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Opinion on CCTV in slaughterhouses

February 2015

Farm Animal Welfare Committee,
Area 6B Nobel House,
17 Smith Square,
London, SW1P 3JR.
FAWC Opinions

FAWC Opinions are short reports to Government\(^1\) on contemporary topics relating to farm animal welfare. They are based on evidence and consultation with interested parties. They may highlight particular concerns and indicate issues for further consideration by Governments and others.

The Farm Animal Welfare Committee is an expert committee of the Department for Environment, Food and Rural Affairs in England and the Devolved Administrations in Scotland and Wales. More information about the Committee is available at https://www.gov.uk/government/groups/farm-animal-welfare-committee-fawc

Opinions published by the Farm Animal Welfare Committee

Welfare of Farmed Fish at the Time of Killing, 2014
Welfare of Farmed Fish, 2014
Welfare of Farmed and Park Deer, 2013
Welfare Implications of Breeding and Breeding Technologies in Commercial Livestock Agriculture, 2012
Contingency Planning for Farm Animal Welfare in Disasters and Emergencies, 2012

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Welfare of the dairy cow, 2009
Policy instruments for protecting and improving farm animal welfare, 2008
Welfare of farmed gamebirds, 2008
Enriched cages for laying hens, 2007
Beak trimming of laying hens, 2007

\(^1\) Where we refer to “Government” we are addressing the Department for Environment, Food and Rural Affairs in England, the Scottish and Welsh Governments, the Northern Ireland Assembly and other responsible Government Departments and Agencies.
Opinion on CCTV in slaughterhouses

Scope

1. This Opinion assesses the arguments and the evidence for the installation of Closed Circuit Television (CCTV) in approved slaughterhouses as an accompaniment to statutory and other observation procedures undertaken by both the Food Business Operator (FBO) and regulatory agencies.

2. The objectives of the study were:
   - To identify the drivers for CCTV use;
   - To assess the benefits and limitations of CCTV as a method of recording and verifying compliance with welfare requirements;
   - To assess the challenges for FBOs installing and using CCTV;
   - To identify the ethical and legal issues of observing workers remotely;
   - To gather opinions on what might be the long term impact of CCTV;
   - To identify any gaps in the evidence base.

3. There have been increasing calls from lobby groups and others for mandatory CCTV use in slaughterhouses, hence Government interest in whether current observation and verification effort should be supplemented by the use of CCTV.

4. FAWC has reviewed published scientific literature, industry information, enforcement data, retailer/assurance information as well as European Food Safety Authority (EFSA), Humane Slaughter Association and previous FAWC advice. The Committee also carried out a written consultation. The scope of the study did not include the killing of farmed fish, which was the subject of a recent FAWC Opinion, or farmed game killed outside approved slaughterhouses.

5. For the purposes of this Opinion, we define CCTV as a system for recording, accessing and storing visual images in real-time (where the length of time of the recorded event is exactly the same as the time of the event itself) within a closed network (i.e. one that does not broadcast or transmit images beyond the pre-determined network of users and access points) that offers the possibility both of immediate access and playback and of storage and later retrieval.

Background

Extent and nature of the topic covered in the Opinion

6. Food Business Operators (FBOs) are responsible for the welfare of the animals passing through their premises. The vast majority of Food Standards Agency (FSA) approved slaughterhouses will have Official Veterinarians (OVs) from the FSA on site during working hours, who ensure that FBOs comply with the legislation governing meat hygiene, animal welfare and other statutory requirements.
Official controls and legislation at slaughterhouses (e.g. EC Regulations 882/2004 and 854/2004) also require auditing and verification.

7. This Opinion considers the potential of CCTV installed in the stunning and bleeding area, as well as other areas of the approved slaughterhouse containing live animals (including unloading, lairage, raceways), to provide additional effective and informative recording and verification of slaughterhouse practice with respect to the welfare of animals.

8. In addition to government and regulators, this Opinion has relevance for a wide range of interested parties including FBOs, slaughterhouse managers and Animal Welfare Officers (AWOs); retailers and the wider food industry; farm assurance and certification bodies; animal welfare organisations and others concerned for the protection of the welfare of farm animals at slaughter.

**Number of animals involved, duration and extent of welfare issues**

9. More than 1 billion farm animals are slaughtered in the UK each year (the large majority of which are broiler chickens). There are currently 254 approved red-meat slaughterhouses operating in the UK in addition to 78 approved white-meat facilities (FSA, Nov. 2014).

10. The welfare of animals in the slaughterhouse is of particular concern in that all stages of the process, from unloading, lairage and handling to stunning and slaughter itself offer the potential for distress and suffering. The numbers of animals involved and commercial throughput speeds mean that maintaining the welfare of individual animals in an environment that is noisy and unfamiliar to them can be particularly challenging. The transition from living animal to meat product is one that requires careful attention to ensure best slaughterhouse practice.

11. Growth in the use of CCTV in slaughterhouses is being strongly driven by Non-Governmental Organisations (NGOs) and supported by retailers and farm assurance schemes, many of which are increasingly requiring CCTV in the slaughterhouse.

