



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR HEALTH AND FOOD SAFETY

Health and food audits and analysis

DG(SANTE) 2017-6123

FINAL REPORT OF AN AUDIT
CARRIED OUT IN
DENMARK
FROM 09 OCTOBER 2017 TO 13 OCTOBER 2017
IN ORDER TO
EVALUATE MEMBER STATE ACTIVITIES TO PREVENT TAIL-BITING AND AVOID
ROUTINE TAIL-DOCKING OF PIGS

In response to information provided by the competent authority, any factual error noted in the draft report has been corrected; any clarification appears in the form of a footnote.

Executive Summary

The report describes the outcome of an audit in Denmark from 9 to 13 October 2017. This audit is part of a Commission project aimed at improving the implementation and enforcement of Directive 2008/120/EC which lays down minimum standards for the protection of pigs in the EU. The objective of the audit was to evaluate the suitability and effectiveness of the measures in place to prevent tail-biting and to avoid routine tail-docking of pigs.

This report concludes that actions taken by the Danish authorities have not yet resulted in better compliance with the provisions of the Pig Directive with regard to the avoidance of routine tail-docking in pigs. The action plan for better pig welfare is a long term project, which includes reducing the number of tail-docked pigs among its objectives. It has led to the development of certain measures which are promoting the rearing of pigs with intact tails. A new government animal welfare label has led to a large increase in pigs with intact tails where their meat is destined for the Danish market. However, due to the large percentage of exported meat and live animals, this has not yet resulted in a significant reduction in the total percentage of tail-docked pigs in Denmark

Where the competent authority has provided clear compliance criteria together with focused actions, this has brought about improvements in animal welfare such as with enrichment materials and care of sick and injured pigs. However, compliance criteria for the enforcement of other legal requirements related to tail-biting risk factors are less clear or lacking and therefore enforcement of these requirements is less consistent.

The authorities are currently working on the implementation of new guidelines that will expect farmers to assess risk factors for tail-biting. If these guidelines set clear criteria for inspectors to be able to assess evidence of tail and ear lesions on farm and what constitutes sufficient measures by farmers to change inadequate environmental conditions or management systems before resorting to tail-docking of pigs, they could form the basis for a useful enforcement strategy to reduce the need for tail-docking. In addition slaughterhouse data can be used by the competent authority for measuring progress and carrying out targeted inspections in herds with slaughter pigs.

The large number of 30 kg weaner pigs exported to other Member States that will only buy docked pigs presents a challenge for the competent authority to change tail-docking practices in sow herds supplying this trade. However, this cannot be an explanation for continuing tail-docking for pigs which go to herds with slaughter pigs in Denmark which supply pigs to Danish slaughterhouses. These herds with slaughter pigs continue to have a high level of non-compliance indicating that the competent authority has not taken sufficient action to ensure welfare standards for that part of pig production which is completely under their control.

Progress with regard to the avoidance of routine tail-docking in pigs is possible where pigs are born, grown and finished in Denmark as many Danish pig facilities would allow rearing of pigs with intact tails, but with a higher cost as it means fewer pigs per pen and more or another type of enrichment material. As almost half of the Danish weaner pigs are exported to other Member States, there is a need to ensure receivers take actions in parallel otherwise this will continue to be a reason for Denmark to not stop tail-docking. The report contains recommendations to the Danish authorities to address the shortcomings identified.

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ABBREVIATIONS AND DEFINITIONS USED IN THIS REPORT

Abbreviation	Explanation
CA	Competent Authority
DVA	Danish Veterinary Association
DVFA	Danish Veterinary and Food Administration
EU	European Union
NGOs	Non-Governmental Organisations
MS	Member State
PRC	Pig Research Centre of Danish Agricultural and Food Council
The Recommendation	Commission Recommendation (EU) 2016/336 of 8 March 2016 on the application of Council Directive 2008/120/EC laying down minimum standards for the protection of pigs.
Pig Directive	Council Directive 2008/120/EC

1 INTRODUCTION

This audit took place in Denmark from 9 to 13 October as part of the planned audit programme of DG Health and Food Safety. An opening meeting was held with the Danish competent authorities on 9 October 2017. At this meeting, the objectives of, and itinerary for, the audit were confirmed by the audit team and additional information required for the satisfactory completion of the audit was requested.

The audit team comprised two auditors from DG Health and Food Safety and a national expert from a Member State (MS) and was accompanied throughout the audit by representatives from the competent authority (CA) the Danish Veterinary and Food Administration (DVFA).

2 OBJECTIVES AND SCOPE

The objective of the audit was to evaluate the suitability and effectiveness of the measures in place to prevent tail-biting and to avoid routine tail-docking of pigs.

The scope of the audit included:

- Primarily measures taken and documentation from the period March 2015 to March 2017 but actions taken by the competent authority and others prior to this date were also included as findings in the audit report;
- Activities of competent authorities;
- Activities of farmers' associations, meat and feed industry, academia and Non-Governmental Organisations (NGOs) to prevent tail-biting and avoid routine tail-docking of pigs;
- Voluntary (quality) schemes, financial incentives or any other factors that aim to encourage and support farmers in avoiding tail-docking.

