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DRAFT REPORT OF THE INTERVENTIONAL LAW COMMISSION ON THE WORK OF ITS FIFTY-SIXTH SESSION

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CHAPTER VII

INTERNATIONAL LIABILITY FOR INJURIOUS CONSEQUENCES ARISING OUT OF ACTS NOT PROHIBITED BY INTERNATIONAL LAW (INTERNATIONAL LIABILITY IN CASE OF LOSS FROM FROM TRANSBOUNDARY HARM ARISING OUT OF HAZARDOUS ACTIVITIES)

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2. Text of the draft principles with commentaries thereto (*continued*)

Principle 3

Objective

The present draft principles aim at ensuring prompt and adequate compensation to natural or legal persons, including States, that are victims of transboundary damage, including damage to the environment.

(1) The key objective of the present principles is to ensure protection to victims suffering damage from transboundary harm. In addition to this main objective, the draft principles are also designed to serve other objectives, including: (a) providing incentives to the operator and other relevant persons or entities to prevent transboundary damage from hazardous activities; (b) promoting cooperation among States concerned or injured to deal with issues concerning compensation in an amicable manner; (c) preserving and promoting the viability of economic activities that are important to the welfare of States and peoples; (d) and providing compensation in a manner that is predictable, equitable, expeditious and cost effective. Wherever possible, the draft principles should be interpreted and applied so as to further all these objectives.⁶¹

(2) The key objective of ensuring protection to victims suffering damage from transboundary harm has been an essential element from the inception of the topic by the Commission. In his schematic outline, Robert Q. Quentin-Baxter also focused on the need to protect victims, which required “measures of prevention that as far as possible avoid a risk of loss or injury and, insofar as that is not possible, measures of reparation” and that: “... an innocent victim should not be left to bear loss or injury; ...”.⁶² The former consideration is already addressed by the draft articles on prevention.

⁶¹ See also Lucas Bergkamp, *Liability and Environment: Private and Public Law Aspects of Civil Liability for Environmental Harm in an International Context* (Kluwer, 2001), p. 70, fn. 19, who has identified seven functions relevant to a liability regime, namely compensation, distribution of losses, allocation of risks, punishment, corrective justice, vindication or satisfaction, and deterrence and prevention.

⁶² *Yearbook ... 1982, vol. II (Part One)*, p. 51, document A/CN.4/360*, para. 53, section 5 (paras. 2 and 3).

(3) The definition of victim for purposes of the present principles includes natural and legal persons, including States as custodians of public property. This definition is linked to and may be deduced from the definition of damage in draft principle 2, which includes damage to persons, property or the environment.⁶³ A group of persons or communes could also be victim. In the *Matter of the people of Enewetak* before the Marshall Islands Nuclear Claims Tribunal established under the 1987 Marshall Islands Nuclear Claims Tribunal Act, the Tribunal considered questions of compensation in respect of the people of Enewetak for past and future loss of use of the Enewetak atoll; for restoration of Enewetak to a safe and productive state; for the hardships suffered by the people of Enewetak as a result of their relocation attendant to their loss of use occasioned by the nuclear tests conducted on the atoll.⁶⁴ In the *Amoco Cadiz* litigation, following the Amoco Cadiz supertanker disaster off Brittany, French Administrative departments of Côtes du Nord and Finistère and numerous municipalities called “communes”, and various French individuals, businesses and associations sued the owner of the Amoco Cadiz, and its parent company in the United States. The claims involved lost business. The French Government itself laid claims for recovery of pollution damages and clean-up costs.⁶⁵

(4) The definition of victim is also linked to the question of standing. Some liability regimes such as the Lugano Convention and the EU Directive 2004/35/CE on environmental liability

⁶³ In respect of international criminal law, see the Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power, General Assembly resolution 40/34 of 29 November 1985. See also the Rome Statute of the International Criminal Court, article 79.

⁶⁴ 39 *ILM* (2000) 1214. In December 1947 the people were removed from Enewetak atoll to Ujelang atoll. At the time of removal, the acreage of the atoll was 1,919.49 acres. On return on 1 October 1980, 43 tests of atomic devices had been conducted, at which time 815.33 acres were returned for use, another 949.8 acres were not available for use, and an additional 154.36 acres had been vaporized.

⁶⁵ See Maria Clara Maffei, “The Compensation for Ecological Damage in the ‘Patmos’ case”, Francesco Francioni and Tullio Scovazzi, *International Responsibility for Environmental Harm* (1991), p. 381. See also In the matter of the Oil Spill by the Amoco Cadiz off the coast of France on 16 March 1978, United States Court of Appeals for the Seventh Circuit. 954 F.2d 1279.

provide standing for non-governmental organizations.⁶⁶ The 1998 Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters also gives standing to NGOs to act on behalf of public environmental interests.⁶⁷

Victims may also be those designated under national laws to act as public trustees to safeguard those resources and hence the legal standing to sue. The concept of public trust in many jurisdictions provides proper standing to different designated persons to lay claims for restoration and clean-up in case of any transboundary damage.⁶⁸ For example, under the United States Oil Pollution Act, such a right is given to the United States Government, a state, an Indian tribe, and a foreign government. Under the United States Comprehensive Environmental Response, Compensation and Liability Act (CERCLA 1980), as amended in 1986 by the Superfund Amendments and Reauthorization Act, locus standi has been given to only the federal government, authorized representatives of states, as trustees of natural resources, or by designated trustees of Indian tribes. In some other jurisdictions, public authorities have been given similar right of recourse. Norwegian law provides standing to private organizations and societies to claim restoration costs. In France, some environmental associations have been given the right to claim compensation in criminal cases involving violation of certain environmental statutes.

(5) The implication of this broad standing to sue must not be overstated. It does not follow that full range of reparations will be available. Birnie and Boyle have aptly explained the limited significance of this right thus:

“What is clear is that third states have the same right as injured states to seek cessation of any breach of obligations owed to the international community as a whole. Beyond that, the availability of reparation will depend on the circumstances of the breach, the extent to which claimants’ interests are affected, and the nature of the risk to community interests.

⁶⁶ See article 18 of the Lugano Convention and article 12 of the EU Directive 2004/35/CE.

⁶⁷ For the text see 39 *ILM* (1999), 517.

