



**United States Department of State**

*Bureau of Oceans and International  
Environmental and Scientific Affairs*

*Washington, D.C. 20520*

29 June 2021

Ms. Elizabeth Maruma Mrema  
Executive Secretary  
Convention on Biological Diversity  
413 Saint-Jacques Street, Suite 800  
Montreal, Quebec, Canada H2Y 1N9

Dear Ms. Mrema:

The United States appreciates the invitation to provide input in response to the invitation in notification 2021-038 to provide peer review comments on the Study on Financial Security Mechanisms under the Nagoya-Kuala Lumpur Supplementary Protocol.

We regret that we have missed the 25 June deadline, but we hope these views are useful nonetheless, and we are pleased to have the opportunity to share the attached information. Thank for your consideration.

Sincerely,

A handwritten signature in cursive script that reads "Barbara M. De Rosa-Joynt".

Barbara M. De Rosa-Joynt  
Division Chief for Biodiversity  
U.S. National Focal Point for the  
Convention on Biological Diversity

Attachment: U.S. comments on the Study on Financial Security Mechanisms under the Nagoya-Kuala Lumpur Supplementary Protocol.

**U.S. comments on the Study on Financial Security Mechanisms under the Nagoya-Kuala Lumpur  
Supplementary Protocol**

<b>Contact information</b>		
<b>Surname:</b>	Cornish	
<b>Given Name:</b>	Adam	
<b>Government/Organization/IPLC:</b>	United States Department of State	
<b>E-mail:</b>	cornisha@state.gov	
<b>Comments on the text and Appendix</b>		
<b>Page #</b>	<b>Line in text</b>	<b>Comment</b>
0	0	There are multiple instances in which the text could usefully provide more detail regarding the type of damage that is being described. Additional detail is recommended to ensure that the damage described is economic in nature or clearly linked to biodiversity. Please see instances noted below, although these may not capture all references to damage that we consider could usefully be better defined.  Pg 14, 24-25; Pg 16, lines 8-9, 12-14, 15-16; Pg 17, lines 16-17; Page 18, lines 1-3, 27-28; Pg 19, lines 18-20; Pg 20, lines 23-24; Pg 24, lines 11-12, 15-16, 18-19; Pg 26, lines 18-19; Pg 27, lines 9-10; Pg 29, lines 33-34; Pg 35, lines 8-9; Pg 36, lines 32; Pg 38, lines 15-17, 30-31; Pg 39, lines 4-6
0	0	We consider that the study could be strengthened by an analysis that examines the rationale for why there are few-to-no examples of damage to biodiversity from the transboundary movement of LMOs and what this may imply for the necessity of financial security mechanisms.
0	0	As noted in the text, this study primarily focuses on case studies for economic damages, which is not relevant to damage to biodiversity derived from the transboundary movement of LMOs. The author may wish to consider the value of instead using case studies that examine environmental damage from non-LMO sources, if available.
7	7-9	Suggested deletion in red in the below text to remove unnecessary reference to the “difficulty” of the negotiations for the Nagoya-Kuala Lumpur Supplementary Protocol, as this reference does not provide useful information for the study.  “After six years of intense <del>and difficult</del> negotiations, the Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on biosafety (NKLSP) was adopted in 2010.”
7	11-13	Suggested edit in red in the below text to provide additional context using language from Article 10, paragraph 2 of the NKLSP.  “As far as financial security is concerned, Article 10, paragraph 1, NKLSP provides that Parties retain the right to provide, in their domestic law, for financial security <b>in a manner consistent with their rights and obligations under international law.</b> ”
8	12-17	We consider that the scope of the study should be limited to the scope of the Cartagena Protocol, and only consider the financial consequences of a loss of biodiversity resulting from transboundary movement of LMOs. In our view, this text

