

**ALPHA UNIT**

**Scientific Panel on Animal Health and Welfare**

**Minutes of the 80<sup>th</sup> plenary meeting**

**Held on 04-05 02 2014, Parma  
(Agreed on 30 03 2014)<sup>1</sup>**

**Participants**

**• Panel Members:**

Edith Authié, Charlotte Berg, Howard Brownman, Klaus Depner, Aline De Koeijer, Mariano Domingo, Sandra Edwards, Christine Fourichon, Frank Koenen, Simon More, Mohan Raj, Liisa Sihvonen, Hans Spoolder, Jan Arend Stegeman, Hans-Hermann Thulke, Ivar Vågsholm, Antonio Velarde, and Preben Willeberg

**• Hearing Experts:**

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**• European Commission and/or Member States representatives:**

- Marina Marini (Unit 03, DG SANCO)
- Francesco Berlingieri, (Unit G2, DG SANCO, item 9.2.c, via web conference)
- Nicolas Krieger, (Unit G2, DG SANCO, item 9.2 c, via web conference)

**• EFSA:**

- ALPHA Unit: Franck Berthe
- AHAW team: Alessandro Broglia, Denise Candiani, Sofie Dhollander, Maria Ferrara, Andrea Gervelmeyer, Andrej Gogin, Per Have, Justyna Jaskiewicz, Renata Leuschner, Silvia I. Nicolau-Solano, and Frank Verdonck

**• Observers:**

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<sup>1</sup> The publication of the minutes shall be made without delay in compliance with the Founding Regulation and no later than 15 working days following the day of their agreement.

## **1. Welcome and apologies for absence**

The Chair welcomed the participants.

Apologies were received from Annette Bøtner, Ilaria Capua and Stéphan Zientara.

## **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 Processes<sup>2</sup> and the Decision of the Executive Director implementing this Policy regarding Declarations of Interests<sup>3</sup>, EFSA screened the Annual Declaration of interest (ADoI) and the Specific Declaration of interest (SDoI) filled in by the experts invited for the present meeting. For further details on the outcome of the screening of the SDoI please refer to Annex I.

## **4. Agreement of the minutes of the 79th Plenary meeting held on 26-27 11 2013.**

The minutes were agreed by written procedure on 16 12 2013 and published on the EFSA website 16 12 2013.

## **5. Report on written procedures since 79<sup>th</sup> Plenary meeting**

None

## **6. Scientific outputs submitted for possible adoption**

None

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

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules.pdf>

## 7. Scientific outputs submitted for discussion

### a. Scientific opinion on Enzootic Bovine Leukosis

Enzootic bovine leukosis (EBL) is a disease caused by the bovine leukaemia virus. Most infections appear to be subclinical, but a proportion of cattle over 3 years old develop persistent lymphocytosis, and a smaller proportion develop lymphosarcomas in various internal organs. While the infection appears to be widespread globally, in the EU there are many Member States that are officially free (Decision 2003/467/EC), or have one or more regions recognised as officially free.

There is a need to assess if EBL is a disease for which control measures are still justified. This is linked to the existence of free areas within the EU and in some of its trading partners and the possible risk of reintroduction of the disease in these currently free areas. Another important aspect is related to the determination the morbidity rate and if it can be considered significant at country or regional level; this consequently needs to be assessed against the control measures and their impact on cattle production.

There may be a need for an assessment of the significance of the risk posed by EBL, its morbidity and the relevance of control measures and surveillance. The Commission asks EFSA for a scientific opinion on the following aspects of EBL:

- the disease profile and significance comprising the morbidity and mortality rates (both quantitative and qualitative) and modes of transmission of the disease in animal populations at country or regional level;
- the assessment of the persistence of the disease in an animal population or in the environment and the routes and speed of transmission of the disease between animals, the distribution of the disease in the EU and the risk of its introduction;
- the impact of the disease on agricultural production considering the level of presence of the disease in the Union, the loss of production due to the disease and its impact on animal welfare and the biodiversity and environment;
- the existence of suitable diagnostic and disease control tools;
- the feasibility, availability, proportionality and effectiveness of the disease prevention and control measures.

The draft opinion, including comments from deep-readers, was presented for detailed discussion. It was suggested to describe the methodology and the approach used to reply to the terms of reference in more detail. It was also suggested to mention that abandoning control measures close to having achieved eradication of EBL would carry a great risk of waste of the resources already invested in controlling the disease.

