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AD HOC OPEN-ENDED WORKING GROUP OF LEGAL AND TECHNICAL EXPERTS ON LIABILITY AND REDRESS UNDER THE CARTAGENA PROTOCOL ON BIOSAFETY

First meeting

Montreal, 25-27 May 2005

Item 4 of the provisional agenda*

CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY SERVING AS THE MEETING OF THE PARTIES TO THE CARTAGENA PROTOCOL ON BIOSAFETY

Second meeting

Montreal, 30 May – 3 June 2005

Item 13 of the provisional agenda**

REPORT OF THE TECHNICAL GROUP OF EXPERTS ON LIABILITY AND REDRESS IN THE CONTEXT OF THE CARTAGENA PROTOCOL ON BIOSAFETY

INTRODUCTION

A. Background

1. At the first meeting of the Conference of the Parties to the Convention on Biological Diversity serving as the meeting of the Parties to the Cartagena Protocol on Biosafety (COP/MOP), in decision BS-I/8, the Parties to the Protocol requested the Executive Secretary in consultation with the Bureau, to convene a Technical Group of Experts on Liability and Redress, nominated by Parties to the Protocol and based on a fair and equitable geographical representation, to undertake preparatory work for the first meeting of the Open-ended Ad Hoc Working Group of Legal and Technical Experts on Liability and Redress. Following financial contributions from the Government of United Kingdom and the European Community, a meeting of the Technical Group of Experts was held in Montreal from 18 to 20 October 2004.

2. In accordance with the established practice, the Executive Secretary requested Parties to the Protocol, as well as other Governments, relevant international organizations and other stakeholders to submit the names of suitably qualified experts to be considered for selection as participants at the Technical Meeting. On the basis of the nominations received, the Executive Secretary, in consultation with the Bureau of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety, selected participants and observers for the meeting taking into consideration the following criteria:

- (a) Equitable geographical and stakeholder representation;
- (b) Knowledge and experience of international environmental law, international law relating to liability and redress for transboundary harm, or issues concerning LMOs; and

* UNEP/CBD/BS/WG-L&R/1/1.

** UNEP/CBD/COP-MOP/2/1.

- (c) Gender balance.

B. Attendance

3. The meeting was attended by experts and observers from the following countries: Armenia, Argentina, Australia, Austria, Belgium, Botswana, Brazil, Bulgaria, Cambodia, Cameroon, Canada, Colombia, Cuba, Denmark, Egypt, El Salvador, Ethiopia, European Community, Finland, France, Germany, India, Latvia, Liberia, Malaysia, Mexico, Netherlands, New Zealand, Panama, Peru, Poland, Sri Lanka, Sweden, Switzerland, Tajikistan, Turkey, Uganda, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, United States of America.

4. Observers from the following organizations also participated in the meeting: Canadian Wheat Board, Center for Science in the Public Interest, Global Industry Coalition (GIC), Greenpeace International, GRET, International Grain Trade Coalition (IGTC), International Maize and Wheat Improvement Centre (CIMMYT), Meridian Institute, Rockefeller Foundation (The), Syngenta, The Edmonds Institute, Third World Network (TWM), University of Bern, The World Conservation Union (IUCN).

ITEM 1. OPENING OF THE MEETING

5. The meeting was opened at 9.30 a.m. on 18 October 2004 by Mr. Olivier Jalbert on behalf of the Executive Secretary of the Secretariat of the Convention on Biological Diversity. He welcomed the participants to the Technical Meeting and thanked the Government of United Kingdom and the European Community for the financial contributions that had enabled the Secretariat to organize the meeting. He noted the wide interest shown by Governments, international organizations and other stakeholders in the issues of liability and redress for damage resulting from the transboundary movement of living modified organisms.

6. He recalled that the issue of liability and redress for damage resulting from transboundary movements of living modified organisms had been the subject of long discussions during the negotiations which had led to the adoption of Article 27 of the Biosafety Protocol. During the inter-sessional period, the Intergovernmental Committee for the Cartagena Protocol on Biosafety (ICCP), had focused on an exchange of views related to both defining the process and gathering information for future work on liability and redress. This had led to the establishment of an Open-ended Ad Hoc Working Group of Legal and Technical Experts to fulfil the task required by Article 27 of the Protocol.

7. He reminded the participants that the purpose of the meeting was to undertake the preparatory work for the first meeting of the Open-ended Working Group. Given the preparatory nature of the meeting, the Secretariat had prepared a provisional agenda that mirrored the terms of reference for the Open-ended Working Group. He stressed that modern biotechnology had great potential for human well-being but needed to be developed and used with adequate safety measures for the environment and human health. The challenge before the participants was to search for appropriate approaches in developing those rules and procedures on liability and redress that could contribute to the objective of the Protocol.

ITEM 2. ORGANIZATIONAL MATTERS

2.1. Election of officers

8. At the opening meeting of the Workshop, participants elected Mr. Rene Lefebvre (Netherlands) and Ms. Jimena Nieto Carrasco (Colombia) as Co-Chairs and Ms. Elena Petkova (Bulgaria) as Rapporteur.

9. Ms. Jimena Nieto Carrasco stated that as she was the only expert from Colombia at the meeting, she would prefer that Mr. Lefebvre chair the meetings. She said however that she would assist him when needed and as appropriate to ensure the successful outcome of the meeting.

2.2. Adoption of the agenda

10. Also at the opening meeting, the participants adopted the following agenda on the basis of the provisional agenda (UNEP/CBD/BS/TEG-L&R/1/1) prepared by the Executive Secretary:

1. Opening of the meeting.
2. Organizational matters:
 - 2.1. Election of officers;
 - 2.2. Adoption of the agenda;
 - 2.3. Organization of work.
3. Review of information relating to liability and redress for damage resulting from transboundary movements of living modified organisms.
4. Consideration of issues on liability and redress pursuant to Article 27 of the Protocol:
 - 4.1. Analysis of general issues relating to:
 - (a) The potential and/or actual damage scenarios of concern that may be covered under the Protocol in order to identify the situations for which international rules and procedures referred to in Article 27 of the Protocol may be needed;
 - (b) The application of international rules and procedures on liability and redress to the damage scenarios of concern that may be covered under Article 27 of the Protocol;
 - 4.2. Elaboration of options for elements of rules and procedures referred to in Article 27 of the Protocol.
5. Other matters.
6. Adoption of the report.
7. Closure of the meeting.

2.3. Organization of work

11. At the opening session of the meeting, participants adopted the organization of work proposed by the Executive Secretary in annex I to the annotated provisional agenda (UNEP/CBD/BS/TEG-L&R/1/1/Add.1).

**ITEM 3: REVIEW OF INFORMATION RELATING TO LIABILITY AND
REDRESS FOR DAMAGE RESULTING FROM TRANSBOUNDARY
MOVEMENTS OF LIVING MODIFIED ORGANISMS**

12. Agenda item 3 was taken up at the 1st session of the meeting, on 18 October 2004. Introducing the item, the Secretariat drew the attention of the participants to a note by the Executive Secretary (UNEP/CBD/BS/TEG-L&R/1/2) containing a synthesis of views submitted in response to the questionnaire on liability and redress for damage resulting from transboundary movement of living modified organisms (Article 27 of the Protocol), as well as a compilation of views submitted in response to the questionnaire that Parties, Governments and international organizations and relevant stakeholders had been invited to submit to the Executive Secretary by decision BS-I/8 of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety (UNEP/CBD/BS/TEG-L&R/1/INF/1).