USA submission Financial Security Mechanisms under the NKLSP

		<p>does not provide a sufficient rationale to justify broadening the focus of this analysis and the use of economic studies to examine financial security mechanisms when examining liability for damage to biodiversity. Request that the authors provide a stronger rationale with appropriate references to justify this broadening of focus.</p> <p>In addition, this study could be considerably strengthened by providing an analysis on the lack of examples in which transboundary movement of LMOs have caused damage to biodiversity. This analysis would provide appropriate context for why appropriate examples are not available for this study.</p> <p>“It is important to note that the type of damage on which the NKLSP focuses is primarily damage to biodiversity. However, most of the literature dealing with financial security for LMOs primarily focuses on traditional damage that would be suffered by non-GM farmers who are confronted with GM comingling. Even though these examples may be less relevant for the biodiversity damage covered by the NKLSP, the examples will still be discussed in light of the scarcity of literature addressing financial security for damage to biodiversity covered by the NKLSP.”</p>
8	20-22	<p>Suggested edits in red in the below text to emphasize that the only focus of the NKLSP is on damage to biodiversity using exact language from the NKLSP.</p> <p>“The reader should, however, be aware that the application of LMOs is broader than just in plants and agriculture and that the <del>main</del> focus of the NKLSP is on damage to biodiversity <b>resulting from living modified organisms which find their origin in a transboundary movement and not rather than</b> property damage of farmers.”</p>
8-9	32-34, 1-2	<p>Suggested deletion of the below section. “Risk aversion” is not a justification for the development and implementation of financial mechanisms. Risk is quantifiable, while perception and aversion are not.</p> <p><del>“The first reason is risk aversion. Individuals often have an aversion against risks with a potential high magnitude of damage, especially when that damage could endanger their entire wealth. Given the limited assets of most individuals, a majority of the population is averse against risks and may seek financial security (for example insurance) to be protected from risk.”</del></p>
9	20-21	<p>We consider that the term “duties” is ambiguous in this context. Suggested edits in red in the below text to clarify using language from Article 5 of the NKLSP.</p> <p>“With regard to response measures, in general terms, the NKLSP obligates Parties and <b>their competent authorities with specific notification and response actions to impose duties on an operator</b> to evaluate damage and take response measures (see box 1 for more details).”</p>
10	13-16	<p>Suggested edits in red in the below text to emphasize that Article 12 of the NKLSP does not establish a right for Parties, instead obligating Parties to provide rules and procedures, using language from Article 12, paragraph 1 of the NKLSP.</p> <p>“Article 12 <b>obligates</b> <del>establishes a right for</del> Parties to <b>provide, in their domestic law, for rules and procedures that describe response measures</b> to address damage resulting from LMOs through civil liability rules and procedures. Civil liability for material or personal damage is only covered by the NKLSP to the extent that it is associated with biodiversity damage as defined in Article 2(2)(b).”</p>

USA submission Financial Security Mechanisms under the NKLSP

11	7-9	<p>We recommend including additional detail related to the phrase “Property damage to farmer”. At present, in our view this statement is vague and implies that LMOs are resulting in many kinds of damage to a farmer. Such financial damage as described resulting from refused shipments, etc. would fall outside the scope of CBD, CPB, and NKLSP because they are not “adverse effect on the conservation and sustainable use of biological diversity, taking also into account risks to human health” (Definition of “damage” in article 2(2)(b)).</p> <p>“A challenge for this study arises in that most of the literature on financial security for LMO-related damage deals with comingling and the adventitious presence of LMOs in agriculture, thus leading to property damage for a farmer.”</p>
11	16-17	<p>Suggested edits in red in the below text to appropriately contextualize the damage described in relation to LMOs using language from the Introduction and Article 2 of the NKLSP.</p> <p>“The NKLSP covers damage to biodiversity on the condition that it is measurable or observable taking into account, wherever available, scientifically established baselines recognized by a competent authority, is significant as laid out in Article 2, paragraph 3 of the NKLSP, and results from transboundary movements of living modified organisms.”</p>
11	21-25	<p>Additional information for clarity and balance is recommended. As written, this paragraph positions one outcome as the inevitable outcome of all scenarios (i.e., damage to biodiversity from LMOs). However, there is virtually no evidence of damage from LMOs to biodiversity and this should be included as a component of this paragraph.</p> <p>“This can lead to two related issues with the provision of financial security: (1) because LMOs can cause harm under a wide variety of different risk scenarios, it is at present difficult to assess whether currently existing financial security mechanisms (for example insurance) do provide cover for a specific type of damage to biodiversity caused by LMOs, and; (2) this may equally make it difficult to develop dedicated financial security in the future as there is a wide variety of possible scenarios leading to damage.”</p>
12	1-2	<p>More information is recommended to be added for the below text. We suggest the incorporation of additional detail as to the extent and rationale for uncertainty concerning the potential impacts of LMOs.</p> <p>Suggested edit in red in the below text to bring into context and language of the NKLSP.</p> <p>“There is in the first place uncertainty concerning the potential impacts of LMOs on the conservation of sustainable use of biodiversity.”</p>
12	4-7	<p>Suggested deletion in red in the below text to remove unrelated references to allergenicity and fitness, as these aspects are not relevant to impacts on biodiversity.</p> <p>“These uncertainties were equally largely recognized during the process leading to the NKLSP. A 2003 conference report on biotechnology by Swiss Re mentions that the risk posed by GM crops are estimated to be very low, but that there remains uncertainty with regard to allergenicity, fitness and the impact of such crops on wildlife.”</p>

