

ANIMAL HEALTH AND WELFARE UNIT

MINUTES OF THE 65th PLENARY MEETING OF THE PANEL ON ANIMAL HEALTH AND WELFARE (AHAW)

19-20 April 2012, Parma

1. PARTICIPANTS

AHAW PANEL MEMBERS

Anette Bøtner, Don Broom, Marcus Doherr, Mariano Domingo, Jörg Hartung, Linda Keeling, Frank Koenen, Simon More, David Morton, Fulvio Salati, Mike Sharp, Jan Arend Stegeman, Endre Szücs, Hans-Hermann Thulke, and Martin Wierup.

AHAW UNIT

Ana Afonso, Franck Berthe, Sandra Correia, Sofie Dhollander, Chiara Fabris, Maria Ferrara, Milen Georgiev, Andrea Gervelmeyer, Tomasz Grudnik, Per Have, and Karen Mackay.

European Commission

Judit Krommer (attended the meeting via conference call on item 7.2)

2. OPENING, APOLOGIES AND AGENDA

Jörg Hartung, vice-chair of the AHAW Panel, chaired the meeting. He welcomed the Panel members. Apologies were received from Philippe Vannier, John Webster. Mo Salman and Moez Sanaa attended the meeting via conference call on item 6.2. The agenda was adopted.

3. DECLARATIONS OF INTEREST

In accordance with EFSA's Policy on Declarations of Interests (DoI), EFSA screened the Annual and Specific Declaration of Interest (SDoI) provided by the Panel Members for the present meeting. No new interests were declared in the SDoIs submitted in relation to the current agenda.

Marcus Doherr declared a conflict of interest in relation to point 6.4. of the agenda (Tuberculosis testing) of the agenda. The interest was declared in the SDoI.

The other Panel Members confirmed that no further declarations of interests were to be made in the context of the adopted agenda.

4. MINUTES FROM THE PREVIOUS PLENARY MEETING

The minutes of the 64th plenary meeting of the AHAW Panel were unanimously adopted by written procedure and available from the EFSA website.

5. NEW MANDATES

Sandra Correia presented a request received from the European Commission to produce a scientific opinion on the risk of introduction and spread of the small hive beetle (*Aethina tumida*) and *Tropilaelaps* in the EU. The mandate has 4 Terms of Reference: 1) the risk of introduction of small hive beetle (SHB) and *Tropilaelaps* into the EU through importation from 3rd countries of live queen bees, queen bumble bee colonies and bees products destined to be used in apiculture; 2) the risk mitigation factors that have proven to be or that could potentially be effective in ensuring safe international trade as regards the transmission of the SHB and *Tropilaelaps* in bees and their products; 3) the risk of introduction of the SHB and *Tropilaelaps* into the EU from neighbouring countries, especially through the natural movements of live bees and of the SHB; 4) the risk of introduction of SHB and *Tropilaelaps* into the EU through importation from 3rd countries of products other than bee products (e.g. fruits, vegetables, other possible vectors and fomites, etc).

The Panel welcomed this new request and emphasised the importance to consider information available from other mandates or projects on bees within EFSA, as well as other recent and on-going EU projects. Franck Berthe informed the Panel about the EFSA task force (EMRISK, SC, AHAW SAS, PLH, Pesticides, GMO, and Communication) that was established to better address all horizontal issues concerning bees in EU.

Franck Koenen was nominated as chair of the working group. The deadline is May 2013.

6. DRAFT OPINIONS SUBMITTED FOR ADOPTION

6.1. Update the scientific opinions on the welfare of beef cattle and the welfare of intensive calf farming systems

The mandate: In March 2011, EFSA received a mandate to update the scientific opinions concerning the welfare of beef cattle and calves. In particular to consider if the conclusions and recommendations of the two previous scientific opinions on the "Welfare of cattle kept for beef production" (SCHAW, 2001) and "The risks of poor welfare in intensive calf farming systems" (EFSA, 2006) are still valid. Only the animal categories covered in these previous scientific opinions should be considered in the update.

The approach: A comprehensive scientific review of bibliographic references on the welfare of beef cattle and calves was outsourced (NP/EFSA/AHAW/2011/04) and its results circulated to the working group. Separate risk assessments have been performed for beef cattle and calves, following the approach developed and consolidated in the AHAW "Guidance on risk assessment for animal welfare". In calves, hazards and animal categories from the previous scientific opinions have been considered as starting point. The update opinion reviews new evidence (from 2001 for beef cattle and from 2005 for calves) and amends the validity of the previous conclusions and recommendations, justified by this new evidence. For several important topics where previous opinions (SCAHAW, 2001; EFSA, 2006) contained little or no evidence, it has been necessary to include references that precede their publications and also to update the section on conclusions and recommendations. This opinion covers all systems of beef production, deals with the calves

from the dairy herd reared for white or pink veal, or prior to entry into beef production systems. The welfare of suckler cows or breeding bulls is out of the scope of the mandate.

