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FINAL BUSINESS AND REGULATORY IMPACT ASSESSMENT (BRIA)

POST MORTEM INSPECTION OF PIG MEAT AT SLAUGHTERHOUSES

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Contact for enquiries:	Karen Robertson
Phone No:	01224 288362
Email:	karen.robertson@foodstandards.gsi.gov.uk

1. Title of Proposal

- 1.1 Commission Regulation (EU) No 218/2014¹ of 7 March 2014 amending Annexes to Regulations (EC) No 853/2004 and (EC) No 854/2004 of the European Parliament and of the Council and Commission Regulation (EC) No 2074/2005 and also Commission Regulation (EU) No 219/2014² of 7 March 2014 amending Annex I to Regulation (EC) No 854/2004 as regards the specific requirements for post-mortem inspection of domestic swine.
- 1.2 These new EU Regulations will change how government officials working in slaughterhouses carry out post mortem inspections of pig carcasses and offal from 1 June 2014.

2. Purpose and Intended Effect

Objectives

- 2.1 The policy objective is to ensure that post mortem inspection procedures delivered by government officials are risk-based, proportionate and effective at protecting public health, animal health and are in compliance with the requirements of the EU regulations.

Rationale for Government Intervention

- 2.2 Under existing EU legislation, pig carcasses and offal are subject to ante mortem and post mortem inspection by government officials at approved slaughterhouses before their meat can be placed on the market for human consumption. These inspections are carried out to check for signs of abnormalities that would present a public health risk or indicate animal health or welfare concerns. Such abnormalities may ultimately lead to the meat and/or offal being declared unfit for human consumption. The current post mortem system consists of a visual check of the carcass and offal, as well as the routine palpation and incision of specific organs and associated lymph nodes to check for abnormalities.
- 2.3 Evidence from the European Food Safety Authority (EFSA), supported by research carried out by the Food Standards Agency (FSA), suggests that this system does not adequately identify risks for public health protection. This is because the main cause of foodborne disease is microbiological contamination, which is invisible to the naked eye. Current inspection methods cannot detect such contamination. In fact, the evidence from EFSA suggests that palpation and incision may actually increase the risk of microbiological contamination.
- 2.4 The new regulation therefore requires that officials no longer carry out palpation and incision of organs and lymph nodes as routine at post mortem inspection. Each carcass and its offal will continue to be inspected visually by an official for signs of visible abnormalities, but physical handling will be minimised and palpation and incision will only take place on a risk basis. For example the risk basis might include where the ante mortem inspection has identified the presence of a specific animal health condition that could be verified through palpation or incision.

¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2014:069:0095:0098:EN:PDF>

² <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2014:069:0099:0100:EN:PDF>

- 2.5 The new regulation is a low-impact simplification of current EU law, which ties in with the Government's strategic aim of supporting growth. It will have a small benefit to business in terms of the speed of the production process, and will allow government resources to be more effectively deployed in the slaughterhouse. It represents a more risk based approach to meat inspection in line with the scientific evidence, and may reduce the risk of microbiological cross-contamination of carcasses at post mortem.
- 2.6 The regulation was supported by the UK throughout negotiations.

Background

Official controls in slaughterhouses

- 2.7 The EU Food Hygiene Regulations place responsibility on the operator of a slaughterhouse to ensure that all stages of the production, processing and distribution of food under their control comply with EU Food Hygiene Regulations. The safe production of food is therefore a fundamental legal obligation of the food business operator (FBO).
- 2.8 The FSA is the central competent authority in the UK responsible for carrying out official controls in slaughterhouses in Scotland, England and Wales. In Northern Ireland, the official controls are delivered by the Department for Agriculture and Rural Development (DARD) on behalf of the FSA.
- 2.9 The controls require inspections of all animals, carcasses and offal to verify that FBOs comply with EU Food Hygiene Regulations. They include ensuring that the slaughter and dressing process conducted by the FBO is in accordance with the legislative requirements, and that sampling and enforcement are undertaken as required. The FSA in Scotland also undertake official controls on behalf of the Scottish Government Directorate for Agriculture, Food and Rural Communities to ensure compliance with legislative requirements on animal health and welfare.
- 2.10 The EU Hygiene Regulations require the competent authority to carry out ante mortem and post mortem inspection on all animals presented for slaughter for human consumption at the slaughterhouse. The purpose of these inspections is to detect abnormalities of public or animal health or welfare significance, or any other factor that might ultimately lead to the meat being declared unfit for human consumption. Table 1 provides an overview of both inspections.

