

Decision in case 176/2015/JF on the alleged failure of the European Food Safety Authority to reply adequately to questions about an authorisation application for genetically modified maize

Decision

Case 176/2015/JF - Opened on 05/05/2015 - Decision on 13/12/2017 - Institutions concerned European Food Safety Authority (Settled by the institution) | European Food Safety Authority (Solution achieved) |

The complaint here was that the European Food Safety Authority (EFSA) did not respond adequately to a number of questions put to it about its role in the authorisation of Monsanto's MON 810 genetically modified maize.

After inquiring into the issue, the Ombudsman found the answers provided by EFSA to be opaque in that they referred to EFSA's general procedures without specifically addressing the questions about MON 810. The complainant's concern was mainly related to the appropriateness of the information submitted with the application for authorisation of MON 810. The Ombudsman therefore proposed to EFSA that it should reply in more detail to the complainant.

EFSA replied stating that it checks the completeness of the information submitted by the applicants and that it requests additional information, when necessary. As regards MON 810, EFSA made a number of requests for additional information to the applicant. It then took the applicant's replies to those requests into consideration, together with other information, when deciding on the safety of MON 810.

Since EFSA has accepted and implemented the solution proposed by the Ombudsman, the Ombudsman considered the matter settled and has closed the case. She also made a suggestion for improvement to EFSA that it consider making public the additional information provided by applicants in reply to its requests for clarifications.

The background

1. The complaint, from the French association *G.I.E.T. - Groupe International d'Études Transdisciplinaires*, is about how the European Food Safety Authority (EFSA) evaluates the



safety of genetically modified organisms (GMOs) before authorising them for use in the EU. Specifically, it concerns EFSA's handling of an authorisation application for genetically modified maize.

2. In October 2013, a member of the European Parliament (the 'MEP'), put a number of questions to the European Commission on behalf of the complainant. The questions were based on the assertion that an EU study focusing on an authorisation renewal for Monsanto's MON 810 genetically modified maize had cast doubt on some of Monsanto's published results and on the methods it used to assess the safety of MON 810 and other genetically modified plants.

3. The Commission asked EFSA to reply to the MEP and also to the complainant. EFSA was of the view that, in its reply, it addressed all of the questions and thoroughly described the methodology it used in the risk assessment of maize MON 810.

4. The complainant, however, was not satisfied and complained to the European Ombudsman in February 2015 [1] .

Allegation of inadequate reply about the authorisation of a GMO

On EFSA's general responsibility

The Ombudsman's proposal for a solution

5. The complainant's concern was that if the data, studies and scientific evidence submitted to EFSA in an application for the authorisation of a GMO is biased or incomplete, there is a greater risk that EFSA, despite its best efforts, will make an incorrect assessment. The inquiry thus concerned what responsibility EFSA has in verifying if applications are biased or incomplete and, if so, what actions, if any, EFSA should take in relation to such applications.

6. In her proposal for a solution, the Ombudsman thus asked EFSA to explain to what extent it is responsible for verifying whether scientific data in applications are biased or incomplete and for taking action in relation thereto.

7. EFSA stated that it is capable of verifying if the data it receives are reliable (it can verify if they contain inconsistencies or mistakes). EFSA also checks whether applications are complete, both from an administrative and a scientific point of view [2]. It asks applicants to provide missing information and/or data [3]. If an applicant is unable to provide the requested clarifications and/or data, EFSA may adopt a negative or an inconclusive opinion. EFSA then added that it does not, and it cannot, disregard a scientific study simply because it has been submitted by an applicant.



8. EFSA's guidance documents set out the type of information and methodologies which enable its experts to reach meaningful scientific conclusions. These guidance documents have been adopted by the EFSA Scientific Panel on GMOs, following thorough scientific discussions, public consultation and stakeholder-engagement exercises, whenever this was possible.