⁶⁸ Peter Wetterstein, “A Proprietary or Possessory Interest: ...”, *op. cit.*, pp. 50-51.

It is for example unlikely that individual states will be entitled to demand compensation for material damage to the global environment beyond any clean-up or reinstatement costs which they may incur.”⁶⁹

(6) Principle 3 also contains the notion of prompt and adequate compensation to victims of transboundary damage. This requirement reflects the understanding and the desire that victims of transboundary damage should not have to wait long in order to be compensated. The importance of ensuring prompt and adequate compensation to victims of transboundary damage is related to two basic principles of international law. The first is stated in the *Trail Smelter* arbitration⁷⁰ and the *Corfu Channel* case,⁷¹ as further elaborated and encapsulated in Principle 21 of the Stockholm Declaration, namely:

States have, in accordance with the Charter of the United Nations and principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction and control do not cause damage to the environment or other areas beyond the limits of national jurisdiction.

(7) The environmental aspects of this proposition of law were well articulated by the International Court of Justice in the *Advisory opinion on the Legality of the threat or use of*

⁶⁹ Patricia Birnie and Alan Boyle, *International Law and the Environment*, Oxford University Press 2002, 2nd ed., pp. 197.

⁷⁰ Trail Smelter Arbitration, United Nations, *Reports of International Arbitral Awards*, vol. III, 1905 at p. 1965 stated:

“[U]nder the principles of international law, ... no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequences and the injury is established by clear and convincing evidence.”

⁷¹ *Corfu Channel* (merits) case, *I.C.J. Reports* 1949, p. 4 at p. 22: The Court stated that it was “every State’s obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States”.

nuclear weapons, when it asserted that the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn, and affirmed:

[t]he existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other states or of areas beyond national control is now the corpus of international law relating to the environment.⁷²

(8) The second proposition, which serves as a comparator and has implications for aspects concerning measurement of compensation in respect of the present principles, relates to the obligation under general international law to make full reparation. General international law does not specify “principles, criteria or methods of determining a priori how reparation is to be made for injury caused by wrongful acts or omissions”.⁷³ Reparation under international law is a consequence of a breach of a primary obligation. The general obligation to make full reparation is restated in article 31 of the draft articles on responsibility of States for internationally wrongful acts.⁷⁴ The content of this obligation was detailed by the Permanent International Court of Justice in the *Factory at Chorzow* case, when it stated obiter dicta:

“The essential principle contained in the actual notion of an illegal act - a principle which seems to be established by international practice and in particular by the decisions of arbitral tribunals - is that reparation must, so far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed. Restitution in kind, or, if this is not possible, payment of a sum corresponding to the value which a restitution in

⁷² *I.C.J. Reports* 1996, p. 226 at 241-242.

⁷³ Garcia-Amador, Sohn and Baxter (eds.), *Recent Codification of the Law of State Responsibility for Injury to Aliens* (Dobbs Ferry, NY), 1974, 89. See also Alan Boyle, “Reparation for Environmental Damage in International Law: Some Preliminary Problems”, in Bowman and Boyle, *Environmental Damage ...*, op. cit., pp. 17-26. Julio Barboza, Special Rapporteur, Eleventh report, document A/CN.4/468 (1995).

⁷⁴ Official Records of the General Assembly, Fifty-sixth session, Supplement No. 10 (A/56/10). See generally, James Crawford, *The International Law Commission’s Articles on State Responsibility: Introduction, Text and Commentaries* (Cambridge University Press), 2002.

kind would bear; the award, if need be, of damages for loss sustained which is not covered by restitution in kind or payment in place of it - such are the principles which should serve the amount of compensation due for an act contrary to international law.⁷⁵

(9) The *Chorzow Factory* standard of course applies in respect of internationally wrongful acts. It is however useful in appreciating the limits and the parallels that ought to be drawn in respect of “activities not prohibited by international law”. Such compensation should be adequate taking into account the extent and gravity of damage. Prompt and adequate compensation may also include restitution in certain circumstances. The point is that any emphasis on compensation should not be interpreted as undermining the remedy of restitution. Indeed, paragraph (a) (iv) of principle 2 makes the same point.

(10) The notion of liability and compensation for victims is also reflected in Principle 22 of the Stockholm Declaration, wherein a common conviction is expressed that:

“States shall cooperate to develop further the international law regarding liability and compensation for the victims of pollution and other environmental damage caused by activities within the jurisdiction or control of such States to areas beyond their jurisdiction.”⁷⁶

(11) This is further addressed more broadly in Principle 13 of the Rio Declaration:

“States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage. States shall also cooperate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.”

(12) The need for prompt and adequate compensation should also be perceived from the perspective of achieving “cost internalization”, which constituted the core, in its origins, of the

⁷⁵ *Factory at Chorzow, Jurisdiction*, 1927, PCIJ, Series A, No. 9, p. 21.

⁷⁶ *Report of the United Nations Conference on the Human Environment*, Stockholm, 5-16 June 1972 (United Nations publication, Sales No. E.73.II.A.14).

“polluter pays” principle. It is a principle that argues for internalizing the true economic costs of pollution control, clean-up, and protection measures within the costs of the operation of the activity itself. It thus attempted to ensure that governments did not distort the costs of international trade and investment by subsidizing these environmental costs. The policy of OECD and the European Union endorses this. However, in implementation, the principle thus endorsed, exhibits its own variations in different contexts. The “polluter pays” principle is referred to in a number of international instruments. It appears in very general terms as Principle 16 of the Rio Declaration:

“National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.”⁷⁷

(13) In treaty practice, the principle has provided a basis for constructing strict liability regimes. This is the case with the Lugano Convention which in the preamble notes “the desirability of providing for strict liability in this field taking into account the ‘Polluter Pays’ Principle”. The 2003 Kiev Protocol refers, in its preamble, to the “polluter pays principle” as

⁷⁷ In its report on the Implementation of Agenda 21, the United Nations notes:

“Progress has been made in incorporating the principles contained in the Rio Declaration ... - including ... the polluter pays principle ... - in a variety of international and national legal instruments. While some progress has been made in implementing United Nations Conference on Environment and Development commitments through a variety of international legal instruments, much remains to be done to embody the Rio principles more firmly in law and practice.”

