

For poultry plants, only one of the six plants interviewed said that they also received such information as a result of their suppliers being in a producer club or a farm assurance scheme (this was thought to be due to the integrated nature of many of their supply chains).

(Note: For further comments on this point, see Section 6, on Farm Assurance Schemes)

When the FBO's were asked 'if similar information to that provided through FCI could be provided from other sources, such as assurance schemes, should the requirement to continue to provide this information as part of FCI system remain', 69% of the red meat plants and all the poultry plants thought that 'Yes' it should. As one large cattle plant pointed out, the problem with FA information is that it is only audited periodically, while FCI is 'real time'.

The view of many of the remainder that said 'No', was that if the information can be provided through the assurance schemes, then why duplicate.

Of the replies from cattle and sheep farmers, over 90% of those interviewed indicated that they were members of a farm assurance scheme, which in England was invariably identified as the Red Tractor scheme (often identified as FABBL), with a few also answering that they were also in an Organic scheme, Freedom Foods, or a dairy scheme (NDFA). In Scotland and Wales it was the similar regional scheme, identified as QMS in Scotland and WQBL in Wales.

In the pig and poultry sector over 95% of those interviewed confirmed that they were part of a farm assurance scheme, although, because of the replies from managers of integrated holdings/units, it was unclear at times what was a national scheme, such as the Red Tractor or a company scheme, as the schemes were often referred to in different ways, e.g. as SAI Global, Genesis (thought to be confused with the farm assurance inspection bodies – but could be Global Gap) and in poultry, ACP.

The Red Tractor scheme can see the benefit of moving to an 'earned recognition' system for FCI, in that there could be a derogation for farm assured producers in having to complete FCI forms but that non assured farms should be required to provide more information.

4.17 Final Observations

Taking a holistic view from the many answers given in both the FBO and OV surveys, a picture builds up of what many FBOs and some OVs seem to feel about the general attitude of many of the farmers who supply their plants with livestock to the FCI system.

The overarching view is that it was perceived by many farmers, that once their animals were sold (i.e. to the buyer at a market or to the representative of the abattoir on the farm) and once the 'buyer' had seen the livestock and agreed a sale (i.e. accepted them as fit for sale without seeing FCI paperwork), then the buyer took on the responsibility of any subsequent problems that may affect not only animal health and welfare but also meat safety (i.e. the farmers customer is not the end consumer but the abattoir).

This was thought to be the case especially in the cattle and sheep sectors, with regard not only to those producers selling to the smaller/medium abattoirs but also those selling to some of the larger ones.

As a result, such farmers have only a limited interest in completing the FCI information, which is regarded by many as a mere addition to the Movement Licence and an additional chore that is no more than bureaucratic/red tape – 'a tick box exercise'.

The majority of livestock farmers (77%) response to 'if they had any suggestions or comments to make on ways of improving the effectiveness and efficiency of the information exchange between the producer and the processor', was – 'no comment'.

Of those that did comment, 62% of them expressed in various ways to the effect that the system should become integrated using the web/email for two way communications. This was backed up by the small number of the private veterinarians interviewed, who commented that better access to results could enable them to be pro-active in evaluation of post mortem data and culling rates and drive improved animal health, which is also a core principle of the British Pig Health Scheme.

A further 26% replied that farmers need to be made more aware that they can 'demand' to see CCIR on their livestock, while 6% believed that the system is much too bureaucratic and needs to be only driven (in both ways) by exception reporting.

This, to a certain extent, linked in with the views of some of the small number of private veterinarians interviewed, who commented that there was a danger of too much information being made available and that maybe there should be trigger points relating to conditions and their severity. While the OV and the practice veterinarian needed to develop a better relationship, rather than being bombarded with full details on every animal, perhaps this could be based on a rolling six months of results from each farm, to identify trends in disease and 'iceberg' indicators. This may be a long period for some conditions, which require more urgent action to prevent further exposure or distress of remaining animals in the herd. However, there may be a case for poultry where an 'all in all out' system is practiced and meat inspection outcomes are batch /flock specific.

5. Situation in Northern Ireland

5.1 Northern Ireland - Animal and Public Health Information System (APHIS)

All cattle, pig herds and sheep flocks in Northern Ireland are registered on Animal and Public Health Information System (APHIS). Along with other information, animal movements are recorded on the system from the farm on which the animals were born through to abattoir, individually in the case of cattle and by batch for sheep (with individual electronic EID numbers) and by batch for pigs.

APHIS has been operational for cattle since 1998. In 2006 it went live for sheep and pigs as well. It records ante and post mortem inspection results. APHIS has been declared fully operational and therefore no cattle passports are used. Direct access to the database is provided to Divisional Veterinary Offices, markets and slaughterhouses. Farmers are able to make notifications remotely to APHIS.

Poultry flocks are registered on APHIS but ante and post mortem inspection findings are not recorded. In Northern Ireland the Department of Agriculture and Rural Development (DARD) Veterinary Public Health Unit (on behalf of FSA) feeds back inspection findings through poultry slaughter house operators to their poultry producers/farmers.

5.2 All Species on APHIS

Slaughterhouse operators can access ante and post mortem inspection results input by OV and meat inspectors at their own slaughterhouse. The Livestock and Meat Commission (LMC) realised a significant culture change because the abattoir and producers can access this information which can be used for health improvement programmes.

Slaughterhouse operators, can if they wish, feed this back down the chain to their suppliers/producers.

Slaughterhouse operators can also, with the permission of the relevant herd/flock keeper, get access to the ante and post mortem findings of animals slaughtered in another abattoir.

5.3 Cattle

The system allows farmers to record details of every bovine animal in the province:

- Register cattle births, deaths and stillborns, breed, gender and colour.
- Produce movement notification of cattle moving from herd to market, abattoir or farm.
- Confirm animal movements into the herd.
- View and download the producer’s own herd list including information about animals’ DARD statuses, TB & Brucellosis (BR) test results and export eligibility.
- View movement and progeny history of every animal in the producers’ own herd.
- View post and ante mortem details of their own slaughtered animals.

- Produce a report to count and classify animals in accordance with the Nitrate Action Programme.[11]

For routine movements the farmer fills out a self Movement Declaration Document, including the food chain information declaration as in Great Britain. The recipient confirms the move into their herd/market/slaughterhouse.

Breeder → Finisher
Finisher → Abattoir
Breeder/Finisher → Market
Market → Purchaser

If an animal/herd are under restrictions, then DARD must issue a licence to move animal (e.g. TB test).

Information on medicine records is not available on APHIS. The LMC, for example, concerned that this could be important for health and treatment issues, such as dosing with Imizol for Red Water disease, a tick borne cattle disease not uncommon in Northern Ireland which has over a 100 day or 7 month withdrawal period. This is just one example of a veterinary medicine that could be missed in FCI if the animal passes from one keeper to another in the withdrawal period.

5.4 Sheep and Pigs

Sheep flocks and pig herds are all registered on APHIS, although without individual animal details like those held for cattle. There is individual numbering of sheep. Movements are notified and confirmed by batch as are ante and post mortem findings.

Much of what is legally required for the food chain information can be accessed by the slaughterhouse operator electronically from APHIS. However, details such as treatments administered and current health status can currently only be delivered by the signed paper copy of food chain information.

At present all abattoirs also receive paper copies of the movement declaration and the FCI. The responsible lairage operator accesses data held on the APHIS system and transfers the relevant animal number and associated data into the slaughterhouse's own system.

Following this, slaughterhouse operators check on FCI, the OV checks the FCI but is not obliged to put the FCI on the computer. The OV enters relevant ante mortem findings onto APHIS – this may include information from FCI if it were significant. It is exception reporting, as the bulk of animals slaughtered are fit and healthy. Meat

11 Nitrates Directive
The Nitrates Directive (91/676/EEC) (external link) – Council Directive of 12 December 1991 concerning the protection of waters against pollution by nitrates from agricultural sources – has the objective of reducing water pollution caused or induced by nitrates from agricultural sources.

In accordance with this Directive each Member State is obliged to put in place a Nitrates Action Programme and to review and, if necessary, revise their action programme at least every four years.

inspectors enter the post mortem findings on line. Again, it is exception reporting - if there are no findings nothing is entered.

The regulations do not require market operators to request food chain information from sellers or to pass on FCI. However, anyone purchasing an animal and intending to supply it for slaughter must be prepared to have the relevant FCI and pass it to the slaughterhouse operator when required. Some markets, where it is known that the animals are likely to go directly to slaughter, the auctioneer does announce available FCI. Slaughterhouse agents can sometimes buy from markets and hold them on a farm for a period of time. This is a loophole exploited by abattoirs to get round the supermarket requirement to not source animals from markets.

The pig producers and through them their pig advisors' and veterinary advisers', have access to their inspection data or CCIR's on APHIS and we were told by the largest pig producer group in Northern Ireland that most of their members use the information very professionally to improve herd health.

In the abattoirs, all meat inspectors and OVs are DARD employees. DARD has developed a list of standard post mortem conditions that are found for each of the three species and can be recorded on line. Producers have access to examples of pictures of common pig conditions to explain the findings.

No work has been done yet to produce similar pictures for the sheep and cattle conditions.

FBOs and OVs in the abattoirs have stated that they are seeing improvements in herd health and PM inspections, especially in pigs. Some of the Northern Ireland abattoirs ensure the information goes back to their producers for cattle and sheep. This information is typically on liver fluke, abscesses, bruising, "skinny" cattle etc. This enables a producer and their veterinary adviser to undertake further welfare interventions with the resulting improvement in animals coming in to be slaughtered.

The APHIS system will list the conditions/issues found in the abattoir. It is then up to the producer to access the inspection results, themselves or with the assistance of an agent and to collaborate with their veterinary adviser to make any adjustments/improvements in herd/flock health programmes:

- DARD → OV → Veterinary Public Health Unit

DARD believes that they have realistic expectations of APHIS and, although it may not be able to do everything, it does not mean it is not worth doing. It does contribute on every level, as well as recording the issues on the APHIS system the companies interviewed for this survey also collect these issues into their own system and will inform the producers by email or letter.

5.5 Poultry

The poultry industry is run independent to APHIS; however, it has similar detailed procedures that are managed by the large poultry companies. In most cases, these companies run an integrated supply chain managing the slaughter and further processing and retail packing of products. The poultry companies have farm veterinary advisers who work with the poultry producers to monitor flock health and welfare, including salmonella, mortalities, weights and feeding regimes. Abnormalities are recorded throughout the growing period and the paperwork is

supplied with the birds at time of slaughter. The abattoirs and their OVs record the ante and post mortem conditions and these go back with the slaughtering results to the producers.

5.6 Limitations of APHIS

- Base capture data is provided by the producers so accuracy is dependent on information provided by them. Input can be electronic or from a paper form completed by the producer.
- There are no means for the producer to enter private veterinary diagnosis/treatment notes or information regarding medicines/drugs administered, on APHIS, to complete electronic transmission of all aspects FCI.

Shortcomings of Current FCI and CCIR Feedback According to DARD and the Northern Ireland Slaughtering Industry

- There are costs involved with the many sheets of paper per consignment.
- Not all disease occurrences that would affect the safety of meat, e.g. hydatidosis, C bovis are recorded, as they can only be discovered during post mortem inspection.
- Results of the samples carried out on animals are not included, for example, some information on zoonoses or salmonella.
- Production data, when this might indicate a presence of a disease, is not included.
- Respiratory diseases such a pneumonia tend to be a growers (farmers who have animals born on his farm and rear them for a period of time) problem, rather than a finishers (farmers who purchase cattle with the main aim of finishing them ready for slaughter) problem, so the findings might not be relevant to the person accessing the information.

Other Uses of the Inspection Data

As well as the producers, processors and DARD having access to the inspection Data on APHIS, some commercial companies also have access to understand the key health and disease issues visible in the post mortem results.

Norbrook Veterinary sciences, a subsidiary of Norbrook Pharmaceuticals Worldwide, which conducts research, development and production of revolutionary animal healthcare products, record and monitor, fluke and statistics, resistance to flukicides and milk spot incidences. These are still a common finding indicating control measures on farm are not yet effective.

5.7 The Interaction with of Imports and Exports of Live Animals

All animals that are imported from or exported to the Republic of Ireland (ROI) or mainland Europe are managed on the TRACES system. This is the standard EU management tool for tracking the movement of animals and products of animal origin from both outside of the European Union and within its territory.

Keepers of cattle in The Irish Republic are obliged to notify the Department of Agriculture, Food and the Marine of the movement of cattle to and from their holdings

(similar to the UK). In the case of cattle sold privately, the source keeper must obtain a Certificate of Compliance from the Cattle Movement Notification Agency or online from the Department's website, prior to the movement of any animal off the holding. Both the source and destination keepers must confirm within 7 days of the event that the movement has taken place. Keepers must also notify the Department of on-farm deaths.

On entering the Northern Ireland abattoirs, imports are registered on the APHIS system. All cattle from the Irish Republic (ROI) come with the normal intra-community trade Cattle Movement Monitoring System (CMMS) paperwork and FCI. The CCIR tends not to go back to the ROI producers unless:

1. The abattoir has got a supplier relationship with the producers and will email health issues.
2. A notifiable disease is discovered e.g. TB. The OV will inform DARD who will notify Department of Agriculture, Food and the Marine (previously DAFF) in the ROI to initiate proceedings to investigate the producer holding.

Attempts have been made to provide competent authority in the ROI with computer download of all inspection findings in ROI cattle, but no electronic solution has been found to date.

6. Farm Assurance and Food Chain Information

The survey of livestock suppliers in England and Wales showed that the Red Tractor Farm Assurance Scheme was the main scheme to which producers belonged.

6.1 Producers

Within the latest Red Tractor standards, while the provision of FCI is not one of the required standards for the beef and lamb scheme, because it is a legal requirement, it is covered by the key standard LT.1 (see Annex 5 for the Red Tractor Beef and Lamb Farm Standards – Quick Guide – LT stand a for Livestock Transport). The standard states that:

'All stock must be accompanied by relevant movement/delivery information.'

However, the specific reference to FCI in the standard is given in italics and set out as:

'As required by legislation, Food Chain Information for animals going directly to slaughter must be provided to the abattoir/processing plant.'

FCI is referred to in this way by the Red Tractor scheme because this element of the standard is not considered as being capable of being audited at farm level.

However, in the pig standards LT1.1 the requirement for FCI is set out as a key standard, which states that:

'As required by legislation, FCI must be sent to the receiving slaughterhouse for each consignment of pigs sent for slaughter'.

The reason why this appears in the pig standard and not the cattle and sheep, was, according to contacts at the Red Tractor scheme, because of the way in which the pig standards were set up.[12]

[12] Legislation was introduced from 1st January 2008 to require that Food Chain Information (FCI) must be sent to the receiving slaughterhouse for each consignment of pigs sent to slaughter (BPEX provided an online system to help producers deliver this information efficiently). There was a standard in the original ABPigs scheme which re-iterated this requirement (3.9).

During the harmonisation exercise, the pigs sector insisted on retaining a similar standard, linking it with movement records (TI.1.1) and, as it is a legislative requirement, they specified this must be a Key Standard.

The movement records have now moved onto the eMAL2 electronic pig movement system, which became compulsory at the beginning of April 2012 in England and Wales. The background to eMAL2 is again a legal requirement, i.e. to comply with the PRIMO Pigs (Records, Identification and Movement) Order 2011, pig movements must be reported through the eAML2 system.

Before 2010, the other livestock sectors did not have similar legislation and therefore, this explains why the pig's standards differed at that time but not why they should differ now.

For poultry within the Red Tractor standards for broilers and poussin, standard AH5 states:

'Records on the health and performance of all stock must be maintained.'

There does not appear to be any direct reference to FCI.

6.2 Live markets

The reference to FCI is set out for pigs in the Red Tractor standard 5.9:

'In the case of pigs, FCI must be obtained from the seller and collated appropriately for transfer to the relevant buyer.'

The market standards were last updated in 2011 but still do not have a specific similar standard for FCI for cattle and sheep. Instead:

For markets, standard 5.1 states that:

'Auctioneers must announce at the time of sale and include in presale publications and pass to purchasers all information that is relevant to the animals.'

For collections sites, Standard 6.1 states that:

'Site operators must collect and complete, as necessary, all passports, movement forms and other documents particular to any animal and will ensure that they are passed on, if appropriate, to purchasers as required by the legislation.'

6.3 Abattoirs

Within the revised standards introduced on 1 May 2012, the reference to FCI is set out in the Food Safety Module PC2:

'For livestock to be considered acceptable for slaughter, they must not be within any medicine withdrawal periods and must not be showing signs of disease/ conditions that may affect meat safety. Food chain information must be reviewed and livestock still within a withdrawal period rejected.'

In the Animal Welfare Module - AW, the checking and recording of animal welfare problems of livestock on arrival or in the lairage is referred to but without any specific reference to FCI.

Under the Red Tractor scheme there is no requirement for abattoirs to pass back CCIR information.

6.4 Further Observations

During the course of interviews, comments were made by some abattoirs, that in practice, many abattoir companies probably hide behind the official requirement for FCI when in discussion with retailers, in that it satisfies their 'due diligence' requirements and means that they do not have to worry about retailers asking for more information to 'prove' the acceptability of livestock.

The existence of large finishing units in the beef sector, wherein cattle are fed for three to four months before being sent for slaughter is a problem for any requirement for a complete medical history of an animal without a far better individual animal database being in place.

As indicated in Section 4.16, while only a small proportion of the FBOs of the plants interviewed, replied that they also received information from some of their livestock suppliers similar to that provided by the current FCI system, as a result of them being in a producer club or a farm assurance scheme, a large number of producers are now part of such schemes, such as the as the Red Tractor scheme.[13]

There is a view that existing information from contractual relationships between producers and slaughterhouses (including the farm assurance requirements and in the pig sector the membership of the BPEX pig health scheme), could replace the need for some of the food chain information (e.g. the schemes could provide the information required on the health status of the holding or the animal's health status).

Red Tractor has requirements in its standards that go above legal requirements in order to improve the health and welfare of livestock, these are:

- The requirement to retain the services of a vet
- The requirement for health plans and health records
- The number of livestock treatment procedures and methodologies

Under the pig health scheme, health reports relating to a batch of pigs are sent to the veterinary practice linked to the unit and the abattoir at which the pigs were slaughtered, as well as to the producer.

[13] The Red Tractor farm standards require farmers to comply with various issues that are similar to the minimum elements that are required by FCI (see Annex 5), these include traceability, compliance with animal health and welfare (including health and performance records that if made available through FCI could show the health history of animals) and veterinary medicine withdrawal periods.

7. Conclusions and Recommendations

The main objectives of the study were, in brief to:

1. Review the relevance of the current FCI/CCIR system, to reduce health risk on meat and improve production.
2. Evaluate how the current FCI/CCIR system is operating.
3. Assess how it could be improved.

7.1 Conclusions

7.1.1 Compliance with the FCI requirement

The work showed that while overall the FCI is being complied with, the degree of compliance varies by species. Amongst producers:

Cattle and Sheep

In general, the survey showed that although there is vague understanding of the FCI requirement, the 'minimum elements' of the information required are mostly being completed satisfactorily but some farmers in all production sectors and many in certain sectors, see it as a 'tick box' exercise (i.e. they would not send the animal to slaughter if it did not meet the requirements, so why do they have to tick a box to say that it does?).

