
ALPHA UNIT

Scientific Panel on Animal Health and Welfare
Minutes of the 8th meeting of the Working Group on a Multifactorial approach to
assess the welfare of pigs
VIDEO/WEB/TELE-conference, 28 04 2014
(Agreed on 14 05 2014)

Participants

- **Working Group Experts:**
 - Sandra Edwards
 - Hans Spoolder¹
 - Antonio Velarde Calvo
 - Ziv Shkedy²
 - Anna Valros³

- **EFSA:**
 - ALPHA Unit: Silvia I. Nicolau-Solano

1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from Jose Cortinas.

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 Processes⁴ and the Decision of the Executive Director implementing this Policy regarding Declarations of Interests⁵, EFSA screened the Annual Declaration of interest and the Specific Declaration of interest) filled in by the experts invited for the present meeting. No

¹ Present from 12.30 onwards

² Present until 14.30

³ Present until 14.45

⁴ <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

⁵ <http://www.efsa.europa.eu/en/keydocs/docs/independencerules.pdf>

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 (7)th Working Group meeting held on 10 03 2014 VIDEO/WEB/TELE-conference. The minutes were agreed on 10 03 2014 and published on the EFSA website on 14 03 2014.

5. Scientific topic(s) for discussion

5.1 Draft opinion on Multifactorial approach to assess the welfare of pigs
[\(EFSA-Q-2013-00667\)](#)

The members of the Working Group (WG) discussed the outcome of the pen-level analyses of the Welfare Quality datasets and revised the respective sections of the draft opinion. The WG also discussed the data collection model as well as the toolboxes to be proposed under ToR3. The draft opinion was revised, minor revisions were proposed and tasks were divided among the WG members and EFSA staff.

6. Any Other Business

The new deadline (01 07 2014) was formally accepted by the Commission on 26.03.2014.

7. Next meeting(s)

To be decided after the outcome from the 82th AHAW Panel meeting.

ALPHA UNIT

Scientific Panel on Animal Health and Welfare
Minutes of the 7th meeting of the Working group on a Multifactorial approach to
assess the welfare of pigs
VIDEO/WEB/TELE-conference, 10 03 2014, Parma
(Agreed on 10 03 2014)

Participants

- **Working Group Experts:**
 - Sandra Edwards
 - Hans Spoolder
 - Anna Valros
 - Antonio Velarde Calvo

- **EFSA:**
 - ALPHA Unit: Maria Ferrara
 - AMU Unit: Jose Cortinas, Anna Zuliani

1. Welcome and apologies for absence

The Chair welcomed the participants and opened the meeting.

Apologies were received from Ziv Shkedy.

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 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

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

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

during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

4. Agreement of the minutes of the 6th Working Group meeting held on 24-25 02 2014, Parma. The minutes were agreed on 25 02 2014 and published on the EFSA website on 28 02 2014.

5. Scientific topic for discussion

5.1 Draft opinion on Multifactorial approach to assess the welfare of pigs ([EFSA-Q-2013-00667](#))

The members of the Working Group (WG) discussed the draft opinion on Multifactorial approach to assess the welfare of pigs. In particular, the conclusion and recommendation section was discussed and preliminary agreed. The draft opinion will be revised accordingly to the outcome from the more comprehensive data analyses at pen, rather than a farm, level. Minor revisions were proposed and tasks were divided among the WG members and EFSA staff.

6. Any Other

The formal letter to the Commission on the request for an extension of the deadline in order carry out a more comprehensive data analyses has been issued and it's pending formal acceptance. The proposed new deadline to deliver the opinion is by 30th June 2014. As already discussed at technical level with commission services, the draft opinion will be presented for possible adoption at the 83rd AHAW Plenary meeting.

7. Next meeting

The 8th WG meeting of the AHAW WG on Multifactorial approach to assess pig welfare will be held on the 7th April 2014.

