
ALPHA UNIT

Scientific Panel on Animal Health and Welfare

Minutes of the 83rd plenary meeting

Held on 24-25 06 2014, Parma

(Agreed on 11 07 2014)

Participants

- **Panel Members:**

Edith Authié, , Anette Bøtner, Klaus Depner, Aline De Koeijer, Mariano Domingo, Sandra Edwards, Christine Fourichon, Frank Koenen, Simon More, Liisa Sihvonen, Hans Spoolder, Jan Arend Stegeman, Hans-Hermann Thulke, Antonio Velarde, and Preben Willeberg

- **European Commission representatives:**

Maria Ferrara (DG Sanco, Unit G3), Nicolas Krieger (DG Sanco, Unit G2, by phone).

- **EFSA:**

ALPHA Unit: Franck Berthe, Alessandro Broglia, Denise Candiani, Sofie Dhollander, Andrea Gervelmeyer, Per Have, Renata Leuschner, Frank Verdonck, Mattia Calzolari

AMU Unit: Fulvio Barizzone

1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from Charlotte Berg, Ilaria Capua, Ivar Vågsholm and Stephan Zintara.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of interest

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director implementing this Policy regarding

¹ <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

Declarations of Interests², EFSA screened the Annual Declaration of interest and the Specific Declaration of interest filled in by the experts invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

4. Agreement of the minutes of the 82nd Plenary meeting held on 13-14 05 2014.

The minutes were agreed by written procedure on 06 06 2014 and published on the EFSA website 09 06 2014.

5. Report on written procedures since 82nd Plenary meeting

No written procedures took place since the 82nd Plenary meeting.

6. Scientific outputs submitted for discussion and possible adoption

6.1. Scientific opinion concerning electrical requirements for waterbath stunning equipment (EFSA-Q-2014-00089)

The draft opinion was presented. Comments received from DG SANCO G3 and Panel members were discussed. The proposed amendments were discussed and agreed. The opinion was adopted unanimously. The Panel chair thanked the WG members and deep readers.

7. Scientific outputs submitted for discussion

None

8. Scientific outputs submitted for update on progress

8.1. Scientific opinion on Canine Leishmaniosis (EFSA-Q-2013-00835)

A short update was provided on the preparations by the working group on the scientific opinion on canine leishmaniosis (CanL). The Panel was briefly informed about the outcomes of the literature scoping exercise on diagnostic tests and pharmaceutical treatments of CanL, and the need for prioritising the review questions and further refining them for the follow up contract of the systematic review (SR). The outcomes of the SR, namely a summary of the sensitivity and specificity of the applicable PCR and serological tests, and a summary of the literature, studying the possible long-term cure of CanL by pharmaceutical treatments, will be used to parameterise the model. The model studies the probability of introduction and establishment of CanL in free areas through the movement of infected dogs and assesses the efficacy of available mitigation measures to reduce the probability of introduction and establishment of CanL in these areas.

8.2. Request for a scientific opinion on lumpy skin disease (EFSA-Q-2013-00917)

An update on the opinion was presented. The draft opinion contains information on aetiology, control measures, diagnostics and vaccines. The approach to assess the risk of introduction was presented, used previously for vesicular stomatitis. It is based on shipment size, prevalence estimates and testing system characteristics. The model to

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules.pdf>

assess the risk of spread will make use of outbreak and demographic data from Israel. A roadmap with critical dates until adoption was presented.

8.3. Request for a scientific opinion on Peste des Petits Ruminants (EFSA-Q-2013-01034) AB

An update on the opinion was presented. Information on aetiology, control measures, diagnostics and vaccines has already been added to the draft opinion. The approach to assess the risk of introduction was presented, which, similar to the one used for vesicular stomatitis, is based on shipment size, prevalence estimates and testing system characteristics. The model to assess the risk of spread will make use of outbreak and demographic data from Tunisia and other African countries. A roadmap with critical dates until adoption was presented.

8.4. Request for a scientific opinion on the main welfare risks related to the farming of sheep for wool, meat and milk production (EFSA-Q-2013-00580)

The current state of the opinion was presented. Preliminary results from the online survey, which aimed at defining the most important welfare consequences for each of the seven management systems for sheep (ewes and lambs), were presented and a short discussion about the method for data analysis was held, especially in relation to the different weight that should be posed to the answers from experts with different expertise and background.

