

Location: Web conference

Attendees:

- Working Group Members:
 - Jutta Berk
 - Joanna Marchewka
 - Virginie Michel
 - Nienke van Staaveren
 - Antonio Velarde Calvo
 - Anja B. Riber (Chair)

- Hearing Experts¹: Not applicable

- European Commission and/or Member States representatives:
 - EC: Laerke Toft Holm

- EFSA:
 - BIOHAW Unit: Cristina Rojo Gimeno, Chiara Fabris, Yves van der Stede

- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

¹ As defined in Article 34 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



IV. Agreement of the minutes of the 15th Working Group meeting held on 3rd March 2025, via web conference

The minutes of the 15th Working Group (WG) meeting were agreed by written procedure on 18th March 2025.

V. Scientific topics for discussion

a. Draft Scientific opinion (SO) on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

A. Animal based measures at slaughter to collect welfare information on farm (ToR-B, Request 5 of the mandate)

The final WG comments on the text assessing the selected ABMs at slaughter were discussed and the relevant modifications were agreed in view of the submission to the next AHAW panel plenary meeting.

B. Assessment of the factor 'concentration of CO₂' and 'concentration of ammonia' (ToR-B, Request 2a of the mandate)

The comments on the updated draft text on the impact of the mandate factors 'concentration of CO₂' and 'concentration of ammonia', including the draft conclusions and recommendations, were presented and discussed. New evidence looking at the impact of ammonia on the welfare of turkeys was revised and incorporated in the assessment. The text was finalized and agreed for submission to the next AHAW panel plenary meeting.

C. Assessment of the factor 'temperature' (ToR-B, Request 2a of the mandate)

The draft of the assessment of the factor temperature was presented and discussed. The WG agreed to assess the factor 'effective environmental temperature' to reflect the combination of the impact of dry bulb temperature and relative humidity. Too low or too high effective environmental temperature can lead to the welfare consequences cold stress and heat stress, respectively. The evidence available, including industry management guidelines, on the measures to prevent and mitigate cold stress in poults and heat stress in turkeys in brooding and rearing phases was assessed and discussed in detail. Draft conclusions and recommendations were agreed and prepared for submission to the next AHAW panel plenary meeting in April.

VI. Any Other Business

Project management, tasks and assignments

Timeline and next deadlines of the project were discussed. Tasks were identified in the project Gantt Chart, confirmed and distributed among the WG experts until the end of the project; it was agreed that the section of the draft SO assessing the factor 'space allowance' will be finalised for further revision in the next WG meeting.

VII. Next meeting

The next meeting will be held on 23rd and 24th April 2025 via web-conference.

3rd March 2025
09:00 -17:30
MINUTES - Agreed on 18th March 2025

Location: Web conference

Attendees:

- Working Group Members:
 - Jutta Berk
 - Joanna Marchewka
 - Virginie Michel
 - Nienke van Staaveren
 - Antonio Velarde Calvo
 - Anja B. Riber (Chair)
- Hearing Experts¹: Not applicable
- European Commission and/or Member States representatives:
 - EC: Ester Aláez Pons
- EFSA:
 - BIOHAW Unit: Cristina Rojo Gimeno, Marika Vitali (Scientific topic for discussion point V.a.A), Yves van der Stede
 - MESE Unit: Olaf Mosbach-Schulz (Scientific topic for discussion point V.a.B)
- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

¹ As defined in Article 34 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



IV. Agreement of the minutes of the 14th Working Group meeting held on 5th February 2025, via web conference

The minutes of the 14th Working Group (WG) meeting were agreed by written procedure on 19th February 2025.

V. Scientific topics for discussion

a. Draft Scientific opinion (SO) on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

A. Animal based measures at slaughter to collect welfare information on farm (ToR-B, Request 5 of the mandate)

The WG comments on the ABMs at slaughter chapter were discussed and the text was edited. Special attention was paid to the evidence on the validation status of the automatic tools to measure the ABMs at the slaughterhouse. The WG agreed on removing one ABM from the initial selected list of ABMs as the WG considered that it did not measure well the welfare on farm, but it related to the welfare on transport and at the slaughterhouse. Conclusions and recommendations were drafted. An updated version of this chapter will be finalized by the next WG meeting for following submission to the AHAW Panel.

B. Assessment of the factor 'space allowance' (ToR-B, Request 2a of the mandate)

The results of the sensitivity analysis of the impact of the interindividual distance in the stocking density were presented and discussed by the working group. In addition, the results of two scenarios of flock-thinning carried out by separating different percentages of toms and hens of different ages were presented and discussed. The working group discussed and agreed on the structure of the section dealing with the impact of space allowance on the welfare of turkeys that will include the results of the behavioural space model and the relevant sensitivity analyses.

C. Assessment of the factor 'concentration of CO₂' and 'concentration of ammonia' (ToR-B, Request 2a of the mandate)

The comments on the draft text on the impact of the factors concentration of CO₂ and ammonia including the draft conclusions and recommendations were presented and discussed. The scientific evidence dealing with the impact of different concentrations of CO₂ and ammonia on the welfare of turkeys was discussed. The used thresholds of CO₂ and ammonia in production standards and its scientific motivation were discussed. An updated version of this section will be circulated to the WG members for final revision and discussion at the next WG before submission to the AHAW Panel.

D. Review of the panel comments on the sections submitted on the relevant welfare consequences and selected animal-based measures to measure the welfare consequences (ToR-B, Request 3), 'the type and condition of the litter' and 'the type and presence of enrichment' (ToR-B, Request 2a)

Selected AHAW panel comments on the relevant welfare consequences and selected animal-based measures to measure the welfare consequences (ToR-B, Request 3), 'the type and condition of the litter' and 'the type and presence of enrichment' (ToR-B, Request 2a) were presented and discussed such as the addition of the interpretation for each selected ABM to measure welfare consequences. The working group agreed on adding this element prior to the next WG meeting for submission to the panel. The AHAW comment requesting to include the genotype used in the articles used in the assessment was discussed and agreed to report when the genotype is relevant in the assessment of the information.

VI. Any Other Business

Project management, tasks and assignments



Timeline and next deadlines of the project were discussed. Tasks were identified in the project Gantt Chart, confirmed and distributed among the WG experts until the end of the project; it was agreed that in preparation for the next WG meeting, the responsible authors will finalize to address all the comments of the 'ABMs collected at slaughter to measure welfare of turkeys on farm' (ToR-B, Request 5 of the mandate). The WG agreed to review and provide comments to the sections on the factors 'concentration of CO₂' and 'concentration of ammonia' before its finalization for submission to the next AHAW Panel meeting. The WG agreed to prepare a draft section on the factor of the mandate 'Temperature' for revision before the next WG meeting. The WG agreed in adding the interpretations for each selected ABM and to address the final comments of the panel in the sections of the factor on the chapter of 'the type and condition of the litter' and of 'the type and presence of enrichment'.