9. Applicants who wish to demonstrate that their product has no adverse effects on heath and/or the environment [4] are required to share with EFSA appropriate information, data and analyses. At the time of the events to which this case relates, there were no specific requirements regarding the level of detail or the completeness of an application. To fill this gap [5], in 2006, EFSA published its guidance document for the risk assessment of GMO plants and derived food and feed [6]. In 2011, it developed a further guidance document on the preparation and presentation of GMO plant applications (the 'submission guidance'). The submission guidance was reviewed in 2012, following the experience gained in the meantime in checking GMO applications and the feedback received from applicants, other stakeholders and EU Member States. The submission guidance was reviewed again after the entry into force of new legislation on GMO food and feed [7]. In its current form, the submission guidance sets out the EU procedure for handling GMO plant applications, as well as detailed instructions on the structure of an application. It sets out specific requirements for applications and renewals of authorisations. Applicants must follow the guidance documents. Any failure to comply with a given requirement must be properly justified on scientific grounds. Otherwise, EFSA may adopt a negative or an inconclusive opinion.

10. Applicants are now also required to provide evidence of further compliance, namely through toxicological studies and other additional studies [8]. EFSA has in place, since 2016, a programme and a procedure for auditing studies' compliance with good laboratory practice [9]. This is done either through random yearly audits or audits for a specific purpose, when these are deemed necessary by its Scientific Panels' and/or Working Groups' experts.

11. In accordance with its 2015 guidance document on agronomic and phenotypic characterisation of GMO plants [10], EFSA also checks that applicants have the necessary quality assurance systems in place and that they submit appropriate agronomic and phenotypic characterisation documentation.

12. The complainant did not comment on EFSA's reply.

The Ombudsman's assessment after the proposal for a solution

13. EFSA has replied that it has the responsibility for verifying the administrative and the scientific completeness of the applications and that it systematically checks the relevance of the data given by applicants. When necessary, EFSA asks applicants to provide any missing information or data. In case of non-compliance, it adopts negative or inconclusive opinions. EFSA has developed guidance documents on the type of information and studies it considers sufficient for its experts to be able to reach scientific conclusions. Applicants are now also



obliged to submit additional studies, which EFSA may also audit.

14. EFSA has thus now given a clear description of its responsibility **for assessing** the scientific data given by applicants, as well as of the actions that it may take in case of incomplete information. EFSA has therefore accepted and implemented the Ombudsman's proposal for solution and it has thereby settled this aspect of the case.

On the data provided by the applicant

The Ombudsman's proposal for a solution

15. The complainant had asked EFSA 1) whether the applicant for MON 810 had submitted only data that was favourable to its application and 2) whether submitting only favourable data is scientifically acceptable. EFSA had replied that an applicant must submit information that allow the risk assessors, that is, EFSA and the competent national authorities, to determine whether the product is safe or not. The applicant must, therefore, include also studies showing negative results or safety concerns. Failure to share meaningful studies highlighting a safety risk would be in breach of the applicable legislation [11]. EFSA also underlined that it does not form its risk assessment opinion solely on the basis of information submitted by applicants. It continuously monitors the scientific literature for new relevant data and keeps itself up-to-date with new developments and papers. Its GMO Panel thoroughly analyses all available evidence. EFSA took into account all available relevant data in its assessment of the MON 810 application, including data unfavourable to the applicant.

16. The Ombudsman noted that EFSA and the complainant are referring to different things: EFSA referred, in general terms, to its rigorous analysis, while the complainant referred to its concerns about the completeness of the information provided by the applicant in the specific application regarding MON 810.

17. It was clear from EFSA's reply that it is not scientifically acceptable to submit favourable data only when unfavourable data are also available. An applicant has to submit *all* relevant data to EFSA. However, EFSA had not given an answer to the complainant's question as to the completeness of the data provided in the specific case. Nor had it explained why it had not answered the complainant's question.

18. In light of the above, the Ombudsman proposed that EFSA should explain whether the applicant for MON 810 had submitted all relevant data in its possession and, if it did not, whether EFSA had requested the applicant to provide additional data and subsequently made all the relevant data public.

