



SCIENTIFIC PANEL ON Animal health and Welfare

18th Working Group meeting on Fish diseases' introduction
in free areas



05 November 2025

09:00-13:00

MINUTES - Agreed on 17 NOVEMBER 2025

Location: Web

Attendees:

- Working Group Members:
Fernanda DÓREA – Chair, Debes CHRISTIANSEN, Niels Jorgen OLESEN, Espen RIMSTAD,
Anna TOFFAN, Niccolò VENDRAMIN,
- EFSA:
Francesca BALDINELLI

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

IV. Agreement of the minutes of the 17th Working Group meeting held on 27 October 2025, via web-conference

The minutes of the 17th Working Group meeting were agreed by written procedure on 3 November 2025.

V. Scientific topic(s) for discussion

The WG experts went through the entire Scientific Opinion and resolved pending side comments. The work then focused on reviewing the summary and the draft abstract. Further review of those two latter sections is expected after the meeting. The Scientific Opinion will be shared with the AHAW Panel from 7 to 17 November and is planned for adoption at the Plenary meeting on 19 November. WG experts agreed to answer comments/clarifications requested by the Panel experts, if any, ahead of the adoption date.

¹ https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/independence-policy-2024.pdf

² https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/decision-ed-on-competing-interest-management-2024.pdf



VI. TASKS/who/deadline:

The WG experts will review for the last time the entire opinion and make final proposal on the summary and abstract by 7 November.

VII. Next meeting

No further meetings were scheduled.



SCIENTIFIC PANEL ON Animal health and Welfare

17th Working Group meeting on Fish diseases' introduction
in free areas



27 October 2025

10:00-12:00

MINUTES - Agreed on 3 November 2025

Location: Web

Attendees:

- Working Group Members:
Fernanda DÓREA – Chair, Niels Jorgen OLESEN, Espen RIMSTAD, Anna TOFFAN, Niccolò VENDRAMIN, Debes CHRISTIANSEN
- EFSA:
Francesca BALDINELLI, Stella PAPALEO

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

IV. Agreement of the minutes of the 16th Working Group meeting held on 9th of October 2025, via web-conference

The minutes of the 16th Working Group meeting were agreed by written procedure on 3 November 2025.

V. Scientific topic(s) for discussion

The feedback from the AHAW experts received at the last plenary meeting was shared with the Working Group members. Some textual adjustments were introduced: in particular, the section on uncertainty was reviewed, and the uncertainty section was removed from the recommendations.

An overview of the entire document was provided and all pending comments and modifications made in track changes were discussed and solutions were agreed. In particular, the Working Group

¹ https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/independence-policy-2024.pdf

² https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/decision-ed-on-competing-interest-management-2024.pdf



members reviewed and discussed the newly added Summary section. All the modifications made in the summary will also be applied consistently throughout the main text to ensure coherence.

VI. TASKS/who/deadline:

At the end of the meeting specific tasks were assigned among the Working Group members to finalise the outstanding sections by the next WG meeting.

VII. Next meeting

The next meeting will be held on 5 November from 12.00 to 16.00 via web-conference.



SCIENTIFIC PANEL ON Animal health and Welfare

16th Working Group meeting on Fish diseases' introduction
in free areas

09 October 2025

12:00-16:00

MINUTES - Agreed on 3 NOVEMBER 2025



Location: Web

Attendees:

- Working Group Members:
Fernanda DÓREA – Chair, Niels Jorgen OLESEN, Espen RIMSTAD, Anna TOFFAN, Niccolò VENDRAMIN, Debes CHRISTIANSEN
- EFSA:
Francesca BALDINELLI, Stella PAPALEO

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

IV. Agreement of the minutes of the 15th Working Group meeting held on 16th of September 2025, via web-conference

The minutes of the 15th Working Group meeting were agreed by written procedure on 25 September 2025.

V. Scientific topic(s) for discussion

The participants reviewed and further discussed the draft of the Scientific Opinion, with a particular focus on the assessment and results of ToR2, 3 and 4. In particular, the WG reviewed the amendments suggested to table 8 during the AHAW Plenary, and agreed on a final text for the table. Also, section 3.5 on implementation of risk mitigation measures was discussed and comments resolved. The source of uncertainty related to the assessment performed under ToR 3 and 3 were discussed. The first draft of the conclusions on ToR 2 and

¹ https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/independence-policy-2024.pdf

² https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/decision-ed-on-competing-interest-management-2024.pdf



3 was discussed. In the section on conclusion for ToR 1, The WG agreed on adding the conclusion related to the risk of introduction when implementing population testing instead of individual testing of broodstock after stripping.

VI. TASKS/who/deadline:

The member of the working group decided to divide the work to draft the conclusions.

VII. Next meeting

The next meeting will be held on 27 October from 10.00 to 12.00 via web-conference.



SCIENTIFIC PANEL ON Animal health and Welfare

15th Working Group meeting on Fish diseases' introduction
in free areas



15 September 2025

10:00-12:00

MINUTES - Agreed on 25 SEPTEMBER 2025

Location: Web

Attendees:

- Working Group Members:
Fernanda DÓREA – Chair, Niels Jorgen OLESEN, Espen RIMSTAD, Anna TOFFAN, Niccolò VENDRAMIN, Debes CHRISTIANSEN
- AHAW Panel Members:
ALVAREZ Julio
- EFSA:
Francesca BALDINELLI, Stella PAPALEO

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

IV. Agreement of the minutes of the 14th Working Group meeting held on 9th of September 2025, via web-conference

The minutes of the 14th Working Group meeting were agreed by written procedure on 25 of September 2025.

V. Scientific topic(s) for discussion

The participants reviewed and further discussed the responses to the survey, with a particular focus on the work that was done by the experts after the previous working group meeting. The open questions in the Critical points section and the ones in the Testing and disinfection

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



section were summarized. The summary of the responses to the survey drafted in the opinion was reviewed.

The uncertainty related to ToR 1 was discussed in dept.

VI. TASKS/who/deadline:

The WG will review the section of the draft Scientific Opinion related to ToR 2, 3 and 4 in methods and assessment sections and integrate where needed according to the results of the analysis of the survey results. The survey, as well as the outcome of the analysis will be integrated into the opinion as the annexes B (survey) and C (responses to the survey) before submitting the document to the Panel members on the 17th of September.