The main legal requirements are included in:

- Council Directive 2008/120/EC¹;
- Regulation (EC) No 854/2004 of the European Parliament and of the Council² ;

¹ Council Directive 2008/120/EC of 18 December 2008 laying down minimum standards for the protection of pigs (OJ L 47, 18.2.2009, p. 5)

² Regulation (EC) No 854/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption (OJ L 139, 30.4.2004, p. 206)

- Regulation (EC) No 882/2004 of the European Parliament and of the Council³ .

In assessing compliance with Council Directive 2008/120/EC the audit team will take into account Commission Recommendation (EU) 2016/336 (hereafter: the Recommendation) and the accompanying Staff Working Document⁴.

In pursuit of the objectives, the following meetings were held:

Meetings with competent authorities			Comments
Competent authority	Central	2	Initial and closing meetings, including meetings with representatives of pig producer associations, NGO's and private practitioners.
	Veterinary Inspection Unit North	1	Meeting with DVFA Veterinary Inspection Unit North.
Farms		2	Herd 1: 1300 sows, 6000 weaner pigs. Herd 2: 1500 slaughter pigs.
Slaughterhouse		1	Slaughterhouse visit
Meeting with representatives	Universities	1	Meeting with researchers of Copenhagen and Aarhus Universities.

3 LEGAL BASIS

The audit was carried out under the general provisions of EU legislation and, in particular Article 45 of Regulation (EC) No 882/2004 of the European Parliament and of the Council on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules and Article 10 of Council Directive 2008/120/EC (hereafter the Pig Directive) laying down the minimum standards for the protection of pigs.

EU legal acts quoted in this report are provided in Annex 1 and refer, where applicable, to the last amended version.

³ Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules (OJ L 165, 30.4.2004, p. 1)

⁴ Commission Recommendation (EU) 2016/336 of 8 March 2016 (OJ L 62, 9.3.2016, p. 20) on the application of Council Directive 2008/120/EC laying down minimum standards for the protection of pigs and Commission Staff Working Document on best practices with a view to the prevention of routine tail-docking and the provision of enrichment materials to pigs (C(2016)1345 final).

4 BACKGROUND

Denmark is the 4th largest producer of pigs in the EU with approximately 8675 pig herds⁵. Danish sow farmers keep about 1 million sows and produce about 32 million 30 kg weaner pigs annually, of which 14 million are exported to other MS and 18 million are fattened and slaughtered in Denmark. About 90% of pig meat produced in Denmark is exported. The vast majority of pigs are reared under intensive conditions. About 98.5 % (see paragraph 10) of commercial pigs born in Denmark are tail-docked.

In 2014 a position paper was drawn up by representatives from Denmark, Germany and the Netherlands and signed by ministers from these three countries plus Sweden. The paper is also supported by the Belgian authorities. It calls for an urgent update of the Pig Directive, in particular regarding the provision on tail-docking of pigs. These countries urged the Commission to amend the legislation, with the aim to ensure that the conditions, which apply before tail-docking can be carried out, must also apply for the *keeping* of tail-docked pigs to make herds with slaughter pigs also responsible for bringing about a reduction in this practice.

This audit is part of a Commission project aimed at improving the implementation and enforcement of the Pig Directive laying down minimum standards for the protection of pigs, particularly reducing systematic tail-docking of pigs in the EU.

In 2014, the European Parliament published a study indicating extremely low implementation of the Pig Directive in relation to tail-docking.

In 2016, the Commission published the Recommendation, which provides guidance on best practices as regards measures to reduce the need for tail-docking and an accompanying Staff Working Document on best practices with a view to the prevention of routine tail-docking and the provision of enrichment materials to pigs.

The Directive leaves to MS the choice of appropriate form and methods of ensuring compliance with these general conditions.

5 FINDINGS AND CONCLUSIONS

5.1 IMPLEMENTING MEASURES

Legal requirements

Paragraphs 4 and 8 of Annex I of Directive 2008/120/EC

Regulation (EC) No 882/2004

⁵ *In their response to the draft report the Competent Authority noted that: "A farm (in Danish "bedrifter") reflects an economic entity that may include a number of herds (in Danish "besætninger") on different locations. As it is these herds that are selected for animal welfare controls all findings in this report relate to herds".*

Findings

1. The requirements of point 4 of Chapter I of Annex I of the Pig Directive on the provision of enrichment material are transposed into Danish law by the following provisions:
 - Act no. 56 of 11th January 2017 "*om indendørs hold af smågrise, avls- og slagtesvin*", § 5 states that weaner pigs, breeding pigs and rearing pigs must have permanent access to a sufficient amount of straw or other manipulative materials that can meet their needs for manipulative- and rooting materials.
 - Act no. 49 of 11th January 2017 "*om indendørs hold af gylte, goldsøer og drægtige søer*", § 9 states that gilts, dry sows and pregnant sows must have permanent access to a sufficient amount of straw or other manipulative materials that can meet their needs for manipulative and rooting materials.
 - Order no. 17 of 7th January 2016 "*om beskyttelse af svin*", § 23 states, that in addition to the measures normally taken to prevent tail-biting and other vices, and in order for the pig's behavioural needs to be met, all pigs shall have permanent access to a sufficient amount of straw or other manipulative material that can meet their need for manipulable and rooting materials.
2. The requirements of the second paragraph of point 8 of Chapter I of Annex I of the Pig Directive on the provision of enrichment material and avoidance of routine tail-docking are transposed into Danish law by the following provision: "Order no. 1324 of 29th November 2017 "*om halekupering og kastration af dyr*" § 4. In addition to what is laid down in the Pig Directive the national legislation states that (if tail-docking is carried out) the tail must be cut as little as possible and no more than half of the tail may be docked. Guidance is available on how to provide proof of this (measuring tail length in a sample of docked piglets compared with piglets with intact tails). Tails should form an almost complete circle.
3. National requirements with regard to care and accommodation for sick and injured animals, flooring and cooling systems are more detailed than the provisions laid down in Council Directives 2008/120/EC and 98/58/EC (see Annex 2)
4. Most of the requirements of Council Directive 98/58/EC are implemented by Order no. 707 of 18 July 2000 on Minimum Requirements for the Protection of Farm Animals and Articles 3 and 4 of Directive 98/58/EC are regarded as being transposed by paragraphs 1 and 2 of Order no. 20 of 11th January 2018, which codifies the animal welfare Act.
5. Denmark has a well-established system of sanctions which includes warnings, enforcement notices (injunctions (*indskaerpelse*) or prohibitions (*paabud/forbud*)) and reporting to the Police; see country profile: http://ec.europa.eu/food/audits-analysis/country_profiles/details.cfm?co_id=DK.

