

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 22nd MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 28 September 2020

(Agreed on 28 September 2020)¹

Participants

- Working Group Members:
Ernst Wimmer
- Hearing Experts²:
Luke Alphey
- European Commission and/or Member States representatives:
DG SANTE: Not applicable
- EFSA:
GMO Unit: Yann Devos
- Others:
Not applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

EFSA welcomed the participants. No apologies for absence were received.

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 Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 21st Working Group meeting held on 9 September 2020, TELE-conference

The minutes of the 21st Working Group meeting held on 9 September 2020 were agreed on 9 September 2020.⁵

5. Scientific topics for discussion

5.1. Revision of the draft scientific opinion

EFSA staff/experts discussed the classification of engineered gene drive strategies in insects.

6. Any Other Business

Not applicable.

7. Next meeting

To be confirmed.

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 21st MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 9 September 2020

(Agreed on 9 September 2020)¹

Participants

- Working Group Members:
Michael Bonsall, Leslie G Firbank, Fabien Nogué and Ernst Wimmer
- Hearing Experts²:
John Mumford
- European Commission and/or Member States representatives:
DG SANTE: Ilaria Ciabatti
- EFSA:
GMO Unit: Yann Devos and Konstantinos Paraskevopoulos
- Others:
Not applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

EFSA welcomed the participants. Apologies for absence were received from Hans Moons and Anastasia Pagida.

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 Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 20th Working Group meeting held on 10 July 2020, TELE-conference

The minutes of the 20th Working Group meeting held on 10 July 2020 were agreed.⁵

5. Scientific topics for discussion

5.1. Public consultation comments

EFSA staff/experts discussed the comments received through the online public consultation on the draft EFSA GMO Panel scientific opinion on the molecular characterisation and environmental risk assessment of gene drive modified insects. The public consultation was open from 17 February 2020 till 24 April 2020 (included).

5.2. Revision of the draft scientific opinion

EFSA staff/experts discussed revisions to the draft scientific opinion in light of the public consultation comments.

6. Any Other Business

Not applicable.

7. Next meeting

To be confirmed.

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 20th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 10 July 2020

(Agreed on 10 July 2020)¹

Participants

- Working Group Members:
Michael Bonsall, Leslie G Firbank, Fabien Nogué and Ernst Wimmer
- Hearing Experts²:
Luke Alphey, Boet Glandorf, Lisa M Knolhoff, John Mumford and Jörg Romeis
- European Commission and/or Member States representatives:
DG SANTE: Hans Moons
- EFSA:
GMO Unit: Yann Devos and Konstantinos Paraskevopoulos
- Others:
Not applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

EFSA welcomed the participants. Apologies for absence were received from Ilaria Ciabatti and Anastasia Pagida.

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 Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 19th Working Group meeting held on 24 June 2020, TELE-conference

The minutes of the 19th Working Group meeting held on 24 June 2020 were agreed.⁵

5. Scientific topics for discussion

5.1. Similarities and differences between engineered gene drives and current/emerging disease vector/pest control strategies involving insects

EFSA staff/experts discussed similarities and differences between engineered gene drives and current/emerging disease vector/pest control strategies that involve the release of insects including genetically modified ones, and explored the extent to which lessons can be learned for the environmental risk assessment and post-market environmental monitoring of gene drive modified insects.

6. Any Other Business

Not applicable.

7. Next meeting

9 September 2020 (TELE/WEB)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 19th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 24 June 2020

(Agreed on 24 June 2020)¹

Participants

- Working Group Members:
Michael Bonsall, Leslie G Firbank, Fabien Nogué and Ernst Wimmer
- Hearing Experts²:
John Mumford
- European Commission and/or Member States representatives:
DG SANTE: Ilaria Ciabatti and Hans Moons
- EFSA:
GMO Unit: Yann Devos and Konstantinos Paraskevopoulos
- Others:
Not applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

EFSA welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 18th Working Group meeting held on 15 June 2020, TELE-conference

The minutes of the 18th Working Group meeting held on 15 June 2020 were agreed.⁵

5. Scientific topics for discussion

5.1. Public consultation comments

EFSA staff/experts discussed the comments received through the online public consultation on the draft EFSA GMO Panel scientific opinion on the molecular characterisation and environmental risk assessment of gene drive modified insects. The public consultation was open from 17 February 2020 till 24 April 2020 (included).

