



SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 11^{TH} MEETING OF THE WORKING GROUP ON THE TRANSPORT/STORAGE OF FRESH FISHERY PRODUCTS

Held on 9 November 2020, web-conference

(Agreed on 13 November 2020)

Participants

Working Group Members:

Karen Bekaert, Sara Bover-Cid, Janna Cropotova, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

■ EFSA:

BIOCONTAM Unit: Winy Messens

1. Welcome and apologies for absence

The Chair welcomed the participants to the meeting. Paolo Caricato and Patricia Herrero-Sancho (DG SANTE) sent apologies for this meeting.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management^{2,} 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.

4. Agreement of the minutes of the 10th Working Group meeting held on 12 October 2020, 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 10^{th} Working Group meeting of the Working Group on the transport/storage of fresh fishery products were agreed.³

5. Scientific topic(s) for discussion

5.1. Use of the so called "superchilling" technique for the transport of fresh fishery products⁴. The WG Chair provided a short feedback of the presentation of the whole draft scientific opinion provided at the 140th BIOHAZ plenary meeting (21-22 October 2020). Most importantly, for ToR 1, the wording "equivalent" fish temperature in the Assessment Question has been replaced with lower or equal (AQ1a) and the conclusions have been considerably shortened. A final expression of the uncertainty would need to be agreed with the WG. For ToR 2, the panel proposed some changes in the terminology and agreed to move many tables to an appendix and keep the overview tables that only contain the results of the four "fit for purpose" methods in the body text. During the WG meeting, the panel comments were discussed and addressed. Related to ToR 1, the experts agreed on the overall expression of the uncertainty. For ToR 2, the appraisal of the studies and the advantages and disadvantages of the methods and their evaluation was discussed. The experts finalized the concluding remarks, conclusions and recommendations. Tasks were allocated to EFSA staff and WG experts.

6. Next meeting(s)

This was the last meeting of this WG.

³ http://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-fishtubs.pdf

⁴ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00437





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 10^{TH} MEETING OF THE WORKING GROUP ON THE TRANSPORT/STORAGE OF FRESH FISHERY PRODUCTS

Held on 12 October 2020, web-conference

(Agreed on 13 October 2020)

Participants

Working Group Members:

Karen Bekaert, Sara Bover-Cid, Janna Cropotova, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

EFSA:

BIOCONTAM Unit: Winy Messens

1. Welcome and apologies for absence

The Chair welcomed the participants to the meeting. Paolo Caricato and Patricia Herrero-Sancho (DG SANTE) sent apologies for this meeting.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

 $^{^1\} http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf$

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





4. Agreement of the minutes of the 8th Working Group meeting held on 15 September 2020, WEB-conference

The minutes of the 9th Working Group meeting of the Working Group on the transport/storage of fresh fishery products were agreed.³

5. Scientific topic(s) for discussion

Use of the so called "superchilling" technique for the transport of fresh **fishery products**⁴. The WG Chair provided a short feedback of the presentation of the draft scientific opinion provided at the 139th BIOHAZ plenary meeting (22-23 September 2020). Most importantly, for ToR 1, the results of the heat balance model were presented, using two representative cases of lean and fat sea fish species as examples in the assessment, i.e. cod and salmon, and a species from temperate freshwater (e.g. Nile perch). Experimental data supplementing the heat balance model was presented. For ToR 2, the panel approved the classification of the markers [into biochemical methods (incl. the Hydroxyacyl-coenzyme A dehydrogenase (HADH) enzymatic test) and physicochemical methods] and the method to assess their suitability to detect whether a fish frozen before is commercially presented as "superchilled". Simplification of the answers to ToR was proposed by the panel. The answers to ToR 2 and the uncertainty analysis of the assessment of ToR 1 and 2 were not yet finalised and have not been discussed with the panel. During the WG meeting, related to ToR 1, the experts discussed the uncertainty table and finalized the concluding remarks and conclusions. For ToR 2, the experts agreed on a common understanding of the appraisal of the studies and the advantages and disadvantages of the methods and their evaluation. The experts discussed the uncertainty analysis and concluding remarks. Tasks were allocated to EFSA staff and WG experts.