12. Animal welfare NGOs have raised the public profile of animal welfare abuses in slaughterhouses and have been actively promoting the use of CCTV in slaughterhouses.

13. The RSPCA’s ‘Freedom Food’ certification scheme has required CCTV in all live animal areas since 2011. Although Freedom Food allows individual FBOs to manage CCTV use on a day-to-day basis, the assurance scheme requires that “the recorded CCTV footage must be retained by the abattoir for a period of at least three months and [be] available for viewing on site by Freedom Food field staff and RSPCA Farm Animals Department staff on request”\(^2\), (requirements at Appendix 3).

14. Most major food retailers (including Asda, the Co-operative, Iceland, Marks and Spencer, Morrisons, Sainsbury’s, Tesco, Lidl and Waitrose) now insist upon the

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use of CCTV in supply chain slaughterhouses. The Red Tractor scheme, which is also used by a number of meat wholesaler and distribution companies as an assurance standard, recommends that CCTV is used “to monitor the performance of staff at the point of stunning and slaughter”\(^3\). The Association of Non-Stun Abattoirs has been reported as saying that “all abattoirs, including halal, should embrace CCTV at their killing stations”\(^4\).

15. A 2014 e-petition to the UK Government sought to “urge the government to make CCTV installation mandatory for all slaughterhouses, with selected footage independently monitored by welfare experts”. Also, an Early Day motion (EDM) was put to the UK House of Commons in January 2013, supported by 118 signatory Members of Parliament calling for the Government to bring forward legislative proposals for the mandatory installation of CCTV in UK slaughterhouses. This was the third EDM on the issue over the last few years, but none has led to either a formal debate or legislation.

16. In Wales, a Welsh Petitions Committee recently considered petition P-04-433 “We call on the National Assembly to urge the Welsh Government to introduce mandatory CCTV in slaughterhouses to help vets with better regulation and monitoring, to provide footage for training and retraining, to deter some of the animal welfare abuses filmed by Animal Aid, and to provide evidence for prosecutions should they be necessary.”

17. A significant number of responses to Defra’s 2012 consultation on implementing Council Regulation 1099/2009 called for mandatory CCTV. The Department for Agriculture and Rural Development in Northern Ireland informed us that 99% of mammals and birds slaughtered in Northern Ireland are in premises with CCTV supervision by the FBO (mostly large throughput premises), although lobbying for CCTV to be compulsory continues.

18. In 2010, the FSA agreed to endorse the principle of encouraging the installation of CCTV by FBOs as an additional management tool to protect animal welfare, and continues to encourage voluntary installation as best practice\(^5\).

19. Current instructions on the use of cameras and video capture by OVs is found in the FSA Manual for Official Controls: “If the BO [FBO] has CCTV installed and access to the footage is permitted to FSA staff, [the OV should] monitor the stunning and killing process at random during each working day. This is a very useful source of evidence where a welfare breach is suspected. To obtain a copy of such recordings, a written request to the BO should be made.” However, the FSA have powers to seize CCTV footage from FBOs if a breach of the welfare regulations is suspected\(^6\).

\(^4\) Meat Info 31.10.2014
\(^5\) http://www.food.gov.uk/enforcement/sectorrules/animal-welfare
Legal context for oversight of slaughterhouse operations

20. EU legislation on the protection of animals at the time of killing (European Council Regulation 1099/2009) came into force on 1 January 2013 and is directly applicable in Member States. The EC Regulation requires the FBO to take necessary measures to ensure various conditions that protect animal welfare (Article 3), but not specifically the use of CCTV.

21. FBOs are required to have effective procedures (Standard Operating Procedures – SOPs) in place for stunning and slaughter operations. A designated Animal Welfare Officer (AWO) is required to assist them in ensuring compliance with the regulation in premises processing more than 1000 livestock units of mammals or 150,000 birds or rabbits per year (EC Regulation 1099/2009, Article 17). The FSA also has a presence (the OV) in approved slaughterhouses to check conformity with the rules. OVs and AWOs carry out checks on procedures and practices but, given that slaughtermen cannot practically be observed continuously, these are by necessity risk based.

22. EC Regulation 1099/2009 requires that monitoring for signs of consciousness or sensibility be undertaken at regular intervals: Article 5 of the Regulation, for example, requires slaughterhouse operators to ensure that persons responsible for stunning animals carry out regular checks (which could be 100% depending on the stunning method) to ensure that animals do not present any sign of consciousness following stunning and before death. Article 16 of EC Regulation 1099/2009 requires that the FBO puts in place specific monitoring procedures for each slaughter line and the monitoring procedures set out how the checks in Article 5 are carried out.

23. At the present time, the UK governments have no legal powers to impose compulsory CCTV in slaughterhouses.

24. Taking photographs in approved premises will often be a fundamental part of the FSA evidence gathering process. The Authorised Officer (AO - usually the OV or Meat Hygiene Inspector (MHI)) may inform the FBO of what is intended as a matter of courtesy. However, the FBO cannot stop an AO from taking photographs for the purposes of evidence gathering and it could be an offence for them to obstruct the AO carrying out their duties.

