

Animal and Plant Health Unit (ALPHA UNIT)**Scientific Panel on Animal Health and Welfare (AHAW)****Minutes of the 15th meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)****Parma, 9 March 2017****(Agreed on 4 April 2017)****Participants****• Working Group Members:**

Christoph Winckler (chair), Sandra Edwards, Mohan Raj, Hans Spoolder, Antonio Velarde.

EFSA: AHAW Unit: Denise Candiani, AMU Unit: Olaf Mosbach-Schulz

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were presented for Andy Hart.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 14th Working Group meeting held on 13-14 February 2017

The minutes of the 14th Working Group meeting were agreed by written procedure on 27 February 2017.

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

5. Scientific topic(s) for discussion

5.1 Finalisation of the scientific opinion (M-2015-0178)³

Conclusions and recommendations for ToR 5 were discussed and agreed. The scientific opinion was reviewed according to the comments received during the AHAW Panel Plenary minutes. Conclusions and recommendations were reviewed along the same line. Basically, aspects related to the uncertainty assessment for ToR1 and ToR3 were better clarified. The opinion will be submitted to the AHAW Panel at its next Plenary meeting (4-5 April 2017) for possible adoption.

6. Next meeting

No further meeting is planned.

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>

Animal and Plant Health Unit (ALPHA UNIT)

Scientific Panel on Animal Health and Welfare (AHAW)

Minutes of the 14th meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)

Parma, 13-14 February 2017

(Agreed on 27 February 2017)

Participants

• **Working Group Members:**

Christoph Winckler (chair), Sandra Edwards, Mohan Raj, Hans Spoolder, Antonio Velarde.

EFSA: AHAW Unit: Denise Candiani, AMU Unit: Olaf Mosbach-Schulz

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were presented for Andy Hart.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 13th Working Group meeting held on 10-11 January 2017.

The minutes of the 13th Working Group meeting were agreed by written procedure on 19 January 2017.

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

5. Scientific topic(s) for discussion

5.1 ToR 4 and ToR 5 of the mandate (M-2015-0178)³

Conclusions and recommendations were compiled for ToR 4 of the mandate, on the methods suitable for stunning and killing of fetuses and the methods suitable for estimating the age of fetuses at the slaughterhouse.

The draft text for ToR5 – on the methods for establishing the gestational age of the fetuses at slaughter – was discussed. The tables including physical features of the fetuses at different points in time of the gestation period were discussed. A structure for reporting the available information was agreed, common for all species. Conclusions and recommendations for ToR 5 were drafted.

6. Next meeting

Next meeting will take place in Parma on 9 March 2017.

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>

Animal and Plant Health Unit (ALPHA UNIT)

Scientific Panel on Animal Health and Welfare (AHAW)

Minutes of the 13th meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)

Parma, 10-11 January 2017

(Agreed on 19 January 2017)

Participants

- **Working Group Members:**

Christoph Winckler (chair), Sandra Edwards, Mohan Raj, Hans Spoolder, Antonio Velarde.

EFSA: AHAW Unit: Denise Candiani

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were presented for Andy Hart.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 12th Working Group meeting held on 6-7 December 2016.

The minutes of the 12th Working Group meeting were agreed by written procedure on 16 December 2016.

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

5. Scientific topic(s) for discussion

5.1 ToR 4 and ToR 5 of the mandate (M-2015-0178)³

The draft texts for ToRs 4 of the mandate - on the methods suitable for stunning and killing of fetuses - and ToR5 – on the methods suitable for estimating the age of fetuses at the slaughterhouse – were discussed.

For ToR4, different scenarios were established for when the slaughterhouse operators detect the pregnancy (at lairage, during evisceration leaving an unopened uterus, during evisceration after accidental opening of the uterus) and two separate sets of scenarios are developed for the normal circumstances (corresponding to the probability that fetuses don't feel pain) and for the circumstances applying under the precautionary principle (corresponding to the probability that fetuses feel pain).

6. Next meeting

Next meeting will take place in Parma on 13-14 February 2017.