The transmission of information is mainly by using paper forms (appended to the movement licence), that are or are based on, the FSA 'model' documents.

However, the provision of 'additional information' by cattle and sheep farmers is in general poor. One of the reasons for this is that many farmers, particularly when sending livestock to local abattoirs will convey any problems by word of mouth (i.e. telephone before the animals arrive) to alert the plant, rather than completing a form as farmers in general are form averse.

Pigs

In general there is a much better understanding of the FCI requirement within the pig sector, largely because of the nature of the more integrated supply chains. While the study was in progress, the pig sector was in transition between switching from paper to all electronic transmission (using the eAML2 animal movements system onto which FCI was appended).

The provision of the 'minimum elements' of the information required was generally good for movements from larger pig farms to large abattoirs but poorer for smaller producers supplying the artisanal market through smaller abattoirs.

The provision of 'additional information' within the larger pig farms to large abattoirs chain in particular, is much better than with cattle and sheep, again probably because of the influence of the integrated supply chains.

Poultry

All of the poultry producers interviewed maintained that they had a good understanding of why they had to provide FCI information. Transmission of the information is with the movement licence, mainly by electronic means (although some smaller plants still accept paper).

The provision of the 'minimum elements' of the information required was good and 'additional information' is also sent by many producers. However, it should be remembered that there is a greater mandatory requirement for additional information (e.g. on such as salmonella status) for poultry (and pigs), than with cattle and sheep.

Views of FBOs

Most of the FBOs interviewed maintained they understood the reasons for FCI but this was expressed in various ways. However, many FBOs reported that their suppliers saw FCI as a 'chore' - 'just paperwork' - particularly in the cattle and sheep sector and merely an addition to the movement licence.

Views of OVs

Many of the OVs interviewed reported that farmers did not complete the forms properly (again particularly in the cattle and sheep sectors) and that there was also additional problems with the quality of information provided with livestock sourced via auction markets.

The provision of 'minimum elements' of the information required was good in the poultry sector and in the pig sector, for movements from larger pig farms to large abattoirs, but poorer for smaller producers supplying the artisanal market. This is similar to the practices in the artisanal market in the red meat sector, in that they may pass on information on conditions by word of mouth, before or on the day of despatch. Similarly the provision of 'additional information' within the poultry and the larger pig farms to large abattoirs is much better than with cattle and sheep, largely, it is thought, because of the more integrated nature of the supply chains.

7.1.2 Accuracy of the FCI supplied and correlation to the inspection outcomes

Views of OVs

Because of the limited amount of information (i.e. the 'minimum elements') supplied by the FCI system in the red meat sector (particularly for cattle and sheep), many OVs reported that FCI was not much use for indicating meat safety issues, particularly if only information on the 'minimum elements' were provided.

Many of the OVs interviewed reported that in the red meat sector the inspection outcomes do not correlate with FCI, as by and large the information that farmers can supply at the FCI stage has limited relevance to the conditions that are identified at PM inspection.

There was also a concerned/sceptical view from some FBOs and OVs, that 'you have to believe what is written' – implying that in some instances what was submitted was incorrect or sanitised, so that it did not raise immediate problems that could lead to the rejection of the livestock.

Clearly, the relatively small amount of information on conditions that is provided on the FCI forms does not reflect the number of conditions reported at AM and PM inspection. The OVs also believed that many more AM conditions could be recognised by the farmers (e.g. lameness, diarrhoea) and that the FCI system could take this into account. In fact, the analysis of inspection data concluded that, the majority of AM data could be recognised by the farmer and should be recorded on the FCI. However, at the moment farmers only have to provide limited FCI.

Views of FBOs

While the majority of FBOs in the red meat sector when asked directly, maintained that the FCI information was useful, their answers to other questions made it clear that at the same time for many it was not completely trusted or relied upon and also, in some cases not considered to be accurate.[14] For example, while the surveys indicated that withdrawal period infringements seem few, it was reported that farmers may not report issues that might lead to rejection.

There was, unfortunately, a common view amongst many of the FBOs interviewed, that for most plants the FCI system adds nothing, except that it allows them to prove 'due diligence' (i.e. to prove to customers that procedures have been followed), while for small plants it just creates excessive administration.

7.1.3 Perceived usefulness of FCI in deciding on necessary interventions or targeted inspection practices

From the answers provided by OVs during the survey, it would seem that in the cattle and sheep sector it was felt that the FCI supplied was of little value in identifying inspection procedures which improve animal health, welfare and food safety outcomes, as few suppliers put anything significant (or anything at all) on the forms.

In the poultry sector and, to some extent, in the pig sector, the identification of on farm issues (e.g. salmonella status) determines slaughter and inspection procedures.

It was also clear that the FBOs in the red meat sector (particularly for cattle and sheep) relied more on field staff and suppliers to alert them about any unusual conditions in livestock being consigned to the abattoir (e.g. injury).

The FBOs interviewed maintained that they rejected very few livestock as a result of receipt of FCI, which was only useful when major conditions were identified (e.g. TB). For most, their view was that where carcases were rejected post-mortem, these are not done so based on information supplied as part of FCI.

One outcome of this is to question whether the current blanket approach for FCI for all species is necessary or valuable (i.e. is the same level of detail needed for cattle and sheep as for pigs and poultry or should there be a more 'risk based' approach?).

[14] There was a common view that for many farmers – once animals are sold and the buyer (either at a market or the fieldsman for the abattoir) had seen the livestock and agreed a sale (i.e. accepted them as fit without seeing FCI) – the buyer took the responsibility for any subsequent problems. As a result**,** farmers have only a limited interest in completing FCI.

7.1.4 The assessment and analysis of FCI as an integral part of the procurement and inspection procedures

In the red meat sector, the interviews showed that there is a general scepticism about how useful FCI is in routinely changing procurement and inspection procedures. The evidence from the cattle and sheep sector was that AM inspection or pre-notification of issues by field staff and farmers is more likely to alter slaughter routine than FCI.

With poultry and, to a certain extent, pigs, it is the FCI about conditions tested on farm (e.g. salmonella) that today make it much more integral to procedures. This is also true for the TB status of cattle.

In order for FCI to be of more use, both OVs and the small number of private veterinarians interviewed felt that:

a) Farmers, particularly in the cattle and sheep sectors, need educating to complete the forms properly.

b) More information is needed on the general condition of livestock on the farm.

c) Cattle and sheep and to a lesser extent pigs need to move more to the poultry model, with the inclusion of more mandatory information.

7.1.5 The operation of the of the CCIR system

In response to the question as to whether the results of inspections were returned to their livestock suppliers (or the veterinary advisers of such), the majority of FBOs interviewed gave a seemingly positive message. However, this should be viewed with caution as the answer ‘Yes, for some’, given by the majority of plants, usually referred to the fact that only the information on rejections (condemnation notes) and other major issues were sent back as a matter of course (and for relatively few animals).

PM inspection results tend to be returned to farmers routinely only when there are whole carcase rejects. This is because usually such cases have significant financial implications for the farmer.

Most of the plants killing cattle and sheep that were interviewed did not send more detailed information to producers, on such as conditions found within internal organs, on a regular basis. This was confirmed by the majority of the cattle and sheep producers interviewed who maintained that they did not routinely receive the result of inspections.

There is a particular problem when livestock are sent to slaughter via an auction market as, with current arrangements, the administrative system frequently means that the producer/abattoir connection is broken. Many livestock auction markets do not believe it is their responsibility to preserve/make this connection, and in any case, do not have the administrative resources. The change to more electronic systems could alter this position, if it is possible to integrate the information systems.

In the pig and poultry sectors, the CCIR information usually related to batch/loads (herd/flock) and was available in some detail through the Innova system from the larger plants. However, to what extent farmers interrogate Innova is unknown. The smaller pig and poultry plants are poorer in sending back information.

Currently under the main farm assurance scheme (i.e. the Red Tractor scheme), there is no requirement for the FBOs of abattoirs to pass back CCIR information. One of the larger abattoir companies interviewed, supplying one of the smaller of the supermarket chains, reported that they were beginning to do this as part of their supply chain development activities and a number of others were considering it or had trialled it.[15]

If a more risk based approach was adopted as suggested in the answer to question 7.1.3 above, then the information that the farm assurance schemes had on condition on farm, could also form the basis of the level of detail that was needed in the FCI supplied.

7.1.6 The use of CCIR

As few cattle and sheep farmers reported that they routinely receive inspection information, it was no surprise that these farmers reported that their veterinary advisers are rarely consulted about issues raised by CCIR.

However, many of the farmers interviewed expressed an interest in receiving inspection information, particularly on the conditions affecting internal organs (e.g. on the incidence of liver fluke), although they had rarely requested it.

At the same time, over 70% of all farmers interviewed (and 90% of those rearing poultry) who were in receipt of inspection information, said they had taken action based on it. Many said they hoped to make better use of the information in future (although they did not specify how).

While almost all consulted private veterinary advisers, fewer did it as a matter of course (representing some 16-22% of cattle, sheep and pig producers but 33% of poultry producers).

In addition, because the AM and PM data is not divided into lambs/adult sheep, dairy/beef, the figures are not as helpful to the cattle and sheep sectors.

7.1.7 The impact of FCI to date

There is little evidence to support the case, in the cattle and sheep sectors in particular, that despite the 100% compliance with the FCI in its current form (albeit given the reservations indicated by some of the answers above) there has been a concurrent improvement in meat safety, based on the trends in inspection condition results to date. Although, as the cattle and sheep system has only been running since 1 January 2010, it may be a little early to draw such conclusions.

[15] It is interesting to report that one large abattoir company we interviewed reported that as a result of improving the IT in their internal systems, they had started incorporating such information in the returns (kill and price sheets) to their suppliers. However, they had now stopped doing this because of the large number of contacts they subsequently received from farmers asking for further explanation of a reported condition and questions about what could be done, which they did not have the administrative resources to answer.

In the pig and poultry sector, the FCI system overall seems to be working more successfully (providing a greater degree of reassurance) than in the cattle and sheep sectors. This is not only because the FCI system has been in place longer than in the ruminant sector but also because the larger processors that control a major share of the market, operate within a system that has much shorter supply chains with more integration than exists in much of the ruminant sector. This facilitates greater control and also greater resources to provide the administrative ability to meet the requirements.

It was interesting to note that interviews with the smaller/medium sized processors in the poultry and particularly the pig sectors, indicated attitudes towards the FCI and CCIR requirement that were similar to those found within the ruminant sector. This was thought to be linked to the fact that such small/medium processors tend to have less integrated supply chains, (with, in the case of pigs, many being processed in multi species plants) and less resources to meet the administrative needs of the requirements.

Despite the efforts that have so far gone into explaining the need for FCI and CCIR, the study found that there still appears to be a lack of clear understanding across many producers and some FBOs, as to what the FCI/CCIR objectives are and how they can contribute to meat safety and animal health and welfare.

7.2 Key Recommendations

The FCI requirement should be maintained. It is used very effectively in the poultry and pig sectors. In the cattle and sheep sectors, the results of the survey confirm that, if implemented fully, it would have a positive impact.

In order to improve the current system, the Competent Authority should:

1. Carry out a risk analysis for each species and by the various types of holding and farming methods, in order to determine the key information, other than the 'minimum elements', that should be provided to assess the health of the animals and link this with the inspections required to protect public health. The current blanket approach for all species does not take into account the differences in the various structured, often complex, systems of livestock production and marketing that exist, which renders some information unavailable at point of sale. For example, with the breeding/rearing, store and finishing systems of beef production, and the sale of cattle and sheep through livestock markets.

2. Provide farmers with background information on the conditions of key concern that may affect their livestock and why it is important to provide this information on FCI forms. For example, a species specific list of the top five conditions of concern to both public health and/or animal health. In principle the majority of ante-mortem conditions can be recognised by farmers and could be recorded on FCI. This information should not be restricted to conditions that may affect public health, but should also include information on those that affect animal health and animal welfare.

3. For conditions of key concern, consideration should be given to setting trigger points in the cattle, sheep and pig sectors (as with poultry) for the number of cases of a particular condition in a herd or flock, whereby that information should be provided as part of FCI with any other animals sent for slaughter from the same herd or flock.

4. Improve the knowledge and understanding of the role FCI plays in the public and animal health chains. To combat both the attitude amongst some farmers that their responsibility for the livestock they produce ends at the point of sale and to stress that the returns they can expect will be enhanced if they have a good reputation for delivering healthy livestock that meet all the FCI requirements. To this end, an enhanced communications programme should be targeted at cattle and sheep producers, pig farmers outside the integrated chain and smallholders who keep livestock. Examples of FCI being used for decision making should be publicised to improve the understanding along the entire chain.

5. FCI should, as far as is possible, be provided in advance, to allow the FBOs and OVs the time needed to respond to issues and make arrangements that reduce the risk from specific groups of animals. Ideally electronic data transfer should become the norm for all commercial farmers but with a paper option or hybrid for smaller/hobbyist producers. FCI should also be exhibited with or before animals are sold within livestock markets, so that it forms part of the decision making process for purchasers.

6. The enhanced communications programme to the farming sectors identified above, should, also promote farmer ownership of FCI. Changing farmers attitudes towards the FCI requirement (i.e. to overcome the view amongst some that it is merely an 'administrative chore', or a 'tick box' exercise), is seen as an important step to improving the quality and trust that FBOs and OVs have with some of the FCI data supplied by cattle and sheep farmers in particular. If this still remains an issue, it may be necessary to introduce a system to verify farmer compliance with the FCI requirement. This could operate in such a way that farms identified as 'high risk', (i.e. have a history of poor/inadequate compliance with the FCI requirements), were subject to greater scrutiny (e.g. with the completion of forms having to be checked by the farm veterinarian) and, where required, remedial action. Explore the use of information from third party assurance schemes for the purpose of Food Chain Information. Use the enhanced communication programme to also remind farmers of the inspection information that should be available to them through the operation of the Collection and Communication of Inspection Results (CCIR) system, to help them improve the health/welfare of their livestock (and thus their productivity) and which they can request if it is not returned.

7. Develop a programme to improve the FBOs appreciation of the information that is provided to them and the actions they should be taking as a result of that information to improve the safety of the products they produce. FBOs should also be encouraged to support the messages being given in the enhanced communications programme to farmers (identified in points 4 and 6 above), by becoming more proactive in requiring FCI as part of their supply chain strategy and promoting it as an integral section of their controls on the raw material entering the premises.

8. Improve the extent to which CCIR happens as a matter of course in the cattle and sheep sectors in particular. All such inspection results should be returned, in the first instance, to producers (as there is evidence that far fewer cattle and sheep producers have regular contact with their farm veterinarian, than is the case in the pig and poultry sectors). Information should be sent to veterinary advisers where requested.

9. Review the operation of the system for the verification of inspection results, so that the consistency of results within and between plants is such to ensure the accuracy of post-mortem information and extent of CCIR. Building trust in ante-mortem/post-mortem inspection results will gain respect for the system.

10. Encourage assurance schemes of abattoir standards to introduce a requirement, whereby the FBO of a slaughterhouse has to act together with the OV to improve the provision to producers of the results of the inspections of their livestock.

ANNEX 1

Stratification of the Survey

1. Target Numbers to be Interviewed

The basic commitment was set out in the final Tender documents as follows:

a. Farmer survey – GB – 250 structured interviews with livestock and poultry producers. NI – contact representative bodies

b. FBO/OV – Number of plants to be interviewed:

GB	Red meat	Cattle	Sheep	Pigs	Poultry
Small artisanal	15				3
Medium	10				
Large	20				2
Total	45				5
% estimated coverage of slaughtering per species		30%	30%	30%	

NI	Red meat	Cattle	Sheep	Pigs	Poultry
Total	3				1

Definitions of the size of red meat abattoirs:
Small - 1,500 to 18,000 Cattle units (CU – where 1 cattle beast =5 pigs or 10 sheep)
Medium - Over 18,000 CU but not part of integrated companies supplying supermarkets
Large – Plants belonging to integrated companies supplying supermarket

c. Veterinary advisers - specialist from each of poultry, cattle, sheep and pigs and general practitioners.

In order to ensure that the two main surveys (the Farmer and the FBO/OV were representative of the situation in GB as a whole, the target number of interviews has been further stratified on the following basis.

2. Farmer Survey

It was originally thought that stratification to take account of the production of livestock for slaughter in the major regions (England, Wales and Scotland) and farm type (with the major sub divisions of – Dairy, Grazing livestock lowland, Grazing livestock LFA, Specialist pigs, Specialist poultry and Mixed), could be done using structural information contained in the annual Defra publication 'Agriculture in the UK' (and from the databases from which the information in this publication was built up).

This proved to be problematical due to definitional problems in the farm type data collected in the major regions. An alternative method (as set out), based on the

objective data that was available and judgement based on industry knowledge has been used, to set interview targets.

Targets for apportioning the 250 interviews between England, Wales and Scotland to reflect the relative production of livestock in each, were derived by first using annual UK slaughter data for 2010 converted to liveweight production, to give the overall proportional between the species, shown in Table A.

Table A. Proportional allocation between species

	Prime cattle	**Cows**	**Lambs**	**Ewes and rams**	**Clean pigs**	**Broilers**	**Total**
1.UK slaughter (000)	2,098	553	12,073	1,932	9,441	862,600	
2.Average carcase weight	341.4	314.0	18.8	24.8	78.0	1.5 *	
Weight average,	336.0		19.6				
3. Live weight	634.0 *		40.8*		104.0	2.21	
Total live weight (1x3) tonnes	1,680,734		571,404		981,864	1,906,346	5,140,348
%UK	32.7		11.1		19.1	37.1	

Source:
1 Agriculture in the UK
2. Defra – livestock slaughter statistics
* Liveweight/deadweight conversion cattle 53%, sheep 48%, pigs 75%, broilers 70% - MLCSL

Figures for England, Wales and Scotland are, however, only available for total cattle (which includes calves and have to be adjusted) and total sheep. The proportional division between species in each country on this basis, is as follows in Table B.

Table B. proportional allocation between species and England, Wales and Scotland

000	**Prime cattle and cows**	**%GB**	**Total sheep**	**%GB**	**Clean pigs**	**%GB**	**Broilers ****	**% UK**
GB total	2192.0*		13,639		7,886			
England	1546.5*	70.6	8,704	63.8	7,276	92.3	709,000	82.0
Wales	142.8*	6.5	3,495	25.6	36	0.5		
Scotland	502.5*	22.9	1,440	10.6	574	7.2		
		100.0		100.0		100.0		

Source:
Defra, Scottish Government, AHDB
* Adjusted to take account of calf – UK 2.25% of total cattle slaughterings
** No country breakdown available, except for England and Wales total

Applying the proportions from Table A, to the 250 projected interviews gives the following breakdown, which has then been adjusted as indicated to take account of, for cattle, those coming from dairy cows.

Table C. GB target interviews for species allocated according to UK live weight proportions using % UK (from Table A).