“a general principle of international environmental law, accepted also by the parties to” the 1992 Protection and Use of Watercourses Convention and Lakes and the 1992 Industrial Accidents Convention.⁷⁸

(14) Some national judicial bodies have also given recognition to the principle. For example the Indian Supreme Court in the *Vellore Citizens Welfare Forum v. Union of India*⁷⁹ treating the principle as part of general international law directed the Government of India to establish an authority to deal with the situation of environmental degradation due to the activities of the leather tannery industry in the state of Tamil Nadu. In that case it was estimated that nearly 35,000 hectares of agricultural land in this tanneries belt became either partially or totally unfit for cultivation, and that the 170 types of chemicals used in the chrome tanning process have severely polluted the local drinking water. The Court fined each tannery Rs10,000 to be put into an Environmental Protection Fund. It also ordered the polluting tanneries to pay compensation and made the Collector/District Magistrates of the state of Tamil Nadu responsible to collect the compensation to be assessed and levies by the authority to be established as directed by the Court.⁸⁰

⁷⁸ It also finds reference, for example, in the 1990 International Convention on Oil Pollution Preparedness and Response (30 *ILM* (1990), 735); the 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention); (32 *ILM* (1993), 1069); the 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area; the 1992 Convention on the Protection of the Marine Environment of the Black Sea against Pollution (32 *ILM* (1993) 1110); the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes; the 1992 Convention on the Transboundary Effects of Industrial Accidents and the 1993 Lugano Convention, and the EU Directive 2004/35/CE on environmental liability.

⁷⁹ *All India Reports*, 1996, SC 2715.

⁸⁰ For a brief résumé of the Vellore Citizens Welfare Forum case, Donald Kaniaru, Lal Kurululasuriya and P.D. Abeyegunawardene (eds.), *Compendium of Summaries of Judicial Decisions in Environment Related Cases* (with special reference to countries in South Asia) (South Asia Co-operative Environment Program, 1997). The Supreme Court of India in the subsequent case of *Andhra Pradesh Pollution Control Board v. Prof. M.V. Naidu (retired) and others* further elaborated on the obligations of prevention by emphasizing on the principle of precaution (replacing the principle of assimilative capacity), the burden of proof placed on the

(15) In the arbitration between France and the Netherlands, concerning the application of the Convention of 3 December 1976 on the Protection of the Rhine against Pollution and the Additional Protocol of 25 September 1991 against Pollution from Chlorides (France/Netherlands), the Arbitral Tribunal however took a different view when requested to consider the “polluter pays” principle in its interpretation of the Convention, although it was not expressly referred to therein. The Tribunal concluded, in its award dated 12 March 2004, that, despite its importance in treaty law, the polluter pays principle is not a part of general international law. Therefore, it did not consider it pertinent to its interpretation of the Convention.⁸¹

(16) In addition, it has been noted that it “is doubtful that whether it (the ‘polluter pays’ principle) has achieved the status of generally applicable rule of customary international law, except perhaps in relation to States in the EC, the UNECE, and the OECD”.⁸²

respondent, and the principle of good governance, which includes the need to take necessary legislative, administrative and other actions (in this respect the Supreme Court relied on the First report on prevention, document A/CN.4/487/Add.1, paras. 103-104), *AIR 1999 SC 812*. See also *Andhra Pradesh Pollution Control Board II v. Prof. M.V. Naidu (retired)*, 2000 SOL No. 673. See also www.SupremeCourtonline.Com/cases.

⁸¹ Affaire concernant l’apurement des comptes entre le Royaume des Pays-Bas et la République Française en application du Protocole du 25 septembre 1991 Additionel à la Convention relative à la Protection du Rhin contre la pollution par les chlorures du 3 décembre 1976. The Tribunal stated, in the pertinent part in paragraphs 102-103:

“102. ... Le Tribunal note que les Pays-Bas, à l’appui de leur demande ont fait référence au principe du ‘polluer payeur’.

103. Le Tribunal observe que ce principe figure dans certains instruments internationaux, tant bilatéraux que multilatéraux, et se situe à des niveaux d’effectivité variables. Sans nier son importance en droit conventionnel, le Tribunal ne pense pas que ce principe fasse partie du droit international général.”

Arbitral Award of 12 March 2004, available at <http://www.pca-cpa.org>.

⁸² Philippe Sands, *Principles of International Environmental Law*, Second Edition (2003), 282. For illustration of the flexible way in which this principle is applied in the context of OECD and EC, 281-285.

(17) The principle also has its limitations. It has thus been noted:

“The extent to which civil liability makes the polluter pay for environmental damage depends on a variety of factors. If liability is based on negligence, not only does this have to be proved, but harm which is neither reasonably foreseeable nor reasonably avoidable will not be compensated and the victim or the taxpayer, not the polluter, will bear the loss. Strict liability is a better approximation of the ‘polluter pays’ principle, but not if limited in amount, as in internationally agreed schemes involving oil tankers or nuclear installations. Moreover, a narrow definition of damage may exclude environmental losses which cannot be easily quantified in monetary terms, such as wildlife, or which affect the quality of the environment without causing actual physical damage.”⁸³

(18) Moreover, it has been asserted that the principle cannot be treated as a “rigid rule of universal application, nor are the means used to implement it going to be the same in all cases”.⁸⁴ It is suggested that a “great deal of flexibility will be inevitable, taking full account of differences in the nature of the risk and the economic feasibility of full internalization of environmental costs in industries whose capacity to bear them will vary”.⁸⁵

(19) Principle 3 also emphasizes that damage to “environment” per se is actionable requiring prompt and adequate compensation. As noted in the commentary to principle 2 such compensation may not only include monetary compensation to the claimant but certainly allow reimbursement of reasonable measures of restoration and response measures.

⁸³ Birnie and Boyle, *International Law* ..., op. cit., pp. 93-94.

⁸⁴ Ibid., pp. 94-95. See also United Nations Secretariat Survey of Liability regimes relevant to the topic of International Liability for Injurious consequences arising out of acts not prohibited by international law (international liability in case of loss from transboundary activities), A/CN.4/543, chap. II.