VII. Next meeting

The next meeting will be held on 27th March 2025 via web-conference.

5th February 2025

09:00 -17:30

MINUTES - Agreed on 19th February 2025

Location: Web conference

Attendees:

- Working Group Members:
 - Jutta Berk
 - Joanna Marchewka
 - Virginie Michel
 - Nienke van Staaveren
 - Antonio Velarde Calvo
 - Anja Riber (Chair)
- Hearing Experts¹: Not applicable
- European Commission and/or Member States representatives:
 - EC: Ester Alaez Pons
- EFSA:
 - BIOHAW Unit: Cristina Rojo Gimeno, Chiara Fabris, Marika Vitali (Scientific topic for discussion point V.a.D), Yves van der Stede
 - MESE Unit: Olaf Mosbach-Schulz (Scientific topic for discussion point V.a.C)
- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

¹ As defined in Article 34 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



IV. Agreement of the minutes of the 13th Working Group meeting held on 13th January 2025, via web conference

The minutes of the 13th Working Group (WG) meeting were agreed by written procedure on 27th January 2025.

V. Scientific topics for discussion

a. Draft Scientific opinion (SO) on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

A. Section on the factor 'type and condition of the litter'

A revised version of the draft conclusions and recommendations of the text covering the mandate factor 'type and condition of the litter' (ToR-B Request 2A of the mandate) was presented and the comments submitted by the WG members were discussed. Special emphasis was given on the percentage of moisture in the litter above which it leads to welfare consequences such as 'soft tissue lesions and integument damage' and 'resting problems'. An updated version of this section will be finalized for submission to the AHAW Panel at the February Plenary meeting.

B. Section on the factor 'type and presence of enrichment'

The revised draft version text addressing 'the type and presence of enrichment' (ToR-B, Request 2A of the mandate) in particular the conclusions and recommendations were discussed and agreed. Special emphasis was given to the space of elevated platforms for hens and toms at different weights and the age of first access to outdoor space. An updated version of this section will be finalized to be submitted to the AHAW Panel at the February Plenary meeting.

C. Assessment of the factor 'space allowance' (ToR-B, Request 2A of the mandate)

The conclusions and recommendations on space allowance and stocking density (in terms of m²/bird and kg/m² respectively) based on the results of the behavioural space model were reviewed and agreed by the working group. Conclusions on the suitability of the behavioural space model for addressing this mandate question were also discussed. The working group agreed to run the behavioural space model to estimate the space allowance when 'flock thinning' by separation of the toms and hens is conducted.

D. Animal based measures at slaughter to collect welfare information on farm (ToR-B, Request 5 of the mandate)

The draft text of the selected ABMs at slaughter to collect welfare information on turkey farms was presented by discussing and addressing WG comments. Relevant conclusions were drafted. An updated version of the document will be finalized according to the inputs received by the next WG meeting for following submission to the AHAW Panel.

VI. Any Other Business

Project management, tasks and assignments

Timeline and next deadlines of the project were discussed. Tasks were identified and distributed among the WG experts; it was agreed that in preparation for the next WG meeting, all WG members will review the revised versions of the draft SO on 'ABMs collected at slaughter to measure welfare of turkeys on farm' (ToR-B, Request 5 of the mandate). The WG agreed to address the last comments before submitting the sections on 'type and condition of the litter' and 'type and presence of enrichment' to the next AHAW Panel meeting. The WG agreed to provide a scenario for the situation of flock thinning by separation of the toms and hens and a draft version of the results and conclusions and recommendations of the space allowance will be prepared and revised at the next WG meeting.



VII. Next meeting

The next meeting will be held on 03rd March 2025 via web-conference.

13th January 2025

08:30 -17:30

MINUTES - Agreed on 27th January 2025

Location: Web conference

Attendees:

- Working Group Members:
 - Jutta Berk
 - Joanna Marchewka
 - Virginie Michel
 - Nienke van Staaveren
 - Antonio Velarde Calvo
 - Anja Riber (Chair)
- Hearing Experts¹: Not applicable
- European Commission and/or Member States representatives:
 - EC: Ester Alaez Pons
- EFSA:
 - BIOHAW Unit: Cristina Rojo Gimeno and Chiara Fabris
 - MESE Unit: Olaf Mosbach-Schulz (Scientific topic for discussion point V.a.C)
- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

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² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



IV. Agreement of the minutes of the 12th Working Group meeting held on 9th December 2024, via web conference

The minutes of the 12th Working Group (WG) meeting were agreed by written procedure on 7th January 2025.

V. Scientific topics for discussion

a. Draft Scientific opinion (SO) on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

A. Section on the factor 'type and condition of the litter'

An updated version of the text was presented, comments submitted by WG members were discussed and addressed. The scientific evidence dealing with the percentage of humidity and the removal of wet litter as hazards for several welfare consequences (e.g., soft tissue lesions and integument damage, inability to perform exploratory and foraging behaviours and inability to perform comfort behaviour) was assessed. Relevant conclusions and recommendations were presented and discussed. An updated version of the document will be circulated to the WG members for final revision and discussion at the next WG meeting before submission to the AHAW Panel.

B. Section on the factor 'type and presence of enrichment'

The draft text addressing 'the type and presence of enrichment' (ToR-B, Request 2A of the mandate) was presented. The scientific evidence dealing with various types of enrichment for turkeys was presented. The WG discussion focused on the provision of perches, elevated platforms, pecking objects, covered veranda and outdoor range to prevent/mitigate welfare consequences like inability to perform exploratory and foraging behaviour, inability to perform comfort behaviour and resting problems. Relevant conclusions and recommendations were presented and discussed. An updated version of the document will be circulated to the WG members for final revision and discussion at the next WG meeting before submission to the AHAW Panel.

C. Assessment of the factor 'space allowance' (ToR-B, Request 2A of the mandate)

All the results of WG Expert knowledge elicitation (EKE) exercises were included into the behavioural space model to quantitatively assess the hazard 'space allowance' to prevent and mitigate welfare consequences (e.g., restriction of movements, group stress, inability to perform comfort behaviour). The model results, including the 90% certainty interval, were presented and discussed.

The WG drafted and discussed relevant conclusions and recommendations on space allowance and stocking density (in terms of kg/m² and number of birds/m²) suggested for preventing and/or mitigating welfare consequences for three different weight categories of hens and three of toms between 7 and 25 kg.

b. Draft Technical report (TR) on the housing systems and current practices for keeping turkeys ([EFSA-Q-2023-00648](#))

The outcomes from the AHAW Panel discussion during the December Plenary meeting on the draft Technical report (TR) on the housing systems and current practices for keeping turkeys were presented to the WG; Panel comments in relation to the specific section on 'flock-thinning' and 'removal of hens' and the text proposed to address these comments were discussed. An updated version of the report will be shared with the WG in the next weeks.