	Cattle	**Sheep**	**Pigs**	**Broiler**	**Total**
	32.7	11.1	19.1	37.1	100.0
250 allocated proportionally in GB	82	28	48	92	250
Dairy	17				
Other	65				

Applying the proportions from Table B, gives the allocation to the major regions.

Table D. England, Wales and Scotland interviews allocated by species proportions using % GB (from Table B).

000	**%GB Prime cattle and cows**	**Number**	**%GB Total sheep**	**Number**	**% GB Clean pigs**	**Number**	**% UK Broilers ****	**Number**
GB total		82		28		48		92
England	70.6	58 of which	63.8	18	92.3	44	82.0	75
Dairy		13						
Other		45						
Wales	6.5	5 of which	25.6	7	0.5	0		
Dairy		1						
Other		4						
Scotland	22.9	19 of which	10.6	3	7.2	3		17
Dairy		4						
Other		14						
	100.0		100.0		100.0			

Although by using this methodology the number of interviews allocated between the species is proportionally sound, in terms of what the survey is attempting to achieve and given the structure of the farming industry in the various sectors, this method of stratification is considered to give too high a proportion of interviews to the poultry sector.

The poultry sector is highly integrated between farm and abattoir and the farming sector is dominated by large production units (as shown in Table E), compared with the cattle and sheep sectors in particular. In addition, the Food Chain Information system has been established in the poultry sector since 2006 and is ‘a priori’, now believed to be delivered in a large part by electronic means.

Table E. Numbers of holdings and livestock numbers by size group in UK 2010
Ei. Cattle and sheep

Total cattle	Holdings 000	Number livestock 000	**Total sheep**	Holdings 000	Number livestock 000
1-50	39.1	795	**1-125**	33.5	1,531
50-99	16.6	1,200	**125-499**	21.6	5,725
100+	31.8	8,081	**500-999**	9.3	6,620
			1000+	9.1	17,208
Total	87.5	10,076		73.4	31,084

E ii. Pigs

Total pigs	Holdings 000	Number livestock 000	**Total broilers**	Holdings	Number livestock
1-50	7.3	65	**1-9999**	1.6	543
50-999	2.2	753	**10-99,999**	0.6	28,190
1000+	1.3	3,643	**100K+**	0.4	76,576
Total	10.7	4,460		2.6	105,309

Source: Defra Agriculture in the UK Table 3.4

As Table E shows, with less than 400 poultry farms accounting for 73% of total UK poultry production and given the integration of the sector, a sample of 40 (10% of large poultry farms in UK total), rather than 92 would seem to be sufficient.

It is proposed that as the current pig allocation is thought to be reasonably robust (with one added to Wales), the 52 remaining interviews are to be distributed between the cattle and sheep sectors (which have much more fragmented structures and have only had to complete Food Chain Information since 1st January 2010). These are proportioned using the species live weight (shown in Table A) i.e.:

	Cattle	**Sheep**	**Total**
	1,680,734	571,404	2,252,138
% of total	75%	25%	
Proportional allocation of 52	39	13	
+previous allocation	82	28	
Total	121 *	41	

* 1 allocated to pigs

Farmer survey – proposed allocation of interviews

The final proposed allocation of interviews in England, Wales and Scotland interviews allocated by species proportions using % GB from Table B.

Table F. Proposed target allocation of Interviews- Farmer Survey

000	% GB prime cattle and cows	Number	% GB total sheep	Number	% GB clean pigs	Number	% UK broilers	Number
GB total		120		41		48		40
England	70.6	84 of which	63.8	26	92.3	44	82.5	33
Dairy		18						
Other		66						
Wales	6.5	8 of which	25.6	10	0.5	1		
Dairy		2						
Other		6						
Scotland	22.9	28 of which	10.6	4	7.2	3		7
Dairy		6						
Other		22						
	100.0		100.0		100.0			

3. FBO and OV Survey

The stratification by major region in GB of abattoirs slaughtering cattle, sheep and pigs, was based on the % numbers of animals slaughtered by major region, using coefficients derived from the conversion of figures for cattle and sheep and pigs into cattle units (CU) and applying these to the basic stratification by plant type given in Table H. This is shown in Table G.

Table G. Slaughterings of cattle, sheep and pigs by major region in GB converted to cattle units (as per FSA designation)

	Prime Cattle and calves 0000	CU rounded	Sheep 000	CU 1cattle = 10 sheep	Pigs 000	CU 1 cattle = 5 pigs	Total CU	%CU
England	1,546.5		8,740		7,276			
		1,546.0		870.4		1,455.2	3,871.6	75.4
Wales	142.8		3,495		36			
		143.0		349.5		7.2	499.7	9.7
Scotland	502.5		1,440		574			
		503.0		144.0		114.8	761.8	14.9
Total							5,133.1	100.0

Source; Slaughterings – Defra

Table H, shows the basic breakdown of the importance to total GB slaughtering in the red meat sector of three groups of abattoir types, defined as small, medium and large. Table J, shows similar information for two groups of poultry plants.

Table H. Numbers of red meat abattoirs in GB and throughputs in 2008/09, stratified into three main groups of plants.

Abattoir Category						
Red Meat	% total slaughterings 2008/09			Number companies	Number plants – based on 267 operational	Proposed number plants in sample
Stratification:	Cattle	Sheep	Pigs			
a) Smaller and artisanal – mostly multi species (cattle, sheep and pig)	19.5	26.9	16.2		192 (of which 87 slaughtered less than 1,500 cattle units a year and accounted for less than 1% of the total kill) – therefore we would concentrate on sampling the 105 others)	15
b) Medium companies, with plants with throughputs per year but not in group c)					35 Of which:	10
Cattle ≥ 18,000	24.2			17	17 (11 cattle only)	
Sheep ≥ 180,000		29.9		14	14 (12 sheep only)	
Pigs ≥ 90,000			11.4	5	5 (2 pigs only)	
c) Large companies, with plants servicing integrated or farm assured supply chains)					40 Of which:	20
Cattle	56.3			8	23 (9 cattle only)	
Sheep		43.2		7	17 (4 sheep only)	
Pigs			72.4	4	12 (10 pig only)	

The 45 abattoirs in the red meat sector were sampled from those that made up these stratified groups divided on a regional basis, to give an estimated representative sample size of companies that accounted for about 30 to 40% of total slaughtering per species. When taken with the five from the poultry sector this would give an indicative sample of 50 plants.

This sample was believed to be robust because:

a) A priori – it can be demonstrated that if stratified as set out above, the sample would potentially account for a large percentage of total national slaughtering.

b) This could be checked as the survey progressed, through monitoring the overall size and the overall representativeness of the single species and multi species plants surveyed by species, through access to total individual plant throughputs for 2010.
c) When interviewing individual plants that belong to a company that owns more than one plant, enquiries will be made as to the extent to which the answers they give apply to other plants in the group. If this is the case, the throughputs of the other plants will increase the total representativeness.
d) Other major survey work carried out with abattoirs in recent years (e.g. for Defra – Waste Utilisation Study 2008; for WRAP - Meat Industry Resource Maps 2009) used similar sample sizes and produced robust results.

The abattoirs sampled from the regional lists of plants represent the medium and large companies that include both specialist plants and those killing more than one species, while the smaller plants were mainly multi species facilities.

The survey did not cover the very small artisanal abattoirs, many of which exist to supply a retail business but also provide local contract killing for farmer/butcher direct sellers.

FBO/OV survey – final allocation of interviews in GB

Applying the percentage CU figures to the plant type, as given in Table H, and taking account of industry knowledge, with regard to the size of plant and species speciality, the target allocation of red meat plants to be surveyed is set out Table I.

Table I. Proposed target allocation of interviews – FBO/OV Survey

	England	**Wales**	**Scotland**	**Total**
Small	11	2	2	15
Medium	7	1	2	10
Of which cattle only	*2*			
Sheep only	*2*			
Mixed species	*3*		*2*	
Large	15	2	3	20
Of which cattle only	3			
Sheep only	3			
Pigs only	3			
Mixed species	6	2	2	
Totals	33	5	7	45

Definitions
Small - 1,500 to 18,000 CU
Medium - Over 18,000 CU but not part of integrated companies supplying supermarkets
Large – Plants belonging to integrated companies supplying supermarkets

Poultry

In the GB poultry sector, the survey was targeted to cover five FBO interviews in the white meat sector. This assumed that the seasonal artisanal poultry sector (i.e. those killing relative small numbers of birds which they have produced themselves for the seasonal markets) is of least concern. Three interviews were chosen from those representative of the small group of regionally important small plants, backed up by interviews with trade bodies.

Table J. Numbers of poultry abattoirs in GB and throughputs in 2008/09, stratified into two main groups of plants.

White meat and other	Estimated % total slaughtering	Number of plants	Number of companies	Proposed number of plants in sample
d). Small - poultry	20%	100	n/a	3
e). **Large specialist poultry** (with integrated supply chains)	80%		6	2

Northern Ireland

The situation in Northern Ireland (NI) that has the APHIS animal health reporting data base, was covered through both liaison with the representative bodies and discussions with abattoir companies that have plants in GB and NI, to elicit their views on the two systems. In addition contact was made with three red meat abattoirs and one poultry plant in Northern Ireland as a check.

ANNEX 2

FSA 1. Farmer Structured Interview Questionnaire – Dairy/beef cattle, sheep

An Evaluation of Food Chain Information (FCI) and Collection and Communication of Inspection Results (CCIR)

INTERVIEWER INTRODUCTION (to be read to/by the interviewee at start of interview/before answering the questions)

Providing Food Chain Information has been a legal requirement for a number of years in the case of pigs and poultry and since 1st January 2010 for cattle and sheep. The 'minimum elements' consist of statements to confirm that a) such as withdrawal periods have been adhered to and b) that the livestock as far as the producer is aware are fit and healthy.
Currently these are most commonly appended to the movement licence. In specific instances additional information is required or can be provided.

The Foods Standards Agency (FSA) has appointed MLCSL Consulting to evaluate the implementation this Food Chain Information and also the Collection and Communication of Inspection Results for all species. This is part of a wider review by the FSA of the current official controls on meat to identify potential changes that would support an improved system.

As part of this work we are contacting a sample of farmers who have **sent animals for slaughter in the past 18 months,** to take part in a short survey to evaluate their attitudes towards having to supply information on the condition of the livestock sent for slaughter (i.e. Food Chain Information), and the extent to which they receive and use the results of ante and post mortem inspection (i.e. Collection and Communication of Inspection Results).

If you have not sent animals for slaughter in the past 18 months, please do not complete the questionnaire

The answers you provide are confidential and will only be seen by members of the MLCSL Consulting research team, and will only be used when combined with those from the other livestock producers interviewed. All the completed survey forms will be held securely and not used for any purpose beyond this specific project.

INTERVIEWEE DETAILS

Holding detail – tick relevant box								
Farm location	England		Wales		Scotland		Northern Ireland	
Farm type	Dairy		Grazing Livestock lowland		Grazing Livestock LFA			
	Mixed		Specialist Pig		Specialist poultry			
Number of animals	Total cattle and calves		Total sheep and lambs		Total pigs		Broilers	
	1-50		1-124		1-50		1-9999	
	50-99		125- 499		50-999		10,000 – 99,999	
	100+		499-999		1000+		100,000+	
			1000+					

Note * Details match sub divisions set out in June Census (See Agriculture in the UK 2010. Chap 3).

What is the main livestock enterprise on the farm? (tick box)

Beef cattle		**Dairy cattle**		**Sheep**		**Pigs**		**Poultry**	

A. QUESTIONS on the information you send.

1. Do you understand the reason why you have to provide Food Chain Information on livestock sent for slaughter (either directly or via a livestock market)? (tick box)

Yes- very well		Yes - vague understanding		Not really	

2. If YES, what is the main reason? (briefly write answer)

3a. Do you think that the current Food Chain Information you provide when your livestock are sent for slaughter can help improve meat safety? (tick box)

Yes		No	

3b. If NO, why not? (briefly write answer)

4. As well as the minimum elements of the Food Chain Information, have you ever supplied additional information? (tick box)

Yes – over 75% of the time		Yes – 50 to 75% of the time		Yes – 25 to 49% of the time		Yes – less than 25% of the time		Never	

5. In relation to your main livestock enterprise, from the conditions identified below, pick 3 which you think pose the greatest threat to **meat safety?**

a) Dairy cattle	Please tick 3	Have you information on the health status of your stock with regard to the conditions ticked, that you could provide to abattoirs (tick box)	
		Yes	No
Mastitis			
TB			
Johnes			
Salmonella			
BVD			
E coli			
BSE			
Campylobacter			
Brucellosis			
Leptospirosis			

Or

b) Beef cattle	Please tick 3	Have you information on the health status of your stock with regard to the conditions ticked, that you could provide to abattoirs (tick box)	
		Yes	No
Tapeworms			
TB			
Johnes			
Salmonella			
BVD			
E coli			
Fluke			
Campylobacter			
Brucellosis			
Leptospirosis			

Or

c) Sheep	Please tick 3	Have you information on the health status of your stock with regard to the conditions ticked, that you could provide to abattoirs (tick box)	
		Yes	No
Toxoplasma			
Hydatid cysts			
Fluke			
Scrapie			
Caseous lymphadenitis (cheesy gland)			
E coli			
Salmonella			
Campylobacter			
Q Fever			

6. Does the guidance available given in the Food Chain Information forms and/or in the Model documents, enable you to complete the food chain information required to the best of your ability? (tick box)

Yes		Partly –but guidance could be improved		No – guidance is poor	

7. How and when do you send the Food Chain Information to the abattoir?(tick box)

	Paper copy - sent before the animals are sent for slaughter	Paper copy - sent at the same time as the animals	By web or e mail- sent before the animals are sent for slaughter	By web or e mail- sent at the same time as the animals are sent for slaughter
Cattle				
Sheep				
Pigs				
Poultry				

8. If sent by paper copy - could you submit the Food Chain Information available by web or e mail means? (tick box)

No		Yes –at the same time as animals are sent		Yes – at least 24 hours before	

B. QUESTIONS on the information you receive.

9. Do you routinely use a private veterinarian to regularly advise you on animal health issues? (tick box)

Yes - during advisory visits 2 or more times a year		**Yes** – during annual advisory visits		**No** – no, only use a vet as required and not for regular advice	

10. Do you routinely receive results of inspections on all the animals you send for slaughter? (tick box)

	Yes, on all individual animals	Yes, but only for some animals	Yes, but only related to problems with the batch	No, except for kill sheet data i.e. weight, grade, price, deductions	No, because sent via livestock market
Cattle					
Sheep					
Pigs					
Poultry					
Write names of abattoirs mentioned					

If NO, go to Question 19.

11. How soon do you receive the information? (tick box)

	Within 1 day	Within 2 to3 days	Within a week	Longer
Cattle				
Sheep				
Pigs				
Poultry				

12. Have you ever taken any action based on this information? (tick box – if No go to 13)

Yes		Not to date but looking to make better use in the future		No	

13. If NO, to Question 12, why not? (tick box)

Because:	Cattle	Sheep	Pigs	Poultry
The information was not received in time for me to take action				
I was note aware of what action could be taken				
I did not see any financial incentive for me to take action				
I did not trust the reliability of the information received				

14. Do you consult your private vet about the results of inspections? (tick box)

Always		Sometimes		Rarely		Never	

15. Should your private vet be informed of the results of inspections of your livestock? (tick box)

Yes		No	

16. If Yes to Question 15, who should inform your private vet of the results of inspections of your livestock? (tick box)

I should as the producer		**The abattoir operator**		**The official vet/inspector**	

17. Do you use the results of inspections, to calculate the loss in the value to your farm business from problems that are identified? (tick box)

Yes		Not at the moment but looking to make better use in the future		No	

18. Do you have sufficient information to help you make the best use of the results of inspections? (tick box)

Yes- on most issues		Only on some issues		No	

19. What inspection information would you like to receive to enable you to improve the health and productivity of livestock in your main livestock enterprise? (briefly comment on specific issues)

20. In relation to your main livestock enterprise, from the conditions identified below**, pick 3,** which you think pose the greatest threat to the **health and productivity of your livestock?**

a) Dairy and beef cattle	Please tick 3	Have you information on the health status of your stock with regard to the conditions ticked, that you could provide to abattoirs (tick box)	
		Yes	No
Lameness			
Mastitis			
Respiratory disease (pneumonia, IBR)			
BVD			
Johnes			
Parasites (including lung and gut worms, fluke)			
E coli			
Reproductive dysfunction			
TB			
Leptospirosis			

or

b) Sheep	Please tick 3	Have you information on the health status of your stock with regard to the conditions ticked, that you could provide to abattoirs (tick box)	
		Yes	No
Lameness			
Scrapie			
Respiratory disease /pneumonia			
Dentition status			
Parasites (including lung and gut worms, fluke)			
Salmonella			
Abortions			

21. Please identify the 3 most important sources of information on the diseases that may affect your animals from those set out below (write in box in order of importance first - 1, second -2 and third - 3)

Background knowledge/education/experience	
Veterinary advice/guidance literature	
Levy board advice	
Assurance scheme	
Trade press	
Consultants	
Trade association	
Supply chain sources	

22. Are you a member of a farm assurance scheme/schemes? (tick box)

Yes		No – (If no go to Question 20)	

23. If yes, which scheme/schemes? (write name of scheme)

Name of scheme	Species applicable to
a.	
b.	
c.	

24. Do you have any other suggestions or comments to improve the effectiveness and efficiency for information exchange between the producer and the processor? (briefly comment on specific issues)

For further information related to this survey contact:
C M Palmer AHBD/MLCSL Consulting. Tel 07887 896089 or e mail martin.palmer@mlcsl.co.uk

Return completed forms to: C M Palmer
MLCSL Consulting, Stoneleigh Park, Kenilworth, Warwickshire, CV8 2TL
or
e mail martin.palmer@mlcsl.co.uk;
fax 02476 478627

FSA 1. Farmer Structured Interview Questionnaire – Pigs

An Evaluation of Food Chain Information (FCI) and Collection and Communication of Inspection Results (CCIR)

INTERVIEWER INTRODUCTION (to be read to/by the interviewee at start of interview/before answering the questions)

Providing Food Chain Information has been a legal requirement for a number of years in the case of pigs and poultry and since 1st January 2010 for cattle and sheep. The 'minimum elements' consist of statements to confirm that a) such as withdrawal periods have been adhered to and b) that the livestock as far as the producer is aware are fit and healthy.
Currently these are most commonly appended to the movement licence. In specific instances additional information is required or can be provided.

The Foods Standards Agency (FSA) has appointed MLCSL Consulting to evaluate the implementation this Food Chain Information and also the Collection and Communication of Inspection Results for all species. This is part of a wider review by the FSA of the current official controls on meat to identify potential changes that would support an improved system.

As part of this work we are contacting a sample of farmers who have **sent animals for slaughter in the past 18 months,** to take part in a short survey to evaluate their attitudes towards having to supply information on the condition of the livestock sent for slaughter (i.e. Food Chain Information), and the extent to which they receive and use the results of ante and post mortem inspection (i.e. Collection and Communication of Inspection Results).