25. The installation and use of CCTV is covered by various legislation and codes of practice including the Data Protection Act 1998, the Protection of Freedoms Act 2012, the Freedom of Information Act 2000, the Human Rights Act 1998, surveillance camera code of 2013 and the Information Commissioner’s Office Code of Practice 2014. The detailed application of these requirements in slaughterhouses is outside our remit, which is to assess the potential of CCTV to protect animal welfare in slaughterhouses.

Current use of CCTV in slaughterhouses

26. CCTV is already in place in many slaughterhouses and over the last few years that use has grown significantly.
27. The FSA reported that, in 2010 around 7% of slaughterhouses had CCTV installed for recording of events relevant to animal welfare in the stunning/slaughter area, with 8% having CCTV in other areas of the facility.

28. By the time of the 2011 FSA Animal Welfare Survey in Great Britain the number of establishments with CCTV in place for animal welfare purposes had more than doubled. At that point there were 19% of red meat slaughterhouses and 29% of white meat slaughterhouses with CCTV in place to record animal welfare issues. By the time of the recently published 2013 FSA Animal Welfare Survey in Great Britain this stood at 43% of red meat slaughterhouses and 55% of white meat slaughterhouses having some form of CCTV in use for animal welfare purposes (Tables 1 and 2).

Table 1. The use of CCTV in red-meat slaughterhouses, 2011 and 2013  
(percentages of slaughterhouses surveyed in the FSA report, i.e. those operational in the week of the survey)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stunning area</td>
<td>24%</td>
<td>34%</td>
</tr>
<tr>
<td>Bleeding area</td>
<td>20%</td>
<td>32%</td>
</tr>
<tr>
<td>Lairage</td>
<td>34%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Table 2. The use of CCTV in white-meat slaughterhouses, 2011 and 2013  
(percentages of slaughterhouses surveyed)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stunning area</td>
<td>32%</td>
<td>49%</td>
</tr>
<tr>
<td>Bleeding area</td>
<td>27%</td>
<td>52%</td>
</tr>
<tr>
<td>Lairage</td>
<td>56%</td>
<td>55%</td>
</tr>
</tbody>
</table>


29. FSA has supplied FAWC with figures that show the proportion of overall throughput from premises with CCTV (Table 3). Abattoirs not supplying to assurance-scheme food chains, abattoirs supplying to the wholesale trade and slaughterhouses specialising in non-stun slaughter may not currently be required by their customers to have CCTV, though no systematic evidence is currently available to us on this point.

Table 3. Proportion of slaughterhouse throughput from premises with CCTV

<table>
<thead>
<tr>
<th>Species</th>
<th>Proportion of throughput from premises with CCTV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>90%</td>
</tr>
<tr>
<td>Pigs</td>
<td>92%</td>
</tr>
<tr>
<td>Sheep</td>
<td>83%</td>
</tr>
<tr>
<td>Poultry</td>
<td>98%</td>
</tr>
</tbody>
</table>

Source FSA 2015 (data from week of FSA survey 2013)

7 Food Standards Agency (2011) CCTV for monitoring animal welfare at the slaughterhouse. Report to the Open Board Meeting. 15.11.2011 (Document FSA 11/11/09)
8 Food Standards Agency (2011) CCTV for monitoring animal welfare at the slaughterhouse. Report to the Open Board Meeting. 15.11.2011 (Document FSA 11/11/09)
30. In their report on the 2011 Survey, the FSA stated that the survey results showed no significant variation in general compliance levels with The Welfare of Animals (Slaughter or Killing) Regulations 1995 identified between those premises with or without CCTV.

31. CCTV systems may include static cameras recording to one or more centralised data collection points or more versatile systems also involving static and moveable recording devices sending real-time visual images across wi-fi and other networks. CCTV recording systems may also be potentially linked to other monitoring apparatuses in the slaughterhouses, such as stun monitors. The critical parameters of CCTV are that it is capable of recording real-time images, that it can store those images and that those images can be reliably accessed and reviewed.

32. Another aspect of the use of cameras in the slaughterhouse is to record operations where an OV or Inspector cannot be present or have visual access for health and safety or other reasons, for example inside gas stunning systems, that nonetheless require visual inspection (whether this be through windows or integral camera systems).

33. The early introduction of CCTV in slaughterhouses was closely linked to security, i.e. to reduce the risk of trespass, theft and damage and record any such incidents. This still appears to be a valid reason for CCTV. A number of industry respondents to FAWC’s consultation for this Opinion did recognise the potential of CCTV for management purposes, to deter staff from undesirable and unacceptable behaviour, and for other reasons (such as training and addressing accusations of wrongdoing).

Advice by FAWC, EFSA and others

34. Existing advice from FAWC and EFSA stresses the need for effective inspection procedures at slaughterhouses for poultry, pigs, sheep, goats and bovines, and identifies calculations for appropriate sample size for monitoring stunning at slaughter. EFSA has produced supporting publications on indicators for success of stunning, i.e. how to decide whether an animal is conscious or unconscious (all 2013).^10^

35. The FSA Manual for official controls has sections on ante-mortem inspection and animal welfare in addition to the OV’s meat hygiene responsibilities.^11^ The FSA requires that FBOs have appropriate systems in place to comply with all legal requirements including animal welfare standards. With respect to the use of CCTV, the FSA argues:

‘The scale of meat production means that the FSA cannot oversee the slaughter of every animal. There is also often limited space in the stunning pen to observe slaughter. The FSA therefore supports the use of CCTV in slaughterhouses as an effective monitoring tool for animal welfare - for both the food business operator and

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their management team, or the FSA – to ensure necessary standards are being met at all times¹².