6. Next meeting(s)

The next meeting of this WG will take by WEB-conference on 9 November 2020 (09:00-16:00).

http://registerofquestions.efsa.europa.eu/rogFrontend/questionLoader?question=EFSA-Q-2019-00437





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 9TH MEETING OF THE WORKING GROUP ON THE TRANSPORT/STORAGE OF FRESH FISHERY PRODUCTS

Held on 9 September 2020, web-conference

(Agreed on 15 September 2020)

Participants

Working Group Members:

Karen Bekaert, Sara Bover-Cid, Janna Cropotova, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

EFSA:

BIOCONTAM Unit: Winy Messens

1. Welcome and apologies for absence

The Chair welcomed the participants to the meeting. Paolo Caricato and Patricia Herrero-Sancho (DG SANTE) sent apologies for this meeting.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

 $^{^1\} http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf$

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





4. Agreement of the minutes of the 8th Working Group meeting held on 26 June 2020, WEB-conference

The minutes of the 8th Working Group meeting of the Working Group on the transport/storage of fresh fishery products were agreed.³

5. Scientific topic(s) for discussion

5.1. **Use of the so called "superchilling" technique for the transport of fresh fishery products**⁴. The WG Chair provided a short feedback of the briefing
provided at the 138th BIOHAZ plenary meeting (8-9 July 2020). Most importantly, for ToR 1,
the panel agreed with the proposed tool, based on the conservative heat transfer balance
model, for the food business operators to calculate 'equivalences' of the two compared
conditions (conventionally chilled versus superchilled fresh fishery products; or CFFP versus
SFFP) in their capability to keep the fish temperature under control, when exposed to the
same external storage/transport conditions, as part of 'safety-by-design'. If the equivalence
is met, the SFFP temperatures will be lower than those of CFFP. For ToR 2, the Panel was
informed that the markers have been categorized into biochemical methods (incl. HADH)
and physicochemical methods. Tables have been presented to summarize the various
studies. The methodology for their appraisal was discussed with the panel.

During the WG meeting, the experts discussed for ToR1 the outcome of the heat transfer modelling for salmon, cod and Nile perch. The use of the proximal composition of fish to estimate the initial freezing point T* was agreed. The observed data, both from the Nile perch study and from literature were discussed and support the outcome of the heat transfer modelling. For ToR2, screening of the records is ongoing; the overview tables are nearly completed. The proposal for appraising the studies was agreed. The table with the advantages and disadvantages of the methods was commented.

The experts were reminded to further complete the uncertainty tables. Tasks were allocated to EFSA staff and WG experts.

6. Next meeting(s)

The next meetings of this WG will take by WEB-conference on 12 October 2020 (09:00-16:00) and on 9 November 2020 (09:00-16:00).

http://registerofquestions.efsa.europa.eu/rogFrontend/questionLoader?question=EFSA-Q-2019-00437





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 8TH MEETING OF THE WORKING GROUP ON THE TRANSPORT/STORAGE OF FRESH FISHERY PRODUCTS

Held on 26 June 2020, web-conference

(Agreed on 7 July 2020)

Participants

Working Group Members:

Karen Bekaert, Sara Bover-Cid, Janna Cropotova, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

Hearing experts¹:

Vincenzo Di Leva, Antonio Solimeo (FIORITAL), Mike Turenhout (Dutch Fish Importers Association)

EFSA:

BIOCONTAM Unit: Winy Messens

1. Welcome and apologies for absence

The Chair welcomed the participants to the meeting. Paolo Caricato (DG SANTE) has sent apologies for this meeting.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management^{3,} EFSA screened the Annual Declarations of Interest filled out by

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





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.

4. Hearing Expert

Mr Vincenzo Di Leva, Antonio Solimeo (FIORITAL) and Mr Mike Turenhout (Dutch Fish Importers Association) were invited to provide information about the study in the report "Superchilling Fish Products - Nile perch (Lates niloticus) attached to the mandate and to provide an overview of the superchilling technique used in the Nile perch value chain.

In accordance with EFSA's Policy on Independence⁴ and the Decision of the Executive Director on Competing Interest Management⁵, EFSA invited Mr Vincenzo Di Leva, Mr Antonio Solimeo and Mr Mike Turenhout to submit an Annual Declaration of Interest. Their participation in the present meeting was limited to providing testimony, without the possibility to take on any role undertaken by members of the Working Group (i.e. not possible to draft or be involved in the discussion or the adoption of a scientific output), in accordance with the applicable legal framework⁶.