It was requested to tabulate the various studies on tumour frequency and to attempt to quantify the impact of EBL on production with particular reference to the current epidemiological situation in US, Argentina and Japan. Control options should be considered more in terms of proportionality.

A final and extended WG meeting (workshop) with hearing experts from MS, US, Argentina and Japan will be held on March 11-12. The outcome of this meeting will be incorporated into the draft opinion for possible adoption at the March Plenary.

### b. Update of the 2010 scientific opinion on African Swine Fever

African swine fever (ASF) is a highly contagious and fatal disease of domestic pigs and wild boar that is transmitted through direct contact, ingestion of contaminated feedstuffs and

certain tick species. ASF is considered one of the most dangerous animal diseases of pigs; it affects trade and has a serious socio-economic impact on people's livelihood.

ASF is transmitted by direct contacts between infected and uninfected animals; it is also transmitted through feeding of virus contaminated products (swill and garbage waste) and through vectors.

ASF was confirmed in Georgia in 2007 and then it spread to the Russian Federation where numerous outbreaks have been notified in domestic pigs and wild boars. In 2012 an outbreak of ASF was reported in Ukraine and in 2013 Belarus confirmed the disease in a backyard holding in the region of Grodno, some forty kilometers from the Lithuanian border. In July, a second outbreak was confirmed in a commercial holding in Belarus, close the Russian border. Although there are not recent official reports of new cases in Belarus, there is indication that the ASF epidemic is still on-going there, possibly in domestic pigs and wild boars.

The main measures to control ASF are laid down in Council Directive 2002/60/EC and Commission Decision 2003/422/EC. No vaccine is available to prevent ASF infection and the control provisions applied in case of an outbreak are based on classical disease control measures.

The ASF epidemiological situation has changed significantly in Eastern Europe in the last year and the presence of the disease close to the EU border represents a serious risk to the livestock population of the Union and a challenge for animal health risk managers. It is therefore necessary to better determine the extent of the problem in order to better target preventive and control measures in the light of the current evolution of the ASF epidemic at the EU border updating and completing the scientific opinion issued by EFSA in 2010 .

The Commission asks EFSA for a scientific opinion on;

- Update the significance of the occurrence and risk of endemicity of ASF in the countries neighbouring the EU at higher risk;
- The evaluation of all the possible pathways of introduction of ASF into the EU, ranking them on the basis of their level of risk with a view to enhance preparedness and prevention.

The draft opinion, including comments from deep-readers, was presented for detailed discussion. The most important comments concerned the role of wild boar in the spread of ASFV, their potential 'carrier status' and the paragraphs on antibody detection and clinical signs. The panel suggested to reformulate the chapter reporting on the results of the EKE (ToR 1), and to include a class indicating a zero-risk for the possibility of to become and remain contaminated with infectious ASFV (ToR 2). The conclusions of the draft opinion were discussed.

**c. Scientific opinion concerning a multifactorial approach on the use of animal-based measures to assess the welfare of pigs**

The Commission is planning to develop guidelines to facilitate the proper implementation of the requirements of Council Directive 2008/120/EC laying down minimum standards for the protection of pigs as part of the EU Animal Welfare Strategy 2011-2015. Therefore EFSA is requested to deliver a scientific opinion to assess the multi-factorial interaction and associations between risk factors, welfare consequences and animal-based measures to assess the welfare of pigs bearing in mind the objective of their use in assessing degree of compliance with legal requirements.

The Commission requests EFSA to use a multi-factorial approach on the use of animal-based measures to assess the welfare of pigs especially those welfare parameters regulated in Directive 2008/120, Articles 3 and 4 and Annex I Chapter I-II as well as Directive 98/58 Annex numbers 10, 13 second paragraph, 14, 15 and 16.

- Identify the multiple interactions between risk factors, welfare consequences and animal-based measures
- Identify the strength and predictive capacity of the above identified interaction
- Propose a model of the above mentioned interactions to evaluate how likely certain welfare consequences may happen given certain factors and which animal-based measure would better fit for the assessment of those consequences.

The assessment should be based on and linked to the risk assessment of the previous EFSA scientific opinions on the welfare of pigs. In particular the Commission highlights the importance of the chosen indicators use in assessing compliance with legislative requirements as listed above.

The approach taken by the Working Group (WG) was presented to the Panel members by the WG chair. The Panel discussed and commented on the main limitations faced when addressing this mandate (i.e the time constraints, the lack of harmonized data, the uncertainties related to the statistical analyses, the lack of validated protocols) and these should be flagged in the opinion. The Panel discussed and agreed on the approach taken. No major changes to the draft opinion were proposed, although some minor revisions are to be done before the next Panel meeting (81<sup>st</sup> Plenary meeting) when the draft document will be presented for possible adoption.