36. FAWC has produced Reports on the welfare of farmed species at slaughter or killing, covering red and white meat species (2003, 2009)¹³. FAWC’s report on the welfare of red meat animals at slaughter or killing covered inspection at unloading, monitoring of stunning, assessment of unconsciousness, the role of the Animal Welfare Officer (AWO), training of enforcement staff and level of veterinary supervision.

37. FAWC’s report on white meat animals covered ante-mortem veterinary inspection on farm (or lack of it) prior to loading of poultry, assessment of birds on arrival at the slaughterhouse and in the lairage (and feedback to farms), assessment of unconsciousness, monitoring the performance of stunning equipment, the need for visual inspection of gas stunning/killing systems, oversight of on-farm slaughtering, the role of the Poultry Welfare Officer (PWO), training of Official Veterinarians and the possibility of using trained auxiliaries for welfare checks. That report also said that closed-circuit cameras might be used in shackling areas to promote good practice as well as recording performance.

Welfare concerns or contentious issues and/or opportunities to improve welfare

38. While an increasing number of FBOs have CCTV in place to record slaughter operations, the issue of CCTV in slaughterhouses has been brought to both public and political attention partly as a result of media reports of covert filming in slaughterhouses. The resultant footage sometimes shows instances of abuse of animals by operators unaware that they are being observed. This has not only created an impression amongst the public that abuses identified by covert filming are not isolated incidences but has also led to calls for more effective, and more widespread, real-time, continuous observation (as distinct from intermittent or sampled observation) of slaughterhouse practices.

39. However, the advantages of CCTV in slaughterhouses identified during our consultation go further than the identification (or prevention) of individual incidences of animal mistreatment and abuse. CCTV would allow retrospective assessment of the functioning of the lairage, handling and slaughter areas. This should allow an assessment of how better provision could be made for the behavioural needs of the animal waiting for slaughter and its treatment at stunning.

Evidence

40. For this Opinion, scientific papers have been reviewed on objective scoring of animal handling and stunning practices, animal welfare audit programmes and measures, welfare monitoring parameters and practical improvements that can be made. A written consultation exercise brought forward responses from farming and meat producers’ representative bodies, farm assurance scheme providers, levy

¹² http://www.food.gov.uk/enforcement/sectorrules/animal-welfare
bodies, regulators, veterinary organisations and animal welfare groups (Appendix 2 – those who gave evidence).

Drivers for CCTV

41. The use of CCTV in slaughterhouses and calls for that use to become mandatory have been largely driven by the need to address concern that possible individual and systematic acts of animal abuse are taking place without detection in a number of facilities. While acknowledged as only one particular driver for CCTV use amongst many, this concern has recently come to dominate the debate on the issue.

42. From this perspective, advocates of CCTV see it as a means of addressing failures in the observation and verification of procedures within the slaughterhouse. These failures are held to be due to insufficient coverage of the sites and locations observed and the low periodicity and ineffective use of current observation procedures. Where examples of animal abuse have been brought to light by covert filming, FBOs, AWOs and OVs have consistently asserted that they were unaware of such abusive practices.

43. Consequently, CCTV has become a means for the additional surveillance of slaughterhouse personnel and their activities, offering the possibility of detection, providing evidence and potentially leading to prosecution for acts of animal cruelty and the breach of legislation governing the treatment of animals.

44. CCTV, it is argued, offers a deterrent against such activities due to the threat of exposure, and the possible use of footage in disciplinary or legal proceedings, reinforcing good staff behaviour. Critics of CCTV may argue that in offering only a deterrent, the presence of CCTV does little on its own to tackle poor behaviour. It was argued at consultation that the physical presence of inspectors, active management and training did more to ensure good staff behaviour.

45. A second driver for CCTV use is more effective welfare auditing and real-time or continuous recording offering uninterrupted evaluation of the operation, flow and potential welfare impacts of standard procedures. CCTV may be directed not only at operators and their actions but also, and unobtrusively, at the facilities used for the keeping and handling of live animals as well as stunning and killing procedures. CCTV can record specific slaughter procedures such as, for example, tong positioning in electrical stunning and the visual assessment of animal handling with subsequent use for training of staff. It can also be used to record animals out of hours and, we are told by workers at the University of Bristol, to spot unguarded behaviour, e.g. lameness in sheep that might not be seen when an inspector is present.