5.2. Revision of the draft scientific opinion

EFSA staff/experts discussed revisions to the draft scientific opinion in light of the public consultation comments.

6. Any Other Business

Not applicable.

7. Next meeting

10 July 2020 (TELE/WEB)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 18th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 15 June 2020

(Agreed on 15 June 2020)¹

Participants

- Working Group Members:
Michael Bonsall, Leslie G Firbank, Fabien Nogué and Ernst Wimmer
- Hearing Experts²:
John Mumford
- European Commission and/or Member States representatives:
DG SANTE: Ilaria Ciabatti, Hans Moons and Anastasia Pagida
- EFSA:
GMO Unit: Yann Devos and Konstantinos Paraskevopoulos
- Others:
Not applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

EFSA welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 17th Working Group meeting held on 13 May 2020, TELE-conference

The minutes of the 17th Working Group meeting held on 13 May 2020 were agreed.⁵

5. Scientific topics for discussion

5.1. Public consultation comments

EFSA staff/experts discussed the comments received through the online public consultation on the draft EFSA GMO Panel scientific opinion on the molecular characterisation and environmental risk assessment of gene drive modified insects. The public consultation was open from 17 February 2020 till 24 April 2020 (included).

5.2. Revision of the draft scientific opinion

EFSA staff/experts discussed revisions to the draft scientific opinion in light of the public consultation comments.

6. Any Other Business

Not applicable.

7. Next meeting

24 June 2020 (TELE/WEB)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 17th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 13 May 2020

(Agreed on 13 May 2020)¹

Participants

- Working Group Members:
Michael Bonsall, Leslie G Firbank, Fabien Nogué and Ernst Wimmer
- Hearing Experts²:
John Mumford
- European Commission and/or Member States representatives:
DG SANTE: Anastasia Pagida
- EFSA:
GMO Unit: Yann Devos and Konstantinos Paraskevopoulos
- Others:
Not applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

EFSA welcomed the participants. Apologies for absence were received from Ilaria Ciabatti.

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 Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 16th Working Group meeting held on 4 May 2020, TELE-conference

The minutes of the 16th Working Group meeting held on 4 May 2020 were agreed.⁵

5. Scientific topics for discussion

5.1. Public consultation comments

EFSA staff/experts discussed the comments received through the online public consultation on the draft EFSA GMO Panel scientific opinion on the molecular characterisation and environmental risk assessment of gene drive modified insects. The public consultation was open from 17 February 2020 till 24 April 2020 (included).

5.2. Revision of the draft scientific opinion

EFSA staff/experts discussed revisions to the draft scientific opinion in light of the public consultation comments.

6. Any Other Business

Not applicable.

7. Next meeting

15 June 2020 (TELE/WEB)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 16th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 4 May 2020

(Agreed on 4 May 2020)¹

Participants

- Working Group Members:
Michael Bonsall, Leslie G Firbank, Fabien Nogué and Ernst Wimmer
- Hearing Experts²:
John Mumford
- European Commission and/or Member States representatives:
DG SANTE: Ilaria Ciabatti and Anastasia Pagida
- EFSA:
GMO Unit: Yann Devos and Konstantinos Paraskevopoulos
- Others:
Not applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

EFSA welcomed the participants. No apologies for absence were received.

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 Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 15th Working Group meeting held on 10 January 2020, TELE-conference

The minutes of the 15th Working Group meeting held on 10 January 2020 were agreed.⁵

5. Scientific topics for discussion

5.1. Public consultation comments

EFSA staff/experts discussed the comments received through the online public consultation on the draft EFSA GMO Panel scientific opinion on the molecular characterisation and environmental risk assessment of gene drive modified insects. The public consultation was open from 17 February 2020 till 24 April 2020 (included).

5.2. Revision of the draft scientific opinion

EFSA staff/experts discussed revisions to the draft scientific opinion in light of the public consultation comments.

6. Any Other Business

Not applicable.

7. Next meeting

13 May 2020 (TELE/WEB)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 15th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 10 January 2020

(Agreed on 10 January 2020)¹

Participants

- Working Group Members:
Michael Bonsall, Leslie G Firbank, John Mumford and Ernst Wimmer
- Hearing Experts²:
Not applicable
- European Commission and/or Member States representatives:
DG SANTE: Ilaria Ciabatti
- EFSA:
GMO Unit: Yann Devos and Konstantinos Paraskevopoulos
- Others:
Not applicable

1. Welcome and apologies for absence

EFSA welcomed the participants. Apologies for absence were received from Fabien Nogué.