## 8. New Mandates

### **Scientific opinion concerning the electrical requirements for waterbath stunning equipment (EFSA-Q-2014-00089)**

#### BACKGROUND

The Commission has received information from a third country which may justify amending the parameters laid down in Table 2 of Chapter II of Annex I to Regulation (EC) No 1099/2009 on the protection of animals at the time of killing sets out the average values per animal of electrical requirement which must be used when stunning chickens, turkeys, ducks, geese and quails using waterbath stunning equipment.

Article 2 (f) of Regulation (EC) No 1099/2009 defines “stunning” as “any intentionally induced process which causes loss of consciousness and sensibility without pain including any process resulting in instantaneous death”. Furthermore, Article 4 states that “The loss of consciousness and sensibility should be maintained until the death of the animal”. Article 4 (2) of the same Regulation allows the Commission to amend its Annex I so as to take into account scientific and technical progress on the basis of an opinion of the EFSA. Any such amendments shall ensure a level of animal welfare at least equivalent to that ensured by the existing methods.

In order to reply to this request, the Commission would like to request the EFSA to review the scientific publication provided and assess to which extent the electrical parameters proposed for stunning poultry are able to provide a level of animal welfare at least equivalent to that ensured by the currently allowed methods and, in case of favourable reply, under which conditions.

#### TERMS OF REFERENCE

- Review if the study provides sufficient scientific details as to evaluate the stunning procedure applied and its welfare outcome;
- In case of favourable reply, carry out a full welfare assessment of the animal welfare implications of the proposed stunning procedure, taking into account other relevant scientific references;

- Recommend, if necessary, a revision of 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.

## DISCUSSION AT THE PLENARY MEETING

The mandate and terms of reference were discussed. They were considered as clear and the timeline as appropriate. It was decided to establish a WG which would be chaired by Howard Browman and supported by Mohan Raj and Antonio Velarde with the aim to deliver a scientific opinion by December 2014 at the latest.

### **Scientific opinion on the welfare assessment of dairy cows in small scale farming systems**

#### BACKGROUND

Based on the EU Strategy for the protection and welfare of animals 2012-2015, the Commission is examining the feasibility of drafting EU guidelines for the "animal welfare friendly" keeping of dairy cows to be used voluntarily by farmers. The Commission requests EFSA to assess the welfare risks for dairy cows in small scale farming systems focusing on the suitability of the animal-based measures, already identified by EFSA, to those systems. More specifically, the Commission requests EFSA to move towards a practical application of its risk assessment methodology suitable for small scale farming systems and scientifically categorize them on the basis of quantified welfare risks.

#### TERMS OF REFERENCE

The Commission requested EFSA to develop a scientific opinion on the assessment of animal welfare in small scale dairy farming systems. As a first step a review of the available description and categorization of small scale/non-conventional farms in relation to the size and types of farming systems and husbandry practices should be carried out. The risk assessment should cover dairy cows both during lactation and dry period and it should be carried out for the following categories of small scale dairy farms (with up to 75 dairy cows on the farm):

- farms where animals are kept inside throughout the entire year;
- farms where animals are kept outside on pasture throughout the entire year;
- farms where animals are kept outside on pasture during the summer and inside during the winter;

- To identify the main factors and welfare consequences under the above-classified farming systems and apply the risk assessment methodology for risk ranking;
- To assess if the animal-based measures for dairy cows, identified by 2012 EFSA scientific opinion on the use of animal-based measures to assess welfare of dairy cows, are suitable to assess animal welfare in the above-classified farming systems;
- To assess the impact on welfare of production diseases in small scale dairy cows farming systems.

The assessment should take into account the assessments already performed by EFSA as well as the ongoing work on the welfare of dairy cows (the pilot project on the "Identification, validation and collection of data on animal-based measures to create a database for quantitative assessment of the welfare of dairy cows").

## DISCUSSION AT THE PLENARY MEETING

The mandate was presented together with its terms of reference. A brief discussion was held on the threshold, as set up by the ToRs, of 75 dairy cows for the definition of the small scale farms. Such a threshold might not be significant, thus the need of a proper description and definition of such small scale farms was highlighted.