USA submission Financial Security Mechanisms under the NKLSP

12	7-11	<p>We recommend additional references be included for the below text, as the given citation does not directly refer to: 1) the reluctance of insurers; 2) the scope of damage presented by a low-risk product or organisms; and 3) how uncertainty and complexity increase as biotechnologies and their products advance.</p> <p>“Notwithstanding the estimated low probability, the insurers are still reluctant to cover LMO-related risks. The reason is precisely that even with a low probability there can still potentially be high damage or at least there is uncertainty with respect to the scope of the damage. Uncertainty and complexity may very well increase in view of the rapid evolution of biotechnologies.”</p>
12	19-20	<p>Suggested edit in red in the below text, as in our view the references should be made in the direct context of transboundary movement rather than the supply chain.</p> <p>“The potential risks to which particular actors are exposed may differ, depending to some extent on their specific position in the <del>transboundary movements</del><del>supply chain</del> of LMOs”</p>
12	27-29	<p>Suggested edit in red in the below text, as references in our view should be made in the direct context of transboundary movement rather than the supply chain.</p> <p>“For now, it suffices to state that the demand for financial security may well depend upon the particular position of the actor <del>throughout the process of transboundary movement of within</del> the LMO <del>supply chain</del> and the corresponding exposure to risk.”</p>
13	29-31	<p>Suggested edit in red in the below text to demonstrate that, when examples are provided, they should be in the context of the obligations of the NKLSP.</p> <p>“An example of a third party insurance would be a seed supplier (or developer) taking out insurance for potential liability towards <del>actions taken by third parties that have resulted in damage to biodiversity resulting from transboundary movement of</del><del>caused by</del> LMOs.”</p>
14	16-19	<p>Suggested edit in red in the below text to ensure grammatical clarity.</p> <p>“In some cases, there may be a different perception of the risk between, for example, an operator seeking insurance coverage and considering the risk to be fairly low, versus the insurer who may have less information and, as a result of insurer ambiguity, demands a relatively high premium.”</p>
15	22-24	<p>We consider that this is unrelated to transboundary movement and we suggest deletion.</p> <p><del>“For example, in the US, an insurance for genetic harm to organic crops was proposed in a report of the department of agriculture’s advisory committee on biotechnology.”</del></p>
16	1-3	<p>We suggest you provide additional detail for clarity. It is not presently clear how the non-exclusion of LMO use under a multiple property coverage relates to the given section?</p> <p>“A farm insurance program in the US (2016) provides multiple coverage for a wide variety of property types, whereby the use of LMOs is not explicitly excluded.”</p>
18	1-3	<p>We suggest you provide additional detail for clarity. It is not presently clear in what way are the authors suggesting that the shape of the liability regime be “improved”.</p>