VI. Any Other Business

Project management, tasks and assignments

Timeline and next deadlines of the project were discussed. Tasks were identified and distributed among the WG experts; it was agreed that in preparation for the next WG meeting, all WG members will review the sections of the draft SO on 'ABMs collected at slaughter to measure welfare of turkeys on farm' (ToR-B, Request 5 of the mandate), the new versions of the sections on 'type and condition of the litter' and 'type and presence of enrichment', and the conclusions and recommendations on 'space allowance'.

VII. Next meeting

The next meeting will be held on 05th February 2025 via web-conference.

SCIENTIFIC PANEL ON ANIMAL HEALTH AND WELFARE

12th Working Group meeting on the welfare of turkeys on farm



9th December 2024

09:00 -17:30

MINUTES - Agreed on 07th January 2025

Location: Webconference

Attendees:

- Working Group Members:
 - Jutta Berk
 - Joanna Marchewka
 - Virginie Michel
 - Anja Riber
 - Nienke van Staaveren
 - Antonio Velarde Calvo
- Hearing Experts¹: Not applicable
- European Commission and/or Member States representatives:
 - EC: Ester Alaez Pons
- EFSA:
 - BIOHAW Unit: Cristina Rojo Gimeno and Chiara Fabris
- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

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² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



IV. Agreement of the minutes of the 11th Working Group meeting held on 26th November 2024, via web conference

The minutes of the 11th Working Group (WG) meeting were agreed by written procedure on 5th December 2024.

V. Scientific topics for discussion

a. Draft Scientific opinion (SO) on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

A. Section on the 'type and condition of the litter'

An updated text of the draft SO assessing the risks to welfare posed by the 'type and condition of the litter' (ToR-B, Request 2A of the mandate) was presented and discussed. The comments provided by the WG were clarified and suggestions for improvement were proposed and agreed. It was agreed to differentiate 'bedding' as clean substrate, from 'litter' which is the substrate after its utilization and to include information on the depth and humidity of the litter and the type of floor under the litter. An updated version of the section, including relevant draft conclusions, will be discussed at the next WG meeting.

B. Expert knowledge elicitation (EKE) to support the behavioural space model

To address ToR-B, request 2A of the mandate in relation to the factor 'space allowance', the WG conducted an EKE exercise on the percentage of time that turkey hens and toms spend when performing different behaviours: dustbathing, wingflapping, strutting (for toms), other comfort behaviours and dynamic behaviours. All literature relevant for this exercise was firstly discussed and analysed in detail, subsequently the WG agreed on the final list of publications to consider for the elicitation. The results of this EKE informed a behavioural space model that will serve to assess the space allowance. The results of the EKE exercise will be discussed at the next WG meeting, together with the relevant conclusions.

VI. Any Other Business

Project management, tasks and assignments

Timeline and next deadlines of the project were discussed. It was agreed that the outcomes from the AHAW Panel discussion during the December Plenary meeting on the draft Technical report (TR) on the housing systems and current practices for keeping turkeys ([EFSA-Q-2023-00648](#)), will be presented to the WG members and discussed at the next WG meeting.

Tasks were identified and distributed among the WG experts; it was agreed that in preparation for the next WG meeting, all WG members were requested to look at the results from the EKE exercise and continue drafting the sections of the draft SO that were identified under their responsibility.

VII. Next meeting

The next meeting will be held on 13th January 2025 via web-conference.

26th November 2024

09:00 -17:30

MINUTES - Agreed on 05 December 2024

Location: Webconference

Attendees:

- Working Group Members:
 - Jutta Berk
 - Joanna Marchewka
 - Virginie Michel
 - Anja Riber
 - Nienke van Staaveren
 - Antonio Velarde Calvo
- Hearing Experts¹: Not applicable
- European Commission and/or Member States representatives:
 - EC: Ester Alaez Pons
- EFSA:
 - BIOHAW Unit: Cristina Rojo Gimeno and Chiara Fabris
- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

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² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



IV. Agreement of the minutes of the 10th Working Group meeting held on 16th and 17th October 2024, via web conference

The minutes of the 10th Working Group (WG) meeting were agreed by written procedure on 7th November 2024.

V. Scientific topics for discussion

a. Draft Scientific opinion (SO) on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

A. Expert knowledge elicitation (EKE) to support the behavioural space model

To address ToR-B, request 2A of the mandate in relation to the factor 'space allowance', the WG assessed and discussed the data extracted from the literature on different behaviours performed by turkeys when kept at diverse stocking densities (kg/m²). In particular some old publications, likely about turkeys of different genetics compared to the current ones, and publications on very young birds, were examined in detail to assess whether the reported data could be of use in the elicitation. The final dataset to consider was produced and WG members were invited to have a look at it in preparation to the upcoming EKE scheduled during the next WG meeting.

b. Technical report (TR) on the housing systems and current practices for keeping turkeys ([EFSA-Q-2023-00648](#))

The updated text of the draft TR addressing ToR-A, Request 1 of the mandate, on the most common husbandry systems and current practices for keeping turkeys (*Meleagris gallopavo gallopavo*) on farm, was reviewed on the basis of the new contributions and comments provided by the WG members. Main issues were discussed and solved; clarity was enhanced, for instance, on how the practices of thinning and separation of sexes are applied to turkeys. Finally, agreement was found on the updated version of the draft TR, to be submitted to the EFSA AHAW Panel for possible endorsement at the December Plenary meeting.

VI. Any Other Business

Project management, tasks and assignments

Timeline and next deadlines of the project were discussed. In particular, it was agreed that at the next WG meeting main comments provided by the AHAW Panel members to the draft TR will be discussed and addressed via WG consensus.

Tasks were identified and distributed among the WG experts; it was agreed that along the year 2025, specific sections of the draft SO will be submitted at different time-points to the AHAW Panel for revision and discussion at the Plenary meetings.

VII. Next meeting

The next meeting will be held on 9th December 2024 via web-conference.

Location: EFSA - Parma (MTG SEAT 00/M04/MTG SEAT 00/M06a)

Attendees:

- Working Group Members:
 - Jutta Berk
 - Joanna Marchewka (online)
 - Virginie Michel
 - Anja Riber
 - Nienke van Staaveren
 - Antonio Velarde Calvo
- Hearing Experts¹:
 - Tim Burnside, Ana Chapatte Granados, John Ralph for agenda item V.a.B via web conference
- European Commission and/or Member States representatives:
 - EC:
 - Susanne Dittmann Rasmussen, Kirsten Vornhagen via web conference.
 - Asier Pagazartundua, Rudolf Wilmes for agenda item V.a.C via web conference.
- EFSA:
 - BIOHAW Unit: Cristina Rojo Gimeno, Chiara Fabris, Oana-Maria Balmos, Yves Van der Stede
 - MESE Unit: Olaf Mosbach-Schulz (Scientific topics for discussion point V.a.A)
- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled

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² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

IV. Agreement of the minutes of the 9th Working Group meeting held on 12th July 2024, via web conference

The minutes of the 9th Working Group (WG) meeting were agreed by written procedure on 25th July 2024.