## **9. Feedback from the Scientific Committee/the Scientific Panel, Working Groups, EFSA, the European Commission**

### **9.1 Scientific Committee and other Scientific Panels**

The Scientific Committee Working Group on Biological Emerging Risks (SC WG BER) will circulate its draft report to the AHW Panel before the 81th Plenary meeting in March, when the report will be discussed. One of the main conclusions is the need to better understand the context of emergence of biological risks to be able to identify areas of potential emergence.

### **9.2 Working groups**

#### **a) Scientific opinion on Canine Leishmaniosis (M-2013-0303 )**

Scientific evidence from EFSA is required in order to support the European Commission in determining if canine leishmaniosis complies with the characteristics of a disease for which the Commission might adopt preventive health measures for its control pursuant to Regulation (EC) No 998/2013 of the European Parliament and of the Council. Those measures shall be scientifically justified and proportionate to the risk of spreading those diseases due to such movement. *Leishmania infantum* is the most widespread etiological agent of zoonotic cutaneous and visceral leishmaniosis in human and of canine leishmaniosis in dogs in Mediterranean areas. Canine leishmaniosis is a major global vector-borne zoonotic disease and potentially fatal to humans and dogs.

Preparatory work has been carried out by a contractor. A work plan has been developed and the working group exerts have been selected for the working group.

The EC requested:

1. To collect the necessary data to characterize canine leishmaniosis in Europe and in particular:
  - a. the inherent aspects of the epidemiology of the disease, i.e. the affected species, the life cycle, the modes of transmission and potential persistence of the parasite, the distribution of the disease (free and endemic areas);
  - b. the impact of *Leishmania infantum* infections on animal health and welfare, human health, as well as its environmental impact in the regions of the EU, where the disease is endemic.
2. To assess the efficacy of available preventive measures to protect dogs against *Leishmania infantum* infection, with the objective of mitigating the risk of introduction of the infection into free areas in the EU through movements of infected dogs.
3. To assess the risk that the infection would become established in free areas of the EU if *Leishmania infantum* were introduced by infected dogs.

The methodology to address these terms was briefly presented and agreed upon. For the characterization of the disease (ToR 1 a), a narrative literature review was carried out by the procurement, as well as an impact assessment (ToR 1 b), which was based on the OIE's phylum methodology. The mandate will only address the impact on the human health and the animal health and welfare, however. The relevant sections have been extracted from the procurement report. The working group experts will review these sections and contribute to the missing aspects.

For ToR 2, a systematic review (SR) on the efficacy of the preventive measures (vaccinations, collars and pour-on insecticides and prophylactic medication) has been carried out by the procurement. This SR will be updated by the EFSA ALPHA staff. Additionally, a second SR will be carried out under the current framework contract for SR's, to determine the sensitivity and specificity of the available diagnostic tools, and the efficacy of available treatments marketed in the EU, in the context of 'testing and treating' dogs, moving from endemic areas to free areas in the EU (or testing and including dogs, in case of commercial movements of dogs).

A stochastic continuous-time state transition modeling framework was developed to address ToR3 by the procurement, which was individual-based for the dog populations and used vectorial capacity (VC) to generalize the potential of the sand fly population to transmit the disease to dogs under the assumption of independence from the prevalence of infection in sand flies. The limitations of the model were discussed. It was decided that, considering the scarcity of detailed quantitative data, e.g. on dog movements and dog and sandfly population densities in the relevant areas, the model could be a good option, if, e.g. 3 scenarios could be developed which would deliver the minimum, most likely and maximum R<sub>0</sub> values that could be expected in non-endemic areas. The quantification of the model will have to be checked. The outcomes of this exercise will be presented during the plenary meeting in May.

**b) Scientific opinion on sheep pox and goat pox (M-2013-0333), Scientific opinion on lumpy skin disease (M-2013-0332), Scientific opinion on Peste des Petits Ruminants (M-2013-0362)**

Background on sheep and goat pox mandate

Sheep pox and goat pox (Capripox) are viral diseases of sheep and goats. Both diseases are caused by strains of Capripoxvirus which can all infect sheep and goats. Even if most of the strains cause more severe clinical disease in either sheep or goats, some strains are equally pathogenic in both species. These diseases are characterised by fever, generalised papules or nodules, sometimes vesicles or internal lesions or death. In indigenous animals, generalised disease and mortality are often less common, even if possible where disease has been absent from an area for a period of time or in association with other diseases such as peste des petits ruminants or foot and mouth disease.