If you have not sent animals for slaughter in the past 18 months, please do not complete the questionnaire

The answers you provide are confidential and will only be seen by members of the MLCSL Consulting research team, and will only be used when combined with those from the other livestock producers interviewed. All the completed survey forms will be held securely and not used for any purpose beyond this specific project.

INTERVIEWEE DETAILS

Holding detail – tick relevant box								
Farm location	England		Wales		Scotland		Northern Ireland	
Farm type	Dairy		Grazing Livestock lowland		Grazing Livestock LFA			
	Mixed		Specialist Pig		Specialist poultry			
Number of animals	Total cattle and calves		Total sheep and lambs		Total pigs		Broilers	
	1-50		1-124		1-50		1-9999	
	50-99		125- 499		50-999		10,000 – 99,999	
	100+		499-999		1000+		100,000+	
			1000+					

Note * Details match sub divisions set out in June Census (See Agriculture in the UK 2010. Chap 3).

What is the main livestock enterprise on the farm? (tick box)

Beef cattle		**Dairy cattle**		**Sheep**		**Pigs**		**Poultry**	

A. QUESTIONS on the information you send.

1. Do you understand the reason why you have to provide Food Chain Information on livestock sent for slaughter (either directly or via a livestock market)? (tick box)

Yes- very well		Yes - vague understanding		Not really	

2. If YES, what is the main reason? (briefly write answer)

3a. Do you think that the current Food Chain Information you provide when your livestock are sent for slaughter can help improve meat safety? (tick box)

Yes		No	

3b. If NO, why not? (briefly write answer)

4. As well as the minimum elements of the Food Chain Information, have you ever supplied additional information? (tick box)

Yes – over 75% of the time		Yes – 50 to 75% of the time		Yes - 25 to 49% of the time		Yes - less than 25% of the time		Never	

5. In relation to your pig enterprise, from the conditions identified below**, pick 3** which you think pose the greatest threat to **meat safety?**

	Please tick 3	Have you information on the health status of your stock with regard to the conditions ticked, that you could provide to abattoirs (tick box)	
		Yes	No
Trichinella			
Salmonella			
Anthrax			
Worms (ascaris)			
Campylobacter			
Toxoplasma			
Respiratory viruses			
Yersinia			

6. Does the guidance available given in the Food Chain Information forms and/or in the Model documents, enable you to complete the food chain information required to the best of your ability? (tick box)

Yes		Partly –but guidance could be improved		No – guidance is poor	

7. How and when do you send the Food Chain Information to the abattoir? (tick box)

	Paper copy - sent before the animals are sent for slaughter	Paper copy - sent at the same time as the animals	By web or e mail- sent before the animals are sent for slaughter	By web or e mail- sent at the same time as the animals are sent for slaughter
Cattle				
Sheep				
Pigs				
Poultry				

8. If sent by paper copy - could you submit the Food Chain Information available by web or e mail means? (tick box)

No		Yes –at the same time as animals are sent		Yes – at least 24 hours before	

B. QUESTIONS on the information you receive.

9. Do you routinely use a private veterinarian to regularly advise you on animal health issues? (tick box)

Yes - during advisory visits 2 or more times a year		**Yes** – during annual advisory visits		**No** – no, only use a vet as required and not for regular advice	

10. Do you routinely receive results of inspections on all the animals you send for slaughter? (tick box)

	Yes, on all individual animals	Yes, but only for some animals	Yes, but only related to problems with the batch	No, except for kill sheet data i.e. weight, grade, price, deductions	No, because sent via livestock market
Cattle					
Sheep					
Pigs					
Poultry					
Comments – write briefly:					

If NO, go to Question 19.

11. How soon do you receive the information? (tick box)

	Within 1 day	Within 2 to3 days	Within a week	Longer
Cattle				
Sheep				
Pigs				
Poultry				

12. Have you ever taken any action based on this information? (tick box – if No go to 13)

Yes		Not to date but looking to make better use in the future		No	

13. If NO, to Question 12, why not? (tick box)

Because:	Cattle	Sheep	Pigs	Poultry
The information was not received in time for me to take action				
I was note aware of what action could be taken				
I did not see any financial incentive for me to take action				
I did not trust the reliability of the information received				

14. Do you consult your private vet about the results of inspections? (tick box)

Always		Sometimes		Rarely		Never	

15. Should your private vet be informed of the results of inspections of your livestock? (tick box)

Yes		No	

16. If Yes to Question 15, who should inform your private vet of the results of inspections of your livestock? (tick box)

I should as the producer		**The abattoir operator**		**The official vet/inspector**	

17. Do you use the results of inspections, to calculate the loss in the value to your farm business from problems that are identified? (tick box)

Yes		Not at the moment but looking to make better use in the future		No	

18. Do you have sufficient information to help you make the best use of the results of inspections? (tick box)

Yes- on most issues		Only on some issues		No	

19. What inspection information would you like to receive to enable you to improve the health and productivity of livestock in your main livestock enterprise? (briefly comment on specific issues)

20. In relation to your pig enterprise, from the conditions identified below**, pick 3,** which you think pose the greatest threat to the **health and productivity of your livestock?**

	Please tick 3	Have you information on the health status of your stock with regard to the conditions ticked, that you could provide to abattoirs (tick box)	
		Yes	No
Swine dysentery			
Lameness			
Post weaning Multisystemic Wasting Syndrome (PMWS)			
Gut diseases (ileitis, post weaning diarrhoea)			
Respiratory disease (PRRS,EP,APP)			
Parasites			
Reproductive dysfunction			
Fighting/tail biting			

21. Please identify the 3 most important sources of information on the diseases that may affect your animals from those set out below (write in box in order of importance first - 1, second -2 and third - 3)

Background knowledge/education/experience	
Veterinary advice/guidance literature	
Levy board advice	
Assurance scheme	
Trade press	
Consultants	
Trade association	
Supply chain sources	

22. Are you a member of a farm assurance scheme(s)? (tick box)

Yes		No – (If no go to Question 20)	

23. If yes, which scheme/schemes? (write name of scheme)

Name of scheme	Species applicable to
a.	
b.	
c.	

24. Do you have any other suggestions or comments to improve the effectiveness and efficiency for information exchange between the producer and the processor? (briefly comment on specific issues)

For further information related to this survey contact:
C M Palmer AHBD/MLCSL Consulting. Tel 07887 896089 or e mail martin.palmer@mlcsl.co.uk

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FSA 1. Farmer Structured Interview Questionnaire – Poultry

An Evaluation of Food Chain Information (FCI) and Collection and Communication of Inspection Results (CCIR)

INTERVIEWER INTRODUCTION (to be read to/by the interviewee at start of interview/before answering the questions)

Providing Food Chain Information has been a legal requirement for a number of years in the case of pigs and poultry and since 1st January 2010 for cattle and sheep. The 'minimum elements' consist of statements to confirm that a) such as withdrawal periods have been adhered to and b) that the livestock as far as the producer is aware are fit and healthy.
Currently these are most commonly appended to the movement licence. In specific instances additional information is required or can be provided.

The Foods Standards Agency (FSA) has appointed MLCSL Consulting to evaluate the implementation this Food Chain Information and also the Collection and Communication of Inspection Results for all species. This is part of a wider review by the FSA of the current official controls on meat to identify potential changes that would support an improved system.

As part of this work we are contacting a sample of farmers who have **sent animals for slaughter in the past 18 months,** to take part in a short survey to evaluate their attitudes towards having to supply information on the condition of the livestock sent for slaughter (i.e. Food Chain Information), and the extent to which they receive and use the results of ante and post mortem inspection (i.e. Collection and Communication of Inspection Results).

If you have not sent animals for slaughter in the past 18 months, please do not complete the questionnaire

The answers you provide are confidential and will only be seen by members of the MLCSL Consulting research team, and will only be used when combined with those from the other livestock producers interviewed. All the completed survey forms will be held securely and not used for any purpose beyond this specific project.

INTERVIEWEE DETAILS

Holding detail – tick relevant box								
Farm location	England		Wales		Scotland		Northern Ireland	
Farm type	Dairy		Grazing Livestock lowland		Grazing Livestock LFA			
	Mixed		Specialist Pig		Specialist poultry			
Number of animals	Total cattle and calves		Total sheep and lambs		Total pigs		Broilers	
	1-50		1-124		1-50		1-9999	
	50-99		125- 499		50-999		10,000 – 99,999	
	100+		499-999		1000+		100,000+	
			1000+					

Note * Details match sub divisions set out in June Census (See Agriculture in the UK 2010. Chap 3).

What is the main livestock enterprise on the farm? (tick box)

Beef cattle		**Dairy cattle**		**Sheep**		**Pigs**		**Poultry**	

A. QUESTIONS on the information you send.

1. Do you understand the reason why you have to provide Food Chain Information on livestock sent for slaughter (either directly or via a livestock market)? (tick box)

Yes- very well		Yes - vague understanding		Not really	

2. If YES, what is the main reason? (briefly write answer)

3a. Do you think that the current Food Chain Information you provide when your livestock are sent for slaughter can help improve meat safety? (tick box)

Yes		No	

3b. If NO, why not? (briefly write answer)

4. As well as the minimum elements of the Food Chain Information, have you ever supplied additional information? (tick box)

Yes – over 75% of the time		Yes – 50 to 75% of the time		Yes - 25 to 49% of the time		Yes - less than 25% of the time		Never	

5. In relation to your poultry enterprise, from the conditions identified below**, pick 3** which you think pose the greatest threat to **meat safety?**

	Please tick 3	Have you information on the health status of your stock with regard to the conditions ticked, that you could provide to abattoirs (tick box)	
		Yes	No
Coccidiosis			
Salmonella			
Dermatitis			
E coli			
Campylobacter			
Airsacculitis			
Other – please specify			

6. Does the guidance available given in the Food Chain Information forms and/or in the Model documents, enable you to complete the food chain information required to the best of your ability? (tick box)

Yes		Partly –but guidance could be improved		No – guidance is poor	

7. How and when do you send the Food Chain Information to the abattoir? (tick box)

	Paper copy - sent before the animals are sent for slaughter	Paper copy - sent at the same time as the animals	By web or e mail- sent before the animals are sent for slaughter	By web or e mail- sent at the same time as the animals are sent for slaughter
Cattle				
Sheep				
Pigs				
Poultry				

8. If sent by paper copy - could you submit the Food Chain Information available by web or e mail means? (tick box)

No		Yes –at the same time as animals are sent		Yes – at least 24 hours before	

B. QUESTIONS on the information you receive.

9. Do you routinely use a private veterinarian to regularly advise you on animal health issues? (tick box)

Yes - during advisory visits 2 or more times a year		**Yes** – during annual advisory visits		**No** – no, only use a vet as required and not for regular advice	

10. Do you routinely receive results of inspections on all the animals you send for slaughter? (tick box)

	Yes, on all individual animals	Yes, but only for some animals	Yes, but only related to problems with the batch	No, except for kill sheet data i.e. weight, grade, price, deductions	No, because sent via livestock market
Cattle					
Sheep					
Pigs					
Poultry					
Comments- please write briefly:					

If NO, go to Question 19.

11. How soon do you receive the information? (tick box)

	Within 1 day	Within 2 to3 days	Within a week	Longer
Cattle				
Sheep				
Pigs				
Poultry				

12. Have you ever taken any action based on this information? (tick box – if No go to 13)

Yes		Not to date but looking to make better use in the future		No	

13. If NO, to Question 12, why not? (tick box)

Because:	Cattle	Sheep	Pigs	Poultry
The information was not received in time for me to take action				
I was note aware of what action could be taken				
I did not see any financial incentive for me to take action				
I did not trust the reliability of the information received				

14. Do you consult your private vet about the results of inspections? (tick box)

Always		Sometimes		Rarely		Never	

15. Should your private vet be informed of the results of inspections of your livestock? (tick box)

Yes		No	

16. If Yes to Question 15, who should inform your private vet of the results of inspections of your livestock? (tick box)

I should as the producer		**The abattoir operator**		**The official vet/inspector**	

17. Do you use the results of inspections, to calculate the loss in the value to your farm business from problems that are identified? (tick box)

Yes		Not at the moment but looking to make better use in the future		No	

18. Do you have sufficient information to help you make the best use of the results of inspections? (tick box)

Yes- on most issues		Only on some issues		No	

19. What inspection information would you like to receive to enable you to improve the health and productivity of livestock in your main livestock enterprise? (briefly comment on specific issues)

20. In relation to your poultry enterprise, from the conditions identified below**, pick 3,** which you think pose the greatest threat to the **health and productivity of your livestock?**

	Please tick 3	Have you information on the health status of your stock with regard to the conditions ticked, that you could provide to abattoirs (tick box)	
		Yes	No
Pododermatitis (foot pad lesions)			
Lameness			
Campylobacter			
Salmonella			
Dermatitis (skin lesion/ feather loss)			
Coccidiosis			
Other – please specify:			

21. Please identify the 3 most important sources of information on the diseases that may affect your animals from those set out below (write in box in order of importance first - 1, second -2 and third - 3)

Background knowledge/education/experience	
Veterinary advice/guidance literature	
Levy board advice	
Assurance scheme	
Trade press	
Consultants	
Trade association	
Supply chain sources	

22. Are you a member of a farm assurance scheme/schemes? (tick box)

Yes		No – (If no go to Question 20)	

23. If yes, which scheme/schemes? (write name of scheme)

Name of scheme	Species applicable to
a.	
b.	
c.	

24. Do you have any other suggestions or comments to improve the effectiveness and efficiency for information exchange between the producer and the processor? (briefly comment on specific issues)

For further information related to this survey contact:
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FSA 2. Food Business Operator Interview/Official Veterinarian Questionnaire – FBO/OV

An Evaluation of Food Chain Information (FCI) and Collection and Communication of Inspection Results (CCIR)

A. FOOD BUSINESS OPERATOR

INTERVIEWER INTRODUCTION (to be read to/by interviewee at start of interview/before answering the questions)

Providing Food Chain Information has been a legal requirement for a number of years in the case of pigs and poultry and since 1st January 2010 for cattle and sheep. The 'minimum elements' consist of statements to confirm that such as withdrawal periods have been adhered to and that the livestock as far as the producer is aware are fit and healthy (indicating where appropriate such as TB status etc). Currently these are most commonly appended to the movement licence. In specific instances additional information is required or can be provided.

The Foods Standards Agency (FSA) has appointed MLCSL Consulting to evaluate the implementation of Food Chain Information and the Collection and Communication of Inspection Results for all species. This is part of a wider review by the FSA of the current official controls on meat to identify potential changes that would support an improved system.

As part of this work we are contacting a sample of food business operators of abattoirs to take part in a short survey to evaluate their attitudes towards having to collect, check and act upon information on the condition of livestock sent for slaughter (i.e. Food Chain Information).

The answers you provide are confidential and will only be seen by members of the MLCSL Consulting research team, and will only be used when combined with those from the other food business operators of abattoirs interviewed. All the completed survey forms will be held securely and not used for any purpose beyond this specific project.

INTERVIEWEE DETAILS

Name		**Position**	
Abattoir name		Company/Holding company name	

Abattoir location							
England		**Wales**		**Scotland**		**Northern Ireland**	

Abattoir type					
a. Smaller and artisanal red meat -mostly multi species cattle, sheep and pig); white meat -poultry		**b. Medium companies**, cattle, sheep and pigs plants with throughputs per year of Cattle ≥ 18,000 Sheep ≥ 180,000 Pigs ≥ 90,000 (but not in group c).		**c. Large companies,** with plants servicing integrated or farm assured supply chains – supplying large supermarkets/large food service	
Species slaughtered					
Cattle		**Cattle**		**Cattle**	
Sheep		**Sheep**		**Sheep**	
Pigs		**Pigs**		**Pigs**	
Poultry				**Poultry**	

Who is responsible for handling Food Chain Information at the plant? (write name of post e.g. Quality Control Manager, or other)

QUESTIONS for the Food Business Operator

1. Do you understand the reason why the requirement for you to request, collect, check and act upon Food Chain Information for livestock sent for slaughter was introduced? (tick box)

Yes- very well		**Yes** - vague understanding		**No** -not really	

2. If YES, what is the main reason? (briefly write answer)

3a. What percentage of the Food Chain Information that accompanies each animal, satisfactorily provides information on the 'minimum elements' required? Tick box

	Over 75%	50 to 75%	25 to 49%	Less than 25%	None
Cattle					
Sheep					
Pigs					
Poultry					

3b. What percentage of your livestock suppliers provide 'additional' information to the 'minimum elements' of Food Chain Information required ? Tick box

	Over 75%	50 to 75%	25 to 49%	Less than 25%	None
Cattle					
Sheep					
Pigs					
Poultry					

3c. Do you think that the Food Chain Information you receive provides the best information **to aid the arrangements for slaughtering and processing?** (tick box)

	Yes	Yes – but further information could be sent	**No** - improvements could be made
Cattle			
Sheep			
Pigs			
Poultry			

4. What improvements if any, you would like to see in the Food Chain Information provided to aid arrangements for slaughtering and processing? (briefly comment on specific issues)

5. Do you think that the Food Chain Information you receive provides information to aid **food safety decisions about meat,?** (tick box)

	Yes	**No** - improvements could be made
Cattle		
Sheep		
Pigs		
Poultry		

6. What improvements if any, to the Food Chain Information you receive would improve food safety decisions about meat? (briefly comment on specific issues)

7. Do you believe that the overall system whereby Food Chain Information is provided improves meat safety? (tick box)

Yes		**Yes** – but only to a small extent		**No**	

8a. How is the Food Chain Information currently sent to the abattoir? (tick box)

	Paper copy	Via the web or e mail
Cattle		
Sheep		
Pigs		
Poultry		

8b. How would you like it sent?