V. Scientific topics for discussion

a. Draft Scientific opinion (SO) on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

A. Expert knowledge elicitation (EKE) to support the behavioural space model

To address ToR-B, request 2A of the mandate in relation to the factor 'space allowance', the WG continued the elicitation (EKE exercise) started during the previous WG meetings on the behavioural space model, with specific focus on the parameter 'interindividual distance'.

The WG reviewed and discussed in detail the new information retrieved from the literature and from measurements of individual turkeys, including their body dimensions (e.g., neck and wing length, etc.) and the surface they occupy when performing various behaviours (e.g., stationary behaviour, locomotory behaviour, comfort behaviour, etc.).

Two EKE sessions were conducted to estimate the interindividual distance of turkeys when performing diverse behaviours: one elicitation was focused on turkey males and the second on females. Differences between males and females on the resulting values were discussed and substantiated.

B. *Ad-hoc* technical hearing with turkey breeding stock stakeholders

To address ToR 2, Requests 2c, on the risk posed by specific factors to the welfare of turkey breeders, and 2f, on the breeding and genetic traits that can influence turkeys' welfare, in line with EFSA's Engagement Strategy for Animal Welfare mandates, an *ad-hoc* technical hearing on turkey breeders was organised to gather more insights on these topics.

The WG developed a target questionnaire on selected traits, categories of turkey breeders and related husbandry systems and practices which was sent to the two main turkey breeding stock Companies in the EU.

Prior to the meeting only one Company (Aviagen ® Turkeys) replied to the questionnaire. Representatives from Aviagen ® Turkeys and the European Forum of Farm Animal Breeders (EFFAB) attended the technical hearing. At the meeting, EFFAB shortly presented the EFFABAR code of 2023 and the focus of poultry breeding. Subsequently, the representatives of Aviagen ® Turkeys replied to the WG requests for clarifications and provided insights on several aspects; e.g, selection against injurious pecking, the evolution of the prevalence of foot pad dermatitis in the last ten years and the selection for foot pad shape, including the protocol used to measure foot pad dermatitis, and the definition of multienvironmental liveability amongst other topics.

C. Draft sections on 'type and availability of enrichment' and 'type and condition of the litter'

In relation to the factors 'type and availability of enrichment' and 'type and condition of the litter' (ToR-B, Request 2A of the mandate), the WG reviewed and assessed the progress of the drafted sections, which includes the gathered information through the literature collected through Web of Science and supplemented by the scientific inputs obtained from the Public Call for Evidence. Furthermore, the WG reconfirmed the agreement on the structure of the draft scientific opinion by hazard.



D. Fact-finding missions in turkey farms in France and Germany

The key findings of three fact-finding missions conducted in France, Italy and Germany by the European Commission's DG SANTE F2 – Health and Food Audits and Analysis, were presented. The three missions were focused on understanding various aspects of turkey welfare at the national level, such as legal frameworks on the protection of turkeys in both countries, related official controls, the use of animal welfare indicators, the practices of mutilations and the availability of enrichment.

The WG experts were informed that reports of the fact-finding missions in France and Germany are under preparation and will be soon publicly available. The report of the fact-finding mission in Italy has already been published. These findings will be an additional source of information for the scientific opinion.

b. Technical report (TR) on the housing systems and current practices for keeping turkeys ([EFSA-Q-2023-00648](#))

The WG reviewed and discussed the draft technical report on the housing systems of turkeys to address ToR-A, Request 1 of the mandate. The report is a review of the most common husbandry systems and current practices for keeping turkeys (*Meleagris gallopavo gallopavo*) on farm, covering turkeys of all ages (breeding turkeys and turkeys kept for meat production) including hatchery conditions.

The comments to the draft TR provided by WG experts were discussed and addressed, the new version of the draft will be submitted to the WG for final revision before submission to the AHAW Panel for possible endorsement.

VI. Any Other Business

Project management, tasks and assignments

Timeline and next deadlines of the project were discussed. Tasks were identified and distributed among the WG experts, in particular in relation to ToR B, request 2A (space allowance related to the drafting of the conclusions of the two expert knowledge elicitations and the data extraction on time budgets) and ToR A. Request 1 technical report of the housing systems of turkeys.

VII. Next meeting

The next meeting will be held on 26th November 2024 via web-conference.

12th July 2024

09:00 -17:30

MINUTES - Agreed on 25th July 2024

Location: Webconference

Attendees:

- Working Group Members:
 - Jutta Berk
 - Joanna Marchewka
 - Anja Riber
 - Nienke van Staaveren
 - Antonio Velarde Calvo
- Hearing Experts¹: Not applicable
- European Commission and/or Member States representatives:
 - EC: Susanne Dittmann Rasmussen
- EFSA:
 - BIOHAW Unit: Cristina Rojo Gimeno, Chiara Fabris, Oana-Maria Balmos, Marika Vitali (Scientific topics for discussion point V.C)
 - MESE Unit: Olaf Mosbach-Schulz (Scientific topics for discussion point V.B)
- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants. No apologies were received.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

¹ As defined in Article 34 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



IV. Agreement of the minutes of the 8th Working Group meeting held on 21st June 2024, via web conference

The minutes of the 8th Working Group (WG) meeting were agreed by written procedure on 08 July 2024.

V. Scientific topics for discussion

Draft Scientific opinion (SO) on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

A. Preparation for an ad-hoc technical hearing meeting

In relation to ToR 2, Requests 2C and 2F, the WG highlighted the need for more information on breeders as there is little knowledge in the literature on the housing systems where they are kept and the risk factors and practices they are subjected to, as well as the breeding and genetic traits that improve and/or impair welfare. On the basis of the EFSA Engagement Strategy for AW mandates, it was agreed to organise an *ad-hoc* technical hearing on turkeys breeders, breeding strategies and genetic traits with stakeholders who have already submitted relevant data and information to EFSA (during the stakeholder meeting or via the call for evidence) to clarify certain aspects with the WG experts.

In preparation for the technical hearing meeting, it was agreed to prepare a specific questionnaire for retrieving the necessary information. The draft questionnaire was discussed by the WG and modifications agreed: the questionnaire mainly relates to the definitions and descriptions of breeding traits, the definitions for the different categories of turkey breeders and the related husbandry systems and practices.

