

CORE RULES OF INTERNATIONAL ENVIRONMENTAL LAW

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I. INTRODUCTION

International environmental law has been marked by two contradictory trends. On the one hand, states and the international community have become aware of the urgent need to protect the environment; however, at the same time, they have been reluctant to enter into international agreements laying down binding obligations, their specific content, and extent.

Despite this tension, and in light of the emerging environmental concerns, any kind of agreements need to be concluded, at least to sooth civil society's pressure. Alongside this process, states started adopting certain types of conduct under the belief that such conduct was necessary in light of general principles. Thereby, "customary international law, general

principles of law, and normative instruments have advanced a kind of a common law of the environment.”¹

International practice shows that states have now accepted a general principle of responsibility for environmental harm, but there are many uncertainties as to the exact content. Moreover, in the literature many references will be found about customary obligations and different regimes of responsibility, the combination of which adds more confusion to the subject. The purpose of this article, then, is to show that when trying to assess the current status of international environmental law, due regard shall be paid to the specific content and extent of the obligation, for they will determine the regime of responsibility to be applied.

This article will further argue that the basic and foremost obligation of states *vis a vis* other states in, the realm of international environmental law, is not to cause damage to the territory of other states as such obligation has attained customary status. Furthermore, the nature of this obligation is to guarantee a result, and therefore, the only regime compatible with its terms is that of strict responsibility. Finally, this article will contend that strict responsibility is the only system that may have a sound bearing on actual and future conducts of states towards respect of the environment.

II. DIFFERENT REGIMES OF RESPONSIBILITY: THEIR APPLICATION IN LIGHT OF THE SPECIFIC NATURE

The regime of international responsibility in general, and in the realm of international environmental law in particular, is based upon three different grounds.² The first one is responsibility based on fault. For that purpose, to incur international responsibility a state must have failed to exercise due diligence in the fulfillment of an international obligation.³ The

1. ALEXANDRE KISS & DINAH SHELTON, INTERNATIONAL ENVIRONMENTAL LAW 99 (2004).

2. See generally IAN BROWNLIE, SYSTEM OF THE LAW OF NATIONS: STATE RESPONSIBILITY (Oxford, part I) (1983).

3. In support of this proposition see M. Shaw, who opines that in the way that current international law stands at present, responsibility for fault is the only applicable regime, for strict liability has not been accepted as a general principle by international law. Leading cases are inconclusive and treaty practice is variable: MALCOLM SHAW, INTERNATIONAL LAW 853–54 (6th ed. 2008); Günther Handl, *State Liability for Accidental Transnational Environmental Damage by Private Persons*, 74 AM. J. INT'L L. 525, 535 (1980) [hereinafter *State Liability*], albeit he endorses the application of strict liability for abnormally dangerous activities of transnational concern. *State Liability*, *supra* note 3, at 550. However, in a prior work, Professor Handl seemed persuaded of the existence of strict liability for any field of activity: “material damage . . . would seem to suffice in itself as a basis for a successful direct international claim against the polluting state.” Günther Handl, *Territorial Sovereignty and the Problem of Transnational Pollution*, 69 AM. J. INT'L L. 50, 75–76 (1975) [hereinafter *Territorial Sovereignty*]. The only requisite would be the existence of material

second one is strict responsibility. The mere breach of an obligation, regardless of the state's efforts towards fulfillment of the obligation, entails its responsibility.⁴ A third scheme is that pertaining to liability without a wrongful act. In this case, liability arises from lawful activities, as long as there is a causal link between them and the damage caused. This scheme relies on the idea that the application of modern technology to industrial activities creates a special situation, not adequately addressed by the traditional scheme of state responsibility. Some authors support this rationale with respect only to ultra hazardous activities,⁵ whilst others extend it to any activity that may cause damage to the environment.⁶

However, it has to be noted that the type of regime of responsibility cannot be consecrated in the abstract, irrespective of the nature and extent of the obligation concerned. Otherwise, the very nature of the obligation would be changed, as this article will exemplify in the following paragraphs.

damage, whilst moral damage would only be a basis for action if there was a specific governing rule of international law. *Territorial Sovereignty*, *supra* note 3, at 59.

4. Authors that adhere to this concept argue that states are under an absolute obligation to prevent pollution and are thus liable for its effects irrespective of fault. In support of this position, see L. F. E. Goldie, *A General View of International Environmental Law—A Survey of Capabilities, Trends and Limits*, 1973 Hague Colloque pp. 26, 73–85 [hereinafter *General View*]; PATRICIA BIRNIE & ALAN BOYLE, *INTERNATIONAL LAW & THE ENVIRONMENT* 182 (2d ed. 2002); Professor Sands appears to support this rule in respect of ultra hazardous activities, although his position for others activities seems until undefined: “for general industrial and other activities which are not ultra-hazardous or dangerous, it is less easy to argue for a standard of care based upon strict or absolute liability.” PHILIPPE SANDS, *PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW* 882 (2d ed. 2003).

5. W. Jenks, *Liability for Ultra-Hazardous Activities in International Law*, 117(1) R.C.A.D.I. 99–200 (1966); John M. Kelson, *State Responsibility and the Abnormally Dangerous Activity*, 13 HARV. INT'L L.J. 197, 197 (1972); *State Liability*, *supra* note 3, at 550, but only in respect of abnormally dangerous activities of transnational concern.

6. Jan Schneider, *State Responsibility for Environmental Protection and Preservation: Ecological Unities and Fragmented World Public Order*, 2 Yale Studies in World Public Order 32, 33 (1975–1976); Allen L. Springer, *THE INTERNATIONAL LAW OF POLLUTION* 133–34 (Westport Quorum Books 1983) L. F. E. Goldie, *International Principles of Responsibility for Pollution*, 9 COLUM. J. TRANSNAT'L L. 283, 306 (1970) [hereinafter *International Principles*]; this author extends the standard of strict liability for other conducts than hazardous activities, however for him this standard is not applicable to all kind of activities:

[E]ven though this writer welcomes the advent of strict and absolute liability . . . he does not look forward to the elimination of the less stringent doctrines The strictness of the liability to be imposed should depend upon the type of activity causing the harm, the type of activity harmed or through which an individual is harmed, and the juxtaposition of the operator and the injured.

International Principles, *supra* note 6, at 317. He then foresees different scenarios to explain the different types of responsibility to be applied. See *International Principles*, *supra* note 6, at 317–18.

Let's assume that the main obligation, in international environmental law, was restricted only to prevent damage to the environment. By definition, such obligation would impose upon states a duty to appropriately assess whether an activity may cause harm and if that were the case, to adopt measures to minimize the risk. However, under this type of obligation a state would not be responsible if, having taken all those appropriate measures, any damage occurred. This type of obligation clearly matches with the regime of responsibility for fault.

On the contrary, if the regime of strict liability were applied to such obligations, states would be obliged to absolutely prevent all kinds of damages. Should damage occur, it would imply that the state failed to some extent to prevent it. Damages would be totally irrelevant whether the state had taken some reasonable measures, or all necessary measures to avoid such harm. The state simply would have failed to prevent damages, and therefore, would be responsible. This regime would turn the state into an absolute guarantor of the environment, being tantamount to alleging that the state is under an obligation not to cause damage to other states' environment. This scheme would denaturalize the content and extent of the obligation to prevent environmental harm.

What would the scenario be provide that the concerned obligation was not to cause damage to other states' environment? If a due diligence standard was applied to that obligation, then once the damage occurred, the state's conduct should be analyzed first. If the state had been diligent in adopting measures to avoid harm, then, it would not be responsible for such damage. This finding leads to undermining the extent of the obligation, for it no longer would be one of result, but rather an obligation to prevent damage. It is beyond doubt, that this regime is incompatible with the obligation of respecting other states' environment. Consequently, the appropriate standard for the obligation not to cause damage would be that of strict responsibility.

This conclusion is further endorsed by analyzing this obligation in light of the third regime: liability without wrongful act. Under the obligation not to cause damage to other states' environment, the regime of strict responsibility would imply that the mere verification of damage would trigger the responsibility of the state. The same result would be obtained under the liability regime. The only difference would be that in the first case, the verification of damage would imply the existence of an internationally wrongful act of a state; whereas, the latter discards this concept.⁷ As professor Nanda could not have stated more clearly, the limits

7. It is argued that the regime of strict responsibility should be preferred owing to the stigma that a wrongful act inflicts on a State, which has a deterrent effect. See Daniel Magraw, *Transboundary*

between responsibility and liability are blurred since transboundary harm results in a breach of the states' *sic utere tuo* obligation."⁸

The duplication of the results demonstrates the redundancy of both regimes. Therefore, the obligation not to cause damage to other states' environment coupled with the application of the strict responsibility regime, the regime of international liability for injurious consequences arising out of acts not prohibited by international law, misses its *raison d'être*.

This article will suggest a new solution because the regime of international liability has been the object of many criticisms, and particularly accused of being vitiated by two basic errors. The first criticism is that of confusing the lawfulness of certain activities with the lawfulness of the state conduct. In this vein, those are two different concepts, and indeed, it is possible that, even a lawful activity is accompanied by an international wrongful act of the state, for not preventing certain damaging effects or not taking appropriate control measures. The second error is equating the distinction between responsibility for a wrongful act and liability for lawful activities with the distinction between responsibility for fault and responsibility without fault (strict responsibility). In this connection, it must be clarified that responsibility without fault is a different concept from liability for a lawful activity; while the former requires the breach of an obligation on the state, the latter gives rise to compensation (responsibility) for the mere verification of damage.⁹

Therefore, as we have already demonstrated, and as Professor Pisillo-Mazzeschi has previously discerned, the problem of environmental protection must not be addressed from the framework of state responsibility, but from the scope of the primary rules that determine the expected conduct from the state.¹⁰ What is left to be analyzed is the specific content of the substantive rule at stake.

Harm: The International Law Commission's Study of International Liability, 80 AM. J. INT'L L. 305, 318 (1986).

8. VED P. NANDA, *INTERNATIONAL ENVIRONMENTAL LAW AND POLICY* 156 (1995).

9. For more details about the critics, see Riccardo Pisillo-Mazzeschi, *Forms of International Responsibility for Environmental Harm*, in *INTERNATIONAL RESPONSIBILITY FOR ENVIRONMENTAL HARM*, 15, 26-27 (Francesco Francioni & Tullio Scovazzi eds., Graham & Trotman 1991); BROWNLEE, *supra* note 2, at 50.

10. Pisillo-Mazzeschi, *supra* note 9, at 23.

III. THE SPECIFIC CONTENT OF THE SUBSTANTIVE ENVIRONMENTAL LAW OBLIGATIONS: THE OBLIGATION NOT TO CAUSE DAMAGE TO THE ENVIRONMENT

This article will now turn to address what is the specific content of the core obligation of international environmental law. In this vein, this article will argue that the prohibition against causing damage to other states' has attained customary status. To that end, this article will review the teachings of the most prominent scholars in the field, analyze the contents of treaty obligations to discern what has been the conduct of states, review case law to envisage the role of courts in the advancement of this rule and finally forge a conclusion in relation to state practice and *opinio juris* in support of this assertion.

A. *The Teachings of Most Prominent Scholars*

Some authors consider that the general rule does not entail the prohibition of pollution, but only an obligation of preventing, reducing and controlling pollution, and environmental harm, based on a due diligence standard. By no means would such rule impose an obligation not to cause damage. Consequently, a state would be responsibly only to the extent that it failed to adopt all possible means to prevent the damage.¹¹ Professor Okowa, who adheres to this position, attempts to render this obligation a little more objective by advancing some procedural obligations against which the state conduct will be assessed; should any of them be omitted,

11. BROWNLIE, *supra* note 2, at 181–82; Pisillo-Mazzeschi, *supra* note 9, at 24. In terms of Tomuschat: “Neither may, on one hand, a ‘source state’ unrestrictedly pursue activities that cause transboundary harm, nor may, on the other, an affected state claim absolute protection against any negative consequence of such activity.” Christian Tomuschat, *International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law: The Work of the International Law Commission*, in INTERNATIONAL RESPONSIBILITY FOR ENVIRONMENTAL HARM 37, 40 (Francesco Francioni & Tullio Scovazzi eds., Graham & Trotman 1991); BIRNIE & BOYLE, *supra* note 4, at 112. Even if we cited these authors in support of the strict liability position, parts of their teachings wander, causing some confusion. In this vein, they assert that two propositions enjoy significant support in state practice: i) the duty to prevent, reduce and control pollution and ii) a duty to co-operate in mitigating environmental damage. However, when explaining the content of the Rio Declaration, they argue that “the more convincing view is that the Rio Declaration is merely restating existing law,” being therefore implicitly the idea that state must ensure that their activities will not cause damage to the environment of other states. BIRNIE & BOYLE, *supra* note 4, at 104–105. When analyzing principles 21 of the Stockholm Declaration and 2 of the Rio Declaration, these authors state: “what these formulations imply is a general obligation on the part of states to act with due diligence.” Int’l Law Comm’n [ILC], Report of the ILC to the GAOR, ¶ 718, U.N. Doc. A/55/10 (May–Aug. 2000). They also state, “[t]reaty formulations and the work of the ILC overwhelmingly favour the due diligence interpretation of states’ primary environmental obligations.” BIRNIE & BOYLE, *supra* note 4, at 113.

then the state in question, would be precluded to sustain that it has taken all practicable measures to prevent environmental damage.¹²

Another group of scholars contends that the basic duty upon states is not to act as to injure the rights of other states, but combines this obligation with the application of a due diligence standard of care.¹³ The intermediate position gives rise to the confusion of the extent of the obligation that has already been espoused in the previous chapter.