Strategy for prevention of tail-docking and avoidance of routine tail-docking

6. The Danish national strategy is laid down in the action plan for better pig welfare that runs from June 2014 until January 2020. Reducing the number of tail-docked pigs is one of nine points in this plan. It is agreed on by the Danish farming industry, slaughterhouses, animal welfare organisations, consumer organisations, veterinarians and retailers. The objective is to decrease the proportion of tail-docked pigs significantly. The actions include:
 - A targeted welfare campaign carried out by the CA to verify compliance with legislation on rooting and enrichment materials for pigs.
 - The Danish Government Animal Welfare Label that requires, amongst other criteria, intact tails.
 - Cooperation with other MS (Belgium, Germany, Netherlands, Sweden) including a position paper that was drawn up and signed by Germany, Denmark, Netherlands and Sweden. The paper is also supported by Belgium.
 - Several research projects (see paragraphs 19 to 22).
 - 6.4 million DKK funding for the development of a new technology to provide straw in pig barns (see also paragraph10).
7. In 2014 the CA carried out a campaign on enrichment materials. Inspections were carried out in 200 randomly selected herds with weaner and slaughter pigs across the country. During a break between the first and second round of inspections a working group was set up with the Danish Veterinary Association (DVA) and PRC to engage these major stakeholders and improve compliance. Overall non-compliances were found in 13.5% of inspected herds, there was a slight decrease in non-compliances between the first and second round of inspections.
8. The CA together with the DVA, the Danish Agriculture & Food Council, abattoirs and retailers and DOSO (the organisation for cooperation between animal welfare groups), initiated an animal welfare label. There are three levels within this scheme and herds in all levels must keep pigs with intact tails and provide more space and straw. Meat sold under this label has been on the market since May 2017 and labelled meat has already achieved a share of 25% of the national market, with the largest increase in meat from the lowest (one heart) level.
9. The two large slaughterhouse companies that represent more than 80% of the slaughter activities in Denmark and the organisation of medium and small slaughterhouses support the goal in the action plan for better pig welfare to achieve a reduction in tail-docking. These companies participate in the follow-up group for this action plan and in the stakeholder group behind the governmental animal welfare label.

10. According to PRC there are currently between 450,000 and 500,000 pigs with intact tails slaughtered in Denmark, this number represents roughly 25% of the Danish internal fresh meat market. However it represents only about 2.5% of total Danish pig meat production (pigs slaughtered in Denmark) and about 1.5% of total Danish pig production (500,000 undocked pigs of the 32 million commercial 30 kg pigs produced in Denmark), therefore around 98.5 % of pigs produced in Denmark are tail-docked.
11. Denmark participates in a working group on animal welfare in pigs together with representatives from Lower Saxony, The Netherlands and North Rhine-Westphalia. One of the objectives of this working group is to exchange experiences and as far as possible harmonise enforcement of the Pig Directive in the different countries. The last two meetings of the working group have focused on the implementation of the Recommendation. However no specific agreements on harmonising enforcement policy have been made to date.

CA guidance on tail-biting assessment

12. The CA has recently updated their guidelines on how to use manipulable materials and avoid tail-biting. The guidelines now include instructions for farmers and inspectors regarding the assessment of improvement measures, in addition to the use of manipulable materials, taken on farms that tail-dock. Farmers are expected to assess risk factors for tail-biting as well as procedures for the management of tail-biting outbreaks in their herds and draw up action plans together with their veterinarians or other consultants.
 - The updated guidelines on how to use manipulable materials and avoid tail-biting cover the six parameters mentioned in the Recommendation as well as pen design and stray electricity, as these have been identified by PRC as additional risk factors. The list also has an "other" category to allow for miscellaneous issues which may arise in individual herds. The guidelines refer to the PRC manual for the prevention of tail-biting (see paragraph 17).
13. At the time of this audit, the new guidelines were not yet incorporated in the instructions for official controls. The CA intends to discuss the guidelines with their inspectors and in a working group with the DVA, the Association of Danish Pig Producers and PRC before referring to them as part of official controls. In addition, an information campaign will be launched to inform farmers and practising veterinarians about the need for this risk assessment for tail-biting.