13. Mr. Rene Lefeber, Co-Chair of the Meeting, thanked the Secretariat and invited the participants to identify any information gaps in the area of liability and redress for damage resulting from the transboundary movement of living modified organisms.

14. Interventions were made by experts and observers from: Brazil, Bulgaria, Canada, Colombia, Egypt, the Netherlands, New Zealand, Poland, Switzerland and the United States of America.

15. Interventions were also made by the observers from the International Maize and Wheat Improvement Center (CIMMYT) and the University of Bern.

16. In his summary of the discussion, the Co-Chair identified several areas where additional information relating to liability and redress for damage resulting from the transboundary movement of living modified organisms would benefit the work of the Open-Ended Working Group on Liability and Redress, namely: the scientific analysis and assessment of risks involved in the transboundary movement of living modified organisms; the determination of damage to the conservation and sustainable use of biodiversity; the determination of socio-economic damage; the availability of financial security to cover liability resulting from the transboundary movement of living modified organisms; the status of treaties that provide for third-party liability; and recent developments in international law relating to liability and redress.

**ITEM 4. CONSIDERATION OF ISSUES ON LIABILITY AND REDRESS
PURSUANT TO ARTICLE 27 OF THE PROTOCOL**

17. Agenda items 4.1 (a) and 4.1 (b) were taken up at the 1st session of the meeting, on 18 October 2004. Mr. Rene Lefeber, Co-Chair of the Meeting drew the attention to the participants to the two documents that had already been addressed under agenda item 3 (UNEP/CBD/TEG-L&R/1/2 and UNEP/CBD/TEG-L&R/1/INF/1).

18. Agenda item 4.2 was taken up at the second session of the meeting of the Technical Expert Group, on 18 October 2004.

19. The Technical Expert Group continued its discussion of agenda item 4.2 at its 3rd and 4th sessions, on 19 October 2004.

4.1 (a). Analysis of the general issues relating to the potential and/or actual damage scenarios of concern that may be covered under the Protocol in order to identify the situations for which international rules and procedures referred to in Article 27 of the Protocol may be needed

20. Mr. Rene Lefeber, Co-Chair of the Meeting, asked the participants to consider the damage scenarios contained in the annex to the report of the Workshop on Liability and Redress in the Context of

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the Cartagena Protocol on Biosafety, held in Rome from 2 to 4 December 2002. The participants were invited to focus on the identification of the possible damage scenarios that may be covered under the protocol.

21. Interventions were made by experts and observers from Brazil, Cameroon, Canada, Colombia, Cuba, Ethiopia, the European Community, India, Malaysia, the Netherlands, Switzerland, the United Republic of Tanzania and the United States of America.

22. The observer from the University of Bern also made an intervention.

23. Some participants noted that the issue of damage scenarios could be subdivided into damage to biodiversity caused by living modified organisms and activities that lead to damage, and that there was a need for more information on the issue of damage to biodiversity. It was also stressed that the risk assessment and the risk analysis processes were both important in the identification and assessment of damage scenarios. The need to consider the issue of damage during repatriation, destruction or disposal of illegally transported living modified organisms was also raised. It was important to understand when living modified organisms became a risk to the environment and the circumstances under which they could constitute an invasive alien species. It was also agreed that the annex to the report of the Workshop on Liability and Redress in the Context of the Cartagena Protocol on Biosafety (UNEP/CBD/BS/COP-MOP/1/INF/8) was a good starting point for a discussion of damage scenarios. One participant suggested that the situations and activities contemplated by the Protocol should be acknowledged as potential threats through a process of risk assessment by the competent authority on a case-by-case basis. This process of risk assessment should identify activities involving aspects such as: (i) potential for transfer of genetic material; (ii) use of material that presents phenotypic and genotypic instability; (iii) use of material that presents pathogenic, toxic or allergenic potential; (iv) incremental potential for survival, settlement and dissemination; and (v) adverse effects on organisms.

24. One participant suggested that it was important to distinguish contained use from use in the environment and field trials and said that the damage scenarios for each of these would be different. It was also noted that there were three relevant types of damage: damage to property, damage to human health and damage to the environment, and that damage to biodiversity was a sub-category of damage to the environment.

25. Other participants referred to Article 26 of the Biosafety Protocol and stressed the need to look at socio-economic considerations, while another participant pointed out that damage could be both spiritual and cultural as well as strictly economic, and that ancestral links often depended on the value of certain plants or animals. She said that the loss of biodiversity could threaten trans-generational relationships.

26. Some participants stressed that food aid presented a particular problem and that there was a risk of release of living modified organisms that could contaminate agricultural products, cause injury to organic farming and damage the wild relatives of genetically modified crops. To avert this, it was suggested that further capacity-building was essential for developing countries.

27. Finally one participant stressed that there was a need to assess damage in scientific terms. Other participants noted that not every impact on the environment was defined as damage. There was also a discussion among the participants as to whether the reference to “damage resulting from transboundary movement” in Article 27 of the Biosafety Protocol ought to be read broadly or narrowly.

28. In his summary of the discussion, the Co-Chair said that the identification of scenarios that may be covered under Article 27 of the Biosafety Protocol was an important basis for the work of the Open-ended Working Group on Liability and Redress. He agreed with the participants who stressed that the complexity of the subject required a systematic approach that involved the determination of values to be protected, the identification of damage that may be caused and of the activities that may cause such damage. In this respect, he noted as the basis for the further consideration of scenarios the ongoing work under the Biosafety Protocol on risk analysis and risk assessment, the scenarios identified in the report of

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the workshop in Rome in December 2002, and actual cases involving damage caused by living modified organisms. The discussion of concrete scenarios, i.e. of what could happen, should eventually be reflected in abstract terms in the scope of any rules and procedures in the field of liability and redress for damage resulting from the transboundary movement of living modified organisms. He stressed that a number of policy choices will have to be made in this context, but that these choices were for consideration by the Open-ended Working Group on Liability and Redress.

4.1 (b). Analysis of general issues relating to the application of international rules and procedures on liability and redress to the damage scenarios of concern that may be covered under Article 27 of the Protocol

29. The Co-Chair invited the participants to identify international rules and procedures on liability and redress which might be applicable to damage under Article 27 of the Protocol.

30. Interventions were made by experts and observers from Argentina, Austria, Bulgaria, Cameroon, Canada, Colombia, Denmark, Egypt, Ethiopia, the European Community, India, and Malaysia.

31. The observers from Greenpeace and the University of Bern also made interventions.

32. A number of participants noted that although there was no international system to deal with damage arising from the transboundary movement of living modified organisms, there were several general principles of customary international law, including the principle of State responsibility, that could be applicable. In addition, the work of the International Law Commission on international liability for the injurious consequences arising out of acts not prohibited by international law was also mentioned as being useful.

33. Participants mentioned also a number of international instruments relating to nuclear damage, oil pollution, damage caused by the carriage of dangerous goods by road, rail and inland vessels, the transport of hazardous wastes and damage caused by space objects.

34. A number of regional agreements, such as the Lugano Convention on Civil Liability for Damage Resulting From Activities Dangerous to the Environment; the Directive 2004/35/EC of the European Parliament and of the Council on Environmental Liability with regard to the Prevention and Remedying of Environmental Damage; and the Nordic Environmental Protection Convention, were also mentioned.