⁸⁵ Ibid., p. 95. The authors noted that reference to “public interest” in Principle 16 of the Rio Declaration leaves “ample room”, for exceptions and as adopted at Rio the principle “is neither absolute nor obligatory”, p. 93. They also noted that in the case of the East European nuclear installations, the Western European governments, who represent a large group of potential victims, have funded the work needed to improve the safety standards, p. 94.

(20) In general terms, there has been a reluctance to accept liability for damage to environment per se, unless such damage is linked to persons or property as a result of damage to environment.⁸⁶ The situation is changing incrementally.⁸⁷ In the case of damage to natural

⁸⁶ For contrasting results see *Blue Circle Industries Plc. v. Ministry of Defence* [1998], 3 All ER, and *Merlin v. British Nuclear Fuels, Plc.* [1990], 3 All ER 711.

⁸⁷ For difficulties involved in claims concerning ecological damage and prospects, see the *Patmos* and the *Haven* cases. See generally, Andrea Bianchi, "Harm to the Environment in Italian Practice: The Interaction of International Law and Domestic Law, Peter Wetterstein, "Harm to the Environment ...", op. cit., p. 103 at 113-129. See also Maria Clara Maffei, "The Compensation for Ecological Damage in the 'Patmos' case", Francioni and Scovazzi, *International Responsibility ...*, op. cit., p. 381 at 383-390; and David Ong, "The Relationship between Environmental Damage and Pollution: Marine Oil Pollution Laws in Malaysia and Singapore", in Bowman and Boyle, *Environmental Damage ...*, op. cit., p. 191 at 201-204. See also Sands, "Principles ...", op. cit., pp. 918-922. See also the 1979 *Antonio Gramsci* incident and the 1987 *Antonio Gramsci* incident happened on 6 February 1987, see generally, Wu Chao, *Pollution from the Carriage of Oil by Sea: Liability and Compensation* (1996) pp. 365-366: The IOPC Fund resolution No. 3 of 1980, did not allow the court to assess compensation to be paid by the Fund "on the basis of an abstract quantification of damage calculated in accordance with theoretical models". In the *Amoco Cadiz*, the Northern District Court of Illinois ordered Amoco Oil Corporation to pay \$85.2 million in fines - \$45 million for the costs of the spill and \$39 million in interest. It denied compensation for non-economic damage. It thus dismissed claims concerning lost image and ecological damage. It noted: "It is true that the commune was unable for a time to provide clean beaches for the use of its citizens, and that it could not maintain the normal peace, quiet, and freedom from the dense traffic which would have been the normal condition of the commune absent the clean-up efforts", but concluded that the "loss of enjoyment claim by the communes is not a claim maintainable under French law". Maria Clara Maffei, "The Compensation for Ecological Damage in the 'Patmos' case", Francioni and Scovazzi, *International Responsibility ...*, op. cit., p. 381 at 393. Concerning lost image, the Court observed that the plaintiffs claim is compensable in measurable damage, to the extent that it can be demonstrated that this loss of image resulted in specific consequential harm to the commune by virtue of tourists and visitors who might otherwise have come staying away. Yet this is precisely the subject matter of the individual claims for damages by hotels, restaurants, camp grounds, and other businesses within the communes. As regards ecological damage, the Court dealt with problems of evaluating "the species killed in the intertidal zone by the oil spill" and observed that "this claimed damage is subject to the principle of *res nullius* and is not compensable for lack of standing of any person or entity to claim therefor", *ibid.* at 394. See also in the *Matter of the People of Enewetak* 39 ILM (2000), p. 1214 at 1219, before the Marshall Islands Nuclear Claims Tribunal, the Tribunal had an opportunity to consider whether restoration was an appropriate remedy for loss incurred by the people of the Enewetak atoll arising from nuclear tests conducted by the United States. It awarded clean-up and rehabilitation costs as follows: \$22.5 million for soil removal; \$15.5 million for potassium treatment; \$31.5 million for soil disposal (causeway); \$10 million for clean-up of plutonium; \$4.51 million for surveys; and \$17.7 million for soil rehabilitation and revegetation.

resources or environment, there is a right of compensation or reimbursement for costs incurred by way of reasonable preventive, restoration or reinstatement measures. This is further limited in the case of some conventions to measures *actually* undertaken, excluding loss of profit from the impairment of environment.⁸⁸

(21) The aim is not to restore or return the environment to its original state but to enable it to maintain its permanent functions. In the process it is not expected to incur expenditures disproportionate to the results desired and such costs should be cost effective. Subject to these considerations, if restoration or reinstatement of environment is not possible, it is reasonable to introduce the equivalent of those components into the environment.⁸⁹

(22) The State or any other public agency, which steps in to undertake measures of restoration or response measures may recover the costs later for such operations from the operator. For example, such is the case under the US Comprehensive Environmental Response, Compensation and Liability Act, 1980 (CERCLA or Superfund). The Statute establishes the Superfund with tax dollars to be replenished by the costs recovered from liable parties, to pay for clean-ups if necessary. The United States Environmental Agency operates the Superfund and has the broad powers to investigate contamination, select appropriate remedial actions, and either order liable parties to perform the clean-up or do the work itself and recover its costs.⁹⁰

⁸⁸ See generally commentary to principle 2.

⁸⁹ For analysis of the definition of environment and the compensable elements of damage to environment see Barboza, Eleventh Report on International liability, document A/CN.4/468, pp. 1-17, at para. 28, p. 12. For an interesting account of the problem of damage, definition of harm, damage, adverse effects and damage valuation, see M.A. Fitzmaurice, International Protection of the Environment, *Recueil des Cours*, vol. 293 (2001), pp. 225-233.

⁹⁰ For an analysis of CERCLA, see Brighton and Askman, "The Role of the Government Trustees in Recovering Compensation for Injury to Natural Resources", in Peter Wetterstein (ed.), *Harm to the Environment ...*, op. cit., pp. 177-206, 183-184.