Discussion: The draft opinion was discussed at the March Plenary meeting of the AHAW Panel. The Panel's comments were addressed and the reviewed version was submitted for possible adoption.

Toni Oltenacu, chair of the working group, thanked the Panel for comments received on the draft opinion. The new version included changes and improvements in order to address the main issues raised during the discussion at March Plenary. The responses to the comments were also presented and discussed.

The opinion was adopted by the Panel.

6.2. Public health hazards to be covered by inspection of meat Poultry

The mandate: The Commission requested a scientific opinion and technical assistance on the public health hazards to be covered by inspection of meat. The scope of this mandate is to evaluate meat inspection primary in a public health context and secondary the implications for animal health and animal welfare of any changes suggested.

The approach: The AHAW Panel ensures whether any change in current inspection does not jeopardize the capacity to detect animal diseases nor compliance with the animal welfare regulation. For this, it is essential to determine the importance and integration of meat inspection in the EU animal health surveillance and monitoring. Two methodologies (qualitative and quantitative) are in use to assess the quality of both the current and proposed modified meat inspection systems. The former relied on expert opinion and a review of the literature, and the latter used a three stage modelling approach.

Discussion: The draft of AHAW annex to EFSA opinion on meat inspection poultry was presented and discussed. The draft opinion of AHAW is focused on the AHAW implications of changes in meat inspection as proposed by BIOHAZ and CONTAM Panels in the light of public health hazards. There were two main directions of the 'what if' analysis in AHAW (i) ceasing of visual post mortem inspection and (ii) more intensive incorporation of Food Chain Information. The assessment is based on qualitative and quantitative analysis.

The current poultry meat inspection system, both *ante-* and *post-mortem*, was recognised as valuable for maintaining a reliable food supply and for good animal welfare and disease management. Meat inspection is often a key point for identifying outbreaks of existing - or new - disorders or disease syndromes. In the course of normal commercial procedures, *ante-* and *post-mortem* inspection of poultry is an appropriate and practical way to evaluate the welfare of poultry on-farm, and the only way to evaluate the welfare of poultry during transport and associated handling. In relation to welfare during transport, *ante-mortem* inspection is important to detect mortality prior to slaughter.

The AHAW Appendix to the draft opinion was presented by the chair of the working group, and was endorsed by the Panel. Adoption of the complete opinion which will include appendices prepared by the CONTAM and BIOHAZ Panels will follow in May 2012.

7. DRAFT OPINIONS SUBMITTED FOR DISCUSSION

7.1. Comments on the summary report on zoonoses

The mandate: The mandate was prepared by the BIOMO Unit and requests the AHAW Panel to review the EU summary report on zoonoses. The review should address non-food-borne zoonoses (e.g. brucellosis, echinococcosis, rabies, tuberculosis). The AHAW panel is asked to:

1. review the European Union Summary Report on trends and sources zoonoses, zoonotic agents and food-borne outbreaks in 2009. This review should in particular focus on data related to bovine tuberculosis, Echinococcus, Q fever, brucellosis, and non-food-borne zoonoses including the current analyses of the available data;
2. evaluate the appropriateness of the data collected at EU level;
3. consider what data are needed at EU level to provide an accurate picture of the epidemiological situation in the EU and the Member States;
4. assess if the analyses methods used in the report are appropriate;
5. consider if collection of sampled based data for the report's aim instead of aggregated data would improve the quality and analyses of data at EU level;
6. consider if the data collection should be extended to additional zoonoses, or zoonotic agents, such as vector-borne zoonoses;
7. propose any improvements to the data collection, the presentation of the data and their analyses, as appropriate.

Due to the recent publication of the 2010 report the AHAW panel requested an amendment of the mandate in order to include the revision of both reports 2009 and 2010 in the first term of reference.

The approach: Mo Salman chairs the working group. A member of the BIOMO unit participates in the working group meetings. The adoption of the opinion considering term of reference 1 will be submitted for adoption at the May plenary meeting.

Discussion: The draft was distributed to panel members for comments. The Panel agreed that the focus of the mandate for ToRs 2 to 7 is on potential improvements of the reporting of the diseases, and the appropriateness of the data for risk assessments, and not on reviewing of the diseases themselves.