VII. Next meeting

The next meeting will be held on the 9th of October from 12.00 to 16.00 via web-conference



SCIENTIFIC PANEL ON Animal health and Welfare

14th Working Group meeting on Fish diseases' introduction
in free areas



09 September 2025

09:00-13:00

MINUTES - Agreed on 25 September

Location: Web

Attendees:

- Working Group Members:
Fernanda DÓREA – Chair, Niels Jorgen OLESEN, Espen RIMSTAD, Anna TOFFAN, Debes CHRISTIANSEN
- EFSA:
Francesca BALDINELLI, Stella PAPALEO

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

IV. Agreement of the minutes of the 13th Working Group meeting held on 22nd of August 2025, via web-conference

The minutes of the 13th Working Group meeting were agreed by written procedure on 11 of September 2025.

V. Scientific topic(s) for discussion

The results of the survey on practical experience on implementing risk mitigation measures at establishment level, provided by the hearing experts in the previous two working group meetings were discussed. Each question was reviewed and discussed in detail, with particular attention given to how open questions should be analysed. The group also agreed to include the survey as annex in the Scientific Opinion and that an additional summary of the survey findings will be prepared to be included in the Scientific Opinion. At the end of the meeting the work has been divided among the members of the WG to review the answers to the Critical

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



points, and the sections of testing and disinfection. At the end of the meeting, briefly, proposals on analysis of uncertainty related to ToR 1 were presented by the chair with the aim of discussing them in dept in the next WG meeting.

VI. Next meeting

15 September 2025 (web meeting 10.00-12.00)



SCIENTIFIC PANEL ON Animal health and Welfare

13th Working Group meeting on Fish diseases' introduction
in free areas



22 August 2025

9:00-13:00

MINUTES - Agreed on 11 September 2025

Location: Web

Attendees:

- Working Group Members:
Fernanda DÓREA – Chair, Niels Jorgen OLESEN, Espen RIMSTAD, Anna TOFFAN, Niccolò VENDRAMIN
- Working Group Hearing Experts:
Adelchi ACCINI, Per Helge BERGTUN, Pierre-Marie BOITARD, Ciro CASTELLANO, Alain LE BRETON, Dusan PALIC, Peter S. OSTERGAARD, Aud SKRUDLAND, Rajko JANKOVICH
- EFSA:
Francesca BALDINELLI

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

IV. Agreement of the minutes of the 12th Working Group meeting held on 12th of August 2025, via web-conference

The minutes of the 12th Working Group meeting were agreed by written procedure on 1st of September 2025.

V. Scientific topic(s) for discussion

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 mandate and the term of references EFSA received from the EC on assessment of risk of VHSV, IHNV and ISAV HPR-deleted introduction in free areas via movement of fertilized eggs and gametes from non-free to free areas were presented to the hearing experts invited to this WG meeting. The background and the context of the work expected by the hearing experts during the meeting were presented and discussed. The chair then presented to the hearing experts the survey on practical experience on implementing risk mitigation measures at establishment level which is meant to collect information from the hearing expert to answer ToR 3. The hearing experts filled in the online survey. Clarifications were provided from the full members of the WG when required by the hearing experts.

VI. TASKS/who/deadline:

The below to be implemented ahead of the 9 September WG meeting:

- to analyse the results of the survey that will be discussed at the September WG meeting
- to advance on Uncertainty related to ToR 1

VII. Next meeting

9 September 2025 (web meeting 9.00-13.00)



SCIENTIFIC PANEL ON Animal health and Welfare

12th Working Group meeting on Fish diseases' introduction in free areas

12 August 2025

9:00-13:00

MINUTES - Agreed on 1 September 2025



Location: Technical University of Denmark (DTU), Copenhagen

Attendees:

- Working Group Members:
Fernanda Dórea – Chair, Debes Christiansen, Niccolò Vendramin
- Working Group Hearing Experts:
Torsten BOUTRUP, Torkjel BRUHEIM, Thomas CLAUSEN, Andrea FABRIS, Pojezdal LUBOMÍR, Simon MADSEN, Marek MATRAS, Asgeir OSTVIK, Hamish RODGER
- EFSA:
Francesca Baldinelli

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

IV. Agreement of the minutes of the 11th Working Group meeting held on 18th of June 2025, via web-conference

The minutes of the 11th Working Group meeting were agreed by written procedure on 7th of July 2025.

V. Scientific topic(s) for discussion

The mandate and the term of references EFSA received from the EC on assessment of risk of VHSV, IHNV and ISAV HPR-deleted introduction in free areas via movement of fertilized eggs and gametes from non-free to free areas were presented to the hearing experts invited to this WG meeting. The background and the context of the work expected by the hearing experts during the meeting were presented and discussed. The chair then presented to the

¹ https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/independence-policy-2024.pdf

² https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/decision-ed-on-competing-interest-management-2024.pdf



hearing experts the survey on practical experience on implementing risk mitigation measures at establishment level which is meant to collect information from the hearing expert to answer ToR 3. The hearing experts filled in the online survey. Clarifications were provided from the full members of the WG when required by the hearing experts.

VI. TASKS/who/deadline:

The below to be implemented ahead of the 9 September WG meeting:

- to analyse the results of the survey that will be discussed at the September WG meeting
- to advance on Uncertainty related to ToR 1

VII. Next meeting

22 August 2025 (web meeting 9.00-13.00)



SCIENTIFIC PANEL ON Animal health and Welfare

11th Working Group meeting on Fish diseases' introduction
in free areas



18 June 2025

9:00-13:00

MINUTES - Agreed on 7 July 2025

Location: web conference

Attendees:

- Working Group Members:
Fernanda Dórea – Chair, Debes Christiansen, Niels Jorgen Olesen, Espen Rimstad, Anna Toffan, Niccolò Vendramin
- EFSA:
Francesca Baldinelli

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

IV. Agreement of the minutes of the 10th Working Group meeting held on 29th, 30th of May 2025, at the Technical University of Denmark (DTU), Copenhagen

The minutes of the 10th Working Group meeting were agreed by written procedure on 13th of June 2025.