2. Adoption of agenda

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 14th Working Group meeting held on 18 December 2019, TELE-conference

The minutes of the 14th Working Group meeting held on 18 December 2019 were agreed.⁵

5. Scientific topics for discussion

5.1. Structure of the GMO Panel output

EFSA staff/experts discussed the structure/outline content of the GMO Panel scientific opinion on gene drive modified insects.

5.2. Assessment of EFSA GMO Panel (2012, 2013)^{6,7}

EFSA staff/experts discussed the suitability of several sections of the GMO Panel (2012, 2013) guidelines for the molecular characterisation and environmental risk assessment of gene drive modified insects, and reviewed them in light of the respective mandates on genetically modified animals of the European Commission.

6. Any Other Business

Not applicable.

7. Next meeting

7 February 2020 (TELE/WEB – tbc)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

⁶ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2013.3200>

⁷ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2012.2501>



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 14th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 18 December 2019

(Agreed on 18 December 2019)¹

Participants

- Working Group Members:
Michael Bonsall, Fabien Nogu  , John Mumford and Ernst Wimmer
- Hearing Experts²:
Not applicable
- European Commission and/or Member States representatives:
DG SANTE: Ilaria Ciabatti
- EFSA:
GMO Unit: Yann Devos and Konstantinos Paraskevopoulos
- Others:
Not applicable

1. Welcome and apologies for absence

EFSA welcomed the participants. Apologies for absence were received from Andrea Crisanti and Leslie G Firbank.

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 13th Working Group meeting held on 18 October 2019, TELE-conference

The minutes of the 13th Working Group meeting held on 18 October 2019 were agreed.⁵

5. Scientific topics for discussion

5.1. Structure of the GMO Panel output

EFSA staff/experts discussed the structure/outline content of the GMO Panel scientific opinion on gene drive modified insects.

5.2. Assessment of EFSA GMO Panel (2012, 2013)^{6,7}

EFSA staff/experts discussed the suitability of several sections of the GMO Panel (2012, 2013) guidelines for the molecular characterisation and environmental risk assessment of gene drive modified insects, and reviewed them in light of the respective mandates on genetically modified animals of the European Commission.

6. Any Other Business

Not applicable.

7. Next meeting

10 January 2020 (TELE/WEB)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

⁶ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2013.3200>

⁷ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2012.2501>



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 13th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 18 October 2019

(Agreed on 18 October 2019)¹

Participants

- Working Group Members:
Michael Bonsall, Leslie G Firbank, Fabien Nogué, John Mumford and Ernst Wimmer
- Hearing Experts²:
Not applicable
- European Commission and/or Member States representatives:
DG SANTE: Ilaria Ciabatti
- EFSA:
GMO Unit: Yann Devos and Konstantinos Paraskevopoulos
- Others:
Not applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

EFSA welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 12th Working Group meeting held on 9 October 2019, TELE-conference

The minutes of the 12th Working Group meeting held on 9 October 2019 were agreed.⁵

5. Scientific topics for discussion

5.1. Structure of the GMO Panel output

EFSA staff/experts discussed the structure/outline content of the GMO Panel scientific opinion on gene drive modified insects.

5.2. Assessment of EFSA GMO Panel (2012, 2013)^{6,7}

EFSA staff/experts discussed the suitability of several sections of the GMO Panel (2012, 2013) guidelines for the molecular characterisation and environmental risk assessment of gene drive modified insects, and reviewed them in light of the respective mandates on genetically modified animals of the European Commission.

6. Any Other Business

Not applicable.

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

⁶ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2013.3200>

⁷ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2012.2501>



7. Next meeting

3 December 2019 (TELE-conference)



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 12th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 9 October 2019

(Agreed on 9 October 2019)¹

Participants

- Working Group Members:
Michael Bonsall, Andrea Crisanti, Leslie G Firbank (chair), Fabien Nogu  , John Mumford and Ernst Wimmer
- Hearing Experts²:
Not applicable
- European Commission and/or Member States representatives:
DG SANTE: Frank Swartenbroux
- EFSA:
GMO Unit: Ana M Camargo, Yann Devos and Konstantinos Paraskevopoulos
- Others:
Not applicable

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Ilaria Ciabatti and Anastasia Pagida.