According to a yet another group of authors, “states have . . . the responsibility not to cause transboundary environmental damage.”¹⁴ This rule is a customary norm containing an obligation of result, and its breach gives rise to strict liability.¹⁵ In this view, Professor Ved Nanda resorts to

12. Phoebe N. Okowa, *Procedural Obligations in International Environmental Agreements*, 67 Brit. Y. B. Int'l L. 275, 280 (1996). As procedural obligations, Professor Okowa enumerates: notification, consultation, and environmental impact assessment albeit she sustains that even if desirable, these obligations have not reached customary status. *Id.* at 335–36. These obligations are laid down by the Articles on Prevention of Transboundary Harm from Hazardous Activities, in arts. 6, 7, 8 and 9, U.N. GAOR, 56th Sess., Supp. No. 10 at 399, U.N. Doc. A/56/10 (August 10, 2001), which are supposed to codify international law. See Int'l Law Comm'n, *Third report on the Legal Regime for the Allocation of Loss in Case of Transboundary Harm Arising out of Hazardous Activities*, para. 38–39, UN Doc. A/CN.4/566 (Mar. 7, 2006) (prepared by Pemmaraju Sreenivasa Rao) [hereinafter *Third Report*].

13. SHAW, *supra* note 3, at 851, citing doctrine expressed by Judson Harmon, Attorney-General of the United States in 1895, 21 Op. Att'y. Gen. 274, 283 (1895); NANDA, *supra* note 8, at 155–56. KISS & SHELTON, *supra* note 1, at 105. For the application of responsibility for fault, see KISS & SHELTON, *supra* note 1, at 854; E. Jimenez De Aréchaga, *International Law in the Past Third of a Century*, 159 R.C.A.D.I. p. 272 (1978): “principle 21 of the Stockholm declaration . . . lend some apparent support for transnational pollution damage in all cases, regardless of the precautions which State has taken.” However, when dealing with the applicable standard of care, this author acknowledges strict responsibility only for ultra-hazardous activities and clarifies that: “this type of responsibility only results from conventional law [and] has no basis in customary law or general principles and, since it deals with exceptions rather than general rules, cannot be extended to fields not covered by the specific instruments.” De Aréchaga, *supra* note 13, at 273. Malgosia Fitzmaurice, *International Responsibility and Liability*, in THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 1010, 1014 (Daniel Bodansky, Jutta Brunnee and Ellen Hey eds., Oxford University Press 2008).

14. SANDS, *supra* note 4, at 322; Louis B. Sohn, *The Stockholm Declaration on the Human Environment*, 14 HARV. INT'L L.J. 423, 485–93 (1973).

15. Ulrich Beyerlin, *Different types of Norms in International Environmental Law, Policies Principles, and Rules*, in THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 425, 439 (Daniel Bodansky, Jutta Brunnee and Ellen Hey eds., Oxford University Press 2008); Brian Smith, STATE RESPONSIBILITY AND THE MARINE ENVIRONMENT 112–113 (1999); Magraw, *supra* note 7, at 319; Constance O'Keefe, *Transboundary Pollution and the Strict Liability Issue: The Work of the International Law Commission on the Topic of International Liability for Injurious Consequences Arising Out of Acts not Prohibited by International Law*, 18 DEN. J. INT'L L & POL'Y 145, 162 (1989). See *Preliminary Report on International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, U.N. Doc. A/CN.4/334 and Add.1 and Add.2 (1980), reprinted in [1980] 2(1) Y.B. Int'l L. Comm'n 247, U.N. Doc. A/CN.4/334 and Add.1 and Add.2 (prepared by Robert. Q. Quentin-Baxter).

the principle of *sic utere tuo ut alienum non laedas*, which means that every state must use its own territory “in such a manner as not to injure that of another.”¹⁶ Thus, in his opinion there might be some confusion with respect to the content of the obligation of prevention, “since any activity capable of inflicting transboundary harm might be considered per se illegal under the principle of *sic utere [tuo]*.”¹⁷

B. The Obligation Laid Down in International Instrument

Several General Assembly Resolutions tackle environmental concerns, however, some of them blatantly condemn the act of harming the environment of other states and impose responsibility on states who cause such harm. United Nations General Assembly Resolution 1629 (XVI) 1961, declares that “fundamental principles of international law impose a responsibility on all states concerning actions which might have harmful biological consequences.”¹⁸

The Resolution on Development and Environment, stresses the right of states to exploit their natural resources, inasmuch as such exploitation takes place “in such a manner as to avoid producing harmful effects on other countries.”¹⁹ In a manner much more conclusive, the Resolution on Cooperation Between States in the Field of the Environment emphasizes that “[s]tates must not produce significant harmful effects in zones situated outside their national jurisdiction.”²⁰

From the wording cited, an obligation on states to refrain from causing any significant damage to other states’ environments, clearly emerge. This trend was finally enshrined in Principle twenty one of the Stockholm Declaration of 1972, which stipulates 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.

Professor Handl argues that the preparatory works of the declaration show that there was a strong opposition to the idea that Principle twenty one established a regime of strict liability.²¹ Such criticism disregards, according to rules of interpretation, that the ordinary meaning of the terms prevails over preparatory works, unless the question was obscure or led to

16. NANDA, *supra* note 8, at 2.

17. *Id.* at 156.

18. G.A. Res. 1629 (XVI), prmb1, U.N. Doc. A/1629(XVI) (Oct. 27, 1961).

19. G.A. Res. 2849 (XXVI), ¶ 4(a), U.N. Doc. A/2849(XXVI) (Dec. 20, 1971).

20. G.A. Res. 2995 (XXVII), ¶ 1, U.N. Doc A/2995(XXVII) (Dec. 15, 1972).

21. *State Liability*, *supra* note 3, at 536.

absurd results.²² To the contrary, neither the terms of Principle twenty one are obscure, nor does the application of a standard of strict responsibility lead to an absurd result.

Moreover, it ought to be highlighted that when enacting Resolution 2996 (XXVII) adopting the Stockholm declaration, many states regarded the wording of Principle twenty one as reflecting customary international law.²³ Furthermore, and still resorting to customary rules of interpretation, the obligation is endorsed by subsequent state practice²⁴ when voting in favor of other resolutions as well as when drafting treaties.

Indeed, the Charter of Economic Rights and Duties of States,²⁵ reiterates the obligation in exactly the same terms. A similar duty is envisaged in the 1978 United Nations Environment Programme (UNEP) Draft Principles of Conduct in the Field of the Environment for the Guidance of States in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States.²⁶ It was also reiterated in Principle two of the Rio Declaration 1992.²⁷

It is argued that all these instruments reflect principles rather than rules, and therefore lack normative power. Professor Sands dwells on the

22. Vienna Convention on the Law of Treaties art. 32, May 23, 1969, 1155 U.N.T.S. 332 [hereinafter Law of Treaties].

23. One hundred and twelve States voted for this resolution with none in opposition. In particular, see Report of the U.N. Conference on the Human Environment, U.N. Doc. A/CONF.48/14 and Corr.1 at 1420-1464, reprinted in 11 I.L.M. 1416, U.N. Doc. A/CONF.48/14 and Corr.1. The United States expressed that Principle 21 in no way diminished existing international responsibility for damage to other states or areas beyond, national jurisdiction, but it reaffirmed existing rules. *Id.* In turn, Australian delegate manifested that “. . . it represented the first comprehensive international political consensus on environmental issues and, although it was not legally binding, it has been the subject of intensive negotiations and should thus be generally acceptable.” UN Doc. A/C.2/SR 1468 cited in *Territorial Sovereignty*, *supra* note 3, at 67 n.100. Australia, in its oral pleadings in the Nuclear tests case, further stated that: “[t]he specific function of the Stockholm resolution and declarations is that they reflect what the community regards as an acceptable standard of conduct in these matters” Oral Arguments on the Request for the Indication of Interim Measures of Protection, Nuclear Tests (Austl. v. Fr.), 1973 I.C.J. Oral Arguments 185 (June 22, 1973).

24. Law of Treaties, *supra* note 22, at art. 31(3)(b).

25. Adopted by G.A. Res. 3281 (XXIX), prmb1, U.N. Doc. A/3281(XIXX) (Dec. 12, 1974).

26. *Draft Principles of Conduct in the Field of the Environment for the Guidance of States in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States*, [1983] 2(1) Y.B. Int'l L. Comm'n 197, U.N. Doc. A/CN.4/L.353 [hereinafter *Draft Principles of Conduct*]. Principle three of such instrument requires states to ensure that activities within their jurisdiction or control do not cause damage to the natural systems located within other states or in areas beyond the limits of national jurisdiction. *Id.* at art. 3.

27. The Rio Declaration was adopted by consensus of 175 States. Conference on Environment and Development, June 3-14, 1992, *Rio Declaration on Environment and Development*, annex I principle 2, A/CONF.151/26 (June 14, 1992).

distinction between principles and rules, concluding that both have legal consequences, and its difference is verified by the kind of mandate that each of them provide.²⁸ Indeed, both rules and principles point to particular decisions about legal obligations, but they differ in the character of the direction they give. Rules are applicable in an all or nothing fashion. A principle states a reason that argues in one direction, but does not necessitate a particular decision.²⁹

The value of these statements, regardless of their form, should not be diminished.³⁰ Indeed,

principles can be understood as norms that are first and foremost designed to give guidance to their addressees for future conduct in rule making processes as well as to shape the interpretation and application of rules already in existence. Thus, they aim at influencing states' decision making, which otherwise remains open to choice, as well as their interpretation of rules;³¹

all the more when they are included in binding instruments, such as the in the Preamble of United Nations Framework Convention on Climate Change.³²

The coherency and consistency of these resolutions and instruments, coupled with the votes they have gathered in their adoption, as well as states' declarations when adopting them, provide clear evidence as to the existence of *opinio juris* in support of the obligation not to cause damage.³³

Even if the instruments mentioned above were considered as the mere restatement of a principle, such principle would still have normative value as a source of international law, since it would constitute a general principle of law recognized by civilized nations in terms of Art. 38(d) of the Statute of the International Court of Justice (ICJ).³⁴ In turn, it has also been stated

28. See SANDS, *supra* note 4, at 233.

29. RONALD DWORKIN, *TAKING RIGHTS SERIOUSLY* 24 (1977).

30. Alan E. Boyle, *Some Reflections on the Relationship of Treaties and Soft Law*, 48(4) INT'L & COMP L.Q. 901, 902 (1999).

31. Beyerlin, *supra* note 15, at 437.

32. United Nations Framework Convention on Climate Change art. 3, May 9, 1992 FCCC/INFORMAL/84, lists "principles" intended to guide the parties "[i]n their actions to achieve the objective of the Convention and to implement its provisions."

33. Resolutions or declarations passed by international organizations or intergovernmental conferences can be considered as amounting to a clear expression of *opinio juris* as acknowledged by the I.C.J. See *North Sea Continental Shelf* (F.R.G. v. Den. & F.R.G. v. Neth.), 1969 I.C.J. 4, 44 (Feb. 20).

34. U.N. Charter art. 38, ¶ 1(d). For a thorough analysis of all the domestic systems that incorporate such a principle, see *Report of the U.N. Secretariat: Survey of State Practice Relevant to*

that the constant and uniform conduct of states, when ratifying or adhering to treaties that amount to state practice, can crystallize a customary rule of international law.³⁵

As already explained there exists much confusion in respect to the specific content of the rule and the standard of care to be applied. The existence of an obligation of result corresponds with a regime of strict liability. Therefore, it is necessary to first analyze the substantive obligations in states' practice to proceed later with the standard of care established by them.

There are many treaties that specifically set forth the obligations not to cause environmental harm, such as: Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water, 1963;³⁶ United Nations Education, Scientific and Cultural Organization Convention for the Protection of the World Cultural and Natural Heritage, 1972;³⁷ Treaty for Amazonian Co-operation, 1978;³⁸ Convention for the Protection of the Natural Resources and the Environment of the South Pacific Region Noumea Convention (1986);³⁹ Convention on the Prohibition of Military or any Other Hostile use of Environmental Modification Techniques;⁴⁰

International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law, [1985] 2(1) Y.B. Int'l L. Comm'n 78, U.N. Doc. A/CN.4/384 [hereinafter *Survey of State Practice*]. A more recent study has been conducted in European Union (hereinafter EU) Member States as well as in five Organization for Economic Co-operation and Development (hereinafter OECD) countries (the USA, Canada, Australia, Japan and Switzerland) by Christopher Clarke, Update Comparative Legal Study on Environmental Liability 8 (2001) (unpublished legal study), available at <http://ec.europa.eu/environment/legal/liability/legalstudy.htm> (last visited Sept. 29, 2009). This proposition has not been pacific, though. Professors Birnie and Boyle devote some paragraphs to rebut it. See BIRNIE & BOYLE, *supra* note 4, at 187–88.

35. *Continental Shelf*, 1969 I.C.J. at 41–42 (Feb. 20); *Military and Paramilitary Activities (Nicar. v. U.S.)*, 1986 I.C.J. 14, ¶¶ 92–97 (June 27).

36. *Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space, and Under Water* art. 1, Aug. 5, 1963, 480 U.N.T.S. 43, directly prohibits the weapon test explosions if it causes radioactive debris in other states' territories.