Table 1: Overview of “ante mortem” and “post mortem” inspections carried out by government officials in slaughterhouses

Ante Mortem Inspection	Post Mortem Inspection
<p>Livestock and poultry delivered to abattoirs in Scotland are inspected by the FSA before slaughter. Ante mortem inspection is performed by the Official Veterinarian (OV), who will check for any signs of disease, injury, fatigue, stress and mishandling.</p>	<p>Every carcass is inspected after slaughter to ensure fitness for human consumption. This is largely the responsibility of the teams of official Meat Hygiene Inspectors (MHIs) working under the supervision of the OV, but may be carried out by the OV in some circumstances.</p>
<p>Only clean, dry animals may progress to slaughter to reduce the risk of contamination</p>	<p>The EU Food Hygiene Legislation sets out specific and prescriptive tasks that need to be</p>

<p>of the resulting meat.</p>	<p>undertaken by the official delivering post mortem inspection, including a list of organs that require palpating and lymph nodes that require incising to check for abnormalities. Post mortem inspection findings will assist the OV in reaching a definitive diagnosis on the fitness of the carcass and offal for human consumption.</p> <p>Once a carcass has been passed as fit for human consumption, a “health mark” is applied to it under the supervision of the OV.</p>
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FSA Future Meat Controls Programme

2.11 At its meeting in September 2009, the FSA Board established a programme of work to deliver a modernised system of fresh meat controls. The Board agreed that this work would be a strategic priority for the FSA, with the aim of ensuring that fresh meat controls are more risk-based, proportionate and effective. The Board recognised that change could only be achieved through legislative proposals brought forward by the European Commission, and therefore agreed that the Programme would include a significant research component in order to generate evidence that might support any case for change.

2.12 Since 2009, the Future Meat Controls research programme has undertaken 10³ projects over two distinct phases of work with a third phase in the process of being set up. The research projects have generated evidence for proportionate and risk-based approaches for all species, including cattle, wild game, sheep, poultry and pigs. On completion of a peer review, the research projects are published on the FSA website and forwarded to EFSA for consideration, and have been reflected in the EFSA opinions that form the evidence base for the European Commission proposals.

2.13 The full set of published Future Meat Controls research can be found here: <http://food.gov.uk/science/research/choiceandstandardsresearch/meatcontrolsprojects/>

The European Commission’s 2009 review of EU food hygiene legislation

2.14 Existing EU food hygiene laws (known as the “Hygiene Package”) have applied in the UK since January 2006. These are:

- Regulation (EC) 852/2004 on the hygiene of foodstuffs;
- Regulation (EC) 853/2004 laying down specific hygiene rules for food of animal origin;
- Regulation (EC) 854/2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption.

2.15 The regulations were implemented in Scotland by the Food Hygiene (Scotland) Regulations 2006. Similar regulations apply in England, Wales and Northern Ireland. As the regulations took an innovative approach to hygiene legislation, the Hygiene Package contained the legal requirement for the European Commission to submit a

³ <http://food.gov.uk/enforcement/monitoring/meat/reviewofmeatcontrols/>

report to the European Parliament and Council reviewing the experience gained from their application.

2.16 A few years after the Hygiene Package came into effect, the Commission began gathering evidence for its review from Member States, industry and consumer representatives, and the Commission's Food and Veterinary Office. The Commission submitted its conclusions to the European Parliament and to the European Council in July 2009 who adopted them⁴.

2.17 Overall, the review concluded that the implementation of the Hygiene Package was satisfactory and there was no need for an extensive revision. In relation to fresh meat controls, the report mentioned the increasing public health importance of hazards that cannot be easily detected by conventional meat inspection, the possible enhancement of the role of official auxiliaries, the need to clarify food business operator and competent authority responsibilities, and the possibility that some tasks could be more appropriately carried out by slaughterhouse staff.

2.18 In May 2010, the Commission requested that EFSA provide scientific opinions on the current inspection system and alternative meat inspection approaches, with the intention of using the outcome of these risk assessments as the primary evidence base for legislative proposals. EFSA were instructed to consider animal health and welfare risks in addition to public health risks from chemical and microbiological contamination.

The European Food Safety Authority opinion on pig meat inspection

2.19 EFSA approached the work by dividing the scientific opinions by species, beginning with pigs, on which it published its scientific opinion in October 2011⁵. EFSA have since also published opinions on poultry and red meat species inspection, for which European Commission proposals are expected to follow in 2014 and 2015.

2.20 In respect of pigs, the food-borne hazards *Salmonella*, *Yersinia enterocolitica*, *Toxoplasma gondii* and *Trichinella* were identified as priority targets at slaughterhouse 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.