Pig sector associations

14. The Danish Agricultural and Food Council is one of the stakeholders involved in the action plan for better pig welfare. They avail of their own research centre (PRC) that is

involved in several research projects on tail-biting and the rearing of pigs with intact tails. There are regular meetings (at least twice every year) with the CA.

15. In the view of PRC, tail-docking is currently inevitable and there is not enough scientific evidence regarding risk factors to advise farmers on how to sufficiently improve management and environmental conditions to be able to stop tail-docking in current systems.
16. PRC points out that around 14 million 30 kg pigs are exported to other MS on an annual basis and that there is no demand for undocked pigs in these countries. This is a major obstacle to getting greater efforts to avoid tail-docking.
17. On its website PRC provides extensive guidance including a manual for the prevention of tail-biting. The PRC manual details equipment features and management practices to reduce the risk of tail-biting. The information provided includes the main risk factors for tail-biting as mentioned in the Recommendation.
18. PRC has also established a network for pig producers who have stopped tail-docking with the objective to share experiences and best practices. Currently the network consists of the eight farmers that participate in the one heart level of the government animal welfare label.

Universities and research

19. Research carried out by PRC and Copenhagen University concludes that rearing pigs with intact tails in existing conventional systems will increase the prevalence of tail lesions and that *post-mortem* results from slaughterhouses severely underestimate the on-farm prevalence of tail lesions.
20. Research carried out by Aarhus University concluded that the daily provision of 150 grams of straw in combination with a lower stocking density (1.2 m²/slaughter pig) have the same preventive effect on tail-biting (in undocked pigs) as docking pigs kept at standard stocking densities without straw.
21. Other ongoing research projects at Aarhus and Copenhagen University include a comparison between Swedish and Danish systems, early detection of tail-biting outbreaks and intervention measures to stop tail-biting outbreaks.
22. Researchers of Aarhus and Copenhagen University stated that the main risk factors for tail-biting are known and there is extensive evidence of the effect of enrichment materials and stocking density on tail-biting, and that it is possible to advise farmers how to adapt their systems.

Veterinary association

23. A representative of the DVA stated that it is not possible for veterinarians to give advice on how to construct new premises because there is insufficient knowledge on risk factors for tail-biting to guarantee farmers that tail-biting will not occur. The view of this association was similar to PRC, i.e. it is very difficult to avoid tail-docking in existing Danish production systems.
24. Pig practitioners visit pig herds under a Veterinary Advisory Service Contract, which is mandatory for all herds with more than 300 sows and smaller farms where the farmers want to treat pigs with antimicrobials themselves. This represents approximately 90% of pig farms. The contracts focus on advice and prevention of illness rather than treatment, to optimise the use of antimicrobials and to improve animal welfare. Private practitioners do not certify that they consider tail-docking necessary, and the CA has always held that it is the farmer's responsibility to justify tail-docking.
25. Veterinary Advisory Service Contracts expect veterinarians to select the most important health and welfare issues in each herd and draw up action plans for improvement. Since January 2017 pig farmers are obliged to focus on animal welfare on at least two veterinary visits each year. Currently around eight percent of herds have included actions on tail-biting in their action plans under this contract. Farm visits are followed up by reporting via a database (VETReg).
26. In the herd with slaughter pigs visited, the farmer, together with his veterinarian, had not drawn up an action plan. The CA inspectors however identified animal welfare problems with insufficient manipulable material and insufficient arrangements for the care of sick animals. The inspectors indicated that a private veterinarian should have already signalled the need for better care of sick animals. A CA representative indicated that further discussion with private veterinarians on better pig welfare is planned.

Agricultural Advisory Services

27. The Danish Agricultural Advisory Service is part of the Danish Agricultural and Food Council and advises farms on the basis of guidance and scientific evidence provided by PRC. The advisory service has experts ready to assist farmers who want to stop tail-docking or who have tail-biting issues in their herds.

Conclusions on Implementing Measures

28. The action plan for better pig welfare is a long term project which has not yet been effective in decreasing the percentage of docked pigs. The new government animal welfare label is a success which has led to an increase in the consumption in Denmark of meat from pigs with intact tails. However, due to the large percentage of

meat and live pigs which are exported this barely influences the total percentage of pigs which are tail-docked.

29. Inspection campaigns focusing on rooting and enrichment materials and a number of research projects have had a limited impact on improving pig welfare but these actions have not changed the belief of many private practitioners or industry representatives regarding the perceived problems with rearing pigs with intact tails.
30. The new CA guidelines which expect farmers to assess risk factors for tail-biting, draw up action plans and take improvement measures together with their veterinarians or other consultants, could form the basis for making changes to environmental conditions and management systems to potentially avoid routine tail-docking.
31. The finding that only eight percent of herds have included actions on tail-biting in their action plans is in contrast with the need for tail-docking in 98,5% of Danish pig farms. The herd with slaughter pigs visited did not avail of an action plan in spite of animal welfare issues that should have been detected by the farm's veterinarian. This indicates that herd action plans drawn up as a part of Veterinary Advisory Service Contracts do not sufficiently address the tail-biting risk on Danish pig farms.
32. Due to the large number of Danish 30 kg weaner pigs exported to other MS, there is a need to ensure that farmers receiving pigs in these MS take actions in parallel. Otherwise this will continue to be a reason for a large number of herds in Denmark to not stop tail-docking.

5.2 ECONOMIC FACTORS

Legal requirements

Article 33 of Regulation (EU) No 1305/2013⁶.