B. Expert knowledge elicitation (EKE) to inform the behavioural space model

To address ToR-B, request 2A of the mandate in relation to the factor 'space allowance', the WG continued the elicitation (EKE exercise) started during the 8th WG meeting. The information needed for the exercise are planimetric data for some behaviours, adaptation factors for the remaining behaviours, the interindividual distance and the time budget for each behaviour. The WG discussed the literature that was considered useful for the elicitation and the relevant data extracted from it. Considerations were provided on the differences between sexes and genotypes in relation to the dimensions of turkey individuals and the surface occupied when performing diverse behaviours.

Due to the variety of turkey production in the EU, the EKE was carried out on different values of the parameter 'body weight'; in particular the exercise was on the average area on the ground in cm² occupied by turkeys of 7, 12, 16, 25 kg turkey (shortly before slaughter), respectively, when performing stationary behaviour for which the lower bound, 1st quartile, median, 3rd quartile and upper bound were elicited by the working group.

C. Animal-based measures (ABMs) collected at slaughter to measure welfare of turkeys on farm.

The WG experts discussed and finalised the exercise on the selection of ABMs to suggest for monitoring at the slaughterhouse as indicators of the on-farm welfare of turkeys (ToR-B, request 5). The outcomes of the individual exercise were presented and discussed. A final set of ABMs was agreed via group discussion based on the four criteria: (i) link to welfare consequences, (ii) possibility of automatization, (iii) already measured at slaughter, (iv) relevance of the judgement of the EFSA network. The final set of ABMs will be further described on the basis of the scientific literature. Subsequently, the WG discussed the structure of the section(s) in the scientific opinion addressing this ToR which will be consistent with other Farm to Fork Scientific Opinions on animal welfare. Each selected ABM will be characterised by a description, interpretation, and considerations supporting the selection process. It was agreed that the first draft developed by the contractor will be reviewed by the working group and discussed at the next WG meeting.



VI. Any Other Business

Project management, tasks and assignments

Timeline and next deadlines of the project were discussed. Tasks were identified and distributed among the WG experts, in particular in relation to ToR B, request 2A (type and condition of the litter, type and presence of enrichment and space allowance), and requests 2F and 5 of the mandate.

VII. Next meeting

The next meeting will be held on 16th-17th October 2024, in hybrid mode, in Parma and via web-conference.

21st June 2024

09:00 -17:30

MINUTES - Agreed on 8th July 2024

Location: Web conference

Attendees:

- Working Group Members:
 - Jutta Berk
 - Joanna Marchewka
 - Virginie Michel
 - Anja Riber
 - Nienke van Staaveren
 - Antonio Velarde Calvo
- Hearing Experts¹: Not applicable
- European Commission and/or Member States representatives:
 - EC: Susanne Dittmann Rasmussen, Kirsten Vornhagen
- EFSA:
 - BIOHAW Unit: Cristina Rojo Gimeno, Chiara Fabris, Oana-Maria Balmos, Marika Vitali (Scientific topic for discussion point V.B), Yves Van der Stede, Aitana Lopez
 - MESE Unit: Olaf Mosbach-Schulz (Scientific topic for discussion point V.A)
- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants. No apologies were received.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

¹ As defined in Article 34 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



IV. Agreement of the minutes of the 7th Working Group meeting held on 23rd - 24th May 2024, via hybrid conference

The minutes of the 7th Working Group (WG) meeting were agreed by written procedure on 6th June 2024.

V. Scientific topics for discussion

Draft Scientific opinion on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

A. Expert knowledge elicitation (EKE) behavioural space model

To address ToR-B, request 2A of the mandate, and in particular to assess the factor 'space allowance' for turkeys, an EKE exercise was identified to be carried out following a model on space allowance to ascertain the space that turkeys need physiologically for performing different behaviours. An evidence dossier was prepared including scientific literature out of which data was extracted and the WG experts assessed the data; some key parameters like the turkeys 'body surface sitting and standing', 'body length with feathers', 'age of slaughter' and 'body weight' were discussed for turkey toms and turkey hens as well as the shape of the area occupied by the turkey individuals when performing diverse behaviours such as sitting and standing, preening, dustbathing and wing flapping. The working group emphasized that turkeys are slaughtered at different body weights in the EU Member States and the WG agreed to base the EKE on diverse ranges of this parameter. An EKE was carried out amongst the 6 experts on the average area on the ground in cm² occupied by a 20 kg turkey for which the lower bound, 1st quartile, median, 3rd quartile and upper bound were elicited.

B. Animal-based measures (ABMs) collected at slaughter to measure welfare of turkeys on farm

The assessment of ABMs at slaughter to monitor animal welfare on farm was discussed as per the ToR-B, request 5. The approach to address this ToR was presented to the WG. It consists of a two-steps exercise, starting from the list of 19 ABMs discussed in May 2023 by the EFSA Network of the scientific National Contact Points (NCPs) for Art 20 for Regulation 1099/2009 (EFSA, 2021⁴⁴). Initially, the WG experts reached consensus on the definitions of the ABMs that can be monitored during slaughtering of turkeys in *ante-* or *post-mortem* inspections. Subsequently, a first exercise was run to screen which ABMs should be further analysed. The screening was conducted by group discussion which led to group consensus based on four criteria: i) Relevance to animal welfare; ii) Relationship with the farm (and not transport or lairage phases); iii) Existing data in literature on the ABM; iv) Feasibility for large scale collection of the ABM. After the screening was conducted the initial list of 19 ABMs was reduced. Subsequently, a second step of this exercise will be conducted individually as preparatory work for the next WG meeting and will be based on the relevant information gathered from the scientific literature, the WG experts knowledge and experience and the outcomes of the EFSA NCPs Network discussion. This second step aims at selecting the final list of ABMs to suggest for monitoring at the slaughterhouse as indicators of the on-farm welfare of turkeys.

VI. Any Other Business

⁴ <https://doi.org/10.2903/sp.efsa.2023.EN-8383>



Project management, tasks and assignments

Timeline and next deadlines of the project were discussed.

Tasks were identified and distributed among the WG experts; in relation to item V.B above experts were requested to perform the individual selection of ABMs at slaughter to monitor animal welfare on farm (second step will be presented and discussed at the next WG meeting).

VII. Next meeting

The next meeting will be held on 12th July 2024, via web conference.

