





# CONVENTION ON BIOLOGICAL DIVERSITY

Distr. GENERAL

UNEP/CBD/BS/WS-L&R/1/2 4 November 2002

ORIGINAL: ENGLISH

WORKSHOP ON LIABILITY AND REDRESS IN THE CONTEXT OF THE CARTAGENA PROTOCOL ON BIOSAFETY

Rome, 2–4 December 2002

Item 2.2 of the provisional agenda\*

### IDENTIFICATION OF ISSUES RELATING TO LIABILITY AND REDRESS FOR DAMAGE RESULTING FROM THE TRANSBOUNDARY MOVEMENT OF LIVING MODIFIED ORGANISMS

*Note by the Executive Secretary* 

#### INTRODUCTION

- 1. Article 27 of the Cartagena Protocol on Biosafety provides that "the Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first meeting, adopt a process with respect to the appropriate elaboration of international rules and procedures in the field of liability and redress for damage resulting from transboundary movements of living modified organisms, analysing and taking due account of ongoing processes in international law on these matters, and shall endeavour to complete this process within four years".
- 2. According to the work plan of the Intergovernmental Committee for the Cartagena Protocol on Biosafety (ICCP), adopted by the Conference of the Parties to the Convention at its fifth meeting, liability and redress was one of the issues identified to be addressed by the ICCP at its second meeting (decision V/1, annex, section B, item 1). In this regard, the ICCP was required to elaborate "a draft recommendation on the process for elaboration of international rules and procedures in the field of liability and redress for damage resulting from transboundary movements of living modified organisms, including, *inter alia*:
  - "(a) Review of existing relevant instruments; and
  - "(b) Identification of elements for liability and redress."
- 3. Discussions on liability and redress took place at the second and third meetings of the ICCP. To date, the ICCP has mainly focused its work on two areas: information-gathering and the identification of elements of a process for the elaboration of international rules and procedures in the field of liability and redress for damage resulting from transboundary movements of living modified organisms, referred to in Article 27 of the Protocol.

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<sup>\*</sup> UNEP/CBD/WS-L&R/1.

- 4. With regard to information-gathering, ICCP has reviewed information on the existing international legal instruments on liability and redress (UNEP/CBD/ICCP/2/3) and on national legislation on liability regarding activities related to living modified organisms (LMOs) (UNEP/CBD/ICCP/3/3). At its third meeting, ICCP requested the Secretariat to update the information gathered to date, and invited Governments and international organizations to respond to the questionnaire annexed to recommendation 3/1 (UNEP/CBD/ICCP/3/10, annex).
- 5. With respect to the process referred to under Article 27 of the Protocol, ICCP at its second meeting recommended to the first meeting of the Conference of the Parties serving as the meeting of the Parties (COP/MOP) that it establish an open-ended ad hoc group of legal and technical experts to carry out the process pursuant to Article 27 of the Protocol. The terms of reference for the ad hoc group would be defined at that same meeting.
- 6. In order to build up understanding on issues relating to liability and redress for damage resulting from transboundary movements of LMOs, the ICCP, at both its second and third meetings, invited Parties to organize workshops, as soon as possible, but in any case before the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol. In response to these invitations, the Government of Italy has offered to host a workshop on this subject, with the assistance of the Executive Secretary.
- 7. The present document was prepared to assist the Workshop in its discussions. It contains five sections. Section I outlines the issues for general consideration; sections II and III identify types of activities and situations, and other possible elements that may be covered for consideration in the elaboration of international rules and procedures on liability and redress; in section IV, issues are raised in respect of the process provided for in Article 27 of the Protocol; finally recommendations are made with regard to the outcome of the Workshop.

#### I. GENERAL CONSIDERATIONS

#### A. Background of the negotiation of Article 27 of the Protocol

- 8. Before going to any discussion in detail regarding the possible elements that may be covered in the international rules and procedures on liability and redress, it may be useful to recall briefly the negotiation history on Article 27 of the Protocol in order to have better understanding on the context and substance embedded in that article.
- 9. During the negotiation of the Protocol, the issues of liability and redress gave rise to considerable debate and disagreement. At an early stage in the negotiations, the African Group put forward a proposal for strict liability of the State of export for any damage caused by LMOs exported from its jurisdiction even if it was not itself at fault. Many developing countries viewed existing private international law as an inadequate means for ensuring redress for any damage that may be caused by the transboundary movement of LMOs. They therefore sought to include more detailed provisions on liability and redress within the Protocol. Among developed countries there were different views on this matter. Some argued that there was no need for international rules on liability for damage caused by LMOs, since these matters were or could be addressed under national law, and within the context of private international law or general principles of international law. Others took the view that there simply was not sufficient time during the Protocol negotiations to address such a complex issue. 1/

 $<sup>\</sup>underline{1}$ / Source: Explanatory Guide to the Cartagena Protocol on Biosafety, by IUCN Environmental Law Centre and FIELD.