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>

Animal and Plant Health Unit (ALPHA UNIT)**Scientific Panel on Animal Health and Welfare (AHAW)****Minutes of the 12th meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)****Parma, 6-7 December 2016****(Agreed on 16 December 2016)****Participants**

- **Working Group Members:**

Christoph Winckler (chair), Sandra Edwards, Mohan Raj, Hans Spoolder, Antonio Velarde.

EFSA: AHAW Unit: Denise Candiani

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 11th Working Group meeting held on 27-28 September 2016.

The minutes of the 11th Working Group meeting were agreed by written procedure on 3 November 2016.

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

5. Scientific topic(s) for discussion

5.1 ToR 4 and ToR 5 of the mandate (M-2015-0178)³

The plan for the development of ToRs 4 and 5 of the mandate - respectively on the methods suitable for stunning and killing of fetuses and the methods suitable for estimating the age of fetuses at the slaughterhouse – was agreed and task were distributed across WG members.

6. Next meeting

Next meeting will take place in Parma on 10-11 January 2017.

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>

Animal and Plant Health Unit (ALPHA UNIT)

Scientific Panel on Animal Health and Welfare (AHAW)

Minutes of the 11th meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)

Parma, 27-28 September 2016

(Agreed on 03 November 2016)

Participants

• **Working Group Members:**

Christoph Winckler (chair), Sandra Edwards, Mohan Raj, Hans Spoolder, Antonio Velarde, Andy Hart (27 Sept am and 28 Sept am).

EFSA: AHAW Unit: Denise Candiani

• **Requestors of the mandate:**

via webconference on 27th Sept pm: S. Schreiber (Federal Ministry of Food and Agriculture, Germany), M. Marahrens (Friedrich Loeffler-Institut), R. Donker (Ministry of Economic Affairs, DG AGRO, Netherlands), Marrien Gerritzen (Wageningen Livestock Research, NL), K. Nordeus, J. Loberg (Ministry of Enterprise and Innovation, Sweden), E. Enemark (Danish Veterinary and Food Administration)

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 10th Working Group meeting held on 12 September 2016.

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

The minutes of the 10th Working Group meeting were agreed by written procedure on 26 September 2016.

5. Scientific topic(s) for discussion

5.1 Feedback from the EKE 2 meeting on the capacity of fetuses to feel pain and negative outcomes (M-2015-0178)³

The experts agreed the text for answering to the second Term of Reference (ToR) of the mandate on the reasons for slaughtering pregnant animals and possible recommendations to reduce the phenomenon.

The follow up of the mandate was discussed via webconference with representatives from the four Member States who have requested EFSA to develop the mandate. The outcomes of the third ToR (i.e. review the scientific evidence available on the capacity of fetuses to experience pain), were presented during the webconference. It was commonly agreed to proceed with the development of ToRs 4 and 5 on the methods suitable for stunning and killing of fetuses and the methods suitable for estimating the age of fetuses at the slaughterhouse. The ToRs will be developed according to the interpretation agreed during the webconference. Furthermore, it was also agreed to deliver the final scientific opinion, including all ToRs, by 31 May, 2017.

6. Next meeting

Next meeting will take place in Parma on 6-7 December 2016.

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>

Animal and Plant Health Unit (ALPHA UNIT)

Scientific Panel on Animal Health and Welfare (AHAW)

Minutes of the 10th meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)

Parma, 12 September 2016

(Agreed on 26 September 2016)

Participants

• **Working Group Members:**

Christoph Winckler (chair), Sandra Edwards, Mohan Raj, Hans Spoolder, Antonio Velarde, Bjorn Merker (via WEB).

EFSA:

AHAW Unit: Denise Candiani

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from David Mellor (hearing expert), Veronique Houfflin Debarge (hearing expert), Andy Hart.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 9th Working Group meeting held on 20 July 2016.

The minutes of the 9th Working Group meeting were agreed by written procedure on 10 September 2016.