37. *United Nations Education, Scientific and Cultural Organization Convention for the Protection of the World Cultural and Natural Heritage* art. 6.3, Mar. 9, 1972, 1037 U.N.T.S. 151 reads: “[e]ach State Party to this Convention undertakes not to take any deliberate measures which might damage directly or indirectly the cultural and natural heritage referred to in Articles 1 and 2 situated on the territory of other States Parties to this Convention.”

38. *Treaty for Amazonian Co-operation* art. IV, July 3, 1978, 1202 U.N.T.S. 71.

39. *Convention for the Protection of the Natural Resources and Environment of the South Pacific Region* art. 4(6), Nov. 24, 1986, 26 I.L.M 382, establishes that “[e]ach party shall ensure that activities within its jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of its national jurisdiction.”

40. Adopted by the General Assembly of the United Nations on 10 December 1976. *Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification*

ASEAN Agreement on Transboundary Haze Pollution, (2002);⁴¹ and the Convention on Biological Diversity, in its Article 3 reproduces, verbatim, the text of Principle twenty one of the Stockholm Declaration.⁴²

There are other treaties that merely contain an obligation to prevent environmental harm. They normally state the obligation to ensure that activities within their jurisdiction or control do not cause damage, however, they normally are accompanied by the words “best endeavours” or “shall take all appropriate measures.”⁴³

Techniques art. 1, Dec. 10, 1076, 1108 U.N.T.S. 152. Article one states: “[e]ach State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.”

41. ASEAN Agreement on Transboundary Haze Pollution art 3, June 10, 2002, http://www.aseansec.org/pdf/agr_haze.pdf (last visited, Sept 26, 2009).

42. Convention on Biological Diversity art. 3, Dec. 29, 1993, 1760 U.N.T.S. 143. The Convention on Biological Diversity has 191 parties. See Convention on Biological Diversity, www.biodiv.org/world/parties.asp (last visited Sept. 26, 2009). Stockholm Declaration principle 21, available at <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=97&ArticleID=1503> (last visited Oct. 22, 2009).

43. International Convention for the Prevention of Pollution of the Sea by Oil art. VII, May 12, 1954, 327 U.N.T.S. 4; Geneva Convention on the High Seas art. 25, Apr. 29, 1958, 450 U.N.T.S. 11. Even if it is drafted in terms of a preventive obligation, some states construe such article imposes an obligation of result, as New Zealand did in its Request for an Examination of the situation. See Request for Examination of the Situation, Nuclear Tests (N.Z. v. Fr.), 1995 I.C.J. Oral Proceedings 1, 10 (Sept. 12). Mr. Keith states: “[t]he Geneva Convention on the High Seas of 1958, a treaty which is of course a codifying treaty, puts the general obligation not to cause damage into more specific terms.” Other treaties: Convention Concerning Fishing in the Waters of the Danube art. 7, Jan. 29, 1958, 339 U.N.T.S. 58; African Convention on the Conservation of Nature and Natural Resources art. II, Sept. 15, 1968, 1001 U.N.T.S. 4; Convention for the Prevention of Marine Pollution from Land Based Sources art. 1, June 4, 1974, 1546 U.N.T.S. 120; Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft art. I, Feb. 15, 1972, 932 U.N.T.S.5; Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter art. I, Dec. 29, 1972, 1046 U.N.T.S. 138; Convention on Long-Range Transboundary Air Pollution art. 2, Nov. 13, 1979, <http://www.unep.org/env/lrtap/full%20text/1979.CLRTAP.e.pdf> (last visited Sept. 29, 2009); Convention on the Conservation of Migratory Species of Wild Animals art. 4, June 23, 1979, http://www.cms.int/pdf/convtxt/cms_convtxt_english.pdf (last visited Sept. 29, 2009); Convention on the Conservation of European Wildlife and Natural Habitats art. 2, Sept. 19, 1979, Europ. T.S. No. 104. This Convention, however, has a *sui generis* wording, for it states in article 2:

The Contracting Parties shall take requisite measures to maintain the population of wild flora and fauna at, or adapt it to, a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements and the needs of sub-species, varieties or forms at risk locally.

By employing the words “requisite measures” it conveys the idea that there are certain strict, objective standards to abide by; Convention for the Protection of the Marine Environment and Coastal Area of the South-East Pacific art. 5, Nov. 12, 1981, <http://sedac.ciesin.org/entri/texts/>

The existence of these treaties, however, does not impair the existence of a customary rule of international law prohibiting states to cause damage to other states' environments, for many reasons. First, from a time-frame perspective, the obligation to prevent damage comes before that of prohibiting damage. In this vein, failure to prevent, if it leads to harm, would trigger the second obligation, which only comes into play after damage has occurred. Professor Sands acknowledges the differences between these obligations and points out that the obligation not to cause damage "arise[s] from the application of respect for the principle of sovereignty, whereas the preventive principle seeks to minimize environmental damage as an objective in itself."⁴⁴ Therefore, the obligations are independent, and the fact that treaties devote part of their text to the former, does not curtail the existence of the latter. Secondly, the paragraphs about prevention are followed by specific actions to be followed by states: *inter alia*, risk assessment, monitoring, and providing information. Thus treaty obligations can be read as guidelines for states to accomplish their prior duty of prevention. Finally, the treaty-making process is complex, and states might be unwilling to indiscriminately assume responsibility for any harm they might cause in an express manner.

As developed earlier, issues of responsibility and the standard of care to be applied are inherently connected with the substantive or primary obligation. Thus, this article will review treaties from the perspective of provisions of responsibility to complete the framework related to main environmental obligations.

There are some treaties that impose strict liability on states while others only provide for a scheme of fault. A third group adopts a regime of strict liability incumbent upon private parties (namely operators) and in some cases with the residual liability of the state. A fourth category, remains silent on the issue, and a final bundle of bilateral, special agreements expressly regulates responsibility issues for certain activities or particular situations.

1. Strict Responsibility Upon States

Some treaties directly impose responsibility on states, by the mere verification of damage. The Convention on International Liability for

marine.environment.coastal.south.east.pacific.1981.html (last visited Sept. 29, 2009); United Nations Convention on the Law of the Sea art. 192, 194, Dec. 10, 1982, 1833 U.N.T.S. 3; Vienna Convention for the Protection of the Ozone Layer art. 2(b), Mar. 22, 1985, 1513 U.N.T.S. 293; Convention on Environmental Impact Assessment in a Transboundary Context art. 2.1, Feb. 25, 1991, 1989 U.N.T.S. 309; Convention on the Protection and Use of Transboundary Watercourses and International Lakes arts 2.1 and 2.2, Mar. 17, 1992, 1936 U.N.T.S. 269.

44. SANDS, *supra* note 4, at 246.

Damage Caused by Space Objects, 1972 provides for absolute liability for damage caused by space objects on the surface of the earth or to aircraft in flight (article II).⁴⁵ Responsibility is imposed on states by the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies.⁴⁶ Also, the United Nations Convention on the Law of the Sea, Montego Bay (1982), establishes strict responsibility for conduct carried out within the area.⁴⁷

2. Schemes of Responsibility for Fault

All the treaties dealing with the obligation to prevent environmental damage set forth a regime of responsibility for fault, since states would be deemed responsible, only to the extent that they have failed to meet the procedural obligations contained in the treaty at stake, or if they have not exercised due diligence.

However, the provisions on responsibility contained in the United Nations Convention on the Law of the Sea deserve special attention. Article 235 in its first paragraph enshrines that states "shall be liable in accordance with international law."⁴⁸ It should be noted, first of all, that the term liability is related to the obligation to make compensation irrespective of the breach of any international law obligation. Thus, a literal interpretation may lead the reader in that direction. Secondly and more important, the provision does not purport a specific regime, but rather defers the subject to general rules of international law. As this article will explore later, it is our contention that these kinds of provisions presuppose the existence, under international law, of a general regime of responsibility, particularly, that of strict responsibility. Such conclusion is bolstered by the third paragraph of Article 235 that stipulates ". . . states shall cooperate in the implementation of existing international law . . . relating to

45. Convention on International Liability for Damage Caused by Space Objects arts 3, Mar. 29, 1972, 961 U.N.T.S. 188. However, Article III provides for a scheme of responsibility for fault for damage caused elsewhere or to persons or property on board a space object.

46. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies art. VII, Jan. 27, 1967, 610 U.N.T.S. 206. See also G.A. Res. 1962 (XVIII), ¶ 5, U.N. Doc. A/1962(XVIII) (Dec. 13, 1963); G.A. Res. 47/68, ¶ 9, U.N. Doc. A/RES/47/68 (Dec. 14, 1992).

47. United Nations Convention on the Law of the Sea art. 139, Dec. 10, 1982, 1833 U.N.T.S. 3. It declares: "States Parties shall have the responsibility to ensure that activities in the Area, whether carried out by States Parties, or state enterprises or natural or juridical persons . . . shall be carried out in conformity with this Part."

48. United Nations Convention on the Law of the Sea, *supra* note 47, at art. 235.

responsibility and liability for the assessment of and compensation for damage⁴⁹

3. Civil Liability Regimes

These treaties do not directly deal with the responsibility of states but of private persons. They exceptionally have a bearing on states if the operator was not capable of compensating all the damages caused. Nonetheless, they are included in this section for they convey the idea that states are aware of the existence of a rule prohibiting the infliction of damages, but are unwilling to assume responsibility for its breach in treaties. In this law-making process they opt to place the blame on third parties; however, as analyzed in the following chapter, when faced with damage, states ascertain the existence of this rule and invoke the responsibility of the state where the damaging activity has taken place, regardless and independently of any responsibility incumbent upon the operator.

Examples of these treaties include: The Convention on the Liability of Operators of Nuclear Ships, (1962);⁵⁰ Paris Convention on third party liability in the Field of Nuclear Energy, (1960);⁵¹ Brussels Supplementary Convention (1963),⁵² Vienna Convention on Civil Liability for Nuclear Damage, (1963),⁵³ Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage (1997 Vienna Convention);⁵⁴ International Convention on Civil Liability for Oil Pollution Damage (1969),⁵⁵ the International Convention on the establishment of an International Fund for

49. *Id.*

50. Convention on the Liability of Operators of Nuclear Ships, May 25, 1962, www.ecolex.org/server2.php/libcat/docs/.../en/TRE000585.doc (last visited Oct. 22, 2009). States Parties: Austria, Belgium, Denmark, France, Germany, Greece, Italy, Luxemburg, The Netherlands, Norway, Portugal, Iceland, Spain, Sweden, Switzerland, Turkey and the United Kingdom. Signing List of the Convention on Liability of Operators of Nuclear Ships, <http://www.ecolex.org/ecolex/ledge/view/RecordDetails?id=TRE-000585&index=treaties> (last visited Oct. 22, 2009).

51. Paris Convention on Third Party Liability in the Field of Nuclear Energy, Jan. 28, 1964, 956 U.N.T.S. 264.

52. Brussels Supplementary Convention, July 29, 1960, 1041 U.N.T.S. 358.

53. Vienna Convention on Civil Liability for Nuclear Damage, May 21, 1963, 1063 U.N.T.S. 266.

54. Conference to Adopt a Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage and to Adopt a Convention on Supplementary Funding, Sept. 12, 1997, 36 ILM 1454, 1466.

55. International Convention on Civil Liability for Oil Pollution Damage art. III, Nov. 29, 1969, 973 U.N.T.S. 4.

Oil Pollution Damage (1971);⁵⁶ Protocol establishing a Supplementary Fund for Oil Pollution Damage, (in force since 2005);⁵⁷ International Convention on Liability and Compensation for Damage in Connection with the carriage of Hazardous and Noxious Substances by Sea (1996);⁵⁸ International Convention on Civil Liability for Bunker Oil Pollution Damage (2001);⁵⁹ Basel Convention on the control of Transboundary Movement of Hazardous Wastes and their disposal (1989);⁶⁰ Protocol to the Basel Convention on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their disposal (1999);⁶¹ Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters (Kiev Protocol, 2003);⁶² Lugano Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment (1993).⁶³

In line with this regime, on April 21, 2004, the Directive on Environmental Liability with regard to the prevention and remedying of environmental damage was adopted.⁶⁴ It applies to environmental damage

56. International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, Dec. 18, 1971, http://www.imo.org/Conventions/mainframe.asp?topic_id=256&doc_id=661 (last visited Oct. 22, 2009).

57. The 2003 Protocol to the International Fund for Compensation for Oil Pollution Damage, May 16, 2003, http://www.imo.org/Conventions/mainframe.asp?topic_id=256&doc_id=661 (last visited Oct. 22, 2009).

58. International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea art. 7, Oct. 1, 1996, <http://www.jus.uio.no/lm/imo.carriage.by.sea.liability.compensation.damage.connected.to.hazardous.and.noxious.substances.convention.1996/portrait.pdf> (last visited Oct. 22, 2009).

59. International Convention on Civil Liability for Bunker Oil Pollution Damage art. 3, Mar. 23, 2001, <http://www.official-documents.gov.uk/document/cm66/6693/6693.pdf> (last visited Oct. 22, 2009).

60. Basel Convention on the Control of Transboundary Movement of Hazardous Waste and Their Disposal art. 12, Mar. 22, 1989, <http://www.basel.int/text/con-e-rev.pdf> (last visited Sept. 27, 2009).

61. Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and Their Disposal, Dec. 10, 1999, <http://www.basel.int/meetings/cop/cop5/docs/prot-e.pdf> (last visited Sept. 27, 2009).