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 11th Working Group meeting held on 30 September 2019, TELE-conference

The minutes of the 11th Working Group meeting held on 30 September 2019 were agreed.⁵

5. Scientific topics for discussion

5.1. Structure of the GMO Panel output

EFSA staff/experts discussed the structure/outline content of the GMO Panel scientific opinion on gene drive modified insects.

5.2. Assessment of EFSA GMO Panel (2012, 2013)^{6,7}

EFSA staff/experts discussed the suitability of several sections of the GMO Panel (2012, 2013) guidelines for the molecular characterisation and environmental risk assessment of gene drive modified insects, and reviewed them in light of the respective mandates on genetically modified animals of the European Commission.

6. Any Other Business

Not applicable.

7. Next meeting

18 October 2019 (TELE-conference)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

⁶ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2013.3200>

⁷ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2012.2501>



GENETICALLY MODIFIED ORGANISMS UNIT

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 11th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 30 September 2019

(Agreed on 30 September 2019)¹

Participants

- Working Group Members:
Fabien Nogué, John Mumford and Ernst Wimmer
- Hearing Experts²:
Not applicable
- European Commission and/or Member States representatives:
Not applicable
- EFSA:
GMO Unit: Ana M Camargo, Yann Devos and Konstantinos Paraskevopoulos
- Others:
Not applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Ilaria Ciabatti and Andrea Crisanti.

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 Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 10-11 September 2019, TELE-conference

The minutes of the 10th Working Group meeting held on 10-11 September 2019 were agreed.⁵

5. Scientific topics for discussion

5.1. Structure of the GMO Panel output

EFSA staff/experts discussed the structure/outline content of the GMO Panel scientific opinion on gene drive modified insects.

5.2. Assessment of EFSA GMO Panel (2012, 2013)^{6,7}

EFSA staff/experts discussed the suitability of several sections of the GMO Panel (2012, 2013) guidelines for the molecular characterisation and environmental risk assessment of gene drive modified insects, and reviewed them in light of the respective mandates on genetically modified animals of the European Commission.

6. Any Other Business

Not applicable.

7. Next meeting

9 October 2019 (TELE-conference)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

⁶ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2013.3200>

⁷ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2012.2501>



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 10th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

**Parma, 10-11 September 2019
(Agreed on 11 September 2019)¹**

Participants

- Working Group Members:
Michael Bonsall, Andrea Crisanti (by tele on day 1), Leslie G Firbank (chair), Fabien Nogué, John Mumford and Ernst Wimmer (by tele)
- Hearing Experts²:
Not applicable
- European Commission and/or Member States representatives:
DG SANTE: Ilaria Ciabatti (by tele on day 2) and Anastasia Pagida (by tele on day 1)
- EFSA:
GMO Unit: Ana M Camargo and Yann Devos
- Others:
Not applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

The Chair welcomed the participants. No apologies for absence were received.

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 Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 9th Working Group meeting held on 22 July 2019, TELE-conference

The minutes of the 9th Working Group meeting held on 22 July 2019 were agreed.⁵

5. Scientific topics for discussion

5.1. Structure of the GMO Panel output

EFSA staff/experts discussed the structure/outline content of the GMO Panel scientific opinion on gene drive modified insects.

5.2. Assessment of EFSA GMO Panel (2012, 2013)^{6,7}

EFSA staff/experts discussed the suitability of several sections of the GMO Panel (2012, 2013) guidelines for the molecular characterisation and environmental risk assessment of gene drive modified insects, and reviewed them in light of the respective mandates on genetically modified animals of the European Commission.

6. Any Other Business

Not applicable.

7. Next meeting

30 September 2019 (TELE-conference)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

⁶ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2013.3200>

⁷ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2012.2501>

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 9th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 22 July 2019

(Agreed on 22 July 2019)¹

Participants

- Working Group Members:
Michael Bonsall, Leslie G Firbank and John Mumford
- Hearing Experts²:
Not Applicable
- European Commission and/or Member States representatives:
None
- EFSA:
GMO Unit: Ana M Camargo and Yann Devos
- Others:
Not Applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Ilaria Ciabatti.