46. Retailers, customers and certification/assurance scheme operators are increasingly demanding that CCTV be installed in the slaughterhouses that supply them. Their concern for evidence of due diligence, provable compliance to the requirements of both welfare regulation and assurance standards and conformity to brand claims, as well as their responsiveness to consumer concerns, all act as further drivers for the use of CCTV as objective evidence of good slaughtering practice in slaughterhouses.
47. CCTV can provide useful information for FBOs in the management of facilities, in ensuring site and equipment security and in the organisation of work-streams. It may also be used by FBOs as evidence of the efficacy of normal practices. Of equal importance, CCTV footage can be of particular value in staff training, in encouraging sensitive and empathetic behaviour by operatives towards the animals, in raising awareness of areas and practices of potential welfare concern and in fostering a sense of collective responsibility and accountability.

48. Finally, CCTV may also protect slaughterhouse operatives not only from injury and even death, through the detection of potentially dangerous practices (for example, neglect of firearm safety), incidents or near misses (leading to improvements in Health and Safety), but also from a variety of workplace hazards, ranging from bullying to a perceived inability to report incidences of the poor treatment of animals.

**Benefits and limitations of CCTV**

**Benefits**

49. CCTV offers a range of benefits in slaughterhouses for the observation and recording of real-time processes, for the recording of individual incidents, for contributing information to the auditing of animal welfare, for aiding the verification of slaughterhouse compliance with legislative and assurance or certification requirements and for the training of slaughterhouse staff.

50. CCTV footage can have an authenticity and transparency, which can be accepted as evidence as long as its limitations (see below) are acknowledged.

51. CCTV offers the possibility of full-time continuous observation and recording of live animal areas, particularly those where there is a high risk of animal injury or unavoidable suffering.

52. CCTV footage, as a permanent record, can be retained for lengthy periods of time (for example, Freedom Food requires that footage be retained for 3 months). Footage can be viewed retrospectively, periodically or in immediate response to an issue or alleged breach of procedure or standards, allowing rapid intervention and rectification. CCTV footage can be stored and used for regular post-hoc assessment of procedures over given intervals. It can be accessed on demand for external auditors and, if correctly stored and labelled, can be used to return to specific moments in the past, for example to identify the point at which a procedure or process began to fail in meeting required standards.

53. CCTV can be an important back-up to physical observation, particularly in those small, confined or high risk areas where physical inspection is limited, for example in a stunning area where there is insufficient room for an observer to see the whole procedure.

54. If well placed, CCTV can be unobtrusive with respect to the day-to-day procedures of the slaughterhouse.
55. CCTV can provide a valuable training tool for operatives, AWOs and OVs through its recording both of routine operations and of specific incidents. Routine recording can be used to train operators in the identification of possible areas of failing welfare standards or as a contribution to welfare auditing and verification.

56. The strategic placing of live CCTV monitors in areas frequented by slaughterhouse personnel may serve to encourage collective responsibility for the respect and maintenance of good working practices.

57. Recorded evidence of incidents can be used to verify reports of poor, non-standard or illegal practice both to improve operator behaviour and, on occasion, for disciplinary action or prosecution.

58. CCTV may allow retrospective assessment of the functioning of the lairage, handling and slaughter areas. This should allow an assessment of how better provision could be made for the behavioural needs of the animal waiting for slaughter, which may lead to improved handling of the animals.

59. CCTV recording can provide evidence for the FBO or others to check on the operation and use of new equipment and practices to ensure they are working properly and are effective. It may assist FBO staff or others to establish system requirements and operating procedures as well as their subsequent monitoring and auditing requirements.

60. CCTV may be used for ante mortem inspection of livestock in the lairage, providing evidence for analysis and change where necessary. Sheep particularly may mask painful conditions such as lameness when a stockman/OV is present (prey/predator response), but behave normally under remote observation.

61. The use of CCTV combined with electrical stun monitoring equipment could provide more information about specific incidents or general slaughter practice. Electrical stun monitoring equipment provides a record of the current and/or voltage profiles that are applied during electrical stunning. Combining the monitoring of applied currents and/or voltages with visual observation of electrode position and some indicators of animal response can provide information for assessment and evaluation of effective stunning procedures.

**Limitations**

62. CCTV cannot act as a substitute for direct oversight by management or veterinarians for the supervision of the conduct and training of operators. For practical reasons this requires proximity to the animal and clinical examination/checks which require the presence of an observer. Nor can it be a universal and uncritical panacea for public and professional concern over the treatment and welfare of farm animals in slaughterhouses.

63. There are four principal limitations to the use of CCTV in slaughterhouses. These are: the variable technical capabilities and capacities of different CCTV systems and their use; the potential for inconsistencies in the analysis of CCTV
footage; the security and visibility of the CCTV resource; and the broader efficacy of CCTV in addressing welfare issues.

64. Some modern camera systems that can be remotely re-adjusted to take in different perspectives and advancing camera technologies are improving usability and image quality. However, premises that installed earlier CCTV systems may have fixed CCTV cameras offering a restricted view of live animal areas. If these are the only areas being recorded by CCTV then the broader site context may be missed or misinterpreted and staff may take advantage of areas not covered. Image quality is not always high in older systems and the need for a wider angle of view may prevent close observation of detail. Cameras need to be accessible for servicing yet protected from possible damage or vandalism. Other technical concerns are the cost and the durability of materials in the environment of the slaughterhouse as well as the capacity for storing the footage in an accessible form.