62. Protocol on Strategic Environmental Assessment to the Convention of Environment Impact Assessment in a Transboundary Context, May 21, 2003, <http://unece.org/env/eia/documents/legaltexts/protocolenglish.pdf> (last visited Oct. 22, 2009).

63. Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment art. 6, June 21, 1993, Europ. T.S. 150.

64. Council Directive 2004/35/CE, *prmb* ¶ 2, 2004 O.J. (L 143) 8. The directive was amended by the Directive on the management of waste from extractive industries, Council Directive

as well as to damage to protected species and natural habitats, caused by a list of certain hazardous activities, such as waste management, discharges to water, manufacture, use, storage, processing, filling and release of dangerous substances or preparations, amidst others.⁶⁵ It particularly excludes from its scope of regulation, nuclear activities as well as environmental “damage . . . caused by pollution of a diffuse character”⁶⁶ Therefore, part of the damage remains unregulated.

The Directive mainly deals with internal pollution, however, in respect to transboundary harm it sets forth, that if a Member State identifies damages within its borders, caused by another, it may seek to recover the costs it has incurred “in accordance with this Directive”.⁶⁷ This part implies that the state may seek compensation from the operator; however, in no part is it stated that this scheme supersedes the general regime of state responsibility, and therefore, it would still be compatible with the idea that states are under a duty not to cause harm.

4. Treaties Silent With Respect to the Applicable Regime on Responsibility

There are a category of treaties which contain a reference to liability without further classification as to the substantive or procedural rules of liability. For instance, the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, 1972, establishes that in Article X: “[i]n accordance with the principles of international law regarding State responsibility for damage to the environment of other States, or to any other area of the environment, caused by dumping of wastes . . . parties undertake to develop procedures for the assessment of liability and the settlement of disputes”

Treaties containing similar provisions are: 1978 Kuwait Regional Convention for Cooperation on the Protection of the Marine Environment from Pollution; 1976 Convention for the Protection of the Mediterranean Sea against Pollution; 1981 Convention for Cooperation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region; 1981 Convention for the Protection of the Marine Environment and Coastal Area of the South-East Pacific; 1982 Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment (Jeddah Convention); 1983 Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region

2006/21/EC, *prmb1* ¶ 25, art. 15, 2006 O.J. (L 102). It extended the scope of protection of Directive 2004/35/CE to include waste from mining and other extractive industries.

65. Council Directive 2004/35/CE at art. 3 and annex III.

66. *Id.* at art. 4(5).

67. *Id.* at art. 15.

(Cartagena Convention); 1985 Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region; 1986 Convention for the Protection of the Natural Resources and the Environment of the South Pacific Region; 1990 Protocol for the Protection of the Marine Environment against Pollution from Land-based Sources; 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area; 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic; 1992 Convention on the Protection of the Black Sea against Pollution; 1992 Convention on the Transboundary Effects of Industrial Accidents; 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes; 1992 Convention on Biological Diversity;⁶⁸ 2001 Stockholm Convention on Persistent Organic Pollutants.⁶⁹

Such deference to rules in international law permit an inference that states implicitly acknowledge the existence of certain obligations, although they opt not to state it expressly. The reasons for not including such rules in treaties are manifold. It has been argued that there are competing, political, military, economic, industry, and other public interests, that influence the process of conclusions in treaties. The reasons that have been suggested are as follows:

- a) That the material scope of Conventions are too broad;⁷⁰
- b) The spatial scope might be too broad;⁷¹

68. Convention on Biological Diversity art. 3, Dec. 29, 1993, 1760 U.N.T.S. 143. Article 14.2 states: “[t]he Conference of the Parties shall examine, on the basis of studies to be carried out, the issue of liability and redress, including restoration and compensation, for damage to biological diversity, except where such liability is a purely internal matter.” Similarly, *see* Cartagena Protocol on Biosafety to the Convention on Biological Diversity art. 27, Jan. 29, 2000, <http://www.cbd.int/doc/legal/cartagena-protocol-en.pdf> (last visited Sept. 27, 2009). The protocol has 156 parties. *See* Cartagena Protocol on Biosafety to the Convention on Biological Diversity Signing List, <http://www.cbd.int/biosafety/signinglist.shtml> (last visited Sept. 27, 2009).

69. Stockholm Convention on Persistent Organic Pollutants, May 22, 2001, http://chm.pops.int/Portals/0/Repository/convention_text/UNEP-POPS-COP-CONVTEXT-FULL.English.PDF (last visited Sept. 27, 2009). The Convention has been in force since 17 May 2004 and has 146 Parties. *See* Stockholm Convention on Persistent Organic Pollutants Signing List, <http://chm.pops.int/Countries/StatusofRatification/tabid/252/language/en-US/Default.aspx> (last visited Sept. 27, 2009).

70. René Lefebvre, *General Developments: International Civil Liability Compensation*, 11 Y. B. INT’L ENVTL L. 139, 151 (2000). Professor Lefebvre, explains in relation to the 1993 Lugano Convention, that it has been criticized as being too general and going beyond the situation obtaining in some states in respect of environmental damage as such, particular, the concept of hazardous activities was perceived as excessively broad and the relevant definitions vague, especially with regard to biodiversity damage. Denmark, Ireland, Germany and the United Kingdom made it clear that the approach of the 1993 Lugano Convention to liability differed from their own national law.

- c) The scope of application of the various regimes has been considered to be less favorable than domestic law;⁷²
- d) Incompatibility between some proposed regimes and others already assumed,⁷³ amidst others.⁷⁴

No negative inference should be made from the omission of prohibitive rules. Indeed, it is suggested that with many governments participating, with varied interests, the treaty making process is confusing and the results are difficult to explain.⁷⁵

Thus, if liability rules are not expressly laid down in treaties but are somehow relied on by reference to general international law, the content of general international law has to be discerned. Thus, it is fruitful to review states' practice out of general treaties. It will become apparent that, when

71. For instance, when revising the Vienna Convention on Civil Liability for Nuclear Damage it was purported that States should contribute to a fund that would help in repairing damages caused within a State territory; non-nuclear-power-generating States were reluctant to enter into it since such agreement was perceived as a financial burden with no tangible benefits. *Id.* at 149.

72. This has been argued as the reason for United States, Canada, Japan and Russia to be reluctant to become parties to Nuclear Liabilities Convention, as the victims would obtain a better relief under national laws. Robin R. Churchill, *Facilitating (Transnational) Civil Liability Litigation for Environmental Damage by Means of Treaties: Progress, Problems, and Prospects*, 12 Y.B. INT'L. ENVTL L. 3, 10 (2001).

73. For instance, the Czech Republic and Slovakia in responding to a questionnaire on the Convention on Civil Liability for Damage Caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels observed that they were striving to be admitted into the EU and their priority was harmonization of its legal regulations with the laws of the EU. Since the EU was preparing new regulations concerning transport of dangerous goods, the possibility of becoming a party to the Convention would have to await consideration until the Czech Republic was able to adopt the new regulations in the context of the harmonization process. Note by the Secretariat, *Report of the Secretariat on Replies to the Questionnaire related to the Convention on Civil Liability for Damage Caused During Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels*, add. 2, delivered to the Economic and Social Council, U.N. Doc. TRANS/WP.15/2001/17/Add.2 (Feb. 23, 2001); Note by the Secretariat, *Report of the Secretariat on Replies to the Questionnaire related to the Convention on Civil Liability for Damage Caused During Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels*, add. 6, delivered to the Economic and Social Council, U.N. Doc. TRANS/WP.15/2001/Add.6 (Aug. 22, 2001). Both addendums are cited in: International Law Commission [ILC], *Survey of Liability Regimes Relevant to the Topic of International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law*, ¶ 209 n.366, U.N. Doc. A/CN.4/543 (June 24, 2004) (*prepared by the Secretariat*) [hereinafter *Survey of Liability Regimes*].

74. For a thorough analysis of the reasons that may prevent States from entering into treaties, see *Survey of Liability Regimes*, *supra* note 73, ¶¶ 195–214.

75. Louis Henkin, *The Politics of Law-Making*, in INTERNATIONAL LAW: CLASSIC AND CONTEMPORARY READINGS 17, 21–22 (Charlotte Ku & Paul F. Diehl eds., Lynne Rienner Publishers 1998).

engaged in certain activities that may lead to some sort of damage, states enter into treaties to govern the issue and to obtain guarantees of indemnification.

5. Bilateral Treaties

There are a bundle of bilateral treaties that establish responsibility in cases of injuries.⁷⁶ One of the most relevant is the agreement of 29 December 1949 between Norway and the USSR concerning the regime of the Norwegian-Soviet frontier and procedure for settlement of frontier disputes and incidents. Accordingly, parties may not exploit the mineral deposits near their frontiers in a way that would harm their respective territories. Additionally, the Union of Soviet Socialist Republics (USSR) entered into a treaty with Hungary,⁷⁷ which establishes that “the contracting parties shall ensure that the frontier waters are kept in proper order . . . [w]here one contracting party occasions material damage to the other . . . compensation for such damage shall be paid by the Party responsible therefor.”

Similarly, the agreement of 29 April 1959 concerning the regulation of Lake Inari between the Government of the USSR, the Government of Finland and the Government of Norway, established the payment of a lump sum for any loss or damage that might be caused to land, waters, structures or other property owing to the Kaitakoski hydroelectric power station and dam.

Finally, Article 51 of the Treaty of 19 November 1973 between Argentina and Uruguay concerning, Uruguay River, lays down the principle that “each party shall be liable to the other for detriment suffered as a consequence of pollution caused by their operations” This Treaty has been the subject of an international dispute.⁷⁸

76. Agreement on the Use of Italian Ports by the N.S. Savannah art. VIII, Nov. 23, 1964, 1965 U.N.T.S. 138; Exchange of Notes Constituting an Agreement Relating to Public Liability for Damage Caused by the N.S. Savannah note I, June 18, 1964, 1965 U.N.T.S. 218; Agreement on Public Liability for Damage Caused by the N.S. Savannah art. I, Feb. 6, 1963, 1964 U.N.T.S. 115; Nuclear Law Bulletin No. 6, Agreements of Germany: Nuclear Ships, 36, <http://www.nea.fr/html/law/nlb/NLB-06-EN.pdf> (last visited Oct. 22, 2009); Agreement Concerning the Effects on the Territory of the Federal Republic of Germany of Construction and Operation of the Salzburg Airport art. 4, Dec. 19, 1967, 1974 U.N.T.S. 92, establishes a safety zone within Germany, that can be injured by the result of the operation of the Austrian airport. This means that, as Austrian activity may cause an injury within Germany such activity would be prohibited, unless consented by Germany, and that was the reason for signing the treaty. For a more detailed explanation, see *Survey of State Practice*, *supra* note 34, at ¶¶ 45–46.

77. Treaty Concerning the Regime of the Soviet-Polish State Frontier and Co-operation and Mutual Assistance in Frontier Matters art. 4(5)(6)(7), Feb. 15, 1961, 1962 U.N.T.S. 233.

78. See *infra* Section III(c), Pulp Mills.

These treaties in the aggregate create rules that influence the behaviors of state parties to them as well as of non-parties, and provide some evidence to the existence of a rule not to cause damage to the environments of other states.

C. *The Obligation Not to Cause Damage in International Disputes*

The 1872 Alabama case, between the United States and the United Kingdom addressed state practice concerning international disputes. This case showed that claims between states did not deal with state liability arising out of failures to exercise due diligence,⁷⁹ but rather strict liability, except in relation to protections of aliens.

In the well-known *Trail Smelter* arbitration, the Tribunal noted that “no state has the right to use or permit the use of territory in such a manner as to cause injury . . . to the territory of another.”⁸⁰ Even for those who discard the value of this case, arguing that it was resolved according to a compromise whereby Canada had already acknowledge the existence of responsibility,⁸¹ it still constitutes an instance of practice, where a state acknowledges its responsibility for damage caused by pollution. Indeed, it represents what states perceive as acceptable solutions when faced with environmental damage.

Later on, in the *Corfu Channel*, the Court acknowledged the general obligation of every state “not to allow knowingly its territory to be used for acts contrary to the rights of other states.”⁸² This rule has been expanded by analogy to include transboundary environmental dangers.⁸³ As pointed out, in this passage the court was making a general statement of law and policy, not limited to the specific case. Thus, it can be considered a declaratory general statement regarding the conduct of any state which might cause extraterritorial injuries.⁸⁴

Moreover, Albania itself acknowledged the existence of a rule prohibiting her to cause damage to others, when her counsel stated “[i]f Albania had been informed of the operation . . . her responsibility would be involved”⁸⁵

79. *Survey of State Practice*, *supra* note 34, ¶ 398.

80. *Trail Smelter Arbitration* (U.S. v. Can.), 3 R. Int'l Arb. Awards 1905, 1965 (Perm. Ct. Arb. 1941). A thorough analysis of the case can be found at KISS & SHELTON, *supra* note 1, at 102–04.

81. *Pisillo-Mazzeschi*, *supra* note 9, at 29.

82. *Corfu Channel* (U.K. v. Alb.), 1949 I.C.J. 4, 22 (April 9).

83. *NANDA*, *supra* note 8, at 78.

84. *Survey of State Practice*, *supra* note 34, at ¶ 402.

85. *Corfu Channel*, 1949 I.C.J. at 22.