V. Scientific topic(s) for discussion

Text on fish fish system production - The WG experts briefly discussed the draft text and agreed on reducing the text and removing the proposed table on major rainbow trout hatcheries in Europe. The experts were happy with the final text displayed.

ToR 2 – The WG experts further reviewed the content of Table 6 in section 3.4 of the scientific opinion, additional changes were discussed and directly applied to that table. The concern due to pipe fish entering the recirculating aquatic system (RAS) outside the tank was discussed and added to the table and text. The critical point on measures to avoid introduction

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



of transport water into the establishment was removed from the table as standalone item and merged with the point on disinfection of services. Quality assurance should apply on the diagnostic laboratory (i.e. diagnostic laboratories should follow ISO 17025 standard).

ToR 3 – The on-line survey form created in EUSurvey was presented to the experts which commented on content and structure suggesting further refinements according to the items discussed under ToR2 and changed in the opinion. The plan to organise the upcoming work to collect information via the survey from the hearing experts was presented and discussed. The WG experts were requested to indicate their availability to join WG meetings over the summer period, the ones where most of them will be available to join will be proposed to the hearing experts as possible WG meeting dates. Those selected dates will be communicated to the WG experts as soon as identified. The aim is to have the results from the survey analysed and reported in the scientific opinion by middle of September.

VI. TASKS/who/deadline:

The below to be implemented ahead of the end of June upcoming WG meeting:

- to finalise Table 6 on the critical points in Section 3.4
- to update the online form of the survey according to the changes proposed this and to Table 6 (as soon as it is finalised)
- to fill in the survey and indicate/suggest any additional changes (pilot)
- fill the few doodles to look for dates to be proposed to the hearing experts as WG dates
- to advance on Uncertainty related to ToR 1

VII. Next meeting

TBD



SCIENTIFIC PANEL ON Animal health and Welfare

10th Working Group meeting on Fish diseases' introduction
in free areas

29, 30 May 2025

9:00-18:00, 9:00-13:00

MINUTES - Agreed on 13 June 2025



Location: Technical University of Denmark (DTU), Copenhagen

Attendees:

- Working Group Members:
Fernanda Dórea – Chair, Debes Christiansen, Niels Jorgen Olesen, Espen Rimstad, Anna Toffan, Niccolò Vendramin
- EFSA:
Francesca Baldinelli

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 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 29th of April 2025, via web-conference

The minutes of the 9th Working Group meeting were agreed by written procedure on 21st of May 2025.

V. Scientific topic(s) for discussion

ToR 2 – The WG experts discussed and revised the content of Table 6 in section 3.4 of the scientific opinion. The different critical points identified relate to the main risk mitigation measures that were discussed in ToR 1 and were grouped according to the main categories health and surveillance, establishments (where the eggs are produced), biosecurity procedures and diagnostic laboratory. All the points listed were extensively discussed and a short description included in the table. The original proposal of having two different tables related to the possible breeding systems 'fresh water-sea-fresh water' vs 'fresh water' was further explored and the experts concluded to only capture difference in the text, given that a description of the two system is given in the opinion. Therefore, it was agreed to add in the

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



introductory part of the opinion a section describing the two different breeding/managerial production system for salmon species. Therefore, the description of each critical points reported in table 6 should be reviewed by the experts and any difference/specificity relate to the production system drafted as text after the table. In addition, a text capturing and describing the different production system should be added in the introduction section.

ToR 3 – A discussion was held on which expertise was needed to answer the survey to collect information on practical experience in implementing the effective risk mitigation measures identified in ToR1. Fish health experts from private companies, Competent Authority or working in the field in their private capacity would be eligible to answer the survey. A detailed discussion took place among the experts to phrase all the questions needed to collect info on general information on the respondent, on testing of broodfish (individual and population testing), and on eggs disinfection procedures. Experts should revise the questions elaborated at the meeting and pilot the survey as soon as it is finalized (ahead of next WG meeting)

ToR 4 – The data provided at the expert knowledge elicitation on effectiveness of risk mitigation measures will be used to quantitatively assess uncertainty related to ToR1. Whereas, the experts agreed to list and describe the source of uncertainty related to the assessment on ToR 2 and 3.

VI. TASKS/who/deadline:

The below to be implemented ahead of the end of June upcoming WG meeting:

WG experts:

- to review the survey and pilot it and EFSA to prepare the online tool
- review Table 6 on the critical points in Section 3.4 of the scientific opinion
- to draft an introductory part on production systems 'fresh water-sea-fresh water' and 'fresh water' in the opinion, in section 1.5.1
- to advance on Uncertainty related to ToR 1

VII. Next meeting

18th of June



SCIENTIFIC PANEL ON Animal health and Welfare

9th Working Group meeting on Fish diseases' introduction
in free areas



29th April 2025

14:00-18:00

MINUTES - Agreed on 21st May 2025

Location: Web conference

Attendees:

- Working Group Members:
Fernanda Dórea – Chair, Debes Christiansen, Niels Jorgen Olesen, Espen Rimstad, Anna Toffan, Niccolò Vendramin
- EFSA:
Francesca Baldinelli

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

IV. Agreement of the minutes of the 8th Working Group meeting held on 31st of March 2025, via web-conference

The minutes of the 8th Working Group meeting were agreed by written procedure on 10th of April 2025.

V. Scientific topic(s) for discussion

The WG experts were informed on the outcome of the discussion on **ToR 1** at the AHAW Plenary meeting on 9 April, particularly on main suggested changes proposed by the Panel (e.g. the terms used to describe the probability of failing of risk mitigation measures were removed, keeping only the probability values) and agreed on them.

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



On **ToR 2**, it was agreed to keep both tables on Atlantic salmon and trout (Section 3.4) given the possible different management system particularly related to trout raised in sea water (cannot be back to fresh water) or in fresh water (lower biosecurity level usually expected).

The experts discussed the importance of origin of inlet water in relation to the treatment that it should undergone (seawater vs borehole water) and agreed to indicate that freshwater from sources that have anadromous fish population as well as surface freshwater should not be used as inlet water. Experts discussed other critical control points and pointed out any differences between Atlantic Salmon and trout.