35. Some participants emphasized that although many of these instruments did not specifically apply to damage caused by the transboundary movement of living modified organisms, they did contain a number of provisions that could be drawn on and adapted to address the damage scenarios that might arise under Article 27 of the Biosafety Protocol.

36. In his summary of the discussion, the Co-Chair noted that no international instruments at the international or regional levels had been identified that deal specifically with liability and redress for damage resulting from transboundary movements of living modified organisms. There were, however, general rules on liability and redress that might apply to living modified organisms at the global level. He mentioned the rules of international law on State responsibility and the provisions of the Convention on Biological Diversity on settlement of disputes as well as the ongoing work in the framework of the International Law Commission on international liability for the injurious consequences arising out of acts not prohibited by international law, the Hague Conference on Private International Law on procedural rules with respect to the settlement of claims in cases of transboundary environmental harm, and the Conference of Parties to the Convention on Biological Diversity under Article 14 paragraph 2. He stressed that while those elements would have to be taken into account and might fill some gaps in relation to liability and redress in the field of damage resulting from transboundary movements of living modified organisms, they would not seem to render superfluous work under Article 27 of the Biosafety Protocol. Nor could general rules on liability and redress that had been developed at the regional level, such as the Aarhus Convention on Access to Information, Public Participation in Decision-Making and

Access to Justice in Environmental Matters, the Espoo Convention on Environmental Impact Assessment in a Transboundary Context, and the Directive 2004/35/EC of the European Parliament and of the Council on Environmental Liability with regard to the Prevention and Remedying of Environmental Damage. However, those rules could be useful as models for any rules and procedures under Article 27 of the Biosafety Protocol. The same was also true for treaties providing for third-party liability in fields other than living modified organisms that have been concluded at the global and regional levels. In that respect, he pointed to the significance of gathering additional information on the status of treaties that provide for third-party liability, including the number of parties and signatories; relevant dates where possible; and the reasons why several of those treaties had not entered into force. It was specified that the purpose of this exercise was to learn from past experience with a view to preventing the adoption of rules and procedures on liability and redress under Article 27 of the Protocol that would not become operational.

4.2 *Elaboration of options for elements of rules and procedures referred to in Article 27 of the Protocol*

37. Agenda item 4.2 was taken up at the second session of the meeting of the Technical Expert Group, on 18 October 2004. Mr. Rene Lefeber, Co-Chair, invited the participants to consider the terms of reference for the Open-ended Ad Hoc Working Group of Legal and Technical Experts on Liability and Redress contained in the annex to decision BS-I/8 of the Conference of the Parties serving as the Meeting of the Parties to the Cartagena Protocol on Biosafety. He noted that the annex contained an indicative list of elements that had not been meant to be exhaustive. The participants were invited to submit their views on other elements that might also need to be considered.

A. *Definition and nature of damage, including scope of damage resulting from the transboundary movement of LMOs*

1. *Definition and nature of damage*

38. The Co-Chair noted that the element included two linked but distinct issues: (i) the definition of damage and (ii) the scope of “damage resulting from the transboundary movement of living modified organisms”. He asked the participants to focus their discussion on the concept of damage first and then discuss the issue of the scope of damage resulting from the transboundary movement of living modified organisms afterwards.

39. The Co-Chair said that there had been divergent views about the components for a definition of damage and that some submissions had raised the question whether damage to biodiversity and damage to the conservation and sustainable use of biodiversity were the same thing.

40. Interventions were made by experts and observers from Argentina, Brazil, Bulgaria, Canada, Colombia, Denmark, Egypt, El Salvador, Ethiopia, Malaysia, Mexico, the Netherlands, New Zealand, Poland, Switzerland, Uganda, the United Republic of Tanzania, and the United States of America.

41. Interventions were also made by the observers from the Edmonds Institute and Greenpeace.

42. It was suggested by one participant that Article 2 of the Convention on Biological Diversity could serve as a starting point for the definition of damage. One participant stressed that the definition of “damage resulting from the transboundary movement of living modified organisms” constituted an indispensable first step in the process of discussing options for liability and compensation rules and procedures in the context of Article 27 of the Protocol. Another participant noted that the options with respect to damage might vary depending upon the choice of instrument. It was also suggested that it might prove necessary to eliminate some options, such as traditional damage. However other participants noted that traditional damage and socio-economic damage were an important concern for developing countries. It was also noted that the conservation and sustainable use of biodiversity had to be linked to the issue traditional knowledge of indigenous and local communities and that this created an additional

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category of damage. The need for special rules or provisions for damage to the centres of origin and centres of genetic diversity was also stressed, and the question of spiritual and cultural damage to communities was also raised.

43. Some said that the notion of damage could include damage to the environment and to the health of plants, animals and human beings. It was suggested that damage to human health could occur when there was a significant loss of quality of life due to the release of living modified organisms, although others considered that this could fall under the traditional category of personal injury. It was also suggested that it was difficult to assess the changes caused by living modified organisms and that there was a need for realistic and scientific scenarios on the issues of human and public health. The costs to human health could also include the related costs of medical screening.

44. Some participants suggested that it was important not to go beyond the text of Article 27 of the Biosafety Protocol when considering the nature and definition of damage. Other participants suggested that it was important to read Article 27 in light of Article 4 of the Protocol.

45. It was also suggested that there was a need for a baseline understanding of each country's biodiversity to evaluate whether damage had occurred, and several participants asked whether it would be possible to merge damage to biodiversity, damage to the conservation and sustainable use of biodiversity and environmental damage into one category. Other participants preferred to keep these categories separate. Another participant suggested that damage to organic farming be considered as an additional type of damage to biodiversity. It was also noted that it was important to distinguish between direct and indirect damage and reversible and irreversible damage.

46. In his summary of the discussion, the Co-Chair identified that the following optional components could become part of the definition of damage: damage to the environment, damage to the conservation and sustainable use of biological diversity, socio-economic damage, traditional damage and costs of response measures. In this respect, he noted agreement to treat damage to the conservation and sustainable use of biological diversity and damage to biological diversity on a par, while damage to the environment and damage to the conservation and sustainable use of biological diversity were conceptually different and should not be merged. Damage to human health and personal injury should also be kept apart. As for damage to human health, it had been noted that this could cover public health costs related to medical screening, vaccination and evacuation of part of the population in response to an accident involving living modified organisms. He suggested that socio-economic losses, loss of traditional knowledge and spiritual loss by communities be grouped together and that there was a need for more information on these types of loss. As for the costs of response measures, it had been noted that this could cover costs to minimize and contain damages following an incident, monitoring, damage assessment and clean-up. He noted that the special case of damage to organic farming could fall within the category of traditional damage and/or damage to the conservation and sustainable use of biological diversity.

2. Scope of damage resulting from transboundary movement of living modified organisms

47. The Co-Chair reminded the participants that a number of transboundary movements had been highlighted in the submission: intentional, unintentional, illegal and transit. He asked the participants for their views on any additional activities falling within the scope of damage resulting from the transboundary movement of living modified organisms.

48. Interventions were made by experts from Ethiopia, Malaysia, the Netherlands, and the United Republic of Tanzania.

49. One participant raised the issue of damage resulting from intentional and unintentional transboundary movement of living modified organisms and the related issues of the need to repatriate, destroy or dispose of living modified organisms. Other participants pointed out that Article 27 of the Protocol could be read narrowly so that it only covered damage which occurred during the shipment of

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living modified organisms or it could be read broadly so that it included the damage caused during their shipment, transit, handling and/or use. One participant suggested that socio-economic loss also be included under the scope of damage. Some participants mentioned that there was a need to consider damage to biodiversity in areas beyond the limits of national jurisdiction.