Authors who argue that this case is also irrelevant to show an obligation of result, highlight the fact that the court only proscribes the conduct of a state who knowingly allows its territory to be used for acts contrary to the rights of others. In this knowledge, the authors pledge to find the breach of a due diligence obligation, for an omissive conduct, despite knowing the damage that might be caused.⁸⁶ Such reasoning is vitiated by the assumption that knowledge of an activity always entails a positive obligation of the state to act. Indeed, these were the facts in the *Corfu Channel*; if Albania knew the existence of the mines, then she had a duty to inform that damage might be caused. Such obligation is not even a due diligence one, but rather an obligation of result; Albania either informed or she failed to do so and there were no steps towards complying with an obligation to provide information.

The realm of environmental law is diverse. A state may have knowledge of activities taking place within its territory and still may not have a duty to act towards other states, unless for instance, there was risk of causing harm. Therefore, knowledge by itself, neither differentiates a due diligence obligation from an obligation of result, nor does its absence constitutes an impediment to finding an obligation not to cause damage. A state may or may not be aware of the activities that are conducted within its territory; however, inasmuch as such activity results in damage to another, it would breach its obligation of *neimen laedere*.

Moreover, almost every activity that may result in damage to the territory is subject to state regulations. Therefore, states have virtual knowledge of all the activities that take place within its territory, and they could not seek to avoid responsibility under the excuse of lack of knowledge. Indeed, it is the verification of harm, rather than knowledge, that triggers the responsibility of the state and the consequent duty to remedy the situation.

During the 1950's the United States conducted some nuclear tests, which caused damaged to the Enewatak Atoll and Marshall Islands. To settle the matter the United States made *ex gratia* payments for the damages caused. However, the Government of Japan stated that the "United States Government has the responsibility of compensating for economic losses that may be caused by the establishment of a danger zone."⁸⁷ In its response, the United States did not reject the imputation of responsibility; it just circumscribed itself to deny the possibility of causing any contamination or damage. However, the United States acknowledged that

86. Pisillo-Mazzeschi, *supra* note 9, at 29.

87. WHITEMAN, DIGEST OF INTERNATIONAL LAW, 585-86 (1965).

if there was any evidence of substantial economic losses, it would “give consideration to the question of compensation.”⁸⁸

Other cases involving *ex gratia* payments without any acknowledgement of responsibility are instances where states compensate for environmental damage such as occurred in the Mura River case⁸⁹ and Juliana Ship⁹⁰. In those cases, there is an implicit assumption that other states’ environment should not be damaged, and if it were, those states deserve to be compensated.

The *Gut Dam* case also consists of an instance of state practice inasmuch as Canada had agreed to indemnify the United States for any damage caused by the dam.⁹¹ In this vein, the value of such an agreement cannot be underestimated, since as Professor Okowa indicates, states rarely settle claims unless they are well founded in law.⁹²

In the *Nuclear Tests* cases,⁹³ Australia raised different arguments. Of particular relevance is the violation of Australian sovereignty as the result of radioactive fallout from the French tests.⁹⁴ According to Australia, this argument was “sufficiently comprehensive and strong to bear the whole weight of the contention that the conduct by France of atmospheric tests violates Australia’s rights in international law.”⁹⁵ Moreover, Australia was asked by the President of the Court whether it took the view that every transmission by natural causes of chemicals from one state into another state’s territory automatically created a legal cause of action in international

88. *Id.* at 587.

89. The river Mura, forming the International Boundary between Yugoslavia and Austria, was extensively polluted by the sediments and mud which several Austrian hydroelectric facilities had released. Yugoslavia claimed compensation for the economic loss incurred and for damage to fisheries. *State Liability*, *supra* note 3, at 546. In 1959, the two States agreed on a settlement, pursuant to which Austria paid monetary compensation. *Id.* Professor Handl, acknowledges that Austria did not pay compensation on grounds of treaty obligations but rather, under the recognition of the existence of a rule on strict liability. *Id.* at 547. He also acknowledges the incident of Juliana as another instance of state practice. *Id.* However, in his opinion, this practice does not suffice. *Id.* at 546–47.

90. A Liberian oil tanker washed ashore and extensively damaged local fisheries in Niigata, the west coast of Japanese island of Honshu. The Liberian Government paid compensation to the fishermen for damage. *State Liability*, *supra* note 3, at 547.

91. *Gut Dam Claims* (Can. v U.S.), 8 ILM 114, 128 (Sept. 27, 1969).

92. Okowa, *supra* note 12, at 310. This author, refers explicitly to the United States practice, which limits the power of the Executive Branch to settle claims to those that are meritorious: *Id.* at n.124 citing to 10 USC §§ 2734, 2672, 2674 (1964).

93. *Nuclear Tests* (Austl. v. Fr.), 1974 I.C.J. 253 (Dec. 20).

94. *Id.* at ¶¶ 18–19.

95. Oral Arguments on the Request for the Indication of Interim Measures of Protection, *Nuclear Tests* (Austl. v. Fr.), 1974 I.C.J. Oral Arguments 162, 186 (May 1973).

law without the need to establish anything more. Australia responded that “where, as a result of a normal and natural user by one state of its territory, a deposit occurs in the territory of another, the latter has no cause of complaint unless it suffers more than nominal harm or damage.”⁹⁶

This declaration shows that Australia, when claiming the protection of its environment, was acting under the impression that a rule of international law punished other states for causing harm to its territory.

France replied that in the absence of ascertained damage, attributable to their nuclear tests, they did not violate any international rule of law. Thus, France did not deny the existence of a rule mandating that no damage shall be caused to the environment, but rather, denied the existence of damage.⁹⁷

Judge de Castro in his dissent opinion stated:

If it is admitted as a general rule that there is a right to demand prohibition of the emission by neighbouring properties of noxious fumes, the consequences must be drawn, by an obvious analogy, that the Applicant is entitled to ask the Court to uphold its claim that France should put an end to the deposit of radio-active fallout on its territory.⁹⁸

In turn, Judge Ignacio Pinto, (in his separate opinion, stated that “each state is free to act as it thinks fit within the limits of its sovereignty, and in the event of genuine damage or injury . . . it owes reparation to the State having suffered that damage.”⁹⁹

In the *954 Cosmos* case, even if the matter was regulated by a treaty,¹⁰⁰ it is noteworthy that Canada, when claiming compensation from Russia for the damages caused, did not rely only on such treaty. Rather, Canada stated that the standard of absolute liability for space activities in general, and for

96. Oral Arguments on Jurisdiction and Admissibility, Nuclear Tests (Austl. v. Fr.), 1974 I.C.J. Oral Arguments 381, 525 (July).

97. Statement of the French Government, in a diplomatic Note dated 7 February 1973 addressed to the Government of Australia: “l’infraction au droit pourrait . . . venir d’une violation par la France d’une norme juridique international portant sur le seuil de pollution atomique qui ne devrait pas être dépassé” and that “dans le domaine écologique maritime et terrestre la contamination radioactive était non significative.” *Id.* at 29–30.

98. Nuclear Tests (Austl v. Fr.), 1974 I.C.J. 372, 389 (Dec. 20) (dissenting opinion Judge de Castro).

99. Nuclear Tests (Austl v. Fr.), 1974 I.C.J. 128, 131 (Dec. 20) (separate opinion of Judge Ignacio-Pinto).

100. Convention on International Liability for Damage Caused by Space Objects, *supra* note 45, at 189.

activities involving the use of nuclear energy in particular, is considered to have become a general principle of international law.¹⁰¹

Following the Chernobyl tragedy, no state made a formal claim against the USSR, although many reserved their rights to do so.¹⁰² However, from the absence of such claims, no inference can be made as to the inexistence of an obligation not to cause damage, or its consequent right to states to claim for reparation. Indeed, some states' declarations and behavior show that they were very aware of their entitlement to sustain a claim, although they declined to do so for other reasons. For instance, Sweden's declaration provides a clear example of *opinio juris* regarding the statement of the law at that time: "Insofar as customary international law is concerned, principles exist which might be invoked to support a claim against the USSR. The issues involved, however, are complex . . . [i]n present circumstances, the Government has felt that priority should be given, . . . to endeavors of another nature."¹⁰³

In turn, other states, chose not to bring a claim, due to their condition of pollutant states in other cases. Professor Sands uses the United Kingdom to explain such contradictive interests of a State. The United Kingdom faced claims for acid rain in Scandinavia, for contamination of the Irish Sea for its MOX plant, and for alleged damage to Australian territory from the nuclear tests carried out in the 1950s.¹⁰⁴

It is also relevant, on the wake of the Chernobyl case, to note the conduct adopted by states when summoned by the International Atomic Energy Agency (IAEA) to give their comments towards international liability. Canada, Chile, Federal Republic of Germany, Thailand and Guatemala supported the existence of responsibility for environmental damage. Only Belgium and Spain rejected the existence of such a rule, whilst Algeria, Bulgaria, Cameroon, China, Colombia, Czechoslovakia, Egypt, Finland, German Democratic Republic, Hungary, Ireland, Italy, Luxembourg, Mexico, the Netherlands, Norway, Pakistan, Poland, Switzerland, Turkey, USSR, United Kingdom, and the United States did not support or oppose, but they had a pattern of bringing claims when suffering damages, as well as for making *ex gratia* payments when causing them.¹⁰⁵

101. Canada: Claim Against the Union of Soviet Socialist Republics for Damage Caused by Soviet Cosmos 954, 18 I.L.M. 899, 907 ¶ 22 (1978).

102. SANDS, *supra* note 4, at 887.

103. Correspondence with the Swedish Embassy in London, 10 December 1987, cited in SANDS, *supra* note 4, at 888.

104. *Id.*

105. IAEA Docs. GOV/INF/550 (1988); Add.1 (1988); and Add.2 (1989).

Finally, it should be noted that liability for nuclear accidents is a matter already settled.¹⁰⁶ Thus, in the absence of any claims in this case, the only thing that shows is that states may refrain for espousing claims out of political or comity reasons.

In the case concerning *Certain Phosphate Lands in Nauru*, Nauru claimed that Australia had breached its obligation to administer the territory of Nauru in such a way as not to bring about changes in the territory which would cause irreparable damage to, or substantially prejudice, Nauru's legal interests in that territory.¹⁰⁷ Due to phosphate mining, a substantial part of the territory of Nauru was useless for any kind of agricultural activity. Therefore, Nauru requested either the restoration (rehabilitation) of those lands or compensation to provide for rehabilitation.¹⁰⁸ This case shows the existence of an absolute obligation not to cause harm, for a number of reasons. In the first place, it was the General Assembly, through its Resolution 2111 (XX) of 1965 which requested that immediate steps be taken by the Administering Authority towards restoring the island of Nauru for habitation by the Nauruan people as a sovereign nation.¹⁰⁹ Such position was endorsed by other states, such as the USSR¹¹⁰ and Liberia.¹¹¹

Nauru asserted the existence of a duty of the administrator to preserve the natural resources of a territory from depredation, and on the existence of a principle of law which requires a state not to use its own territory in such a way as to cause substantial harm to a successor of the land.¹¹² In this vein, Nauru did not resort to a general obligation of prevention or taking appropriate measures to prevent these lands to be rendered useless. To the contrary, its claim presupposes an objective obligation, to not cause such

106. See practice referred to in Int'l Atomic Energy Agency [IAEA], *Nuclear Liability: Status and Prospects*, at 8, IAEA Bulletin 4/1988 (1988).

107. *Certain Phosphate Lands in Nauru* (Nauru v. Austl.) 1992 I.C.J. 240.

108. *Id.* at ¶ 15.

109. U.N. Res. 2111 (XX), at 64, U.N. Doc. A/2111 (Dec. 21, 1965). A similar mandate was laid out in U.N. Res. 2226 (XXI), ¶¶ 2-3, U.N. Doc. A/2226 (Dec. 20, 1966).

110. The representative of the Soviet Union urged Australia to undertake the restoration of the mined out land, *Report of the Trusteeship Council*, 27 July 1966, General Assembly Official Records, 22nd Session, Supp. No. 4 (1966) p. 50.

111. Liberia proposed a draft to the Trusteeship Council, to call upon Australia to take immediate steps to restoration and to declare that it was its responsibility to effect it. This draft resolution was rejected; however, Nauru argued that such rejection did not imply a denial of the restoration claim but a deferral to the parties to settle the issue in the most convenient way for both. Memorial of the Republic of Nauru, *Certain Phosphate Lands in Nauru* (Nauru v. Austl.), 1990 I.C.J. 1, ¶ 607 (Mar. 20).

112. Memorial of the Republic of Nauru, *Certain Phosphate Lands in Nauru* (Nauru v. Austl.), 1990 I.C.J. at ¶ 468.

harm, and in case of the lands that were mined for obtaining phosphates, adequate royalties should be paid to the owner of those lands to be invested in the restoration of its environment.

Australia did not deny the existence of such a customary rule; on the contrary it referred to the inter-temporal principle to explain that international law as it stands today is not applicable to facts that took place before 1967,¹¹³ implying a tacit recognition of such customary rule today.

It further resorted to other defenses, mainly:

- a) That restoration was not cost-effective, due to the high costs and the ineffectiveness of those lands for agricultural purposes even if rehabilitated;¹¹⁴
- b) That Australia had duly conducted its obligations of result emerging from its administrator's character, since it promoted advancement of the inhabitants until independence, having discretion in the choice of the means to that end,¹¹⁵ all the more when Nauru did not question the mining *per se*;¹¹⁶
- c) That Nauru could have only claimed a duty to rehabilitate those lands if the mining had prevented the well being of the people of Nauru, which was not the case;¹¹⁷
- d) That had there been any breach of governing law, during its administration, it would have entailed the responsibility of the Trusteeship Council, owing to its supervisory function;¹¹⁸
- e) That there was an unconditional termination of the Trusteeship, a package agreement, and a sum was accordingly paid to Nauru.¹¹⁹

113. Counter-Memorial of the Government of Australia, Certain Phosphate Lands in Nauru (Nauru v. Austl.), 1993 I.C.J. 2, ¶ 275 (Mar. 29).