10. As a compromise, Article 27 is in fact an enabling provision, leaving all substantive discussion to the process referred to in that article. The outcome of this process is open, including the form that the international rules and procedures on liability and redress may take (see section IV). Bearing this in mind, it should be emphasized that the elements identified in the present note do not intend to prejudge the discussion or the outcome of the ad hoc group of legal and technical experts; nor do they imply any preferred approach, but rather to examine relevant aspects that may need to be addressed in elaborating international rules and procedures in the field of liability and redress for damage resulting from transboundary movement of LMOs.

#### B. Functions, objectives and characteristics

- 11. International liability rules and procedures may serve a number of functions. The first is preventive function: the threat of incurring liability and the potential burden of redress measures may prevent economic activities that have the potential to result in environmental risk and damage. Secondly, the liability rules may serve as an economic instrument providing an incentive to encourage compliance with international obligations. The third function is reparative: by allocating responsibility for repairing the damage caused by an act or activity, liability and redress rules may be used as an instrument for the implementation of the polluter-pays principle.
- 12. The stringency of a liability and redress regime may vary considerably depending on whether it aims at protection of the victim, environment or industry. For example, if the main objective of the liability instrument is to protect victims, the standard of liability tends to be strict-based and the operator may be required to have compulsory insurance. If it is for protection of environment, a liability regime may emphasize implementation of preventative and reinstatement measures, recovery of the costs of such measures and compulsory intervention by public authority. For the protection of industry, the liability may be limited in time and amount.
- 13. In considering the overall goals and functions of international rules and procedures on liability and redress under the Biosafety Protocol, attention may be given to the following aspects. First, the main objective of the Protocol is to ensure an adequate level of protection in the field of the safe transfer, handling and use of LMOs from adverse effects on the conservation and sustainable use of biological diversity, taking into account risks of human health. The liability regime under the Protocol should contribute to and further enhance such objective.
- 14. Secondly, the Protocol was negotiated in the absence of any specific known incidents of damage caused by the transboundary movement of LMOs; rather it was developed on the basis of precaution. The precautionary approach is reflected in the objective and other provisions of the Protocol . In elaborating liability rules under the Protocol, the precautionary approach may need to be taken into account.
- 15. Thirdly, the Protocol, on one hand, recognizes the growing public concern of the potential adverse effects of modern biotechnology over biological diversity and risks to human health; on the other hand, it also notes that modern biotechnology has great potential for human well-being if developed and used with adequate safety measures for the environment and human health. Following such an approach, the liability regime under the Protocol may need to strike a careful balance between protection of environment and human health and protection of different interests of stakeholders, including industry.
- 16. Finally, the process of developing a liability regime needs to take into account the characteristics of the subject matter it covers. It has been observed that any damage resulting from transboundary movements of LMOs may take a long period of time to manifest itself and the nature of damage may be diffuse and gradual. The rules and procedures on liability and redress under the Protocol should respond to the uniqueness of LMOs.

#### C. State/civil liability

- 17. The general principle in international law with respect transboundary environmental damage is that States have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. The obligation upon States has two parts: first, to take measures to prevent the occurrence of transboundary environmental harm and, secondly, if the transboundary harm occurs, to redress damage in the case of lack of due diligence of the State concerned.
- 18. Although this principle has been incorporated into a number of international agreements, the only instrument that establishes State liability is the 1972 Convention on International Liability for Damage Caused by Space Objects. Under the Convention, it is the "launching State", defined as the State which launches or procures the launching or from whose territory an object is launched, that bears liability for the damage caused by the space object. Moreover, a launching State is absolutely liable to pay compensation for damage.
- 19. International legal instruments also contemplate residual State liability to complement the liability of the operator. Such residual State liability arises in a number of situations. The State has to pay because it has failed to comply with its obligations under the international instrument concerned. For example, in the 1971 Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1971 Oil Fund Convention) and the 1996 International Convention on Liability and Compensation for Damage in connection with the Carriage of Hazardous and Noxious Substances at Sea (the 1996 HNS Convention), States only have to contribute to the relevant funds if they have failed to ensure that the person liable pay to the fund or maintain financial security in accordance with the provisions of the conventions. These cases, however, differ from the 1963 Brussels Supplementary Fund Convention and the 1997 Vienna Supplementary Fund Convention where the installation State has to make payments beyond the maximum liability of the operator irrespective of whether or not the installation State has failed to comply with its international law obligations.
- 20. Also, it is interesting to see the development in the enlargement of the scope of the existing Technical Cooperation Trust Fund of the Basel Convention, which if adopted at the sixth meeting of the Conference of the Parties to the Basle Convention, will have a compensation window for damage to and reinstatement of the environment. However, contributions are to be made by States on a voluntary basis. 2/
- 21. Recent international agreements, however, shows that States seem to opt for civil liability by channelling liability to private parties rather than establishing rules for State liability for transboundary damage arising from potentially hazardous activities. This is particularly the case where the activities in question are controlled principally by private parties. Generally speaking, civil liability refers to the liability of any legal or natural person under rules or national law adopted pursuant to international treaty obligations that establish harmonized minimum standards.
- 22. Whether the liability rules under the Biosafety Protocol would opt for State or civil liability or combination of civil and residual State liability would depend on factors such as the actors who may have main control over the LMOs, the level of the control of the LMOs and the types of activity involving the LMOs, etc.