50. In his summary of the discussion, the Co-Chair noted that there still appeared to be disagreement as to the interpretation of the phrase “damage resulting from the transboundary movement of living modified organisms” in Article 27 of the Protocol. It had emerged from the discussions that there were two options. One was to only consider damage caused during the shipment of living modified organisms, while the other was to consider damage caused during the shipment, transit, handling and/or use of living modified organisms. He said that he had heard legal arguments in favour of both options and that a choice between the options would involve a policy choice.

B. Valuation of damage to biodiversity and to human health

51. The Co-Chair invited those participants with practical experience with the valuation of damage to biodiversity, as well as to human health, to share their ideas with the other participants.

52. Interventions were made by experts and observers from Brazil, Cameroon, Canada, Colombia, Ethiopia, the European Community, Malaysia, the Netherlands, Poland, Switzerland, and the United Republic of Tanzania.

53. An intervention was also made by the observer from the Edmonds Institute.

54. It was noted that while it was possible to make a valuation of damage in monetary terms, it could be problematic if there was not also some obligation to repair the damage by some reinstatement of damaged biodiversity, especially as awards of compensation were not always used for restoration. It was suggested that it was important not to let monetary compensation become an excuse for inaction and that the principle of *restitutio in integrum* was the preferred option. It was only where this was not possible that other options such as equivalent or complementary remedial action could be accepted to either replace the lost biodiversity at the site of the damage, or if that was not possible, at another location. It was noted that a case-by-case analysis would be required and the costs of response measures, as well as the need to prevent further damage might also be included in the valuation of the damage.

55. While some participants suggested that baselines had to be established in order to assess environmental damage, other participants noted that the establishment of baselines presented a considerable problem for developing countries. While baselines were desirable, that should not be considered as a pre-condition for the development and implementation of the rules and procedures referred to in Article 27 of the Protocol. Several participants suggested that the valuation of damage be left to the process of adjudication and that it was therefore important to give criteria upon which the judiciary could base their decisions.

56. Some participants stressed the importance of the valuation of damage to human health and one participant suggested that the concept of illness was insufficient and that the definitions of human health provided by the World Health Organization should be taken into account. One participant suggested that human health had to be distinguished from personal injury as the damage may only become noticeable over a significant period of time and may only be revealed by epidemiological studies, and might be confined to a particular population. All of that could constitute damage to human health without necessarily constituting personal injury. It was also suggested that human health was only relevant to the extent that it was connected to changes in affected biodiversity.

57. In his summary of the discussion, the Co-Chair noted that two approaches to the valuation of damage to the conservation and sustainable use of biological diversity had been mentioned, namely through monetary compensation to be determined on the basis of criteria to be developed or through determination of the costs of reinstatement. The distinction between reparable damage and irreparable damage was recalled in the light of the observation that the implementation of reinstatement measures

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would be the appropriate approach in the case damage is reparable. In the case of irreparable harm, reinstatement measures could take the form of the introduction of equivalent components of the damaged components of biological diversity at either the same location for the same use or at another location for other types of use. There was a need for additional information to measure the loss of biological diversity, either by baseline conditions or by other means, taking into account natural variations and human-induced variations other than those caused by living modified organisms. In this respect, the work on a definition of biodiversity loss and the framework of indicators under the Convention on Biological Diversity was noted. The valuation of damage to human health, socio-economic damage and traditional damage also required further consideration.

C. Threshold of damage

58. The Co-Chair asked the participants to consider how a threshold for damage could be defined.
59. Interventions were made by experts and observers from Argentina, Egypt, India, Malaysia, the Netherlands, Switzerland and the United Kingdom.
60. An intervention was also made by the observer from Greenpeace.
61. Several participants stressed the need for a threshold and noted that there was a need to distinguish between qualitative and quantitative thresholds, although it was also suggested by one participant that a minimum accepted level of risk might be used in place of a threshold of damage. It was suggested that a qualitative threshold, such as significant damage, appreciable damage or serious damage could be established. However one participant suggested that the thresholds could foster litigation. Another participant noted that thresholds might be difficult to apply and it would be better to leave it to the judicial process to determine such thresholds.
62. It was also suggested that it was important to consider the precautionary principle, since the damage caused might be ongoing, and there could be movement from minor to significant damage over time. It was also suggested that the use of a qualitative threshold would lead to a more precise definition of damage. Alternatively, a minimum acceptable behaviour could be established in place of a threshold of damage. It was noted that it was not possible to establish a quantitative threshold.
63. In his summary of the discussion, the Co-Chair noted that views among participants appeared to converge towards the need to establish a qualitative threshold for damage to the conservation and sustainable use of biological diversity. The formulation of such threshold would, however, require further consideration.

D. Causation

64. The Co-Chair reminded the participants that it was important to establish a causal link between the damage and activities that had caused the damage. He also noted that this issue had often not been addressed in international agreements and had instead been left to adjudication by the judiciary. He asked the participants to consider whether the issue ought to be included and how this ought to be achieved.
65. Interventions were made by experts and observers from Argentina, Brazil, Canada, Germany, Malaysia, the Netherlands, Switzerland and the United States of America.
66. Several participants noted that causation raised the related issues of the test required to establish a causal link, the burden of proof and the issue of cumulation. It was suggested that it might not be possible to set just one standard of causation and that tests such as the *causa proxima* and the *conditio sine qua non* would have to be considered. It was suggested that it might not be always possible to establish the stage in the process that had caused the damage and the issue of the foreseeability of damage also had to be considered in the establishment of causation. It was also suggested that procedural rules might vary for the victim and that the burden of proof could be relaxed or even reversed under some circumstances. Some participants mentioned that the issue of causation was closely linked to other issues, such as standard of liability and types of activities. The complexity of the interaction of living modified

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organisms with the receiving environment also posed difficulties in establishing causation, as well as the time scales for damage to manifest itself.

67. In his summary of the discussion, the Co-Chair noted that while it was too early to speak of options, a number of issues had been raised that needed further consideration, including the selection of some kind of test to establish a causal link between the damage and the activity, such as foreseeability of the damage, distinguishing between direct and indirect damage, or proximate cause. He also noted that it had been suggested that the burden of proof could be relaxed or even reversed in certain circumstances. The Co-Chair also noted that the problem of cumulative effects as well as the complexity of the interaction of living modified organisms with the receiving environment had been raised by some of the participants.

E. Channelling of liability, roles of Parties of import and export and standard of liability

68. The Co-Chair suggested that the participants consider the channelling of liability, the standard of liability and the roles of the Parties of import and export together, as those were interrelated issues. He asked the participants for their views on how these issues were related to questions of both State liability and State responsibility.

1. State responsibility and State liability

69. In his introduction, the Co-Chair noted the rules of international law on State responsibility, as developed by the International Law Commission, and he asked the participants if they wished to suggest any supplementary rules that would channel liability to States.

70. Interventions were made by experts and observers from Argentina Austria, Botswana, Canada, Colombia, Ethiopia, France, Germany, India, Malaysia, Poland and Switzerland.