65. The security of CCTV footage is an understandable concern for FBOs. Filming within slaughterhouses has served not only to identify incidences of abuse and poor practice but also to raise broader questions over animal killing to the wider public. For it to be an effective management, surveillance, training and auditing tool, industry consultees believe that CCTV has to be deployed in an environment of mutual trust and security.

66. Consultation suggests that a particular limitation of CCTV is that it is rarely viewed or reviewed in a systematic, consistent and effective manner by the FBO or enforcement agencies. CCTV is only as effective as the viewing or review processes employed. While CCTV footage may be accessed and replayed quickly in response to known and observed incidents, considerable resources, time and training are required to view footage in real time or review large amounts of footage from multiple cameras. The ability of the viewer to assess accurately what they are witnessing is important. They should be trained in observation skills in order to understand the actions of the people and reactions of animals they are observing as well as the interaction with the environment and other non-human factors. Consistent sampling and auditing protocols should be developed and employed for the systematic review of CCTV footage and these too require training and resources.

67. While the absence of operator observation (whether through CCTV or otherwise) has been invoked as one contributory factor to the incidences of animal abuse filmed covertly, there has been no objective scientific study nor did we receive any anecdotal evidence to suggest that the presence of CCTV in slaughterhouses is an active contributor to higher levels of welfare compliance. The FSA survey in 2011 did not identify any difference between welfare compliance in plants with or without CCTV installed.

Practical challenges

68. There are financial costs associated with the installation and the running of CCTV within slaughterhouses, even for plants that are already fully compliant with animal welfare requirements. For smaller plants, these costs may be seen as prohibitive. Few detailed figures were provided to us for these costs, however, a small abattoir did offer that its system had cost approximately £5,000 to install.
(2013). Cost of installation at Freedom Food compliant plants was reported to be between £3,000 and £10,000 (compliance required by April 2011). It was reported to the Cross Party Group on Animal Welfare in the Scottish Parliament in 2012 that the cost of installing CCTV in a slaughterhouse in Scotland would vary from £6,000 to £25,000, with an annual maintenance cost of around £600\textsuperscript{14}. Respondents to the consultation noted that costs of CCTV were falling and image quality was improving.

69. As already mentioned, there are concerns about the durability of materials in the environment of the slaughterhouse (e.g. damp and dusty) as well as the capacity for storing the footage in an accessible form.

70. Data protection and the security of the footage is another challenge for FBOs, particularly if monitoring of the footage is done off-site. Standard Operating Procedures for data protection, use and disclosure, the training of CCTV monitoring staff as well as secure storage and data transmission are clearly necessary.

71. To be effective as an assessment tool, CCTV has to be able to record real-time footage accurately in the appropriate live-animal areas of the slaughterhouse. To be effective as part of a verification process, CCTV footage and the storage equipment has to be accessible, comprehensible and evaluable to FBO management, supervisory staff and AWOS; retailer and assurance scheme auditors; and the OV and other enforcement staff. This requires trained personnel, staff time, suitable access and facilities (either on-site or at a distance), adequate image quality, technical support, and appropriate reviewing protocols and procedures.

Ethical issues

72. The use of CCTV to record the activities of slaughterhouse staff presents two ethical challenges. The first concerns the viewing of recordings of animal killing, and the second concerns the filming of FBO operators.

73. While the slaughter of farm animals is a reality of food systems, major questions exist around the use of images or video output (who should be able to see or watch it) and potential misappropriation as spectacle (why people should want to watch it). These issues lie beyond FAWC’s remit.

74. The slaughterman is responsible for conforming to welfare requirements, and addressing any issues that arise, but the AWO or FBO management should also be supervising staff to identify problems and areas of concern as well as ensure compliance with welfare requirements. Society needs to be able to trust in these processes. The effective use of CCTV and the objective assessment of its footage by FBOs, assurance schemes, retailers and enforcement agencies is emerging as an important component of that trust.

75. CCTV is widely used in public and private spaces across the land and, in many situations and contexts, people have become used to it. Nevertheless, it raises significant issues of confidentiality and responsibility. As such, the use of CCTV in slaughterhouses must conform to the Data Protection Act 1998 and should observe

\textsuperscript{14} Minutes of the Cross Party Group in the Scottish Parliament on Animal Welfare, 50\textsuperscript{th} meeting, 17\textsuperscript{th} January 2012. Available at http://www.scottish.parliament.uk/CrossPartyGroups/AnimalWelfare/Minutes_20120117.pdf
the requirements of the CCTV Code of Practice issued by the Information Commissioner’s Office\textsuperscript{15}, which cover the use and administration of CCTV and the responsibilities of those with access to the footage. As we have previously said, the detailed application of these requirements in slaughterhouses is outside our remit.

**Comparison of CCTV to current inspection/supervision methods**

76. CCTV should not be seen as either a replacement for conventional monitoring, verification, auditing and inspection regimes or a panacea in the face of public concern over specific filmed incidences of animal abuse. CCTV needs to work as an adjunct and accompaniment to physical observation and supervisory presences.