5. Agreement of the minutes of the 7th Working Group meeting held on 28 May 2020, WEB-conference

The minutes of the 7th Working Group meeting of the Working Group on the transport/storage of fresh fishery products were agreed.⁷

6. Scientific topic(s) for discussion

Use of the so called "superchilling" technique for the transport of fresh fishery products8. The WG Chair provided a short feedback of the briefing provided at the 137th BIOHAZ plenary meeting (3-4 June 2020). Most importantly, for ToR 2, the Panel proposed and agreed to restrict the assessment to analytical methods (markers), including the Hydroxyacyl-coenzyme A dehydrogenase (HADH) enzymatic test, allowing an effective detection of the fraudulent use of previously frozen fish to commercialize it in the superchilling status. During the WG meeting, the hearing expert Mr Mike Turenhout introduced the Dutch Fish Importers Association and gave an overview of superchilling of fish in general and its benefits. Then he presented the study in the report "Superchilling Fish Products - Nile perch (Lates niloticus). Mr Antonio Solimeo provided an overview of the superchilling technique used in the Nile perch value chain. This was followed by a discussion. For ToR 1, the first results of the heat balance model were discussed. It calculates under which initial configurations the two compared conditions (conventionally chilled versus superchilled fresh fishery products; or CFFP versus SFFP) are equivalent in their capability to keep the fish temperature under control, when exposed to the same external storage/transport conditions. If the equivalence is met, the SFFP temperatures will be lower than those of CFFP. The use of a tool was proposed and agreed with the WG, based on the

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⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

⁵ http://www.efsa.europa.eu/sites/default/files/corporate publications/files/competing interest management 17.pdf

⁶ Decision of the Executive Director on Competing Interest Management, Article 9:

http://www.efsa.europa.eu/sites/default/files/corporate publications/files/competing interest management 17.pdf

http://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-fishtubs.pdf

⁸ http://registerofquestions.efsa.europa.eu/rogFrontend/questionLoader?question=EFSA-Q-2019-00437





conservative heat transfer balance model, for the food business operators to calculate such equivalences as part of 'safety-by-design'. Experimental data will be used to supplement the heat balance model. For ToR 2, the markers have been categorized into biochemical methods (incl. HADH) and physicochemical methods. Tables have been presented to summarize the various studies. The methodology for their appraisal was discussed. The experts were reminded to start completing uncertainty tables. Tasks were allocated to EFSA staff and WG experts.

7. Next meeting(s)

The next meeting of this WG will take by WEB-conference on 30 July 2020 (09:00-16:00).





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 7TH MEETING OF THE WORKING GROUP ON THE TRANSPORT/STORAGE OF FRESH FISHERY PRODUCTS

Held on 28 May 2020, web-conference

(Agreed on 5 June 2020)

Participants

Working Group Members:

Karen Bekaert, Sara Bover-Cid, Janna Cropotova, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

Hearing experts¹:

Sigurjon Arason

■ EFSA:

BIOCONTAM Unit: Winy Messens

1. Welcome and apologies for absence

The Chair welcomed the participants to the meeting. The WG was informed that Janna Cropotova has joined the WG as member. Paolo Caricato (DG SANTE) has sent apologies for this meeting.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management^{3,} 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

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





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.

4. Hearing Expert

Prof Arason was invited to provide information about the superchilling of fresh fishery products.

In accordance with EFSA's Policy on Independence⁴ and the Decision of the Executive Director on Competing Interest Management⁵, EFSA invited Prof. Arason to submit an Annual Declaration of Interest. His participation in the present meeting was limited to providing testimony, without the possibility to take on any role undertaken by members of the Working Group (i.e. not possible to draft or be involved in the discussion or the adoption of a scientific output), in accordance with the applicable legal framework⁶.

