Of Sense And Sensibility: Reflections On International Liability Regimes As Tools For Environmental Protection

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OF SENSE AND SENSIBILITY: REFLECTIONS ON INTERNATIONAL LIABILITY REGIMES AS TOOLS FOR ENVIRONMENTAL PROTECTION

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1. INTRODUCTION

There are several reasons, pertaining to both the development of a generally applicable framework and the elaboration of issue-specific approaches, why it is timely to reflect on whether liability regimes are an appropriate tool for international environmental protection. At the level of general norms, the International Law Commission (ILC) appears to have arrived at a crossroads, as it must decide whether and how to approach further work on liability for transboundary environmental harm. At the same time, discussions about issue-specific liability regimes have proliferated. Indeed, it seems that few multilateral environmental agreements (MEAs) can be negotiated today without running across the liability issue in one way or another. The issue often divides Southern delegations, which tend to push for the inclusion of liability regimes, and Northern delegations, which tend to resist. But the disagreement is not just a matter of policy and politics. There is also a lively debate in the literature about the pros and cons of international liability regimes. All the more reason, therefore, to assess whether engaging in the laborious task of developing a liability regime is a good investment of scarce negotiating resources. The goals that animate the quest for environmental liability are important ones: to make polluters pay for the environmental costs of their activities, to compensate innocent victims, to protect the environment, and, in certain contexts, to protect developing countries against environmental risks. The key question is whether, given these sensibilities, the approach makes sense.

I want to proceed by peeling away several layers from the liability topic. The first layer is the law of State responsibility, which deals with the consequences of States’ breaches of international law. As will become apparent, the law of State responsibility has not played a large practical role in the environmental liability context, and a number of conceptual uncertainties continue to limit its potential to do so. The second layer is the idea that, rather than hold

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States responsible for breaches of international law, efforts should focus on the development of a system of liability for the harmful consequences of lawful but risk-intensive activities. This approach too, in its aspiration to develop generally applicable rules, has been fraught with difficulties. Layer three consists of liability regimes that were developed for specific, high-risk activities, such as nuclear power generation or maritime transport of oil. These agreements brought about a shift from State liability to civil liability, aiming to channel liability, and costs, to owners or operators of high risk undertakings. The fourth layer takes us into the realm of MEAs. These agreements proliferated because most environmental issues are addressed more effectively through pro-active rather than reactive, compensatory approaches. Increasingly, MEAs also embraced strategies designed to promote compliance with commitments, rather than focus on allocation of blame for breaches of obligations. The liability issue seems to have returned to the agenda, however, and many MEA negotiations are confronted with the question of whether or not to back-up preventive efforts with a liability regime.

I will run through these layers, attempting to give a flavour of the issues pertaining to each. I then want to offer a few thoughts on the potential strengths of liability regimes, and attendant weaknesses. I will conclude with some comments on how much we should expect of the liability approach, from the standpoint of international environmental protection and from the standpoint of improved compensation prospects.

II. THE LAW OF STATE RESPONSIBILITY

The idea that a violation of international law triggers certain secondary obligations, notably to discontinue the offending conduct and to repair resulting harm, is so foundational that one might expect the law of State responsibility to be well settled. Yet, as even casual observers will know, while many aspects of the State responsibility framework are customary law, many key points remain controversial and on uncertain legal footing. Consider that it was no less than 50 years ago that the UN General Assembly invited the ILC to work towards the codification of the law of State responsibility. Only in

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1 With respect to terminology, in comparison to State responsibility, ‘international liability refers more generally to mechanisms for compensating and otherwise remediying harm caused by states or other actors, whether or not the harm resulted from the breach of an international obligation’. See TA Berwick ‘Responsibility and Liability for Environmental Damage: A Roadmap for International Environmental Regimes’ (1998) 10 Georgetown Int’l Envtl L Rev 257, at 259.
2 Note that the goal of this contribution is to tease out themes and issues, rather than to offer a detailed review of various liability regimes.
2001 did the ILC finally adopt a set of fifty-nine draft articles. Following the ILC’s recommendation, the General Assembly did not convene a diplomatic conference to work on adoption of the articles as a treaty, but simply took note of them.