SCIENTIFIC PANEL ON ANIMAL HEALTH AND WELFARE

7th Working Group meeting on the welfare of turkeys on farm

23rd- 24th May 2024

09:00 -17:30; 09:00 - 17:00

MINUTES - Agreed on 6 June 2024



Location: Hybrid (in-person in Parma EFSA/ web)

Attendees:

- Working Group Members:
 - Jutta Berk
 - Joanna Marchewka (web)
 - Virginie Michel
 - Anja Riber
 - Nienke van Staaveren
 - Antonio Velarde Calvo (Chair)
- Hearing Experts¹: Not applicable
- European Commission and/or Member States representatives:
 - EC: Susanne Dittmann Rasmussen (web), Kirsten Vornhagen (web)
- EFSA:
 - BIOHAW Unit: Cristina Rojo Gimeno, Chiara Fabris, Oana-Maria Balmos, Yves Van der Stede
 - MESE Unit: Olaf Mosbach-Schulz (Scientific topics for discussion point V.B)
- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants. No apologies were received.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

¹ As defined in Article 34 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



IV. Agreement of the minutes of the 6th Working Group meeting held on 23rd April 2024, via web conference

The minutes of the 6th Working Group meeting were agreed by written procedure on 3rd of May 2024.

V. Scientific topics for discussion

Draft Scientific opinion (SO) on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

A. Definitions of Welfare Consequences and related ABMs

The definitions for the following Welfare Consequences (WC): handling stress, inability to express prelaying and nesting (maternal) behaviours, inability to perform comfort behaviour, prolonged thirst, sensory under and/or over stimulation and predation stress were revised and agreed by the Working Group (WG) members. The ABMs that can be used to assess these WCs and soft tissue and integument damage were also discussed in detail; on the basis of the literature and previous EFSA SOs on poultry welfare, the WG agreed on a final set of ABMs and on their definitions.

B. Hazard characterization of the mandate's factors: 'space allowance', 'type and presence of enrichment', and 'type and condition of the litter'

In relation to 'type and presence of enrichment', 'type and litter condition' and 'space allowance', the WG discussed the evidence retrieved from the literature review and complemented it with the results of the public call for evidence. It was agreed to perform a semi-formal expert knowledge elicitation on the impact of space allowance on the welfare of turkeys on farm. Literature will be examined in detail to extract data for the exercise on space allowance.

Regarding the factor 'type and presence of enrichment' the WG discussed the differences between nutritious and non-nutritious enrichments, elevated platforms and perches and how they could influence turkeys' welfare. In the case of 'type and condition of the litter' the WG discussed the impact of different kinds of litter on the identified welfare consequences. Additional evidence would be collected and explored for a complete assessment of these two factors.

C. Assessment of other factors listed in ToR2

The WG discussed the data and information needed to answer to ToR B Request 2f on how breeding and genetic traits can improve and/or impair turkeys' welfare.

VI. Any Other Business

Project management, tasks and assignments

Timeline and next deadlines of the project were discussed.

Tasks were identified and distributed among the WG experts.

VII. Next meeting

The next meeting will be held on 21st June 2024, via web conference.

23rd April 2024

09:00-18:00

MINUTES - Agreed on 03 May 2024

Location: Web conference

Attendees:

- Working Group Members:
 - Jutta Berk
 - Joanna Marchewka
 - Virginie Michel
 - Anja Riber
 - Nienke van Staaveren
 - Antonio Velarde Calvo (Chair)
- Hearing Experts¹: Not applicable
- European Commission and/or Member States representatives:
 - EC: Kirsten Vornhagen, Susanne Dittmann Rasmussen
- EFSA:
 - BIOHAW Unit: Cristina Rojo Gimeno, Chiara Fabris, Oana-Maria Balmos
- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants. No apologies were received.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

¹ As defined in Article 34 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



IV. Agreement of the minutes of the 5th Working Group meeting held on 26th March 2024, via web conference

The minutes of the 5th Working Group meeting were agreed by written procedure on 5th of April 2024.

V. Scientific topics for discussion

A. Draft Scientific opinion (SO) on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

a. Definition of the relevant Welfare consequences (WC) and list and definition of animal-based measures (ABMs)

The WG members agreed on the definitions of the following WCs identified as relevant for turkeys: cold stress, group stress, heat stress, locomotory disorders, prolonged hunger, restriction of movement, and soft tissue and integument damage. The WG members agreed on a list of ABMs to assess the above-mentioned WCs in turkeys and defined them.

b. Hazard characterization of the mandate's factor 'space allowance', the 'type and presence of enrichment', and the 'type and condition of the litter'

The WG members discussed the preliminary outcomes on the mandate's factor 'space allowance' that were produced based on the literature collected through Web of Science (WOS) and supplemented by the scientific inputs obtained from the Public Call for Evidence. For the factors 'type and presence of enrichment' and 'type and condition of the litter' a similar process will be followed.

VI. Any Other Business

Project management, tasks and assignments

Timeline and next deadlines of the project were discussed.

Tasks were identified and distributed among the WG experts. It was agreed that the WG will draft the description of the remaining WCs and ABMs; the sections of the draft SO reporting on the 'type and presence of enrichment', the 'type and condition of the litter' and 'space allowance' will be presented for discussion at the next WG meeting.

VII. Next meeting

The next meeting will be held on 23rd-24th May 2024, in hybrid mode, in Parma and web-conference.

Agreement of the minutes	
Jutta Berk	Yes
Joanna Marchewka	Yes

MEETING MINUTES – 23rd April 2024
6th Working Group meeting on the welfare of turkeys on farm



Virginie Michel	Yes
Anja Riber	Yes
Nienke van Staaveren	Yes
Antonio Velarde Calvo	Yes

26th March 2024

09:00-17:00

MINUTES - Agreed on 5th April 2024

Location: Web conference

Attendees:

- Working Group Members:
 - Jutta Berk
 - Joanna Marchewka
 - Virginie Michel
 - Anja Riber
 - Nienke van Staaveren
 - Antonio Velarde Calvo (Chair)
- Hearing Experts¹: Nedra Abdelli, Alexandra Contreras attending via web conferencing the scientific topic for discussion 'b.' via the Framework Partnership Agreement No GP/EFSA/ALPHA/2021/10 LOT 1 and specific agreement No 5-2022
- European Commission and/or Member States representatives:
 - EC: Kirsten Vornhagen
- EFSA:
 - BIOHAW Unit: Cristina Rojo Gimeno, Chiara Fabris, Oana-Maria Balmos, Yves Van der Stede
- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants. Susanne Dittmann Rasmussen and Aranzazu Varvaro sent their apologies.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening

¹ As defined in Article 34 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



process, and no interests were declared orally by the members at the beginning of this meeting.

IV. Agreement of the minutes of the 4th Working Group meeting held on 28th February 2024, via web conference

The minutes of the 4th Working Group meeting were agreed by written procedure on 12th of March 2024.