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

5. Scientific topic(s) for discussion

5.1 Feedback from the EKE 2 meeting on the capacity of fetuses to feel pain and negative outcomes (M-2015-0178)³

The feedback from the outcomes of the EKE 2 meeting was discussed as well as how to incorporate them into the scientific opinion. An informal EKE meeting to express the uncertainty was held, since new evidence became available following the EKE 2 meeting.

6. Next meeting

Next meeting will take place in Parma on 27-28 September 2016.

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>

Animal and Plant Health Unit (ALPHA UNIT)

Scientific Panel on Animal Health and Welfare (AHAW)

Minutes of the 9th meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)

Held by WEB-conference, 19-20 July 2016

(Agreed on 10 September 2016)

Participants

• **Working Group Members:**

Andy Hart, Sandra Edwards.

EFSA:

AHAW Unit: Denise Candiani

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from David Mellor (hearing expert), Veronique Houfflin Debarge (hearing expert), Christoph Winckler, Mohan Raj, Hans Spoolder, Antonio Velarde.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 8th Working Group meeting held on 6-7-8 July 2016.

The minutes of the 6th Working Group meeting were agreed by written procedure on 10 September 2016.

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

5. Scientific topic(s) for discussion

5.1 Feedback from the EKE 2 meeting on the capacity of fetuses to feel pain and negative outcomes (M-2015-0178)³

The feedback from the EKE 2 meeting was discussed in terms of question formulation. The report from EKE 2 was commented and amended and it was decided that it will be annexed to the scientific opinion.

6. Next meeting

Next meeting will take place in Parma on 12 September 2016.

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>

Animal and Plant Health Unit (ALPHA UNIT)

Scientific Panel on Animal Health and Welfare (AHAW)

Minutes of the 8th meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)

Parma, 6-7-8 July 2016

(Agreed on 12 September 2016)

Participants

- **Working Group Members:**

Christoph Winckler (chair), Sandra Edwards, Mohan Raj, Hans Spoolder, Antonio Velarde, Andy Hart.

EFSA:

AHAW Unit: Denise Candiani

AMU Unit: Olaf Musbach-Schulz

- **Hearing experts:** Peter Hepper, David Mellor, Lucy Green, Pierre Le Neindre, Nicholas Fisk, Bjorn Merker, Carlo Bellieni, Matthias Schwab, Anne von Thaden

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from Veronique Houfflin Debarge (hearing expert).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 7th Working Group meeting held on 22 June 2016.

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

The minutes of the 6th Working Group meeting were agreed by written procedure on 24 June 2016.

5. Scientific topic(s) for discussion

5.1 EKE 2 meeting about the capacity of foetuses to feel pain and negative outcomes

An EKE exercise was held around few key questions of the logical model representing a step-wise approach for answering the overall question of the possibility that fetuses may experience pain and negative outcomes. The various steps were i) At which developmental stage has the foetus the anatomical features (e.g. thalamo-cortical connections) required to experience pain?; ii) At which stage does the neuro-physiological situation allow for perception?; iii) What changes occurring during slaughter of the dam might be detectable by the fetus?; and iv) How strong is the possibility of "sub-cortical awareness?".

For each of these areas, the possible related uncertainty was expressed.

6. Next meeting

Next meeting will take place by WEB on 19-20 July 2016.

Animal and Plant Health Unit (ALPHA UNIT)

Scientific Panel on Animal Health and Welfare (AHAW)

Minutes of the 7th meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)

Parma, 22 June 2016

(Agreed on 22 June 2016)

Participants

• **Working Group Members:**

Christoph Winckler (chair), Sandra Edwards, Mohan Raj, Hans Spoolder, Antonio Velarde.

EFSA:

AHAW Unit: Denise Candiani

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from David Mellor (hearing expert), Veronique Houfflin Debarge (hearing expert) and Andy Hart.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 6th Working Group meeting held on 16-17 June 2016.

The minutes of the 6th Working Group meeting were agreed by written procedure on 15 June 2016.