8.5. Scientific opinion on the welfare assessment of dairy cows in small scale farming systems (EFSA-Q-2014-00096)

The approach to the mandate TORs was presented and agreed by the Panel. Clarifications were requested from the EU Commission representative regarding the issue of small scale farms to be regarded as non-conventional farms for which a proper definition does not exist. The Commission clarified that conventional farms are intended as those farms which are industrialized/mechanized, with high inputs and outputs, with breeds genetically selected for high productivity, high replacement rate, mechanized milking, high consumption of proteins and high conversion rate. Differently, non-conventional farms/small scale farms are those with low inputs/outputs, with local breeds with low replacement rate, low protein consumption, different farming practices (e.g. no dehorning), where animals kept in a traditional manner.

It was also clarified that the overall purpose of the mandate is to describe small scale farms and propose categories for them based on size, but also on farming systems and husbandry practices. Since this step could result in a high number of categories, specific welfare risks will need to be identified, at least for the most represented categories. The objective of this task is not to compare different farming systems, but to develop a risk assessment methodology for these farm types.

Further, it was clarified that the suitability of using animal-based measures (ABM) in small scale farms is intended as applicability of ABM to the different conditions under which cows are kept as well as their reliability. Finally, it was agreed that the data collection will cover one season only (autumn) and not represent all seasons of a year.

8.6. Scientific opinion regarding welfare aspects of perches for poultry (EFSA-Q-2014-00242)

The approach of the mandate was presented and agreed by the Panel. It was agreed that, in order to answer the question “what design and height of perches better suit welfare of laying hens?”, the opinion will not suggest an optimum height and design of perches. Instead, a methodology will be applied that will define the relationship between different perch heights and designs and the different animal-based measures. The first working group meeting will be held on 9-10 July 2014.

8.7. Updated scientific opinion on increased mortality events in Pacific oysters, *Crassostrea gigas*, associated with ostreid herpes virus 1 μ var and/or *Vibrio aestuarianus* (EFSA-Q-2014-00188)

Initially, the development of oyster mortality in various age groups since 2008 will be considered based on monitoring data obtained from MS. If a continued increased mortality can be confirmed, the TOR 1, 2 and 4 will be addressed. The question on effectiveness of water treatment (TOR 3) will be evaluated in the context of an over-all review of current practices in shellfish depuration plants.

8.8. Scientific opinion concerning the stunning of lambs (EFSA-Q-2014-00109)

A WG was established. The first web-based meeting took place on 20 June. The next WG meeting is planned for 1 September. Currently, the assessment of the submitted study by WG members is being carried out following the procedures outlined in the EFSA guidance.

8.9. Scientific opinion concerning use of carbon dioxide for stunning rabbits (EFSA-Q-2014-00186)

A WG was established. The first web-based meeting will take place on 30 June. Currently, the assessment of the submitted study by WG members is being carried out following the procedures outlined in the EFSA guidance.

8.10. Scientific opinion on enzootic bovine leukosis (EFSA-Q-2014-00546)

The approach to analyze the impact of EBL in EU was discussed in detail. MS reporting does not always include suspect tumour cases, therefore specific questions have been sent to MS concerning further details on EBL monitoring. Information on the age distribution of dairy cows has been requested to MS via AHAW Network representatives. This information will be used to estimate the number of tumour cases in EU in relation to BLV prevalence. The risk of spread of BLV within the EU will be addressed by developing a spread model based on previous models for BSE and paratuberculosis. It was noted that the risk factors for spread of BLV may have changed over time due to changes in herd structure and management practices. Scientific literature on tumour incidence and impact on production will be re-evaluated and presented in a more systematic way with the assistance of the AMU Unit. Control methods and preventive measures will be reviewed in the light of current measures laid down in Dir 64/432 Annex D.

8.11. Scientific opinion on entry routes into the EU of vector borne diseases (EFSA-Q-2014-00187)

The ToRs of the mandate and a diagram summarising the risk assessment framework, developed by CVI, were presented. It was agreed that the framework is appropriate and

covers the ToRs. A more detailed presentation on the MintRisk model was given, which explained the calculation toolbox, developed for assessing the different steps in the risk assessment framework, namely assessing the probability of entry, transmission, establishment, the extent of spread and the probability of persistence of VBD, as well as evaluating the impact of the VBDs. The Panel agreed that the use of the risk assessment framework and the toolbox was an appropriate methodology to address the mandate.