	Paper copy	Via the web or e mail
Cattle		
Sheep		
Pigs		
Poultry		

9. How far in advance would you like to receive it? (tick box)

	The same day as the animals arrive	24 hours before	48 Hours before	72 hours before
Cattle				
Sheep				
Pigs				
Poultry				

10. Do you also receive information from your livestock suppliers similar to that provided by the current FCI system, as a result of them being in a producer club or a farm assurance scheme. (tick box)

Yes		**No**	

11. If similar information to that provided through FCI could be provided from other sources, such assurance schemes, should the requirement to continue to provide this information as part of a Food Chain Information system remain? (tick box)

Yes		**No**	

12. What percentage of your producer suppliers see the Food Chain Information requirement as an important final stage of sending an animal to slaughter? (tick box)

	Seen as important by over 75%	Seen as important by 50% to 75%	Seen as important by 25 to % to 49%	Seen as important by less than 25%	Not seen as important
Cattle					
Sheep					
Pigs					
Poultry					

13. What percentage of livestock in the past year has been rejected for slaughter for human consumption as a result of the receipt of Food Chain Information? (tick box)

	Over 75% of the time	50 to 75% of the time	25 to 49% of the time	Less than 25% of the time	None
Cattle					
Sheep					
Pigs					
Poultry					

14. How often have you used Food Chain Information to organise your routine slaughter programme? (tick box)

	More than 75% of the time	50 to 75% of the time	25 to 49% of the time	Less than 25% of the time	Never
Cattle					
Sheep					
Pigs					
Poultry					

15a. What additional information would make you alter routine procedures? (briefly comment on specific issues)

15b. What specific changes can you make to your slaughter procedures? (briefly comment on changes related to the answer to 15a)

16. Do you provide the results of the inspections to your livestock suppliers and/or to their veterinary advisers? (tick box)

	Yes, on all individual animals- if YES go to Question 18	**Yes**, but only for some animals with major issues - if YES go to Question 18	**No**, except for kill sheet data i.e. weight, grade, price, deductions	**No**, because they were purchased from livestock market	**No,** because it is not my responsibility	**No** because the information is not provided by the OV in a form that can be used
Cattle						
Sheep						
Pigs						
Poultry						

If YES, go to Question 18

17. If NO, do you intend to set up a procedure to return such inspection results? (tick box)

	Yes, on all individual animals	**Yes,** but only for some animals with major issues	**No**
Cattle			
Sheep			
Pigs			
Poultry			

18. Has the introduction of the requirement for Food Chain Information (and the return of the results of inspection), also contributed to higher standards of, a) animal health or b) animal welfare? (tick box)

	a)**Yes**, helped improve animal health	**No,** it has made no significant difference to animal health		b)**Yes**, helped improve animal welfare	**No**, it has made no significant difference to animal welfare
Cattle					
Sheep					
Pigs					
Poultry					

19. Do you have any other suggestions or comments to improve the effectiveness and efficiency for information exchange between the producer and the processor?

B. OFFICIAL VETERINARIAN

Name of OV:
E mail:

INTERVIEWER INTRODUCTION (to be read to/by interviewee at start of interview/before answering the questions).

The Foods Standards Agency (FSA) has appointed MLCSL Consulting to evaluate the implementation of Food Chain Information and the Collection and Communication of Inspection Results for all species. This is part of a wider review by the FSA of the current official controls on meat to identify potential changes that would support an improved system.

As part of this work we are contacting a sample of food business operators of abattoirs to take part in a short survey to evaluate their attitudes towards having to collect, check and act upon information on the condition of livestock sent for slaughter (i.e. Food Chain Information). In addition we also need to interview the OV at these plants in order to ascertain their views as to how the current Food Chain Information system is operating and the extent to which the results of inspections are being utilised.

The answers you provide are confidential and will only be seen by members of the MLCSL Consulting research team, and will only be used when combined with those from the other livestock producers interviewed. All the completed survey forms will be held securely and not used for any purpose beyond this specific project.

QUESTIONS for the Official Veterinarian

1. How would you like to receive the Food Chain Information? (tick box)

	Paper copy	Via the web or e mail
Cattle		
Sheep		
Pigs		
Poultry		

2. How far in advance would you like to receive it? (tick box)

	The same day as the animals arrive	24 hours before	48 Hours before	72 hours before	Do not need it
Cattle					
Sheep					
Pigs					
Poultry					

3a. How are the results of ante-mortem inspections recorded at this plant? (tick box)

	On paper forms	As rough notes (e.g, on note boards)	Electronically	On paper, then copied onto electronic medium
Cattle				
Sheep				
Pigs				
Poultry				

Comments:

3b. How are the results of post-mortem inspections recorded on the line at this plant? (tick box)

	On paper forms	As rough notes (e.g, on note boards)	Electronically	On paper, then copied onto electronic medium
Cattle				
Sheep				
Pigs				
Poultry				

Comments:

4. What percentage of the results of inspections are sent by email to the livestock producers? (tick box)

	None	≥ 5%	≥ 10%	≥25%	≥50%	≥75%	≥100%
Cattle							
Sheep							
Pigs							
Poultry							

5. How do the inspection outcomes correlate with conditions indicated by the Food Chain Information? (tick box)

	Very closely	Very closely for most animals	Very closely for some animals	Not very closely for most animals
Cattle				
Sheep				
Pigs				
Poultry				

6. Does the Food chain information supplied to this plant enable you to determine specific ante-and post-mortem inspection procedures? (tick box)

	Ante-mortem			**Post-mortem**	
	Yes	**No**–require more information		**Yes**	**No**–require more information
Cattle					
Sheep					
Pigs					
Poultry					

7. What additional information do you need to enable inspection resources to be better targeted on tasks that will improve food safety, animal health and welfare? (briefly indicate up to 4 conditions on which you believe require additional information)

1.
2.
3.
4.

8. On the basis of the Food Chain Information received, what actions/interventions can you take in the slaughterhouse to improve the effectiveness of decisions on the safety of meat including inspection? (briefly comment)

9. Food Chain Information does not currently require the name and address of the private veterinarian normally attending the holding of provenance to be included – does this ever cause a problem? (tick box)

Yes		**No**	

10. If YES, please explain briefly in what way? (briefly comment)

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ANNEX 3.

Results of Surveys

3.1 Results of the Food Business Operators Survey

The following is the analysis of the interviews completed with the FBOs at 48 red meat plants and 6 poultry plants in the UK during the course of the study. Most of the questions asked for answers against a suggested reply and the numbers replying against each box are shown in the reply tables against each question. In some cases additional comments were made but for reasons of confidentiality the names of the companies making them have been removed but the type of plant is defined (i.e. small/medium, large cattle, large pig, large sheep, etc).

In the following review of the results, the figures/percentages that show the responses to the various questions and refer to UK unless otherwise stated.

The interviews with the FBOs began with asking **- Who is responsible for handling Food Chain Information at the plant?**

Except for 6 smaller abattoirs in GB, where the FCI documents were handled by the abattoir manager, in most other cases plants stated that it was the lairage staff responsible for the incoming animals that checked the paperwork (described in various ways as, e.g. lairage supervisor, lairage manager or livestock procurement dept). The exceptions to this were for one large Scottish abattoir and three of the large poultry plants, where the responsibility was said to be with the 'quality assurance' staff.

1. Do you understand the reason why the requirement for you to request, collect, check and act upon Food Chain Information for livestock sent for slaughter was introduced?

Red meat:

Numbers replying:

Yes- very well	38	**Yes** - vague understanding	7	**No** -not really	3

Poultry:

All six said **Yes**

2. If YES, what is the main reason?

Red meat:
There were two main answers from 45 respondents that dominated the YES; these were expressed in various ways as:

Integrity of the livestock – 24 that livestock should be fit for slaughter, have met withdrawal periods, nothing untoward on the farm.

Safety of meat – 10 that livestock should have no underlying condition or medication that might make the meat unsafe.

Other answers were:

Integrity of livestock and safety of meat – 4
Legislation – 5
Eradicate disease –1
No answer – 4 – [3 from those that said **No**, plus 1 from an abattoir that said **Yes** but gave no answer]

Poultry:
Numbers replying:

Integrity of the livestock – 3
Integrity of the livestock and safety of meat – 3

3a. What percentage of the Food Chain Information that accompanies each animal, satisfactorily provides information on the 'minimum elements' required?

Numbers replying:

	More than 75%	50 to 75%	25 to 49%	Less than 25%	None
Cattle	37	4			
Sheep	27	4			
Pigs	9	4			
Poultry	6				

The combined answers in the above table for each species reflect the plants that kill these species (i.e. of the plants interviewed 41 killed cattle, 31 killed sheep, 13 killed pigs and 6 poultry).

However, this should not be interpreted that the abattoirs completely trusted the accuracy of the completed forms. As the answers to other questions will illustrate, for some of the livestock delivered (particularly from markets) the answer given should be thought of as a general statement about the batch, rather than their satisfaction with the information about individual animals.

3b. What percentage of your livestock suppliers provide 'additional' information to the 'minimum elements' of Food Chain Information required?

Numbers replying:

	More than 75%	50 to 75%	25 to 49%	Less than 25%	None
Cattle	6	0	0	28	7
Sheep	4	0	0	22	5
Pigs	3	1	1	12	3
Poultry	3	1	0	2	0

Of the 6 plants killing cattle and 4 sheep that said more than 25% of their suppliers provided 'additional' information, 4 of the plants slaughtering cattle and 3 slaughtering sheep were in Scotland.

Of the 5 pig plants answering that additional information came from more than 25% of suppliers, 3 were all specialist pig plants.

Additional comments

Type of plant	
Large pig	Additional information on 95% - because system is electronic
Large pig	Additional information only comes in with casualty pigs
Large cattle	Additional information primarily with cows or young bulls
Small	Like many small plants any problems with incoming animals is usually conveyed by word of mouth and not on the forms

However, it should not be interpreted from this that all animals should have additional information, nor was it supplied for all animals that should have the second part of the form completed.

3c. Do you think that the Food Chain Information you receive provides the best information **to aid the arrangements for slaughtering and processing?**

Numbers replying:

	Yes	Yes – but further information could be sent	**No** – improvements could be made
Cattle	23	9	9
Sheep	17	7	7
Pigs	10	6	4
Poultry	5	1	

All of the 6 plants killing cattle, 5 sheep and 4 pigs in GB that thought improvements could be made were all small/medium plants. In NI all of the plants thought improvements could be made.

4. What improvements if any, you would like to see in the Food Chain Information provided to aid arrangements for slaughtering and processing?

Red meat:

The Yes reply to Question 3c, represent the views of 38 of the plants interviewed in GB and 3 in NI. There were three main answers; these were expressed in various ways as:

More information – 13 GB and 3 NI – the current form is very basic, particularly for cattle and sheep, it does not inform about underlying conditions or the history of the livestock (rearing and growing issues); have to believe what is written; more notification in advance is required about certain conditions.

None – 13 see no need for more information under the current system which is seen as a tick box exercise, bureaucratic.

No comment –12

The No reply to Question 3c, represents the view of 7 GB plants. Their suggestions for what improvements could be made were:

More information – 3

Get rid of it – 2 (a small multi species plant, and medium cattle/cull cow plant)

No comment – 3

Poultry:

More information – 1

None -3

No comment – 1

Simplify –1

Additional comments:

Type of plant	
Large cattle plant	A lot of their cattle suppliers were under TB restrictions and they were getting more information than was usual with other suppliers
Large pig plant	Does not see that FCI has added anything other than due diligence
Medium multi species	Concerned that if more info is required, then for small plants doing sometimes only one or two livestock per producer (especially when the producer takes back the carcase) the time this takes for small plant to cope with the admin is excessive
Medium/large cattle plant - Scotland	Does not see that FCI adds anything, as their field staff will alert the plant over any issues with livestock before they arrive at the plant
2 Large poultry plants	Claimed to have doubts about the veracity of one farm tests for Campylobacter, but did not specify why. These tests are not required under the minimum FCI, and would be provided additionally by the farmers and are not compulsory; it was reported that organic birds have high levels of campylobacter.

5. Do you think that the Food Chain Information you receive provides information to aid **food safety decisions about meat?**

Numbers replying:

	Yes	**No**
Cattle	25	16
Sheep	17	14
Pigs	10	10
Poultry	7	

6. What improvements if any, to the Food Chain Information you receive would improve food safety decisions about meat?

Red meat:

All the plants replied to this question even if they said 'Yes' to Question 5.There was one main answer from 25 respondents (including all three red meat plants in NI); this were expressed in various ways as:

Complete properly – stated that many farmers do not complete the forms correctly and the best improvement would be to encourage them to do so; concerned that the form is very basic; have to trust what farmers tell about such as withdrawal periods – generally feel that farmers need a better understanding of what FCI is about; see current forms as a tick box exercise; no information about underlying conditions; abattoir rarely asked for feedback.

Other answers:

No comment –12

Animal feed details –1

Feedback – 5- better information for such as animal health testing (large pig plant), medicines used/medical histories; farm assurance status.

Exception reporting – 1 – system should be changed so as only to report problems; simplify and concentrate on key issues.

Clean animal – 1 – should state about condition before leaving farm (cattle only plant).

Get rid of it/waste of time – 3 (all small/medium plants).

Poultry:

Exception reporting – 4 – three of the large poultry plants were most concerned about the salmonella status of farms and the arising issues at slaughter.

No comment – 1.

Feedback – 1.

7. Do you believe that the overall system whereby Food Chain Information is provided improves meat safety?

Numbers replying:

	Yes	**Yes** – but only to a small extent	**No**
Red meat	18	21	9
Poultry	5	1	

Additional comments:

Type of plant	
Large cattle plant	Answered No- do not believe that the forms make the meat safe – that is the OV/MHS role – farmers have a legal responsibility to only send animals that are fit for slaughter – if the farmer believes there may be an issue he is encouraged to call the plant who may ask vets opinion

8a. How is the Food Chain Information currently sent to the abattoir?

Numbers replying:

	Paper copy	Via the web or email
Cattle	41	0
Sheep	31	0
Pigs	12	8
Poultry	4	4

The 8 by electronic means were a mixture of large and medium sized pig plants. With the introduction of the eAML pig service while the survey was being completed the study caught a picture of a sector in transitions.

The following comments show that some large plants still received some by paper or through the bureau service, and one other large pig plant received 40% by electronic means.

Type of plant	
Large pig plant	70% by e mail, 30% via the bureau service
Medium multi species	Changing for pigs, but few small producers use the electronic service at the moment
Large/medium pig plant	Mainly web for pigs – but still some paper
Medium multi species	20% pigs data now sent by e mail – prefer paper as smaller businesses are not geared to deal with e mail admin (getting the staff?)
Small multi species	Small producers beginning to send by e mail
Large pig plant	Pigs 60% paper, 40% on line
Medium multi species	Pigs 90% e, 10% paper, but many that send by e do not complete

	the additional information
Small/medium multi species	Pigs 50% paper, 50% e, but concerned that e forms turn up late

Of the poultry plants, 2 received FCI information by means of both paper forms and web/e mail.

8b. How would you like it sent

Numbers replying:

	Paper copy	Via the web or e mail
Cattle	26	15
Sheep	20	11
Pigs	8	12
Poultry	1	6

The 8 plants killing pigs that were happy with paper copies, were all small/medium plants.

While all of the poultry plants preferred to receive FCI by web/e mail, one also still would like to keep the paper option for smaller suppliers – it is good to offer alternatives – creates a more flexible source of supply.

9. How far in advance would you like to receive it?

Numbers replying:

	The same day as the animals arrive	24 hours before	48 Hours before	72 hours before
Cattle	24	16	1	0
Sheep	17	14	0	0
Pigs	8	9	1	2
Poultry			1	5

The 3 red meat plants wanting the information more than 48 hours in advance were all large pig plants.

All of the poultry plants wanting the information 72 hours before, all require the information to be sent on a Friday before the next weeks kill.

10. Do you also receive information from your livestock suppliers similar to that provided by the current FCI system, as a result of them being in a producer club or a farm assurance scheme.

Numbers replying:

	Yes	**No**
Red meat	16	32
Poultry	1	5

Additional comments:

From those who said Yes:

Type of plant	
ENGLAND AND WALES	
Small/medium	Received from organic farmers say they are organic
Small/medium	Received from some producers, but not all
Large cattle/sheep	Received when livestock come from producer groups that are farm assured – but not from just private farmers who are farm assured
Large cattle	Require farmers to be farm assured – detail attached to FCI
Large cattle	Only on certain issues required by supermarkets e.g. re animal feed, GM-free etc
Large cattle	Information is often more detailed for the TB reactor cattle
Medium multi species	From some producers
SCOTLAND	
Medium	FA information received for pigs
N IRELAND	
Large cattle	Received from some producers

11. If similar information to that provided through FCI could be provided from other sources, such as assurance schemes, should the requirement to continue to provide this information as part of a Food Chain Information system remain?

Numbers replying:

	Yes	**No**	No answer
Red meat	33	14	1
Poultry	6	0	

The view of many of those that said No, was that if the information can be provided through the assurance schemes, then why duplicate. However, as one large cattle plant pointed out the problem with farm assurance information is that it is only audited periodically, while FCI could be considered as 'real time', and it is not a legal requirement.

12. What percentage of your producer suppliers see the Food Chain Information requirement as an important final stage of sending an animal to slaughter?

Numbers replying:

	Seen as important by over 75%	Seen as important by 50% to 75%	Seen as important by 25 to % to 49%	Seen as important by less than 25%	Not seen as important
Cattle	8	7	6	11	9
Sheep	5	5	6	7	8

Pigs	8	3	3	3	3
Poultry	5	1			

Only the small/medium plant group answered that their producer suppliers saw FCI as Not Important.

Additional comments:

Type of plant	
Small/medium	The better farmers more concerned about adding value complete better FCI sheets
Small/medium	Believe that farmers understand the need for food safety – but they do not see the paperwork as important
Large, pig	Older producers see it as a continuation of the previous 'casualty form'.
Large, cattle, sheep	Believe that farmers that send stock through the livestock market see it as less important
Medium	Have imposed a higher standard than the legal requirement
Medium	Farmers know they have to do it but few seem to see the value
Large cattle, pigs	Farmers may complete them and over 75% see them as important, but they are not keen on completing them
SCOTLAND	
Large/medium multi species	All understand it has to be done but most see it as a chore

13. What percentage of livestock in the past year has been rejected for slaughter for human consumption as a result of the receipt of Food Chain Information?

Numbers replying:

	More than 75% of the time	50 to 75% of the time	25 to 49% of the time	Less than 25% of the time	None
Cattle	0	0	0	7	34
Sheep	0	0	0	4	27
Pigs	0	0	0	3	17
Poultry					6

Comment:

Many commented that PM inspections are where carcases are rejected and these are not based on FCI. Only those handling TB cattle, although answering None, have rejected cattle based on FCI because of TB. In one plant that answered 25%, this mainly referred to cases where the slaughter was delayed due to the FCI arriving late.

Two NI plants said that any rejection was usually because of the wrong withdrawal period, or where animals have required casualty slaughter.

14. How often have you used Food Chain Information to organise your routine slaughter programme?

Numbers replying:

	More than 75% of the time	50 to 75% of the time	25 to 49% of the time	Less than 25% of the time	Never
Cattle	3	0	2	16	20
Sheep	3	0	2	8	18
Pigs	1	0	3	4	12
Poultry	2	1	0	3	0

Additional comments:

Type of plant	
Large sheep	Ante-mortem will alter slaughter routine but not FCI
Small/medium	Ante-mortem related to TB will alter slaughter routine but not FCI
Medium, cattle, sheep	Normally re arrange slaughter following pre notice by farmers e.g. telephone call – beast has a problem, rather than wait for FCI to arrive
Medium multi species	Farmers will telephone if there are abnormalities- abattoir will tell them to complete Annex C and slaughter will be planned on this conversation
Large cattle, pigs	Ante-mortem will alter slaughter routine but not FCI
Large poultry	Only usually concerning medication issues
Large poultry	Salmonella issues with birds mean that they will be killed last

15a. What additional information would make you alter routine procedures?

Red meat:

There was one main answer from 23 respondents; which was expressed in various ways as:

General condition of livestock on the farm – 23 – if more information was available about issues on the farm i.e. result of on farm testing (e.g. for pigs – salmonella), major disease issues, contact with notifiable disease; general health and welfare of livestock on the farm; likelihood that the animals would arrive in a dirty state.