As far as responsibility for environmental harm is concerned, the picture is even less settled. In principle, it is accepted that a State that violates international environmental law incurs State responsibility. But there is strikingly little State practice and most transnational environmental concerns are resolved through negotiation or adoption of an agreement that regulates the issue at hand. Only in a handful of cases have environmental concerns actually given rise to formal dispute settlement. The resulting decisions provide some clues regarding the primary rules of international environmental law, but they actually offer little insight into State responsibility for environmental harm. Many crucial details remain unsettled. For example, it is unclear whether and to what extent States are entitled to invoke the responsibility of another State when it violates obligations that are owed \textit{erga omnes} or to a group of States. There also little guidance on the extent to which purely ecological harm would be compensable. In any event, it is unlikely that a State responsibility approach could play a role in addressing global environmental problems. Apart from the fact that it is not conducive to promoting the necessary cooperative steps, the multiplicity of polluters and victims would likely pose insurmountable evidentiary difficulties.

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\textsuperscript{9} See X Hanqin \textit{Transboundary Damage in International Law} (Cambridge CUP 2003), at 286.


\textsuperscript{12} As Birnie and Boyle, above n 8, at 192, suggest, the answer to this question depends in part on the underlying primary rules. See also A Boyle ‘Reparation for Environmental Damage in International Law: Some Preliminary Problems’, in M Bowman and A Boyle (eds) \textit{Environmental Damage in International and Comparative Law} (Oxford OUP 2002) 17.

\textsuperscript{13} T Scovazzi ‘State Responsibility for Environmental Harm’ (2001) 12 Yearbook of Int’l Env Law 43, at 51.

\textsuperscript{14} Consider in this context the uphill battle that the plans by Tuvalu to sue Australia for its fail-
Since State responsibility is contingent upon a violation of a rule of international law, the limitations of relevant international environmental norms also impact on the role that State responsibility can play in the environmental context. Important aspects even of central international environmental norms remain opaque. To begin with, the legal status and content of several key norms, such as the precautionary principle, sustainable development, common concern, or common but differentiated responsibilities, remain contested. While this fact does not impede these norms’ ability to influence international environmental policy and shape environmental agreements, it does impact on their usefulness in a litigation context.15

Further constraints flow from the standard of liability in international environmental law. Fault liability, encapsulated in the requirement of due diligence, is the background rule under customary law.16 For example, the foundational obligation to avoid significant transboundary harm requires only that reasonable (regulatory) efforts are made to prevent harm. The difficulties that a claimant would face in establishing a lack of diligence on the part of another State compound other evidentiary challenges, such as those related to causation.17 Only in relation to specific high-risk activities might there be a strict liability standard. However, it is debatable whether that is so as a matter of customary law, or only pursuant to specific treaty regimes.

In short, there is a vicious circle of sorts at play here. The various uncertainties in primary norms make it difficult to deploy them for State responsibility purposes. In turn, it seems that States are not anxious to resolve the ambiguities, as they serve as a convenient buffer against State responsibility.18

III. STATE LIABILITY FOR HARMFUL CONSEQUENCES OF LAWFUL ACTIVITIES

The law of State responsibility for environmental harm proved difficult to develop, and its prevalent due diligence standard limits its potential to channel damage costs to the State in which pollution originates. Therefore, in the 1970s, the ILC began to focus on developing a system of State liability for...
harmful consequences of lawful activities.\textsuperscript{19} For several years, the ILC wrestled with the topic of ‘liability for injurious consequences arising out of acts not prohibited by international law’, but was unable to get a handle on scope and thrust of the project.\textsuperscript{20} Indeed, from the outset the conceptual underpinnings of the topic were heavily criticized.\textsuperscript{21} Many commentators suggested that there was no need for the topic, as it could be accommodated in the State responsibility topic and through development of primary rules that provided for a strict liability standard.\textsuperscript{22} It was also suggested that the focus on ‘activities not prohibited by international law’ was misplaced, or superfluous. Even in the law of State responsibility, so the argument went, the issue is not whether the specific activities that give rise to harm are prohibited (eg, energy generation or industrial activity). The real issue is whether the home State lives up to its duties to make diligent efforts to regulate activities so as to avoid transboundary harm.\textsuperscript{23}