Findings

European and National Funding Measures in the Pig Sector

33. In its Green Development programme the Danish Agrifish Agency is funding several projects to develop tools and information for farmers to assist them in adopting preventive measures instead of tail-docking. Projects include a "stable concept for the

⁶ Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 (OJL 347, 20.12.2013, p.487) on support for rural development by the European Agricultural Fund for Rural Development.

rearing of pigs with intact tails", "a unit for automatic feeding of straw to pigs" and "knowledge to secure pigs' tails."

Other economic factors

34. PRC has calculated the additional costs for rearing pigs with intact tails from 7 to 110 kg at 6.70 euro per pig. Factors that contribute to these extra costs are: 20% more space (2.50) euro, more hospital pens (0.30 euro), straw dispensers (0.80 euro), extra maintenance (0.50 euro), extra labour (2.30 euro), extra feed (0.10 euro), increased mortality (0.20 euro).

Conclusions on economic factors

35. European financial measures are not used to promote the rearing of pigs with intact tails. However, some nationally funded programmes contribute to the knowledge of how to keep pigs with intact tails.
36. The industry's own economic analysis indicates that rearing pigs with intact tails causes additional costs (€6.70 per pig), and this cost is a challenge to achieving progress.

5.3 OFFICIAL CONTROLS

Legal requirements

Directive 2008/120/EC

Article 5 of Regulation (EC) No 854/2004 in connection with Section I, Chapter II, point B(1) and point C. of its Annex I and the relevant provisions of Section II, Chapter I of that Annex.

Article 3 and Article 43 (1) (b) of Regulation (EC) No 882/2004

Findings

Planning and procedures for farm inspections

37. There are satisfactory procedures for the planning of inspections. Procedures to select herds for inspections include zero point (baseline) controls and prioritised (risk-based) controls. Control of requirements concerning tail-biting, tail-docking, and permanent access to a sufficient quantity of enrichment material are an integrated part of all zero point and prioritised controls.
38. In addition to zero point and prioritised controls the CA makes use of campaigns as an enforcement initiative to specifically focus on certain areas. Recent campaigns have focused on enrichment and rooting materials in 2014, housing of piglets up to the age of seven days in 2015 and correct treatment of sick animals in 2016. Before a campaign

begins the CA holds a meeting with PRC and also informs the DVA about the focus of the campaign and interpretation of the relevant legislation by the CA.

39. Guidance for carrying out inspections was available and included detailed guidelines on the assessment of enrichment material, cooling systems, hospital pens and care for sick and injured animals. However, for other legal requirements, in particular nos. 3, 6, 7, and 8 in Annex 2 to this report, no clear criteria were set for inspectors to be able to assess compliance on farm.
40. The guidelines from the Danish Veterinary and Food Administration on enrichment and rooting materials that are currently used by inspectors incorporate in section 5 guidance on measures that are to be taken in a tail-biting outbreak. This section indicates which risk factors are to be checked and stresses the importance of novelty and sufficient quantity of enrichment materials in cases of tail-biting outbreaks. The guidelines do not offer guidance on the assessment of the need for tail-docking.

Official controls on pig farms

41. The CA report to the Commission on checks carried out in 2015 on the protection of animals kept for farming purposes⁷ states that 3.3% of production sites were inspected (284 out of 8675 herds). However animal welfare inspections carried out in the context of campaigns are not included in this report as these are not "inspections" as defined in Commission Decision 2006/778/EC. When these were included in the number of inspections carried out by the Veterinary Inspection Unit visited, approximately 6% of pig herds were subject to an animal welfare check in 2015.
42. From the report to the Commission, the most common non-compliances were in the category "inspection", which was about 30% of herds inspected, and was largely due to inappropriate treatment of sick and injured animals. The second most common deficiency, occurring in 17% of herds inspected, was for insufficient "manipulable materials".
43. Enforcement notices were served on the following numbers of pig herds in recent years for insufficient manipulable material: 40 in 2015, 21 in 2016 and 44 in 2017. These were found to be compliant at follow-up visits.
44. The DVFA and inspectors stated that the need for tail-docking is assessed by discussing the main risk factors and the situation on farm with the farmer during inspections. Farmers are currently not expected to provide written evidence on tail and ear lesions and improvement measures to justify the need for tail-docking.

⁷ The format for this report is given in Commission Decision 2006/778/EC.

45. During the visit to a pig herd to demonstrate inspection procedures, the inspectors had a strong focus on the requirements that had been included in the campaigns and on what detailed guidance was available (enrichment materials and sick and injured pigs) and also included the other legal requirements which are relevant as risk factors for tail-biting. The CA guidance and procedures for inspection do not provide clear criteria on which to base the assessment of these other requirements; however, the inspectors indicated that the PRC manual (see paragraph 17) provided advice on issues such as feeding space and ventilation.
46. Data from inspections carried out in the whole country indicate that levels of non-compliance with animal welfare legislation are higher in herds with slaughter pigs (33%) and herds specialised in rearing weaners (38%) than in sow herds (20%).