2.21 For biological hazards, EFSA recommended omitting the use of palpation and/or incision techniques at post mortem because of the risk of bacterial cross-contamination, introducing a pork carcass safety assurance framework to integrate preventive measures applied on-farm and at the abattoir, and improving Food Chain Information.

2.22 In the area of animal health and welfare, it was noted that the abolition of palpation and/or incision would lead to a reduction in detection of some diseases but that in cases where several organs are affected this effect was likely to be minimal. To mitigate the reduced detection probability of the proposed modified system, EFSA recommended that palpation and/or incision should be conducted as a follow-up to a visual inspection where abnormalities were identified.

⁴ http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/agricult/111384.pdf

⁵ EFSA Journal 2011;9(10):2351[198 pp.], published 3 October 2011

2.23 In the area of contaminants, dioxins, dioxin-like polychlorinated biphenyls and the antibiotic chloramphenicol were identified as the chemical substances of high potential concern in pork. EFSA concluded that chemical substances at the concentrations found in swine meat are unlikely to pose an immediate or short-term health risk for consumers.

The European Commission's legislative package for pig meat inspection

2.24 The European Commission developed a legislative package on modernising pig meat inspection in line with the EFSA opinion and presented it to Member States at the Standing Committee on the Food Chain and Animal Health on 21st September 2012. The package achieved a qualified majority of Member State agreement on 22nd May 2013.

2.25 The UK supported the proposals at the vote in May 2013 because they were in line with the negotiating principles endorsed by the FSA Board⁶ and subsequently agreed with UK health and agriculture ministers.

2.26 The package consists of three legislative measures:

- i. Visual inspection of pig meat and offal;
- ii. Revised testing processes for *Salmonella*; and
- iii. Revised testing processes for *Trichinella*.

2.27 The legislative measures for *Salmonella* and *Trichinella* are considered in more detail in separate Business and Regulatory Impact Assessments, attached at Annex B2 and Annex B3 respectively.

2.28 With regard to the other key hazards identified by EFSA, the stricter process hygiene control for *Salmonella* is also expected to help reduce *Yersinia enterocolita* microbiological contamination, as general good hygiene practices could improve controls of both microorganisms. The evidence also suggests that no longer routinely requiring the incision of the sub maxillary lymph nodes may contribute to a reduction in the risk of contamination on carcasses from *Yersinia enterocolita*.

2.29 Legislative proposals for *Toxoplasma* were not proposed, as it was felt that further research was required to develop a better understanding of the epidemiological situation. The FSA is therefore currently collaborating on a *Toxoplasma* research project with the National Institute of Public Health and the Environment (Netherlands); Agency for Food, Environmental and Occupational Health and Safety (France); Friedrich-Loeffler-Institut (Germany); Stichting Dienst Landbouwkundig Onderzoek (Netherlands); University of Agricultural Science and Veterinary Medicine (Romania); Istituto Superiore di Sanita (Italy); and Royal Veterinary College (UK). The overall aim of the project is to gain information on the presence and infectivity of *Toxoplasma* cysts in meat and other edible tissues (in the main meat-producing animals), and its relationship with *Toxoplasma* seroprevalence in animals. The results from this project may provide evidence for future discussions about *Toxoplasma* controls.

2.30 The Commission opened discussions with Member States on possible improvements in relation to Food Chain Information and increased links between the farm and the slaughterhouse in December 2013. This builds on both the EFSA recommendations

⁶ <http://www.food.gov.uk/multimedia/pdfs/board/info111102.pdf>

and also discussions held at the Lithuanian Presidency's October conference on meat official controls ("Animals + Humans = One Health")⁷. These negotiations are expected to continue during 2014.

2.31 The original proposals brought forward by the Commission also included a measure that would have permitted MHIs to undertake ante mortem inspection with the OV only required to be present during ante mortem if the MHI had identified abnormalities in the pigs. This was a risk based and proportionate proposal in line with the scientific evidence and was supported by the UK during negotiations. However, due to insufficient support from other Member States, the proposal did not progress.

3. Consultation

Within Government

3.1 The FSA set up a Cross Government Group on Meat Official Controls (CGGMOC) in 2010. This group includes officials from the FSA in Scotland and also the Scottish Government Directorate for Agriculture, Food and Rural Communities. The group was instrumental in developing the high level UK negotiating principles and played a key role during the negotiations.

3.2 FSA officials with responsibility for operational delivery in pig slaughterhouses are also represented on both the CGGMOC and the Current and Future Meat Controls Group (CFMC), and were engaged throughout negotiations on the pig proposals and the development of the Future Meat Controls research.

3.3 The Scottish Government's Better Regulation and Industry Engagement team and the Access to Justice Team of the Scottish Government Justice Directorate have been consulted during the preparation of this BRIA.