71. Interventions were also made by the observers from the Edmonds Institute and Greenpeace.

72. Some participants considered that a decision needed to be made as to whether State liability should apply to damage resulting from transboundary movements of living modified organisms. Some participants suggested that rules of international law relating to State responsibility were sufficient to cover the damage resulting from living modified organisms. However, other participants were of the view that it was important to retain residual State liability for those situations where it was either impossible to identify the perpetrator who had caused damage or where all other options had been exhausted. In this regard, some participants considered that discussion of State liability might be premature since this issue would depend on the extent of the involvement of the State in activities related to living modified organisms.

73. Still other participants suggested that it was important to flag this issue for further consideration by the Open-ended Working Group on Liability and Redress at its first meeting. Elaboration of State liability should be in conformity with the application of the polluter pays principle. Some participants also noted the importance of the duty of the State to take preventive measures, including disclosure of all available information regarding potential risks. The need for some type of fund to provide resources when a polluter could not be identified was highlighted. Finally, a participant noted the responsibility of States as specified in Article 3 of the Convention on Biological Diversity required States to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or to areas beyond the limits of national jurisdiction.

74. It was also noted that States were often actively involved in promoting biotechnological innovations, and an analogy was drawn with those cases of vicarious liability where the employer was responsible for the acts of employees, and that this should also include cases where someone outsourced the activity.

75. In his summary of the discussion, the Co-Chair noted agreement among participants that the existing rules of international law on State responsibility apply to wrongful acts of States related to

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transboundary movements involving living modified organisms. The participants did, however, express divergent views on the need to develop additional rules that channel liability to States where damage has been caused by living modified organisms and such damage did not originate in a wrongful act of a State. There were two variations: primary State liability, and residual State liability in combination with primary liability of the operator.

2. *Channelling of liability and standard of liability*

76. The Co-Chair then said that with respect to liability of the operator it may be important to distinguish between the intentional, unintentional and illegal transboundary movement of living modified organisms, and also asked whether the same rules and procedures should apply to both Parties and non-Parties to the Biosafety Protocol.

77. Interventions were made by experts and observers from Argentina, Australia, Brazil, Cameroon, Colombia, Denmark, Egypt, Mexico, New Zealand, Switzerland, Uganda, the United States of America.

78. Interventions were also made by the observers from Greenpeace, the International Grain Trade Coalition and the University of Bern.

79. It was pointed out that there were three possible standards of liability: namely fault-based liability, strict liability and absolute liability. It was further indicated that fault-based liability and strict liability could be complementary. Under strict liability, liability could be channelled to a range of actors. The choice of a standard of liability would depend on a number of factors such as the type of damage, degree of risk involved in a specific type of living modified organism and operational control over living modified organisms. It is possible to view liability as a continuum from fault based liability to absolute liability. It was also recalled that there were generally a number of possible exculpatory exceptions to liability such as acts of God and natural disasters, *force majeure*, civil disturbance, war, the intentional wrongful acts of third parties, and possibly the defences of state-of-the-art and the compliance with compulsory measures, although some participants felt the state-of-the-art defence was a double-edged instrument, since availability of information and/or its withholding is difficult to prove and would rather appear to be a possible mitigation factor on the liability.

80. It was also noted that the issue of channelling was of particular interest in cases of strict liability and that it essentially involved going back along the chain of causation. However, if the polluter-pays principle was considered, then it was also important to distinguish between those actors who only responded to an activity and those that had instituted it. An analogy was made to product liability where liability was reserved for those who had actively been involved in the process of putting a product on the market and not to the end-user who had simply responded to the offer of the seller. One participant suggested that, along the lines of vicarious liability, this channelling could lead toward those who were either directly or indirectly linked to the damage, while another participant said that channelling was not at issue when a number of different actors had been listed. Instead channelling ought to be reserved for those situations where an actor had been made liable for damage because of their capacity to pay rather than their responsibility for the damage. As such it was linked to a system of strict liability, although a residual right to pursue those actually responsible for the damage may also be granted to those who had been held strictly liable.

81. A number of participants noted that the standard of liability depended upon the nature of the risk being imposed by an activity. Some participants stated that in analysing the risk being imposed by an activity there was a need to assess whether the risk from transboundary movements of living modified organisms is any different from the risk from transboundary movement of other organisms. Some suggested that as the transboundary movement of living modified organisms was not a hazardous activity in itself, a fault-based regime might be more appropriate. Others suggested that the existence of the Biosafety Protocol was in itself evidence of the possible risks posed by such movements. However one participant observed that consideration should be given to the need to limit the time period for possible actions to the marketing cycle for perishable products.

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82. In his summary of the discussion, the Co-Chair noted that it had emerged that the determination of the standard of liability and the channelling of liability to a particular person may be different depending on the type of damage, the degree of risk involved in a specific type of living modified organism and who has operational control over a living modified organism. Within this framework, all options that were put forward with respect to the standard of liability in combination with channelling of liability, possible exemptions to or mitigation of strict liability, and additional tiers of liability had to be analysed and considered.

3. Roles of Parties of import and export

83. Some participants noted that the Biosafety Protocol struck a balance between the respective responsibilities of the exporter and the importer and that any liability regime should actually reflect that balance.

F. Mechanism of financial security

84. The Co-Chair noted that while it might be too early to suggest options on the mechanism of financial security, it was still important to elaborate issues for further consideration.

85. Interventions were made by experts and observers from Bulgaria, Colombia, Liberia, Malaysia, the Netherlands, Peru, Poland, Switzerland, and the United States of America.

86. An intervention was also made by the observer from the International Grain Trade Coalition.

87. A number of participants noted that it was important to ensure that neither the victims of damage nor society at large should be left without a recourse for redress. It was particularly stressed that there was a need for prompt funding to respond to certain types of damage, and several participants suggested that a fund could be created by contributions from industry along the lines of the fund created under the oil-pollution liability instruments.

88. Other participants suggested the possibility of compulsory insurance or the provision of bonds by those involved in the transboundary movement of living modified organisms. It was also suggested that it would be useful to seek information from the insurance industry as to the types of insurance coverage that might be available, as was the case in the Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal.

89. In his summary of the discussion, the Co-Chair noted that there was an information gap as to the availability of financial security and the price at which it was available and that it might be useful to invite a representative of the insurance industry to make a presentation to the Open-ended Ad Hoc Working Group on Liability and Redress on the issue. While that would be useful as a starting point, he stressed that a sustained flow of information on this issue would be important throughout the process under Article 27 of the Protocol. He noted that the introduction of compulsory financial-security mechanisms would depend on both the availability and price of such financial security throughout the world. Various modes of financial security were mentioned in the discussions: insurance, insurance pool, self-insurance, bonds, State guarantee or other financial guarantee. Referring to participants who had stressed the notion of solidarity, he suggested that further consideration should be given to the establishment of collective financial arrangements, such as a public or private fund for the purposes of compensation and remediation of damage.

G. Standing/right to bring claims

90. The Co-chair said that while this issue was not normally dealt with in international agreements on civil liability it remained an important question, particularly when the damage in question occurred in areas beyond the limits of national jurisdiction. He noted that the standing of interest groups was of particular importance and that the European Community had addressed this issue in the Directive 2004/35/EC of the European Parliament and of the Council on Environmental Liability with regard to the Prevention and Remedying of Environmental Damage.