Principle 4

Prompt and adequate compensation

1. Each State should take necessary measures to ensure that prompt and adequate compensation is available for victims of transboundary damage caused by hazardous activities located within its territory or otherwise under its jurisdiction or control.
2. These measures should include the imposition of liability on the operator or, where appropriate, other person or entity. Such liability should not require proof of fault. Any conditions, limitations or exceptions to such liability should be consistent with draft principle 3.
3. These measures should also include the requirement on the operator or, where appropriate, other person or entity, to establish and maintain financial security such as insurance, bonds or other financial guarantees to cover claims of compensation.
4. In appropriate cases, these measures should include the requirement for the establishment of industry-wide funds at the national level.
5. In the event that the measures under the preceding paragraphs are insufficient to provide adequate compensation, the State should also ensure that additional financial resources are allocated.

Commentary

(1) This principle reflects the important role of the State of origin in setting up a workable system for compliance with the requirement of “prompt and adequate compensation”. The reference to “Each State” in the present context is to the State of origin. The principle contains four interrelated elements: first, the State should establish a liability regime; second, any such liability regime should not require proof of fault; third, any conditions or limitations that may be placed on such liability should not erode the requirement of prompt and adequate compensation; and fourth, various forms of securities, insurance and industry funding should be created to provide sufficient financial guarantees for compensation. The five paragraphs of principle 4 express these four elements.

(2) Paragraph 1 addresses the first requirement. It requires that the State of origin take necessary measures to ensure that prompt and adequate compensation is available for victims of transboundary damage caused by hazardous activities that take place within its territory or otherwise under its jurisdiction. The latter part of the paragraph reads “its territory or otherwise

under its jurisdiction or control” and the terminology is the same as used in paragraph 1 (a) of article 6 of the draft articles on prevention. It is, of course, assumed that similar compensation would also be provided for damage within the State of origin from such incident.

(3) Paragraph 2 addresses the second and third requirements. It provides that such a liability regime should not require proof of fault and any conditions or limitations to such liability should be consistent with draft principle 3, which highlights the objective of “prompt and adequate compensation”. The first sentence highlights the polluter-pay principle and provides that liability should be imposed on operator or, where appropriate, other person or entity. The second sentence requires that such liability should not require proof of fault. The third sentence recognizes that it is customary for States and international conventions to subject liability to certain conditions or limitations. However, to ensure that such conditions and exceptions do not fundamentally alter the nature of the obligation to provide for prompt and adequate compensation, the point has been emphasized that any such conditions or exceptions should be consistent with the requirement of prompt and adequate compensation in draft principle 3.

(4) Paragraph 3 provides that the measures provided by the State of origin should include the requirement that the operator or, where appropriate other person or entity establish and maintain financial security such as insurance, bonds or other financial guarantees to cover claims of compensation.

(5) Paragraph 4 deals with industry funding at the national level. The words “these measures” reflect the point that the action a State is required to take would involve a collection of various measures.

(6) Paragraph 5 provides that in the event the measures mentioned in the preceding paragraphs are insufficient to provide adequate compensation, the State of origin should also ensure that additional financial resources are allocated. The last 3 paragraphs leave the State of origin free as the manner of ensuring financial security for prompt and adequate compensation. The principle also requires vigilance on the part of the State of origin to continuously review its domestic law to ensure that its regulations are kept up to date with the developments concerning technology and industry practices at home and elsewhere. While paragraph 5 does not require

the State of origin to set up government funds to guarantee prompt and adequate compensation, but it provides that the State of origin should make sure that such additional financial resources are available.

(7) The emphasis in paragraph 1 is on all “necessary measures” and each State is given sufficient flexibility to achieve the objective, that is, of ensuring prompt and adequate compensation. The requirement is highlighted without prejudice to any ex gratia payments to be made or contingency and relief measures, States or other responsible entities may otherwise consider extending to the victims.

(8) In addition, for the purpose of the present principles, as noted above, it is assumed that the State of origin has performed fully all the obligations that are incumbent upon it under draft articles on prevention, particularly draft article 3. Without prejudice to other claims that may be made under international law, the responsibility of the State for damage in the context of present principles therefore is not contemplated.

(9) In this connection, paragraph 1 focuses on the requirement that the State should ensure payment of adequate and prompt compensation. The State itself is not obliged to pay compensation. The principle, in its present form, responds to and reflects a growing demand and consensus in the international community: as part of arrangements for permitting hazardous activities within its jurisdiction and control, it is widely expected that States would make sure that adequate mechanisms are also available to respond to claims for compensation in case of any damage.

(10) As noted in the commentary to draft principle 3, the need to develop liability regimes in an international context has been recognized and finds expression, for example, in Principle 22 of the Stockholm Declaration of 1972 and Principle 13 of the Rio Declaration of 1992.⁹¹ While

⁹¹ See also the 2000 *Malmö* Declaration and the 2001 Montevideo Programme III approved and adopted by decision 21/23 of the 21st session of the UNEP Governing Council and the Plan of Implementation of the World Summit on Sustainable Development, *A/CONF.199/20, resolution 2 of 2 September 2002, annex*.

these principles are not intended to give rise to legally binding obligations, they demonstrate aspirations and preferences of the international community.⁹²

(11) The underlying assumptions of the present principle could also be traced back to the *Trail Smelter* Arbitration. Even though in that case Canada took upon itself the obligation to pay the necessary compensation on behalf of the private company, the basic principle established in that case entailed a duty of a State to ensure payment of prompt and adequate compensation for any transboundary damage.

(12) Paragraph 2 spells out the first important measure that ought to be taken by each State, namely the imposition of liability on the operator or, where appropriate, other person or entity. The commentary to principle 1 has already elaborated on the meaning of operator. It is however worth stressing that liability in case of significant damage is channelled⁹³ to the operator of the installation. There are however other possibilities that exist. In the case of ships, it is channelled to the owner, not the operator. This means that charterers - who may be the actual operators - are not liable under the International Convention on Civil Liability for Oil Pollution Damage (CLC) 1992. In other cases, liability is channelled through more than one entity. Under the Basel Protocol, waste generators, exporters, importers and disposers are all potentially liable at different stages in the transit of waste. The real underlying principle is not that “operators” are always liable, but that the party with the most effective control of the risk at the time of the accident or the most effective ability to provide compensation is made primarily liable.

⁹² Birnie and Boyle, *International Law* ...op. cit., note at p. 105 that “[t]hese principles all reflect more recent developments in international law and State practice; their present status as principles of general international law is more questionable; but the evidence of consensus support provided by the Rio Declaration is an important indication of their emerging legal significance”.