USA submission Financial Security Mechanisms under the NKLSP

		<p>“A first possibility is to have the government improve the shape of the liability regime for LMO-related risks in order to provide more certainty concerning the scope of liability.”</p>
18	9-10	<p>We recommend incorporation of additional detail, as the relevance of risk assessment frameworks to the development of insurance products is unclear. For example, have similar approaches been used in the development of insurance products for other environmental applications?</p> <p>To provide a balanced view, we suggest that it would be appropriate to highlight the projected probability or history of risk of damage to biodiversity due to the transboundary movement of LMOs</p> <p>“A second point is that insurability of LMO-related losses requires clear standards concerning good professional practice. The Cartagena Protocol sets out a framework for assessing the risks of LMOs to biodiversity and further guidance on this framework has also been elaborated. This information could be used by the insurance industry to understand the practices in this area and to inform the development of insurance products.”</p>
18	27-30	<p>We consider that the comparison to terrorism and reference to “catastrophic” harm is not proportionate or equivalent to the risk of damage to biodiversity posed by LMOs. As a result, we suggest deletion or modulation of this section. If retained, we recommend that a reference be included to justify the terms used.</p> <p>“To the extent that LMO-related harm might be catastrophic and (re)insurance cover for catastrophic damage could not be acquired, this is a possible role for the government that could be considered. It is now often employed with natural hazards as well as with insurance of terrorism.”</p>
19	19-22	<p>Suggested edit in red in the below text to provide additional context, as the below interpretation may be correct but does not examine alternative explanations for the given observation.</p> <p>“However, the mere fact that alternatives, like (re)insurance which we discussed in the previous section, are almost unavailable for LMO-related damage, may imply that many actors along the supply chain will use their internal reserves for the simple reason that they may not have any other alternatives. <b>In contrast, the lack of (re)insurance mechanisms may suggest that the perceived risk to biodiversity from the transboundary movement of LMOs is low.</b>”</p>
19	23-25	<p>Suggested edit in red in the below text, as in our view references should be made in the direct context of transboundary movement rather than the supply chain.</p> <p>“In the context of <b>transboundary movement</b><del>the supply chain</del> of LMOs, one can imagine that it could especially be the larger developers of LMOs with substantial assets that rely on self-insurance, but not smaller and medium-sized companies (for example importers of LMOs) or small holders like farmers or other end-users.”</p>
26	Box 5	<p>This Box is not referenced anywhere in the document. We suggest removal if it is not referenced in the document.</p>
30-31	3.5.3 Practice	<p>We suggest that the authors include additional information to bring the section into context, as these mechanisms are largely defunct now that GE crops are not grown in most EU countries (except Spain and Portugal).</p>