19. EFSA replied that it had paid close attention to whether the applicant had submitted all the studies required by the legal framework and guidance documents that were applicable at the time. Since EFSA does not have enforcement powers, it could not inspect the applicant's



premises to verify whether there were any unfavourable studies that had not been reported. However, EFSA did identify several gaps in the application. It therefore asked the applicant, on a number of occasions [12], to provide the missing information [13]. EFSA's GMO Panel then assessed the additional information from the applicant, having concluded that the product was safe. Subsequently, EFSA says that it has continuously reviewed the relevance of any new publications. It has not found that a review of the GMO Panel's opinion is necessary.

20. According to EFSA, all letters and scientific opinions are available on EFSA's website. Member States' contributions are published in the annexes to the opinions. EFSA has also published a summary of the application file of this case [14] . "*The summary… reflects the original submission by the applicant, and the data contained in the scientific opinions on EFSA's website. Subsequently, EFSA did not publish other scientific background information or data submitted in replies to the requests for clarifications…* [E] *FSA aims at tackling the legal and technical challenges posed by the proactive publication of application dossiers it processes under the multiple procedures it implements.*"

21. The complainant did not comment on EFSA's reply.

The Ombudsman's assessment after the proposal for a solution

22. EFSA has explained and demonstrated how it ensures that the information it uses is as complete as possible. It has explained that when it identified several gaps in the application, it asked the applicant to provide the missing information and datasets. Had the GMO Panel found the additional data to be insufficient, it would have adopted an inconclusive or a negative opinion.

23. EFSA has thus now answered the complainant's question regarding the completeness of the data provided by the applicant in this case. It has therefore accepted and implemented the Ombudsman's proposal for a solution and thereby settled this aspect of the complaint.

24. The Ombudsman notes, however, that EFSA has not explained why it has not made public the additional data provided by the applicant, or at least referred to it in the publicly available summary of the application file. Making public as much information as possible about applications avoids misunderstandings and builds public trust in EFSA's procedure. Thus, the Ombudsman will make a suggestion for improvement to EFSA in this regard.

On the relevance of chosen "comparators"

The Ombudsman's proposal for a solution

25. The complainant considered that EFSA had not explained whether the "comparators" [15] referred to by the applicant were relevant for the GMO in question. According to the



complainant, applicants often select inadequate comparators, which gives rise to inaccurate results. EFSA replied that it had considered all available evidence when analysing the GMO and that the observed difference between the GMO and its comparator raised no food safety concerns.

26. The Ombudsman noted that EFSA again made general references to its rigorous procedures and analysis, whereas the complainant's concern was about the applicant possibly having provided insufficient information in the specific application regarding MON 810. EFSA's response could therefore have been understood as opaque. EFSA's failure to state unambiguously whether all relevant information had been provided by the specific authorisation applicant could diminish citizens' trust in the procedure.

27. In light of the above, the Ombudsman proposed that EFSA should explain whether the "comparators" which had been selected by the applicant for MON 810 were relevant or not.

28. EFSA replied that two field trials had been performed for the compositional assessment of MON 810: one in 1994 in the US and another in 1995 in France, using two non-GM maize as control products. The guidance document which was applicable at the time advised use of a non-GM comparator with " *comparable genetic background* ." The applicant had stated that the two control products had a " *similar pedigree to GM maize MON 810 but* [were] *not isogenic to maize MON 810*". The GMO Panel accepted them as relevant comparators [16].

29. EFSA is aware of the key relevance of the selection of appropriate test products. In 2011, it published a specific guidance document on the criteria to be followed when selecting suitable comparators [17]. The 2015 guidance document on agronomic and phenotypic characterisation of GM plants provides for a further set of criteria for the selection of non-GM reference products for field trials. Additionally, the new legislation on GM food and feed now specifically allows EFSA to demand that applicants submit, in electronic format, raw data that is suitable for statistical and other analysis [18].