Public Consultation

3.4 A series of nationwide citizen's forums⁸ were conducted between June and July 2010 to explore consumer attitudes to meat hygiene and views on potential changes to meat official controls. One of the changes explored at the forums was the possible introduction of visual inspection at post mortem. Participants indicated that they would favour any changes to meat inspection that were based on robust science with a suitable monitoring system for animal diseases.

3.5 Consumer perspectives were also sought through the FSA Consumer Advisory Panel (CAP), whose role is to provide consumer insights into the FSA's work by supplementing consumers' views and opinions obtained from direct engagement. CAP's preference was that an OV should continue to have oversight of the slaughter process, and advised on communication handling.

3.6 The CFMC was consulted throughout negotiations and included consumer representation.

⁷ <http://132968743853066968.weebly.com/index.html>

⁸ <http://food.gov.uk/multimedia/pdfs/publication/cfsummreportmeathygiene.pdf>

3.7 In addition, the FSA in Scotland issued a full public consultation on the new pig rules from 25 March to 28 April 2014.⁹ The purpose of this consultation was to seek stakeholder views on the practical application of the changes and to determine whether the FSA's assumptions were a fair reflection of costs, benefits and wider impacts for stakeholders. We received three responses to this consultation from a Local Authority, slaughterhouse and farming union which provided detailed comments on the estimated costs and benefits and likely impacts.

Business

3.8 The FSA has worked in collaboration with industry groups throughout the development of the Future Meat Controls programme, and more recently during the negotiations on the pig proposals. Individual slaughterhouses have assisted the development of the evidence base through contributing to the FSA's research programme, for example through running pilots on visual inspection in pigs.

3.9 On a policy level, the CFMC includes organisations representing slaughterhouses, the meat processing industry, primary producers and consumers. The Group meets three times a year and contributes to discussions on strategy and planning, both in respect to research and future negotiations.

3.10 In 2011 the FSA established a specific Task Group of the CFMC in relation to pigs to provide comments and feedback on the Commission's proposals and help inform the UK negotiating position. Input from the Task Group was sought throughout negotiations. This collaborative approach was a success, and a similar approach will be taken when the FSA begins negotiations on other species.

3.11 Face-to-face visits with operators of pig meat slaughterhouses were also conducted as part of the consultation process – see section 5 below. Individual slaughterhouses have also assisted the development of the evidence base through contributing to the FSA's supporting research programme.

4. Options

4.1 The options considered are:

Option 1: Do nothing – do not update UK operational procedures in line with the EU regulation.

Option 2: Update UK operational procedures in line with the EU regulation.

4.2 Option 2 would involve updating UK operational procedures so that government officials working in slaughterhouses can routinely carry out visual post mortem inspection of carcasses and offal in slaughterhouses, rather than using the traditional methods of palpation and incision. This would apply the rules at a national level, taking into account the UK's epidemiological situation. The move to visual inspection only would provide a more risk based and proportionate inspection process, clarity for industry and enforcement officials, and potentially improve public health protection.

⁹ <http://www.food.gov.uk/news-updates/consultations/consultations-scotland/2014/pigmeat-inspect-consult-scot>

4.3 **Option 2 is the preferred option.** Issues related to the operational procedures for visual inspection by default are outlined below.

Incision of Porcine Hearts

- 4.4 Under the new regime, government officials will no longer incise porcine hearts as routine during post mortem inspection. As a result, there is a possibility that clotted blood may remain in the chambers of the heart and that porcine endocarditis (the inflammation of the smooth membrane that lines the inside of the heart in pigs) is not detected.
- 4.5 The presence of blood clots may become a quality issue when the hearts are placed on the market for human consumption. For quality assurance purposes, FBOs may choose to incise hearts to release blood clots. Such a quality control system would also be expected to identify and reject hearts with porcine endocarditis. Where FBOs discover porcine endocarditis during quality control checks they will be asked to inform officials so that it can be recorded for animal health and welfare surveillance purposes.
- 4.6 The Risk and Benefit Assessment for Visual-Only Meat Inspection of UK Indoor and Outdoor Pigs, funded by the FSA, assessed a large number of diseases/conditions that would potentially be affected by a change to visual inspection methods and also posed a human and/or animal health threat. Only two conditions, porcine tuberculosis and endocarditis, were considered to be of public or animal health and welfare risk and would be less likely to be spotted through visual inspection. The study concluded that very few cases of the pathogens causing endocarditis and associated with human infections are reported each year in Scotland and the majority, if not all, are linked to occupational exposure to pigs or raw pork. The risk of foodborne infection via consumption of pork was considered negligible. Table 2 below shows that the prevalence of endocarditis detected in pig hearts in Scotland over the past three years is extremely low.

