Scientific Panel on Animal Health and Welfare

Minutes of the 97th Plenary meeting

Held on 26-27 April 2016, Parma, (Italy)

(Agreed on 10 May 2016)

Participants

- Panel Members

Dominique Bicout, Anette Botner, Andy Butterworth, Paolo Calistri, Sandra Edwards, Bruno Garin-Bastuji, Margaret Good, Christian Gortazar Schmidt, Virginie Michel, Miguel Angel Miranda, Simon John More, Mohan Raj, Søren Saxmose Nielsen, Liisa Sihvonen, Hans Spoolder, Hans-Hermann Thulke, Antonio Velarde Calvo, Preben Willeberg, Christoph Winckler

- EFSA

ALPHA UNIT: Francesca Baldinelli, Alessandro Broglia, Denise Candiani, Sofie Dhollander, Andrea Gervelmeyer, Frank Verdonck, Gabriele Zancanaro, Giuseppe Stancanelli, Eliana Lima, Edoardo Carnesecchi, Andrey Gogin, Sybren Vos

AMU UNIT: Federica Barucci, Jose Cortinas Abrahantes, Ana Garcia, Laura Martino

LRA UNIT: Citlali Pintado

SCER Unit: Agnes Rortais and Giorgio Sperandio

- EUROPEAN COMMISSION

Marina Marini, Barbara Logar, Stanislav Ralchev

1. Welcome and apologies for absence

The chair welcomed the meeting participants. Apologies were received by Klaus Depner and Jan Arend Stegeman.

2. Adoption of the agenda

The agenda was adopted without changes

3. Declarations of Interest of Scientific Panel Members

In accordance with EFSA's Policy on Declarations of Interests (DoI), EFSA screened the Annual (ADoI) and Specific Declaration of Interest (SDoI) provided by the Panel Members for the present meeting. The Panel members were asked to confirm that no further interests had to be declared in the context of the agenda of the meeting. No conflict of interest has been identified.

4. Agreement of the minutes of the 96th Plenary meeting held on 09 and 10 March 2016, Brussels (Belgium)

The minutes of the previous plenary meeting have been adopted by written procedure.

5. New Mandates

- **Request for a scientific opinion on Low Atmosphere Pressure Stunning for stunning of poultry**

The Commission presented the request to EFSA for a scientific opinion concerning the use of low atmosphere pressure system (LAPS) for stunning poultry, with particular attention to the Terms of Reference. EFSA provided information on Council Regulation EC 1099/2009, the Guidance on how the panel assesses studies researching new stunning methods and previous EFSA Scientific Opinions assessing new stunning methods adopted by the AHAW Panel. A brief overview of the documents (scientific papers, manuscripts, additional information) received by the Commission was given. As part of the documentation is considered confidential by the applicants, the general approach to confidentiality, that all panel members are subject to, was illustrated by the EFSA LRA Unit. It was indicated that the Commission and EFSA will provide further information on any consequences for the scientific opinion once it has been clarified which information should be considered as confidential and on which grounds (either commercial sensitive information or intellectual property). The Panel considered it necessary to establish an *ad hoc* Working Group and the chair of the Panel, after consultation with the HoU, appointed Virginie Michel as chair of the WG.

6. Scientific outputs submitted for possible adoption

None

7. Scientific outputs submitted for discussion

None

8. Feedback from the ad-hoc Working Groups of the AHAW Panel

- **Scientific opinion on avian influenza (EFSA-Q-2015-00214)**

The Panel was updated on the status of the avian influenza opinion. The analysis of the risk of HPAI introduction into the EU via wild birds has been done, including an evaluation of the uncertainties. The assessment of the risk of HPAI introduction into a poultry holding via wild birds is ongoing. Expert elicitations and data collection have been finalised. The first model outcomes show some discrepancy with epidemiological knowledge on HPAI epidemics, therefore the model needs to be further refined regarding the definition of the (macro)areas, latency period to transfer the virus from one bird to another and limiting the number of contacts between birds through the introduction of a mass action term. Several risk factors, such as wetland and poultry density, (water) temperature and wild bird densities, were discussed. The Panel suggested to produce EU level-risk maps by overlaying layers representing different specific risk factors. The use of the model could focus on how the specific risk factors affect HPAI prevalence in water and non-water birds, which could then be linked to the generated risk maps. Keeping 4 hectares (based on size of the foraging area) as the unit in the model would allow keeping the parameter values estimated by the experts. It has to be explored if interaction of wild birds with a small number of neighbouring 'units' could be included without making the model too complex. It was clarified to the Panel that the risk of introduction is based on knowledge from the past yet aiming at predicting for the next fall/winter season. The Panel agreed that changing the original approach of a qualitative assessment into a quantitative assessment was a good decision. As a consequence, more time is required to perform the assessment. The original workplan will be reviewed, taking into account the list of pending actions identified in relation to TOR3.