Others were:

Information on major disease – 7

Information on withdrawal periods that could be trusted – 4

None/no comment – 13

Ages -1 – one large cattle and sheep plant in England believed that additional

information should be made available about the ages of cattle, to assist the grouping for slaughter.

Poultry:

Information on major disease – 5 – for all of these salmonella status was the main issue that would change the slaughter routine, as indicated in the additional comments below.

None/no comment - 1

Additional comments from poultry plants:

Type of plant	
Large poultry plants - England	Salmonella raised as a main issue
Large poultry plant - Scotland	More information required about salmonella, that will cause the order of the kill to be changed
Large poultry plant - NI	Order of kill will depend on status of birds i.e. organic, kill first, free range, second, shed, third; plus salmonella status
Medium poultry plant - England	Batches/loads from flocks with salmonella issues will be killed at the end of the day
Medium poultry plants - England	Salmonella positive will be killed after others

15b. What specific changes can you make to your slaughter procedures?

Apart from one No Comment, all answered that any changes involved altering the order of kill and/or Line speed, except for 3 small/medium plants that said they would make no changes (barring exceptional circumstances).

For the poultry plants the order of kill will reflect the status of the birds delivered e.g. for one large plant the normal order was – organic first, then free range, then shed but salmonella issues could alter this.

16. Do you provide the results of the inspections to your livestock suppliers and/or to their veterinary advisers?

Numbers replying –

	Yes, on all individual animals- if YES go to Question 18	**Yes**, but only for some animals with major issues - if YES go to Question 18	**No**, except for kill sheet data i.e. weight, grade, price, deductions	**No**, because they were purchased from livestock market	**No,** because it is not my responsibility	**No** because the information is not provided by the OV in a form that can be used
Cattle	6	23	6	2	4	0
Sheep	2	19	4	3	3	0
Pigs	7	9	2	0	2	0
Poultry	5	1				

Of the 7 plants killing pigs that regularly sent information back, 4 were large pig plants. All 5 that replied that they did not send information back, because the stock were purchased from live markets, were small/medium plants.

The answer 'Yes for some', was usually meaning that only the information on rejections and other major issues was sent back as a matter of course.

Of the 6 cattle plants that said they regularly sent back information, 4 were in Scotland

Additional comments:

Type of plant	
ENGLAND AND WALES	
Small/medium	Answered Yes – because they send info back to producers re major issues e.g. condemnations or if it requested – therefore did not feel they need to set up any new procedure
Large, sheep	Yes on some – condemnations – used to send all the information back (particularly about fluke) but the administrative burden became too great - would like to set it up again
Large, cattle	Same company as above, used to send information on condemnations of offal etc – but the administrative burden became too great and farmers kept ringing up for explanations – still feed back welfare issues – i.e. bruising with photo evidence
Large, sheep	Much information is sent back to producer groups e.g. clean livestock information, condemnations, pathological issues, lameness, fly strike, fluke
Small/medium	No- because 50% of cattle and sheep were purchased from a live market – difficult to track back to producers
Small/medium	Log everything- farmers can come and see it on request – more given to farmers who take carcases back
Large pig	All information is sent back to their integrated producer group suppliers using the Hellenic system (that operates a compatible system for the MHS and OV – that they think will link to the Innova

	system)
Small/medium	Information is given if asked for but only for PM on carcase issues, not on offal (e.g. re fluke), plus as a matter of routine on rejected animals
Large, cattle. sheep	Give some specific information related to the batch
Small/medium	No – a large proportion are purchased from the market – but few farmers have ever asked
Large, cattle, sheep	Some information is fed back – on request – cost is an issue – also rejection information
Large, pig	Based on slap marks – use the Innova system – but not compatible with Hellenic used in the plant
Large, pig	Based on slap marks – use the Innova system
Large cattle	Only some is sent back usually related to reject – other information is given on request e.g. fluke, C bovis
Large cattle, sheep	Given on major issues and on request – realise that it is not their responsibility – but see it as goodwill
Small/medium	Given on major issues and on request and also to private kill
Small/medium	Given on major issues and about rejections (condemned notes)
Large cattle, sheep, pig	Given on major issues and about rejections – but about to install an Oracle system (?), which is a touch screen system that will allow results to be more easily sent back
Small/medium	Purchase from markets – only send information back if the farmer requests it
Medium	Provide information back on the serious cases only
Large cattle, pigs	Provide information on all animals if rejected – Nicke system – but only provide the reasons for rejection
Medium cattle	Provide information on animals if there are major problems
SCOTLAND	
Large cattle	Installed a Hellenic system that will also allow records to be kept at green and red offal stations, plus heads and carcases
Large cattle	Believe this is done through the FSA system
N IRELAND	
Large cattle, sheep	Provide information for some animals on major issues through the APHIS system – currently working independently of FCI to improve the issues
Large cattle	Answered – No, not my responsibility as it is available through the APHIS system
Large cattle, sheep	Answered – No, not my responsibility as it is available through the APHIS system
POULTRY	
Large - England	Information sent to the producer relating to the house batch
Large - Scotland	Contract farmers get e mails with the information; product manager will send hard copies – the raw data comes out of the Innova system
Large - NI	Information sent relating to flocks – and batch/loads from each supplying flock
Medium/large - England	Results sent to and can be obtained from the Innova system

17. If NO, do you intend to set up a procedure to return such inspection results?

Numbers replying:

	Yes, on all individual animals	**Yes,** but only for some animals with major issues	**No**
Cattle	2	1	9
Sheep	1	1	8
Pigs	0	1	3

The three replies that they intended to set up return procedures came from Large plants, the 20 replies that they had No intention to set up such procedures were from Small/medium plants.

A large poultry plant thought that the format that comes out of the Innova system is unintelligible, and they intend to re format it into their own system for passing back to farmers.

18. Has the introduction of the requirement for Food Chain Information (and the return of the results of inspection), also contributed to higher standards of, a) animal health or b) animal welfare?

Numbers replying:

	a)**Yes**, helped improve animal health	**No,** it has made no significant difference to animal health		b)**Yes**, helped improve animal welfare	**No**, it has made no significant difference to animal welfare
Cattle	10	31		8	33
Sheep	7	24		6	25
Pigs	6	14		4	16
Poultry	5	1		5	1

Additional comments:

Type of plant	
ENGLAND AND WALES	
Large, sheep	Answered no – meant not yet thought it was too early to call
Large, pig	Do not believe that the FCI system adds anything to the information from the QA groups that supply their pigs
Large, cattle, sheep	Do not believe that FCI has achieved much – farm assurance and other supply chain work has done more to improve health and welfare
SCOTLAND	
Large cattle	Some evidence that offal yields have increased and that there have been improvements to the health status of livestock (believed to be referring to liver fluke issues)
Large cattle	To a small extent for health and welfare in that the farmer is more aware he needs to look at his animals for problems
N IRELAND	
Large cattle, sheep	Do not believe that FCI is key driver for improvement
Large cattle, sheep	Yes – means that it has helped in a small way
POULTRY	
Large	Only answered no, as they had their own internal system which they believed was having a beneficial effect

19. Do you have any other suggestions or comments to improve the effectiveness and efficiency for information exchange between the producer and the processor?

Type of plant	
ENGLAND AND WALES	
Small multi species	None
Small multi species	None
Large sheep	None
Large sheep	None
Large cattle	Farmers need better educating about some issues e.g effect on welfare – bruising – positioning of injections to reduce abscesses of etc – could be covered in such as Eblex Better Return Days
Medium cattle, sheep	It would be better if everything was by electronic means
Medium cattle, sheep	Clean livestock is more of a problem than a badly completed FCI – too late to involve the farmers vet
Medium cattle, sheep	Need a better way of maintaining contact with the farmer if the livestock are purchased from an auction market
Large pig	It would be better if all farmers were on a computer system (they maintain that 70% of their suppliers are, and many come through their supply group). The plant operates as one of a group of 3, with the same operating procedures and views

Medium cattle, sheep	Should move completely over to electronic systems, particularly if feed back is to be given to the producer
Medium multi species	None
Medium pig	None
Medium multi species	Encourage farmers to complete the forms better – seen by many as only an administrative task, with no farmer benefit
Large sheep, cattle	None
Large cattle	None
Large cattle	Currently not sending information back to farmer but plan to do so soon and hope to see improvements as a result
Large cattle, sheep	It would be better if the system was more joined up – so the vet and abattoir system could communicate – Schedule 18 veterinary declaration
Medium cattle, sheep	Encourage farmers to complete the forms better – seen by many as only an administrative task
Large cattle, sheep–Wales	none
Large pig	Information is sent back but there is little two way communication – perhaps farmers should have a helpline – more difficult to relate information on individual animals with no individual id.
Large cattle	Farmers need better health plans. Should come together in small groups to improve information sharing with local vets and use CCIR information to improve the health plans
Large pig	More difficult to relate information on individual animals with no individual id.
Large cattle	FSA should finish what they started and move to a full electronic IT system, that is integrated with the systems in the plants and shares info with others e.g. vets, drug and feed companies etc
Small cattle, sheep	Get rid of it
Large cattle, sheep–Wales	Farmers think the form is like a vets certificate
Medium cattle, sheep -Wales	Believe that there is a need to give better information back to the farmer
Small multi species–Wales	Believes the system is working fine – understands view to move to electronic but will be difficult for small/medium plants that do not make much use of computers
Large multi species	Get the farmers on e mail and try to link it all electronically
Large sheep	Believes that there should be a central database that is linked to plants and farms
Large cattle	No comment
Medium multi species	Should only report serious conditions
Medium cattle, sheep	No comment
Medium multi species	FCI seems to emphasise the Trading Standards view of the completion of the paperwork, rather than the veterinary view. A better system should be put in place to handle FCI/CCIR requirements from stock purchased from livestock markets
Medium cattle, sheep	CCIR information should be sent back to the farmer

Large cattle, pigs	No comment, think everything is working well at the moment
Medium multi species	Do not have enough time to handle FCI properly, it is seen as just paperwork that is files and then after a time destroyed – seems pointless
Small multi species	Younger generation much more open to computer based systems – older reluctant because they see it will increase their cost – to buy system and train
Small multi species	No comment
SCOTLAND	
Large cattle	FCI system is only as good as the honesty of the farmers
Medium multi species	Believes that verbal communication with the farmer or agent both before and when the livestock are sent for slaughter is vital and much more useful than the FCI – which is regarded by many as only a record and not something to be use
Large cattle, sheep	Concerned that there are still many IT problems in setting up plant and FSA systems that communicate with each other (e.g. trying for 2yrs to set up a link with FSA H/Q)
Medium cattle, sheep	No comment
Large cattle	The information sent back tends to just list problems – maybe there should be a narrative or something that explains to farmers what they should do
Medium multi species	Would like to see more compulsory information on the FCI e.g. treatment dates, treatments, more medical history
Large cattle	On farm records should be on a database from which FCI can be extracted and CCIR added
N IRELAND	
Large cattle	The reporting system needs to be improved to encourage farmers to consult it + cattle from ROI and GB have no access to APHIS.
Large cattle	Feed back of information via APHIS needs to be backed up with more information (e.g. from abattoir newsletter, website etc)
Large cattle, sheep	Abattoir believes that it needs to work more closely with the producers than it ever has in the past
POULTRY	
Large poultry – England	Make sure that the OV puts all the relevant information onto the computer so that it can be returned to the farmer
Large poultry – Scotland	The plant claimed that the current information coming from Innova is not in a format that is suitable to give summary information on a house and flock basis e.g. difficult to match reject numbers that are on a load basis with the house/flock; however, the FSA maintained that it can be adapted to meet FBO needs.
Large NI	Information should be fed back to the farmer with the aim of helping them to improve not to disincentivise through cost of calling in a vet.
Medium – England	It is possible for the wrong information to be transposed into the system
Medium – England	No comment
Medium – England	There should be a central website for use by grower, processor and OV

3.2 Results of Official Veterinarians Survey

The following is the analysis of the interviews completed with the OVs at 48 red meat plants and 6 poultry plants in the UK during the course of the study. As with the interviews with FBOs, most of the questions asked for answers against a suggested reply and the numbers replying against each box are shown in the tables against each question. In some cases additional comments were made but for reasons of confidentiality the names of the companies making them have been removed but the type of plant is defined (i.e. small/medium, large cattle, large pig, large sheep, etc).

In the following review of the results, the figures/percentages that show the responses to the various questions and refer to UK unless otherwise stated.

1. How would you like to receive the Food Chain Information?

Numbers replying:

	Paper copy	**Via the web or e mail**
Cattle	30	11
Sheep	26	5
Pigs	10	10
Poultry	3	3

For both cattle and sheep, 15 of the replies preferring paper came from OVs in small/medium abattoirs, some because they said they had no access to a computer.

None in the large pig plants preferred paper but some in the large cattle and sheep plants still did, including the OVs in all but one of the Scottish and NI plants. One large poultry plant was happy to receive FCI information by web/e mail provided it was in a format that could be easily printed.

2. How far in advance would you like to receive it?

Numbers replying:

*	**The same day as the animals arrive**	**24 hours before**	**48 hours before**	**72 hours before**
Cattle	28	11	2	0
Sheep	26	4	1	0
Pigs	11	6	2	1
Poultry		3	3	

*The hourly gradations were provided to be interpreted specifically as the day before, two days before or three days before.

Additional comments:

Type of plant	
Large cattle	Happy with same day, except if the farmer knows there are livestock with abnormalities, they should be informed 24 hours before
Medium multi species	Believe that many smaller/medium abattoirs are not skilled with computers and a pre slaughter e system should not be imposed upon them
Medium cattle, sheep	Happy with same day, except if the farmer knows there are livestock with abnormalities, they should be informed 24 hours before

3a. How are the results of ante-mortem inspections recorded at this plant?

Numbers replying:

	On paper forms	As rough notes (e.g, on note boards)	Electronically	On paper, then copied onto electronic medium
Cattle	26	4	3	8
Sheep	20	4	2	5
Pigs	3	1	1	15
Poultry				6

All of the OVs in red meat plants stating that they use paper and notes, are either directly transcribing the AM results onto the Innova system or at the end of the day are transcribing onto standard FSA AM forms. These are consolidated at the end of the week for onward transmission to FSA by fax or email. The four OVs at plants killing pigs using paper and notes were all at small/medium plants; all of the pig plants are using the Innova system.

The OVs at two large plants in GB using electronic systems, said they were using the plants own electronic systems, e.g. Systems Integration, Hellenic, but in the case of one which was a large pig plant data had to be transcribed onto the Innova system as there was no connection between the two. The other were NI plants linked into the APHIS system.

3b. How are the results of post mortem inspections recorded on the line at this plant?

Numbers replying:

	On paper forms	As rough notes (e.g, on note boards)	Electronically	On paper, then copied onto electronic medium
Cattle	18	9	7	7
Sheep	15	8	3	5
Pigs	2	2	3	13
Poultry				6

All of the OVs stating that they use paper and notes were dealing with cattle and sheep and are either directly transcribing the PM results onto the Innova system, or at the end of the day transcribing onto standard FSA PM forms. These are consolidated at the end of the week for onward transmission to FSA by fax or email. The four OVs at plants killing pigs using paper and notes were all at small/medium plants, but these were transcribed onto the Innova system All of the pig plants are using the Innova system as were all 5 of the poultry plants interviewed in GB (with the large poultry plant in NI using the plants own electronic system).

The OVs at two large cattle and two large pig plants in England who said they were using an electronic system maintained that these were the plants own electronic systems (i.e. commercial systems of companies such as Systems Integration and Hellenic) but in the case of one, which was a large pig plant data had to be transcribed onto the Innova system, as there was no connection between it and the Systems Integration package. One of these large pig plants was using a touch screen PM system.

Many of the larger pig plants and the poultry plants in GB, at the point of PM inspection, were using ‘clickers’ to record observed conditions. The OVs at one large cattle and one large cattle and sheep plant in Scotland said that they were using an electronic system for the PM results, as were all the three red meat plants in NI. In NI this was linked into the APHIS system and it was maintained backed up by paper notes (Note: APHIS does not extend to NI poultry plants).

4. What percentage of the results of inspections are sent by email to the livestock producers?

Numbers replying:

	None	≥ 5%	≥ 10%	≥25%	≥50%	≥75%	≥100%
Cattle	30	3	2	0	2	0	4
Sheep	24	1	2	2	1	0	1
Pigs	4	2	1	4	1	1	7
Poultry						3	3

Additional comments:

Type of plant	
ENGLAND AND WALES	
Small/medium	Innova will allow results to be e mailed to farmers
Large, sheep	Farmers never contact OV some may come back for info through the FBO
Large, pig	All sent to producer group suppliers through the groups electronic system – which is partially linked to the Innova system
Small/medium	For cattle and sheep – believed that the only information sent back is on rejections – Innova allows full results to be sent to farmers if they can access it electronically
Large,cattle	Results communicated to plant livestock department who send information back to producers by post
Small/medium	Only provided for cattle and sheep if farmer requests
Large, cattle,sheep, pigs	Only about 20 to 30% of pigs sent back to farmers that have email – others do not have the IT capability or are not using it to receive information. Note: FSA can also send the information back to BPEX who then pass it to the producers in the pig health scheme. In the future FSA hope to develop a web service, but again this is reliant on a producer having IT access.
Small/medium	Only rejection information sent back where stock have been purchased directly from the farm
Large, cattle	Small number sent on request
Medium, multi species	Believes that pig details are available to producers through the Innova system, but only 25% take advantage of this to look them up
Medium, multi species	All their farmers were getting information via their Hellenic system, but due to problems with its links to the FSA this has fallen to 10%
Medium, multi species	If OV sees a major rejection they will call the farmer
Large cattle,pigs	Only send back details by batch to about 50% cattle, Innova gives details on pigs
SCOTLAND	
Large cattle	FBO and OV said 100%, but OV does not believe that the PM results are sent
Large cattle	FBO said 100% but the OV thinks it is less than 5% in detail the rest is only information on bruising
Large cattle,sheep	Believe they are sent by the FBO 100% for cattle and 25% for sheep
Medium, multi species	Although the FBO believes they are sent back, OV said no cattle and sheep are and but less than 25% pigs
Medium, cattle,sheep	FBO said yes for some, OV said none
Medium cattle, sheep	Some are sent by post – if farmers have provided an e mail account they can get it themselves
Large cattle	Some – usually ear tag irregularities, cattle too large – in Scotland they are allowed to send stock back to the farm
N IRELAND	
Large cattle, sheep	Answered 100% for C and S – meaning all are accessible – but not sure how many farmers consult the database?
Large cattle	Answered None for C – meaning all are accessible – but not sure how many farmers consult the database?
Large cattle, sheep	Answered None for C and S – meaning all are accessible – but not sure how many farmers consult the database?
POULTRY	
Large GB	Relies on farmers interrogating the Innova system, plus the FBO sending batch information back, that highlights major conditions

Large GB	Assume all, as it is transferred to Innova
Large NI	AM and PM on paper, then transferred to the factory system, used to send information back to producers; information available off the internet
Large/medium GB	Relies on farmers interrogating the Innova system, plus the FBO sending batch information back, that highlights major conditions
Medium GB	Relies on farmers interrogating the Innova system, plus the FBO sending batch information back, that highlights major conditions
Medium GB	75% reply believed to be from FBO and OV through the Innova system

5. How do the inspection outcomes correlate with conditions indicated by the Food Chain Information?

Number replying:

	Very closely	**Very closely for most animals**	**Not very closely for most animals**
Cattle	6	20	15
Sheep	5	10	16
Pigs	5	9	6
Poultry	1	5	

Additional comments:

Type of plant	
ENGLAND AND WALES	
Small/medium	FCI only useful when it identifies uncommon injuries on livestock being sent to the plant
Large, sheep	Not very good with sheep purchased from market – less detail
Small/medium	Very few FCI completed properly – markets especially send old forms. No annex is ever attached – some farmers do not even delete the TB statement
Small/medium	Not very closely as the farmers do not have the information that is produced through inspection
Small/medium	As few suppliers put anything significant (or anything) on the form it is difficult to assess the accuracy of the information
Large, cattle	Some conditions not on the FCI – lameness, abscesses, ring worm, warts, dermatitis
Large, cattle, sheep	Few farmers communicate useful information
Large, pig	The majority of farmers do not send much additional information
Large, cattle	Little correlation because the FCI information from most is the 'minimum'
Medium cattle, sheep	The information on animals that come from markets is sparse
N IRELAND	
Large cattle, sheep	There are issues with the forms in that the wording refers to abnormalities or conditions that can affect meat safety, but does not spell out what can affect meat safety?– no farmer can judge whether the condition is related to meat safety?
Large cattle, sheep	Re iterated the above

6. Does the Food Chain Information supplied to this plant enable you to determine specific ante and post-mortem inspection procedures?