Table 2: Level of endocarditis found in pig heart at post mortem inspection in Scotland

Year	Total offal throughput	Endocarditis	Percentage
2011	626,729	75	0.012%
2012	578,034	52	0.009%
2013	299,957	19	0.006%

Sectors and groups affected

Industry – pig slaughterhouses

- 4.7 There are 17 approved pig slaughterhouses in Scotland – two of which are specialist pig slaughterhouses (i.e. pigs only) and the remaining 15 are multi species slaughterhouses. 75.13% of the annual throughput of pigs in 2013 took place in the two specialist pig slaughterhouses.
- 4.8 The new operational procedures will impact on approved pig slaughterhouses where a default system of visual inspection is adopted. These establishments will incur familiarisation costs. However, there will be potential benefits from a reduction in inspection time per carcass.

Industry – primary producers

4.9 We do not envisage any impact on primary producers sending animals to slaughter, as there are no additional requirements for the production of Food Chain Information. The new operational procedures use existing information routes for decision making purposes at ante mortem and post mortem inspection.

Enforcement

4.10 The immediate impact will be on those officials who work in approved pig slaughterhouses, such as Meat Hygiene Inspectors (MHIs) and Official Veterinarians (OVs). Changes will also impact on those in related operational management functions, such as Service Delivery Managers (SDMs) and Lead Veterinarians (LVs). Table 3a below shows the average number of officials in the 17 approved pig slaughterhouses in Scotland and Table 3b shows the current hourly chargeout rates for these officials.

Table 3a: Average number of officials in pig slaughterhouses in Scotland per week (2013)

	Scotland
Meat Hygiene Inspectors	22.7
Official Veterinarians (FTE)	29.3
Service Delivery Managers	4
Lead Veterinarians	2
Supervisory Meat Hygiene Inspector	2
Total	60

Table 3b: Hourly Chargeout Rates of officials affected (2013)

	Scotland
Meat Hygiene Inspectors	£28.50
Official veterinarians	£36.80
Service Delivery Managers	£31.60
Lead Veterinarians	£43.25
Supervisory Meat Hygiene Inspector	£28.50

Consumers

4.11 Evidence from EFSA suggests that the main public health risk associated with pig slaughter is microbiological contamination, and that incision and palpation could increase this risk. A move to a system of visual inspection could therefore have a public health benefit in a reduction of this risk.

Benefits

Option 1: Do nothing – do not update UK operational procedures in line with the EU regulation.

4.12 There would be no familiarisation time/costs incurred with this option, as there would be no change to the existing position. However, this would not prevent the new

regulations from coming into force as they are directly applicable across the EU. The UK would therefore be in non-compliance with its legal obligations.

Option 2: Update UK operational procedures in line with the EU regulation.

Benefits to Industry – pig slaughterhouses

Reduction in inspection time per carcass (Non-Monetised)

4.13 The changes to operational procedures are expected to lead to a reduction in inspection time per carcass. This could reduce the total inspection cost in some pig slaughterhouses and therefore provide an efficiency gain as slaughterhouses may be able to allocate their resources more efficiently.

4.14 It is difficult to quantify this benefit as each slaughterhouse is different, and the benefits will vary depending on a number of variables such as the current line speed, the layout of the slaughterhouse and the organisation of inspection points. For these reasons we have been unable to monetise this benefit at this time.

Benefits to Enforcement

Lower frequency of knife-related accidents (Non-Monetised)

4.15 Under the new operational procedures, the use of knives will no longer be required as routine. In GB between 1st April 2011 and 31st March 2012, 29 accidents involving a knife were recorded in red meat slaughterhouses, with an associated cost to the FSA of just over £20,000. It has not been possible to extract the relevant figures associated with pig or multi species slaughterhouses, but it is envisaged that visual inspection could generate a benefit in terms of a reduction in the number of knife-related accidents amongst FSA employees. We have, however, been unable to monetise this potential benefit.

Flexible Resource Allocation (Non-Monetised)

4.16 The new operational procedures are expected to lead to a reduction in inspection time per carcass. This would introduce flexibility in the resource allocation of inspectors and would allow a greater focus on high risk areas. We have however been unable to obtain any estimates of the potential time saving per slaughterhouse arising from the operational procedures, and we have therefore been unable to monetise this benefit.