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

5. Scientific topic(s) for discussion

5.1 Feedback from the EKE 1 meeting on prevalence of EU slaughtered animals (M-2015-0178)³

The feedback from the outcomes of the EKE 1 meeting about i) the estimated prevalence from 2015 of pregnant animals being slaughtered (per each species) and ii) the estimated trimester of gestation were analyzed. The report from EKE 1 meeting will be annexed to the scientific opinion and an extract of it will be incorporated into the scientific opinion, in the answer to the first term of reference.

6. Next meeting

Next meeting will take in Parma on 6-7-8 July 2016.

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>

Animal and Plant Health Unit (ALPHA UNIT)**Scientific Panel on Animal Health and Welfare (AHAW)****Minutes of the 6th meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)****Parma, 16-17 June 2016****(Agreed on 20 June 2016)****Participants****• Working Group Members:**

Antonio Velarde.

EFSA:

AHAW Unit: Denise Candiani

AMU Unit: Olaf Mosbach-Schulz

- Participants to the EKE exercise: Else Enemark, Marien Gerritzen, Michael Marahrens, Joaquim Pallisera, Katharina Riehn, Sara Rotanodari, NOelai Yusta, Claudia Terlouw, Miguel Stevens, Bernadette Doyle, Richard Donker

1. Welcome and apologies for absence

The Chair welcomed the participants. The other WG members were not present at this meeting, as only EKE exercise participants should participate plus one WG member to represent the WG.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 11-12 April 2016.

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

The minutes of the 5th Working Group meeting were agreed by written procedure on 20 June 2016.

5. Scientific topic(s) for discussion

5.1 EKE 1 meeting on prevalence of EU slaughtered animals (M-2015-0178)³

The participants performed an EKE exercise facilitated by the colleague from the AMU Unit. Participants, on the basis of the surveys conducted at their National level, were asked to give possible values for i) the estimated prevalence from 2015 of pregnant animals being slaughtered (per each species) and ii) the estimated trimester of gestation were analyzed. An analysis of the uncertainty related to the estimated prevalence was also run.

6. Next meeting

Next meeting will take in Parma on 22nd of June 2016.

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>

Animal and Plant Health Unit (ALPHA UNIT)

Scientific Panel on Animal Health and Welfare (AHAW)

Minutes of the 5th meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)

Parma, 11-12 April 2016

(Agreed on 19 April 2016)

Participants

• **Working Group Members:**

Christoph Winckler (chair), Sandra Edwards, Mohan Raj, Hans Spoolder, Antonio Velarde.

EFSA:

AHAW Unit: Denise Candiani

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from David Mellor (hearing expert), Veronique Houfflin Debarge (hearing expert) and Andy Hart.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 29 February and 1 March 2016.

The minutes of the 4th Working Group meeting were agreed by written procedure on 15 March 2016.

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

5. Scientific topic(s) for discussion

5.1 Discussion on findings from literature related to ToR3 on capacity of fetuses to feel pain (M-2015-0178)³

The outcomes of the literature review performed by the Working Group were discussed and draft text around few key questions (At which developmental stage has the foetus the anatomical features (e.g. thalamo-cortical connections) required to experience pain? At which stage does the neuro-physiological situation allow for perception? What changes occurring during slaughter of the dam might be detectable by the fetus? How strong is the possibility of "sub-cortical awareness"?) was scrutinized.

For each of these areas, possible uncertainty questions were drafted with view to the Expert Knowledge exercise that will be held in mid-July aimed at weighting uncertainty around the subject of fetal pain and fetal awareness.

Expertise needed for such EKE exercise was defined.

6. Next meeting

Next meeting will take in Parma on 23rd-24th of May 2016.

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>

Animal and Plant Health Unit (ALPHA UNIT)

Scientific Panel on Animal Health and Welfare (AHAW)

Minutes of the 4th meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)

Parma, 29 February – 1 March 2016

(Agreed on 15 March 2016)

Participants

- **Working Group Members:**

Christoph Winckler (chair), Sandra Edwards, Mohan Raj, Hans Spoolder, Antonio Velarde, David Mellor (hearing expert), Veronique Houfflin Debarge (hearing expert).