⁹³ According to Goldie, the nuclear liability conventions initiated the new trend of channelling liability back to operator “no matter how long the chain of causation, nor how novel the intervening factors (other than a very limited number of exculpatory ones)”. See L.F.E. Goldie, “Concepts of Strict and Absolute Liability and the Ranking of Liability in terms of Relative Exposure to Risk”, *XVI Netherlands Yearbook of International Law* 174-248 (1985), p. 196. On this point see also Goldie, “Liability for Damage and the Progressive Development of International Law”, *14 ICLQ* (1965), p. 1189, pp. 1215-8.

(13) Channelling of liability to the operator or a single person or entity is seen as a reflection of the “polluter pays” principle. However it has, as explained in the commentary to principle 3 above, its own limitations and needs to be employed with flexibility. In spite of its impact on the current trend of States to progressively internalize the costs of polluting industries, the principle has not yet been seen as part of general international law.

(14) Paragraph 2 also provides that liability should not be based on proof of fault. Hazardous and ultra-hazardous activities, the subject of the present principles, involve complex operations and carry with them certain inherent risks of causing significant harm. In such matters, it is widely recognized that proof of fault or negligence is not required to be shown and that the person should be held liable even if all the necessary care expected of a prudent person has been discharged. Strict liability is recognized in many jurisdictions, when assigning liability for inherently dangerous or hazardous activities.⁹⁴ In any case, the present proposition may be considered as a measure of progressive development of international law. In the case of activities which are not dangerous but still carry the risk of causing significant harm, there perhaps is a better case for liability to be linked to fault or negligence. Strict liability has been adopted as the basis of liability in several instruments; and among the recently negotiated instruments it is provided for in article 4 of the Kiev Protocol, article 4 of the Basel Protocol; and article 8 of the Lugano Convention.

(15) There are several reasons for the adoption of strict liability. It relieves plaintiffs of the burden of proof for risk-bearing activities involving relatively complex technical industrial processes and installations. It would be unjust and inappropriate to make the plaintiff to shoulder a heavy burden of proof of fault or negligence in respect of highly complex technological activities whose risks and operation the concerned industry closely guards as a secret.

(16) In addition, since profits associated with the risky activity provide a motivation for industry in undertaking such activity, strict liability regimes are generally assumed to provide incentives for better management of the risk involved. This is an assumption, which may not

⁹⁴ See United Nations Secretariat, *Survey ...*, op. cit., chap. I.

always hold up. As these activities have been accepted only because of their social utility and indispensability for economic growth, States may consider at the opportune time reviewing their indispensability by exploring more environmentally sound alternatives which are also at the same time less hazardous.

(17) Equally common in cases of strict liability is the concept of limited liability. Limited liability has several policy objectives. It is justified as a matter of convenience to encourage the operator to continue to be engaged in such a hazardous but socially and economically beneficial activity. Strict but limited liability is also aimed at securing reasonable insurance cover for the activity. Further, if liability has to be strict, that is if liability has to be established without a strict burden of proof for the claimants, limited liability may be regarded as a reasonable *quid pro quo*. Although none of the propositions are self-evident truths they are widely regarded as relevant.⁹⁵

(18) It is arguable that a scheme of limited liability is unsatisfactory, as it is not capable of providing sufficient incentive to the operator to take stricter measures of prevention. If the limits are set too low it could even become a licence to pollute or cause injury to others and externalize the real costs of the operator. Secondly, it may not be able to meet all the legitimate demands and claims of innocent victims for reparation in case of injury. For this reason, it is important to set limits of financial liability at a sufficiently high level, keeping in view the magnitude of the risk of the activity and the reasonable possibility for insurance to cover a significant portion of the risk involved.

(19) One advantage of a strict but limited liability from the perspective of the victim is that the person concerned need not prove negligence and would also know precisely whom to sue.

⁹⁵ See Robin R. Churchill, "Facilitating (Transnational) Civil Liability Litigation for Environmental Damage by Means of Treaties: Progress, Problems, and Prospects", *12 Yearbook International Environmental Law* (2001), pp. 3-41, at pp. 35-37.

(20) In cases where harm is caused by more than one activity and could not reasonably be traced to any one of them or cannot be separated with a sufficient degree of certainty, jurisdictions have tended to make provision for joint and several liability.⁹⁶ Existing international instruments also provide for that kind of liability.⁹⁷

(21) Limits are well known in the case of regimes governing oil pollution at sea and nuclear incidents. For example, under the International Convention on Civil Liability for Oil Pollution Damage (CLC) 1992, the shipowner's maximum limit of liability is 59.7 million Special Drawing Rights; thereafter the International Oil Pollution Compensation Fund is liable to compensate for further damage up to a total of 135 million SDRs (including the

⁹⁶ On joint and several liability, Lucas Bergkamp, *Liability and Environment: Private and Public Law Aspects of Civil Liability for Environmental Harm in an International Context*, 2001, Kluwer, 298-306.

⁹⁷ For examples of treaty practice, see for example article IV of the 1969 International Convention on Civil Liability for Pollution Damage; article IV of the 1992 International Convention on Civil Liability for Pollution Damage; article 8 of the 1996 International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea; article 5 of the International Convention on Civil Liability for Bunker Oil Pollution Damage; article 4 of the Basel Protocol; article 4 of the Kiev Protocol; article 11 of the Lugano Convention. See also article VII of the 1962 Convention on the Liability of Operators of Nuclear Ships; article II of the 1997 Protocol to the 1963 Vienna Convention on Civil Liability for Nuclear Damage; article II of the 1963 Vienna Convention on Civil Liability for Nuclear Damage; article 3 of the 1960 Convention on Third Party Liability in the Field of Nuclear Energy; article 3 of the 2004 Protocol to amend the 1960 Convention on Third Party Liability in the field of Nuclear Energy.

amounts received from the owner), or in the case damage resulting from natural phenomena, a 200 million SDRs.⁹⁸ Similarly, the 1997 Vienna Convention on Civil Liability for Nuclear Damage also prescribed appropriate limits for the operator's liability.⁹⁹

(22) Article 9 of the Kiev Protocol and article 12 of the Basel Protocol provide for strict but limited liability. In contrast, article 6 (1) and article 7 (1) of the Lugano Convention provide for strict liability without any provision for limiting the liability. Where limits are imposed on financial liability of operator, generally such limits do not affect any interest or costs awarded by the competent court. Moreover, limits of liability are subject to review on a regular basis.