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91. Interventions were made by experts and observers from Australia, Cambodia, Cameroon, Colombia, the European Community, the Netherlands, Malaysia, New Zealand, Poland and Switzerland.
92. An intervention was also made by the observer from Greenpeace.
93. One participant raised the question of who should have standing to act on behalf of the environment and drew the attention of the participants to Article 9(3) of the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters which had granted standing to non-governmental organizations. Others suggested that standing should be granted to those affected by the damage and those who act in the general interest, i.e. an *actio popularis*, as well as other States acting in protection of the global commons. Other participants said that standing should be limited to those who had been directly affected by the damage. One participant also clarified the issue of standing under the Directive 2004/35/EC of the European Parliament and of the Council on Environmental Liability with regard to the Prevention and Remedying of Environmental Damage. He said that the Directive did not directly give standing to interested persons including non-governmental organizations in cases of environmental damage. Instead it gave them standing to challenge a decision by a public authority when it had rejected or had refused to act upon a complaint that the individual had made.
94. In his summary of the discussion, the Co-Chair drew a distinction between inter-State procedures and civil procedures. While it was too early to speak of options, a number of issues had been raised that needed further consideration, including the question whether this issue should be dealt with in international rules and procedures or should be left for regulation at the national level in relation to civil procedures. The right to bring claims in civil procedures would seem to vary from country to country and with respect to the type of damage. In this respect, the main focus of discussion was the question whether interest groups could act in vindication of common interests for damage to the conservation and use of sustainable diversity, and in vindication of common interests and communities for socio-economic damage.

H. Choice of instruments

95. Interventions were made by experts and observers from Argentina, Botswana, Canada, Colombia, Egypt, Ethiopia, India, Malaysia, Poland, Switzerland, and the United Kingdom.
96. Interventions were also made by observers from: the Edmonds Institute, the IUCN-World Conservation Union and the University of Bern.
97. One participant said that a full range of instruments had to be considered because of the length of time required to negotiate an international liability regime and have it enter into force, and such other instrument options could be in the alternative or complementary to a binding civil liability regime. Another participant noted the need for some interim measures during the period while an international regime was being negotiated. Some of the suggested options were capacity-building for risk assessment, guidelines, model laws and model contract clauses. Others suggested the possibility that opting for an interim instrument could make the negotiation of an international regime more difficult.
98. One participant stressed that biodiversity was a common resource that needed protection and that the only question was whether that was accepted. Still others stressed that it was important to be proactive and that a reliance on guidelines would not provide the protection needed. Some suggested that it was important to investigate regimes on liability that had not entered into force to avoid situations that might lead to the same result. It was also noted that developing countries were often at a great disadvantage when they sought redress according to the domestic laws of the developed world. One participant stated that it was not open to suggest guidelines as the mandate required the elaboration of rules and procedures, not guidelines.
99. One participant suggested that there were a number of options: the instrument could be an annex to the Biosafety Protocol, a Protocol to the Biosafety Protocol or a Protocol to the Convention on

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Biological Diversity. It was noted that in some cases guidelines had evolved into binding instruments and that it was important not to reject that option too soon. Finally one participant suggested that it was important to leave the choice of instrument open as long as possible and await developments in the process of the ratification of the Protocol.

100. In his summary of the discussion, the Co-Chair stressed that the choice of instrument continued to be a sensitive and controversial issue. He first noted that participants wished to learn from past experiences in order to create an instrument that would enter into force. In that context, he recalled the wish of participants to gather additional information on the status of treaties that provide for third-party liability and related data as well as on the reasons why several of those treaties had not entered into force. He then noted the different views that existed with respect to the interpretation of Article 27 of the Protocol in relation to the choice of instrument and the legal arguments in support of them. He continued his summary by listing the options that had been suggested for the choice of instrument, namely a legally binding instrument and various formats of such a legally binding instrument; a legally-binding instrument in combination with interim measures pending the entry into force of the instrument; a non-binding instrument that could take the form of guidelines, model law and/or model contract clauses and that could provide for a process to review national rules and procedures in the field of liability and redress or national biosafety laws with a view to identify best practices (benchmarking) and to advise and assist Parties in developing and improving national legislation (capacity-building); a two-stage approach where a non-binding instrument might be succeeded at a later stage by a legally binding instrument; and a mixed approach that combines a legally binding instrument and a non-binding instrument.

I. Settlement of claims

101. Interventions were made by experts from Malaysia and Poland.

102. An intervention was also made by the observer from Greenpeace.

103. It was noted that the settlement of claims under the current rules of private international law could present a number of difficulties. One participant noted that claims that arose in one jurisdiction could present difficulties if the damage had been caused in another jurisdiction. Even if a judgement had been rendered in the victim's favour there might still be difficulties with the enforcement of the judgement in another jurisdiction, with the result that the victim might not be compensated. Another participant raised the related problem of damage that had occurred outside the territory of any State, and it was suggested that the rules applicable to damage on the high seas might provide some guiding principles for that situation.

104. In his summary of the discussion, the Co-Chair drew a distinction between inter-State procedures and civil procedures for the settlement of claims. While it was too early to speak of options, a number of issues had been raised that needed further consideration, including the application of the provisions on the settlement of disputes under the Convention on Biological Diversity in relation to inter-State procedures and the jurisdiction of courts or arbitral tribunals, the determination of the applicable law, and the recognition and enforcement of judgments in civil procedures.

J. Limitations on liability

105. Interventions were made by experts from Malaysia and the Netherlands.

106. An intervention was also made by the observer from the International Grain Trade Coalition.

107. It was noted that the issue of absolute and relative time-limits needed to be considered. Another participant noted that it was also important whether these time-limits would start to run at the moment of the damage or only when the victim became aware of the damage. It was also pointed out that the particular situation of isolated communities had to be taken into account when considering the issue of time-limits for redress.

108. Another participant stressed the need for minimum damage thresholds and the need to exclude certain types of damage, and limits on liability. He also suggested that an appropriate time limitation might be the completion of the normal marketing cycle. It was also pointed out that it is important to require the claimant to take measures to mitigate the damage.

109. In his summary of the discussion, the Co-Chair noted that while it was too early to speak of options, a number of issues had been raised that needed further consideration, including the limitation of liability in time and in amount. As for limitation in time, reference had been made to application of relative and absolute time-limits and the commencement of such prescription period. Regarding liability in amount, reference had been made to caps and the possible mitigation of liability.

K. Non-parties to the Biosafety Protocol

110. Interventions were made by observers from Canada and the United States of America.

111. Interventions were also made by the observers from the Edmonds Institute and Greenpeace.

112. One participant questioned the relevance of an international regime that would not apply to non-Parties to the Protocol. She suggested that it would be difficult to enforce any awards and might even be difficult to get a judgement against a non-Party to the Protocol. Other participants agreed that non-Parties would not be bound to the obligations created under the Protocol and that non-compliance with the Protocol was only an issue for Parties to the Protocol. However, another participant pointed out that it was still possible to apply the obligations created under the Protocol against non-Parties under certain circumstances. He suggested that a Party to the Protocol could demand a significant surety from shippers who shipped living modified organisms covered by the Protocol.

113. In his summary of the discussion, the Co-Chair noted that the question of special rules and procedures in the field of liability and redress in relation to living modified organisms imported from non-Parties should be kept in mind and be revisited when the development of rules and procedures in relation to transboundary movements of living modified organisms between Parties has advanced.