EFSA:

AHAW Unit: Denise Candiani

AMU Unit: Olaf Mosbach-Schulz (29 February 16 – 2 pm to 3 pm)

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from Andy Hart.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 3rd Working Group meeting held on 15 January 2016.

The minutes of the 3rd Working Group meeting were agreed by written procedure on 25 January 2016.

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

5. Scientific topic(s) for discussion

5.1 Discussion on findings from literature related to ToR3 on capacity of fetuses to feel pain (M-2015-0178)³

With regard to the assessment of potential pain in foetuses, it was agreed that the scope will be extended also to other negative welfare outcomes (such as distress and discomfort, including hypoxia and hypercapnia) which might be experienced following the stunning and slaughter of the dam.

The preliminary outcomes of the literature review performed by the Working Group were discussed with the hearing experts who were invited at this meeting.

The discussion was mainly focused on few key questions, as follows:

1. At which developmental stage has the foetus the anatomical features (e.g. thalamo-cortical connections) required to experience pain? At which stage does the neuro-physiological situation (e.g. inhibitory and excitatory systems) allow for perception?
3. What changes occurring during slaughter of the dam (e.g. electric current, hypoxia through ceased maternal blood flow, elevated stress hormone levels) might be detectable by the fetus? What is the evidence for the effects this may have on the fetus (e.g. interpretation of gasping, movements)?
4. How strong is the possibility of "sub-cortical awareness"?

The WG agreed to write text along this structure, based on literature findings and on the outcomes from the discussion with the hearing experts.

6. Next meeting

Next meeting will take in Parma on 10th- 11th of April 2016.

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>

Animal and Plant Health Unit (ALPHA UNIT)

Scientific Panel on Animal Health and Welfare (AHAW)

Minutes of the 3rd meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)

Held by WEB-conference, 15 January 2016

(Agreed on 25 January 2016)

Participants

- **Working Group Members:**

Christoph Winckler (chair), Sandra Edwards, Mohan Raj, Hans Spoolder, Antonio Velarde, Andy Hart (from 13:00 to 14:00)

- **EFSA:**

AHAW Unit: Denise Candiani, Francesca Porta.

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 2nd Working Group meeting held on 24-25 November 2015.

The minutes of the 2st Working Group meeting were agreed by written procedure on 30 November 2015.

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

5. Scientific topic(s) for discussion

5.1 Approach to the mandate (M-2015-0178)³

The WG confirmed its approach to the Mandate: ToR 1 and ToR 2 will be addressed in parallel with ToR 3, while ToR 4 and ToR 5 will be addressed only if evidence or possibility of fetal pain will be found.

The main points of discussion:

- The data collected so far by the EU MSs as well as the methodology for collecting data on the prevalence of pregnant cows, sows, ewes, does, mares slaughtered during a late gestation period (ToR1) were discussed. Data acquisition for ToR 1 and 2 as well as potential tools to be used (e. g EKE) were also discussed and main actions to carry out at this regard were set up.
- The finding and the controversial points of some papers related on the capacity of fetuses to experience pain (ToR3) were discussed.
- ToR 1, ToR2 and ToR3 were discussed in view of the new EFSA methodology to weight the uncertainty, for which the Scientific Opinion on the slaughter of pregnant animal is the pilot project.

6. Next meeting

Next meeting will take in Parma on 29th of February – 1st of March 2016.

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>

Animal and Plant Health Unit (ALPHA UNIT)**Scientific Panel on Animal Health and Welfare (AHAW)****Minutes of the 2nd meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)****Physical meeting, 24-25 November 2015****(Agreed on 30 November 2015)****Participants****• Working Group Members:**

Christoph Winckler (CW, chair), Sandra Edwards (SE), Mohan Raj (MR), Hans Spooler (HS), Antonio Velarde (AV).

• EFSA:

AHAW Unit: Denise Candiani (CD), Francesca Porta (FP)

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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 1st Working Group meeting held on 09 November 2015, WEB -conference.