Slaughterhouse controls

47. As part of the routine meat inspection of all pigs, not just those under the welfare label, CA inspectors register tail damage seen at *post-mortem* inspection. They use two different codes: one for tail damage without infection and tail damage with infection (pyaemia). According to the Danish guidelines, in cases where tail-biting affects animal health or animal welfare (finding of abscess, joint inflammation, lameness, etc.), the farmer may receive a sanction. The Veterinary Inspection Unit visited had followed-up one case in 2016 and two cases in 2017, which had been referred from the Meat Inspection section of the CA after they had detected severe tail-biting.
48. The *post-mortem* data for each consignment of pigs slaughtered is sent by the business operator to the herd of origin. This includes data other than tail damage which is relevant to the conditions on farm, such as pleurisy lesions. Farmers are also provided with average scores from the slaughterhouse so they can compare their results.
49. The percentage of damaged tails detected at slaughter shows a downward trend over the last three years: in 2014, 0.73% (0.07% with pyaemia), in 2015, 0.62% (0.06% with pyaemia) and in 2016, 0.49% (0.04% with pyaemia).

Conclusions on official controls

50. Where clear compliance criteria were set and incorporated into inspections and campaigns, this has brought about improvements in animal welfare, such as with provision of enrichment materials and care of sick and injured pigs. However, as no such criteria have been established for the other relevant legal requirements related to tail-biting risk factors, the enforcement of these is less consistent.
51. The current instructions and guidance are not sufficient for inspectors to properly

enforce the provisions of the Directive concerning whether effective changes to management or environmental systems had been made in herds prior to tail-docking. The new DVFA guidelines (see paragraphs 12, 13) provide a basis for better enforcement, but do not provide sufficient criteria for inspectors to be able to assess a) evidence of tail and ear lesions on farm and b) what constitutes sufficient measures by farmers to change inadequate environmental conditions or management systems before resorting to tail-docking of pigs.

52. Feedback from the slaughterhouse helps ensure that severe cases of tail-biting are investigated and the routine *post mortem* data also makes farmers aware of some of their tail-biting issues. Slaughterhouse data on tail damage underestimate the real level of tail-biting on farm, but is still a useful indicator of conditions in fattening units.

6 OVERALL CONCLUSIONS

Actions taken by the Danish authorities have not yet resulted in better compliance with the provisions of the Pig Directive with regard to the avoidance of routine tail-docking in pigs. The action plan for better pig welfare is a long term project which includes reducing the number of tail-docked pigs among its objectives. It has led to the development of certain measures which are promoting the rearing of pigs with intact tails.

A new government animal welfare label has led to a large increase in pigs with intact tails where their meat is destined for the Danish market. However, due to the large percentage of exported meat and live animals, this has not yet resulted in a significant reduction in the total percentage of tail-docked pigs in Denmark.

Where the CA has provided clear compliance criteria together with focused actions this has brought about improvements in animal welfare such as with enrichment materials and care of sick and injured pigs. However, compliance criteria for the enforcement of other legal requirements related to tail-biting risk factors are less clear or lacking and therefore enforcement of these requirements is less consistent.

The authorities are currently working on the implementation of new guidelines that will expect farmers to assess risk factors for tail-biting. If these guidelines set clear criteria for inspectors to be able to assess evidence of tail and ear lesions on farm and what constitutes sufficient measures by farmers to change inadequate environmental conditions or management systems before resorting to tail-docking of pigs, they could form the basis for a useful enforcement strategy to reduce the need for tail-docking. In addition slaughterhouse data can be used by the competent authority for measuring progress and carrying out targeted inspections in herds with slaughter pigs.

The large number of 30 kg weaner pigs exported to other Member States that will only buy docked pigs presents a challenge for the CA to change tail-docking practices in sow herds supplying this trade. However, this cannot be an explanation for continuing tail-docking for pigs which go to herds with slaughter pigs in Denmark which supply pigs to Danish slaughterhouses. These herds with slaughter pigs continue to have a high level of non-compliance indicating that the competent authority has not taken sufficient action to ensure welfare standards for that part of pig production which is completely under their control.

Progress with regard to the avoidance of routine tail-docking in pigs is possible where pigs are born, grown and finished in Denmark as many Danish pig facilities would allow rearing of pigs with intact tails, but with a higher cost as it means fewer pigs per pen and more or another type of enrichment material. As almost half of the Danish weaner pigs are exported to other Member States, there is a need to ensure receivers take actions in parallel otherwise this will continue to be a reason for Denmark for not stopping tail-docking.

7 CLOSING MEETING

A closing meeting was held on 13 October 2017 with representatives of the competent authorities, at which the main findings and preliminary conclusions of the audit were presented by the audit team. The competent authorities agreed that the action plan initiatives have not yet achieved a full significance but they clarified that it is a long term project and that they expect to achieve an impact with the continuous involvement of the stakeholders and the creation of a new working group.