114. *Id.* at ¶¶ 148–152.

115. *Id.* at ¶¶ 288.

116. *Id.* at ¶ 307.

117. *Id.* at ¶ 385, the welfare of the population is stated at ¶¶ 377–379, 382, 384. Australia appears to raise this argument based on the law governing trusteeship in the 1950's and 1960's, but not from the standpoint of today's rules on the environment. This can be inferred from the fact, that in the first place, Australia relied on the intertemporal principle, to proceed later with alternative arguments. She finally included a section named *Australia Respected the Principle of Permanent Sovereignty Absolutely*, where she addresses the governing standards at the time of the administration, how it varied through time and how Australia abided by these varying standards. *See id.* at ¶¶ 424–426.

118. Counter-Memorial of the Government of Australia, Certain Phosphate Lands in Nauru, at ¶¶ 395–96, 401–402.

119. *Id.* at ¶¶ 335–36, 371, 373.

This case was finally settled, on August 2003, by agreements between the parties, whereby Australia had agreed to pay 107 million dollars to Nauru, "to settle amicably the application brought by the Republic of Nauru," made without prejudice to Australia's long-standing position that it bore no responsibility for the rehabilitation.¹²⁰

In the *Request for an Examination of the Situation in Accordance with Paragraph 63 of the Nuclear Tests Case 1974* in 1995, even if the Court rejected New Zealand's request for re-examination of the 1974 decision and consequently New Zealand's contention that France should cease with its nuclear testing plan, the Court stated that its conclusion was without prejudice to the obligations of states to respect and protect the environment.¹²¹

A review of the pleadings indicates that New Zealand's affirmation of Principle 21 of the Stockholm Declaration, Principle 2 of the Rio Declaration, and the ensuing obligation to ensure that the activities would not cause damage to other environments reflected a 'well established proposition of customary international law'¹²² and was not opposed by France.¹²³ The existence of such rule was also endorsed by Judges Weeramantry,¹²⁴ Koroma,¹²⁵ and Ad Hoc Judge Palmer¹²⁶ in their dissenting opinions.

120. *Id.* at 511-12.

121. *Nuclear Tests (N.Z. v. Fr.)*, 1995 I.C.J. 288, ¶ 64 (Sept. 22). When France announced that she would conduct a final series of eight nuclear weapon tests, in 1995, New Zealand filed a new petition before the Court to have the conduct of France declared to be contained in the 1974 ruling according to which France had to refrain from continuing with those tests given her unilateral promise that no further testing would take place. The Court rejected New Zealand's claim on grounds that actual French testing affected the marine environment, whereas the order of 1974 only dealt with atmospheric pollution, and therefore the Court took the view that such controversy was beyond the scope of such decision.

122. *Request for an Examination of the Situation, Nuclear Tests (N.Z. v. Fr.)*, 1995 I.C.J. Oral Proceedings 1, 11 (Sept. 12).

123. *See, e.g., id.* at 56-57. Statements of Mr. De Brichambaut: "la France n'a nullement la prétention de nier que le droit de l'environnement ait connu des progrès non négligeables, encore qu'inégaux, dans les quinze dernières années." "Elle est en particulier d'accord pour reconnaître, en liaison avec le principe 21 de la déclaration de Stockholm de 1972, repris au principe 2 de la déclaration de Rio de 1992, l'existence d'un devoir général de prévention des dommages à l'environnement."

124. *Nuclear Tests (N.Z. v. Fr.)*, 1995 I.C.J. 317, 347 (Sept. 22) (dissenting opinion of Judge Weeramantry).

125. *Nuclear Tests (N.Z. v. Fr.)*, 1995 I.C.J. 363, 378 (Sept. 22) (dissenting opinion of Judge Koroma).

126. *Nuclear Tests (N.Z. v. Fr.)*, 1995 I.C.J. 381, 408 (Sept. 22) (dissenting opinion of Judge Geoffrey Palmer).

The International Court of Justice (ICJ) has seized its opportunity to clearly consecrate the obligation not to cause damage in the Advisory Opinion *Legality of the Threat or Use of Nuclear Weapons*, when it declared that “the 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 part of the corpus of international law relating to the environment.”¹²⁷ This was not a case and there was no evidence in relation to state practice, however, it has been cited in this work as an authoritative opinion of how law stands currently.

In the *Gabčíkovo-Nagymaros Project Case*, when filing the application before the Court, Hungary argued that the construction of the provisional solution posed a serious danger to environmental resources and drinking water. Also, it could threaten the vegetation and fauna that existed in that place, which would be contrary to the principle prohibiting transboundary harm on neighbouring states, as reflected in the *Trail Smelter Arbitration*, the *Corfu Channel case*, and Principle 21 of the *Stockholm Declaration*.¹²⁸

The importance of this case relied on the fact that Hungary, when facing the risk of damage to the environment, decided to stop the works in the area. This is more than a preventive measure; for Hungary did not take some measure to reduce damage but directly eliminated it by not pursuing further works. The Court accepted that grave and imminent danger to the environment could constitute a state of necessity,¹²⁹ although found that in this case such danger did not exist.

Another recent and still unsettled case was between Ukraine and Romania for the *Bystroe Canal project*. Such project was a Ukrainian plan to build a canal through the *Danube Delta*.¹³⁰ Despite Romania's

127. Advisory Opinion, *Legality of the Threat or Use of Nuclear Weapons*, 1996 I.C.J. 2, 241–242 (Jan. 8, 1996).

128. For text of Hungary's arguments for termination of the Treaty *see* Treaty Concerning the Construction and Operation of the *Gabčíkovo-Nagymaros System of Locks and Hungarian Termination of Treaty*, Sept. 16, 1977, 32 I.L.M. 1247, 1282, 1287 (1993):

[t]he ‘provisional solution’ violates the principle of the prohibition of transboundary harm affecting the neighbouring state. This principle was reflected in the arbitration award of the *Trail Smelter arbitration* in 1941, in the judgment of the International Court of Justice in the *Corfu Channel case* in 1949, by Principle No.21 of the Declaration adopted by the *Stockholm Conference on the Human Environment* in 1972; by principles No.11 and 21 of the *Brundtland Report's* recommendations on environmental law, Art.294 the *Convention on Law of Sea of 1982*, and by Art.2 of the *1991 Convention adopted in Espoo* on environmental impact assessment in a transboundary context.

129. *Gabčíkovo-Nagymaros Project (Hung. v. Slov.)*, 1997 I.C.J. 7, ¶ 50 (Sept. 25).

130. U.N. Econ. & Soc. Council [ECOSOC], *Review of the Work Done by the Working Group on Environmental Impact Assessment and Adoption of Decisions, Findings and Recommendations*

objections, Ukrainian officials maintained that the canal would have no significant impacts on the delta's delicate ecosystem and commenced operations in 2004.¹³¹ Romania made a formal request to the Secretariat¹³² of the Espoo Convention.¹³³ The Commission's unanimous opinion was that the project was likely to have a significant adverse transboundary impact on the environment, and Ukraine gave assurances that the entire Project would be conducted in line with relevant International obligations.¹³⁴ Ukraine was condemned for its action, and at the meeting of the parties Ukraine was urged to suspend the implementation of the project and not to implement it.

During Phase II of the project and before fully applying the provisions of the Convention,¹³⁵ Ukraine committed to reconsider its decision. Moreover, Ukraine expressed her willingness to enter into negotiations with Romania and cooperate in the elaboration of bilateral agreements for the regulation of such project.¹³⁶ At no moment did Ukraine deny the existence of a prohibiting rule, she just denied the existence of risk of transboundary harm, and that the agreement may possibly foresee compensation or equitable share.

In *Navigational Rights (Costa Rica vs. Nicaragua)*,¹³⁷ the ICJ, following the line drawn in *Gabcikovo* case, acknowledged the importance of the protection of the environment, as well as the responsibility to protect it; "Nicaragua also has related responsibilities in respect of . . . environmental protection." It therefore concluded that environmental protection is a legitimate purpose to be fostered by imposing certain restrictions on Costa Rica's navigational rights, such as to require

Further to a Submission by Romania Regarding Ukraine, ¶¶ 19–30, U.N. Doc. ECE/MP.EIA/2008/6 (Feb. 27, 2008).

131. *Id.*

132. *Id.* at ¶ 1.

133. Convention on Environmental Impact Assessment in a Transboundary Context, Feb. 25, 1991, 1989 U.N.T.S. 310 (entered into force Sept. 10, 1997); Espoo Convention, *Decision on the Implementation Committee of Espoo Convention*, 3.3, available at [http://www.unece.org/env/eia/documents/Implementation Committee/ 2008- 2011/Report_of_Ukraine_Danube-Black%20Sea_Oct08_main.pdf](http://www.unece.org/env/eia/documents/Implementation%20Committee/2008-2011/Report_of_Ukraine_Danube-Black%20Sea_Oct08_main.pdf) (last visited Oct. 22, 2009).

134. U.N. Econ. & Soc. Council [ECOSOC], *Report of the Meeting of the Parties to the Convention on Environmental Impact Assessment in a Transboundary Context on its Fourth Meeting*, ¶¶ 4, 15, U.N. Doc. ECE/MP.EIA/10 (July 28, 2008).

135. *Id.* at ¶ 74(b).

136. See Press Release, Economic Commission for Europe, Work on the Controversial Bystroe Canal Project to be Reconsidered (May 23, 2008), http://www.unece.org/press/pr2008/08env_p08e.htm (last visited on Oct. 1, 2009).

137. *Navigational and Related Rights (Costa Rica v. Nicar.)*, 2009 I.C.J. 1 (Jan. 13).

passengers to show their identities,¹³⁸ the requirement of departure clearance certificates,¹³⁹ and the prohibition to navigate during night hours.¹⁴⁰ However, it rejected environmental concerns as a justification for prohibiting fishing by inhabitants of Costa Rica for subsistence purposes.¹⁴¹

A thorough consideration of the facts of this recent case provides support for the existence of a prohibition against causing damages to the environment of other states. Indeed, when Costa Rica challenged the regulation adopted by Nicaragua, the latter replied that: “the biggest threat to Nicaragua’s reserves comes from the Costa Rican side of the river. Residents of Costa Rican settlements frequently cross the river, enter the reserves, cut down protected trees, and return to Costa Rica to sell the wood.”¹⁴² Nicaragua further accused the Costa Rican population of illegal hunting which endangers biodiversity.¹⁴³

In this vein, it has to be noted that Costa Rica denied neither the existence of the rule, nor Nicaragua’s rights to protect its environment; what Costa Rica questioned was the reasonableness of the measures¹⁴⁴ and that the environmental concerns were put forward as an excuse to restrict Costa Rica’s rights, since no damage occurred.¹⁴⁵

Thus, the facts of the case show, that Costa Rica, through private actors who acted independently, caused damage to the environment. Nicaragua, instead of claiming its responsibility, adopted restrictive

138. *Id.* at ¶ 104.

139. *Id.* at ¶ 109.

140. *Id.* at ¶ 127.

141. *Id.* at ¶ 141.

142. Rejoinder of The Republic of Nivaragua, Navigational and Related Rights (Costa Rica v. Nicar.), 2008 I.C.J. Written Proceedings 1, ¶ 4.53 (July 15, 2008).

143. *Id.* at ¶¶ 4.56–4.59.

144. See declaration of Mr. Cafilisch at the public hearing held on Mar. 3, 2009: “one really fails to see what this type of obligation brings in terms of environmental protection or, at least, what is achieved by them that could not be accomplished by other, less radical measures.” Oral Arguments, Navigational and Related Rights (Costa Rica v. Nicar.), 2009 I.C.J. Oral Proceedings 8, ¶ 19 (Mar. 3, 2009).

145. See declaration of Mr. Kohen at the public hearing held on Mar. 3, 2009: “[j]amais une seule protestation nicaraguayenne n’a été émise contre le Costa Rica en raison d’une quelconque atteinte à l’environnement du fait de sa navigation sur le San Juan.” *Id.* at ¶ 35.

[I]maginez-vous les dommages à l’environnement que des canoës et autres bateaux utilisés par les Costa-riens peuvent causer, y compris aux espèces ichtyologiques. Je dis bien «imaginer», car le Nicaragua n’a évidemment pas produit la moindre preuve pour démontrer que la navigation costa-ricienne porte atteinte à l’environnement du fleuve ou qu’elle est même en mesure de le faire.

Id. at ¶ 36.

regulations. This might be considered much more effective given the diffuse actions and the insignificance of the harm of each single action but, which considered cumulatively, might cause irreparable harm. The Court in this proceeding declared not only that such regulation was legitimate, but also it suggested that it was Nicaragua's obligation to adopt it in light of its responsibilities towards the environment.

In *Pulp Mills: Argentina vs. Uruguay*, Argentina claims that by authorizing the construction of two pulp mills on the banks of the River Uruguay, in front the Argentine town of Gualaguaychú, Uruguay has incurred international responsibility by reason of its violation of the Statute of the River Uruguay of February 26, 1975. This also violates other rules of international law to which this Statute refers and¹⁴⁶ incorporates by reference some procedural obligations. The substantive obligation argued to be breached is "Uruguay's obligation not to cause environmental pollution or consequential economic losses."¹⁴⁷ Even if this claim is grounded on treaty provisions,¹⁴⁸ Argentina contends that the 1975 Statute incorporated international environmental standards.¹⁴⁹ This would be tantamount to stating that the treaty was written in accordance to international rules, and included *opinio juris* in respect to the customary rule of not causing pollution.