(23) Most liability regimes exclude limited liability in case of fault. The operator is made liable for the damage caused or contributed to by his or her wrongful intentional, reckless or negligent acts or omissions. Specific provisions to this extent are available in article 5 of the Basel Protocol and article 5 of the Kiev Protocol. In the case of operations involving highly complicated chemical or industrial processes or technology, fault liability could pose a serious burden of proof for the victims. Their rights could nevertheless be better safeguarded in several ways. For example, the burden of proof could be reversed requiring the operator to prove that no negligence or intentional wrongful conduct was involved. Liberal inferences may be drawn from the inherently dangerous activity. Statutory obligations could be imposed upon the operator to give access to the victims or the public to the information concerning the operations.

⁹⁸ Article V (1) of the 1992 Protocol and article 4 of the Fund Convention. Following the sinking of the Erika off the French coast in December 1999, the maximum limit was raised to 89.77 million SDRs, effective 1 November 2003. Under 2000 amendments to the 1992 Fund Protocol to enter into force in November 2003, the amounts have been raised from 135 million SDRs to 203 million SDRs. If three States contributing to the Fund receive more than 600 million tons of oil per annum, the maximum amount is raised to 300,740,000 SDRs, from 200 million SDRs. See Sands, *Principles ...*, op. cit., pp. 915, 917.

⁹⁹ For the text, 36 *ILM* (1997) 1473. The installation State is required to assure that the operator is liable for any one incident for not less than 300 million SDRs or for a transition period of 10 years, a transitional amount of 150 million SDRs is to be assured, in addition by the installation State itself. The 1997 Convention on Supplementary Compensation provides an additional sum, which may exceed \$1 billion. See Articles III and IV. For the text, 33 *ILM* (1994) 1518.

(24) Strict liability may alleviate the burden victims may otherwise have in proving fault of the operator but it does not eliminate the difficulties involved in establishing the necessary causal connection of the damage to the source of the activity. The principle of causation is linked to questions of foreseeability and proximity or direct loss. It is noted that a negligence claim could be brought to recover compensation for injury if the plaintiff establishes that (a) the defendant owed a duty to the plaintiff to conform to a specified standard of care; (b) the defendant breached that duty; (c) the defendant's breach of duty proximately caused the injury to the plaintiff; and (d) the plaintiff suffered damage.

(25) Courts in different countries have applied the principle and notions of proximate cause, adequate causation, foreseeability, and remoteness of the damage. This is a highly discretionary and unpredictable branch of law. Different countries have applied them with different results. It may be mentioned that the test of proximity seems to have been gradually eased in modern tort law. Developments have moved from strict *conditio sine qua non* theory over the foreseeability ("adequacy") test to a less stringent causation test requiring only the "reasonable imputation" of damage. Further, the test foreseeability could become less and less important with the progress made in the fields of medicine, biology, biochemistry, statistics and other relevant fields. Given these reasons, it is suggested that it would seem difficult to include such tests in a more general analytical model on loss allocation.¹⁰⁰ All these matters however require to be addressed by each State in constructing its liability regime.

(26) Even if a causal link is established, there may be difficult questions regarding claims eligible for compensation, as for example, economic loss, pain and suffering, permanent disability, loss of amenities or of consortium, and the evaluation of the injury. Similarly, a property damage, which could be repaired or replaced, could be compensated on the basis of the value of the repair or replacement. But it is difficult to compensate damage caused to objects of historical or cultural value, except on the basis of arbitrary evaluation made on a case by case basis. Further, the looser and less concrete the link with the property which has been damaged, the less certain that the right to compensation exists. Question has also arisen whether a pure economic loss involving a loss of a right of an individual to enjoy a public facility, but not

¹⁰⁰ See Peter Wetterstein, "A Proprietary or Possessory Interest ...", pp. 29-53, at p. 40.

involving a direct personal loss or injury to a proprietary interest, qualify for compensation.¹⁰¹ However, pure economic losses such as the losses suffered by a hotel are payable for example in Sweden and in Finland but not in some other jurisdictions.¹⁰²

(27) Paragraph 2 also addresses the question of conditions of exoneration. It is usual for liability regimes and domestic law providing for strict liability to specify a limited set of fairly uniform exceptions to the liability of the operator. A typical illustration of the exceptions to liability can be found in articles 8 and 9 of the Lugano Convention, article 3 of the Basel Convention or article 4 of the Kiev Protocol.¹⁰³ Liability is excepted if, despite taking

¹⁰¹ Ibid., p. 32.

¹⁰² Jan M. Van Dunne, “Liability for Pure Economic Loss: Rule or Exception? A Comparatist’s View of the Civil Law - Common Law split on compensation of Non-Physical Damage in Tort Law”, *Revue européenne de droit privé* 1999, pp. 397-428. See also *Weller and Company v. Foot and Mouth Disease Research Institute*, 1 QB, 1966, p. 569.

¹⁰³ Under paragraphs 2 and 3 of article III of the 1992 International Convention on Civil Liability for Oil Pollution Damage *war, hostilities, civil war, insurrection or natural phenomena of an exceptional, inevitable and irresistible character* are elements providing exoneration from liability for the owner, independently of negligence on the part of the claimant. See also article III of the 1969 International Convention on Civil Liability for Oil Pollution Damage; article 3 of the 2001 International Convention on Civil Liability for Bunker Oil Pollution Damage; article 7 of the 1996 International Convention on Liability and Compensation for Damage in connection with the Carriage of Hazardous and Noxious Substances by Sea; article 3 of the 1977 Convention on Civil Liability for Oil Pollution Damage resulting from Exploration for and Exploitation of Seabed Mineral Resources provides similar language in respect of the *operator of an installation*; article 3 of the 1989 Convention on Civil Liability for Damage caused During Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels.