Benefits to Consumers

Potential for a lower risk of cross-contamination in pork slaughterhouses (Non-Monetised)

4.17 Research has suggested that incising lymph nodes and palpating organs as routine may contribute to the risk of cross-contamination of carcasses with foodborne hazards such as *Salmonella spp.* or *Yersinia spp.* If officials no longer undertake these tasks as routine, there could be benefits to public health protection. A study carried out at EU level on the “Estimation of the relative contribution of different food and animal

sources to human *Salmonella* infections in the European Union”¹⁰ shows that the proportion of *Salmonella* reported cases attributable to pigs in the UK between 2007-2009 was 11.7% against other animal source.

4.18 The Annual Report of the FSA’s Chief Scientist (2012/2013)¹¹ estimates that there are around a million cases of foodborne illness in the UK each year. In 2012, there were 9,184 confirmed cases of *Salmonella* across the UK. The estimated cost of foodborne illness for UK was around £1.8billion in 2011. Any reduction in cases of foodborne illness would be welcome, but it would be difficult to link improvements specifically to these changes in operational procedures.

Costs

Option 1: Do nothing – do not update UK operational procedures in line with the EU regulation.

4.19 This option would involve taking no action to update UK operational procedures but this would not prevent the new regulations from coming into force as they are directly applicable across the EU. The UK would therefore be in non-compliance with its legal obligations.

4.20 This non-compliance would provide a lack of clarity about official operational procedures for UK FBOs, many of whom have been supportive of the changes being proposed. It may also place UK slaughterhouses at a competitive disadvantage to those in the rest of the EU as inspection tasks considered to be additional in other Member States, would remain as part of the routine inspection procedure in the UK. As set out in the Benefits to option 2, the new rules are expected to provide increased line speed in some slaughterhouses and additional operational flexibility for government, which may not be realised under this option.

4.21 The potential public health benefits from the visual inspection system would also not be realised, as officials would continue to routinely palpate and incise organs and lymph nodes despite the evidence that suggests that this may contribute to microbiological contamination on carcasses.

4.22 For these reasons and the risk of costly infraction proceedings, the Do Nothing option was not supported.

Option 2: Update UK operational procedures in line with the EU regulation.

Costs to Enforcement

Familiarisation cost (One-Off Cost)

4.23 The new amendment will generate a familiarisation cost to enforcement officers who will need to familiarise themselves with the new changes. This includes MHIs and OVs, as well as those in operational functions such as SDMs, LVs, SMIs and DVOs/SVOs. As Table 3a shows, in 2013 the average number of officials working in the specialist approved pig slaughterhouses and multi species slaughterhouses in Scotland per week was 60.

¹⁰ <http://www.efsa.europa.eu/en/supporting/doc/184e.pdf>

¹¹ http://food.gov.uk/multimedia/pdfs/publication/cstar_2013.pdf

4.24 Familiarisation costs can be monetised by multiplying the chargeout rate with the hours required for familiarisation. We envisage that it will take an official about one hour to read and familiarise themselves with the changes. Multiplying the average number of officials in each occupational group (see Table 3a) by their respective chargeout rates (see Table 3b), and then again by the time required by official (1hr) generates an approximate familiarisation cost of £1995 to the enforcement sector in Scotland, as shown below at Table 4.

Table 4: Approximate familiarisation cost to officials in pig slaughterhouses in Scotland

	Scotland
Meat Hygiene Inspectors	£646.95
Official Veterinarians (FTE)	£1078.24
Service Delivery Managers	£126.40
Lead Veterinarians	£86.50
Supervisory Meat Hygiene Inspector	£57.00
Total	£1995.09

Training costs (One-Off Costs)

4.25 The FSA has carried out a skill gap analysis to identify the training required for officials to deliver the revised operational procedures. The analysis concluded that officials working in slaughterhouses already have the skills required to carry out visual inspection of pigs to identify abnormalities, as visual checks on carcasses and offal form a part of their existing work. However, officials will need training on the new operational procedures, and training on how their professional judgement can be used to best advantage as part of these procedures. The proposed operational procedures would also mean that officials may be required to use hand-held hooks to assist with carcass and offal handling.

4.26 The main skill gaps relate to:

- a. the circumstances under which a batch of animals or an individual carcass require further inspection (i.e., the circumstances in which palpation of organs or incision of lymph nodes is required);
- b. how to determine which further inspection tasks are required in each circumstance (i.e., which suspected conditions would require the incision of which lymph nodes or palpation of which organs); and
- c. the safe use of hand-held hooks.

4.27 The primary target audience for training will be officials directly involved in front line delivery (MHIs and OVs). Those in the operational hierarchy with management functions for OVs and MHIs will also require training. The training delivery methods are still being finalised, but we envisage that a training session would take approximately four hours per official. Multiplying the average number of officials requiring training (see Table 3a) by their respective chargeout rate as presented in Table 3b, and then again by the time required by official (4hr) generates an approximate training cost of £7980 to the enforcement sector in Scotland, as shown below at Table 5.