It appears that the sceptics won the day. In 1997 the ILC decided to further divide the ‘liability’ topic into work on the prevention of transboundary harm from hazardous activities, and work on liability for injurious consequences.\textsuperscript{24} The former project resulted in the completion, in 2001, of draft Articles that flesh out primary obligations of States regarding harm prevention.\textsuperscript{25} While the latter work is ongoing, all indications are that the liability focus has been subjected to a reality check. The work is now very pragmatically focused on ‘allocation of loss’, rather than on developing an overarching concept of liability.\textsuperscript{26} In a March 2003 report the Special Rapporteur for the topic, PS Rao, assesses whether the earlier focus on State liability was a ‘a case of misplaced emphasis’.\textsuperscript{27} To answer this question, suffice it to quote the Special Rapporteur:

\textit{\textsuperscript{19} While the topic was cast in general terms, transboundary environmental harm quickly emerged as a central issue. See Hafner and Pearson, above n 5, at 23.}
\textit{\textsuperscript{20} Ibid, at 23–4.}
\textit{\textsuperscript{22} Ibid, at 109–12.}
\textit{\textsuperscript{23} Ibid, at 117; G Handl ‘Liability as an Obligation Established as a Primary Rule of International Law: Some Basic Reflections on the International Law Commission’s Work,’ (1985) 16 Netherlands Int’l L J 49, at 56–9; Birnie and Boyle, above n 8, at 182.}
\textit{\textsuperscript{24} See PS Rao First report on the legal regime for allocation of loss in case of transboundary harm arising out of hazardous activities, UN Doc A/ACN.4/531 (21 Mar 2003), para 33; Hafner and Pearson, above n 5, at 25.}
\textit{\textsuperscript{25} The UN General Assembly took note of the Articles, and asked the ILC to proceed with its work on liability. See ibid, para 36.}
\textit{\textsuperscript{26} See ibid, para 24 (‘the trend of requiring compensation is pragmatic rather than grounded in a consistent concept of liability’), and para 37 (concluding that the Commission would ‘better deal with the allocation of loss among different actors involved’).}
\textit{\textsuperscript{27} Ibid, para 16.}
State Liability and strict liability are not widely supported at the international level, nor is liability for any type of activity located within the territory of a State in the performance of which no State officials or agents are involved. (…) The case law on the subject is scant and the basis on which some claims of compensation between States were eventually settled is open to different interpretations. The role of customary international law in this respect is equally modest.28

The most significant aspect of Rao’s report is the conclusion, based on a sober review of State practice on loss allocation, that any further work of the ILC should focus civil liability, rather than State liability.29 In short, the ILC’s approach to liability for environmental harm has been scaled back considerably. Rao suggests that the Commission consider working on the development of a ‘model of allocation of loss’ that would be ‘both general and residuary’.30

There have been calls for the ILC to redouble its efforts to complete its work on State liability.31 It remains to be seen how the Commission will fare in this endeavour. The fate of the only existing model of a general—as opposed to sectoral—regime on civil liability for environmental harm is not a good omen. The 1993 Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment (Lugano Convention) was negotiated under the auspices of the Council of Europe.32 The convention aimed to channel liability to the operators of environmentally harmful activities. It envisaged strict, unlimited liability of operators,33 and required State parties to ensure that operators carry appropriate insurance or other financial security.34 However, it is not likely that the Lugano Convention will take effect in the foreseeable future. To date, it has not received a single ratification.35

IV. TREATY-BASED LIABILITY REGIMES FOR HAZARDOUS ACTIVITIES

Rather than at the level of generally applicable norms, the development of international liability schemes proceeded at the level of issue-specific treaty regimes. It was largely through these developments that the move away from State liability observed in the Rao report was brought about.