On **ToR 3**, the discussion focused on contents of the survey to describe the implementation of the effective risk mitigating measures identified as per ToR 1, when applied by competent authorities or operators, including practical experiences, best practices or practical difficulties. Some general questions to characterize the premises/management of the establishment were included (e.g. species reared, type of production, production capacity) and the experts started to identify specific questions related to each of the mitigation measures (e.g. testing of fish, disinfection of eggs, water treatment) with the aim to clearly define the good practice as well as the weak and difficult steps in implementing each of them. The WG decided to collect this information from a few fish health veterinarians who can be interviewed directly, covering expertise from different type of salmonids production in Europe. Therefore, the selection will be operated considering extreme geographical and management settings (e.g. northern, continental, and southern Europe salmonids production with the aim to represent both salmon and trout production). The information collected via the survey will be discussed within the WG and with the experts originating the information in a WG meeting.

VI. TASKS/who/deadline:

The below to be implemented ahead of the end of May upcoming WG meeting:

- EFSA-chair: to harmonise the two tables (on Atlantic salmon and trouts) on critical points in section 3.4
- WG experts: to give feedback if each of the critical points that have been identified in the Atlantic salmon table are applicable to trouts too
- WG experts: to indicate/describe 'Note/Importance' for each of the critical points listed in the tables
- WG experts: propose a list of stakeholders in their contact networks to be interviewed for the survey in TOR3.

VII. Next meeting

29th – 30th of May



SCIENTIFIC PANEL ON Animal health and Welfare

8th Working Group meeting on Fish diseases' introduction
in free areas



31st March 2025

13:00-17:00

MINUTES - Agreed on 10 April 2025

Location: Web conference

Attendees:

- Working Group Members:
Fernanda Dórea – Chair, Debes Christiansen, Niels Jorgen Olesen, Espen Rimstad, Anna Toffan, Niccolò Vendramin
- EFSA:
Francesca Baldinelli
- Others:
Ludovica Preite participated as ISA (Individual Scientific Advisor) contractor (ref. EOI/EFSA/2022/01 – CT 23 BIOHAW) for agenda item 4 and 6, via web conference

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

IV. Agreement of the minutes of the 7th Working Group meeting held on 24th and 26th of February 2025, via web-conference

The minutes of the 7th Working Group meeting were agreed by written procedure on 14th of March 2025.

V. Scientific topic(s) for discussion

- The timeline for next meetings, including plenary sessions, was presented.
- A brief overview of the new organization within the SO of the protocol and report for the two SLRs was provided.

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



- Different sections of the SO were reviewed, with key comments discussed. It was noted that rephrasing was necessary to ensure consistency between text and graphs concerning the concept of "probability of failure" for the RMMs. Also, a decision was required on how to refer to "ISAV HPR-deleted" and "ISAV HPR0" to maintain consistency throughout the document. The concept of "hardening of eggs," a process lasting only a few hours, should be clearly defined in the SO. Experts agreed to use the terms "green eggs" and "eyed eggs" instead. For milt, it was noted that Scenario 2 was not assessed because the risk was considered higher than in Scenario 1. However, it was highlighted that experts should not decide whether the level is too high. A proposed solution is to present results for Scenario 2 by combining the probability with other RMMs, even if individual testing is not conducted in this Scenario. Regarding unfertilized eggs, experts agreed to retain a reference in the SO, stating that the same considerations applied to milt also apply to unfertilized eggs. A discussion was held on expressing risk in a more quantitative manner while maintaining the term "extremely unlikely" and also reporting numerical data.
- Regarding the inclusion of susceptible species, at the beginning of the work decision was made to focus on Salmonid species unless literature reviews identified other susceptible species. If additional species were found to be relevant, they should be reported. It was suggested that when introducing Scenario 2, it could be added that in principle it is applicable to other fresh water species raised under the same risk mitigation measures. This should be stated in the assessment section not conclusion or recommendations.
- Within the recommendation section, review the rephrasing (e.g., use extremely unlikely instead of negligible) and see consistency all along the document. Make sure that also the term "broodstock" is well defined.
- The section on "critical points to be controlled in the establishment of origin" should list all measures first, followed by a description of those that can be implemented. The main points of entry of a disease within an establishment, identified during the meeting, were: fish, water, fomites, transport, personnel. These should be listed according to their importance, in the form of a Table and distinguishing between salmon and trout. There was a discussion on how to interpret this ToR, considering different biosecurity requirements in WOA biosecurity chapter, national legislations, and specific biosecurity plans applied for each establishment. A question was raised about whether WG should assess the effectiveness or implementation of these measures.
- Regarding the survey preparation and distribution, discussion on the timeline for preparing and sending the survey (ideally beginning of June), as well as its scope (Europe or worldwide). Various proposals were made on whom to contact, including CVOs and other stakeholders, companies in particular may provide valuable insights. A suggestion was also to request the biosecurity plans of establishments in advance, to then easily identify critical points.

VI. TASKS/who/deadline:

- To have the critical points listed by the end of April.

VII. Next meeting

29th of April



SCIENTIFIC PANEL ON Animal health and Welfare

7th Working Group meeting on Fish diseases' introduction
in free areas



24th and 26th February 2025

14:30-16:30 and 09:00-13:00

MINUTES - Agreed on 14 March 2025

Location: Web conference

Attendees:

- Working Group Members:
Fernanda Dórea – Chair, Debes Christiansen (attended on 26th), Niels Jorgen Olesen, Espen Rimstad, Anna Toffan, Niccolò Vendramin
- EFSA:
Kamela Kryemadhi (attended on 24th)
- Others:
Ludovica Preite participated as ISA (Individual Scientific Advisor) contractor (ref. EOI/EFSA/2022/01 – CT 23 BIOHAW) for agenda item 4 and 6, via web conference

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

IV. Agreement of the minutes of the 6th Working Group meeting held on 12th February 2025, via web-conference

The minutes of the 6th Working Group meeting were agreed by written procedure on 4th March 2025.

V. Scientific topic(s) for discussion

The 24th of February:

- The Scientific Opinion was shared and a recap on the risk mitigation measures for fertilized eggs was provided.