5. Agreement of the minutes of the 6th Working Group meeting held on 2 April 2020, WEB-conference

The minutes of the 6th Working Group meeting of the Working Group on the transport/storage of fresh fishery products were agreed.⁷

6. Scientific topic(s) for discussion

6.1. Use of the so called "superchilling" technique for the transport of fresh fishery products⁸. The WG Chair provided a short feedback of the briefing provided at the 136th BIOHAZ plenary meeting (29-30 April 2020). The interpretation and approach to the ToR were further discussed and assessment questions agreed. The suggested approaches to be used for the various steps defined for the assessment were presented and discussed. Tasks were allocated to EFSA staff and WG experts.

7. Next meeting(s)

The next meeting of this WG will take by WEB-conference on 26 June 2020 (09:00-16:00).

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

⁵ http://www.efsa.europa.eu/sites/default/files/corporate publications/files/competing interest management 17.pdf

⁶ Decision of the Executive Director on Competing Interest Management, Article 9:

http://www.efsa.europa.eu/sites/default/files/corporate publications/files/competing interest management 17.pdf

⁷ http://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-fishtubs.pdf

⁸ http://registerofquestions.efsa.europa.eu/rogFrontend/questionLoader?question=EFSA-Q-2019-00437





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 6TH MEETING OF THE WORKING GROUP ON THE TRANSPORT/STORAGE OF FRESH FISHERY PRODUCTS

Held on 2 April 2020, web-conference

(Agreed on 14 April 2020)

Participants

Working Group Members:

Karen Bekaert, Sara Bover-Cid, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

- European Commission and/or Member States representatives:
 Paolo Caricato (DG SANTE)
- EFSA:

BIOCONTAM Unit: Winy Messens, Michaela Hempen

1. Welcome and apologies for absence

The Chair welcomed the participants to the meeting. The WG was informed that Sigurjón Arason resigned from the WG on 27 March 2020.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

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





4. Agreement of the minutes of the 5th Working Group meeting held on 2 March 2020, WEB-conference

The minutes of the 5th Working Group meeting of the Working Group on the transport/storage of fresh fishery products were agreed.³

5. Scientific topic(s) for discussion

5.1. Use of the so called "superchilling" technique for the transport of fresh fishery products⁴. The background and Terms of Reference (ToR) of the mandate received from the European Commission (EC) were introduced to the WG. The WG discussed the ToRs, clarified these with the EC representative, and agreed on a common understanding of these. Possible approaches to be taken to answer these were discussed. The WG experts were appointed to lead the various steps in the scientific assessment and tasks were allocated to EFSA staff and WG experts.

6. Next meeting(s)

The next meeting of this WG will take by WEB-conference on 28 May 2020.

³ http://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-fishtubs.pdf

⁴ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00437





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 5TH MEETING OF THE WORKING GROUP ON THE TRANSPORT/STORAGE OF FRESH FISHERY PRODUCTS (EFSA-Q-2019-00053 and EFSA-Q-2019-00437)

Held on 2 March 2020, web-conference

(Agreed on 5 March 2020)

Participants

Working Group Members:

Sigurjón Arason, Karen Bekaert, Sara Bover-Cid, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

EFSA:

AMU Unit: Marios Georgiadis BIOCONTAM Unit: Winy Messens

1. Welcome and apologies for absence

The Chair welcomed the participants to the meeting. Apologies were received from Paolo Caricato and Marina Marini (DG SANCO).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

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

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





4. Agreement of the minutes of the 4rd Working Group meeting held on 27-28 January 2020, WEB-conference

The minutes of the 4rd Working Group meeting of the Working Group on the transport/storage of fresh fishery products were agreed.³

5. Scientific topic(s) for discussion

- 5.1. Use of "tubs" for transporting and storing fresh fishery products⁴. The feedback from discussing held during the 133rd BIOHAZ plenary meeting (11-12 December 2019) was provided. The draft opinion was presented for thorough reading. The panel proposed to clarify that the "cooling after a temperature peak" process also consists of further keeping the temperature. The panel informed to stress that the assessment basically relies on temperature differences between the two containers and agreed to focus on the maximum duration being 3 d as 5 d is an exceptional situation. Related to public health risks, the panel suggested to reply in a "theoretical way" as it depends on various factors (such as mode of consumption) and therefore cannot be answered. The panel confirmed that for the public health concern, growth is more important and deserves more attention compared to survival of hazards. During the WG meeting, comments were discussed, and the concluding remarks finalized. The conclusions would be agreed by written procedure. The adoption of the draft scientific opinion is foreseen during the BIOHAZ plenary on 18-19 March 2020. Tasks were allocated to EFSA staff and WG experts.
- 5.2. Use of the so called "superchilling" technique for the transport of fresh fishery products⁵. This mandate was not discussed.