A brief update was provided on the other parts of the opinion. The risk of introduction via imported psittaciformes was worked out as an example how the non-wild bird pathways will be assessed. The focus is on two questions: (i) differences in susceptibility for the different clades and (ii) possibility to escape syndromic surveillance. TOR2 is divided into sections on biosecurity, early detection, protection measures and surveillance. Biosecurity will be assessed via EKE since the literature review confirmed that only few data are available. The assessment of early detection will look at the need for different thresholds for different clades, the effect of the number of animals considered (flock versus holding) and some practical limitations on its implementation. Protection measures will be assessed based on data from poultry holdings that were analysed after a HPAIV-infected wild bird was detected in the neighbourhood during the last 10 years. The HPAI surveillance in wild birds will be assessed based on a literature review and a data collection.

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

A short update was provided to the Panel, presenting the timeline of the activities of the working group and the different contractors involved with the data collection for the risk assessment. A template was presented for gathering all the data contributing to the estimates for the parameters which will be needed for the risk assessment using the mintrisk model. Finally, the software which will be used for the story-maps was presented. These story-maps will show the characterisation of the 39 VBD's on EFSA's website (see here for an example on another VBD: http://bureau.maps.arcgis.com/apps/MapJournal/index.html?appid=9e9ca7c6957f4616a05a4331f99a0c22) and their text will need to be reviewed by the Panel.

- **Scientific Opinion on Aujeszky's disease, Enzootic bovine leukosis, bovine viral diarrhoea, infections bovine rhinotracheitis, porcine reproductive and respiratory syndrome, paratuberculosis and Koi herpes virus disease for the listing and categorisation of animal diseases in the framework of the Animal Health Law (EFSA-Q-2015-00713)**

An update was provided about the state of the art of the work progress in the WG and the outcome of previous discussions with the EC. The presentation is available at this link http://prezi.com/bsve5lsrkshh/?utm_campaign=share&utm_medium=copy.

The WG proposal for the methodology to be followed has been presented to the Panel, outlining a possible evolution and an analysis of advantages and disadvantages of the different steps.

The profile of disease and its impact according to the criteria of art. 7 of AHL will be presented in the form of narrative factsheets to give a complete overview of each disease to the risk managers. It was suggested to elaborate a template in order to facilitate retrieval of the information. Supplementary summary tables for the most relevant information could be also developed.

The criteria for listing and for categorisation provided in art. 5 and 9 of the AHL represent the conceptual model. The proposal presented to assess these criteria for listing and for categorisation of the diseases will rely on expert judgement, and be based on the mapping of information compiled in the factsheets. To this end, the available evidence of the art. 7 criteria will be screened and fit it into the corresponding conceptual model compartments, minimising subjectivity and maximising transparency. The indication of the evidence underlying the judgement for each criterion documented in the factsheets will facilitate revisiting this judgement as and when needed. An expression of the uncertainty levels around the given judgement will be provided as well. The assessment output on each criterion can be proposed by the WG experts, and reviewed by the Panel.

The EC considers the narrative essential, because it would form the basis for discussions among risk managers. The condensation of the information in tables is welcome for the sake of readability. The EC has to reflect whether the AHAW Panel should perform the assessment up to the assignment of the disease to a certain category, or if the indication of the scientific evidence for the criteria in art. 9 would be sufficient.

Considering the criterion regarding the "impact of prevention and control measures", which is strongly influenced by the socio-economic context in which the measures are applied, the Panel highlighted that it is difficult to provide indications for specific diseases valid in general at EU level. It was agreed that for this mandate the assessment of the impact of prevention and control measures will be limited to providing an overview about the elements and costs that should be taken into account for evaluating the impact, accompanied, where available, by references to relevant case studies.

- **Scientific opinion on health of honey bee colonies (EFSA-Q-2015-00047)**

The Panel was updated on the outcomes of the 'bee health' workshop with stakeholders. The main topics covered in the workshop breakout sessions were explained to the Panel, as well as the overall conclusions. The Panel was pleased that the mind maps were validated by the stakeholders, that additional scientific evidence was gathered and that the feasibility of several methods were discussed in detail. The generated framework will remain a theoretical overview although it was agreed that there is a need to explain in the opinion how it could be used, ideally referring to different stakeholder groups. The most important target audience for the opinion are clearly risk assessors.