Sheep pox and goat pox are endemic in Africa north of the Equator, the Middle East, Turkey, and some parts of Asia. Sheep pox and goat pox are exotic to the EU, even if several outbreaks occurred in the past years and decades in Greece and Bulgaria, and especially in 2013 where sheep pox has been reintroduced in Greece since August 2013 and in Bulgaria since September 2013.

Sheep pox and goat pox are included within the category of sheep and goat diseases on the OIE list of diseases in Article 1.2.3. of the Terrestrial Animal Health Code (the Code) of the World Organisation for Animal Health (OIE), with compulsory notification to the OIE for the EU Member States and its trading partners. Specific international trade standards for sheep pox and goat pox are provided for in Chapter 14.10. of the Code as well as in Chapter 2.7.14. of the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals.

Background on lumpy skin disease

Lumpy skin disease (LSD) is a pox disease of cattle caused by capripoxvirus, of the genus Capripoxvirus, in the family Poxviridae. Various strains of capripoxvirus are responsible for the disease, yet they are not the same strains causing sheep and goat pox. Transmission of LSD virus appears to occur predominantly by insects (possibly through mechanical vectors like mosquitoes, flies and ticks), natural contact transmission in the absence of insect

vectors being a minor source of infection, while feed and water contaminated with infected saliva may also be transmission routes.

LSD is exotic to the EU. It has been reported in the African continent as well as in the Middle East and in Asia. Turkey reported the first occurrence of LSD in 2013. If the virus were to enter the EU it could have severe direct losses related to temporary reduction in milk production, temporary or permanent sterility in bulls, damage to hides and death due to secondary bacterial infections. LSD entails notification obligations to the OIE.

### Background on PPR

Peste des petits ruminants (PPR) is an acute contagious disease caused by a Morbillivirus in the family Paramyxoviridae. It affects mainly sheep and goats and occasionally wild small ruminants. It has been reported on a few occasions in camels, cattle and buffaloes. PPR represents one of the most economically important animal diseases in areas that rely on small ruminants.

PPR is exotic to the EU. It occurs in Africa, in the Arabian Peninsula, Middle East, and in Central and South- East Asia. The disease is currently being reported in Turkey and several other Northern African countries. If the virus were to enter the EU it could have severe direct losses related to important mortality rates in naïve populations. PPR entails notification obligations to the OIE.

As the three mandates on SPGP, LSD, and PPR have the same ToRs (see below), it has been proposed to approach them in a similar and common way, although three different opinions will be adopted.

#### Terms of reference:

1. Characterise the disease and provide an update on the global occurrence of [SPGP/LSD/PPR] and changes in the distribution during the last 15 years.
2. Provide a mapping of the regions of concern and other countries of the Mediterranean Basin and Black sea, displaying identified or likely major live animal trade routes.
3. Evaluate all possible pathways of introduction of [SPGP/LSD/PPR] into the EU, ranking them on the basis of their level of risk, with a view to enhance preparedness and prevention.
4. Assess the risk and speed of propagation of [SPGP/LSD/PPR] into the EU and neighbouring countries.
5. Assess the risk of [SPGP/LSD/PPR] becoming endemic in animal population in the EU and neighbouring countries.
6. Assess the impact and consequences of [SPGP/LSD/PPR] when entering the EU considering different scenarios as regard the effectiveness of surveillance and control measures.
7. Briefly review the feasibility, availability and effectiveness of the main disease prevention and control measures (diagnostic tools, biosecurity measures, restrictions on the movement, culling, vaccination).

For sheep pox in particular, the deadline proposed by EC for the seven ToRs is very strict, due to urgency of receiving scientific advice in light of the outbreaks in Greece and Bulgaria. After negotiation with EC about deliverables and deadlines, the agreement was reached that by May 2014 a first opinion will be delivered including the following elements:

- For Tor 3: identification of pathways of introduction (without performing the ranking exercise);
- For Tor4: assessment of risk of spread and propagation;
- For Tor 7: Review of control measures taking into account pros and cons of each, so to provide a tool to evaluate their feasibility according to the specific context.

The remaining ToRs could be addressed by December 2014.

It was agreed that the condition to deliver this first batch of work in May 2014 is to have full collaboration from EC and the MSs implicated in the outbreaks (i.e. Greece, Bulgaria) in order to receive sufficient sound epidemiological data about the outbreaks. On this basis the spread model could be fed with current epidemiological data from the region of concern. The AMU Unit has also been involved in the preparatory work and the next steps include:

- Retrieving outbreak data from ADNS system, OIE, FAO database and MSs about outbreaks in Greece, Bulgaria and Turkey;
- Assisting in outsourcing the development of a kernel-based model to assess the spread risk;

Among the Panel members, Aline de Koeijer, Hans Hermann Thulke and Arjan Stegeman expressed their availability to contribute to these mandates.