<sup>2/</sup> Interim Guidelines for the Implementation of Decision V/32 "Enlargement of the scope of the Technical Cooperation Trust Fund", report of the fifth session of the legal working group on the Basel Convention (UNEP/CHW/LWG/5/6).

#### II. TYPES OF ACTIVITIES OR SITUATIONS

- 23. Discussion on types of activities or situations that may be covered under Article 27 essentially concern the scope of the liability regime under the Protocol. Article 27 of the Protocol refers to "damage resulting from transboundary movements" of LMOs. The term "transboundary movement" is defined as "the movement of a living modified organisms from one Party to another Party save that for the purpose of Articles 17 and 24 transboundary movements extends to movement between Parties and non-Parties." (Article 3 (k)). The Protocol refers to four types of transboundary movements of LMOs:
- (a) Intentional transboundary movement. The Protocol envisages three types of such transboundary movements: LMOs for intentional introduction into the environment of the Party of import; LMOs intended for direct use as food or feed, or for processing (LMO-FFPs); and LMOs for contained use. These three types of intentional transboundary movements of LMOs are subject to different procedural and documentation requirements under the Protocol;
- (b) Unintentional transboundary movements. The Protocol also includes the situation where LMOs may cross national boundaries unintentionally, but it does not define what LMO movements constitute "unintentional". Such movements may, however, include accidental releases of LMOs. Article 17 of the Protocol sets out obligations relating to notification and consultations among Parties to minimize any significant adverse effects on the conservation and sustainable use of biological diversity and risks to human health, in cases of unintentional transboundary movements of LMOs;
- (c) *Illegal transboundary movements.* Article 25 of the Protocol indicates transboundary movements of LMOs carried out in contravention of a Party's domestic measures to implement the Protocol shall be deemed illegal. Thus, such movements would encompass movements in contravention of the Protocol or domestic measures for its implementation;
- (d) LMOs in transit through the territory of a Party. The Protocol refers to LMOs in transit in the context of Article 6 of the Protocol recognizing the right of a Party of transit to regulate the transport of LMOs through its territory.
- 24. The international liability rules and procedures under the Protocol may need to address the situation that may arise from the above-mentioned types of transboundary movements of LMOs and consider whether it is necessary to differentiate them in terms of allocating liability, setting standards of liability and other elements for liability.
- 25. In elaborating the scope of the regime, a critical issue is the point at which transboundary movement begins and ends, which relates to the definition of transboundary movements of LMOs, i.e., whether it should be narrowly or broadly defined. A narrow definition may encompass only the course of actual action of shipment or transport of LMOs while a broad one may go beyond actual shipment including activities covered by the Protocol, such as handling and use of LMOs. It is generally perceived that the effects of LMOs may only be observed over potentially long periods of time. Damage may therefore be manifested well after the completion of a specific shipment and well after introduction of the LMOs into the environment of the importing country.
- 26. The Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal (the Basel Liability Protocol) seems to have adopted a narrow approach with respect to transboundary movement, but relatively broad approach regarding disposal. The Basel Liability Protocol applies to an incident during a transboundary movement of hazardous wastes and their disposal, including illegal traffic. The movement starts from the point where the wastes are loaded for transport in an area under the national jurisdiction of the exporting State and

may continue through any number of States of transit. It ends upon notification of the completion of disposal by the disposer to the exporter and the competent authority of the State of export or, where no notification is made, upon the completion of the disposal, or if the waste has been delivered to disposal. The question arises whether there is a similar limitation within the Protocol and whether the words "resulting from" necessarily imply an "incident during" a transboundary movement.

27. The 1996 International Convention on Liability and Compensation for Damage in connection with the Carriage of Hazardous and Noxious Substances at Sea (the 1996 HNS Convention) takes a narrow approach with respect to the issue of transboundary movement, which is limited to claims for damage arising from the carriage of hazardous and noxious substances by sea (Article 4(1)). "Carriage by sea" is defined as the period that the hazardous or noxious substances are on the ship or ship's equipment (Article 1 (9)). Similar provisions can be found in the 1969 Convention on Civil Liability for Oil Pollution Damage (the 1969 Oil Pollution Damage Convention).