Number replying:

	Ante-mortem			Post-mortem	
	Yes	**No**		**Yes**	**No**
Cattle	28	13		29	12
Sheep	20	11		20	11
Pigs	13	7		13	7
Poultry	5	1		3	3

Additional comments:

Type of plant	
ENGLAND AND WALES	
Small/medium	As few suppliers put anything significant (or anything) on the form it is difficult to assess the accuracy of the information and therefore to determine procedures
Large, cattle, sheep	Only because most of the animals are generally healthy anyway, the FCI tells us little
Small/medium	Yes for cattle for AM and PM, but only related to TB
Medium multi species	As many farmers seem to regard the current forms as tick box exercises, there is a scepticism about the FCI information – view that some farmers put as little information as possible as this will decrease the chances of rejection
SCOTLAND	
Large cattle	The information provided by many farmers is poor
Medium multi species	Information provided by some farmers on the condition of livestock is not accurate

7. What additional information do you need to enable inspection resources to be better targeted on tasks that will improve food safety, animal health and welfare?

Red meat:

There were 2 main answers from the respondents; these were expressed in various ways as better information on:

General condition of livestock on the farm – 37 – if more information was available about issues on the farm i.e. result of on farm testing (e.g. for pigs – salmonella), major disease issues, contact with notifiable disease; general health and welfare of livestock on the farm.

Relevance of FCI – 9 felt that it should be better explained to farmers what the purpose of FCI is – make sure that farmers complete the forms properly (one thought that the forms should be completed by the farm vet) – afraid that the current system relies too much on the integrity of the farmer that they do not trust; current system

seen as a tick box exercise.

None/no answer – 2

Poultry:

General condition of livestock on the farm – 2

Relevance of FCI – 1 on the grounds that knowing in advance will make no difference to the AM and PM inspection procedure. This is not to say that it is not required – just that it is only a prerequisite to inspection.

None/no answer – 3

8. On the basis of the Food Chain Information received, what actions/interventions can you take in the slaughterhouse to improve the effectiveness of decisions on the safety of meat including inspection?

All answered in a fairly standard way that they could change the order of slaughter (isolate animals and detain carcases), alert the MHS/FSA staff on the line of what to watch out for and, at the extreme, remove animals and carcases from the food chain.

9. Food Chain Information does not currently require the name and address of the private veterinarian normally attending the holding of provenance to be included – does this ever cause a problem?

Number of replying -

	Yes	**No**
Red meat	17	31
Poultry	5	1

For the poultry plants in GB, the 'Yes' referred to the fact that poultry FCI forms include the private veterinary details relating to the holding at which the 'crates' of birds originated.

10. If YES, please explain briefly in what way?

Those that answered 'Yes' (other than the poultry plants), mainly saw it as an issue when there was a problem with the animals and/or carcase and if they wanted to verify information but found communication with the farmer supplier either difficult or vague. This was often because of what they saw as the poor attitude of many farmers in the cattle and sheep sector in particular towards FCI. Again it was repeated here that many farmers see the FCI paperwork as a chore rather than something intrinsically important to the meat supply chain.

Some plants were already logging these names in their systems, as in all red meat plants in NI where the name of the vet is already logged onto the APHIS system

3.3 Results of the Farmer Survey

The following is a summary analysis of the results of the replies to the questionnaires received from livestock farmers in England, Wales and Scotland.

The results are expressed as percentages of the total number of replies, either relating to the farmers view as per all livestock production or specific to specialist beef/cull dairy cattle, sheep, pig or poultry production.

3.3.1 FCI Sent by Livestock Producers

The first set of questions, asked of all the livestock producers, concerned the FCI that was sent by them; their attitudes towards sending it; what they understood to be the reason/importance of sending it; the factors that affected what they did or could send and how they sent or could send it.

1. Do you understand the reason why you have to provide Food Chain Information on livestock sent for slaughter (either directly or via a livestock market)?

Replies from farms with: **(rounded)**	**Yes- very well**	**Yes - vague understanding**	**Not really**
Beef and/or dairy cattle and/or sheep	53%	42%	5%
Pigs	82% *	18%	
Poultry	100%		

Note: * the replies from the managers of integrated enterprises were all 'Yes-very well'

If YES, what is the main reason?

Cattle and sheep

There were four main answers from respondents with beef and/or dairy cattle and/or sheep; these were expressed in various ways as:

Observance of veterinary medicine rules – 36% – to make sure the meat is not contaminated.

Observance of veterinary medicine rules and that animals are fit and healthy – 14%.

Food safety – 33% – where the issue of food safety appeared as their main answer, some would also mention issues of veterinary medicine rules and traceability.

Traceability – 16% – to ensure the traceability of livestock related to their production history.

Pigs and poultry

In the pig and poultry sectors, the 'Food safety' answer dominated the replies, expressed in various ways often with references to the observance of veterinary medicine rules and that animals are fit and healthy.

3. Do you think that the current Food Chain Information you provide when your livestock are sent for slaughter can help improve meat safety?

Replies from farms with: **(rounded)**	**Yes**	**No**
Beef and/or dairy cattle and/or sheep	72%	28%
Pigs	95%	5%
Poultry	100%	

If NO, why not?

Cattle and sheep

There were three main answers from the respondents with beef and/or dairy cattle and/or sheep; who replied No; these were expressed in various ways as:

Worthless – 84% – the information provided gives no useful information (i.e. who would send livestock for slaughter if they thought the animal was unfit for such and then say so?); all the answers to the 'minimum elements' depend on the producers honesty but only a very small proportion of producers would lie, as they would be found out during inspection.

Unnecessary – 16% – while producers see the withdrawal period notification as important, which most abide by, anything else is seen as an unnecessary bureaucratic requirement.

Farm assurance – less than 1% – unnecessary as it duplicates what the Farm Assurance status implies.

Pigs

In the pig sector those that replied 'No', made no substantive further comment

4. As well as the minimum elements of the Food Chain Information, have you ever supplied additional information?

Replies from farms with: **(rounded)**	**Yes – over 75% of the time ***	**Yes – 50 to 75% of the time**	**Yes -25 to 49% of the time**	**Yes - less than 25% of the time**	**Never**
Beef cattle	3%	2%	2%	33%	60%
Dairy cattle	5%	9%	5%	24%	57%
Sheep	3%	1%	1%	33%	62%
Pigs	11%	7%	4%	61%	17%
Poultry	61%	8%	16%	5%	10%

***** It is possible that a small error could have been introduced into the analysis of replies here, with some who wanted to reply exactly 75% ticking the box for 'over 75%' and some '50 to 75% - the question should have been phrased 'more than 75% of the time.

5. In relation to your main livestock enterprise, from the conditions identified below which do you think pose the greatest threat to **meat safety?**

Dairy cattle	% replies **(rounded)**	Have you information on the health status of your stock with regard to the conditions that you could provide to abattoirs %	
		Yes	No
Mastitis	2	100	
TB	8	83	17
Johnes	10	100	
Salmonella	26	43	57
BVD	0		
E coli	29	41	59
BSE	13	30	70
Campylobacter	10	25	75
Brucellosis			
Leptospirosis	2		2
	100		

Beef cattle	% replies **(rounded)**	Have you information on the health status of your stock with regard to the conditions, that you could provide to abattoirs %	
		Yes	No
Tapeworms	2		100
TB	12	81	19
Johnes	5	66	34
Salmonella	26	35	65
BVD	5	3	97
E coli	28	1	99
Fluke	3	50	50
Campylobacter	16	1	99
Brucellosis	1	34	66

Leptospirosis	2	20	80
	100		

Sheep	% replies **(rounded)**	Have you information on the health status of your stock with regard to the conditions, that you could provide to abattoirs %	
		Yes	No
Toxoplasma	6	50	50
Hydatid cysts	10	48	52
Fluke	5	48	52
Scrapie	3	40	60
Caseous lymphadenitis (cheesy gland)	6	80	20
E coli	30		100
Salmonella	26		100
Campylobacter	11		100
Q Fever	3		100
	100		

Pigs	% replies **(rounded)**	Have you information on the health status of your stock with regard to the conditions, that you could provide to abattoirs %	
		Yes	No
Trichinella	6		100
Salmonella	38	75	25
Anthrax	1		100
Worms (ascaris)	13	28	72
Campylobacter	17		100
Toxoplasma	8		100
Respiratory viruses	17	54	46
Yersinia	0		
	100		

Poultry	% replies **(rounded)**	Have you information on the health status of your stock with regard to the conditions, that you could provide to abattoirs %	
		Yes	No
Coccidiosis	0		
Salmonella	34	92	8
Dermatitis	0		
E coli	33	31	69
Campylobacter	33	8	92
Airsacculitis			
	100		

6. Does the guidance available given in the Food Chain Information forms and/or in the Model documents, enable you to complete the food chain information required to the best of your ability?

Replies from farms with: (rounded) *	Yes	Partly – but guidance could be improved	No – guidance is poor
Beef and dairy cattle	45%	46%	9%
Sheep	36%	58%	6%
Pigs	75%	25%	
Poultry	82%	14%	4% **

Note:* This question was asking what guidance was commonly available and gave the examples of FCI forms and Model documents as potential sources, the data do not allow the answers to be separated for each of these potential sources.

**This represented replies from very small producers

7. How and when do you send the Food Chain Information to the abattoir?

	Paper copy – sent before the animals are sent for slaughter	Paper copy – sent at the same time as the animals	By web or email – sent before the animals are sent for slaughter	By web or e mail- sent at the same time as the animals are sent for slaughter
Cattle	8% *	90%	Less than 1%	1%
Sheep	2%	96%	Less than 2%	0
Pigs	4%	23%	69%	4%
Poultry	10%	2%	88% **	

Note:
*All those in the cattle sector that sent paper copies the day before were very large beef cattle producers
** included a reply from an integrated group that were sending by fax

8. If sent by paper copy – could you submit the Food Chain Information available by web or e mail means?

Replies from farms with: (rounded)	No	Yes – at the same time as animals are sent	Yes – at least 24 hours before
Beef and sheep	34%	32%	34%
Dairy cattle	12%	50%	38%
Pigs	6%	33%	61%
Poultry	33% *	0	66%

Notes: *this represented a small number of poultry producers in Wales (presumably with poor broad band access- which according to the CLA Wales – writing in Farmers Guardian 11 May 2012, is a major problem in rural Wales)

3.3.2 CCIR Received by Livestock Producers

The second set of questions concerned the CCIR received (or not) by livestock producers; what currently they normally receive, compared to what they would like to receive; their attitudes towards the information and what ability they had to make use of it, and what veterinary advice they needed to improve their production systems; what livestock diseases most concern them and what are their main sources of information with regard to these and protective/remedial measures.

The final questions were to establish the extent to which those interviewed were members of farm assurance schemes.

9. Do you routinely use a private veterinarian to regularly advise you on animal health issues?

Replies from farms with: **(rounded)**	**Yes** – during advisory visits 2 or more times a year	**Yes** – during annual advisory visits	**No** – no, only use a vet as required and not for regular advice
Beef and sheep	43%	27%	30%
Dairy cattle	68%	28%	4%
Pigs	66%	21%	13%
Poultry	59%	41%	

10. Do you routinely receive results of inspections on all the animals you send for slaughter?

Replies from farms with: **(rounded)**	Yes, on all individual animals	Yes, but only for some animals	Yes, but only related to problems with the batch	No, except for kill sheet data i.e. weight, grade, price, deductions	No, because sent via livestock market
Cattle	8%	23%	16%	46%	7%
Sheep	10%	19%	17%	33%	21%
Pigs	21%	21%	50%	8% *	
Poultry	77%	10%	10%	3%*	

Notes:

* All small scale pig farmers with 1 -50 pigs, and small scale poultry producers.

Of Those Receiving Information:

11. How soon is the information received?

Replies from farms with: (rounded)	Within 1 day	Within 2 to 3 days	Within a week	Longer
Cattle	19%	47%	28%	6%
Sheep	8%	41%	45%	6%
Pigs	10%	49%	31%	10%
Poultry	33%	48%	14%	5%

12. Has action ever been taken based on this information?

Replies from farms with: (rounded)	Yes	Not to date but looking to make better use in the future	No
Cattle	70%	23%	7%
Sheep	75%	25%	
Pigs	74%	19%	7%
Poultry	90%	6%	4%

13. If No, to Question 12, why not?

The replies to this question were few in number and poor, as a result it was judged that no sound messages could be identified.

14. Do they consult their private vet about the results of inspections?

Replies from farms with: (rounded)	Always	Sometimes	Rarely	Never
Cattle	16%	72%	10%	2%
Sheep	16%	73%	10%	1%
Pigs	24%	66%	10%	
Poultry	33%	62%	5%	

15. Should your private vet be informed of the results of inspections of your livestock?

Replies from farms with: (rounded)	Yes	No
Cattle	42%	58%
Sheep	33%	67%
Pigs	59%	41%
Poultry	57%	43%

16. If Yes to Question 15, who should inform your private vet of the results of inspections of your livestock?

Replies from farms with: (rounded)	Producer	Abattoir operator	The official vet/inspector
Cattle	83%	6%	11%
Sheep	85%	5%	10%
Pigs	66%	17%	17%
Poultry	42%	42%	16%

17. Do you use the results of inspections to calculate the loss in the value to your farm business from problems that are identified?

Replies from farms with: (rounded)	Yes	Not at the moment but looking to make better use in the future	No
Cattle	36%	47%	17%
Sheep	39%	43%	18%
Pigs	52%	41%	7%
Poultry	95%	5%	

18. Do you have sufficient information to help you make the best use of the results of inspections?

Replies from farms with: (rounded)	Yes – on most issues	Only on some issues	No
Cattle	38%	54%	8%
Sheep	45%	47%	8%
Pigs	45%	41%	14%
Poultry	95%		5%*

Note: * represented the view of small poultry producers

19. What inspection information would you like to receive to enable you to improve the health and productivity of livestock in your main livestock enterprise?

Cattle and sheep
There were two main answers from respondents with beef and/or dairy cattle and/or sheep; these were expressed in various ways as:

Information on internal organs – 27% - information on conditions that have affected the organs, in particular liver fluke, but also parasites etc.

Feedback – 13% – general feedback on all information obtained from inspection (perhaps detailed in kill sheets), and specific issues that arise in lairage, slaughter line etc.

Other replies were:

Happy with information received, want no more – less than 1 %

More information on the cause of the problem – 2%

Only send information on major issues – less than 1%

No answer – 57%

Pigs

Information on internal organs – 3%

Feedback -22%:

Happy with information received, want no more – 4 %

More information on the cause of the problem – 4%

No answer – 67%

Poultry

Feedback -47%:

Happy with information received, want no more – 20 %

No answer – 33%

20. In relation to your main livestock enterprise, from the conditions identified below**,** which do you think pose the greatest threat to the **health and productivity of your livestock?**

Dairy and beef cattle	% replies **(rounded**	Have you information on the health status of your stock with regard to the conditions that you could provide to abattoirs %	
		Yes	No
Lameness	11	82	8
Mastitis	4	100	
Respiratory disease (pneumonia, IBR)	22	37	63
BVD	12	74	26
Johnes	11	63	37
Parasites (including lung and gut worms, fluke)	23	24	76
E coli	>1		100
Reproductive dysfunction	3	100	
TB	12	81	19
Leptospirosis	1		100
Total	100		

Sheep	% replies **(rounded**	Have you information on the health status of your stock with regard to the conditions, that you could provide to abattoirs %	
		Yes	No
Lameness	23	81	19
Scrapie	2	75	25
Respiratory disease /pneumonia	34	60	40
Dentition status	≥1	100	
Parasites (inc luding lung and gut worms, fluke)	29	33	67
Salmonella	2	25	75
Abortions	9	79	21
	100		

Pigs	% replies **(rounded**	Have you information on the health status of your stock with regard to the conditions, that you could provide to abattoirs %	
		Yes	No
Swine dysentery	21	71	29
Lameness	6	75	25
Post weaning Multisystemic Wasting Syndrome (PMWS)	14	78	22
Gut diseases (ileitis, post weaning diarrhoea)	17	82	18
Respiratory disease (PRRS, EP, APP)	32	76	24
Parasites	4	25	75
Reproductive dysfunction	4	100	
Fighting/tail biting	2	100	
	100		

Poultry	% replies **(rounded**	Have you information on the health status of your stock with regard to the conditions, that you could provide to abattoirs %	
		Yes	No
Pododermatitis (foot pad lesions)	17	100	
Lameness	21	100	
Campylobacter	7		100
Salmonella	12	100	
Dermatitis (skin lesion/ feather loss)	12	100	
Coccidiosis	26	73	27
Other – please specify: IB&Gumboro virus	5	na	na
	100		

21. When asked to identify the 3 most important sources of information (from those identified) on the diseases that may affect their animals the percentages ranking as most important, second in importance and third in importance where:

Sources of information	**% of replies that ranked these as:** Most important
Background knowledge/education/experience	62%
Veterinary advice/guidance literature	34%

Levy board advice	>1
Assurance scheme	>1
Trade press	>1
Consultants	>1
Trade association	0
Supply chain sources	>1
	100
	Second in importance
Background knowledge/education/experience	27%
Veterinary advice/guidance literature	46%
Levy board advice	6%
Assurance scheme	2%
Trade press	11%
Consultants	3%
Trade association	>1%
Supply chain sources	4%
	100
	Third in importance
Background knowledge/education/experience	7%
Veterinary advice/guidance literature	4%
Levy board advice	18%
Assurance scheme	6%
Trade press	44%
Consultants	10%
Trade association	2%
Supply chain sources	9%
	100

The results show that for most farmers their most important source of information on the diseases that may affect their animals is their own knowledge gained from education and experience, refreshed by discussions with their veterinary advisers and the guidance literature which they see, kept up to date by scanning the trade press. All other sources for most livestock farmers are secondary.