ALPHA UNIT

Scientific Panel on Animal Health and Welfare
Minutes of the 6th meeting of the Working group on a Multifactorial approach to
assess the welfare of pigs
Held on 24-25 02 2014, Parma
(Agreed on 25 02 2014)

Participants

- **Working Group Experts:**
 - Sandra Edwards
 - Hans Spoolder
 - Anna Valros
 - Antonio Velarde Calvo

- **European Commission and/or Member States representatives:**
 - Bente Bergersen ¹

- **EFSA:**
 - ALPHA Unit: Silvia I. Nicolau-Solano
 - SAS Unit: Jose Cortinas²

1. Welcome and apologies for absence

The Chair welcomed the participants and opened the meeting.

Apologies were received from Ziv Shkedy.

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 Processes³ and the Decision of the Executive Director implementing this Policy regarding

¹ Present in the afternoon of the first day via audio call

² Present only for some parts in the meeting.

Declarations of Interests⁴, 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 5th Working Group meeting held on 13 01 2014, Parma. The minutes were agreed on 13 01 2014 and published on the EFSA website on 15 01 2014.

5. Scientific topic for discussion

5.1 Draft opinion on Multifactorial approach to assess the welfare of pigs ([EFSA-Q-2013-00667](#))

The members of the Working Group (WG) discussed all chapters of the draft opinion on Multifactorial approach to assess the welfare of pigs. Revisions were proposed and tasks were divided among the WG. The WG discussed with Commission the possibility to extend the deadline until 1st July 2014 in order to carry out some further data analyses.

6. Any Other

none

7. Next meeting

The 7th WG meeting of the AHAW WG on Multifactorial approach to assess pig welfare will be held on the 10 March 2014.

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

⁴ <http://www.efsa.europa.eu/en/keydocs/docs/independencerules.pdf>

ALPHA UNIT

Scientific Panel on Animal Health and Welfare
Minutes of the 5th meeting of the Working group on a Multifactorial approach to
assess the welfare of pigs
Held on 13 01 2014, Parma
(Agreed on 13 01 2014)

Participants

- **Working Group Experts:**
 - Sandra Edwards
 - Hans Spoolder
 - Anna Valros
 - Antonio Velarde Calvo
 - Ziv Shkedy.

- **Hearing Experts:**
 - Marc Brake (for all agenda items)

- **European Commission and/or Member States representatives:**
 - n/a

- **EFSA:**
 - ALPHA Unit: Silvia I. Nicolau-Solano
 - SAS Unit: Jose Cortinas¹ and Anna Zuliani¹

1. Welcome and apologies for absence

The Chair welcomed the participants and opened the meeting.

No apologies were received.

¹ Present only for some parts in the meeting.

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 Processes² and the Decision of the Executive Director implementing this Policy regarding Declarations of Interests³, 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 4th Working Group meeting held on 13 12 2013, VIDEO/WEB/TELE-conference. The minutes were agreed on 13 12 2013 and published on the EFSA website on 03 12 20135.

5. Scientific topic for discussion

5.1 Draft opinion on Multifactorial approach to assess the welfare of pigs ([EFSA-Q-2013-00667](#))

The members of the Working Group (WG) discussed the chapters of the draft opinion on Multifactorial approach to assess the welfare of pigs and the work done so far on data modelling. Revisions were proposed and tasks were divided among the WG.

6. Any Other

none

7. Next meeting

The 6th WG meeting of the AHAW WG on Multifactorial approach to assess pig welfare will be held on the 24-25 February 2013.

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

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

Parma, 13.12.2013

Scientific Panel on Animal Health and Welfare
Minutes of the 4th meeting of the Working group on a Multifactorial approach to assess the welfare of pigs

VIDEO/WEB/TELE-conference on 13 12 2013

(Agreed on 13 12 2013)

Participants

- **Working Group Experts:**

Sandra Edwards (chair), Hans Spoolder, Anna Valros, Antonio Velarde Calvo and Ziv Shkedy.

- **Hearing Experts:**

n/a

- **European Commission representatives:**

n/a

- **EFSA:**

- **AHAW Unit:** Silvia I. Nicolau-Solano
- **SAS Unit:** Jose Cortinas¹ and Anna Zuliani¹

1. Welcome and apologies for absence

The Chair welcomed the participants and opened the meeting.