## III. OTHER POSSIBLE ELEMENTS FOR CONSIDERATION IN THE ELABORATION OF INTERNATIONAL RULES AND PROCEDURES AS REFERRED TO IN ARTICLE 27 OF THE PROTOCOL

#### A. Damage

- 28. Under most international liability regimes, the concept of damage involves three components: personal injury, property loss and environmental damage. The environmental damage is often defined to include three categories of losses: the costs of measures of reinstatement of impaired environment; loss of income from an economic interest in any use or enjoyment of the environment incurred as a result of the impairment of the environment; and the costs of measures undertaken or to be undertaken to prevent environmental damage.
- 29. Article 27 of the Protocol simply refers to "damage resulting from transboundary movements" of LMOs without further indicating what constitutes damage. The concept of damage under Article 27 may have to be considered in the context of the Protocol as a whole.
- There are number of issues relating to the definition of damage. The wording of Article 27 appears sufficiently broad to encompass damage to the environment, persons or property. However, a number of provisions under the Protocol refer to LMOs that "may have adverse effects on the conservation and sustainable use of biological diversity". The Protocol does not give any guidance on how conservation and sustainable use of biological diversity would be defined. Article 2 of the Convention on Biological Diversity provides definitions of the terms "biological diversity", "ex situ conservation", "In situ conservation", and "sustainable use", but these terms in general encompass wide range of elements and would be difficult to quantify for the purpose of defining damage in a liability regime. The question may also arise as to whether "damage to the conservation and sustainable use of biological diversity" is distinct from "damage to biological diversity". Secondly, the reference "taking into account risks to human health" may bring a new dimension to the issue. In effect, personal injuries or related health costs, such as the costs of medical screening after an incident arising from exposure to LMOs, would need to be considered in any definition of damage under the Protocol. Lastly, Article 26 contemplates social-economic considerations arising from the impact of LMOs on the conservation of and sustainable use of biological diversity. Would these considerations broaden the concept of damage under the Protocol? If so, how would this type of damage be quantified?
- 31. Another important issue is evaluation of damage to biodiversity. In order to assess whether the damage to biodiversity occurs as a result of transboundary movements of LMOs, baseline data on the

state of biodiversity must be established in advance. Moreover, evaluation criteria have to be created for the damaged natural resources to avoid disproportionate costs of restoration. If restoration is technically not or only partially possible, the valuation of the natural resource has to be based on the costs of alternative solutions by establishing natural resources equivalent to the destroyed environment. In this regard, the process under Article 14, paragraph 2, of the Convention on Biological Diversity, needs to be taken into account, in particular, in its elaboration of definition, valuation and classification of damage to biodiversity.

- 32. The European Union has, indeed, developed definitions related to "baseline condition", "biodiversity" and "conservation status" in its draft directive on environmental liability with regard to the prevention and restoration of environmental damage. It must be pointed out that liability to biological diversity has a relatively narrow application as it only covers natural habitats and species listed in the relevant Community legislation through Nature 2000 network and designated by the member States. Damage to biodiversity would cover damage to habitats, wild life or species of plants, as defined in the annexes to the directives.
- 33. With respect to threshold of damage, the general rule seems that, in order for liability to arise damage needs to exceed a *de minimis* threshold. In some of the treaties on liability, the terms "significant harm" or "significant damage", "above tolerable levels", "in excess of the prescribed standard" are used as an indicator for threshold of damage. The Biosafety Protocol refers to "adverse effects" or "significant adverse effects" (Article 17, paragraph 4) on the conservation and sustainable use of biological diversity". Should "adverse effects" or "significant adverse effects" be as a threshold to give rise to liability under the Protocol?

#### B. Channelling liability

- 34. The issue of which actor should be liable for damage is one of the most critical elements in a liability regime. The majority of international legal instruments channel liability to the "operator" the person who has the operational control of the activity at the time of the incident causing damage. Generally, the categories of "operator" need to be refined to include those who might otherwise escape liability and exclude others who are thought to merit protection. Assigning liability to appropriate persons may be determined by principles such as fairness—reflecting equitable balance between interests of victims, environment and other stakeholder including industry; effectiveness—allocating liability to a person who was in the best position to prevent damage and purchase financial security; and transparency—facilitating the identification of the persons liable.
- 35. Channelling liability in the transboundary movements of LMOs may be complex undertaking involving a series of persons. The Protocol confers rights and obligations to Parties, but it also refers to a range of entities involved in the transboundary movements of LMOs, such as "exporter", "importer" or "notifier". According to Article 3, "importer" or "exporter" means any legal or natural person, under the jurisdiction of the Party of import or export, who arranges for LMOs to be imported or exported. The term "notifier" is not specified in the Protocol, but Article 8 provides that, if the notifier is not a Party of export, that Party shall require the exporter to ensure notification. Depending on who makes notification, notifier could be a Party of export or a private entity. In summary, the Protocol envisions a number of actors in the transboundary movements of LMOs: exporter, importer, notifier, the Party of export and the Party of import.
- 36. It should be also noted that the question may arise as to whether and, if so, to what extent the liability could be channelled to actors beyond those envisaged in the Protocol, such as "developer" or "producer" of LMOs. In addition, if liability were allocated to them, clear definitions need to be developed regarding who would fall into the appropriate categories.