### **c) Conceptual model for bovine tuberculosis (M-2013-0174)**

Bovine tuberculosis is included as one of the animal diseases to be eradicated in the European Union since 1964. Substantial progress towards eradication has been achieved by the control policies implemented. However during the years 2006-2011, the proportion of existing cattle herds infected or positive for *M. bovis* in the EU (all MSs) has remained stable. Further decrease has not been observed and re-emergency is being reported in several countries.

Several EFSA opinions have looked at specific aspects of this complex picture and it is felt that such an approach is not optimal for scientific advice to risk managers since it does not contemplate the interactions between animal populations and their environment, and the specificities of testing and culling programs applied in different field situations.

The AHAW Panel wishes to develop a conceptual framework towards holistic approach to bovine tuberculosis. The objective is to establish and maintain a broad understanding of the epidemiology of bovine tuberculosis, relevant to effective surveillance and control, throughout the EU, while addressing specific questions posed from the Commission. In order to achieve this objective, the Panel considers that it is necessary to compare the epidemiological situations in different MS and different areas within each MS, and to identify key issues that hinder effective bTB surveillance and control or otherwise provide an explanation for differences in surveillance/control effectiveness in different epidemiological contexts.

A short update was presented to inform the Panel that two social scientists joined the working group to describe the non-biological context in relation to bTB. A chapter on the transition from a conceptual framework to a parameterized model will be added to the Statement, including three examples of modelling methodologies that could be used. On 3-4 March, a WG meeting with hearing experts from 15 Member States will take place in Parma to review the draft Statement. A Panel discussion on the draft Statement is foreseen in March and the new deadline of the mandate is end May 2014. An abstract will be submitted to present this work at the 6<sup>th</sup> international conference on *Mycobacterium bovis* (June, Cardiff).

### **d) Welfare risks related to the farming of sheep for wool, meat and milk production (M-2013-0197)**

The mandate comes in the frame of the new EU Animal Welfare Strategy which foresees the introduction of animal-based indicators in a revised animal welfare legal framework as well as to strengthen international technical collaborations. International organisations and global stakeholders, such as the International Wool Trade Organisation (IWTO), are moving towards more sustainable livestock production policies and farming practices, developing guidelines and codes of practices including also the welfare of sheep.

The mandate, to be finalized by December 2014, requests EFSA to:

- identify the main factors and welfare consequences and perform the risk characterisation for the farming of sheep for wool, meat and milk production, taking into account differences in genetic lines, local production systems, environmental conditions and nutrition;
- based on the risk assessment carried out following point 1 and on the analysis of breeds' distribution, to identify the main welfare risks common to the different production typologies and main breeds in order to develop a matrix linking breeds/common risks/welfare consequences/risk characterization;
- based on the outcome of the above terms of reference, to identify the animal-based measures that can be used to assess the welfare of sheep and the main welfare risks identified.

A short update was given to inform the Panel on the state of development of the opinion and on the methodological approach that the WG is following. In particular, the WG has so far focused on:

- identifying the management systems that, together with the breed typologies, will constitute the main elements of the risk assessment scenarios;
- developing a conceptual model to identify main welfare consequences, animal-based measures and related factors, to be related to the specific management system. Such model is being built on the welfare principles and criteria developed by the Welfare Quality® project,

In addition, a systematic literature review is also being carried out in parallel.

### **9.3 EFSA**

None

### **9.4 European Commission**

None

## **10. Other scientific topics for information and/or discussion**

None

## **11. Any Other Business**

None

## Annex I

### Interests and actions resulting from the screening of Specific Declaration of Interests (SDoI)<sup>4</sup>

**a) CONFLICT OF INTEREST:** At the beginning of the present meeting, Dr. Klaus Depner declared orally the following interest: update of the 2010 scientific opinion on African swine fever. In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes and the Decision of the Executive Director implementing this Policy regarding Declarations of Interests, and taking into account the specific matters discussed at the meeting in question, the interest above was deemed to represent a conflict of Interest.

Therefore, the expert abstains from the adoption of Update of the 2010 scientific opinion on African swine fever.

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<sup>4</sup> The Annual Declarations of Interests have been screened and approved before inviting the experts to the meeting, in accordance with the Decision of the Executive Director implementing the Policy on Independence regarding Declarations of Interests.