Indicators for tail biting risks relating to compliance criteria on health, dietary factors and space and competition

The Competent Authorities of the Member States continue to work on compliance criteria for the legal requirements linked to the parameters for tail biting risks in Commission Recommendation 2016/336. The Competent Authorities need better defined criteria, based on science, for the open norms in EU legislation. Official Controls should be based on objective measureable criteria with defined limits. Indicators used as part of official controls ideally should be relevant, accepted, credible, easy to monitor and reliable. Officials need to use a degree of flexibility when interpreting indictors, and to take into account the link between risk parameters for tail biting. The best indicator is intact tails, and there is no need to go into detailed measurements of tail biting risks if there is no evidence of tail damage.

In order to address gaps commonly seen in official controls, the subgroup for pig welfare has developed three documents (see Annexes 1-3) which outlines factors related to health, diet and space and competition. In particular to assess legal requirements linked to parameters included in Commission Recommendation 2016/336. We conclude that there is a need for more work to be done to develop practical and validated compliance criteria and guidelines for these legal requirements, and thus **recommend that the EU Reference Centre on Animal Welfare dedicated to Pig Welfare dedicate resources to:**

1. Health

- 1. Define a list of "iceberg" indicators per category of pig (especially weaners and rearing pigs) and potentially define a three-tiered system enabling the CAs to verify in detail the issues occurring on the farms that have problems of tail biting.
- 2. Set "alarm" thresholds and "concern" thresholds (possibly a "traffic light system") for the listed indicators.
- 3. Prepare a set of practical guidelines on measures that farmers can take to improve pig health outcomes on farm (e.g. injuries, lameness). This should be done so that CAs, government animal welfare officers, and private veterinary practitioners can assist farmers in improving pig health with a view to reduce the risk of tail biting to such an extent that the farmer can start rearing pigs with intact tails.

2. Diet

- 1. Determine the extent to which tail biting is linked to gastro-intestinal damage, such as linked to post weaning diarrhoea or gastric ulcers. If there is a clear relationship, subsequent work should collate scientific evidence on methods to prevent gastro-intestinal damage in pigs into practical guidelines. Further research should be performed if gaps in evidence exist, and this may also include research aimed at validating behavioural indicators of gastro-intestinal damage.
- 2. Fast growing pigs with high Feed Conversion Ratio may not be having their hunger/nutritional needs satisfied by current diet and feeding strategies. This could lead to feeding frustration and enhanced tail biting risk. Applied research on effects of different feeding systems (including feeding frequency and volume within restricted feeding systems)

and nutritional factors (including fibre content and quality, protein digestibility, mycotoxins) on tail biting risk is still needed to underpin practical guidelines to farmers.

3. To evaluate appropriate strategies for smooth transitions to new diets such that digestive upsets/reduced feed intake problems are minimized.

3. Space and resource competition

- 1. Limited availability of provided enrichment. The Directive requires permanent access to a sufficient quantity of material to enable proper investigation. However, more guidance is required on the term "sufficient" to avoid increased tail biting risk because of inadequate provision and therefore competition for resources. To avoid competition over enrichment resources and therefore reduce tail biting risk the optimal strategy for providing enrichment material needs to be better determined.
- 2. Poor quality and/or functionality of space are considered to challenge the success with which pigs can be reared with intact tails. When space allowances are in line with current legislative minimum requirements there can still be a challenge in successfully rearing pigs with intact tails. For example there is an enhanced risk of pigs suffering from heat stress when space becomes limiting, particularly towards the end of each phase of growth before they are moved to larger pens or sent for slaughter. This can trigger tail biting. Provide more guidance to help meet the different requirements in relation to competition for space and resources (for example feeders and drinkers).

Concluding remarks/recommendation

The sub-group has identified that it is difficult to address requirements that are sometimes very prescriptive but for other areas are "open norms". We recommend therefore providing guidance on how to deal with not only the points raised above but also not to take each requirement in isolation as well as the necessity to treat farms in a case by case basis.