30 Ibid, para 152.
33 However, the convention does provide for a number of defences to liability. Ibid, Art 8.
34 Ibid, Art 12.
35 The fact that the Lugano Convention has not entered into force is particularly striking given that it requires only three ratifications to do so. See A Daniel ‘Civil Liability Regimes as a Complement to Multilateral Environmental Agreements: Sound International Policy or False Comfort?’ (2003) RECIEL 225, at 227.
In channelling costs directly to operators of hazardous facilities or activities, the design of liability regimes must typically balance two competing concerns. On the one hand, the goal is to facilitate claims for compensation of pollution damage resulting from activities that, even when undertaken with all due care, entail a particular risk of harm. On the other hand, the regimes aim to shield operators of activities that are deemed necessary or socially beneficial from exposure to excessive claims. The earliest such liability regimes emerged to address the risks associated with nuclear power generation and with the maritime transport of oil, respectively. Suffice it for present purposes to highlight some of the main features of the some of the key conventions in these two issue areas.

Since the adoption of the 1960 Convention on Third Party Liability in the Field of Nuclear Energy (Paris Convention), a number of agreements have been concluded to establish liability for damage caused by a nuclear incident. The Paris Convention was negotiated among Member States of the OECD. The Vienna Convention on Civil Liability for Nuclear Damage has global reach. The Paris and Vienna Conventions have broadly similar features. Each provides for strict liability of operators of nuclear facilities, limits liability to a maximum amount, and requires the operator to carry insurance coverage for that amount. The initial liability limits established by each convention were soon seen to be insufficient, and were increased through supplementary agreements that provide for additional coverage through funds drawn from State parties. Under the Vienna Convention, an expanded definition of damage now includes, inter alia, the cost of measures to reinstate an impaired environment.

A relatively large number of conventions has been negotiated to deal with oil pollution damage, beginning with the International Convention on Civil Liability for Oil Pollution Damage that was adopted following the 1967 Torrey Canyon disaster. The Civil Liability Convention, which provides for the strict liability of ship owners up to a maximum amount and requires them to hold requisite insurance coverage, was later complemented by a convention that established a supplementary compensation fund. The supplementary funds are provided by the oil industry. The conventions are concerned with the compensation of oil pollution damage that occurs in the territory, territorial

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37 Paris Convention, 956 UNTS 251.
38 Vienna Convention, 1063 UNTS 265.
39 The Paris Convention was complemented by the Brussels Supplementary Convention, 1041 UNTS 358; the Vienna Convention was supplemented by Protocol to Amend the Vienna Convention, reprinted in (1997) 36 ILM 1462, and the Convention on Supplementary Compensation for Nuclear Damage, reprinted in (1997) 36 ILM 1473. Neither the protocol nor the supplementary convention to the Vienna Convention are in force.
40 Civil Liability Convention, 973 UNTS 3.
41 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1110 UNTS 57.
sea, or exclusive economic zone of a State party. In 1992, two protocols were adopted which substantially altered and improved the civil liability and fund regimes. These protocols entered into force in 1996 and effectively replaced the original conventions. Among other changes, they expanded a previously narrow definition of pollution damage to encompass the costs of ‘reasonable measures of reinstatement’ of the environment.

In short, the liability regimes covering nuclear damage and oil pollution have seen sustained development. The approach is one of strict liability of operators and owners, respectively. In both areas, civil liability is backed up by insurance coverage or other financial security, and supplemented by compensation funds. The latter, in the nuclear liability context, are fed by public funds and, in the oil pollution context, by industry resources. While the nuclear liability conventions do not appear to have served as basis for a compensation claim to date, a large number of claims have been pursued under the oil pollution regimes.