6. Next meeting(s)

The next meeting of this WG to discuss the superchilling mandate will take place by WEB-conference and either on 30 March PM or 2 April AM.

⁴ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00053

⁵ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00437





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 4TH MEETING OF THE WORKING GROUP ON THE TRANSPORT/STORAGE OF FRESH FISHERY PRODUCTS (EFSA-Q-2019-00053 and EFSA-Q-2019-00437)

Held on 27-28 January 2020, Parma

(Agreed on 14 February 2020)

Participants

Working Group Members:

Sigurjón Arason, Karen Bekaert, Sara Bover-Cid, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

EFSA:

AMU Unit: Marios Georgiadis, Olaf Mosbach-Schulz

BIOCONTAM Unit: Winy Messens

1. Welcome and apologies for absence

The Chair welcomed the participants to the meeting. Apologies were received from Paolo Caricato and Marina Marini (DG SANCO).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

 $^{^1\} http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf$

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





4. Agreement of the minutes of the 3rd Working Group meeting held on 10 December 2019, WEB-conference

The minutes of the 3rd Working Group meeting of the Working Group on the transport/storage of fresh fishery products were agreed.³

5. Scientific topic(s) for discussion

- **5.1. Use of "tubs" for transporting and storing fresh fishery products⁴.** The impact of excluding some of the potentially relevant hazards from the assessment was discussed in detail. Based on the clarification with the requestor, the maximum duration of transport was shortened (considering the absolute exceptional maximum of 5 days and realistic maximum of 3 days) and the material for fish boxes further defined (high density polyethylene). The final heat transfer modelling results were presented, and a discussion was held on the next steps related to the description and predictive modelling of relevant hazards. Tables listing the uncertainty sources and their impact were discussed. The adoption of the draft scientific opinion is foreseen during the BIOHAZ plenary on 18-19 March 2020. Tasks were allocated to EFSA staff and WG experts.
- 5.2. Use of the so called "superchilling" technique for the transport of fresh fishery products. This mandate was not discussed.

6. Next meeting(s)

The next meetings of this WG have been scheduled on 24 February AM and 2 March AM (WEB-conference).

³ http://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-fishtubs.pdf

⁴ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00053

⁵ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00437





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 3RD MEETING OF THE WORKING GROUP ON THE TRANSPORT/STORAGE OF FRESH FISHERY PRODUCTS (EFSA-Q-2019-00053 and EFSA-Q-2019-00437)

Held on 10 December 2019, Parma

(Agreed on 8 January 2020)

Participants

Working Group Members:

Sigurjón Arason, Karen Bekaert, Sara Bover-Cid, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

EFSA:

AMU Unit: Marios Georgiadis BIOCONTAM Unit: Winy Messens

1. Welcome and apologies for absence

The Chair welcomed the participants to the meeting. Apologies were received from Paolo Caricato and Marina Marini (DG SANCO).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

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





4. Agreement of the minutes of the 2nd Working Group meeting held on 7 November 2019, WEB-conference

The minutes of the 2nd Working Group meeting of the Working Group on the transport/storage of fresh fishery products were agreed.³

5. Scientific topic(s) for discussion

- 5.1. Use of "tubs" for transporting and storing fresh fishery products⁴. The identification of the relevant hazards for the assessment has been concluded. The conceptual map has been finetuned during the meeting and the maximum duration of transport shortened. In particular, the container specific characteristics and the amount of ice to be added to the tubs and boxes has been discussed and revised. The heat transfer modelling and predictive modelling was further discussed. The increase in water content of the fish meat when transferred to fresh water/ice in tubs was concluded alongside with the water phase salt decrease associated with this potential water content increase. WG members were reminded to identify and list the uncertainty sources encountered during the assessment and assess their impact. The first reading of the draft scientific opinion will take place during the BIOHAZ plenary on 11-12 December. Tasks were allocated to EFSA staff and WG experts.
- 5.2. Use of the so called "superchilling" technique for the transport of fresh fishery products⁵. This mandate was not discussed.