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- 37. Channelling liability may also need to be examined in specific circumstances. If an intentional transboundary movement of LMOs is in full compliance with the requirements of the Protocol, such as the advance informed agreement (AIA) procedure, who should be held liable when the damage nevertheless occurs? In the case of unintentional transboundary movement of LMOs, where the incident may happen with or without operational control of operator, should the liability be channelled to carriers, owners of the LMOs or any other persons?
- 38. It should be pointed out that in both cases of unintentional and illegal transboundary movements of LMOs, Parties have the responsibility to take emergency measures. According to Article 17 of the Protocol, Parties have the responsibility to notify the affected or potentially affected States of occurrence of LMOs that may lead to unintentional transboundary movements, and consult the affected States in order to take response measures. When illegal transboundary movements happen, the State Party of origin may, upon the request of the affected State, dispose, at its own expense, of the LMO in question by repatriation or destruction (Article 25, paragraph 2).
- 39. The Basel Liability Protocol imposes liability on a series of persons regarding damage resulting from the transboundary movement of hazardous wastes, reflecting the complex nature of the relationships arising from such movement and the specificities of the provisions of the Basel Convention. The liability is allocated variously to the notifier, deposer, exporter, importer and re-importer and applied in different situations:
- (a) The notifier of a transboundary movement is liable for damage until the disposer takes possession; thereafter the disposer shall be liable for damage;
- (b) If the State of export is the notifier or no notification has taken place, the exporter is liable until the disposer takes possession; thereafter the disposer shall be liable for damage;
- (c) The importer is liable with respect to wastes under Article 1, paragraph 1(b) of the Convention that have been notified as hazardous by the State of import in accordance with Article 3 of the Convention but not by the State of export;
- (d) If the wastes are re-imported, the person who notified is liable from the time the waste leave the intended disposal site until the wastes come into the possession of the exporter.

#### C. Standard of liability

- 40. Generally speaking, there are three standards of liability: fault-based liability where proof of the fault of the actor is required; strict liability where there is no need to establish the fault of the actor, only the fact the act caused the damage; and absolute liability where almost no defences are available.
- 41. A number of existing international treaties establish a system of strict liability, mainly applying to dangerous activities that may lead to inevitable harmful consequences. Use of strict liability is based on the fact that, for many modern activities, it would be very difficult for a victim to prove fault on the part of an operator. Strict liability alleviates the burden that would otherwise weigh upon a victim who has suffered damage.
- 42. Recent national liability regimes that apply to LMO-related activities are, to a large extent, based on the principle of strict liability. For example, the German Genetic Engineering Act focuses on the sheer risk posed by LMOs whether or not the person responsible for the genetic engineering operation is at fault. Section 23 of the Norwegian Act lays down strict liability "for damages regardless of any fault on

his part when the activity causes damage, inconvenience or loss by deliberate release or emission of LMOs into the environment" (UNEP/CBD/ICCP/3/3, para. 23).

- 43. The Basel Protocol establishes both a strict and fault-based liability system. However, even in this case, the dominant regime is one of strict liability. The fault-based liability imposed under Article 5 is stated expressly to be without prejudice to the regime of strict liability and applies only in cases where a person causes or contributes to damage through lack of compliance with the provisions implementing the Basel Convention or by his wrongful intentional, reckless or negligent acts or omissions. Under fault-based liability, financial limits defined in Article 12, paragraph 2, of the Basel Protocol would not apply. The European Commission directive on environmental liability provides for a fault-based liability system for damage to biological diversity if such damage is caused by a non-dangerous activity. Damage to biological diversity arising from dangerous activities would conceivably fall under the general strict liability regime.
- 44. The standard of liability to be imposed is ultimately a policy decision. Whether LMOs are materials of which transboundary movement should invite a strict liability regime is a matter of policy choice depending on the perception on the level of potential risk of LMOs. Suffice to point out that the term "dangerous activities or substances" also incorporates those activities and substances, which have a low probability of the dangerous incident occurring but with high magnitude of damage once the incident occurs.

#### D. Exemptions from liability

- 45. If liability rules were developed in the form of a civil liability regime, such a liability regime typically allows for a limited number of exceptions from liability relating to cases where damage has been occasioned by or through events and situations beyond the control of the operator. Across most international and national liability regimes, commonly accepted exemptions from liability include: (i) act of God (*force majeure*); (ii) act of war or civil unrest; (iii) contribution by the victim; (iv) intervention by a third party.
- 46. In the context of the Biosafety Protocol, two issues may be of particular concern. The first is whether compliance with regulatory permits would be allowed as a defence, such as approval of an LMO in accordance with AIA procedure. Some national liability laws specify prior permission does not necessarily exclude liability. The Danish Act on Compensation for Damage to the Environment is the case in point. Similar provisions can be found in the Norwegian liability system. (UNEP/CBD/ICCP/3/3, para. 25).
- 47. The second question is whether the state-of-the-art or development risk would be taken into account in applying defence, such as foreseeability or best practicable means relating to the global scientific and technical understanding on LMOs. If a risk assessment on a LMO is conducted carefully and shows that it poses no risks at that time, should liability be exempted when risks or damage emerge over time with increasing scientific and technical knowledge?