V. MEAS AND LIABILITY REGIMES

In the early days of international environmental law’s development, considerable attention was paid to matters of responsibility and liability. This was in part a reflection of the fact that virtually no norms or regimes existed that focused specifically upon transnational environmental concerns. As a result, initial efforts to develop a legal framework drew heavily upon foundational principles, such as those relating to State sovereignty and the mutual balancing of conflicting sovereign rights. Basic ideas, such as those of responsibility for harmful consequences of breaches of obligations were marshalled to conceptualize duties to prevent the causation of transboundary harm. However, it soon emerged that the broad-meshed principles on transboundary harm and the attendant ‘rule-breach-sanction’ model inherent the State responsibility paradigm were neither well-suited to dealing with environmental

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44 Civil Liability Convention, above n 40, Arts I and II. See Rao, above n 24, paras 52–4.
46 See G Handl ‘Territorial Sovereignty and the Problem of Transnational Pollution’ (1975) 69 AJIL 50.
concerns, nor easily developed to better meet the challenge of international environmental protection. As a result, the emphasis of international environmental lawmaking efforts shifted away from the development of the framework of general rules on State conduct and responsibilities. Instead, efforts focused on the development of two broad types of treaty-based approaches. On the one hand, MEAs proliferated to prevent or manage individual environmental concerns, often deliberately side-stepping responsibility or liability issues, emphasizing instead various strategies to promote compliance. On the other hand, as we have seen, treaties were negotiated specifically to establish civil, rather than State, liability for the harmful consequences for certain types of activities or facilities.

Only relatively recently have the two approaches begun to merge. Over the last decade or so, there has been a trend towards including the liability dimension in the agenda of MEA negotiations. This trend may have been spurred on by the 1992 Rio Conference’s renewed call for the development of international law on liability and compensation of transnational environmental harm. It is more likely, however, that much of the impetus for attention to liability issues in MEA negotiations came from the recent adoption of a liability protocol under the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention).

Under the Basel Convention, exports of hazardous wastes must be notified to a potential State of import, and can proceed only when the latter permits the import. Article 12 of the Basel Convention obligated parties to co-operate with a view to adopting, as soon as practicable, a protocol setting out appropriate rules and procedures in the field of liability and compensation for damage resulting from the transboundary movement and disposal of hazardous wastes.


More than 30 years ago, the Stockholm Declaration on the Human Environment called upon States to ‘co-operate to develop further the international law regarding liability and compensation for the victims of pollution and other environmental damage caused by activities within the jurisdiction or control of such States to areas beyond their jurisdiction’. See Principle 22, Stockholm Declaration on the Human Environment, reprinted in (1972) 11 ILM 1420. In 1992 Principle 13 of the Rio Declaration on Environment and Development reiterated the call. See Rio Declaration on Environment and Development, reprinted in (1992) 31 ILM 876.


Ibid, Arts 4.1(c) and 6.

Hazardous Wastes and Their Disposal (Basel Liability Protocol) was adopted in 1999. 52

The length of the Liability Protocol negotiations reflects both the complexities involved in developing any liability regime, and the contentious nature of some of the negotiating issues. For example, the Protocol had to balance industry concerns, including insurance concerns, pertaining to economic viability of the waste transfer business and the concerns of transit and recipient countries that the risks associated with waste transfers (notably, illegal transfers) be alleviated through an effective compensation scheme. Given that one of the central preoccupations of the Basel Convention was to ensure safe transfers of hazardous waste from developed countries to recipient countries in the South, it is not surprising that many of the negotiating issues pitted developed against developing countries. 53

For present purposes, suffice it to highlight only some of the key features of the Liability Protocol regime. Liability attaches to damage resulting from the transboundary movement or disposal of waste. Damage is defined as including personal injury and property damage, loss of income deriving from an economic interest in use of the impaired environment, costs of reinstatement of the impaired environment, and costs of certain measures taken to prevent, minimize, or mitigate damage, or to effect environment clean-up. 54

Given that waste transfers frequently encompass numerous transactions and actors, one of the key challenges for negotiators was to determine the most appropriate, and practicable, circle of liable persons. The protocol envisages a range of alternative scenarios. In general, however, the person in the exporting State who notifies a waste transfer will be strictly liable until the person who carries out the disposal of the wastes takes them in possession, and assumes the liability burden. 55