7.2. Electrical requirements for waterbath stunning of poultry

The mandate: in June 2011, EFSA received a mandate on electrical requirements for waterbath stunning of poultry. The Commission had received information from British and Dutch authorities that might justify amending the electrical requirements for waterbath stunning of poultry laid down in Table 2 of Chapter II of Annex I to Regulation (EC) No 1099/2009. EFSA is tasked to review relevant new scientific references on electrical stunning of poultry and in particular the ones provided by the British and Dutch authorities and to recommend, if necessary, new electrical requirements applicable for waterbath stunning equipment laid down in Table 2 of Chapter II of Annex I to Regulation (EC) No 1099/2009.

The approach: A technical hearing was held on September 23 2011, at which British and Dutch scientists explained their findings that led to the requests of their authorities. A systematic review of scientific references on waterbath stunning of poultry was carried out to collate the scientific evidence for electrical requirements of waterbath stunning of poultry in line with requirements of Article 4, Regulation (EC) No 1099/2009 by EFSA staff. The draft opinion was discussed at the plenary meeting in December 2011. A second technical hearing was held in January 2012 to discuss the findings of the systematic literature review with the hearing experts.

The mandate focuses only on the electrical requirements applicable for waterbath stunning equipment laid down in Table 2 of Chapter II of Annex I to Regulation (EC) No 1099/2009. It was agreed not to limit data extraction to studies describing electrical settings which result in 100% successful and irreversible stuns. Quality issues related to electrical stunning were out of the scope of this mandate.

Discussion: Following the comments on the draft opinion made during the March plenary, a revised approach for the development of the opinion was presented to the panel for discussion. This approach would employ showing the data extracted during the systematic literature in the form of plots/graphs (i.e. box and forest plots) – plotting the different treatment classes against the different outcomes (i.e. percentage for birds stunned, stun duration, or incidence of cardiac arrest). Results reported in a way not appropriate for incorporation into plot/graph format, would instead be captured as a narrative part of the results section. Depending on the nature and robustness of the data, recommendations will be given if the table in the regulation with parameters needs to be amended.

The Panel endorsed this new approach, stating that it would also be important that the opinion reflect the sample size.

The draft opinion will be submitted to the Panel for possible adoption in May.

7.3. Statement on the use of animal based measures to assess the welfare of animals

The mandate: The statement presents overall considerations on the use of animal based measures to assess the welfare of animals. It highlights differences in the risk assessment terminology used in those opinions and the welfare assessment terminology used by animal welfare scientists. It builds upon the recent work in EFSA to develop guidelines for risk

assessment in animal welfare and so establishes a common framework for specific and detailed EFSA opinions on welfare assessment for dairy cows, pigs, broilers and other species.

The approach: The statement contains Section 1 and 3 of the dairy cow draft scientific opinion (Rev. 6.0, 20 July 2011) related to the concepts and general use of the animal-based measures and on the development of tools to monitor animal welfare, respectively, left out from the final scientific opinion. Concepts and general parts that could be relevant for different species have been expanded. The statement not only refers to the Welfare Quality project but includes a more general discussion of welfare and welfare assessments. It contains a comprehensive discussion on intensity, duration and magnitude, a section on "Essential attributes of animal-based measures" with analogies to OIE guidelines on diagnostic test validation. The statement also addresses the issue of tools to monitor animal welfare (links between factors and animal-based measures) and proposes ways toward quantifying the strengths of the links, of predictive and classification capacity. It also includes a section on risk-based surveillance (monitoring plus corrective action/control), advice for future opinions on use of animal-based measures in welfare assessment Identify the animal-based measures to be placed in the 'toolbox' for this species, and data collection in a way that it contributes to the establishment of a database(s) for future quantitative risk assessment of animal welfare (Take the ideas of health monitoring and use it for welfare monitoring).

Discussion: The chair of the working group presented the comments that were received on the draft opinion. The panel agreed on the proposed solutions for the comments, in particular to: address in a clearer way which is the target audience for this statement, increase discussion on intensity, duration and magnitude, add comparison between "iceberg measure" and screening tests, better define reproducibility and repeatability, and review the conclusions and recommendations focusing more on knowledge gaps and research needs.

The draft opinion will be submitted to the Panel for possible adoption in May.