30. EFSA is now better equipped to implement more rigorous standards in respect of the required documentation than it was at the time of its opinion on MON 810. EFSA argued that this did not affect the opinion of the GMO Panel as regards the safety of the GMO, including the risk assessment " *which has been confirmed by EFSA and its experts several times since.*"

31. The complainant did not comment on EFSA's reply.

The Ombudsman's assessment after the proposal for a solution

32. EFSA has explained that the GMO Panel expert members agreed that the comparators proposed by the applicant were relevant comparators of the GMO maize. EFSA has since developed specific guidance documents that explain the criteria to be followed for the selection of suitable comparators. This notwithstanding, the risk assessment performed at the relevant time still remains valid in respect of the safety of MON 810.



33. EFSA has thus answered the complainant's question as to whether EFSA had found the applicant's comparators to be relevant or not. It has therefore accepted and implemented the Ombudsman's proposal for a solution and settled this aspect of the complaint.

On the links between the experts proposing the pepsin resistance test and the applicant

The Ombudsman's proposal for a solution

34. The complainant argued that the pepsin resistance test used to assess the digestibility *in vitro* of the interest protein of MON 810 was proposed by experts with links to the applicant.

35. Since EFSA had not replied to the complainant's concern on this matter, the Ombudsman proposed that EFSA should respond to the concerns expressed by the complainant regarding a possible link between experts linked to the applicant and the reliance on the pepsin resistance test.

36. EFSA replied that applicants are responsible for proving the safety of their products. Hence, nothing prevents them from submitting information, datasets and studies developed internally. Sourcing information internally does not, in itself, undermine the scientific validity of an argument or dataset. EFSA assesses the data from the scientific point of view only, irrespective of the origin of the data. It added that it is its GMO Panel experts who are expected to comply with the requirements of independence, including the absence of conflicts of interest [19]. The experts used by applicants, or the authors of the studies that are used by them, do not have to be independent of the applicant (they could, for example, be employees of the applicant).

37. According to EFSA, the pepsin resistance test is the most commonly used digestion test for allergenicity assessment of novel proteins. Following a public consultation, to which the complainant contributed, EFSA has proposed some changes to the conditions used in the pepsin resistance test to better reflect the gastric environment, as well as to add an intestinal digestion phase. EFSA will launch a procurement procedure for the testing necessary to assess the efficacy of its proposals.

38. The complainant did not comment on EFSA's reply.

The Ombudsman's assessment after the proposal for a solution

39. EFSA has explained that it assesses data from the scientific point of view only, irrespectively of their origin. Since an applicant is legally required to submit all relevant information it has, it may well be required to submit any relevant information it has from internal and external sources, including in-house studies. Thus, in the Ombudsman's view, EFSA



cannot legally impose a requirement on an applicant not to submit information that it has generated in-house. That said, if and when information is submitted to EFSA by an applicant, an applicant should clearly identify to EFSA precisely where that information has been obtained. In addition, if EFSA considers that any data submitted to it is incomplete or unreliable, it can ask for more information. In this context, the Ombudsman notes that although the pepsin test is the most commonly used test for allergenicity assessment of novel proteins, EFSA is currently considering changes to the pepsin resistance test, following a public consultation to which the complainant contributed. On 26 July 2017, EFSA published a procurement notice on " *In vitro protein digestibility*" in the Official Journal of the European Union " *to outsource the protocol development and the production of experimental data for the improvement of classical in vitro protein degradation tests*" [20].

40. In light of the above, the Ombudsman considers that EFSA has replied to the complainant's concern. EFSA has therefore accepted and implemented the Ombudsman's proposal for a solution and settled this aspect of the complaint.

Conclusion

On the basis of the inquiry into this complaint, the Ombudsman closes it with the following conclusion:

EFSA has accepted and implemented the Ombudsman's proposal for a solution and settled the complaint.

The complainant and EFSA will be informed of this decision.

Suggestion for improvement

The Ombudsman suggests, where EFSA requests and receives additional data from an applicant, that it make this additional data publicly available in order to avoid any public perception that the file is incomplete.