In keeping with the pattern described earlier in this article, the Basel Liability Protocol establishes a civil liability regime, and places primary emphasis on strict liability. 56 As in the nuclear and oil pollution liability regimes, the imposition of strict liability by the Basel Protocol is balanced by a liability ceiling. 57 In addition, the protocol imposes a time limit of 5 years

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53 See Soares and Vargas, above n 51, at 72.
54 See Basel Liability Protocol, above n 52, Art 2.
55 See ibid, Art 4. For an overview on the various other options for channeling liability, see Soares and Vargas, above n 51, at 86–8. Note in this context that one contentious negotiating issue revolved around the extent to which generators of waste should be included in the range of potentially liable persons. While Art 6 of the Basel Convention, above n 49, envisages waste generators as within the circle of possible notifiers, generators will frequently pass wastes to other operators who then act as notifiers. This raised the concern that generators could escape liability by passing wastes off to other entities. See JA Long ‘Hazardous Materials and Energy: Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and Their Disposal’ (1999) Colo J Int’l Envtl L & Pol 253, at nn 38–40.
56 Basel Liability Protocol, ibid.
57 Maximum liability varies according to the amount of waste involved, and depending on
from the claimant’s knowledge of the damage, or 10 years from the incident.\textsuperscript{58} Persons exposed to liability under the protocol are required to hold insurance or other financial security up to the liability limits.\textsuperscript{59} During the negotiations, developing countries pressed for the inclusion of a fund mechanism through which to cover damage that exceeds the protocol’s liability limits. However, the protocol provides only that ‘additional and supplementary measures . . . may be taken using existing mechanisms’.\textsuperscript{60} The relevant ‘mechanism’ is the Technical Co-Operation Trust Fund which was established under the Basel Convention, and which is fed by voluntary contributions.\textsuperscript{61} The protocol also provides for a fault liability track, applicable when damage is caused by non-compliance with the requirements of the Basel Convention, or through intentional or negligent conduct.\textsuperscript{62} The protocol’s liability ceilings do not apply in the case of fault-based liability.\textsuperscript{63}

How successful the Liability Protocol will be in practice remains to be seen. According to its Article 29, the Protocol requires twenty signatures to enter into force. As of 17 October 2003, the protocol had attracted only thirteen signatures and only three of these signatures came from developing countries.\textsuperscript{64} It is also conceivable that the Basel Convention’s recently adopted compliance mechanism, and its emphasis on assistance to parties with compliance difficulties,\textsuperscript{65} will shift some of the dynamics that animated the liability discussions.

Notwithstanding the long time that it took to negotiate the Basel Liability Protocol and its slow progress towards entry into force, the protocol has begun to serve as a model for other agreements. For example, an approach that, with various adjustments, is broadly similar to that of the Basel Liability Protocol was recently adopted in a liability protocol that operates under both the 1992 Convention on the Transboundary Effects of Industrial Accidents,\textsuperscript{66} and the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes.\textsuperscript{67} The protocol was negotiated in only 15 months, and was

whether the notifier or disposer is the liable party. See Basel Liability Protocol, ibid, Art 12 and Annex B.

signed by twenty-two countries on 21 May 2003. The protocol provides for strict operator liability, with a possibility, in accordance with applicable domestic law, of fault liability for wrongful intentional, reckless, or negligent conduct.

Only limited progress has been made on liability issues under the 1992 Convention on Biological Diversity, and under the 2000 Cartagena Protocol on Biosafety, each of which require that parties give consideration to liability questions. In each case, expert groups have been convened to discuss liability issues. The Biosafety Protocol discussions have been particularly contentious. During the negotiations for the protocol, developed countries were reluctant even to include an enabling clause for liability discussions in the treaty text. They feared protracted negotiations of uncertain outcome. In turn, developing countries were concerned at their limited capacity for risk assessment and risk management. They saw a liability regime as essential to their protection against the risks of transboundary movements of living, genetically modified organisms. A compromise was finally reached, with parties agreeing to endeavour to complete within four years a ‘process with respect to the appropriate elaboration of international rules and procedures in the field of liability and redress for damage resulting from transboundary movements of living modified organisms’.