L. The way forward

114. Interventions were made by the experts from Colombia and the Netherlands.

115. One participant referred to the draft recommendation contained in paragraph 66 (b) of the note by the Executive Secretary (UNEP/CBD/BS/TEG-L&R/1/2). He asked whether it would be possible to change the time-period for the submission of views on issues that had been identified during the meeting. It was agreed that those views needed to be submitted no later than three months before the first meeting of the Open-ended Working Group on Liability and Redress.

116. Ms. Jimena Nieto Carrasco (Colombia), Co-Chair of the meeting, thanked the United Kingdom and the European Community for their financial support in organizing the meeting of the Technical Group of Experts and urged other Parties, States and other stakeholders to consider making resources available for the organization of meetings of the Open-ended Working Group for which there no funds available in the budget adopted by the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety.

M. Recommendations

117. The Technical Group of Experts:

(a) *Agreed* to forward the present report and its annex to the first meeting of the Open-ended Working Group of Legal and Technical Experts on Liability and Redress for its consideration;

(b) *Identified* several areas where additional information relating to liability and redress for damage resulting from the transboundary movement of living modified organisms would benefit the work of the Open-Ended Working Group on Liability and Redress:

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- (i) The scientific analysis and assessment of risks involved in the transboundary movement of living modified organisms in respect of which reference was made to the ongoing work under the Biosafety Protocol;
- (ii) The determination of damage to the conservation and sustainable use of biodiversity in respect of which reference was made to the definition of biodiversity loss in paragraph 2 of decision VII/30 of the Conference of Parties to the Convention on Biological Diversity as well as the on-going work on the framework of indicators under that Convention;
- (iii) The determination of socio-economic damage in respect of which reference was made to the ongoing work under Article 26 of the Biosafety Protocol;
- (iv) The availability of financial security to cover liability resulting from the transboundary movement of living modified organisms and the prices at which such financial security is available;
- (v) The status of treaties that provide for third-party liability, including the number of Parties and Signatories; relevant dates where possible; and an analysis of reasons why several of those treaties have not entered into force;
- (vi) Recent developments in international law relating to liability and redress, including soft law;
- (vii) The work under the International Law Commission with respect to State responsibility and State liability;

(c) *Requested* the Secretariat to arrange for the provision of information, where possible in the form of presentations, with respect to the gaps of information identified above. With respect to the analysis of reasons why treaties that provide for third-party liability have not entered into force, it was said that such information is available with respect to some treaties, namely the Basel Protocol on Liability and Compensation for damage resulting from Transboundary Movements of Hazardous Wastes and their Disposal, the Lugano Convention on Civil Liability for Damage Resulting from Activities Dangerous for the Environment and the CRTD (Convention on Civil Liability for Damage Caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels), and that it is not feasible to undertake such work in relation to other treaties. It was therefore suggested that the Secretariat should approach the relevant bodies with a view to obtaining such information;

(d) *Requested* the Executive Secretary to invite Parties to the Protocol, other Governments, relevant international organizations and other stakeholders to submit further views on the matter covered by Article 27 of the Protocol in particular with respect to scenarios, approaches, options and issues identified in the annex to the present report no later than three months before the first meeting of the Open-ended Working Group of Legal and Technical Experts on Liability and Redress;

(e) *Called upon* Parties, other Governments and other stakeholders in a position to do so to provide financial resources for the organization of the meetings of the Open-ended Working Group of Legal and Technical Experts on Liability and Redress.

ITEM 5. OTHER MATTERS

118. No other matters were raised by the participants.

ITEM 6. ADOPTION OF THE REPORT

119. The Rapporteur presented the draft report of the Meeting (UNEP/CBD/BS/TEG-L&R/1/L.1) at its fifth session, on 20 October 2004. The draft report was adopted together with the annex, as orally amended.

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ITEM 7. CLOSURE OF THE MEETING

120. The Co-Chair, Mr. Rene Lefebvre, on behalf of the two Co-Chairs, thanked the participants for their contribution and very productive discussion. He indicated that the outcome of this meeting provided good basis for the work of the Open-ended Working Group when it meets next year. He also thanked the Secretariat for the good preparation for the meeting and the support provided to the Co-Chairs and the Rapporteur in the conduct of the meeting. The Executive Secretary addressed the participants and complimented them on their productive work during the meeting. He thanked the United Kingdom and the European Community for their contributions that made it possible to organize the meeting, and urged other Parties, States and stakeholders to consider making resources available to aid in organizing the meetings of the Open-ended Working Group of Legal and Technical Experts on Liability and Redress.

121. Several participants expressed their appreciation to the Co-Chairs, and the Rapporteur for the excellent conduct of the meeting. They also thanked the Secretariat for the preparation and facilitation of the meeting.

122. Following the customary exchange of courtesies, Mr. Rene Lefebvre, Co-Chair declared the meeting closed at 4.30 p.m. on Wednesday, 20 October 2004.

Annex

This annex contains scenarios, options, approaches, and issues for further consideration as identified by the Meeting of the Technical Group of Experts, with view to facilitating the work of the Open-ended Ad Hoc Working Group of Legal and Technical Experts on Liability and Redress. It is not meant to be exhaustive nor does it reflect a preference for any of the options or approaches listed.

I. SCENARIOS

The following scenarios have been elaborated with a view to identifying the situations for which international rules and procedures referred to in Article 27 of the Protocol may be needed. They are non-exhaustive and should be read in conjunction with paragraphs 23 to 28 of the report.

A. LMO crops – field trial or commercial growing

(a) An intentional transboundary movement takes place from Party A to Party B with the consent of Party B for the purpose of a field trial or for commercial growing of LMO crops in Party B, including field trials or commercial growing as part of development assistance. This is an intentional introduction into the environment of LMOs under the Protocol.

- (i) The presence of an LMO causes damage (contamination of organic crops) in Party B;
- (ii) The presence of an LMO leads to an unintentional transboundary movement to Party C and causes damage in Party C.

(b) Field trial or commercial growing of LMO crops in Party A leads to an unintentional transboundary movement (the presence of an LMO) that causes damage in Party B;

(c) Transboundary movement from Party A to Party B is illegal and causes damage in Party B or Party C;

(d) An intentional transboundary movement takes place from non-Party A to Party B and causes damage in Party B.

B. LMO virus – laboratory test

(d) An intentional transboundary movement takes place from Party A to Party B with the consent of Party B for the purpose of testing a LMO virus in a laboratory. This is a contained use of LMOs under the Protocol;

- (i) There is an accidental release during the test that causes damage in Party B;
- (ii) The accidental release in Party B leads to an unintentional transboundary movement to Party C and causes damage in Party C.

(e) Laboratory test with LMO virus in Party A leads to an unintentional transboundary movement that causes damage in Party B or Party C;

(f) Transboundary movement from Party A to Party B is illegal and causes damage in Party B;

(g) An intentional transboundary movement takes place from non-Party A to Party B and causes damage in Party B.

C. *Placing on the market of products containing LMOs, including LMO-FFPs that enter into the food chain*

(a) An intentional transboundary movement takes place from Party A to Party B with the consent of Party B for the purpose of placing products on the market or for the purpose of food aid and causes damage in Party B. This could be LMOs for direct use as food, feed and processing under the Protocol;

(b) Transboundary movement from Party A to Party B is illegal and causes damage in Party B;

(c) An intentional transboundary movement takes place from non-Party A to Party B and causes damage in Party B.

D. *Shipment of LMOs*

There is an accidental release of LMOs while they are passing through a transit Party (T) in connection with a transboundary movement from Party A to Party B for the purpose of contained use, introduction into the environment or placing on the market. Following the accidental release, there is damage in Party T. Due to an unintentional transboundary movement from Party T to Party C, there is damage in Party C.