#### E. Causation/burden of proof

48. The issue of causation is an important element in discussions relating to liability. Proof of causation between damage and activities plays an increasingly critical role in a strict liability regime. In the situation where damage is caused by LMOs, causation, however, may be hard to establish because of the complexities of their interactions with the receiving environment and the possible timescales involved. More difficult, as scientific understanding on LMOs is still immature, concrete evidence of correlation may not be possible to find at all.

- 49. Due to the complexity of proving causation, some international and national liability regimes alleviate burden of proof through means of a rebuttable presumption. For example, according to Article 1, paragraph 6, of the HNS Convention, where it is not possible to separate damage caused by the hazardous and noxious substances from that caused by other factors, all such damage shall be deemed to be caused by the hazardous and noxious substances, except if, and to the extent that, the damage caused by other factors is dealt with under certain other conventions.
- 50. Under the German Genetic Engineering Act, when the damage was caused by LMOs, it is presumed to have been caused by such properties of these organisms as a result of genetic engineering operations. In general, The Austrian Law on Genetic Engineering adopts the similar approach whereby causation is presumed until the defendant can demonstrate otherwise. It states:

"If depending on the case the LMO subject to the contained use or a deliberate release may cause damage, it is presumed that the damage is due to the characteristics of the LMO resulting from the genetic modification. To rebut the presumption the notifier demonstrates the likelihood that the damage is not due to the characteristics of the LMO resulting from the genetic modification (or in combination with other hazardous characteristics of the LMO)." (UNEP/CBD/ICCP/3/3, para. 27)

#### F. Limitation of liability in time

- 51. An important consideration regarding the time limit for the bringing of claims is the fact that environmental interferences often have long-term effects. It has been pointed out that it is even more so in the case of adverse effects resulting from LMOs. The nature and magnitude of damage to species, habitats and ecosystems may not become apparent in the short-term. Any limitations regarding the time within which actions for redress may be instituted within the framework of the liability rules under the Protocol should take cognizance of this fact.
- 52. Under some national legislation relating to LMO-related activitities, such as the draft Swiss Gene Technology Act, proceedings for the recovery of damage are subject to two time-period limitations: three year after the injured Party recognizes the harm and the personal liable, and 30 year at the latest after (a) the event that caused the harm occurred or came to an end within the company or installation; or (b) the LMOs were first placed on the market.(UNEP/CBD/ICCP/3/3, para. 30)
- 53. Across international agreements time limits vary considerably. The 1993 Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment (the Lugano Convention) provides that action for compensation shall be subject to a limitation period of three years from the date on which the claimant knew or ought reasonable to have known of the damage and the identity of the operator. But in no case shall actions be brought after thirty years from the date of the incident that caused the damage. The two time-periods under the Basel Liability Protocol are five years and ten years respectively.

#### G. Limitation of liability in amount

54. Depending on the magnitude of the damage and the nature of activity, a liability regime may choose whether or not to set a ceiling on the amount of compensation payable for an incident. Most strict liability regimes opt for financial limitation of liability, which establishes either fixed limits or minimum limits, expressed in special drawing rights (SDR) as defined by the International Monetary Fund. The HNS Convention is set at 250 million SDR, with a maximum limit on the shipowner of 100 million SDR. The Basel Liability Protocol sets minimum levels of compensation for strict liability, leaving domestic law to determine the amount of compensation.

- 55. It is also important to note that it may be needed to review such ceilings regularly since they do become outdated over time. The financial ceilings imposed by both the 1960 Convention on Third Party Liability in the field of Nuclear Energy (the Paris Convention), the 1963 Vienna Convention on Civil Liability for Nuclear Damage, the 1969 Oil Pollution Damage Convention and the 1971 Fund Convention, have had to be revised upwards through amendments to take into consideration the potential magnitude of nuclear damage.
- 56. For damage caused by fault, the liability may be unlimited. Such is the case for the Basel Liability Protocol (Article 12.2), the HNS (Article 9(2)) and the 1977 Convention on Civil Liability for Oil Pollution Damage resulting from Exploration for and Exploitation of Seabed Mineral Resources (the 1977 Seabed Mineral Resources Convention) (Article 6(4)).
- 57. Whether or not the liability for transboundary movements of LMOs would incur limited or unlimited liability as well as the amount of compensation, it is important to consider the prospect of insurability as well as the balance of guaranteeing prompt and adequate compensation of victims of damage, and at the same time not to unduly impose onerous financial burdens on legitimate economic activity.