V. Scientific topics for discussion

A. Draft Scientific opinion (SO) on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

a. Feedback on the draft Husbandry systems report prepared by the contractor

The working group (WG) provided feedback on the contractor's report on the husbandry systems of turkeys kept on farm based on the results of a survey and a literature review. The contractor accepted to include additional summary tables of the results of the surveys of relevant factors of the mandate in the following version of the report.

b. Hazard characterization: results of literature searches on enrichment, space allowance and litter

EFSA presented the results of the literature searches conducted to retrieve scientific evidence on three of the factors listed in the mandate: type and presence of enrichment, space allowance and type and condition of the litter. The WG members screened titles and abstracts of the extracted records against specific inclusion and exclusion criteria and agreed to look for any additional publications that could be of relevance.

c. Definition of Welfare consequences and list and definition of animal-based measures (ABMs)

The WG reviewed and revised the definition of the welfare consequences 'gastroenteric disorders', 'respiratory disorders', 'soft tissue lesions and integument damage', 'group stress' and 'resting problems' included in the Methodological Guidance for the development of animal welfare mandates in the context of the farm to fork strategy (EFSA AHAW Panel, 2022)⁴. A list of animal-based measures (ABMs) that, according to scientific publications, can be used to assess the welfare consequences relevant for turkeys was provided and discussed by the WG. The ABMs for 'locomotory disorders (including lameness)', 'gastroenteric disorders' and 'inability to perform comfort behaviour' were discussed and agreed.

⁴ EFSA AHAW Panel (EFSA Panel on Animal Health and Welfare), Nielsen, SS, Alvarez, J, Bicout, DJ, Calistri, P, Canali, E, Drewe, JA, Garin-Bastuji, B, Gonzales Rojas, JL, Gortazar Schmidt, C, Herskin, M, Miguel ´Angel Miranda, Chueca, Michel, V, Padalino, B, Pasquali, P, Roberts, HC, Spooler, H, Stahl, K, Velarde, A, Viltrop, A, Edwards, S, Ashe, S, Candiani, D, Fabris, C, Lima, E, Mosbach-Schulz, O, Gimeno, CR, Van der Stede, Y, Vitali, M and Winckler, C, 2022. Scientific opinion on the methodological guidance for the development of animal welfare mandates in the context of the Farm to Fork Strategy. EFSA Journal 2022;20(7):7403, 29 pp. <https://doi.org/10.2903/j.efsa.2022.7403>



VI. Any Other Business

Project management, tasks and assignments

Timeline and next deadlines of the project were discussed.

Tasks were identified and distributed among the WG experts. It was agreed that the sections of the draft SO reporting litter, enrichment and space allowance and the related hazards (see point b. above) and the welfare consequences and ABMs (see point c. above), will be drafted by the WG members and presented for discussion at the next WG meeting.

VII. Next meeting

The next meeting will be held on 23rd April 2024, via web conference.

Agreement of the minutes	
Jutta Berk	Yes
Joanna Marchewka	Yes
Virginie Michel	Yes
Anja Riber	Yes
Nienke van Staaveren	Yes
Antonio Velarde Calvo	Yes

SCIENTIFIC PANEL ON ANIMAL HEALTH AND WELFARE

4th Working Group meeting on the welfare of turkeys on farm



28th February 2024

09:00-17:00

MINUTES - Agreed on 12th March 2024

Location: Web conference

Attendees:

- Working Group Members:
 - Jutta Berk
 - Joanna Marchewka
 - Virginie Michel
 - Anja Riber
 - Nienke van Staaveren
 - Antonio Velarde Calvo
- Hearing Experts¹: Not applicable
- European Commission and/or Member States representatives: not applicable
- EFSA:
 - BIOHAW Unit: Cristina Rojo Gimeno, Chiara Fabris, Oana-Maria Balmos
- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants. No apologies were received

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



IV. Agreement of the minutes of the 3rd Working Group meeting held on 26th January 2024, via web conference

The minutes of the 3rd Working Group meeting were agreed by written procedure on 12th of February 2024³.

V. Scientific topics for discussion

A. Draft Scientific opinion (SO) on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

a. Feedback on the discussion of the protocol at the 154th AHAW Panel plenary meeting

The WG chair and EFSA updated the WG members on the outcomes of the AHAW Panel discussion on the protocol for the SO on the welfare of turkeys on farm that was presented at the 154th EFSA AHAW Panel plenary meeting. The protocol covers the problem formulation and the approach to be used for developing the SO. It was reported that the Panel agreed with the protocol and that Tollgate 1 was successfully passed.

b. Update on the linkages between factors and welfare consequences based on literature review

The WG discussed the scientific evidence that was provided in support to the identification of the links between the factors and practices listed in the mandate and the relevant welfare consequences. The overall results of this exercise were updated accordingly.

c. Identification of the hazards for the mandate factors

To address request 2.B (a) of the mandate, for turkeys kept for meat production, turkey breeders and poults, the WG members discussed, identified, and characterized the hazards related to the following factors: litter, enrichment and space allowance. The structure of the sections of the draft SO reporting on these factors and hazards, their descriptions and relationship with the relevant welfare consequences was also discussed and agreed.

d. Update on the outcomes of the Public call for evidence on the welfare of turkeys

EFSA informed the WG members about the outcome of the [Public call for evidence on the welfare of turkeys](#) that was launched between 7th December 2023 and 31st January 2024: a structured summary of the scientific content of the comments and attachments submitted was presented and discussed in detail.

VI. Any Other Business

Project management, tasks and assignments

Timeline and next deadlines of the project were discussed.

Tasks were identified and distributed among the WG experts. It was agreed that the sections of the draft SO reporting on litter, enrichment and space allowance and the related hazards (see point c. above), will be drafted by the WG members and presented for discussion at the next WG meeting.



VII. Next meeting

The next meeting will be held on 26th March 2024, via web conference.

Agreement of the minutes	
Jutta Berk	yes
Joanna Marchewka	yes
Virginie Michel	yes
Anja Riber	yes
Nienke van Staaveren	yes
Antonio Velarde Calvo	yes

SCIENTIFIC PANEL ON ANIMAL HEALTH AND WELFARE

3rd Working Group meeting on the welfare of turkeys on farm



26th January 2024

09:00-17:00

MINUTES - Agreed on 12th February 2024

Location: Web conference

Attendees:

- Working Group Members:

Jutta Berk

Joanna Marchewka

Virginie Michel

Anja Riber

Nienke van Staaveren

Antonio Velarde Calvo

- Hearing Experts: Not applicable
- EFSA:
BIOHAW Unit: Cristina Rojo Gimeno, Chiara Fabris, Oana-Maria Balmos
- Others: Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants. Susanne Dittmann Rasmussen from the European Commission sent her apologies.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

IV. Agreement of the minutes of the 2nd Working Group meeting held on 18th December 2023, via web conference

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



The minutes of the 2nd Working Group meeting were agreed by written procedure on 9th of January 2024³.