USA submission Financial Security Mechanisms under the NKLSP

36	Box 10	This Box seems redundant, as Box 7 already describes a multi-layered structure of compensation. In addition, it provides a direct comparison to terrorism, which in our view is not proportionate or equivalent to the risk of damage to biodiversity posed by LMOs. We suggest deletion or modulation of this section. If retained, we recommend that a reference be included to justify the terms used.
37	Box 11	This Box references guidance materials that have not yet been put into effect and, therefore, the outcomes are unknown and cannot be applied in this context. We suggest removal of this text and/or replacement with a different example that has been applied and has resulted in measurable outcomes.
38	6-7	Suggested edit in red in the below text, as in our view references should be made in the direct context of transboundary movement rather than the supply chain.  “Attention will particularly be paid to the impacts of the different mechanisms on the stakeholders invested in the transboundary movement of LMOs-supply chain (developers, traders, and users), but also on society at large.”
39	23-25	Suggested edit in red in the below text for clarity and scope – in our view the focus should be on products derived from LMOs.  “The payment of an insurance premium could in principle lead to an increase in the prices of products derived from using LMOs but whether this passing on of the cost through the price mechanism is of substantial importance (especially compared to non-GM- products that are not derived from LMOs) is at this moment hard to judge.”
39	25-28	In order to bring appropriate balance to this paragraph, it is suggested that the authors again reference that the lack of experience is also due to the few-to-no examples of the transboundary movement of LMOs causing damage to biodiversity.  “As explained above, LMOs are still largely excluded from insurance policies and there is even less experience with insurances covering LMO-related damage to biodiversity, meaning it is difficult to know how heavy a burden the insurance premium would be.”
39-40	28-31, footnote for Bock et al. 2002	We suggest removal of the below text, as the study provided in both the footnote and reference is 1) Antiquated and not relevant in a modern context, having been developed in 2002, prior to the deployment of modern LMOs and 2) Does not take into account the economic benefits achieved from utilizing GE rapeseed.  <del>“A study by Bock et al. calculated for rapeseed production the extra costs for changing agricultural practices. The analysis includes both the costs of monitoring GMO content, additional costs related to prevention as well as insurance costs. They came to a price of 345 € per ton for organic oil seed production compared to a cost of 126 € for conventional seed production.”</del>  <del>footnote—“Bock et al. 2002, classified oilseed rape into three categories, namely conventional certified seed production (Farm 1), Organic certified seed production (Farm 2), and conventional production with farm saved seeds (Farm 3). Total costs ranged from 126 €/t for Farm 3 and 127 €/t for Farm 1, to 345 €/t for Farm 2. For Farm 1 the main part of the costs comes from monitoring of the GMO content, while the costs for changes of agricultural practices are estimated to be zero (adding an extra spring crop to the rotation). Monitoring costs are very high for both Farm 1 and Farm 2 because yields and the area of the oilseed rape producing fields are small. Both</del>

USA submission Financial Security Mechanisms under the NKLSP

		<del>farms are selling a high added value product and thus also the indicative insurance cost is high, especially for the production of organic certified seeds. For more information, see Boek et al. 2002, 112-113.”</del>
40	1-7	<p>We suggest that this section be revisited and revised to ensure that the analysis is grounded in legal statutes and evidence of harm, rather than theory. We recommend that the statement “all kinds of scenarios are possible” be removed, as this does not provide clarity or greater meaning to the section.</p> <p>We suggest clarification on what “economic effects” and “social repercussions” are being referenced, especially as this falls outside of the scope of the CBD, Cartagena Protocol on Biosafety, and the NKLSP.</p> <p>We recommend the inclusion of greater detail on the final sentence in the context of the preceding sentence, as the meaning and import is unclear.</p> <p>“Theoretically, all kinds of scenarios are possible. If insurance costs were substantial, non-GM products might become economically more attractive by comparison. In addition, substantial insurance costs could drive operators to countries where financial security requirements are less stringent. At the extreme, very high insurance premiums could drive operators out of the market. Some of these economic effects would have obvious social repercussions as well. According to the literature, concerns regarding the higher prices that could result from insurance premiums to be paid was an important reason not to impose mandatory financial security under the NKLSP.”</p>
40	21-27	<p>We suggest that references to unidentified experts (i.e., “Some”) be clarified to indicate from whom the opinions/arguments have been presented.</p> <p>As written, this section solely applies to economic damages derived from LMOs. We suggest revising to focus on damage to biodiversity from the transboundary movement of LMOs.</p> <p>If retained as economic damage, the section notes the responsibility for bearing the weight of insurance can be interpreted to lie solely with GM farmers. To provide adequate balance, we suggest including relevant rationales for non-GE farmers bearing liability for this responsibility.</p> <p>“In a context where a third party is liable, it might be problematic to require a victim to pay for the damages through a first-party insurance premium. Some have therefore argued that it is inherently unfair for non-GM farmers to bear the costs of premiums when they are not causing the potential harm. Also, others have expressed opposition to an insurance compensation mechanism that would impose a financial burden (of paying the premium) on organic and non-GM farmers, rather than on producers of LMO. In this view, the social effects of insurance would be fairer if those creating the risks were the ones required to take insurance.”</p>
41	1-2	<p>Suggested edit in red in the below text, as in our view references should be made in the direct context of transboundary movement rather than the supply chain.</p> <p>We recommend more detail be included on the proposed “negative social effects” described in the text. This concept has not been explored adequately and thus in our view it should be put into an appropriate context or removed. Are there demonstrated cases in which the transboundary movement of LMOs has resulted in negative social effects downstream of damage to biodiversity?</p>