Emily O'Reilly European Ombudsman

Strasbourg, 13/12/2017



[1] For further information on the background to the complaint, the parties' arguments and the Ombudsman's inquiry, please refer to the full text of the Ombudsman's proposal for a solution available at: https://www.ombudsman.europa.eu/cases/solution.faces/en/87264/html.bookmark [Link]

[2] EFSA referred to Recital 9 and Articles 6 and 18 of Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on GM food and feed (OJ 2003 L 268, p. 1) (the 'GM Food and Feed Regulation', available here:

http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32003R1829)

[3] EFSA referred to Article 6(3) and 18(3) of the GM Food and Feed Regulation.

[4] EFSA referred to Articles 4, 5, 16 and 17 of the GM Food and Feed Regulation.

- [5] EFSA referred to Articles 5(8), 11(6), 17(8) and 23(6) of the GM Food and Feed Regulation.
- [6] Available here: http://onlinelibrary.wiley.com/doi/10.2903/j.efsa.2006.99/epdf

[7] Namely, the Commission Implementing Regulation (EU) No 503/2013 of 3 April 2013 on applications for authorisation of genetically modified food and feed in accordance with the GM Food and Feed Regulation and amending Commission Regulations (EC) No 641/2004 and (EC) No 1981/2006 (OJ 2003 L 157, p. 1.)

[8] According to EFSA: "[C] ommission Implementing Regulation (EU) No 503/2013 introduced additional obligations pertaining to the quality of studies provided in pre-marketing applications on GMOs by requiring applicants that: - toxicological studies (e.g. repeated dose 28-day oral toxicity studies, 90-day feeding studies in rodents) comply with the requirements of Directive 2004/10/EC or with OECD principles on GLP; - studies other than toxicological studies (e.g. field trials to collect compositional, agronomic and phenotypic data; analysis of the composition) should adhere to the principles of GLP or be conducted by organisations accredited under the relevant ISO standard."

[9] See:

http://www.oecd.org/chemicalsafety/testing/oecdseriesonprinciplesofgoodlaboratorypracticeglpandcompliancemonit [Link]

[10] Available here: http://onlinelibrary.wiley.com/doi/10.2903/j.efsa.2015.4128/epdf

[11] Namely, the GM Food and Feed Regulation.

[12] EFSA listed 16 letters it had sent to the applicant between December 2007 and April 2009, and one letter it had sent to the applicant in April 2012, with requests for additional information and/or clarifications.



[13] EFSA referred to Articles 6(3) and 18 (3) of the GM Food and Feed Regulation.

[14] EFSA referred to Articles 5(2)(b) and 17(2)(b) of the GM Food and Feed Regulation.

[15] According to the article "Safety assessment of genetically modified plants with deliberately altered composition" by Halford, Nigel G. *et al.* (last consulted on 9 October 2017 at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4265246/ [Link]): "[t] *he food and feed risk assessment strategy for genetically modified (GM) crops in Europe, as applied by the European Food Safety Authority (EFSA) GMO Panel, compares GM plants and their derived food and feed with a conventional non-GM comparator, the comparator being a plant with a history of safe use as food (the principle of substantial equivalence)."*

[16] According to EFSA: "[t] he information provided by the applicant stated that GM maize MON 810 and the two non-GM maize MON 818 and MON 820 had a similar pedigree [(((Hi-II x B73) selfed x Mo 17) selfed]. This however cannot guarantee that the lines are isogenic due to the variability in the Hi-II line, which is not an inbred line. Against this background, the EFSA GMO Panel accepted the two non-GM lines MON 818 and MON 820 as relevant comparators of MON 810. "

[17] Available here: http://onlinelibrary.wiley.com/doi/10.2903/j.efsa.2011.2149/epdf

[18] EFSA referred to Articles 4(3) and 6, and Annex 2 of the Commission Implementing Regulation (EU) No 503/2013 of 3 April 2013 on applications for authorisation of genetically modified food and feed in accordance with the GM Food and Feed Regulation and amending Commission Regulations (EC) No 641/2004 and (EC) No 1981/2006.

[19] EFSA referred to this webpage of its website: https://www.efsa.europa.eu/en/howwework/independentscience

[20] http://www.efsa.europa.eu/en/tenders/tender/170727 [Link]