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



- It was then discussed whether to proceed with the collective discussion on the individual judgment for the gametes. The approach was differed from that used for fertilized eggs, where infection was assumed and the assessment focused on the risk mitigation measures to prevent virus introduction and spread.
- For gametes, the main question was whether they would be infected if the parents were infected. The answers showed results with an uncertainty range of 0-95%. This indicates that the uncertainty is too high to accurately determine the probability of gamete contamination. It was agreed that contamination refers to the fluid surrounding the gametes and it was concluded that for the three virus the risk and uncertainty levels were both deemed too high without further mitigation measures.
- The discussion then shifted to risk mitigation measures applicable to milt and unfertilized eggs. One key measure involves testing the population and conducting individual testing of the broodstock. It was also assumed that biosecurity measures outlined in the WOAHA draft chapter are being followed.
- Most of the mitigation measures had already been assessed, so the existing information would be reused. The only added measures was water treatment, and the experts felt that the efficacy is well documented in literature, so an expert assessment of the probability was not needed.
- Regarding unfertilized eggs, it was discussed whether they should be excluded from the assessment given that they are not currently moved and due to the inability to ensure a low risk of virus transmission without appropriate risk mitigation measures in place.
- Regarding milt, there are protocols to move it frozen in the future (differently from unfertilised eggs). There are risk mitigation measures that can be applied for trading. Once the milt is bought, it will eventually be used for fertilization to produce progeny. So, as long as these disinfection procedures of the fertilised eggs are applied, and the effluent from the fertilization center is disinfected, the risk is considered to be extremely low.

The **26th** of February:

The Scientific Opinion was shared and here the main points of discussion:

- The content of Section 4.1.1, focusing on the conclusion on the risk of vertical transmission, was reviewed and discussed in detail.
 - The content of Section 3.1.4.2 on proposed risk mitigation measures to be included in the risk assessment was also reviewed and discussed. Special consideration was given to Scenario 2, where it was reiterated that this scenario better reflect practices applicable to fresh-water farmed trouts. Clarifications were provided regarding population testing, emphasizing that:
 - The sampled fish population belongs to the same physical establishment
 - That 75 animals are tested at least once a year, with a testing protocol approved by the EURL. It was also noted that water temperature for the testing system is an important factor, but this aspect is covered when referring to the EURL guidelines.
 - The conclusions on risk mitigation measures for fertilized eggs (Section 4.1.2), were also reviewed and revised. Changes were made to the structure and phrasing to improve clarity. It was emphasized that the results of the SLRs and the expert elicitation were based on the compliance and proper application of strict biosecurity measures.
 - A paragraph addressing the moving of milt was drafted during the meeting. Key points include:
-



- Disinfection procedures which can be applied directly to the milt before trading are not currently available. Thus, the primary risk mitigation measure relies on the confidence in the absence of infection in individually tested sires (male parents).
- It was stressed the importance to apply risk mitigation measures at the establishment receiving the imported milts. Eggs fertilised using the milt should be properly disinfected
- Water effluents from the hatching unit should be disinfected (e.g. by UV, Ozone, Heat or chlorine or a combination) before release into the environment.
- It was concluded that in Scenario 2 the risk is too high, since sires are not tested individually.
- It was discussed whether or not to provide specific risk mitigation measures estimates in the conclusions. Experts highlighted that for ISAV HPR-deleted, the probability of success for the individual test obtained is too low (85%-99%) and probably misleading, since the assessment exercise assumed the worst case scenario of parents being infected. Experts agree that the test is actually much better than that. Therefore, percentages will only be reported in the assessment part, were considerations on how to interpret these values are provided.

VI. TASKS/who/deadline:

- By Friday end of the day, experts to review the new drafted conclusions.

VII. Any Other Business

None.

VIII. Next meeting

31st of March



SCIENTIFIC PANEL ON Animal health and Welfare

6th Working Group meeting on Fish diseases' introduction
in free areas



12th February 2025

12:00 -16:45

MINUTES - Agreed on 4th March 2025

Location: Web conference

Attendees:

- Working Group Members:
Debes Christiansen, Niels Jorgen Olesen, Espen Rimstad, Anna Toffan, Niccolò Vendramin
- EFSA:
Francesca Baldinelli
- Others:
Ludovica Preite participated as ISA (Individual Scientific Advisor) contractor (ref. EOI/EFSA/2022/01 – CT 23 BIOHAW) for agenda item 4, via web conference

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

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

The minutes of the 5th Working Group meeting were agreed by written procedure on 25th February 2025.

V. Scientific topic(s) for discussion

The collective discussion on the individual judgment regarding the effectiveness of risk mitigation measures was conducted. Discussion points included:

- The two methods for aggregating the answers were presented, the **final** method considers the lower of the lower estimates and the upper of the upper estimates, capturing all uncertainties and different viewpoints. While the **median** method uses

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 median of the lower and upper values. The final method was preferred for its comprehensive approach.

- The interpretation of the 95% probability interval was clarified, emphasizing that it represents the range within which the true probability lies with 95% certainty. This interval should not be too narrow unless supported by solid evidence.
- The discussion was initiated from the first scenario. The reasoning given by the experts for each question was displayed on the screen together with the excel sheet containing the estimates and corresponding graphs. Real-time adjustments were made based on the discussion, with track changes applied to the reasoning and modifications highlighted in yellow for the updated lower and upper bounds.
- Important decisions were taken during the discussion, it was agreed that questions on the ISAV, which at the beginning referred to both ISAV HPR-deleted and HPR0, were answered only for HPR0, as HPR-deleted was already covered in other questions. It was also clarified that in this elicitation, the sampling is of internal organs according to EU Regulation. When interpreting the results, specifications on this section will be given. Regarding the population testing of scenario 2, it was clarified that the health status of the establishment would be checked following the EU regulation (testing 75 fish). Additionally, in Scenario 2, further details were provided regarding the questions about the number of broodstocks to be pooled.

VI. TASKS/who/deadline:

- WG experts to have a look both at the updated excel file providing the estimates and at the reasoning and to check whether the discussion is well reflected in these two files

VII. Any Other Business

None.

VIII. Next meeting

24th of February



SCIENTIFIC PANEL ON Animal health and Welfare

5th Working Group meeting on Fish diseases' introduction
in free areas



5th February 2025

9:00 -13:00

MINUTES - Agreed on 25th February 2025

Location: Web conference

Attendees:

- Working Group Members:
Fernanda Dórea – Chair, Debes Christiansen, Niels Jorgen Olesen, Espen Rimstad, Anna Toffan, Niccolò Vendramin
- EFSA:
Francesca Baldinelli
- Others:
Ludovica Preite participated as ISA (Individual Scientific Advisor) contractor (ref. EOI/EFSA/2022/01 – CT 23 BIOHAW) for agenda item 4, via web conference

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 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 29th January 2025, via web-conference

The minutes of the 4th Working Group meeting were agreed by written procedure on 7 February 2025.