No apologies were received.

2. Adoption of agenda

The agenda was adopted without changes.

¹ Present only for some parts of the meeting.

3. Declarations of interest

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes² and the Decision of the Executive Director implementing this Policy regarding Declarations of Interests,³ 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 in the Oral Declaration of interest at the beginning of this meeting.

4. Agreement of the minutes of the 3rd WG meeting held on 02 December 2013, Parma. The minutes were agreed on 12 12 2013 and will be published on the EFSA website on the week commencing on 16 12 2013.

5. Scientific topic for discussion

5.1 Draft opinion on Multifactorial approach to assess the welfare of pigs ([EFSA-Q-201300667](#))

The Working Group (WG) and the EFSA staff discussed the progress done so far on draft opinion, in particular the work done on data collection, analysis and modelling in relation to EC mandate on Multifactorial approach on the use of animal and non-animal based measures to assess the welfare of pigs (M-2013-0236, EFSA-Q-2013-00667). The WG also discussed the draft text on the interpretation of the Terms of References. The text as presented in an Annex to these minutes was shared and agreed with the European Commission representative the day before the meeting.

6. Any Other

none

7. Next meeting

The 5th WG meeting of the AHAW WG on Multifactorial approach to assess pig welfare will be held on the 13 January 2014.

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

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

ANNEX. TERMS OF REFERENCE AS PROVIDED BY EUROPEAN COMMISSION

The Commission therefore considers it opportune to request EFSA to use a Multifactorial approach on the use of both animal- and non-animal based measures to assess the welfare of pigs especially those welfare parameters regulated in Directive 2008/120, Article 3(5) and Annex I Chapter I numbers 4 and 8 regulating the provision of manipulable material and avoidance of tail-docking.

1. Identify the multiple interactions between risk factors, welfare consequences and animal-based and non-animal based measures.
2. Identify the strength and predictive capacity of the above identified interactions
3. Propose a model to evaluate how likely certain welfare consequences may happen given specific risk factors and which animal- and/or non-animal based measures 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.

INTERPRETATION OF THE TERMS OF REFERENCE (DRAFT)

In order to address the ToR, the Opinion will consider separately the issues of avoidance of tail docking and provision of functional manipulable materials which meet the needs of the animals, although there is significant interaction between these two issues which will be incorporated in the response. Since tail docking of neonatal piglets is carried out to reduce the risk of tail biting in later life, consideration focuses on the other risk factors for tail biting in rearing and finishing pigs, and how these might be better managed and controlled in a farm situation to reduce the need for docking. To promote the use of functional manipulable materials, consideration focuses on the identification of when such materials meet the behavioural needs of the animals at different stages in life, and how this might be assessed in a farm situation.

To address the first ToR, regarding the multiple interactions between risk factors, welfare consequences and animal-based and non-animal based measures, a summary of information is therefore provided on these two questions. This will draw on the previous EFSA opinions with particular relevance to these questions, where much of the necessary scientific literature was reviewed and expert opinion presented.

Scientific Opinion on animal health and welfare in fattening pigs in relation to housing and husbandry
Scientific Opinion on the animal health and welfare aspects of different housing and husbandry systems for adult breeding boars, pregnant, farrowing sows and unweaned piglets
Scientific Opinion on the risks associated with tail biting in pigs and possible means to reduce the need for tail docking considering the different housing and husbandry systems
Scientific Opinion on the use of animal-based measures to assess welfare in pigs

This information, together with review of any new scientific information since the publication of these opinions, will be used to construct a diagrammatic representation of the interactions between (i) the risk factors for tail biting, the welfare consequences of being motivated to tail bite or being tail bitten and the indicators which can be used to identify and measure these welfare consequences. In addition, the animal based measures which directly or indirectly

indicate the presence and level of risk factors present in a given situation will also be considered. (ii) the risk factors for poor welfare consequent on the failure to provide manipulable material at different stages in the pig's life, the welfare consequences of such lack of provision, and the indicators which can be used to identify and measure these welfare consequences.