Table 5: Approximate training cost to officials in pig slaughterhouses in Scotland

	Scotland
Meat Hygiene Inspectors	£2587.80
Official Veterinarians (FTE)	£4312.96
Service Delivery Managers	£505.60
Lead Veterinarians	£346.00
Supervisory Meat Hygiene Inspector	£228.00
Total	£7980.36

Increase in Post mortem verification (Negligible Cost)

4.28 OVs or LVs verify the post mortem inspection of a sample of carcasses and offal that have been health marked by MHIs¹². The frequency of verification is based on the number of days the slaughterhouse operates. In a pig slaughterhouse that operates on four or five days per week, the OV or LV will carry out verification tasks on three days per week. For those that operate fewer than four days a week, the OV or LV will carry out verification on a daily basis. The sample size for the verification tasks depend on the throughput of the establishment.

4.29 To provide assurance that visual inspection is effective in detecting conditions and that the procedures are correctly implemented, the FSA intends to require that the inspection team carries out verification tasks on a daily basis for a period of six months. This means that plants that operate on four or five days a week will see an increase in verification checks. The aim would be to check around 15% of throughput on a daily basis for the 6 month period, which keeps the checks achievable within the working day by the current inspection team. The increased verification could therefore be encompassed within existing daily plant activities, and would not place an increased burden on industry or enforcement.

Costs to Food Business Operators (Slaughterhouses)

Familiarisation Costs (One-Off Cost)

4.30 There are 17 approved pig slaughterhouses in Scotland – see paragraph 4.2 for further details. The new operational procedures place no new obligations on FBOs. However, we expect that most slaughterhouse managers will wish to familiarise themselves with the new procedures that officials are undertaking in their establishments. Familiarisation costs can be quantified by multiplying the wage rate of the official carrying out the familiarisation by the number of hours required for familiarisation. It is our assumption that it will be the slaughterhouse manager (wage rate of £25.80¹³) that will familiarise himself/herself, and that familiarisation would take approximately 1 hour per slaughterhouse. This generates a total familiarisation cost of £438.60.

Reporting Cases of Endocarditis (Non-Monetised Cost)

¹² <http://www.food.gov.uk/multimedia/pdfs/mocmanualch2part4rev57.pdf>

¹³ Wage rate obtained from Annual Survey of Hours and Earnings 2012, <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcn%3A77-280149>. Median hourly wage rate of 'Production managers and directors' was used, £19.83, plus 30% overheads, totalling £25.8.

4.31 As mentioned in paragraphs 4.4-4.6 some FBOs may choose to start incising porcine hearts to remove blood clots for quality assurance purposes. If porcine endocarditis is identified, FBOs will be asked to inform officials so that the condition can be recorded for animal health surveillance purposes. As shown in Table 3 above, the prevalence of endocarditis in pig hearts over the past three years amount to an average of 0.009% of total offal throughput of slaughterhouses in Scotland. This suggests that the cost of reporting is likely to be minimal; however, the cost will also be dependent on the reporting arrangements adopted, and whether the reporting of endocarditis can be incorporated in existing reporting arrangements. We have at this stage not been unable to monetise this potential cost, but we envisage it to be negligible.

Increase in Number of Detained Carcasses (Non-Monetised Cost)

4.32 There may be a temporary increase in the number of carcasses being detained for further inspection to compensate for uncertainty whilst MHI and OV's familiarise themselves with the new system. This might have the effect of slowing down the production line and increase the inspection time per carcass. We have not been able to estimate the level of this temporary increase, so we are at this stage unable to monetise this potential cost.

Red Offal

4.33 Meat inspectors carry out post mortem inspection of red offal such as lungs and liver (see Table 1). The current legislation details when meat and offal ought to be declared unfit for human consumption, but it does not however detail who should remove the unfit part/organ. Currently, if any red offal is deemed unfit for human consumption by the meat inspector, then the meat inspector rejects and removes the affected organ.

4.34 With visual inspection, we are proposing that meat inspectors no longer carry knives as routine. This means that while they will declare meat unfit for human consumption where appropriate by tagging or marking the affected organ, it may no longer be appropriate for them remove the affected part or organ.

4.35 To apply the changes effectively, we are exploring two options during the series of trials we will run in pig approved slaughterhouses; 1) where plant staff remove the affected part/organ, 2) where meat inspectors continue to remove affected part/organ.

Consumers

4.36 The new operational procedures are not expected to generate additional costs to consumers. The FSA welcomes your views on this assumption.