77. Current official controls do not necessarily prevent all animal welfare abuses. Yet as research into other uses of CCTV demonstrates\textsuperscript{16}, the presence of CCTV is not necessarily a deterrent against illegal acts, nor does it address the motivation for such acts. We believe that behavioural change is more likely to occur with good training and motivation, or the physical presence of the OV or FBO supervisor who are able to respond immediately to incidences and situations involving animal health and welfare.

78. On-site direct inspection was widely held in consultation responses to be more effective than CCTV in determining compliance and identifying potential or actual areas of animal welfare concern. As inspectors and staff responsible for supervision and verification cannot be present in all live animal areas at all times, CCTV could be used by the FBO, AWO and OV for supplementary assessment.

**Conclusions**

79. CCTV was positively considered by those who responded to our consultation as a tool for recording slaughterhouse practice, supporting demonstrable conformity with requirements and dissuading operatives from irresponsible behaviour. It has become a growing component of assurance standards and accreditation procedures and, when properly reviewed, can be effective in detecting animal welfare abuses. In this, CCTV can contribute to the maintenance and respect of animal welfare standards as well as to increased consumer confidence. Although it should not replace on site physical presence of FBO staff, OVs and others, we believe on the basis of the evidence we have seen that it can be a valuable complement to them.

80. By itself, CCTV does not prevent welfare failures or secure welfare compliance. Although CCTV may allow continuous real-time filming, the review of subsequent footage is likely to only ever be intermittent, selective and periodic.

81. Observation and verification of compliance with animal welfare requirements are best achieved through a combination of methods, including systematic and regular review following established protocols as well as spot checks, specific risk-based observation (following specific alerts or concerns) and randomised sampling. FBOs have generally developed their own observation and supervision protocols or


approaches and anecdotal evidence would suggest that there is little or no consistency across different operators (other than the more consistent auditing requirements specified by retailers and assurance scheme operators).

82. CCTV is an important tool to demonstrate compliance and due diligence and can provide evidence of normal operations that may be used to address and if appropriate refute allegations of wrong-doing.

83. CCTV can be an important complement to physical observation. It should not replace, reduce or be considered a substitute for current, physical inspection of slaughterhouse practice undertaken by OVs, AWOs and others. It should not be used as the sole mechanism for verifying compliance with legal requirements and retailer/assurance standards. It can be useful as an observational tool both during and outside of periods of physical on-site inspection or in those small, confined or high risk areas where physical inspection is difficult.

84. New software packages and technologies for the analysis of CCTV footage offer possible time and resource saving opportunities for the review of slaughterhouse practices but these may not always be able to identify individual welfare breaches and do not permit immediate action. They cannot be a substitute for physical observation particularly with respect to specific animal conditions, such as unconsciousness. If possible CCTV footage should be considered on more than one angle of view.

85. CCTV recording of slaughterhouse practice when linked to the recording of stunning parameters and other variables offer the potential for a more comprehensive verification of the welfare of animals at slaughter.

86. FBOs have a duty of diligence to draw on all available evidence to safeguard welfare. This includes CCTV recording, if such recording provides useful evidence different from that obtainable from other sources or that corroborates other sources. FBOs should ensure that the footage obtained is regularly and securely analysed according to an established protocol that sets out the periodicity of review, the relevant parameters regarding the selection of footage to be seen (how often, how much), the length of time footage is retained, the mechanisms for accessing footage immediately following a specific incident and the possibilities for random spot-check observation of specific sites or periods.

87. CCTV should be used in slaughterhouses in line with CCTV codes of practice. All personnel should be informed of its installation and operation including its aims and purpose in the relevant areas of the slaughterhouse. CCTV should not be installed or used in areas or for activities that are not relevant to the stated aims and purpose of the CCTV recording.

88. FBOs should ensure that slaughterhouse staff are clearly informed of the benefits of the system both to the animals in their care and to themselves as workers in a difficult and potentially dangerous environment. This can address feelings of mistrust, intrusion or demotivation on the part of those observed. Moreover staff should be fully informed about and have trust in how the footage is subsequently
used and what the limitations and restrictions on the use and diffusion of that material will be.

89. In summary, although we recognise the limitations and concerns associated with the introduction and use of CCTV in slaughterhouses, we argue that, as a complement to existing statutory requirements and management practices for the observation and verification of slaughterhouse practices, CCTV offers some real benefits to FBOs and the rest of the food chain:

- in increasing public trust that processes of animal killing are carried out properly;
- as a component of demonstrable conformity to both statutory legislation and retailer/assurance scheme rules relating to the treatment of animals;
- as a means of identifying animal welfare issues or incidents that might be missed by physical observation;
- as a source of potential evidence of normal practice, compliance or otherwise in cases of purported, intentional wrong-doing with respect to animal welfare;
- as a management tool to assist FBOs to assess and evaluate slaughterhouse operations;
- as a valuable tool in staff training in the handling and welfare of animals.

**Recommendations**

90. In order to realise the potential benefits to animal welfare and to businesses identified in this Opinion, FAWC recommends that all approved slaughterhouse operators (Food Business Operators, FBOs) should install CCTV in all areas where live animals are kept and where animals are stunned and killed.