6. Next meeting(s)

The next meeting of this WG has been scheduled on 27 (PM)-28 January 2020 (in Parma) and on 24 February AM and 2 March AM (by web conference).

⁴ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00053

⁵ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00437





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 2ND MEETING OF THE WORKING GROUP ON THE TRANSPORT/STORAGE OF FRESH FISHERY PRODUCTS (EFSA-Q-2019-00053 and EFSA-Q-2019-00437)

Held on 7 November 2019, Parma

(Agreed on 25 November 2019)

Participants

Working Group Members:

Sigurjón Arason, Karen Bekaert, Sara Bover-Cid, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

EFSA:

BIOCONTAM Unit: Winy Messens

1. Welcome and apologies for absence

The Chair welcomed the participants to the meeting. Apologies were received from Paolo Caricato and Marina Marini (DG SANCO).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management^{2,} 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.

4. Agreement of the minutes of the 1st Working Group meeting held on 4 November 2019, 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 1st Working Group meeting of the Working Group on the transport/storage of fresh fishery products were agreed.³

5. Scientific topic(s) for discussion

Use of "tubs" for transporting and storing fresh fishery products4. The 5.1. WG Chair provided a feedback of the discussion held at the 131st BIOHAZ plenary meeting (23-24 October 2019) and the 1st sub-WG meeting (4 November 2019). These were further discussed under the relevant item. The identification of the relevant hazards for the assessment is nearly completed. For some hazards, more specific data is needed in order to decide. The grouping of the fishery products and scenarios for the assessment were reminded. There are two processes, namely "cooling after a temperature peak" caused by gutting and/or filleting at first on-land establishment and "keeping the chill temperature". The temperature-time profiles of the outside temperature were agreed; data for more realistic scenarios would be further searched for. The container specific and fish specific characteristics were agreed (pending thermal properties of fat fish). The heat transfer modelling and predictive modelling, application of predictive models was discussed. For some hazards, the assessment will be conducted using narrative reasoning in the absence of available models. WG members were reminded to identify and list the uncertainty sources encountered during the assessment and assess their impact. By the next WG meeting, the assessment should be nearly completed to allow the first reading during the BIOHAZ plenary on 11-12 December. Tasks were allocated to EFSA staff and WG experts.

5.2. Use of the so called "superchilling" technique for the transport of fresh fishery products. This mandate was not discussed.

6. Next meeting(s)

The next meetings of this WG have been scheduled on 10 December 2019 (Parma) and 27 (PM)-28 January 2020 (Parma).

⁴ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00053

⁵ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00437





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 1ST MEETING OF THE WORKING GROUP ON THE TRANSPORT/STORAGE OF FRESH FISHERY PRODUCTS (EFSA-Q-2019-00053 and EFSA-Q-2019-00437)

Held on 4 November 2019, WEB-conference

(Agreed on 5 November 2019)

Participants

- Working Group Members:Sara Bover-Cid, Miriam Rodriguez Garcia, Panagiotis Skandamis
- EFSA:

BIOCONTAM Unit: Winy Messens

1. Welcome and apologies for absence

The Chair welcomed the participants to the sub-WG meeting arranged with three WG members. Apologies were received from Paolo Caricato and Marina Marini (DG SANCO).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management^{2,} 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.

4. Agreement of the minutes of the 4th Working Group meeting held on 26-27 September 2019, Parma

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 4th Working Group meeting of the Working Group on the use of "tubs" for fresh fishery products were agreed by written procedure on 11 October 2019.³

5. Scientific topic(s) for discussion

- 5.1. Use of "tubs" for transporting and storing fresh fishery products⁴. The WG Chair provided a short feedback of the discussion held at the 131st BIOHAZ plenary meeting (23-24 October 2019). The grouping of the fishery products and scenarios for the assessment were reminded. There are two processes, namely "cooling after a temperature peak" caused by gutting and/or filleting at first on-land establishment and "keeping the chill temperature". The scenarios would be for lean or fat fish using the initial fish temperature and the outside temperature considering realistic, best-case and worst-cases scenarios. The conditions for tubs and box transport/storage were discussed with some being the same while other will be container specific. A table with the input values was discussed and missing values highlighted. The application of predictive models was discussed, and an example was provided for a realistic scenario. Tasks were allocated to EFSA staff and WG experts.
- 5.2. Use of the so called "superchilling" technique for the transport of fresh fishery products⁵. This mandate was not discussed.