Uruguay did not challenge the existence of a customary rule of international law binding upon her and prohibiting her to cause any damage to the environment of the River Uruguay. On the contrary, her defense was that the environmental impact assessments undertaken, the regulatory control and licensing conditions guarantee that no harm would be caused to the River Uruguay or to Argentina.¹⁵⁰

When resolving the issue, at the provisional measures stage, the Court seized the opportunity to recall the obligation of states to ensure that activities within its jurisdiction and control respect the environment of other

146. See Argentina's Application Instituting Proceedings, Pulp Mills on the River Uruguay (Arg. v. Uru.) 2006 I.C.J. Applications 5, 19 (May 4); Statute of the River Uruguay, Dec. 17, 1982, 1295 U.N.T.S. 339.

147. See Request for the Indication of Provisional Measures, Pulp Mills on the River Uruguay (Arg. v. Uru.), 2006 I.C.J. Incidental Proceedings 1, 8 (July 13); Statute of the River Uruguay, *supra* note 146, at art. 41(a), 42.

148. Statute of the River Uruguay, *supra* note 146, at art. 42, "[e]ach party shall be liable to the other for damage inflicted as a result of pollution caused by its own activities or by those carried out in its territory by individuals or legal entities."

149. J. Viñuales, *The Contribution of the International Court of Justice to the Development of International Environmental Law: A Contemporary Assessment*, 32 *FORDHAM INT'L L.J.* 232, 254 (2008).

150. Pulp Mills, 2006 I.C.J. Incidental Proceedings at ¶¶ 45, 47.

states. However, it did not find that the construction of the pulp mills would pose an imminent threat of irreparable damage, in particular, since the pulp mills were not expected to be operational before August 2007.¹⁵¹

Therefore, many things remain to be seen in the Court's decision, such as, the existence of damage now that the pulp mills are operational, the existence of a customary rule on the prohibition of causing damage, and the customary status of many procedural obligations such as notification and consent.¹⁵²

In the *Aerial Incident Case*, the dispute concerns Colombia's aerial spraying of toxic herbicides at locations near and at its border with Ecuador.¹⁵³ Ecuador alleges that the spraying has already caused serious damage to people, crops, animals and the natural environment on the Ecuadorian side of the frontier.¹⁵⁴

Ecuador's substantive claim is that Colombia has violated, "Ecuador's rights under customary and conventional international law."¹⁵⁵ This is because fumigations carried across the border or near it have been dispersed by winds onto Ecuador's territory, and has caused deleterious effects on its environment. Thus, Ecuador asks the Court to declare that Colombia has violated its obligations under customary international law by causing or allowing the deposit on its territory of toxic herbicides.¹⁵⁶ Furthermore, Ecuador asks the Court to deal with this breach of international law in a twofold manner: a) by compensation for any loss or damage, including environmental damage, already caused, and b) by asking the Court to prohibit the use, by means of aerial dispersion, of such herbicides near any part of the border between Ecuador and Colombia.¹⁵⁷

This is the typical transboundary environmental damage case, and it is noteworthy that in the absence of any treaty governing the issue, Ecuador invokes a customary rule of international law, prohibiting the causing of damage to support its claim.

Finally, state practice cannot only be found in those cases where some sort of reparation was claimed or granted as a result of environmental harm; there are also instances of success where a state refrained from conducting

151. *Id.* at ¶¶ 72–73 and 75.

152. The time-limits for the parties to submit their arguments have already been met; therefore, a decision is expected to be rendered this year.

153. Application, *Aerial Herbicide Spraying (Ecuador v. Colom.)* 2008 I.C.J. 4, ¶ 2 (Mar. 31).

154. *Id.*

155. *Id.* at ¶ 37.

156. *Id.* at ¶¶ 2, 37.

157. *Id.* at ¶ 38. The case has not been decided yet. The time-limit for Colombia to present its Counter-Memorial would be 29 March 2010.

an activity due to environmental concerns. In this vein, France intended to build a chemical industrial complex, which was likely to produce air pollution within German territory. Germany objected to the construction and required the disclosure of information. As a result of the probable damage, France agreed to abandon the construction of some of the factories of the complex in order to reduce or eliminate the risk of transboundary pollution.¹⁵⁸

In 1949, Austria made a formal protest to the Hungarian government for installing mines in its territory close to the Austrian border.¹⁵⁹ Austria was concerned that during a flood the mines might be washed to its territory. Indeed, in 1966, a Hungarian mine exploded in Austrian territory causing damage. Austria protested arguing that Hungary had violated "uncontested international legal principle according to which measures taken in the territory of one state must not endanger the lives, health and property of citizens of another state."¹⁶⁰ Hungary subsequently removed the minefield.¹⁶¹

All these cases show that even when states have refused to accept liability as a legal principle, they acted as though they have accepted it, normally in the form of a tacit acknowledgment of the obligation. States did not deny the existence of a legal principle it and proceeded to pay compensation, regardless of the terms used when paying them,¹⁶² or by directly refraining from engaging in the questioned activities.

158. Report of the Sixtieth Conference of the International Law Association, *Legal Aspects of the Conservation of the Environment*, [1982] 60 INT'L L. ASS'N REP. CONF. 165 (1982). The ICJ has stated that the mere fact of abstention, without careful consideration of the motivating factors is not sufficient to prove the existence of a customary rule *see* *Asylum Case (Colom. v. Perú)*, 1950 I.C.J. 266, 286 (Nov. 20); *North Sea Continental Shelf (F.R.G. v. Den. & F.R.G. v. Neth.)*, 1969 I.C.J. 4, ¶ 77 (Feb. 20). However, it holds equally true that "repeated instances of State practice, when they follow and promote similar policies may create expectations about the authoritativeness of those police in future behaviour." *Survey of State Liability Regimes*, *supra* 73, at 5. Such conclusion is endorsed by the very ICJ when it considered a State's abstention as evidence of a customary rule in *Nottebohm (Liech. v. Guat.)*, 1955 I.C.J. 4, 21 (April 6). In this vein, the abovementioned examples were not isolated acts of States that abandoned unviable projects. On the contrary, the abstention from continuing with the projects was the consequence of protests from other States and motivated by core principles of international environmental law. Thus, still if they are examples of abstentions, they may well help to show the crystallization of a customary rule of not to cause damage to the environment's of other states.

159. The Secretariat, *Survey on Liability Regimes Relevant to the Topic: International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, ¶ 184, U.N. Doc. A/CN.4/471 (1995).

160. *Id.*

161. *Survey of State Practice*, *supra* note 34, at ¶ 474.

162. *Survey of Liability Regimes*, *supra* note 73, at ¶ 399.

IV. THE ROLE OF THE WORK OF THE INTERNATIONAL LAW
COMMISSION ON INTERNATIONAL LIABILITY IN RELATION TO THE
SCHEME OF STRICT RESPONSIBILITY

International liability differs from state responsibility in that the latter is dependent upon a prior breach of international law, while the former constitutes an attempt to develop a branch of law in which a state may be liable internationally with regard to the harmful consequences of an activity which is not contrary to international law. This innovative approach received many criticisms, namely that the issue was not whether the relevant activity was unlawful, but whether the home state fulfilled its due diligence duty to avoid causing transboundary harm.¹⁶³ Thus, it was accused of confusing the lawfulness of the any industrial, explorative or economic activity with the unlawfulness of the state conduct.¹⁶⁴ It was further condemned as utterly unnecessary, since it could be accommodated in the state responsibility topic and through the development of primary rules that provided for a strict liability standard.¹⁶⁵

Certainly, if the obligation were to not damage the environment of any other State, then the mere verification of damage would be a breach of international law. Thus if damage were produced, a state would incur international responsibility regardless of whether the activity prompting the damage was lawful or not.

Owing to the lack of consensus around this new regime of responsibility, the International Law Commission (ILC) revised its work and divided it into two different subtopics: Prevention on Transboundary Damage from Hazardous Activities and International Liability in cases of loss from Transboundary Harm Arising out of Hazardous Activities.¹⁶⁶ In 2001, the ILC adopted the draft articles on Prevention of Transboundary Harm from Hazardous Activities.¹⁶⁷

Some authors assert, that by only adopting the Prevention of Transboundary Harm, the ILC implicitly reaffirmed the due diligence nature of the obligation to prevent discarding any obligation of not causing

163. See Alan Boyle, *State Responsibility and Liability for Injurious Consequences of Acts Not Prohibited by International Law: A Necessary Distinction?*, 30 INT'L & COMP. L.Q. 1, 2 (1990).

164. BROWNIE, *supra* note 2, at 50–51.

165. Pierre-Marie Dupuy, *The International Law of State Responsibility: Revolution or Evolution?*, 11 MICH. J. INT'L L. 105, 109 (1989); Magraw, *supra* note 7, at 318.

166. G.A. Res. 56/8, 15, U.N. Doc. A/RES/56/82 (Jan. 18, 2002).

167. *Report of the Commission to the General Assembly on the Work of its Fifty-Third Session*, [2001] 2(1) Y.B. Int'l L. Comm'n 248, ¶ 4, U.N. Doc. A/CN.4/SER.A./2001. The report was submitted to the General Assembly, who expressed its appreciation for the valuable work through G.A. Res. 56/82, prmb. ¶¶ 2–3, U.N. Doc. A/RES/56/82 (Dec. 12, 2001).

harm, followed by a scheme of strict responsibility.¹⁶⁸ This conclusion is misled by the confusion between strict responsibility and liability for a lawful activity. What the ILC abandoned is the scheme of liability without a wrongful act due to the conceptual criticism that it received. In no way does it imply an abandonment of a strict liability regime. Indeed, practice shows that state responsibility could continue to provide a basis for preventing environmental harm.¹⁶⁹ Moreover, the ILC has insisted on repairing environmental damage (ILC articles on allocation of loss in case of Transboundary Harm Arising Out of Hazardous Activities) and it is turning on civil liability as a more feasible regime to gain consensus between states.¹⁷⁰ This was probably due to the fact that members of the General Assembly continued to insist that the main *raison d'être* of the topic assigned for study was liability, and should be completed without delay.¹⁷¹ This insistence clearly shows that the matter is not definitely settled in favor of the regime of responsibility for fault, which has been the traditional one, and it constitutes a demand that rules fitting environmental concerns ought to be codified.

Moreover, in 2006 the ILC adopted the Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities.¹⁷² Its purpose is to ensure prompt and adequate compensation to victims of transboundary damage and to preserve and protect the environment, particularly because “incidents may occur despite compliance by the relevant State with its obligation concerning prevention.”¹⁷³ Such statement acknowledges that the obligation of prevention and responsibility for harm are two different concepts; whilst the obligation to prevent can be well established under international law, compliance with it may not exonerate a state from its duty to repair should

168. Fitzmaurice, *supra* note 13, at 1014.

169. *Third report*, *supra* note 12, at 27–30.

170. Int'l Law Comm'n [ILC], *First Report on the Legal Regime for Allocation of Loss in Case of Transboundary Harm Arising Out of Hazardous Activities*, ¶ 18, U.N. Doc. A/CN.4/531 (2003) [hereinafter *First Report*].

171. G.A. Res. 54/111, ¶¶ 2–4, U.N. Doc. A/RES/54/111 (2000), reiterated in U.N.G.A. Res. 55/152 on Report of the International Law Commission on the work of its fifty-second session, G.A. Res. 55/152, pmbl. ¶ 7, U.N. Doc. A/RES/55/152 (2001) (“requests the Commission to resume consideration of the liability aspects of the topic as soon as the second reading of the draft articles on the prevention of transboundary damage from hazardous activities is completed, bearing in mind the interrelationship between the prevention and the liability”) and also in G.A. Res. 56/82, pmbl. 2–3, U.N. Doc. A/RES/56/82 (2002).

172. *Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities*, [2006] 2(2) Y.B. Int'l L. Comm'n 1, 103, U.N. Doc. A/61/10.

173. *Id.* at pmbl.

any damage be caused. States are to take all necessary measures to ensure such compensation is available, without requiring proof of fault. Even if different measures are suggested, such as imposition of liability on the operator and the establishment of industry-wide funds, the final responsibility to ensure that adequate compensation is provided rests with the state.¹⁷⁴ The adoption of these articles makes the repairing of damage a paramount consequence of environmental harm regardless of the activity causing it and whether it was due to lack of diligence when carried out and constitutes a step towards recognizing the obligation not to damage. Thus, if these obligations are breached, compensation is justified.

V. AN APPRAISAL OF THE SCHEME OF STRICT RESPONSIBILITY

From a doctrinal perspective, the standard of responsibility to be applied is not evident, leading to uncertainty when studying the topic. Uncertainty acts as a barrier to international claims, and renders the codification ineffective in deterring breaches of obligations.