8. PROGRESS REPORTS AND DISCUSSION OF CURRENT MANDATES

8.1. Request for a scientific opinion on the use of a gamma interferon test for the diagnosis of bovine tuberculosis (bTB)

The mandate: Tuberculin skin test is currently the only available *in vivo* diagnostic test for bTB. While it provides a relative accurate and fast diagnosis of bTB (at a herd level), it has certain limitations when used on individual animals. Since 2002 the concurrent use of the IFN test as an ancillary test to the tuberculin skin test is regulated in Annex B (3) to Council Directive 64/432/EEC on animal health problems affecting intra-Community trade in bovine animals and swine in order to detect the maximum number of infected animals in a herd or a region. Experience has been gained in the EU and elsewhere on the performance of the IFN test. The AHAW Panel is requested to issue a scientific opinion on the suitability of the IFN test as a prescribed test to be included as an alternative to the tuberculin skin test for

granting and retaining officially bTB free herd status contemplated in the annex A to Directive 64/432/EEC and intra-Union trade in bovine animals.

The approach: It was clarified that the use of gamma interferon tests for other purposes such as control of disease by identification and culling of infected animals are not under the scope of the mandate. Furthermore gamma interferon and other tests should be evaluated for inclusion as single tests, not when in combination with other tests. The assessment should aim at demonstrating the equivalency or superior diagnostic sensitivity of the tests when compared with the official test (skin test). The WG will concentrate in what is defined by the OIE as stage 2 of diagnostic test validation (estimation of diagnostic sensitivity and specificity) the approach if using a gold standard method or a latent class model will depend on the available data. The data sources to be used are: i) scientific literature, EU reference laboratory studies, MS and other stakeholder data. A public call for data was launched in 26 March with deadline 26 April.

Discussion: The Chair of the working group updated the Panel on the progress made by the working group. The deadline of this mandate is 1 July 2012. The opinion will be submitted for discussion to the panel during the May plenary meeting in view of its possible adoption in June.

8.2. Request for a scientific opinion on animal health risk mitigation treatments as regards imports of animal casings

The mandate: Animal casings are imported into the European Union from a variety of third countries with different animal health status *inter alia* for use in the production of meat products like sausages. It is requested to assess whether the NaCl treatment has been refined in recent years as regards temperature and/or duration of treatment in a way that would lead to an increased level of safety as regards animal pathogens. It is also requested to assess whether alternative treatments have been developed that give equivalent or better results in the inactivation of pathogens possibly present in casings derived from animals of the bovine, ovine, caprine, porcine and equine species, taking into account scientific developments and technological progress. Finally, the request includes to assess whether the modified phosphate salt treatment, as described by the OIE Terrestrial Code in 2011, can be considered as an effective and reliable alternative to the standard NaCl treatment so as to provide at least equivalent animal health guarantees as regards the elimination of animal health risks posed by pathogens other than FMDV possibly present in casings derived from animals (taking into account the effects of both the temperature and the duration of treatment).

The approach: In this mandate the AHAW working group is focused on scientific analyses of information of treatments of casings against pathogens causing animal diseases in line with the requested mandate rather than a thorough risk assessment on the risk of introduction in the EU. Particular attention is going to be paid on viruses considered to present risk for the EU according to the legislation. A critical review of the literature obtained by a broad scope search and provided the hearting experts was used to extract relevant information. The

work flow follows logic consequences in the analyses (i) defining most risky pathogens for the EU, (ii) describing some biological characteristic with implications on potential survival of the pathogens (iii) analysing the practices in production of casings (iv) analysing available treatments. The basic biological features of the pathogens are investigated in well known/recognised sources (scientific books, OIE manual and etc.). Specific outcome of various treatments are going to be based on the information of published literature. Differentiation is made on studies on casings from experimentally infected animals, in-vitro experiments. Some assumptions are made and indicated when information for characteristics of a pathogen or options for treatments can be extrapolated to another cause of infection or method in use. Various treatments would be presented in more structured way (e.g. table).

Discussion: For identifying relevant infectious agents which might be present in casings, the approach was to assimilate casings to meat and meat products, and to look at specific EU legislation (Commission Regulation (EU) No 2016/2010 of 12 March 2010 identifies relevant pathogens which may be present in meat and meat products, laying down lists of third countries, territories or parts thereof authorised for the introduction into the European Union of certain animals and fresh meat and the veterinary certification requirements). The draft opinion is foreseen to be presented for discussion at the AHAW Plenary on 22-23 May 2012 and submitted for potential adoption on 21-22 June 2012. The deadline is 30 June 2012.

8.3. Use of animal based measures to assess the welfare of broilers

The mandate: The mandate is the third of the series on animal based measures. The deadline is end of June 2012. The request is to 1) identify how animal-based measures could be used to ensure the fulfilment of the recommendations of EFSA scientific opinions on the welfare of broilers 2) identify how the assessment protocols suggested by the Welfare Quality® project cover the main hazards identified in EFSA scientific opinions (and vice-versa); 3) identify which relevant animal welfare issues cannot be assessed using animal-based measures for broilers and what kind of alternative solutions are available to improve the situation; and 4) list main factors in the various husbandry systems which have been scientifically proven to have negative effects on the welfare of broilers and to what extent these negative effects can be or not prevented through management.