6. Next meeting(s)

The next meetings of this WG have been scheduled on 7 November 2019 (web-meeting from 8.30-12.30), 10 December 2019 (Parma) and 27 (PM)-28 January 2020 (Parma).

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³ http://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-fishtubs.pdf

⁴ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00053

⁵ http://registerofguestions.efsa.europa.eu/rogFrontend/guestionLoader?guestion=EFSA-Q-2019-00437





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 4TH MEETING OF THE WORKING GROUP ON THE USE OF "TUBS" FOR FRESH FISHERY PRODUCTS

Held on 26-27 September 2019, Parma

(Agreed on 11 October 2019)

Participants

Working Group Members:

Sigurjón Arason, Karen Bekaert, Sara Bover-Cid, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

- European Commission and/or Member States representatives:
 Paolo Caricato (DG SANCO)
- EFSA:

BIOCONTAM Unit: Winy Messens

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from Marina Marini (DG SANCO).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

 $^{^1\} http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf$

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





4. Agreement of the minutes of the 3rd Working Group meeting held on 27 June 2019, WEB-conference

The minutes of the 3rd Working Group meeting were agreed by written procedure on 8 July 2019.³

5. Scientific topic(s) for discussion

5.1. Use of "tubs" for transporting and storing fresh fishery products4. Then the WG Chair provided feedback of the discussion held at the 129th and 130th BIOHAZ plenary meetings (3-4 July 2019 and 25-26 September 2019). An update was provided on the steps 1-6 defined for the assessment and a discussed was held on the way forward. In particular, the first part of the hazard identification related to evidence of association with human illness associated to fishery products has been completed. The second part related to the growth or survival under the temperature conditions of water/ice ("tubs") or ice transport is ongoing. The listing of the various criteria to be considered for the grouping of the fishery products was discussed and agreed. The conditions for tubs and box transport/storage were defined with some being the same while other will be container specific. A table will be prepared with the input variables and scenarios. A new approach was defined for addressing the impact of the potential water content change on the growth/survival of the hazards. The WG members were reminded to identify and list the uncertainty sources encountered during the assessment and evaluate in which direction the uncertainty may affect the outcome of the assessment. Tasks were allocated to EFSA staff and WG experts.

6. Next meeting(s)

The name of this ad hoc working group "WG on the use of "tubs" for fresh fishery products" has been changed to "WG on the transport/storage of fresh fishery products (EFSA-Q-2019-00053 and EFSA-Q-2019-00437)" so this WG can also deal with the mandate on "Use of the so called "superchilling" technique for the transport of fresh fishery products"⁵.

The next meetings of this WG have been scheduled on 7 November 2019 (web-meeting from 8.30-12.30), 10 December 2019 (Parma) and 27 (PM)-28 January 2020 (Parma).

⁴ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00053

⁵ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00437





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 3RD MEETING OF THE WORKING GROUP ON THE USE OF "TUBS" FOR FRESH FISHERY PRODUCTS

Held on 27 June 2019, WEB-conference

(Agreed on 8 July 2019)

Participants

Working Group Members:

Sigurjón Arason, Karen Bekaert, Sara Bover-Cid, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

■ EFSA:

BIOCONTAM Unit: Maria Francesca Iulietto, Winy Messens

GMO Unit: Riccardo Bonini

Transformation Services Unit: Alessandra Serra

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from Paolo Caricato and Marina Marini (DG SANCO).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management^{2,} 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

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





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.