V. Scientific topic(s) for discussion

The following was discussed:

- 1) A first draft of the elicitation exercise was shared with the WG experts to provide an overview before the individual judgement. This ensured that the process and scoring

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



system- covering the lower and upper bounds and allowing the selection of multiple probability ranges (to reflect uncertainty) – were clear to all participants.

2) Key discussion points:

- a. A discussion was carried out on whether to consider both HPR-deleted ISAV and HPR0 in the assessment as the WOAH doesn't distinguish between the two and on whether to focus on fertilized eggs only or to include gametes too.
- b. The definition of the term "compartment" as in the WOAH Aquatic Health Code was adopted for the scope of the elicitation.
- c. Distinct **scenarios** were developed for the elicitation exercise to reflect different establishment situations. Notably, the starting point for each scenario does not necessarily involve animals originating from compartments certified as "virus-free".
 - Each scenario includes one assessment for **IHN** and **VHSV**, with a separate assessment for **ISAV**.
 - The assessment was conducted considering **Salmonids in general**, as the scenarios sufficiently capture the variations in practices across species (e.g., establishment operates partially in **seawater** or full production cycle occurs in **freshwater** within the **same establishment**). However, when documenting the results, species-specific susceptibility to different viruses will be addressed.
 - Each scenario was analyzed in detail, outlining relevant **risk mitigation measures** and highlighting key differences.
 - An additional risk mitigation measure—**disinfecting fertilized eggs upon arrival in the importing country**—was discussed and incorporated into the scenarios.

VI. TASKS/who/deadline:

- WG experts are requested to provide feedback by **Friday, February 7th** on the updated spreadsheet, which incorporates the discussions and integrations from today's meeting.

VII. Any Other Business

None.

VIII. Next meeting

12th of February



SCIENTIFIC PANEL ON Animal health and Welfare

4th Working Group meeting on Fish diseases' introduction
in free areas



29th January 2025

9:00 -11:00

MINUTES - Agreed on 7th February 2025

Location: Web conference

Attendees:

- Working Group Members:
Fernanda Dórea – Chair, Debes Christiansen, Niels Jorgen Olesen, Espen Rimstad, Anna Toffan, Niccolò Vendramin
- EFSA:
Francesca Baldinelli
- Others:
Ludovica Preite participated as ISA (Individual Scientific Advisor) contractor (ref. EOI/EFSA/2022/01 – CT 23 BIOHAW) for agenda item 6, via web conference
Estelle Méroc participated as ISA (Individual Scientific Advisor) contractor (ref. EOI/EFSA/2022/01 – CT 22 BIOHAW) for agenda item 4, via web conference

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

IV. Agreement of the minutes of the 3rd Working Group meeting held on 10th January 2025, via web-conference

The minutes of the 3rd Working Group meeting were agreed by written procedure on 28 January 2025.

V. Scientific topic(s) for discussion

The following was discussed:

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



- 1) The final report for SLR2 was shared, highlighting that all feedback to the contract needs to be finalized by the end of the day.
- 2) Then, the Scientific Opinion (SO) was presented, with an overview of its structure and different sections.
 - a. Data on the geographic distribution of the three pathogens, from two different sources (ADIS and WAHIS), were presented. It was emphasized that the goal is not to be exhaustive, but to provide a high-level representation. A suggestion from the WG was not to present the data in the form of a Table for countries outside Europe. Instead, text should be used to describe that the viruses are widespread and the uncertainties about exact distribution, considering the scarcity of data on occurrence outside Europe, as countries don't report when the disease is endemic.
 - b. Experts highlighted that the term "endemic" can be hard to define, as the viruses are widespread, and we don't know where lack of detection means lack of virus or lack of surveillance. It is suggested instead to define areas "officially certified as free" versus areas not certified free.
 - c. Regarding the timeline for representing geographic distribution, no single starting date was proposed. Instead, when writing the text, the focus should be on where the virus is currently present, followed by a retrospective look at its past distribution.
 - d. Clarifications were made regarding drafting key concepts and structuring the evidence on vertical transmission from sources other than SLR1. The same approach applies to evidence on RMM from sources other than SLR2. Then, it was specified that the corresponding conclusions have also to be drafted, in a different section, based on experts' consensus. Experts were urged to give input in the SO, in particular adding evidence to the two literature reviews and adding their conclusions in the relevant section.
- 3) A presentation on the risk mitigation measures (RMM) failure scenario was given, in preparation for the expert elicitation. An important aspect that emerged was whether alternatives exist to the measures proposed in the WOAHP draft chapter. A possible additional measure identified was the use of enclosed compartments, as the broodstock are increasingly moved in land and housed indoor, rather than open systems (enclosed from the ocean). Then, the different RMM failure scenarios were presented, not in detail, just an overall framework.
 - a. Starting from the probability of disinfection failure, discussion on existing disinfection protocols was carried out. There are no direct guidelines from the EURL, a number of procedures are outlined in the Bovo report (2005) for different countries, therefore so far, the WOAHP protocol is definitely a good one to follow. National legislations of disinfection protocols for salmonid eggs will be gathered and reviewed to assess whether they can be considered viable alternatives to the WOAHP protocol. However, a ranking of the protocols will not be conducted, only a listing of different procedures. Also to consider that different protocols apply based on egg types (green eggs VS eyed eggs).
 - b. Test failure (false negative): The testing procedure was clarified. Killing and individual testing of parents is used in Atlantic salmon but not trout. It is important to verify whether the WOAHP chapter allows for group testing as an option. Experts were asked to re-read the chapter and present their opinion in the next meeting when we should decide whether to do the assessment of efficacy of RMM only assuming individual testing, or also for group testing.
 - c. In the Scientific Opinion, in the section on the assessment of risk mitigation measures, it was suggested to add an introduction on compartmentalization and health status steps.