22/23. Membership of a farm assurance scheme (s)?

Of the replies from cattle and sheep farmers, over 90% of those interviewed indicated that they were members of a farm assurance scheme, which in England was invariably identified as the Red Tractor scheme (often identified as FABBL). A few answered that they were also in an Organic scheme, Freedom Foods, or a dairy scheme (NDFA); in Scotland and Wales it was the similar regional scheme (identified as QMS in Scotland and WQBL in Wales).

In the pig and poultry sector over 95% of those interviewed confirmed that they were part of a farm assurance scheme, although because of the replies from managers of integrated holdings/units it was unclear at times that these were national schemes

such as the Red Tractor or a company scheme, as the schemes were often referred to in different ways, e.g. as SAI Global, Genisis (thought to be confused with the farm assurance inspection bodies – but could be Global Gap) and in poultry ACP (in Northern Ireland – in GB the assured Chicken Production standards are now a part of the Red Tractor Farm Assurance Poultry scheme).

24. Suggestions or comments on ways of improving the effectiveness and efficiency of the information exchange between the producer and the processor

The majority of livestock farmers (77%) in response to this question, made no comment. Of those that did there were two main answers expressed in various ways, these were:

System should be integrated utilising web/e mail – 62%.

Farmers need to be made more aware that they can 'demand' to see CCIR on their livestock – 26%.

Others:

System is much too bureaucratic and needs to be only driven in both ways by exception reporting – 6%.

Pay producers a better price – 4%.

Health plan information should be printed on passports and other id material – 2%.

3.4. Report on Interviews with Private Veterinarians

The views of five private veterinarians were sought on the operation of the FCI and CCIR system and these also acted as a check against some of the responses to the questions given by both the livestock farmers and the OVs interviewed during the three main surveys.

The five were chosen from across GB so as to give a coverage of private veterinarians that dealt with all four species under consideration (of those interviewed one covered all species, one dealt mainly with poultry, one with cattle/dairy cattle, and two dealt mainly with pigs. They were all asked the following questions:

1. Do you advise your client about the completion of Food Chain information on livestock sent for slaughter?

Four of the veterinarians interviewed replied that when asked, they advised clients about FCI but this was only infrequently (dealing with questions such as fitness to travel, post treatment movement and drug withdrawal issues and emergency slaughter).

One (who looked after all species) replied that they had never been asked to advise on issues involving FCI.

2. Do you think the Food Chain Information system could be improved?

There was a general consensus from all of those interviewed that the system could be improved.

However, there were no consistent substantive comments about what needed to be done other than to better educate the farmer. This would give them a better understanding of the system, with training and guidance on the completion of FCI and on how the information from the abattoir (that is received) could be used to improve production practices and profitability.

One of the veterinarians interviewed that specialised in pigs was very critical of meat inspection in abattoirs and maintained that counts of conditions could be inaccurate (and sometimes 'guestimates'). An example was given of where pigs were stunned with CO2; this, they maintained, causes the lungs to collapse but some meat inspectors, when they observe this, will put the condition down to pneumonia.

3. Does your client routinely receive from the abattoir the results of inspections on all the animals that are sent for slaughter?

The reply from all the veterinarians interviewed, was 'Yes' that information was received on some animals (or in some cases for pigs and poultry on the batch), except, it was thought, on animals that were sent to slaughter via live markets.

If YES, does your client consult about matters arising from the results?

All answered 'Yes', to an extent, but in some cases it was only when there were significant rejections such as related to liver damage, lung lesions, lameness, that they were informed about, why have parts been condemned. Two mentioned questions being asked about incidences of haemophilus and pyaemia.

4. Do you think the return of the results of inspections could be improved?

Again, there was a general consensus from all of those interviewed that the system could be improved.

Comments were made by four of those interviewed as to what improvements could be made, although there were no substantive comments that dominated the others.

Two were of the opinion that a web/email based system would give better access to results and could enable the vet to be pro-active in evaluation of post-mortem data and culling rates and drive improved animal health. Another thought that the better return of inspection results would make for a better relationship between the abattoir and the producer.

Some thought that there was a danger of too much information being made available and that maybe there should be trigger points relating to conditions and their severity. Certainly, the OV and the practice veterinarian needed to develop a better relationship.

Rather than being bombarded with full details on every animal, perhaps this could be based on a rolling six months of results from each farm to identify trends in disease together with 'iceberg' indicators.

ANNEX 4

FCI Experience in Australia and New Zealand

1. FCI in Australia

Investigations for comparative purposes regarding FCI and CCIR within the Australian industry showed that a vendor's declaration has to be supplied to the abattoir before the animals are delivered, and this contains the animals ID and the Premises Identification Code (PIC). The operator can check through the National Livestock Identification Scheme (NLIS), that the PIC has no problems (e.g. restrictions from incorrect use of pesticides). This applies only to cattle but the state of Victoria is about to bring in a tagging system for sheep. If farmers from other states want to send sheep for slaughter in Victoria, they have to meet the Victoria requirements.

(Note - according to statistics provided by the State of Victoria Department of Primary Industry, the state accounted for 62% of Australian dairy cattle, 9% of beef cattle, 22% of sheep and 11% of pigs).

The return of inspection results is a very new concept that is being promoted by Animal Health Australia; the situation is in transition. A number of examples were given:

a) It was reported to us that one of the largest companies in Australia slaughtering cattle on six sites at 7,000 per day, do not get any information from the inspectors. The inspectors will not use the touch screens that the Operator has installed! It is hoped that the a new meat inspection system, where the Operator is able to do their own inspections with just one government inspector as a final carcase check, will remove this obstacle so the operator will include the PM information on the quality/grading/payment report.

b) One of the sheep slaughterers has been sending PM information back to the farmer. This has been driven by the campaign to eradicate ovine Johnes disease (OJD). The drive is to get all slaughterhouses that process sheep, whether export or domestic, to inform the famers of OJD. (There are 2 control systems depending on the final consumer, the first being under federal control the second being under state controls).

   The information is recorded electronically on the online system and sent back to the farmer with the quality/price documents by the FBO. There is no communication with the farmer's veterinarian. Food animal farmers seldom use private veterinarians, except for the supply of medicines and then they go for the cheapest.

   A sheep health monitoring project has also recently been set up that aims to get more information on livestock conditions collected at slaughterhouses back to farmers.

2. FCI in New Zealand

As in the EU farmers are required to supply FCI type information on model forms, that indicate the health status of the animals, if they have been subjected to veterinary medicines or agriculture chemicals, and are within the withholding period The New Zealand Ministry of Agriculture and Forestry (MAF) then sample them.

In New Zealand it would appear that the return of information to the farmer by MAF is focussed on animal health rather than public health issues.

Public health diseases, e.g. C. bovis and tuberculosis, are communicated back to the farmer by the Animal Health Board or MAF Biosecurity. Other issues such as pregnancy, liver fluke and other non-food related things are reported to the farmer on request.

To what extent farmers use this information and consult their private veterinarians to improve the health of their livestock is unclear. Liver samples are sent to the laboratory to determine trace element levels on request, there is a cost to this and the farmer's vet advises the farmer accordingly. We were informed that thousands of these samples are submitted every year on request from the farmer's veterinary advisers, to undergo analysis to identify any actual/potential issues with the health and nutrition of the herd/flock from which the animals came.

Because in New Zealand there is no live market system, most animals travel from farm direct to slaughter so it is easier to make the information links. In Great Britain, by comparison, while the majority of pigs and poultry are sold direct to abattoirs on a deadweight basis, livestock auction markets still account for a large percentage of sheep sales but a declining percentage of cattle sales. AHDB figures for 2009 show that live market sales accounted for 24% of all cattle sold for slaughter (but 40% of cows), and 57% of sheep (but 74% of ewes and rams).

ANNEX 5

Red Tractor Standards

The farm assurance standards given on the following two pages are copied from a ‘Quick Guide’ that summarises the Red Tractor Assurance for Farms Beef and Lamb Scheme including the rules and procedures, the standards and how to become assured.

The full standards are referenced according to the section but this is not shown in the ‘Quick Guide’. For example, the beef and lamb scheme standard that refers to all livestock have to be accompanied by relevant movement/delivery information is standard LT.1, the short reference to this in the ‘Quick Guide’ is under the ‘Livestock transport’ subheading.

The farm standards for pigs and poultry cover very similar areas.

Red Tractor Beef and Lamb Farm Standards

Outlined below are the standards* that you must meet to become assured. The standards are based on legislation and good agricultural and commercial practice and for that reason you are probably meeting most of them anyway. The ✍ indicates those that need a record or publication to be available for the assessor to see. You can use this outline of the standards to do a quick self assessment.

Traceability

- ☐ Cattle and sheep must be identifiable (tagged) and traceable (movement records, passports etc) inline with legislation. ✍
- ☐ Stock must be purchased from another farm assured farm – however the current derogation permits cattle sourced from non-assured farms to be kept on an assured farm for the last 90 days, and sheep 60 days prior to slaughter – (this can be split between farms).
- ☐ Any markets and collection centres that livestock pass through during the last 90 days (cattle), 60 days (sheep) must be assured for the livestock to retain their assurance status.

Staff Competency

- ☐ Farm workers must be competent and trained/experienced. A record of their experience/qualifications must be maintained. ✍
- ☐ Pesticide spray operators must have the required certificate of competence/grandfather rights as required by legislation.

Animal Health and Welfare

- ☐ Stock must be handled in a way that does not compromise their welfare, incl. no electric goads; dogs must be kept under control.
- ☐ Stock must be checked regularly, particularly young stock/animals near to giving birth.
- ☐ Stock must be under the routine care of a vet.
- ☐ Ill or injured animals must receive treatment without undue delay. If the animal has to be culled/is not intended for rearing, it must be dispatched of humanely.
- ☐ There must be facilities to segregate/isolate ill or injured animals.
- ☐ An animal health plan must be produced and reviewed at least annually. ✍
- ☐ Health and performance records must be maintained and reviewed annually (i.e. reasons for treatment). ✍

Veterinary medicines

- ☐ Only competent persons should administer veterinary medicines/carry out veterinary procedures. Medicine withdrawal periods must be abided by. Procedures must be in place to deal with a needle breaking in an animal. ✍
- ☐ Medicines must be authorised/under direction of a vet; permitted by legislation (i.e. no growth promoting hormonal products); within use by date; stored appropriately (i.e. cool, dry place) and kept in a locked store. ✍
- ☐ Unused (and past use by date) medicines, sharps and empty medicine bottles must be disposed of safely. ✍
- ☐ Records of medicine purchases and administration must be maintained and kept for 5 years. ✍
- ☐ Reason for treatment must be recorded and reviewed annually. ✍

Biosecurity

- ☐ Farm dogs and cats must be wormed regularly. ✍
- ☐ A biosecurity policy must be produced and implemented. ✍
- ☐ A suitable disinfectant (i.e. suitable to kill relevant diseases) must be available on the farm.

Feed and Water

- ☐ Stock must receive a diet that maintains health and vigour. Newborns must receive adequate colostrum.
- ☐ Feeds (feed materials, additives and medicines) must be permitted by the scheme, UK and EU law. Diets must not contain animal products/by-products (with the exception of fish oils/milk products as permitted by law).
- ☐ Purchased compounds/blended feeds must be sourced from assured compounders/merchants. ✍
- ☐ All other purchased feed materials must be sourced from an assured supplier; other assured farms; or for limited circumstances with a warranty declaration. ✍
- ☐ Feed purchase records (e.g. delivery records) must be kept for 2 years (or 5 years if feed contains medicines). ✍
- ☐ Medicated Feedingstuff Prescription must be retained were applicable. ✍
- ☐ If home-mixing (not including forage-only mixes), records and samples must be kept. Records and samples for home mixed compounds/meals or blends must be taken for every batch mixed. ✍
  TMR records only need updating when the mix changes. If home-mixing pre-mixtures/additives/medicated feeds, local authority approval is required.

Red Tractor Beef and Lamb Farm Standards (continued)

- ☐ Feed must be stored in clean conditions to prevent contamination.

Vermin control

- ☐ A vermin control system must be in place.

Housing and handling

- ☐ Housing (and flooring) construction must be safe, hygienic and maintained to avoid injury and disease (i.e. no sharp edges/electrical wires in reach of stock). Housing must be effectively ventilated and able to keep stock clean. Housing lighting must allow adequate inspection of stock.
- ☐ Stock should be grouped according to size, age, production status (except dam/offspring groupings). Fractious/horned cattle must not be mixed with others if there is a danger of bullying/injury.
- ☐ Stock kept outside must have access to a sheltered and well-drained lying area.
- ☐ Units must have well maintained handling facilities. Sheep dipping facilities must be securely covered.
- ☐ Clean, well lit calving/lambing facilities must be available.
- ☐ Calves must not be muzzled/tethered (except for group housed calves for a max. of 1 hour whilst feeding).

Fallen stock

- ☐ Carcases must be removed from housing/fields promptly, stored appropriately and disposed of inline with legislation.

Livestock transport

- ☐ Movement documents required by legislation must accompany livestock. ATC's must be kept for 6 months. ✍
- ☐ Loading of animals must be done so with minimum stress and risk of injury. Lighting must be available (fixed or portable).
- ☐ Vehicles must be of sound construction; fitted with a roof and partitions (where applicable); have adequate head room; non-slip flooring; free from projections; have facilities allowing inspection of animals on all decks; provide adequate ventilation.
- ☐ Animals must not be too tightly or loosely stocked. Legal stocking densities must be met.
- ☐ Unfit animals must not be transported unless under the direction of a vet.
- ☐ Written emergency contingency plans are required for journeys over 8 hours. For journeys shorter than this members must carry a mobile phone.
- ☐ For stock to retain their assured status, they must be transported in an assured vehicle.
- ☐ Vehicles must be cleaned and disinfected inline with legislation.

Environment protection and contamination control

- ☐ Pesticides must be stored in a secure, lockable store. Fertilisers must be stored in such a way as to reduce the risk of theft.
- ☐ Contamination from potential pollutants (pesticides, fertiliser, manures, slurry, effluent, fuel oil, waste (e.g. empty containers), baits, disinfectants etc) must be avoided, through correct storage/application to land, inline with legislation.
- ☐ Records of pesticide use must be kept inline with legislation (if carried out by the member or a contractor). ✍
- ☐ A written manure management plan is required for farms using organic waste and manures. A waste management plan/disposal record is required for the disposal of empty containers etc. ✍

Documents and Procedures

- ☐ Printed/electronic copies of the following documents must be kept:
  - RTA Beef and Lamb Scheme Manual. ✍
  - Protecting our Water, Soil and Air (Code of Good Agricultural Practice)
  - Codes of Recommendations for the welfare of livestock – cattle and sheep.
  - Industry Code of Practice for On-Farm Feeding.
- ☐ An emergency plan (i.e. telephone numbers, actions to be taken in the event of an emergency) must be printed and accessible by staff. ✍
- ☐ If applicable registration with regulatory authorities to dispose of sheep dip is required.
- ☐ A record of complaints (e.g. dirty stock) must be kept. ✍

If you require more information about a specific standard then refer to the RTA Beef and Lamb Scheme Manual which provides further guidance and examples of records.
Visit **www.redtractorassurance.org.uk** where you will find blank templates and downloadable versions of publications if you have not already got them.

ANNEX 6

Model document

FOOD CHAIN INFORMATION FOR CATTLE AND CALVES consigned for slaughter for human consumption	
Holding Number	
Keeper's Name	
Address of Holding	
Telephone number	
E-mail address (optional)	
Individual identification mark(s) – or attach list	
Declaration	
The holding **is not** under movement restriction for bovine Tuberculosis (TB)* **OR** The holding **is** under movement restriction for bovine Tuberculosis (TB)* *delete one Cattle/calves on the holding are not under movement restrictions for other animal disease or public health reasons (excluding a 6-day standstill). Withdrawal periods have been observed for all veterinary medicines and other treatments administered to the animals while on this holding and previous holdings. To the best of my knowledge the animals are not showing signs of any disease or condition that may affect the safety of meat derived from them. No analysis of samples taken from animals on the holding or other samples has shown that the animals in this consignment may have been exposed to any disease or condition that may affect the safety of meat or to substances likely to result in residues in meat.	
Keeper's signature	
Print name	
Date	
If the animals do not fulfil all the above statements, tick this box and provide additional information on an attached document**	

** See additional model document

Additional model Document

ADDITIONAL FOOD CHAIN INFORMATION for Cattle and Calves

Information about animals showing signs of a disease or condition that may affect the safety of meat derived from them.	
Identification of animals – or attach list	
Describe the disease or condition, or diagnosis if a veterinary surgeon has examined the animal(s)	
Withdrawal periods have been observed for all veterinary medicines and other treatments administered to the animals while on this holding and previous holdings.	

Details of holding movement restrictions for animal health or other reasons

Details of analysis of samples taken from animals on the holding or other samples that have shown that the animals in this consignment may have been exposed to any disease or condition that may affect the safety of meat, or to substances likely to result in residues in meat.

Keeper's signature	
Print name	
Date	

GLOSSARY

ACP	Assured Chicken Production scheme
AHDB	Agriculture and Horticulture Development Board
AM	Ante- mortem
AIMS	Association of Independent Meat Suppliers
APHIS	Animal and Public Health Information System (operated in Northern Ireland)
BMPA	British Meat Processors Association
BPC	British Poultry Council
BPEX	British Pig Executive (part of AHDB
CCIR	Collection and Communication of Inspection Results
CMMS	Cattle Movement Monitoring System (NI)
CU	Cattle units – where 1 cattle beast = 5 pigs or 10 sheep
DARD	Department of Agriculture and Rural Development (NI)
DAFM	Department of Agriculture, Food and Marine (ROI)
DEFRA	Department of Environment, Food and Rural affairs (E&W)
e AML	Electronic animal movement licence
EBLEX	English Beef and Lamb Executive (part of AHDB)
E&W	England and Wales
FABBL	Farm Assured British Beef and Lamb
FBOs	Food Business Operators
FCI	Food Chain Information
FSA	Food Standards Agency
GB	Great Britain
HCC	Hybu Cig Cymru – Meat Promotion Wales,
Innova	FSA database recording AM and PM information
LMC	Livestock and Meat Commission (in Northern Ireland).
MAF	Ministry of Agriculture and Forestry (New Zealand)
NBA	National Beef Association
NFU	National Farmers Union
NI	Northern Ireland
NPA	National Pig Association
NSA	National Sheep Association
OVs	Official Veterinarians
PM	Post-mortem
QMS	Quality Meat Scotland
ROI	Republic of Ireland
TRACES	EU management system for tracking the movement of animals and products of animal origin from both outside of the European Union and within its territory.
UFU	Ulster Farmers Union
UK	United Kingdom
WRAP	Waste Resources Action Programme