5. Scottish Firms Impact Test

5.1 As part of the public consultation the FSA in Scotland held face-to-face meetings with FBOs of the three largest pig slaughterhouses in Scotland, which account for 85% of all pigs slaughtered in Scotland, as well as a number of FBOs from smaller plants, to discuss their views and comments in more detail.

5.2 In general, businesses were supportive of the move towards visual only inspection. Comments were also received on the strengthened *Salmonella* controls and the new *Trichinella* rules and are summarised in the respective BRIAs on these matters. Most businesses felt the move towards visual inspection would not reduce inspection times nor that a temporary increase in the number of detained carcasses may be detrimental as inspection times do not generally dictate line speed. Concerns were not raised that an increase in burden on industry and enforcement may be incurred by having the inspection team carry out verification tasks on a daily basis during the first six months. FBOs were also in agreement that reporting cases of endocarditis would not cause significant costs. The proposal of the removal of abnormalities from offal to be carried out by the FBO (as opposed to the MHI) was discussed in detail and the conclusion reached was this would be assessed on a case to case basis as each slaughter line is different and that the FBO and MHI would work together to reach a practical solution.

Competition Assessment

5.3 The incoming Regulations are not expected to have any impact either directly or indirectly on competition.

5.4 Using the Office of Fair Trading (OFT) competition assessment framework, it has been established that the preferred policy option (option 2) will neither directly or indirectly limit the number or range of suppliers, limit the ability of suppliers to compete or reduce suppliers' incentives to compete vigorously.

Test Run of Business Forms

5.5 The updated national operational procedures for officials working in slaughterhouses do not introduce any new or additional forms to business.

6. Legal Aid Impact Test

6.1 These new EU Regulations will not introduce new criminal sanctions or civil penalties; therefore there are no legal aid implications. This BRIA has been reviewed by the Scottish Government Access to Justice Team of the Justice Directorate who concur that there will be no impact on the legal aid fund.

7. Enforcement, Sanctions, and Monitoring

7.1 Enforcement will be the responsibility of the FSA, as the competent authority – this will be drawn from powers written within the Food Hygiene (Scotland) Regulations 2006.

Sanctions

7.2 No changes are being proposed to the criminal sanctions or civil penalties contained in the Food Hygiene (Scotland) Regulations 2006.

Monitoring

7.3 The effectiveness and impact of this EU Regulation will be monitored via feedback from stakeholders, including the CFMC Task Group, as part of the ongoing policy

process. Agency mechanisms for monitoring and review include: open fora, stakeholder meetings, surveys and general enquiries.

8. Implementation and Delivery Plan

8.1 The publication of the Food Hygiene (Scotland) Amendment Regulations 2014 will be communicated to stakeholders by email, letter and via the FSA website. This will be done shortly after the SSI has been published on legislation.gov.uk website.

9. Post-implementation Review

9.1 A review to establish the actual costs and benefits, and the achievement of the desired effects of the Regulation, is expected to take place in five years.

10. Summary and Recommendation

10.1 The Agency recommends Option 2 to provide for the execution and enforcement of the EU Regulations and provide the legislative framework for the requirements to be enforced under UK law.

10.2 Taking this option allows the Government to fulfil its obligations to implement EU law.

11. Summary Costs and Benefits Table

Option	Total benefit per annum: economic, environmental, social	Total cost per annum: economic, environmental, social policy & administrative
1 Do Nothing	No familiarisation costs would be incurred.	This option entails not being in compliance with EU legislation which could lead to infraction proceedings. The maximum fine that could be imposed on the UK is some €703,000 per day or £256 million per year
2 Update UK operational procedures in line with the EU regulation.	This option would provide a more risk based and proportionate inspection process, clarity for industry and enforcement officials, and potentially improve public health protection. Affected businesses have welcomed the move towards visual inspection.	The move towards visual inspection should not reduce inspection times nor will a temporary increase in the number of detained carcasses be detrimental as inspection times do not generally dictate line speed. Concerns have not been raised that an increase in burden on industry and enforcement may be incurred by having the

		<p>inspection team carry out verification tasks on a daily basis during the first six months.</p> <p>Reporting cases of endocarditis should not cause significant costs. Therefore, there are no monetised costs.</p>
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Declaration and publication

I have read the final Business and Regulatory Impact Assessment (BRIA) and I am satisfied that, (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs. I am satisfied that business impact has been assessed with the support of businesses in Scotland.

Minister’s signature

Minister’s title

Date

Contact point:

Karen Robertson
 FSA in Scotland
 Regulatory Policy Branch
 6th Floor, St. Magnus House
 25 Guild Street, Aberdeen, AB11 6NJ

Tel: 01224 288362
 Email: karen.robertson@foodstandards.gsi.gov.uk