Exemptions are also referred to in article IV (3) of the 1997 Protocol to amend the 1963 Vienna Convention on Civil Liability for Nuclear Damage provides: No liability under this Convention shall attach to an operator if he proves that the nuclear damage is directly due to an act of armed conflict, civil war, insurrection. See also article IV (3) of the 1963 Vienna Convention on Civil Liability for Nuclear Damage; article 9 of 2004 Protocol to amend the 1960 Convention on Third Party Liability in the field of Nuclear Energy; article 3 (5) of the annex to the 1997 Convention on Supplementary Compensation for Nuclear Damage Convention; article 4 (1) the EU Directive 2004/35 on environmental liability. It also does not apply to activities whose main purpose is to serve national defence or international security. In accordance with article 4 (6), it also does not apply to activities whose sole purpose is to protect from natural disasters. For examples at domestic law, see United Nations Secretariat *Survey*, op. cit., chap. III.

all appropriate measures, the damage was the result of (a) an act of armed conflict, hostilities, civil war or insurrection; or (b) the result of a natural phenomenon of exceptional, inevitable, unforeseeable and irresistible character; or (c) wholly the result of compliance with a compulsory measure of a public authority in the State of injury; or (d) wholly the result of the wrongful intentional conduct of a third party.

(28) If however, the person who has suffered damage has by his or her own fault caused the damage or contributed to it, the compensation may be denied or reduced having regard to all the circumstances.

(29) If liability of the operator is excepted for any one of the above reasons, it does not however mean that the victim would be left alone to bear the loss. It is customary for States to make ex gratia payments, in addition to providing relief and rehabilitation assistance. Further, compensation would also be available from supplementary funding mechanisms. In the case of exemption of operator liability because of the exception concerning compliance with the public policy and regulations of the government, there is also the possibility to lay the claims of compensation against the State concerned.

(30) Paragraph 3 identifies another important measure that the State should take. It should oblige the operator (or where appropriate another person or entity) to have sufficient funds at its disposal not only to manage the hazardous activity safely and with all the care expected of a prudent person under the circumstances but also to be able to meet claims of compensation, in the event of an accident or incident. For this purpose, the operator may be required to possess necessary financial guarantees.

(31) The State concerned may establish minimum limits for financial securities for such purpose, taking into consideration the availability of capital resources through banks or other financial agencies. Even insurance schemes may require certain minimum financial solvency from the operator to extend their cover. Under most of the liability schemes, the operator is

obliged to obtain insurance and such other suitable financial securities.¹⁰⁴ This may be particularly necessary to take advantage of the limited financial liability scheme, where it is available. However, in view of the diversity of legal systems and differences in economic conditions, States may be given some flexibility in requiring and arranging suitable financial and security guarantees.¹⁰⁵ An effective insurance system may also require wide participation by potentially interested States.¹⁰⁶

(32) The importance of such mechanisms cannot be overemphasized. It has been noted that: “financial assurance is beneficial for all stakeholders: for public authorities and the public in general, it is one of the most effective, if not the only, way of ensuring that restoration actually

¹⁰⁴ For treaty practice, see for example article III of the 1962 Convention on the Liability of Operators of Nuclear Ships; article VII of the 1997 Protocol to the 1963 Vienna Convention on Civil Liability for Nuclear Damage; article VII of the 1963 Vienna Convention on Civil Liability for Nuclear Damage; article 10 of the 1960 Convention on Third Party Liability in the Field of Nuclear Energy; article 10 of the 2004 Protocol to amend the 1960 Convention on Third Party Liability in the field of Nuclear Energy. See also article V of the 1992 International Convention on Civil Liability for Pollution Damage; article 12 of the 1996 International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea; article 7 of the International Convention on Civil Liability for Bunker Oil Pollution Damage; article 14 of the Basel Protocol; article 11 of the Kiev Protocol; article 12 of the Lugano Convention.

¹⁰⁵ See for example the statement by China, in *Official Records of the General Assembly, Fifty-eighth session, Summary Records, Sixth Committee*, A/C.6/58/SR.19, para. 43.

¹⁰⁶ See for example the statement by Italy, *ibid.*, A/C.6/58/SR.17, para. 28.

takes place in line with the polluter pays principle; for industry operators, it provides a way of spreading risks and managing uncertainties; for the insurance industry, it is a sizeable market". Insurance coverage may also be available for clean-up costs.¹⁰⁷

(33) The experience gained in insurance markets of the United States can be quickly transferred to other markets as the insurance industry is a growing global market. Article 14 of the EU Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage, for example, provides that member States should take measures to encourage the development of security instruments and markets by the appropriate security economic and financial operators, including financial mechanisms in case of insolvency, with the aim of enabling operators to use financial guarantees to cover their responsibilities under the Directive.

(34) One of the consequences of the availability of insurance and financial security is that a claim for compensation may be allowed as one option under domestic law, directly against any person providing financial security cover. However, such a person may be given the right to require the operator to be joined in the proceedings. Such a person is also entitled to invoke the defences that the operator would otherwise be entitled to under the law. Article 11 (3) of the Kiev Protocol and article 14 (4) of the Basel Protocol provide for such possibilities. However, both Protocols allow States to make a declaration if they wish to not to allow for such direct action.

(35) Paragraphs 4 and 5 refer to the other equally important measures that the State should focus upon. This is about establishing supplementary funds at the national level. This, of course, does not preclude the assumption of these responsibilities at subordinate level of government in the case of a State with a federal system. All available schemes of allocation of loss envisage some sort of supplementary funding to meet claims of compensation in case the funds at the disposal of the operator are not adequate enough to provide compensation to victims. Most liability regimes concerning dangerous activities provide for additional funding sources

¹⁰⁷ See Proposal for a Directive of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage, Brussels, 23 January 2002, COM (2002) 17 final, pp. 7-9.

to meet the claims of damage and particularly to meet the costs of response and restoration measures that are essential to contain the damage and to restore value to affected natural resources and public amenities.

(36) The additional sources of funding could be created out of different accounts. The first one could be out of public funds, as part of national budget. In other words, the State could take a share in the allocation of loss created by the damage. The second account is a common pool of fund created by contributions either from operators of the same category of dangerous activities or from entities for whose direct benefit the dangerous or hazardous activity is carried out. It is not often explicitly stated, which pool of funds - the one created by operators or by the beneficiaries or by the State - would, on a priority basis, provide the relief after exhausting the liability limits of the operator.