V. Scientific topics for discussion

A. Draft opinion on the welfare of turkeys on farm ([EFSA-Q-2023-00647](#))

a. Relevant welfare consequences for turkeys

Starting from the list of welfare consequences produced by the AHAW Panel ([EFSA AHAW Panel, 2022](#)), the working group (WG) carried out an exercise to identify which welfare consequences are relevant for turkeys in the diverse production systems and to be further assessed.

In addition, the WG agreed that additional welfare consequences could be described narratively (e.g., skin disorders, inability to perform play behaviour, and metabolic disorders).

b. Linking the factors and practices of the mandate to the relevant welfare consequences

The WG run an exercise to identify the links between the factors and practices listed in the mandate to the relevant welfare consequences. The factors and practices are: 1) litter condition, 2) enrichment, 3) covered veranda, 4) outdoor space, 5) space allowance, 6) concentration of ammonia, 7) concentration of CO₂, 8) temperature, 9) light condition, 10) group size, 11) separation of males and females, 12) final weight, 13) average daily weight gain, 14) the practice of thinning, 15) feed and water restriction, 16) age of onset of breeding, 17) nests conditions, 18) the practice of artificial insemination, 19) hatchery conditions, 20) the practice of mutilations (e.g. 21 beak trimming), 22) Breeding and genetics.

c. Protocol presentation

EFSA presented the draft protocol to the WG; it includes the problem formulation and the approach to be used. The protocol will be presented for consultation at the 154th EFSA AHAW Panel plenary meeting.

d. Update on the survey of mutilations on turkeys

The final version of the questionnaire on the mutilations practiced to turkeys was presented, discussed and agreed by the WG. The questionnaire will be sent to the EU Member States of the EFSA for AHAW (AW Topic) Network.

VI. Any Other Business

Project management, tasks and assignments

Timeline and next deadlines of the project were discussed. Tasks were identified and distributed among the WG experts accordingly.

VII. Next meeting

The next meeting will be held on 28th February 2024, via web conference.



Agreement of the minutes	
Jutta Berk	Yes
Joanna Marchewka	Yes
Virginie Michel	Yes
Anja Riber	Yes
Nienke van Staaveren	Yes
Antonio Velarde Calvo	Yes

SCIENTIFIC PANEL ON ANIMAL HEALTH AND WELFARE

2nd Working Group meeting on the welfare of turkeys on farm



18th December 2023
09:00-17:00
MINUTES - Agreed on 9th January 2024

Location: Web conference

Attendees:

- Working Group Members:

Jutta Berk

Joanna Marchewka

Virginie Michel

Anja Riber

Nienke van Staaveren

Antonio Velarde Calvo

- Hearing Experts: Nedra Abdelli and Alexandra Contreras Jodar (attending the scientific topic for discussion 'b' via the Framework Partnership Agreement No 5-2022 GP/EFSA/ALPHA/2021/10 LOT 1):
- EFSA:
BIOHAW Unit: Cristina Rojo Gimeno, Chiara Fabris, Oana-Maria Balmos
- Others:
Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants. No apologies were received.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



IV. Agreement of the minutes of the 1st Working Group meeting held on 21st November 2023, via web conference

The minutes of the 1st Working Group meeting were agreed by written procedure on 4th of December 2023³.

V. Scientific topics for discussion

a. Definitions of the animal categories of turkeys

The working group agreed on the definitions of the animal categories to be assessed in the scientific opinion on the welfare of turkeys: turkey hens and turkey toms will be used for turkeys kept for meat production and breeders. Turkey hens are the female turkeys and turkey toms are the male turkey. Poults will be used for newly hatched turkeys up to 5-7 days of life.

b. Working group feedback on the preparatory work by the contractor

The contractor presented draft documents on the turkeys' production cycle and surveys to gather information on the husbandry systems of turkeys. The documents were discussed in detailed by the working group and the inputs received will be addressed by the contractor in the updated versions.

c. Identification of relevant welfare consequences for turkey breeders, poults and turkeys kept for meat production

The working group agreed on assessing three less relevant welfare consequence: inability to perform sexual behaviour, inability to avoid unwanted sexual behaviour and reproductive disorders that will be addressed with a narrative assessment.

VI. Any Other Business

Project management, tasks and assignments

Timeline and next deadlines of the project were discussed. Tasks were identified and distributed among the WG experts accordingly.

VII. Next meeting

The next meeting will be held on 26th January 2024, via web conference.



Agreement of the minutes	
Jutta Berk	Yes
Joanna Marchewka	Yes
Virginie Michel	Yes
Anja Riber	Yes
Nienke van Staaveren	Yes
Antonio Velarde Calvo	Yes

Location: Web conference

Attendees:

- Working Group Members:

Jutta Berk

Joanna Marchewka

Virginie Michel

Anja Riber

Nienke van Staaveren

Antonio Velarde Calvo

- Hearing Experts:
Not Applicable

- European Commission:
Susanne Dittmann Rasmussen

- EFSA:
BIOHAW Unit: Cristina Rojo Gimeno, Chiara Fabris, Oana-Maria Balmos

- Others:
Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants.

II. Adoption of agenda

The agenda was adopted without changes.

III. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening

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² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



process, and no interests were declared orally by the members at the beginning of this meeting.

IV. Scientific topic(s) for discussion

a. Short introduction of the working group members.

The Chair and the WG members introduced themselves and provided their scientific background related to the remit of the mandate on the welfare of turkeys on farm.

b. EFSA Corporate presentation and Farm to fork (F2F) mandates

A presentation of the functioning of the EFSA Working groups and an overview and methodology of the F2F mandates was provided by the EFSA secretariat.

c. Presentation of the Terms of reference of the mandate on the protection of turkeys on farm (EFSA-Q-2023-00648 and EFSA-Q-2023-00647)

The ToRs of the mandate were presented and discussed. Working group members were informed of the preparatory work related to ToR A of the mandate that have been outsourced to an external contractor.

d. Outcomes and next steps: Stakeholders meeting on the welfare of turkeys on farm: farming practices and data.

The objectives of the stakeholders' meeting held on 8th November were described. Subsequently, the engagement plan with the stakeholders was presented.

e. Distribution of tasks of the Scientific Opinion on the welfare of turkeys on farm.

Specific tasks were assigned and agreed as well as their specific deadlines. In particular, WG experts were invited to work on sections addressing ToRs 1.

V. Any Other Business

Not applicable.

VI. Next meeting

The next meeting will be held on 18th of December 2023, via web conference.



Agreement of the minutes	
Jutta Berk	Yes
Joanna Marchewka	Yes
Virginie Michel	Yes
Anja Riber	Yes
Nienke van Staaveren	Yes
Antonio Velarde Calvo	Yes