E. *Repatriation of LMOs*

There is an accidental release of LMOs while they are being repatriated to the State of origin that causes damage in the Party from which it is being repatriated or in a transit Party.

F. *Transboundary movement of LMOs that causes damage to global commons*

II. SCOPE OF “DAMAGE RESULTING FROM TRANSBOUNDARY MOVEMENTS OF LMOs”

Option 1

Damage caused during shipment of LMOs

Option 2

Damage caused during shipment, transit, handling and/or use of LMOs

III. DAMAGE

A. *Optional components for the definition of damage*

- (a) Damage to environment;
- (b) Damage to conservation and sustainable use of biological diversity;
- (c) Damage to human health;
- (d) Socio-economic damage, especially in relation to indigenous and local communities;
- (e) Traditional damage:
 - (i) Loss of life or personal injury;
 - (ii) Loss of or damage to property;
 - (iii) Loss of income.
- (f) Costs of response measures.

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B. *Possible approaches to valuation of damage to conservation and sustainable use of biological diversity*

- (a) Costs of measures to reinstate the damaged components of the environment/biological diversity:
- (i) Introduction of original components;
 - (ii) Introduction of equivalent components that could be on the same location, for the same use, or on another location for other types of use;
- (b) Monetary compensation to be determined on the basis of criteria to be developed.

C. *Issues for further consideration with respect to valuation of damage*

- (a) Determination of biodiversity loss (baseline conditions or other means to measure the loss, taking into account natural variations and human-induced variations other than those caused by LMOs);
- (b) Special situation of centres of origin and centres of genetic diversity;
- (c) Formulation of qualitative threshold of damage to conservation and sustainable use of biological diversity;
- (d) Valuation of damage to human health, socio-economic damage and traditional damage.

IV. CAUSATION

Issues for further consideration:

- (a) Establishment of the causal link between the damage and the activity:
- (i) Test (e.g. foreseeability, direct/indirect damage, proximate cause);
 - (ii) Cumulative effects;
 - (iii) Complexity of interaction of LMOs with the receiving environment and time scales involved;
- (b) Burden of proof in relation to establishing the causal link:
- (i) Relaxation of burden of proof;
 - (ii) Reversal of burden of proof;
 - (iii) Burden of proof on exporter and importer.

V. CHANNELLING OF LIABILITY, ROLE OF PARTIES OF IMPORT AND EXPORT, STANDARD OF LIABILITY

A. *Possible approaches to channelling of liability*

- (a) State responsibility (for internationally wrongful acts, including breach of obligations of the Protocol);
- (b) State liability (for acts that are not prohibited by international law, including cases where a State Party is in full compliance with its obligations of the Protocol).

Option 1

Primary State liability

Option 2

Residual State liability in combination with primary liability of operator

Option 3

No State liability

(c) Civil liability (harmonization of rules and procedures).

B. Issues relating to civil liability

1. Possible factors to determine the standard of liability and the identification of the liable person

- (i) Type of damage;
- (ii) Degree of risk involved in a specific type of LMO;
- (iii) Operational control of LMOs (stage of transaction involving LMOs).

2. Standard of liability and channelling of liability

(a) Fault-based liability:

- (i) Any person who is in the best position to control the risk and prevent the damage;
- (ii) Any person who has operational control;
- (iii) Any person who does not comply with the provisions implementing the Biosafety Protocol;
- (iv) Any person to whom intentional, reckless or negligent acts or omissions can be attributed;

(b) Strict liability:

Option 1

Liability to be channeled to one or more of the following persons, including persons acting on his or her behalf, on the basis of prior identification:

- The developer
- The producer
- The notifier
- The exporter
- The importer
- The carrier
- The supplier

Option 2

Liability to be channeled on the basis of establishment of a nexus of causality

3. Possible exemptions to or mitigation of strict liability

- (a) Act of God/force majeure;
- (b) Act of war or civil unrest;
- (c) Intervention by a third party (including intentional wrongful acts or omissions of the third Party);
- (d) Compliance with compulsory measures imposed by a competent national authority;
- (e) Permission of an activity by means of an applicable law or a specific authorization issued to the operator;
- (f) The “state-of-the-art” defence for activities that were not considered harmful according to the state of scientific and technical knowledge at the time they were carried out.

4. Additional tiers of liability in situation where:

- (a) The primary liable person cannot be identified;
- (b) The primary liable person escape liability on the basis of a defence;
- (c) A time limit has expired;
- (d) A financial limit has been reached;
- (e) Financial securities of the primary liable person are not sufficient to cover liabilities; and
- (f) The provision of interim relief is required.

5. Issues for further consideration

- (a) Combination of fault liability and strict liability;
- (b) Recourse against third party by the person who is liable on the basis of strict liability;
- (c) Joint and several liability.

VI. MECHANISMS OF FINANCIAL SECURITY

A. Issues for further consideration

- (a) Modes of financial security (insurance, insurance pool, self-insurance, bonds, state guarantees or other financial guarantees);
- (b) Collective financial arrangements (public and/or private fund) for the purpose of, for example, compensation and remediation.

VII. STANDING/RIGHT TO BRING CLAIMS

A. Issues for further consideration

- (a) Level of regulation (international and/or domestic level);
- (b) Distinction between interstate procedures and civil procedures;
- (c) Direct involvement in the transboundary movement of living modified organisms as a requirement of standing/right to bring claims;

- (d) Type of damage:
- (i) Traditional damage: injured person;
 - (ii) Costs of response measures: person incurring the costs;
 - (iii) Damage to environment/conservation and sustainable use of biodiversity:
 - o Affected State
 - o Interest groups acting in vindication of common interests;
 - (iv) Damage to human health: affected State;
 - (v) Socio-economic damage:
 - o Affected State;
 - o Interest groups acting in vindication of common interests or communities.

VIII. SETTLEMENT OF CLAIMS

A. Issues for further consideration

- (a) Inter-State procedures (including settlement of disputes under Article 27 of CBD);
- (b) Civil procedures:
 - (i) Jurisdiction of courts or arbitral tribunals;
 - (ii) Determination of the applicable law;
 - (iii) Recognition and enforcement of judgments.

IX. LIMITATION OF LIABILITY

A. Issues for further consideration

- (a) Limitation in time (relative time-limit and absolute time-limit);
- (b) Limitation in amount including caps and possible mitigation of amount of compensation for damage under specific circumstances to be determined.

X. NON-PARTIES

A. Issues for further consideration

- (a) Possible special rules and procedures in the field of liability and redress in relation to LMOs imported from non-Parties.

XI. CHOICE OF INSTRUMENT

Option 1

Legally binding instrument.

- o A liability Protocol to the Biosafety Protocol;
- o Amendment of the Biosafety Protocol;
- o Annex to the Biosafety Protocol
- o A liability Protocol to the Convention on Biological Diversity.

/...

Option 2

Legally binding instrument in combination with interim measures pending the development and entry into force of the instrument.

Option 3

Non-binding instrument.

- (a) Guidelines;
- (b) Model law or model contract clauses.

Option 4

Two stage approach (initially to develop a non-binding instrument, evaluate the effects of the instrument, and then consider to develop a legally binding instrument)

Option 5

Mixed approach (combination of a legally binding instrument and a non-binding instrument).