USA submission Financial Security Mechanisms under the NKLSP

		<p>“The insurance costs would be passed on to the users of the LMOs, and not cause negative social effects <del>to those uninvolved in the transboundary movement of on users outside the LMOs supply chain.</del>”</p>
44	15-17	<p>Suggested edit in red in the below text to ensure balance is provided with the amount of experience gained on the use of LMOs.</p> <p>“However, whereas those risk-pools might have emerged in developing countries, for example to cover agricultural losses, it is highly unlikely that the same would cover LMO-related harm to biodiversity given the 1) unpredictability of the scale of the damage and 2) lack of damage noted to date.”</p>
45	20-26	<p>To present balance, we recommend that the alternative scenario be included, in which non-LMO users contribute to a common fund.</p> <p>“Theoretically one could imagine the creation of a fund in a developing country whereby for example importers of LMOs or the end users of the LMOs would pay contributions to cover for future losses. In this respect, insufficient human resources, the costs of the operation of the fund, the number of paying operators and the amount of payments required, might add to the complexities of establishing an effective compensation fund. Theoretically one could even imagine a global fund (created through an intergovernmental instrument). Depending on who would pay the contributions to the fund and who could potentially benefit this could be more or less socially equitable.”</p>
46	12-14	<p>In order to provide appropriate balance to this section, it is suggested that the authors again reference that the lack of experience is also due to the few-to-no examples of the transboundary movement of LMOs causing damage to biodiversity.</p> <p>“That explains why currently there is no financial security mechanism available to cover the type of biodiversity damage covered by the NKLSP.”</p>
46	15-17	<p>We recommend that additional information be provided to clarify what is meant by “damage to property”. What property is being damaged and how does this relate to damage to biodiversity derived from the transboundary movement of LMOs?</p> <p>“A second consequence is that whereas first party financial security mechanisms might be suitable for traditional damage caused by LMOs (e.g. damage to property), third party financial security mechanisms may be required for damage to biodiversity.”</p>
46	17-18	<p>In our view, the first clause of the below statement is not supported by the text. We recommend inclusion of additional text to provide clarity and a reference to support the statement.</p> <p>“As biodiversity cannot generally be attributed to an individual, a third party financial security mechanism could be more suitable for damage to biodiversity.”</p>
47	25-26	<p>We recommend providing additional text, as the <u>underlined</u> clause appears to be incomplete.</p> <p>“Furthermore, access to redress differs for each mechanism. Funds generally have streamlined procedures for handling claims <u>which may ease of access</u>, although the payments made may be limited.”</p>

USA submission Financial Security Mechanisms under the NKLSP

47-48	39-41, 1-4	<p>In order to provide appropriate balance to this section, it is suggested that the authors again reference that the lack of experience is also due to the few-to-no examples of the transboundary movement of LMOs causing damage to biodiversity.</p> <p>“The study showed that in a number of developing countries, experience with financial security mechanisms exist, including informal mechanisms such as de facto self-insurance as well as risk-pooling among farmers. The administrative, regulatory and institutional challenges many developing countries face would likely exacerbate the general difficulty to develop financial security mechanisms to cover damage to biodiversity caused by LMOs. International practice shows however that with adequate regulatory support, transboundary financial security mechanisms can be developed that would also benefit developing countries.”</p>
48	3-4	<p>We recommend providing additional detail related to the term “regulatory support”, as this term is defined in the study. As necessary, we also suggest inclusion of an appropriate reference for the use of this term.</p> <p>“International practice shows however that with adequate regulatory support, transboundary financial security mechanisms can be developed that would also benefit developing countries.”</p>

Please submit your comments to [secretariat@cbd.int](mailto:secretariat@cbd.int) by **25 June 2020**.