8 RECOMMENDATIONS

The competent authorities are invited to provide, within 25 working days of receipt of the report, an action plan containing details of the actions taken and planned, including deadlines for their completion, aimed at addressing the recommendations set out below:

No.	Recommendation
1.	<p>The competent authority should provide inspectors with suitable compliance criteria to enable them to effectively enforce legal requirements of Council Directive 2008/120/EC and Council Directive 98/58/EC that are related to risk factors for tail-biting.</p> <p>Conclusion 50. Findings 39, 45.</p>
2.	<p>The competent authority should provide inspectors with suitable instructions and guidance to be enable them to enforce the provision on the prevention of tail-biting and avoidance of routine tail-docking, as laid down in the second paragraph of point 8 of Chapter I of Annex I of Council Directive 2008/120/EC, including how they should assess evidence of tail and ear lesions on farm and what</p>

No.	Recommendation
	<p>constitutes sufficient measures by farmers to change inadequate environmental conditions or management systems before resorting to tail-docking of pigs. This entails the development of measurable criteria to enable inspectors to properly assess progress with regard to the risk factors listed in the new DVFA guidelines on enrichment materials and the avoidance of tail-docking.</p> <p>Conclusion 51. Findings 39 and 44 to 46.</p>
3.	<p>The competent authority should, as required by Article 3(a) of Regulation 882/2004, take account of identified risks such as the level of non-compliance in herds with slaughter pigs compared to sow herds and <i>post-mortem</i> data on tail damage at slaughter to further target herds with slaughter pigs and improve risk factors for tail-biting on these premises.</p> <p>Conclusion 51. Finding 46. Conclusion 52. Findings 47 to 49.</p>
4.	<p>The competent authority should continue to work with private veterinarians to maximise the impact of Veterinary Advisory Service Contracts and ensure that priorities set in herd action plans support farmers in their assessment of risk factors as well as other relevant data related to the need for tail-docking, as required by point 8 of Chapter I of Annex I of Council Directive 2008/120/EC.</p> <p>Conclusion 31. Findings 24 to 26.</p>
5.	<p>The competent authority should consider liaising with other Government Agencies responsible for funding new buildings where pigs are to be kept and renovating existing ones with the assistance of European funding under Article 17 of Regulation (EU) No 1305/2013 to ensure not only that payments related to such facilities are suitable to commitments going beyond the relevant mandatory standards where they are related to animal welfare but that in general all funded facilities, as a minimum, comply with relevant mandatory requirements (of Directives 2008/120/EC and 98/58/EC) including the avoidance of routine tail-docking e.g. slurry systems that can handle optimal enrichment materials, different temperature zones, suitable flooring, feeding, space allowances etc.</p> <p>Conclusions 35, 36. Findings 33, 34.</p>

ANNEX 1 – LEGAL REFERENCES

Legal Reference	Official Journal	Title
Reg. 882/2004 - Article 45 (MS)	OJ L 165, 30.4.2004, p. 1, Corrected and re-published in OJ L 191, 28.5.2004, p. 1	Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules
Reg. 854/2004	OJ L 139, 30.4.2004, p. 206, Corrected and re-published in OJ L 226, 25.6.2004, p. 83	Regulation (EC) No 854/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption
Dir. 2008/120/EC	OJ L 47, 18.2.2009, p. 5-13	Council Directive 2008/120/EC of 18 December 2008 laying down minimum standards for the protection of pigs

ANNEX 2

Parameter Commission Recommendation (EU) 2016/336	Legal requirements Directive 2008/120/EC, 98/58/EC	Legal requirements Danish national legislation	Compliance criteria / guidance / instructions for inspections
Enrichment material	1. “permanent access to a sufficient quantity of material to enable proper investigation and manipulation activities” (Directive 2008/120/EC Annex 1, Chapter 1, 4)	1. Weaner pigs, breeding pigs and rearing pigs must have permanent access to a sufficient amount of straw or other manipulative materials that can meet their needs for manipulative- and rooting materials (Act 56, 5). Gilts, dry sows and pregnant sows must have permanent access to a sufficient amount of straw or other manipulative materials that can meet their needs for manipulative- and rooting materials (Act 49,9) In addition to the measures normally taken to prevent tail biting and other vices, and in order for the pig's behavioural needs to be met, all pigs shall have permanent access to a sufficient amount of straw or other manipulative material that can meet their need for manipulative and rooting materials (Statutory order 17, 23)	1. National legislation goes beyond the minimum standard of the Directive in that it requires that materials must be rootable. Assessment is done on the basis of the DFVA guidelines that provide elaborate guidance on suitable materials, distribution and quantity. The guidelines include a table of suitable enrichment and rooting materials, numbers of objects (wooden logs, ropes) to be provided to a certain number of pigs and instructions on how enrichment materials must be distributed in the pen. Materials must be natural, chains and plastic toys are not considered to be suitable enrichment materials. Bedding is required for pregnant sows and gilts in groups.
Cleanliness	2. “a lying area physically and thermally comfortable as well as adequately drained and clean which allows all the animals to lay at the same time”(Directive 2008/120/EC, Annex 1, Chapter 1, 3)	2. All pigs must have access to a lying area that is comfortable in terms of physical conditions and temperature; that is sufficiently drained and clean and where all the pigs are able to lie down at the same time (Statutory order 17, 14-2) In pens for weaners, breeding and slaughter pigs at least 1/3 of the unobstructed available floor area shall be solid or drained or a combination thereof (Act 56, 3,1) In pens only used for weaners at least ½ of the unobstructed floor area shall be solid or drained or a combination thereof (Act 56, 3,2)	2. According to the guideline for inspections reasons for dirty pigs should be clarified. Animals should not be forced to lie in manure. Inspectors state that single dirty pens in a compartment may be accepted, however when all pens are dirty the farmers is required to take measures to solve the problem. Drained floor = no more than 10 % openings
Thermal comfort and air quality	3. “air circulation, dust levels, temperature, relative air humidity and gas concentrations must be kept within limits which are not harmful to the animals” (Directive 98/58/EC Annex 1, 10)	3. Circulation of air, concentration of dust, temperature, relative air humidity and concentration of gases must be kept at levels that are not harmful to the animals (Statutory order 707, 9) Pens for weaners above 20 kg, breeding stock and finishers must have a sprinkling system or similar devices for regulating the animals' body	3. The guideline for inspections offers elaborate guidance on the assessment of cooling facilities. Sprinkling systems are mentioned specifically in the legislation, but other cooling systems may be accepted if temperature is lowered sufficiently. No guidance on the assessment of climate parameters. According to inspectors gas concentrations are assessed on a