#### H. Financial security and funds

- 58. Various ways may be available in guaranteeing adequate compensation for victims of damage. The most common form is maintenance of insurance by operator. Without insurance, reparations may fail if the operator is undercapitalized. Insurance availability reduces the risks to which operators are exposed by transferring part of them to insurers. Some liability regimes establish compulsory insurance such as the nuclear-liability treaties where the operator of a nuclear installation is required to maintain insurance or other financial security correspond to his maximum liability. The persons liable under the Basel Liability Protocol must maintain insurance, bonds or other financial guarantees.
- 59. However, insurance availability may be constrained by factors such as lack of widely accepted measurement techniques to quantify environment damage, which makes it difficult to predict for the amount of damage. This could be particularly true for calculating damage on conservation and sustainable use of biodiversity cause by transboundary movement of LMOs. The other factors affecting insurability are the certainty and transparency provided by a liability regime including aspects of clearly defined scope of damage, capping liability and the limitation to significant damage, all of which would contribute to making the risks arising from the regime better calculable and manageable.
- 60. Creation of funds is another possible way to provide financial security for compensation of victims or remedy of damage which might not otherwise be covered by a liability system. Funds are used in the situations where: (i) the operator cannot be held liable due to defences, time or financial limits; (ii) the operator is financially incapable of meeting his liability up to the financial limit; or (iii) relief is provided on an interim basis. A voluntary fund outside any liability treaty regime could also be established. The sources of funding could be from companies or States that benefit most from the activities. International liability regimes that have established funds involve nuclear safety and oil pollution.
- 61. It might be worth considering the feasibility of creating any fund for compensation of damage caused by transboundary movements of LMOs and identifying who would be potential contributors to such fund.

#### I. The nature and scope of redress

- 62. In general public international law, the defendant is required to make full reparation for the damage caused. Reparation can take the form of restitution or compensation. Traditional approaches to liability covers compensation for injured persons or property. Restitution in the context of environmental damage would encompass measures of restoration or reinstatement. Where restitution is not possible or inadequate, monetary compensation or any equivalent measures of reinstatement would be necessary. Punitive damage is not usually accepted under international law.
- 63. In the case of compensation, different methods may be used for the calculation of damage, such as using the price that environmental resource commands in the market (the *Trail Smelter Arbitration*), or calculating the economic value attached to the use of environmental resources through travel-costs method (relying on expenditures made by an individual to visit and enjoy a resource), a hedonic pricing (taking extra market value enjoyed by private property with certain environmental amenities) or other similar methods. In addition, contingent valuation methods that measure the willingness of individuals to pay for environmental goods such as clean air or water or the preservation of endangered species (usually taken from public opinion surveys) may also be used.
- 64. With respect to redress under Article 27 of the Protocol, restoration or reinstatement of the damage in many situations may not be technically feasible or not reasonable. However, it should be recognized that irreparable or unquantifiable damage should not result in an exemption from compensation. In particular, if the species or ecosystems play an important role in the social-economic life of the inhabitants of the affected State in general, and of indigenous and local communities, it would be unfair not to pay compensation for the loss suffered regardless of monetary or in any form of compensation.

#### J. Jurisdiction, mutual recognition and enforcement of judgements

- 65. An important issue that must be addressed in any civil liability and redress regime concerns the question of jurisdiction. The issue of jurisdiction has two aspects: first, determining the competent court to entertain claims for compensation; and, secondly, ensuring the recognition and enforcement of judgments arrived at by such a competent court in the territories of other contracting parties. Victims of damage must be certain of the court or courts that are competent to entertain their claims. The fact that there may be numerous victims from a single incident also makes it imperative that only one court should have jurisdiction over claims from any one incident so as to be able to apportion compensation, where appropriate, among the victims. A multiplicity of claims in diverse jurisdictions does not create certainty or efficiency in the judicial processing of claims for compensation.
- 66. This issue of jurisdiction is dealt with similar terms in most international liability agreements. In a large number of cases, in the first instance, jurisdiction over actions for compensation lie with the courts of the contracting party in whose territory the incident giving rise to liability has occurred. In the second instance, the competent court is different when the incident occurs outside the jurisdiction of any State Party. Under the HNS Convention, jurisdiction regarding actions for incidents occurring outside the jurisdiction of any State party lie with the courts of either the flag State party, the State party where the owner has his habitual residence or principal place of business, or a State party where a fund for compensation has been constituted by the owner.
- 67. The Basel Protocol leaves to the victim the choice of which competent court to seize. Jurisdiction over actions for compensation under the Protocol lie variously with the courts of the contracting party where the damage was suffered; the incident occurred; or the defendant has his habitual residence or principal place of business. In cases where courts of different parties have been seized of related actions,

any court other than the court first seized is required to stay its proceedings until the jurisdiction of the first court is established. The purpose of this requirement is to allow the consolidation of related actions and single determination by one competent court.