To address the second ToR, regarding the strength and predictive capacity of the above identified interactions, an attempt will be made to statistically quantify the relationships described in ToR 1 by carrying out a meta-analysis of information from available databases recording (i) multiple welfare outcome indicators in pigs and (ii) epidemiological studies on the risk factors for tail biting. Where the available data prove to be inadequate for such assessment, expert opinion will be used to construct a qualitative assessment of the relative importance of the described interactions.

To address the third ToR, the information from the first two ToR will be used to propose a practical model for how to evaluate (on a farm) how likely the adverse welfare consequences identified previously are to happen, given the specific risk factors which are present (on that farm). This will include a toolbox of animal- and/or non-animal based measures which can be used to assess the level of risk from the contributing factors in the case of (i) tail biting or (ii) lack of functional manipulable material, and to define the current extent of the welfare consequences.

Parma, 02.12.2013

Scientific Panel on Animal Health and Welfare
Minutes of the 3rd meeting of the Working group on a Multifactorial approach to assess the welfare of pigs
Held on 02 12 2013, Parma
(Agreed on 11 12 2013)

Participants

- **Working Group Experts:**
Sandra Edwards (chair), Hans Spoolder, Anna Valros, Antonio Velarde Calvo and Ziv Shkedy.

- **Hearing Experts:**
n/a

- **European Commission representatives:**
n/a

- **EFSA:**
 - **AHAW Unit:** Silvia I. Nicolau-Solano
 - **SAS Unit:** Jose Cortinas¹ and Anna Zuliani¹

- **Observers:**
n/a

1. Welcome and apologies for absence

The Chair welcomed the participants and opened the meeting.

No apologies were received.

¹ Present only for some parts in the meeting.

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 Processes² and the Decision of the Executive Director implementing this Policy regarding Declarations of Interests,³ 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 in the Oral Declaration of interest at the beginning of this meeting.

4. Agreement of the minutes of the 2nd meeting held on 22 November 2013, Parma.

The minutes were agreed on 25 11 2013 after the audio-conference meeting and published on the EFSA website on 26 11 2013

5. Scientific topic for discussion

5.1 Draft opinion on Multifactorial approach to assess the welfare of pigs ([EFSA-Q-2013-00667](#))

The members of the Working Group (WG) discussed the progress done so far on the draft opinion as well as on data modelling exercise, particularly on the data collected under the Welfare Quality protocol. The WG discussed the approach to address the terms of reference. A proposal will be presented to the Commission for further discussion and agreement. Tasks were divided among the WG to draft and revise sections of this opinion for next WG meeting.

6. Any Other

none

7. Next meeting

The 4th WG meeting of the AHAW WG on Multifactorial approach to assess pig welfare will be held on the 13 December 2013 (audio-web conference meeting).

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

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

Parma, 22. 11. 2013

Scientific Panel on Animal Health and Welfare
Minutes of the 2nd meeting of the Working group on a Multifactorial approach to
assess the welfare of pigs

VIDEO/WEB/TELE-conference on 22 11 2013

(Agreed on 25 11 2013)

Participants

- **Working Group Experts:**
Hans Spoolder, Anna Valros and Antonio Velarde Calvo.

- **Hearing Experts:**
n/a

- **European Commission representatives:**
n/a

- **EFSA:**
 - **AHAW Unit:** Silvia I. Nicolau-Solano
 - **SAS Unit:** Jose Cortinas and Jane Richardson

1. Welcome and apologies for absence

EFSA secretariat welcomed the participants and opened the meeting.

Apologies for absence were received from Sandra Edwards and Ziv Shkedy.

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 Interests,² 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 in the Oral Declaration of interest at the beginning of this meeting.

4. Agreement of the minutes of the 1st WG meeting held on 21 October 2013, Parma. The minutes were agreed after the meeting on 21 11 2013 and published on the EFSA website on 24 10 2013.