The criteria for the selection of VBD to be included in the work were discussed and a list of 37 selected VBD for which the probability of entry will be assessed was presented. The importance of feed-back from DG SANCO G2 on this list of VBDs was stressed. The list will also be further cross-checked by the experts of the VectorNet project.

An update was provided on the kick-off meeting of the VectorNet project (inter-institutional framework contract between EFSA and ECDC on the geographic distribution of vectors in the EU, May 2014 - May 2018). The Knowledge Matrix (a group of 23 experts on Culicoides-, sandfly-, mosquito- and tick-borne diseases) of the VectorNet project was presented. The VBD mandate will be managed back-to-back with the VectorNet procurement. The VBD working group exists of 3 Panel members who will provide methodological expertise on epidemiology, biometrics and risk assessment. Ad-hoc advice on vectors and VBDs will be provided by the Knowledge Matrix of the VectorNet group.

The timelines of the mandate were discussed. As a first deliverable, the outcomes of the risk assessment framework for 4 different zones (southern, eastern, western, and northern EU) will be provided by 31/12/2015. It is suggested that a more detailed, spatial analysis (network analysis, R0 maps and risk maps), including the newly available information on vector abundance (which will be generated by VectorNet in the coming years), will be provided after the finalisation of the VectorNet procurement (01/06/2018), and that the deliverable of 2015 will be updated by 30/06/2018. Feedback from DG SANCO G2 is needed on the suggested timelines and deliverables.

8.12. Scientific opinion on Porcine Epidemic Diarrhoea (PED) and emerging pig Deltacoronavirus (PDCoV) (EFSA-Q-2014-00361)

The approach of the mandate was presented and agreed by the Panel. It is likely that available data is insufficient to provide clear answers based on sound scientific evidence, at least for some TORs. For instance, no PEDV strains have been isolated and/or sequenced in Europe and no seroprevalence studies have been performed by any Member State in the last 10 years. Therefore, the opinion should clearly highlight any uncertainties and lack of data where relevant. The Panel indicated that it might be useful to obtain information on PED vaccines used (e.g. in China). With view to time constraints, the focus of the scientific opinion will be on the situation in Northern America. The EC should be contacted to understand the background of TOR2. Klaus Depner, Preben Willeberg and Liisa Sihvonen offered to act as deep readers.

9. Presentation on risk matrices

Arjan Stegeman and Hans-Hermann Thulke gave a presentation on matrices for combining qualitative risk estimates/likelihoods. They covered total likelihood estimates, combinations of sequential likelihoods and combinations of non-sequential likelihoods.

For several steps influenced by multiple factors, one option for deriving a total likelihood estimate is to take the highest risk estimate as a worst case scenario. One could also use a quantitative formula if probabilities are known: $p_1 + (1-p_1)*p_2 + (1-p_1-p_2)*p_3$ (example with 3 mutually exclusive factors).

In the case of sequential events that depend on each other, the combined probability $p_1 \cdot p_2$ is always smaller or equal to the lowest probability. The resulting risk matrix tables hence should be symmetrical.

If estimates of the importance of specific risk paths exist (e.g. severity, impact of factor), but knowledge/information regarding their relative occurrence (i.e. which risk do they contribute) is lacking, an average can be a solution.

According to Cox (Risk Analysis, 2008), risk matrices have a poor resolution, are error prone, are a suboptimal resource allocation and are often interpreted subjectively.

In conclusion, likelihoods can be compared and should be combined in a mathematical way. If risks or consequences are involved, risk matrices may be used, however not necessarily the one used in the ASF opinion.

10. AHAW workshop series

Franck Berthe provided a summary of the series of workshops organised by the AHAW unit throughout 2013 and 2014. The workshops centred around drivers for emerging risks, the need for interdisciplinarity to integrate such drivers sufficiently into RA, the lessons learnt from previous unexpected events, ways to engage with Member States, and how to implement the one-health concept at the EU level. Following from these workshops, it could be promising to introduce socio-technical analyses in a pre-assessment stage of the mandate-opinion process. The risk governance framework of IRGC (International Risk Governance Council) could be scrutinised for new practices for EFSA / AHAW risk assessments and enhanced interaction between risk assessment and risk management.

11. Horizon 2020 proposals

The panel discussed options for possible project proposals for the Horizon 2020 project. It was agreed that the AHAW team prepares a collation of the proposals based on previous suggestions and considering projects already accepted and circulates them to the AHAW Panel for review before submitting them to the EFSA SCER Unit.