An update was given on the use of the HEALTHY-B scientific opinion by the MUST-B WG. A cross-check of both documents will be done to harmonise the terminology used. The main components of the MUST-B model were explained and the reasons to opt for an agent-based mechanistic exposure/effect model in a spatially complex landscape were clarified. A targeted data collection will be performed to inform the parameters of the generated model and to evaluate the performance of the model under different scenarios. The Panel suggested doing the model calibration by module/unit instead of doing it at the end for the whole model. Input from the HEALTHY-B TOR4 on the model calibration would be useful. Furthermore, the Panel indicated the need for an epidemiological analysis on the associations between the indicators and factors selected in the HEALTHY-B opinion. A better understanding on which indicators and factors are the main drivers of bee health is considered important to progress towards a holistic assessment. There should be a continuous evaluation of the MUST-B model with data from both experimental and field settings. Therefore, future data collections in the field should include additional indicators and factors than that will be first included in the MUST-B model. The model will be coded in a language that allows expansion as more evidence becomes available. Involvement and engagement of stakeholders will be crucial in the collection and/or analysis of data since EFSA resources are limited in respect of the objectives and expectations of the MUST-B project. In the HEALTHY-B opinion, a section will be inserted to explain the fit-for-purpose to risk assessors and other stakeholder groups such as bee scientists, beekeepers, farmers and risk managers. The potential of the generated framework to facilitate citizen science was highlighted since the EFSA 2020 strategy aims to evolve towards citizen involvement in risk assessment.

- **Scientific opinion on Bluetongue (EFSA-Q-2016-00160)**

The Prometheus approach was presented by AMU colleagues and an overview was provided about the Prometheus protocol developed so far for approaching the mandate and the possible methodology and source of data.

ToR 1 can be answered by a spread model for BT. The relevant factors that may affect and influence disease spread, and persistence could be retrieved by the Mint-Risk model used in the VBD Opinion. The question 1.3 can be answered by looking at the sensitivity of the surveillance system taking into consideration the model results above.

The answer to ToR 2 would require describing and characterising the dynamics of passive immunity in the response to BT in ruminants and its interaction with vaccination.

The answers to ToR 3 should consider the previous EFSA opinions on BT. A review on vector ecology could be done based on the previous opinion, taking into account recent data that have been collected by the Vectornet project. The question about the seasonally vector-free period (question 3.1) will be assessed by using maps of EU of vectors displaying the start, peak of activity, and end of vector season. An assessment of overwintering mechanism (question 3.2) will be done for the VBD opinion, for which all required information except for the one on vertical transmission of the pathogen in the host leading to overwintering. The effectiveness of insecticides and repellents against Culicoides (question in 3.3) will be assessed (and data collected by SLR) for the current VBD opinion. It will be reviewed how these assessments can be used to answer the BT mandate ToRs.

For ToR 4 and 5, the criteria to assess the BTV serotypes could be the ones proposed in the assessment framework of the AHL opinion. These criteria have been designed specifically to indicate the level of risk and categorise the diseases according to the kind of control measures that should be used for each disease/serotypes. The ToR requires indicating which serotypes could be partially or totally excluded from the overall BT policy. These would be the ones considered not eligible for listing according to the assessment done with the framework of the AHL mandate.

The Panel considered it necessary to establish an ad hoc Working Group and the chair of the Panel, after consultation with the HoU, appointed Paolo Calistri as chair of the WG.

- **Scientific opinion on animal welfare aspects in respect of the slaughter or killing of pregnant livestock animals (cattle, pigs, sheep, goats, horses) (EFSA-Q-2015-00477)**

A short update on the methodologies used to develop this mandate was presented. Particular focus was given to the methodologies that will be used for ToR1 (the prevalence of pregnant animals slaughtered at EU level) and ToR3 (the assessment of the capacity of foetuses to feel pain). The logical model for the development of ToR 3 was presented. For both ToRs, knowledge will be elicited through two EKE exercises and the uncertainty around the outcomes of these exercise and the analysis of the available literature will be weighted (this scientific opinion is a pilot for EFSA's guidance on uncertainty).

- **Request for a joint EFSA and EMA scientific opinion on measures to reduce the need to use antimicrobial agents in animal husbandry in the European Union and the resulting impacts on food safety (EFSA-Q-2015-00216)**

The overall structure of chapter 1.7 on the circumstances and diseases for AM usage and chapter 3.2. on the alternative options to the use of AM were presented following some changes introduced after the last Plenary meeting. During the discussions of the chapter on vaccination it was suggested to shorten it. The point in the bovine section regarding vaccination for mastitis should be moved to the paragraph regarding herd health plans. More emphasis should be given to the on-farm stressors for each species. The conclusions and recommendations drafted by the RONAFA WG were presented with particular emphasis on those related to chapter 3.2. It was agreed that the first recommendation will be about the need for an integrated/holistic approach. The view of the AHAW Panel about the advantages and disadvantages of alternative options was also agreed.

9. Other scientific topics for information and/or discussion

- **Joint session of AHAW and BIOHAZ Panel**

A two-hour joint session of the BIOHAZ and the AHAW Panel was held. The Panel Members introduced themselves and explained their areas of expertise. This was followed by two general presentations on the remit and activities of the Panels by the respective Chairs. The session concluded with discussions on possible future joint activities. Issues suggested for collaboration were the use of outcome-based measures in risk assessments, sharing of methodologies (e.g. stochastic models) used in the respective Panel's opinions and experience in their application, and holistic risk assessments.

10. Any other business

None