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 Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 8th Working Group meeting held on 8 July 2019, TELE-conference

The minutes of the 8th Working Group meeting held on 8 July 2019 were agreed.⁵

5. Scientific topics for discussion

5.1. Structure of the GMO Panel output

EFSA staff/experts discussed the structure/outline content of the GMO Panel scientific opinion on gene drive modified insects.

5.2. Assessment of EFSA GMO Panel (2013)⁶

EFSA staff/experts discussed the suitability of several sections of the GMO Panel (2013) guidelines for the environmental risk assessment of gene drive modified insects, and reviewed them in light of the respective mandates on genetically modified animals of the European Commission.

6. Any Other Business

6.1. Not Applicable

7. Next meeting

10-11 September 2019 (Parma)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wqs/gmo/wq-gene-drive-era.pdf>

⁶ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2013.3200>



GENETICALLY MODIFIED ORGANISMS UNIT

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 8th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

**Held on 8 July 2019, TELE/WEB
(Agreed on 8 July 2019)¹**

Participants

- Working Group Members:
Michael Bonsall, Leslie G Firbank, John Mumford and Ernst A Wimmer
- Hearing Experts²:
Not Applicable
- European Commission and/or Member States representatives:
None
- EFSA:
GMO Unit: Ana M Camargo and Yann Devos
- Others:
Not Applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Ilaria Ciabatti (EC) and Andrea Crisanti.

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 Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 7th Working Group meeting held on 28 June 2019, TELE-conference

The minutes of the 7th Working Group meeting held on 28 June 2019 were agreed.⁵

5. Scientific topics for discussion

5.1. Assessment of EFSA GMO Panel (2013)⁶

EFSA staff/experts tested/discussed the suitability of several sections of the EFSA GMO Panel (2013) guidance for the environmental risk assessment of gene drive modified insects.

6. Any Other Business

6.1. Not Applicable

7. Next meeting

22 July 2019 (TELE-conference)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

⁶ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2013.3200>



GENETICALLY MODIFIED ORGANISMS UNIT

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 7th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

Held on 28 June 2019, TELE/WEB

(Agreed on 28 June 2019)¹

Participants

- Working Group Members:
Andrea Crisanti, Fabien Nogué and Ernst Wimmer
- Hearing Experts²:
Not Applicable
- European Commission and/or Member States representatives:
None
- EFSA:
GMO Unit: Ana M Camargo and Yann Devos
- Others:
Not Applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Ilaria Ciabatti.

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 Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 6th Working Group meeting held on 25-26 June 2019, physical (Parma)

The minutes of the 6th Working Group meeting held on 25-26 June 2019 were agreed.⁵

5. Scientific topics for discussion

5.1. Assessment of EFSA GMO Panel (2013)⁶

EFSA staff/experts tested/discussed the suitability of several sections of the EFSA GMO Panel (2013) guidance for the environmental risk assessment of gene drive modified insects.

6. Any Other Business

6.1. Not Applicable

7. Next meeting

8 July 2019 (TELE-conference)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

⁶ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2013.3200>



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 6th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

Held on 25-26 June 2019, Parma

(Agreed on 26 June 2019)¹

Participants

■ Working Group Members:

Michael Bonsall, Andrea Crisanti (by tele on day 1 only), Leslie G Firbank (chair), John Mumford, Fabien Nogué and Ernst A Wimmer (by tele)

■ Hearing Experts²:

Johannes Frieß (by tele for item 6.5 only) and Bernd Giese (by tele for item 6.5 only)

■ European Commission and/or Member States representatives:

Ilaria Ciabatti (DG SANTE [by tele])

■ EFSA:

GMO Unit: Ana M Camargo, Yann Devos and Konstantinos Paraskevopoulos

■ Others:

Not Applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

The Chair welcomed the participants. No apologies for absence were received.

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 Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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. Declarations of Interest of Hearing experts

In accordance with EFSA's Policy on Independence and the Decision of the Executive Director on Competing Interest Management⁴, EFSA invited Johannes Frieß and Bern Giese 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 framework.

5. Agreement of the minutes of the 5th Working Group meeting held on 17 June 2019, TELE-conference

The minutes of the 5th Working Group meeting held on 17 June 2019 were agreed.⁵

6. Scientific topics for discussion

6.1. Workshop

EFSA staff/experts discussed the outcomes of EFSA's stakeholder workshop "Problem formulation for the environmental risk assessment of gene drive modified insects", and the way to report the contributions of workshop participants in the GMO Panel scientific opinion on gene drive modified insects.⁶

6.2. Review of gene drive strategies

EFSA staff/experts discussed relevant gene drive strategies for insects.

