

**SUBMISSION FROM PARAGUAY (PARTY)**

*(Translated from the original in Spanish)*

**FORM FOR THE SCIENTIFIC REVIEW OF THE  
GUIDANCE ON RISK ASSESSMENT OF LIVING MODIFIED ORGANISMS**

The Guidance for Risk Assessment of Living Modified Organisms (the “Guidance”) was developed through collaborative efforts between the Open-ended Online Expert Forum and the Ad Hoc Technical Expert Group (AHTEG) on Risk Assessment and Risk Management.\*

The aim of the Guidance is to further elaborate the methodology for risk assessment of living modified organisms (LMOs) in accordance with the Cartagena Protocol on Biosafety, and in particular in accordance with Annex III of the Protocol.

The Guidance is intended to be a “living document” that will be improved with time as new experience becomes available and new developments occur in the field of applications of LMOs, as and when mandated by the Parties to the Cartagena Protocol on Biosafety.

At the fifth meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol (COP-MOP), the Parties to the Protocol welcomed the first version of the Guidance and noted that it requires further scientific review and testing to establish its overall utility and applicability to living modified organisms of different taxa introduced into various environments.

The Executive Secretary was therefore requested to coordinate a review process of this first version of the Guidance among Parties and other Governments, through their technical and scientific experts, and relevant organizations.

The following questions are aimed at seeking views to assist the Open-ended Online Expert Forum and the AHTEG in revising the Guidance.

The completed review forms are to be mailed to the Secretariat at: [riskassessment.forum@cbd.int](mailto:riskassessment.forum@cbd.int) . Reviews from Parties and other Governments are to be submitted by their National Focal Points. Reviews from organizations are to be submitted through their head offices.

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\* Additional information on the development of the “Guidance on Risk Assessment of Living Modified Organisms” may be found in document UNEP/CBD/BS/COP-MOP/5/12 (see “Official Documents” at <http://www.cbd.int/doc/?meeting=MOP-05>).

**i. Reviewer's information**

Please select **only one** of options below

**This scientific review of the Guidance on Risk Assessment of Living Modified Organisms is being submitted on behalf of a:**

- Party. Please specify: <PARAGUAY>
- Other Government. Please specify: <Country's name>
- Organization: Please specify: <Organization's name>

**ii. Overall evaluation**

Please select **only one** answer for each section

<b>Q1. How do you evaluate the level of consistency of the following sections of the Guidance with the Cartagena Protocol on Biosafety, particularly with its Article 15 and Annex III?</b>					
	<b>Very poor</b>	<b>Poor</b>	<b>Neutral</b>	<b>Good</b>	<b>Very good</b>
• Roadmap for risk assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Risk assessment of living modified organisms with stacked genes or traits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Risk assessment of living modified crops with tolerance to abiotic stress	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Risk assessment of living modified mosquitoes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Q2. How do you evaluate the usefulness of the following sections of the Guidance as tools for assisting countries in conducting and reviewing risk assessments of LMOs <u>in a scientifically sound and case-by-case manner?</u></b>					
	<b>Very poor</b>	<b>Poor</b>	<b>Neutral</b>	<b>Good</b>	<b>Very good</b>
• Roadmap for risk assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Risk assessment of living modified organisms with stacked genes or traits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Risk assessment of living modified crops with tolerance to abiotic stress	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Risk assessment of living modified mosquitoes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Q3. How do you evaluate the usefulness of the following sections of the Guidance as tools for assisting countries in conducting and reviewing risk assessments of LMOs introduced into various receiving environments?**

	Very poor	Poor	Neutral	Good	Very good
• Roadmap for risk assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Risk assessment of living modified organisms with stacked genes or traits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Risk assessment of living modified crops with tolerance to abiotic stress	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Risk assessment of living modified mosquitoes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Q4. How do you evaluate the usefulness of the “Roadmap” as a tool for assisting countries in conducting and reviewing risk assessments of LMOs of different taxa?**

	Very poor	Poor	Neutral	Good	Very good
• Roadmap for risk assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**ADDITIONAL COMMENTS ON THE OVERALL EVALUATION**

Please add any additional comment you may have regarding the overall evaluation of the first version of the “Guidance on Risk Assessment of Living Modified Organisms” below.

Q5. <In general, the assessment included in the preliminary version is of a neutral nature. One area to be pointed out are the global issues related to quality and relevance (criteria) for the general assessment. As regards uncertainty, it can be supplemented with additional studies and risk management measures.

The document seems to be more refined in the section on stacked traits, but not regarding crops with tolerance to abiotic stress and risks related to mosquitoes.

In general, the Roadmap takes into account all the steps to be followed in a risk assessment; nevertheless, it is considered as a basic structure. Biosafety criteria should be taken into account.>

**iii. Section-by-section review**

Please select **only one** of the boxes for each question

**PART I: THE ROADMAP FOR RISK ASSESSMENT**

**1. INTRODUCTION**

Q6. Are all the concepts in this section relevant and accurate from a scientific point of view?  Yes  No. Please comment: <Type here>

Q7. Does this section include all the necessary relevant concepts?  Yes  
 No. Please comment: <More variables with biosafety criteria should be included.>

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Q8. Are all the concepts in this section expressed in a language that could be easily understood by the target users?  Yes  
 No. Please comment: <Concepts should be clarified.>

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## 2. THE RISK ASSESSMENT

**Step 1: “An identification of any novel genotypic and phenotypic characteristics associated with the living modified organism that may have adverse effects on biological diversity in the likely potential receiving environment, taking also into account risks to human health”**