VI. TASKS/who/deadline:

- **Disinfection protocols:** Share eggs disinfection protocols that we know exist in X country, adding a reference.
- **Draft Scientific Opinion:** progress in the evidence and conclusion sections on vertical transmission. Progress in the evidence on risk mitigation measures.
- **Report for SLR2:** WG experts are to provide any additional feedback to the contractor before finalizing the work.

VII. Any Other Business

None.

VIII. Next meeting

5th of February



SCIENTIFIC PANEL ON Animal health and Welfare

3rd Working Group meeting on Fish diseases' introduction
in free areas



10th January 2025

12:30 -16:30

MINUTES - Agreed on 28th January 2025

Location: Web conference

Attendees:

- Working Group Members:
Fernanda Dórea – Chair, Debes Christiansen, Niels Jorgen Olesen, Espen Rimstad, Anna Toffan, Niccolò Vendramin
- EFSA:
Francesca Baldinelli
- Others:
Ludovica Preite participated as ISA (Individual Scientific Advisor) contractor (ref. EOI/EFSA/2022/01 – CT 23 BIOHAW) for agenda item 6, via web conference
Estelle Méroc participated as ISA (Individual Scientific Advisor) contractor (ref. EOI/EFSA/2022/01 – CT 22 BIOHAW) for agenda item 5, via web conference

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 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 17th December 2024, via web-conference

The minutes of the 2nd Working Group meeting were agreed by written procedure on 9 January 2025.

V. Scientific topic(s) for discussion

The following was discussed:

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



- 1) A short-term timeline was presented, outlining tasks to be completed by end of January and end of February.
 - 2) Review of the comments in the draft **SLR1** report:
 - a. It was recommended to consistently refer to pathogens as "infection by the viruses" rather than the diseases. However, the mandate refers to the diseases, so it should be explained/reasoned in the Scientific Opinion why we focused on the transfer of viruses (in an eradication plan you react when you find the virus, not wait until the onset of the disease).
 - b. The term "infection" will be replaced with "**transfer of viable virus particles**". The group also defined "vertical transmission" and agreed on consistent terminology for **gametes** and **fertilized eggs**, aligning with WOH standards.
 - c. The reliability of evidence from very old references (e.g., from 1965) was discussed, considering their relevance with current scientific knowledge. If these old references are taken into account, historical evidence is ensured. An option is to include the references and discuss their reliability in the uncertainty paragraph.
 - d. The need to clarify "egg" terminology was highlighted, as some papers do not specify whether the eggs are fertilized or not. A proposed solution is to refer explicitly to fertilised/not fertilised when referring to eggs.
 - e. In the discussion section, concern regarding the term "adequate disinfection" was raised. It was agreed to define this as the recommended disinfection method (to add an example, WOH chapter, fish and trade report). It is another point to be included in the uncertainty section.
 - f. For the three infections, it is important to distinguish between the conclusions from the SLR evidence and the view of the WG (which will be explained in the Scientific Opinion).
 - 3) Preliminary findings for SLR2 were presented. Mitigation measures were discussed, it was highlighted the importance of considering non-peer-reviewed articles alongside peer-reviewed studies. The WG is in favor of discussing the report of SLR2, in the same way it was done for SLR1. Discussion regarding what should fall within the scope of these risk mitigation measures (example water treatment or/and disinfection of the fertilized eggs) was carried out. A strategy was outlined to address non-peer-reviewed references, such as creating a table or grouping references in a folder. Discussion regarding the ranking exercise on risk mitigation measures, whether some kind of expertise is missed in the group, or if they are comfortable as they are. Important risk mitigation measures were defined:
 - a. Keeping broodstock in closed containment systems
 - b. Compartmentalization
 - c. Preventing viral particle to enter the facilities
 - d. Testing broodstock
 - e. Disinfecting eggs
 - 4) The WG pointed out that different measures will have different applicability for instance salmon versus rainbow trout (for example the feasibility of keeping animals separated individually or testing singularly). This may result in the need to consider species separately for the ranking of risk mitigation measures.
-



- 5) To conclude, a more detailed timeline was presented, with deadlines to finalize the protocol (15th Jan), the report of the SLR1 (23rd Jan), of the SLR2 (31st of Jan), finalize the integration of additional evidence on VT/RMM (3rd Feb), start elicitation on internal WG assessment (5th of Feb), finalize elicitation on internal WG assessment and assessment VT (12th Feb), finalize preliminary assessment on VT/RMM for the EC (26th of Feb). It was suggested to add an additional WG meeting on the 29th of February to review the results of the SLR2 before the internal WG assessment exercise.

VI. TASKS/who/deadline:

- **SLR:**
 - Estelle to make a list of the references of the EGG trade report, that she could not retrieve and send them to the experts.
 - Estelle to clear the report for the SLR 1 (on vertical transmission) and circulate it again to us next week;
 - Niels Jorgen to include in the report the reference from Dr. P.E. V. Jorgensen's thesis from 1974. Also, to add first isolate in FR in the bulletin from 1987.
 - For IHNv, Anna to add report from Bovo (1997).
 - Retrieved papers on risk mitigation measures (not included in SLR2) to be added in shared folder.
 - All to have a look at SLR 2 providing inputs/comments/suggestions by 28 Jan so it can be discussed on the 29th Jan WG meeting.
- **Protocol:** All to review and insert in the text any proposed change in the draft protocol to be finalized by next Tuesday 14th of January to be sent to AHAW Panel.
- **Draft Scientific Opinion:** All to start integrating the results from the two SLRs with evidence from other sources and start drafting the conclusions on vertical transmission.

VII. Any Other Business

None.

VIII. Next meeting

29th of January



SCIENTIFIC PANEL ON Animal health and Welfare

2nd Working Group meeting on Fish diseases' introduction in free areas

17th December 2024

09:00 -13:00

MINUTES - Agreed on 9 January 2025



Location: Web conference

Attendees:

- Working Group Members:
Fernanda Dórea – Chair, Niccolò Vendramin, Espen Rimstad, Niels Jorgen Olesen, Anna Toffan
- Hearing expert:
Debes Christiansen
- EFSA:
Francesca Baldinelli
- Others:
Ludovica Preite participated as ISA (Individual Scientific Advisor) contractor (ref. EOI/EFSA/2022/01 – CT 23 BIOHAW) for agenda item 6 and 8, via web conference
Estelle Méroc participated as ISA (Individual Scientific Advisor) contractor (ref. EOI/EFSA/2022/01 – CT 22 BIOHAW) for agenda item 7 and 8, via web conference

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

IV. Agreement of the minutes of the 1st Working Group meeting held on 25th October 2024, via web-conference

The minutes of the 1st Working Group meeting were agreed by written procedure on 20 November 2024.