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

⁶ <https://www.efsa.europa.eu/en/events/event/190515>



6.3. Assessment of EFSA GMO Panel (2012,2013)^{7,8}

EFSA staff/experts tested/discussed the suitability of several sections of the EFSA GMO Panel (2012, 2013) guidelines for the molecular characterisation and environmental risk assessment of gene drive modified insects.

6.4. Structure of the GMO Panel output

EFSA staff/experts discussed the structure/outline of the GMO Panel scientific opinion on gene drive modified insects.

6.5. Reporting of relevant research projects/workshops

Bernd Giese and Johannes Frieß reported on the research project GDRA 'New molecular techniques: risk assessment of synthetic gene drive-systems' and the workshop 'Spatial and temporal control of gene drives' held on 4-5 April 2019 in Vienna.

7. Any Other Business

7.1. Not Applicable

8. Next meeting

28 June 2019, TELE

⁷ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2012.2501>

⁸ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2013.3200>



GENETICALLY MODIFIED ORGANISMS UNIT

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 5th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 17 June 2019

(Agreed on 17 June 2019)¹

Participants

- Working Group Members:
Andrea Crisanti, Fabien Nogué and Ernst Wimmer
- Hearing Experts²:
Not Applicable
- European Commission and/or Member States representatives:
Anastasia Pagida (DG SANTE)
- EFSA:
GMO Unit: Ana M Camargo, Yann Devos and Konstantinos Paraskevopoulos
- Others:
Not Applicable

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Ilaria Ciabatti.

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 Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 11 June 2019, TELE-conference

The minutes of the 4th Working Group meeting held on 11 June 2019 were agreed.⁵

5. Scientific topics for discussion

5.1. Assessment of EFSA GMO Panel (2012)⁶

EFSA staff/experts tested/discussed the suitability of several sections of the EFSA GMO Panel (2012) guidance for the molecular characterisation of gene drive modified insects.

6. Any Other Business

6.1. Not Applicable

7. Next meeting

25-26 June 2019 (Parma)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

⁶ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2012.2501>



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 4th MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 11 June 2019

(Agreed on 11 June 2019)¹

Participants

- Working Group Members:
Michael Bonsall, Leslie G Firbank and John Mumford
- Hearing Experts²:
Not Applicable
- European Commission and/or Member States representatives:
Ilaria Ciabatti (DG SANTE)
- EFSA:
GMO Unit: Fernando Álvarez, Ana M Camargo and Yann Devos
- Others:
Not Applicable

1. Welcome and apologies for absence

The Chair welcomed the participants. No apologies for absence were received.

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 3rd Working Group meeting held on 30 April 2019, TELE-conference

The minutes of the 3rd Working Group meeting held on 30 April 2019 were agreed.⁵

5. Scientific topics for discussion

5.1. Workshop

EFSA staff/experts discussed the main points raised at EFSA's stakeholder workshop "Problem formulation for the environmental risk assessment of gene drive modified insects"⁶, held on 15 May 2019.

5.2. Assessment of EFSA GMO Panel (2013)⁷

EFSA staff/experts tested/discussed the suitability of several sections of the EFSA GMO Panel (2013) guidance for the environmental risk assessment of gene drive modified insects.

5.3. Outline/structure of the mandated output

EFSA staff/experts discussed the potential outline and structure of the mandated output.

6. Any Other Business

6.1. Not Applicable

7. Next meeting

17 June 2009 (TELE-conference)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

⁶ <https://www.efsa.europa.eu/en/events/event/190515>

⁷ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2013.3200>



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 3rd MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

**TELE-conference, 30 April 2019
(Agreed on 30 April 2019)¹**

Participants

- Working Group Members:
Andrea Crisanti, Leslie G Firbank (chair), John Mumford, Fabien Nogué and Ernst A Wimmer
- Hearing Experts²:
Not Applicable
- European Commission and/or Member States representatives:
Ilaria Ciabatti (DG SANTE)
- EFSA:
GMO Unit: Ana M Camargo and Yann Devos
- Others:
Not Applicable

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Michael Bonsall.

2. Adoption of agenda

The agenda was adopted without changes.

¹ Minutes should be published within 15 working days of the final day of the relevant meeting.