The minutes of the 1st Working Group meeting were agreed by written procedure on 20 November 2015.³

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

³ <http://www.efsa.europa.eu/sites/default/files/wgpregnantanimals.pdf>

5. Scientific topic(s) for discussion

5.1 Approach to the mandate

(<http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>)

The WG confirmed its approach to the Mandate: ToR 1 and ToR 2 will be addressed in parallel with ToR 3, while ToR 4 and ToR 5 will be addressed only if evidence or possibility of fetal pain will be found.

The main point of the discussion:

- Data acquisition for ToR 1 and 2 as well as potential tools to be used (e.g EKE) were discussed and main actions to carry out at this regard were set up. The results obtained by the EFSA network representatives were also discussed.
- ToR 3 was discussed and papers on the capacity of fetuses of the main livestock species to experience pain were screened. The possibility to involve some additional experts for supporting the WG in developing ToR 3 was discussed.
- The general structure of the scientific opinion was discussed and the table of contents was drafted. The section on the interpretation of the mandate was discussed.

6. Next meeting

Next meeting is foreseen for the 15th of January, 12 am by web-conference.

Animal and Plant Health Unit (ALPHA UNIT)**Scientific Panel on Animal Health and Welfare (AHAW)****Minutes of the 1st meeting of the Working Group on animal welfare aspect in respect of slaughter or killing of pregnant livestock species (cattle, pigs, sheep, goats, horses)****Held by WEB-conference, 09 November 2015****(Agreed on 20 November 2015)****Participants****• Working Group Members:**

Christoph Winckler (chair), Sandra Edwards, Mohan Raj, Hans Spoolder, Antonio Velarde.

• EFSA:

AHAW Unit: Andrea Gervelmeyer, Francesca Porta.

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes¹ and the Decision of the Executive Director on Declarations of Interest², EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest 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. Scientific topic(s) for discussion**4.1 Approach to the mandate (M-2015-0178)³**

The charter of the Mandate was presented to the WG Members and the approach to be followed was discussed: it was agreed to start working on ToR 3 (Capacity of fetuses of the main livestock species to experience pain). A search outline made by EFSA following the Prometheus protocol was presented to the experts: each ToR was divided into sub-questions and for each of them expertise to assist the WG with its scientific work, as well as the methodology to be followed, were identified. The excel table was discussed and

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

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

further developed by the experts. Moreover SOP6 (Standard Operation Procedure establishing, updating and closing a scientific WG), particularly the Annex III related to the search log on the identification of external experts, was presented.

The main points of discussion:

- Christoph Winckler asked if ToR 3 should assess only the pain or also other discomforts that the foetuses could, eventually, experience; he also proposed to take into account evidences from human embryos. The WG agreed that definitions are needed (e.g. pain, discomfort, sensibility etc) and Andrea Gervelmeyer stressed on the importance of having a protocol for defining which kind of evidence we want to include in ToR 3.
- The scoping exercise performed by the experts and aimed at gathering data either on the prevalence of the phenomenon of the slaughter of pregnant animals or further information, was presented. Considering the limited data and studies found, Andrea Gervelmeyer proposed to raise the issue to the November Network Meeting, in order to gather information directly from MSs either on the magnitude of the phenomenon or on the reasons why farmers send pregnant animals for slaughter (ToR 2). Andrea Gervelmeyer reported the existence of a German study (on-going) concerning the slaughter of the pregnant animals: data collection tools used could be useful for approaching ToR 1 and 2 and it was agreed to ask for having access to the protocol. Sandra Edwards raised the issue if ToR 1 should also consider the on farm emergency killing.
- ToR 4 and ToR 5 were also discussed and it was agreed that ToR 5 should be addressed before ToR 4; Andrea Gervelmeyer underlined that while the order of the ToRs does not change, the approach could be different. More details can be given in the “Interpretation of the mandate” section of the opinion.
- Andrea Gervelmeyer proposed to involve the colleagues from EFSA Assessment and Methodological Support Unit (AMU). The WG suggested to eventually involve them as auxiliary experts not providing contribution to the opinion, but only supporting the WG in running the search.

5. Next meeting

Next meeting will take in Parma the 24th and 25th of November 2015.

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2015-00477>