The spectrum of issues that would have to be resolved in the negotiation of a liability regime is daunting. To highlight but a few of these issues, they range from causation issues (e.g., how to deal with potential cumulative effects of various organisms) to the challenges of defining damage to biological diversity (e.g., the fact that not all changes to biodiversity may constitute harm) to the identification of liable entities (e.g., exporting State, individual operators, manufacturer, or importer) to determination of appropriate time limits for liability (one concern is limited knowledge as to how long it might take for harmful changes to become manifest). Most fundamentally, there appears to be little agreement on the need for and ultimate purposes of a liability regime.

73 Ibid. Notwithstanding the open-textured wording, this provision now appears to be understood as requiring the development of a liability regime within 4 years.
for the Biosafety Protocol. If a liability system is needed, would domestic regimes suffice? If damage prevention and creation of compliance incentives are among the intended purposes, is a liability regime an effective tool for achieving these goals? It is as yet unclear what impact, if any, the Biosafety Protocol’s entry into force (on 11 September 2003) will have on the liability deliberations.75

Liability issues have been raised in the context of two other recent MEAs, neither one of which has entered into force. While the text of the 2001 Stockholm Convention on Persistent Organic Pollutants does not call for liability discussions,76 the issue has received some attention and a workshop on ‘liability and redress’ took place in September 2002.77 Some of the issues that complicate the design of a liability scheme for the Biosafety Protocol would likely arise under the Stockholm Convention as well. To cite only two of the parallels, negotiators would have to grapple with complex causation issues, such as how to identify sources of releases and victims of damage, and how to attribute damage to particular substances. Another complication would be posed by the potentially long time lags between the release of the chemicals and the occurrence of harm. The workshop helped raise awareness of these complexities, and it appears as if liability discussions under the Stockholm Convention have been abandoned for now.78 Like the Stockholm Convention, the 1998 Rotterdam Convention on Prior Informed Consent itself does not envisage consideration of liability issues.79 Preliminary discussions on liability have nonetheless taken place. However, parties do not appear to agree on whether or not a liability regime should be given urgent attention.

Finally, a unique set of circumstances must be confronted by efforts to develop a liability annex for the Protocol on the Antarctic Treaty on Environmental Protection.80 A key preoccupation animating these efforts was the protection of the fragile Antarctic environment against potentially irreversible harm, rather than the compensation of victims of personal injury or property damage. An expert group convened in 1992 to elaborate proposals for a liability regime. The expert group’s work progressed through eight iterations...

78 For an overview on the issues raised in the liability discussion, see the report of the Stockholm Convention Workshop on Liability and Redress, ibid.
80 Reprinted in (1991) 30 ILM 1461. Art 16 of the protocol requires that parties develop an annex on ‘rules and procedures relating to liability’ for damage caused by activities in Antarctica.
of informal draft texts (‘offerings’) on a liability regime. However, parties have not been able to reach consensus on a range of contentious issues and discussions on the liability annex appear to have stalled.

VI. ASSESSING THE PROMISE OF INTERNATIONAL ENVIRONMENTAL LIABILITY REGIMES

In peeling away various layers from the environmental liability topic, we moved from the limited role of the law of State responsibility to the largely abandoned efforts to develop State liability to the current focus on issue-specific, treaty-based civil liability regimes. We can identify some broad trends in the development of these civil liability regimes. They tend to provide for strict liability of owners or operators of hazardous ventures, while limiting that liability to a maximum amount. There is usually a requirement that potentially liable parties carry insurance coverage. In some cases, compensations funds are established to address damage in excess of the agreement’s liability limit. Finally, while earlier liability regimes focused primarily on compensation of victims in cases that have a pollution aspect, several recent agreements allow for compensation of ecological damage to the extent that it is reflected in restoration or clean-up costs.