Q9. Are all the concepts in this section relevant and accurate from a scientific point of view?  Yes  
 No. Please comment: <Type here>

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Q10. Does this section include all the necessary relevant concepts?  Yes  
 No. Please comment: <It is necessary to include specific indicators for the adverse effects on biological diversity.>

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Q11. Are all the concepts in this section expressed in a language that could be easily understood by the target users?  Yes  
 No. Please comment: <Type here>

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**Step 2: “An evaluation of the likelihood of adverse effects being realized, taking into account the level and kind of exposure of the likely potential receiving environment to the living modified organism”**

Q12. Are all the concepts in this section relevant and accurate from a scientific point of view?  Yes  
 No. Please comment: <Type here>

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Q13. Does this section include all the necessary relevant concepts?  Yes  
 No. Please comment: <Type here>

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Q14. Are all the concepts in this section expressed in a language that could be easily understood by the target users?  Yes  
 No. Please comment: <Type here>

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**Step 3: “An evaluation of the consequences should these adverse effects be realized”**

Q15. Are all the concepts in this section relevant and accurate from a scientific point of view?  Yes  
 No. Please comment: <Type here>

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Q16. Does this section include all the necessary relevant concepts?  Yes  
 No. Please comment: <It would be convenient to harmonize the concepts already existing in guidelines and glossaries of international agencies such as FAO, CODEX and others.>

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Q17. Are all the concepts in this section expressed in a language that could be easily understood by the target users?  Yes  
 No. Please comment: <Type here>

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**Step 4: “An estimation of the overall risk posed by the living modified organism based on the evaluation of the likelihood and consequences of the identified adverse effects being realized”**

Q18. Are all the concepts in this section relevant and accurate from a scientific point of view?  Yes  
 No. Please comment: <Type here>

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Q19. Does this section include all the necessary relevant concepts?  Yes  
 No. Please comment: <Type here>

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Q20. Are all the concepts in this section expressed in a language that could be easily understood by the target users?  Yes  
 No. Please comment: <Type here>

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**Step 5: “A recommendation as to whether or not the risks are acceptable or manageable, including, where necessary, identification of strategies to manage these risks”**

Q21. Are all the concepts in this section relevant and accurate from a scientific point of view?  Yes  
 No. Please comment: <Type here>

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Q22. Does this section include all the necessary relevant concepts?  Yes  
 No. Please comment: <Biosafety criteria should be included.>

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Q23. Are all the concepts in this section expressed in a language that could be easily understood by the target users?  Yes  
 No. Please comment: <Type here>

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**3. RELATED ISSUES**

Q24. Does the “Related Issues” section include all relevant issues related to risk assessment and decision-making process but that are outside the scope of the Roadmap?  Yes  
 No. Please comment: <These are elements to be considered in a decision making process, but are not relevant to the risk assessment itself, and are out of the scope of the Roadmap.>

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**4. FLOWCHART**

Q25. Does the flowchart provide an accurate graphic representation of the risk assessment process as described in the Roadmap?  Yes  
 No. Please comment: <Type here>

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**PART II: SPECIFIC TYPES OF LMOs AND TRAITS**

**A. RISK ASSESSMENT OF LIVING MODIFIED ORGANISMS WITH STACKED GENES OR TRAITS**

Q26. Are all the concepts in this section relevant and accurate from a scientific point of view?

- Yes  
 No. Please comment: <Type here>

Q27. Does this section include all the necessary relevant concepts?

- Yes  
 No. Please comment: <It would be convenient to harmonize the concepts already existing in guidelines and glossaries of international agencies such as FAO, CODEX and others.>

Q28. Are all the concepts in this section expressed in a language that could be easily understood by the target users?

- Yes  
 No. Please comment: <The combinatorial and cumulative effects of stacked event LMOs should be specified.>

**B. RISK ASSESSMENT OF LIVING MODIFIED CROPS WITH TOLERANCE TO ABIOTIC STRESS**

Q29. Are all the concepts in this section relevant and accurate from a scientific point of view?

- Yes  
 No. Please comment: <The components of increased persistence in agricultural areas and increased invasiveness in natural habitats should be separated, and the latter should be specified. The language is confusing, and biosafety risks and criteria should be specified.>

Q30. Does this section include all the necessary relevant concepts?

- Yes  
 No. Please comment: <Idem Q29>

Q31. Are all the concepts in this section expressed in a language that could be easily understood by the target users?

- Yes  
 No. Please comment: <Idem Q29>

**C. RISK ASSESSMENT OF LIVING MODIFIED MOSQUITOES**

Q32. Are all the concepts in this section relevant and accurate from a scientific point of view?

- Yes  
 No. Please comment: <The language is confusing; the risks are not specified, and it is not accurate from the scientific point of view.>

Q33. Does this section include all the necessary relevant concepts?

- Yes  
 No. Please comment: <Idem 32>

Q34. Are all the concepts in this section expressed in a language that could be easily understood by the target users?

- Yes  
 No. Please comment: <Idem 32>

**ADDITIONAL COMMENTS ON THE SECTION-BY-SECTION REVIEW**

*Please add any additional comment you may have regarding particular sections of the first version of the "Guidance on Risk Assessment of Living Modified Organisms" below.*

Q35. <It would be convenient to review the rationale, so that it reflects clarity and objectivity, in agreement with the components and the areas to be taken into account in each component.

The document should be more practical as regards its development and supplementary items, which force the evaluator to go back to previous sections permanently.

The level of uncertainty should be handled by scales, such as release in confined environment and market release, in harmony with international guidelines on risk assessment.>

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