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



V. Scientific topic(s) for discussion

The following was discussed:

- 1) Presentation on how EFSA works, focusing on the Scientific process (problem formulation and protocol development), what is expected from the WG members and how does the sharing of WG's documents works.
- 2) The mandate was then introduced, along with the four TORs. Deadlines were outlined, with February 2025 for preliminary results on ToR 1 and adoption of the Scientific Opinion by the 30th of November. The process for conducting uncertainty analysis was explained as well as the process to develop the protocol. To conclude, a more detailed timeline was presented.
- 3) Presentation on the current draft protocol: several key points were raised and discussed throughout the meeting. Important definitions/clarifications were identified and later incorporated into the draft protocol document under the section 'interpretation of ToRs'. These include:
 - a. Whether to **limit the susceptible species** to be included (since the list in Reg 2018/1882 is extensive), a proposal was to focus only on salmonids and differentiate between farmed and wild species. Farmed species are the only ones that can be controlled and for which measures can be recommended.
 - b. Give a clear and standardized **definition of vertical transmission**, according to current scientific knowledge. Important to make a distinction: "true" vertical transmission that is intra-ova, versus any egg associated transmission.
 - c. Also, start to refer to **gametes** and **fertilized eggs** only, specifying that gametes include sperm and unfertilized eggs, regardless the preservation state (e.g. frozen).
- 4) The work done so far on the two foreseen systematic literature reviews (SLR) was presented. The research question of the first SLR was outlined, along with the search string used. A proposal was made to repeat a quick search adding the word "ova" to identify any potential missed articles. Then, the selections steps for SLR1 were presented, in the end around 30 papers were included. Some questions were raised: whether bulletins from the European fish pathologist were used in the SLR, since in the past it was used to publish relevant articles. How to interpret evidence of vertical transmission, such as detecting viral RNA via PCR versus live virus in cell cultures, was debated. Experts agreed on the fact that in assessing different diagnostic methods, uncertainty will rise as we go through. The importance of distinguishing between farm and natural settings was highlighted, as outcomes vary significantly. For instance, biosecurity practices (e.g. egg disinfection) differ across farms and regions, with inconsistent application at the EU level. Then, for the second SLR, it was noted that the same search string was used. Many reports, rather than peer-reviewed articles, may be relevant to the topic. These reports should be identified and included/integrated. Also, other sources of information such as WOA code and manuals should be considered, as well as historical evidence of vertical transmission in the form of reports. WG members were invited to share relevant references they are aware of, which may not be peer-reviewed. Regarding the nomenclature of the diseases, it was pointed out that some diseases have changed their names (e.g. VHS was Egtved disease), this may affect the SLRs and might be included in the search string.



- 5) The draft protocol for the Scientific Opinion was shared, incorporating definitions and limitations based on insights that emerged during the meeting. The relevant topics that emerged continued to be discussed, such as the diagnosis of the virus, the species to be included, the definition of vertical transmission, the testing in place for broodstock and what products of the fish are traded. The group agreed to focus on viruses rather than diseases. A proposal to draft a dedicated section defining the three viruses was made or to use existing definitions from the WOA and reference them.

VI. TASKS/who/deadline:

- All WG members: Start to add relevant reports in the shared folder created for this purpose, needed to integrate the results of the SLRs.
- For January:
 - WG experts to review the protocol and contribute drafting the interpretation of TORs;
 - WG experts to review the results of the first SLR, see if there are relevant references that could be missing.

VII. Any Other Business

None.

VIII. Next meeting

10th of January



SCIENTIFIC PANEL ON Animal health and Welfare

1st Working Group meeting on Fish diseases' introduction
in free areas

25th October 2024
11:00 -13:00



Location: Webconference

Attendees:

- Working Group Members:
Fernanda Dorea - Chair
- EFSA:
Francesca Baldinelli
- Others:
Ludovica Preite participated as ISA (Individual Scientific Advisor) contractor (ref. EOI/EFSA/2022/01 – CT 23 BIOHAW)
Estelle Méroc participated as ISA (Individual Scientific Advisor) contractor (ref. EOI/EFSA/2022/01 – CT 22 BIOHAW)

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

IV. Scientific topic(s) for discussion

The following was discussed:

- 1) The two protocols of the literature review, on risk of vertical transmission and on risk mitigation measures/critical control points, were discussed and revised. A rapid review of the PICO strategy, the inclusion criteria and information sources (PubMed and Scopus, with Google Scholar helping in broadening the search scope) was done. IN relation to the search strings, it was suggested to avoid acronyms, an agreement was reached for 'ISAV' by using the term 'infectious salmon anemia'. Given that the search terms will be the same for both protocols (with only the inclusion/exclusion criteria varying according to each review question), the approach would be to review the sources twice: first, with a focus on the

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



first question, and subsequently, with the second question in mind. This approach avoids mistakes attempting to address both questions simultaneously. Then, it was suggested to identify key articles that should be definitively included, to serve as reference points for both the search terms and selection criteria. In particular, a relevant report that was shared during the meeting, could be used to see if all relevant references are included in the search. Also, it was commented that the experts could further help in identifying relevant articles.

- 2) Then, the protocol for the overall risk assessment was briefly reviewed, and an overview on how to address the different TORs (via literature review, survey distributed by EFSA drafted together with the experts and WG group discussion for the ranking) was provided.

V. TASKS/who/deadline:

- Estelle:
 - to identify any articles that may have been missed in the initial search by conducting an additional search on Scopus. Afterward, to cross-check the results with the references listed in the report shared during the meeting;
 - to update the protocol with the changes discussed during the meeting for the search terms;
 - to carry out the screening of abstract by the end of next week, then to proceed with retrieving the full texts and full text screening and send what she has retrieved.
- Ludovica to review and complete the overall risk assessment protocol.

VI. Any Other Business

None.

VII. Next meeting

Not yet identified.