The traditional scheme of responsibility for fault, with its prevalent due diligence standard, limits its potential to channel damage costs to the environment.¹⁷⁵ Moreover, under this scheme, cost would be borne by innocent states or the global commons,¹⁷⁶ since states can easily avoid responsibility by referring to compliance with some measures to prevent damage. Indeed, there is neither a specific definition of what constitutes due diligence, nor is the state of the art always reflected in the measures that are required. Therefore, in the absence of clear guidelines against which the conduct of states is to be assessed, this standard is quite unhelpful since it offers little guidance on what legislation, controls or measures are required to prevent pollution.¹⁷⁷

Furthermore, another major disadvantage of this scheme is that proving the lack of diligence is tough and sometimes turns out to be an insurmountable obstacle. Thus, even if victims were given the opportunity to have liberal recourse to rules of evidence and inferences, this could be an unachievable task. Some authors suggest that this regime can work out if the burden of proof were shifted and the operator or accused state would be required to prove that he has taken all the care expected.¹⁷⁸ However, as

174. *Id.* at principle 4.

175. Jutta Brune, *Of Sense and Sensibility: Reflections on International Liability Regimes as Tools for Environmental Protection*, 53 INT'L & COMP. L.Q. 351, 354 (2004).

176. NANDA, *supra* note 8, at 136.

177. BIRNIE & BOYLE, *supra* note 4, at 113.

178. Brian Jones, *Deterring, Compensating, and Remedying Environmental Damage: The Contribution of Tort Liability*, in HARM TO THE ENVIRONMENT: THE RIGHT TO COMPENSATION AND

previously mentioned, in the absence of high and strict standards, this obligation can be easily discharged. Therefore, instead of making artificial or forced modifications to a regime (such as of shifting the burden of proof) it would be more sensible to directly adopt a regime of strict liability.

In turn, an alternative to the regime of responsibility for fault has been suggested in the shape of strict liability, but posed upon operators rather than on the state of origin. Strict liability was held to be the most proper technique under both common and civil law to enable victims to recover compensation without having to establish proof of fault on the basis of what is often detailed technical evidence.¹⁷⁹

However, this regime is not devoid of criticism. It has been qualified as incapable of providing sufficient incentives to the operator to take stricter measures of prevention. If the limits are set too low it could even become a license to pollute or cause injury to others and externalize the real costs of the operator.¹⁸⁰ It is also felt that it may not be able to meet all the legitimate demands of innocent victims for reparation due to these limits. Therefore, for some authors it would be useful to return to actions based on liability for fault.¹⁸¹ On the contrary, this article suggests that the responsibility of states, either direct or residual, should be maintained for both regimes would be always intertwined.¹⁸²

In this vein, regimes of international responsibility for breaches of obligations, either of due diligence or obligations of result, is already crystallized. That is the very reason for advocating for its applicability; to take advantage of all the work already taken, instead of proposing a new different regime. The expectations about its contribution to the development of international environmental law must not be overestimated; it is an overarching, reactive, subsidiary regime that will come into play should all the other rules fail.

What is relevant, as a deterrent and as a certainty element, is the standard to be applied. Strict liability gives foreseeability to states, as it plainly determines the expected conduct from states. It also is a deterrent,

THE ASSESSMENT OF DAMAGES 1, 22 (Peter Wetterstein ed., Oxford University Press 1997). This author acknowledges that "the difference between fault-based liability and strict liability may not be as great as may sometimes be suggested," a conclusion that is verified if the change in the burden of proof was applied.

179. Elspeth Reid, *Liability for Dangerous Activities: A Comparative Analysis*, 48 INT'L & COMP. L.Q. 731, 756 (1999); *Survey of Liability Regimes*, *supra* note 73, at ¶ 23.

180. *First Report*, *supra* note 170, at ¶ 119.

181. KISS & SHELTON, *supra* note 1, at 375.

182. For a clear explanation of the interaction between the schemes of Civil Liability and State Responsibility, see T. Gehring & M. Jachtenfuchs, *Liability for Transboundary Environmental Damage: Towards a General Liability Regime?*, 4 EUR. J. INT'L L. 92, 104-105 (1993).

for it would logically constrain states to be more stringent in the design, implementation and control of their domestic system, as well as, of the activities taken place within their jurisdictions.

Indeed, three advantages have been proclaimed in defense of strict liability: firstly, this regime can help internalize costs of pollution into the polluter's sphere; secondly, it can provide incentives for compliance with environmental standards; and thirdly it can provide an important back-up system should environmental harm occur.¹⁸³

Such advantages have been questioned by other commentators, arguing that any cost internalization would be partial at best, due to difficulties in identifying the polluter, insufficient insurance or insolvent polluters.¹⁸⁴ It ought to be noted that it is difficult to identify polluters at any stage. It is not a problem germane to liability, but to all environmental regulation, and that is due to the lack of scientific knowledge as to minimum standards, cumulative effects, the determination of who is the person causing harm and the apportionment of the contribution of different actors to degrade the environment. Thus, a typical problem of all environmental law cannot be raised as an objection only to a strict responsibility regime.

Another critic, points to the lack of empirical evidence showing the effect of incentives for compliance.¹⁸⁵ In support of this criticism, a study commissioned by the European Commission in the context of its work towards a strict liability directive, is cited to suggest that strict liability regimes have no statistically significant effect on polluters' behavior.¹⁸⁶ However, what such study concluded was that "the evidence for the effect of strict liability on air emissions is suggestive but not strongly significant."¹⁸⁷

Despite the fact that the study verified a diminution of the levels of pollution, several observations can be made. First, the calculation of levels

183. Betsy Baker Røben, *Civil Liability as a Control Mechanism for Environmental Protection at the International Level*, in INTERNATIONAL, REGIONAL AND NATIONAL ENVIRONMENTAL LAW 821, 827 (Kluwer ed., Kluwer Law Int'l, 2000).

184. Marcel Boyer and Donatella Porrini, *The Choice of Instruments for Environmental Policy: Liability of Regulation?*, in AN INTRODUCTION TO THE LAW AND ECONOMICS OF ENVIRONMENTAL POLICY: ISSUES OF INSTITUTIONAL DESIGN 245, 247 (Timothy Swanson ed., JAI Elsevier Science 2002).

185. Brunee, *supra* note 175, at 366.

186. *Id.* at 366.

187. David Austin & Anna Alberini, *An Analysis of the Preventive Effect of Environmental Liability: Environmental Liability, Location and Emissions Substitution: Evidence from the Toxic Release Inventory 26-27*, (Oct. 30, 2001), http://ec.europa.eu/environment/legal/liability/pdf/preventive_final.pdf (last visited Oct. 2, 2009).

of pollution based on air emissions within the United States depends on legislation of different states. The main argument of such study is that some firms may substitute one means of emission for another, instead of reducing the actual levels of pollution.¹⁸⁸ Such argument is not applicable when dealing with states' strict responsibility. Substituting one means for another will still make a state cause damage to another states' environment, incurring responsibility all the same. Thus, the state would be more cautious when evaluating substitutive alternatives. Furthermore, it is arguably that states will implement clear environmental standards that will enable themselves to continue with their economic activities in a manner that it is not prejudicial to the environment. Finally, states will most effectively control subjects under their jurisdiction, thus, the internalization of the costs that environmentally-friendly technology might entail will be mandatory rather than optional. If such technology were not applied the state would be the one who will bear the costs of the injuries caused with no benefit. Then, the possibility of suit for liability, instead of adopting new technology is applicable to individuals, but not to the state. The same conclusion applies even if a civil liability scheme were adopted with the residual responsibility of states, for it would be reasonable to presume that states will diligently control those activities, to avoid incurring responsibility with no benefit in return.

Finally, it ought to be said that such study might not have been found so conclusive since, in its aftermath, the European Directive was adopted with the fundamental aim to hold operators financially liable. Indeed, according to the European Union Commission "it is expected that this will result in an increased level of prevention and precaution."¹⁸⁹ This directive aims to hold the operator, whose activity has caused the environmental damage, financially liable "in order to induce operators to adopt measures and develop practices to minimize the risk."¹⁹⁰

While a clear-cut obligation of not causing harm and system of strict liability is not the panacea for environmental problems, it remains a

188. *Id.* at 4.

189. Memorandum of the European Union Commission, European Union, Questions and Answers Environmental Liability Directive, (Apr. 27, 2007) (MEMO07/157). With respect to implementation, interesting observations emerge from *Commission Report on Financial Security in Environmental Liability Directive, 10* (Aug. 2008), http://ec.europa.eu/environment/legal/liability/pdf/eld_report.pdf (last visited October 2, 2009). This report verified that among the operators surveyed, none had actually adapted their insurance policy, suggesting that this regime needs to be communicated to the public to be effective. *Id.*

190. Directive on Environmental Liability with regard to the prevention and remedying of environmental damage, Directive Council 2004/35/CE, *supra* note, 64 of the European Parliament and of the Council, Official Journal of the European Union, L. 143, p. 56/70, 30/04/04, prmb1, ¶ 2.

necessary step to permit any person to foresee the consequences of lack of compliance. Indeed, turning back to the cornerstone of this area of international law, the tribunal of the *Trail Smelter* Case opined that the prescribed regime will probably remove the causes of the present controversy and will probably result in preventing any damage of a material nature occurring in the future.¹⁹¹

VI. CONCLUSION

When assessing the regimes to be applied to states' conducts, the elucidation of the nature and scope of the primary obligation is critical, since it will determine the governing standard of care, and consequently, the regime of responsibility. In the realm of environmental harm, the main obligation is that of not causing damage to other states, and such obligation can only be fully respected if accompanied by a strict standard of care. This is not just a proposal; the scheme of strict responsibility for environmental harm has crystallized into a customary rule.

The "customary law status of a rule depends on whether the principle is invoked by a majority of states, . . . by a regional group of states or even by the . . . international civil society" and can be proved if referred to in treaties, soft law instruments, invoked on judicial, or semi-judicial decisions, or in other expression of state practice.¹⁹²

In this vein, the research here exposed shows that the state practice is consistent; that almost all states when suffering any kind of damage invoke such rule. That group of states include: the United States, Mexico, Canada, Japan, Yugoslavia, Australia, New Zealand, Nauru, Hungary, Romania, Nicaragua, Argentina and Ecuador.

In turn, respondent states to the disputes here reviewed, namely, the United States, Canada, Austria, Liberia, France, Australia, Ukraine, Costa Rica, Uruguay, Colombia, have denied the existence of damage, but in no case did they reject the existence of a prohibition of causing damage to other states. Moreover, some States, to avoid judicial disputes directly opted to abandon the project they were pursuing, as were the cases of France and Hungary amidst others.

With respect to treaty practice, it is quite variable. However, no negative inference can be drawn from the omission of including a prohibitive rule, since such omission can have multiple causes. What is relevant, is the quantity of treaties, and states parties to them, that contain

191. *Trail Smelter Arbitration*, 3 R. Int'l Arb. Awards at 1980.

192. Pierre-Marie Dupuy, *Formation of Customary International Law and General Principles*, in *THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW* 449, 451 (Daniel Bodansky, Jutta Brunnee and Ellen Hey eds., Oxford University Press 2008).

the obligation to ensure that no damage occurs. There are a myriad of treaties referring to such obligation. The conspicuous example is the recent Convention on Biological Diversity, which has 191 parties. Moreover, practice is also reflected in the celebration of specific treaties regulating particular situations and clarifying the scope of indemnification to be provided should any harm arise, as is the case of Norway, the USSR, Hungary, Canada, the United States of America, Italy, Ireland, the Netherlands, Liberia, Germany, Austria, Argentina, Uruguay, Finland, among others.

Turning to *opinio juris*, it is evident by the adoption of documents by international organizations, such the United Nations General Assembly Resolution 1629 (XVI) 1961,¹⁹³ the Resolution on Development and Environment UNGA 2849 (XXVI) 1972,¹⁹⁴ the Resolution on Co-operation Between States in the Field of the Environment UNGA 2995 (XXII) 1972,¹⁹⁵ the Charter of Economic Rights and Duties of States UNGA 3281 (XXVII) 1974),¹⁹⁶ the 1978 United Nations Environment Programme Draft Principles of Conduct in the Field of the Environment for the Guidance of States in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States, Principle 2 of the Rio Declaration 1992,¹⁹⁷ etc. In particular, it can also be traced in the declarations of states when voting for those resolutions. For instance, the Declarations of Canada, the United States and Australia, when adopting Resolution 2996 (XXVII), and declarations made in particular circumstances, furnish evidence of the beliefs of states in relation to the governing obligations. Examples of these governing obligations include Australia's declaration in the Nuclear Tests Case, the Swedish reservation of actions in relation to the Chernobyl tragedy, Liberia's and USSR's declaration within the Trusteeship Council about Nauru, pointing to Australia's responsibility to restore the damaged area, etc.

The practice cited is wide, representative and most importantly, includes the majority of the cases that has arisen in the international plane. In turn, states' declarations have been retrieved from the most democratic and participative forums under the auspices of the United Nations. Thus, both elements for the existence of a customary rule are met. Moreover, the activities of the ILC tend to favor this view since they continue to be

193. G.A. Res. 1629 (XVI), *supra* note 18, at prmb.

194. G.A. Res. 2849 (XXVI), *supra* note 19, at ¶ 4a.

195. G.A. Res. 2995 (XXII), *supra* note 20, at ¶ 1.

196. G.A. Res. 3281 (XXVII), *supra* note 25, at prmb.

197. *Draft Principles on Conduct*, *supra* note 26, at art. 3.

engaged in the development of some principles to provide the victims with prompt and adequate remedies.

Finally, from the comparison of the different regimes, strict liability is the regime that provides certainty to the states, as it sheds light on the expected conducts. This regime's incentive effects for the adoption of better technologies to avoid causing harm, its deterrent effect over deleterious conducts, and the sense of justice that its allocation of loss brings in, all support the conclusion that this regime is the one that best serves the environmental concerns of the international community.