- 68. Regarding mutual recognition and enforcement of judgements, in principle, once judgment is delivered, it should be recognized as final and binding in the respective territories of contracting States, and a victim should be able to enforce it in any of those territories. Access to the assets of the person liable is the crucial factor in recognizing and enforcing judgement.
- 69. The Lugano Convention, the HNS Convention contain similar provisions: where a judgment has been entered by a court of competent jurisdiction that is enforceable in the State of origin and is no longer subject to ordinary forms of review, the judgment is to be recognized and enforced in the territory of any contracting party. This provision obviates the need for claimants to institute further proceedings in the courts of other contracting States in order to secure their compensation.

#### K. The right to bring claims

70. Under traditional liability regimes, in principle, only a person with a direct interest (i.e. a person having suffered some damage or loss) may bring a civil action for compensation. However, the case of damage to the environment or biodiversity may be different from claiming traditional damage in that the public may be responsible for the environment and act on its behalf under certain circumstances since protection of environment is public interest. It seems that there is a growing trend in domestic national legislation of allowing some private organizations to access to justice. For example, the Danish Act on Compensation for Damage to the Environment permits some of private organizations recognized as having a "special grant" to the resources at issue, to claim costs of preventive measures. In Norway also, compensation can be claimed by a private organization or an association with a legal interest in the matter. The compensation awarded then accrues to the pollution control authority, which decides how the compensation awarded is to be used (UNEP/CBD/ICCP/3/3, para. 35). Under the draft European Union directive on environmental damage, any qualified entity is entitled to submit to the competent authority (Article 14 of the directive) and it has access to a procedure before a court (Article 15 of the directive)

### IV. ANY OTHER ISSUES THAT MAY BE RELEVANT TO THE PROCESS PROVIDED FOR IN ARTICLE 27 OF THE PROTOCOL

- 71. A relevant issue to the process under Article 27 of the Protocol is the form of its final outcome, that is, whether it would be in the form of legally binding international agreement, or in a more soft law format such as guidelines, model laws, etc. It should be noted that the form of an instrument would affect defining objectives, nature and stringency of international rules and procedures on liability and redress under the Protocol.
- 72. Both a binding or a non-binding instrument has its own merit. A binding instrument establishes firm legal commitments for those countries that ratify it and requires the establishment of the administrative and technical procedures and structures required at national level to ensure legal remedies available for victims to obtain prompt, adequate and effective compensation. One potential problem, however, lies with the possible limited application—it would be effective only in respect of those that have ratified the agreement. Also negotiating an international legally binding instrument often requires a number of years and substantial funding before the instrument can be adopted. Moreover, there may be a long time lag of between adopting and entering into force of an agreement. Experience shows that a significant number of international agreements, though adopted several years ago, have not yet entered into force effective, including the 1977 Seabed Mineral Resources Convention, the 1993 Lugano

Convention, the 1996 HNS, 1997 Convention on Supplementary Compensation for Nuclear Damage, and the 1997 Vienna Protocol to Amend the 1963 Vienna Convention on Civil Liability for Nuclear Damage.

- 73. A non-legally binding instrument, on the other hand, may be negotiated and adopted within a shorter time period. Because of its more flexible character, a non-binding instrument can often be more ambitious in the goals it sets. Although implementation is voluntary, it may serve as a useful and practical way to guide nations in enacting national legislation or regional agreements on liability and redress and thus contribute to a rapid implementation of the instrument. Participation in implementation might often be broader than for a binding instrument that requires ratification. Finally, it may also be used as a framework towards developing a binding regime in the future. Yet the advisory nature of such an approach may fall short of providing adequate legal certainty and consistency in protecting the victims and environment, in particular for the damage caused by transboundary movements where a uniform liability regime would be more effective to serve the purpose. Indeed, given the nature of the Protocol, this option may not be realistic.
- 74. Another question that may arise in relation to the process of Article 27 of the Protocol is the possible arrangement of interim measures before finalization of international rules and procedures on liability and redress. Bearing in mind that Article 27 indicates that the Conference of the Parties shall endeavour to complete the negotiation process within four years, a situation might arise where damage caused by transboundary movements of LMOs occurs after the Protocol enters into force but before any liability regime is put in place under the Protocol. Consideration may be given to the need for and the nature and modalities of any interim arrangement to address any possible damage during such period. In that respect, Parties may wish to consider establishing a compensation fund pending the negotiation and adoption of a liability regime.

#### V. RECOMMENDATION

75. The Workshop is a brainstorming meeting. Participants are invited to consider the issues raised in this document to identify possible issues that may be addressed in the international rules and procedures on liability and redress under Article 27 of the Protocol. The findings of the workshop will be forwarded to the Executive Secretary who will make them available through the Internet and in hard copies, as requested by recommendation 2/1 of the ICCP (UNEP/CBD/ICCP/2/15, annex). It is hoped that the discussion of the Workshop would facilitate Governments in developing terms of reference for the openended ad hoc group of legal and technical experts that may be established at the first meeting of the Conference of the Parties to the Convention serving as the meeting of the Parties to the Protocol, and also assist them in preparing for the questionnaire annexed to recommendation 3/1 of ICCP.

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