² 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>



3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, 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 2nd Working Group meeting held on 19 March 2019, TELE-conference

The minutes of the 2nd Working Group meeting held on 19 March 2019 were agreed.⁵

5. Scientific topics for discussion

5.1. Workshop

EFSA staff/experts discussed the preparation of EFSA's stakeholder workshop "Problem formulation for the environmental risk assessment of gene drive modified insects"⁶.

5.2. Assessment of EFSA GMO Panel (2013)⁷

EFSA staff/experts tested/discussed the suitability of several sections of the EFSA GMO Panel (2013) guidance for the environmental risk assessment of gene drive modified insects.

6. Any Other Business

6.1. Not Applicable

7. Next meeting

11 June 2019 (TELE-conference)

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

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

⁶ <https://www.efsa.europa.eu/en/events/event/190515>

⁷ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2013.3200>



GENETICALLY MODIFIED ORGANISMS UNIT

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF THE 2nd MEETING OF THE WORKING GROUP ON THE ENVIRONMENTAL RISK ASSESSMENT (ERA) OF GENE DRIVE MODIFIED ORGANISMS (GENE DRIVE ERA)

TELE-conference, 19 March 2019

(Agreed on 19 March 2019)

Participants

- Working Group Members:
Michael Bonsall, Andrea Crisanti, Leslie G Firbank (chair), John Mumford, Fabien Nogué and Ernst A Wimmer
- Hearing Experts¹:
Not Applicable
- European Commission and/or Member States representatives:
Ilaria Ciabatti (DG SANTE)
- EFSA:
GMO Unit: Fernando Álvarez, Ana M Camargo, Yann Devos and Konstantinos Paraskevopoulos
- Others:
Not Applicable

1. Welcome and apologies for absence

The Chair welcomed the participants.

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. 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 Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 1st Working Group meeting held on 7 February 2019, TELE-conference

The minutes of the 1st Working Group meeting held on 7 February 2019 were agreed.⁴

5. Scientific topics for discussion

5.1. Expertise needs

EFSA staff/experts discussed additional expertise needs for the working group.

5.2. Workshop

EFSA staff/experts discussed the briefing notes of EFSA's stakeholder/EU Member state workshop "Problem formulation for the environmental risk assessment of gene drive modified insects"⁵.

5.3. EFSA GMO Panel (2013) for GM insects⁶

EFSA staff/experts tested/discussed the conceptual structure of the EFSA GMO Panel (2013) guidance for the environmental risk assessment of GM insects.

5.4. Outline/structure of the mandated output

EFSA staff/experts discussed the potential outline and structure of the mandated output.

6. Any Other Business

6.1. Not Applicable

7. Next meeting

30 April 2019 (TELE-conference)

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

⁴ <http://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-gene-drive-era.pdf>

⁵ <https://www.efsa.europa.eu/en/events/event/190515>

⁶ <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2013.3200>

Scientific Panel on Genetically Modified Organisms

Minutes of the 1st meeting of the Working Group on the environmental risk assessment (ERA) of gene drive modified organisms (Gene Drive ERA)

**Held on 7 February 2019 – TELE/WEB
(Agreed on 7 February 2019)**

Participants

- **Working Group Members:**

- Michael Bonsall, Andrea Crisanti, Leslie G Firbank, John Mumford, Fabien Nogué and Ernst A Wimmer

- **Hearing Experts¹:**

- None

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

- None

- **EFSA:**

- GMO Unit: Fernando Álvarez, Ana M Camargo, Yann Devos and Konstantinos Paraskevopoulos

- **Others:**

- None

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Ilaria Ciabatti (DG SANTE).

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. 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 Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topics for discussion

4.1. Introduction to the mandate

EFSA staff introduced European Commission's mandate⁴ and its scope, as well as the associated timeline and expected deliverables. The way forward to address the mandate was discussed.

4.2. Expertise needs

EFSA staff/experts discussed additional expertise needs for the working group.

4.3. Workshop

EFSA staff/experts discussed the outline of the 1-day stakeholder workshop "problem formulation for the environmental risk assessment of gene drive modified insects"⁵.

5. Next meeting

To be determined.

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

⁴ <http://registerofquestions.efsa.europa.eu/roqFrontend/ListOfQuestionsNoLogin?0&panel=ALL>

⁵ <https://www.efsa.europa.eu/en/events/event/190515>