		<p>temperature (Act 56, 4) For gilts, dry sows and pregnant sows kept in groups a sprinkling system shall be installed, by which their body temperature can be regulated (Act 49, 8)</p>	<p>sensory basis and by looking at the pigs. The CA does not as a routine measure ammonia levels Temperature and ventilation levels are assessed by checking climate control computer of the farm and by looking at the pigs (panting, huddling).</p>
Competition for food and space	<p>4. "unobstructed floor area" (Directive 2008/120/EC, Article 3, 1a). 5. "measures taken to prevent fighting (...) adequate opportunities to escape and hide from other pigs" (Directive 2008/120/EC, Annex 1, Chapter 2, D 1, 2) 6. "feeding and watering equipment must be designed constructed and placed so that (...) the harmful effects of competition between the animals are minimised" (Directive 98/58/EC, Annex, 17) 7. "permanent access to a sufficient quantity of fresh water" (Directive 2008/120/EC, Annex 1, Chapter 1, 7)</p>	<p>4. Space requirements according to Directive (Statutory order 17, 4) 5. When mixing pigs, it must be possible for the pigs to escape from or to hide from other pigs (Statutory order, 17, 36-2) 6. Equipment for feeding and watering must be designed, produced and installed in such a way that it provides the lowest possible risk of contamination of feed or water and of harmful effects, resulting from internal rivalry among the animals (Statutory order 707, 15) 7. Pigs older than 2 weeks must have permanent access to sufficient amounts of fresh water (Statutory order 17, 22)</p>	<p>4. The guideline for inspections states that troughs, other objects including the space under suspended objects are to be deducted from the available space. Sizes of troughs and other objects are usually estimated and then deducted. 5. The guideline for inspections provides guidance on preventive measures. Assessment is mainly based on animal based indicators 6. The guideline for inspections does not provide guidance on feeding space or ratio pigs / feeding space in ad libitum systems. 7. The guideline for inspections does not provide guidance on drinkers or ratio pigs / drinker but does provide a table with guidance on height of drinkers for different categories of pigs.</p>
Health status	<p>8. "sufficient number of staff who possesses the appropriate ability, knowledge and professional competence (Directive 98/58/EC, Annex, 1) 9. "sick or injured animals shall be accommodated in suitable accommodation with, where appropriate, dry comfortable bedding. (Directive 98/58/EC, Annex, 4) 10. "specialised housings (for piglets weaned less than 28 days of age) which are separated from housings where sows are kept" (Directive 2008/120/EC, Annex 1, Chapter 2, C3)</p>	<p>8. Farm animals must be tended to by a sufficient number of staff with the relevant skills, qualifications and technical know-how required to be able to tend to the animals in a responsible manner in terms of animal welfare (Statutory order 707, 3). 9. On all pig farms, a sufficient number of hospital pens must be available and you must as a minimum always have one hospital pen ready for use (Statutory order 17, 13, 1). The total number of hospital pen places for sows shall be at least 2.5 % of the total number of places for indoor places for pregnant sows in groups (transitional period) (statutory order 17, 13, 2.) The design of the hospital pen must fulfil the below criteria: 1. Soft bed in 2/3 of the minimum area. The soft bed may be constituted by a soft rubber mat or sufficient amounts of straw to prevent direct contact between the animal and the floor (Statutory order 17, 6). All hospital pens must have a heat source and a cooling facility (Statutory</p>	<p>8. The guideline for inspections does not provide guidance to assess if number and competence of staff are sufficient. 9. The guideline for inspections states that there must always be at least one hospitable pen ready to use (incl. litter, heating and cooling facilities) on the farm. Dry and comfortable bedding should be provided in 2/3 of pen. Stocking density in hospital pens should be about half of normal stocking density. It also provides elaborate guidance on which pigs are required to be in the hospital pens. Sick and injured animals must receive prompt and adequate treatment and if not recovering quickly, must be killed immediately. Separate guidelines exist for the handling of pigs with hernias and shoulder lesions in sows. 10. Some guidance on how to assess weaning age. Housings for early weaned piglets must be "all in all out"</p>

		<p>order) 17, 13, 5), 3. There must be no draught in the pen (Statutory order 17, 13, 5). Space requirements for hospital pens see Statutory order 17, 13, 3-4).</p> <p>10. Specialised housings (for piglets weaned less than 28 days of age) which are separated from housings where sows are kept (Statutory order 17, 35,2)</p>	
Diet	<p>11. "animals are fed a wholesome diet appropriate to their age and species and which is fed to them in sufficient quantity to maintain them in good health and satisfy their nutritional needs." (Directive 98/58/EC Annex, 14)</p>	<p>11. The feed must match the animals' age, weight, behavioural and physiological need (Statutory order 17, 20)</p>	<p>11. The guideline for inspections provides no guidance on what constitutes a wholesome diet and sufficient quantity.</p>