5. Scientific topic for discussion

5.1 Draft opinion on Multifactorial approach to assess the welfare of pigs ([EFSA-Q-201300667](#))

The Working Group (WG) and the EFSA staff discussed the progress done so far on the draft opinion as well as on data modelling in relation to EC mandate on Multifactorial approach on the use of animal and non-animal based measures to assess the welfare of pigs (M-2013-0236, EFSA-Q-2013-00667).

6. Any Other

none

7. Next meeting

The 3rd WG meeting of the AHAW WG on Multifactorial approach to assess pig welfare will be held on the 2nd December 2013.

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

Parma, 21.10.2013

Scientific Panel on Animal Health and Welfare
**Minutes of the 1st meeting of the Working group on a Multifactorial approach to assess
the welfare of pigs**
Held on 21 10 2013, Parma
(Agreed on 21 10 2013)

Participants

- **Working Group Experts:**
Sandra Edwards (chair), Hans Spoolder, Anna Valros and Antonio Velarde Calvo.

- **Hearing Experts:**
n/a

- **European Commission representatives:**
Bente Bergense¹

- **EFSA:**
 - **AHAW Unit:** Silvia I. Nicolau-Solano
 - **SAS Unit:** Jose Cortinas and Jane Richardson²

- **Observers:**
Leopoldo Humberto Stuardo Escobar; Agriculture and Livestock Service, Chile.
Christopher Hamilton-West.; University of Chile, Chile.

1. Welcome and apologies for absence

The Chair welcomed the participants and opened the meeting.

¹ Participated by teleconference in the afternoon session.

² Present only for some parts in the afternoon session.

No apologies were received.

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 Processes³ and the Decision of the Executive Director implementing this Policy regarding Declarations of Interests,⁴ 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 in the Oral Declaration of interest at the beginning of this meeting.

4. Agreement of the minutes of the initial meeting held on 11 October 2013, Parma. The minutes were agreed on 11 10 2013 after the audio-conference meeting and published on the EFSA website on 15 10 2013

5. Scientific topic for discussion

5.1 Draft opinion on Multifactorial approach to assess the welfare of pigs ([EFSA-Q-201300667](#))

The members of the Working Group (WG) and the EFSA secretariat discussed the terms of references, the work programme and the table of content of the draft scientific opinion. Tasks were divided among the WG to draft sections of this opinion. Clarifications on the first and third terms of references were discussed and agreed with the EC at the meeting. Some further clarifications are still needed regarding the second term of reference.

6. Any Other

none

7. Next meeting

The 2nd WG meeting of the AHAW WG on Multifactorial approach to assess pig welfare will be held on the 22 November 2013 (audio-web conference meeting).

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

⁴ <http://www.efsa.europa.eu/en/keydocs/docs/independencerules.pdf>

Parma, 10.10.2013

Scientific Panel on Animal Health and Welfare
Minutes of the Initial web-meeting on the Pig Welfare Assessment Mandate
VIDEO/WEB/TELE-conference on 11.10.2013

(Agreed on 11 10 2013)

Participants

- **Working Group Experts:**
Sandra Edwards (chair)

- **Hearing Experts:**
n/a

- **European Commission representatives:**
n/a

- **EFSA:**
 - **AHAW Unit:** Silvia I. Nicolau-Solano
 - **SAS Unit:** Jose Cortinas

1. Welcome and apologies for absence

The Chair welcomed the participants and opened the meeting.

No apologies were received.

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 Interests,² 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 in the Oral Declaration of interest at the beginning of this meeting.

4. Agreement of the minutes from previous WG meetings

n/a

5. Scientific topic(s) for discussion

The chair of the Working Group (WG) and the EFSA secretariat discussed the work planning in relation to EC mandate on Multifactorial approach on the use of animal and non-animal based measures to assess the welfare of pigs (M-2013-0236, EFSA-Q-2013-00667). The structure and features of the database as well as the current status of data collection for the model to be developed addressing the 3rd term of reference of the mandate were also discussed.

6. Next meeting

The 1st WG meeting of the AHAW WG on Multifactorial approach to assess pig welfare will be held on the 21 October 2013.

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