The approach: A preparatory work has been outsourced. The objectives were to: systematically review the relevant scientific literature from 2000 for new available scientific evidence on the welfare of broilers, propose possible amendments to the conclusions and recommendations of the SCAHAW scientific opinion, and identify hazards for broiler welfare. The working group drafted a table responding to TOR1, listing animal-based measures that could be used to ensure the fulfilment of the recommendations of the EFSA scientific opinions on the welfare of broilers. For each animal based measure (proposed by WQ), two separate scores will be assigned; one score for sensitivity (probability that the animal-based measure detects a problem, given that the animal is suffering from the adverse effect) and one for specificity (probability that the animal based measure does not

detect a problem, given the animal is not suffering from the adverse effect) of the animal based measure in relation to the adverse effect (0-4). Another table was developed for addressing TOR2, based on the main factors (hazards) in the EFSA opinion. The hazards will be cross-linked to the animal-based measures proposed by the Welfare Quality protocol. The methodology is supposed to identify the animal-based measures which cover the main hazards identified in EFSA scientific opinions (and vice-versa). In order to address TOR3, gap identification will be based on TOR 1 and TOR 2. To address TOR4, the working group decided to separate, and give different scores (0 not possible-5 very good), to hazards (that can be prevented through short term management BETWEEN FLOCKS or WITHIN a FLOCK) and adverse effects (assuming presence of hazard).

Discussion: The chair presented the TOR's and working group composition, the diagrams with hazards adverse effects and indicators. The draft opinion will be presented for discussion in the May plenary.

8.4. Request for a scientific opinion on Infectious salmon anaemia (ISA)

The mandate: ISA is a fish disease listed in Part II of Annex IV to Council Directive 2006/88/EC on animal health requirements for aquaculture animals and products thereof, and on the prevention and control of certain diseases in aquatic animals. There are several strains of ISA virus, one of which is not known to cause clinical disease (HPRO). Virulent strains of the virus are usually regarded as HPRO deleted strains. It is requested to assess: 1) the capability of HPRO ISA strains to cause disease in Atlantic salmon, and 2) the risk of HPR-deleted ISA emerging from HPRO ISA and, if relevant, indicating the risk factors causing such an emergence.

Discussion: The Panel recognised the similarity with highly pathogenic and low pathogenic avian flu viruses. The Panel agreed on the composition of the working group. An extension of the deadline until October 31, 2012 has been proposed to SANCO. Hence the opinion will be presented for discussion in September and for adoption in October.

8.5. Request for a scientific opinion concerning the risk of introduction and spread of Rift Valley Fever in the EU neighbouring countries of the Mediterranean region (North Africa and the Near East)

The mandate: The terms of references as agreed upon during the kick-off meeting on 12 April 2012 were presented to the Panel: It was agreed that the TOR's can be specified as:

1. Provide an update on the global occurrence of Rift Valley Fever and possible changes in the distribution during the last 10 years.
2. Provide maps of the region of concern¹ and other countries of the Mediterranean Basin (including EU Member States), displaying the geographical distribution of potential

¹ Region of concern: countries of the Mediterranean area neighbouring the EU, namely Mauritania, Morocco, Algeria, Tunisia, Libya, Egypt, Jordan, Israel, the Palestinian Territories, Lebanon and Syria

invertebrate hosts, taking into account their vector competence and seasonal variation in abundance.

3. Assess the risk of introduction of RVF into the region of concern especially through the movements of live animals and vectors.

4. Assess the risk of RVF becoming endemic, with clinical outbreaks or not, in animal and vector populations in the region of concern.

Discussion: A brief outline of the methodology was presented to the Panel. The Panel agreed that both TOR 1 and 2 on the occurrence of RVF and the vector distribution during the last 20 years will be answered by a literature review. Unpublished data should also be included in the review. An output of this exercise would be the provision of maps with the occurrence of the disease and the vectors. TOR 3 and 4 will be answered by a qualitative risk assessment. The model used in the ASF opinion could be a starting point. The Panel accepted the idea of a small core-working group including a RVF expert, an entomologist, a risk assessor, a regional expert. The Panel also agreed on the idea of the organisation of a workshop for expert knowledge elicitation, including broader range of expertise from the region, to be organised in the last quarter of 2012.

9. OTHER ISSUES

9.1. Meeting of the Scientific Committee

Mike Sharp, vice-chair of the AHAW Panel, provided information from the latest meeting of the EFSA Scientific Committee that was of interest for the AHAW Panel.