91. FAWC recommends that all assurance scheme operators, food retailers and others in the food chain require that CCTV be installed in the slaughterhouses associated with them.

92. FAWC recommends that FBOs install CCTV in a manner that allows for the clear and uninterrupted recording of all actions and areas involving live animals and animal killing.

93. FAWC recommends that FBOs should ensure that CCTV footage is regularly and securely monitored according to an established protocol

94. Further, we recommend that the slaughter industry should produce a common set of good practice protocols for the review, evaluation and use of CCTV footage. These good practice protocols might include the following:

- **CCTV systems should be installed in all live animal areas within the slaughterhouse including those used for unloading, lairage, moving live animals through the facility, stunning and killing;**
• CCTV footage should be recorded at all times when animals are present in the areas listed above;

• CCTV cameras should be installed so as to permit a clear and uninterrupted view of the processes being recorded at all times;

• Cameras should be installed in a manner that facilitates easy access and repair yet in a position that protects them from damage or interference;

• CCTV cameras should record continuous visual images but, if audio is captured, should not record conversations between slaughterhouse personnel;

• CCTV footage should be viewed, whether in real-time or from recording, from designated areas that permit detailed review;

• CCTV footage should be accessible to and viewed on a regular basis by FBO staff, AWOs and OVss to ensure business compliance, particularly in those areas and for those processes where the risk of non-compliance is higher. This could be on a daily basis, but at different times of the day;

• CCTV footage should be regularly reviewed by an approved independent person;

• CCTV footage should be retained by the slaughterhouse for a period of at least three months and be made available to authorised officers beyond this time if there is an indication that it might be used as evidence in enforcement action;

• CCTV footage must be stored, transmitted and protected securely and only authorised personnel must have access to it;

• CCTV footage could be used for the training of slaughtermen, other FBO staff and OVss;

• CCTV footage should only be used for its intended purpose and should not be used in any way that is incompatible with that purpose;

• CCTV equipment and CCTV footage must only be employed in a manner that is lawful and consistent with the 1998 Data Protection Act, the Protection of Freedoms Act surveillance camera code of 2013, the Freedom of Information Act, 2000, the Human Rights Act of 1998 and the Information Commissioner’s Office Code of Practice, 2014;

• Clearly visible and readable signs must indicate where CCTV is in operation.

95. FAWC recommends that all personnel involved in viewing and review of CCTV footage should be suitably trained in observational techniques and should be aware of the responsibilities and security provisions regarding capture, storage, access to and diffusion of recorded material.
96. **FAWC recommends that CCTV should not replace, reduce or be considered a substitute for current controls of slaughterhouse practice undertaken by OV, AWO, slaughter operators and others.**

97. In the case of incidents of animal abuse or of non-compliance, and notwithstanding powers of seizure, FAWC recommends that FBOs should make CCTV footage readily available to authorised officers. We consider this to be an important component of their duty of care towards the animals for which they are responsible.

98. **FAWC recommends that all slaughterhouse staff are kept informed about the installation and operation of CCTV systems in slaughterhouses.**

99. **FAWC recommends that CCTV footage is used by FBOs in the training of their staff in the handling and welfare of animals.**

100. **FAWC recommends that government, the slaughter industry and the rest of the food chain collaborate on research to establish scientifically, and quantify if applicable, whether the presence of CCTV and the systematic viewing and review of CCTV footage in line with recommended consistent industry protocols will achieve the full potential benefits we foresee in terms of good operator practice and animal welfare.**

101. **FAWC recommends that the food industry support research and development into technologies that facilitate linkage of visual recording of stunning practices to the recording of stunning parameters and other variables and into how new camera, image recognition and associated technologies can be harnessed to improve the impact of CCTV in slaughterhouses.**
Membership of FAWC (December 2014)

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Bernard Matthews Foods Ltd
British Meat Processor Association
British Veterinary Association (BVA)
Freedom Food (with RSPCA)
HCC Meat Promotion Wales
Humane Slaughter Association (HSA)
National Farmers Union
National Farmers Union Wales
National Pig Association
OneKind
Royal Society for the Prevention of Cruelty to Animals (RSPCA)
Scottish Association of Meat Wholesalers
Trading Standards Institute
Universal Halal Agency Ltd
Veterinary Public Health Association (with BVA)
RSPCA Welfare Standards requiring the installation of CCTV in abattoirs processing poultry

1.1. A functional CCTV system must be installed and operational to monitor animals undergoing the following processes at the abattoir (as applicable)

a) unloading from vehicles into the lairage
b) shackling, including the shackling of birds following gas killing
c) stunning, including exiting the electrical waterbath
d) neck cutting
e) entering a Controlled Atmosphere System (CAS)

1.2 CCTV cameras must be positioned to ensure a clear view of the processes being monitored is achieved at all times.

1.3 It must be possible to observe clearly the view from each camera at all times via one or more monitors

1.4 CCTV footage must be recorded at all times where animals are undergoing any of the processes listen under standard 1.1.

1.5. The recorded footage must be:

a) retained by the abattoir for a period of at least three months, and
b) available for viewing on site by Freedom Food field staff and RSPCA Farm Animals Department staff on request