4. Agreement of the minutes of the 2nd Working Group meeting held on 7-8 May 2019, Parma

The minutes of the 2nd Working Group meeting were agreed by written procedure on 24 May 2019.³

5. Scientific topic(s) for discussion

5.1. Use of "tubs" for transporting and storing fresh fishery products4. First EFSA presented to the WG the new way of collaborating with experts in drafting scientific outputs to simplify collaboration, improve efficiency and lean EFSA's core activities. Then the WG Chair provided feedback of the discussion held at the 128th BIOHAZ plenary meeting (5-6 June 2019). The reformulation of the ToR into draft assessment questions and their hypothetical answers according to the first steps in the uncertainty checklist (A and B) were welcomed. The conceptual map clarifying the conditions to be assessed was presented. The interpretation of "impact" was discussed. The panel agreed that it is not feasible to quantitatively assess the risk for public health but considered that the potential risk could be described. The approaches to be used for steps 1-6 defined for the assessment were presented and discussed. During the WG meeting, the WG members provided a further update of the work done and a discussion was held on the way forward. The WG members were reminded to identify and list the uncertainty sources encountered during the assessment and evaluate in which direction the uncertainty may affect the outcome of the assessment. Tasks were allocated to EFSA staff and WG experts.

6. Next meeting(s)

The next WG meetings have been scheduled on 26-27 September 2019 (Parma) and tentatively on 10 December 2019 (Parma).

http://registerofquestions.efsa.europa.eu/rogFrontend/questionLoader?question=EFSA-0-2019-00053





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 2ND MEETING OF THE WORKING GROUP ON THE USE OF "TUBS" FOR FRESH FISHERY PRODUCTS

Held on 7-8 May 2019, Parma

(Agreed on 24 May 2019)

Participants

Working Group Members:

Sigurjón Arason, Karen Bekaert, Sara Bover-Cid, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

EFSA:

BIOCONTAM Unit: Maria Francesca Iulietto, Winy Messens

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from Paolo Caricato and Marina Marini (DG SANCO).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

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





4. Agreement of the minutes of the 1st Working Group meeting held on 25 March 2019, Parma

The minutes of the 1st Working Group meeting were agreed by written procedure on 2 April 2019.3

5. Scientific topic(s) for discussion

5.1. Use of "tubs" for transporting and storing fresh fishery products⁴**.** The WG Chair provided the feedback of the discussion held at the 127th BIOHAZ plenary meeting (11 April 2019). The interpretation and approach to the ToR were further discussed. The WG reformulated the ToR into assessment questions. The approaches to be used for steps 1-6 defined for the assessment were presented and discussed. The WG members were reminded to consider the uncertainty sources encountered during the assessment and list the minimum uncertainties that should be included. Some tasks were allocated to EFSA staff and WG experts.

6. Next meeting(s)

The next WG meetings have been scheduled on 27 June (web-conference), 26-27 September 2019 (Parma) and tentatively on 10 December 2019 (Parma).

³ http://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-fishtubs.pdf

⁴ http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00053





SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS

MINUTES OF THE 1ST MEETING OF THE WORKING GROUP ON THE USE OF "TUBS" FOR FRESH FISHERY PRODUCTS

Held on 25 March 2019, WEB-conference

(Agreed on 2 April 2019)

Participants

Working Group Members:

Sigurjón Arason, Karen Bekaert, Sara Bover-Cid, Miriam Rodriguez Garcia, Panagiotis Skandamis, Elisabetta Suffredini

- European Commission and/or Member States representatives:
 - Paolo Caricato, Marina Marini (DG SANCO)
- EFSA:

BIOCONTAM Unit: Maria Francesca Iulietto, Winy Messens

1. Welcome and apologies for absence

The Chair welcomed the participants. No apologies were received.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

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





4. Scientific topic(s) for discussion

4.1. Use of "tubs" for transporting and storing fresh fishery products³. The background and Terms of Reference (ToR) of the mandate received from the European Commission (EC), were introduced to the WG including a short presentation of previous related EFSA work. The WG discussed the ToRs, clarified these with the EC representative, and agreed on a common understanding of these. Possible approaches to be taken to answer these were discussed. The EFSA Scientific Committee's Guidance on Uncertainty Analysis in Scientific Assessments was introduced. The WG experts were appointed to lead the various steps in the scientific assessment and tasks were allocated to EFSA staff and WG experts. A timeline for WG meetings in 2019 was agreed.

5. Next meeting(s)

The next WG meetings have been scheduled on 7 (14:30-18:00) and 8 (8:30-15:00) May 2019 (Parma), 27 June (web-conference), 26-27 September 2019 (Parma) and tentatively on 10 December 2019 (Parma).

 $^{3}\ \underline{\text{http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2019-00053}$