These trends would seem to suggest slow but steady progress towards acceptance of environmental liability as an important international policy tool. Environmental, compensatory and economic efficiency sensibilities certainly permeate the various efforts to develop environmental liability regimes. However, whether or not the environmental liability approach makes sense in the circumstances remains uncertain. Several considerations are relevant to

81 The eighth offering built on the basic models of existing nuclear and oil pollution liability regimes, but also pushed beyond these precedents. It would have provided for strict, unlimited, operator liability; defined damage as any harmful effect above the de minimis range; required operators to take precautionary and response measures; required operators to contribute to a compensation fund where damage is irreparable; required non-state operators to carry insurance; provided for residual state liability in cases where States fail to meet their commitments under the protocol; created a dispute settlement regime. See R Wolfrum ‘Environmental Protection of Ice-covered Regions’, in FL Morrison and R Wolfrum (eds) International, Regional and National Environmental Law (The Hague Kluwer Law International 2000) 329, at 336–7.

82 See L de La Fayette ‘The Concept of Environmental Damage in International Liability Regimes’, in Bowman and Boyle (eds), above n 12, at 178–81. The US has proposed a much more limited liability regime, which would hold parties liable only for failure to take response action following an environmental emergency.

83 Note that only one agreement exists that focuses on (primary) State liability, the 1972 Convention on International Liability for Damage Caused by Space Objects (1921) UNJYB 111. As we have seen, to the extent that they do so at all, other agreements provides only for residual forms of State liability.

this assessment.

First, the broad trends that I have highlighted mask the vast array of unresolved issues. As various commentators and studies have concluded, there is no sufficient uniformity to draw general conclusions on civil liability regimes. In any case, existing regimes are issue-specific and, notwithstanding emerging conceptual similarities, new regimes will require solutions that are tailor-made to their particular concerns.

A second set of considerations relates to the as yet very shaky pattern of support for international liability regimes. After decades of work on international environmental liability, the only liability regimes that are actually in force are those relating to nuclear and oil pollution liability. In turn, of these agreements, only the oil pollution agreements have been successfully relied upon by pollution victims. Of the more recent, MEA-based liability initiatives, only two have proceeded to adoption (Basel Liability Protocol; Protocol on Transboundary Effects of Industrial Accidents). In light of this relatively modest yield it is questionable whether it is worthwhile to pour significant negotiating resources into the elaboration of liability regimes.

A significant part of the answer to the latter question rests in a third set of considerations, pertaining to whether liability regimes, assuming their entry into force, could actually meet the high expectations that their proponents have of them. Roughly speaking, arguments in support of environmental liability regimes fall into two categories. They are seen as a tool for environmental protection, and they are seen as devices to improve the prospects that pollution victims are compensated for damage suffered.

With respect to environmental protection, reference is typically made to three benefits that liability regimes might engender. First, they can help internalize costs of pollution into the polluter’s sphere, thereby implementing the ‘polluter pays principle’. Secondly, they can act as an economic instrument, providing incentives for compliance with environmental protection standards, thereby helping to prevent environmental harm from occurring in the first place. Thirdly, they provide an important back-up system should environmental harm occur notwithstanding the regulatory efforts of the underlying protective regime. All three of these considerations appear to animate developing countries’ efforts to ensure inclusion of liability in MEA negotiation agendas.

As plausible as these three types of arguments in favour of environmental

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85 See, eg, Rao, above n 24, para 150.
86 However, Churchill points out, that some of the amendments and updates to these regimes are not yet in force. See Churchill, above n 43, at 31. And see above n 39.
87 Ibid.
88 See ibid, at 32.
89 See, eg, B Baker Röben ‘Civil Liability as a Control Mechanism for Environmental Protection at the International Level’, in Morrison and Wolfrum (eds), above n 81, 821, at 821–7.
90 See Cook, above n 72, at 373–4.
(strict) liability regimes may seem, there is actually relatively little evidence that would directly support them. For example, observers have noted that any cost-internalization that existing or emerging regimes might bring about would be partial at best. Assuming well-functioning regimes that enable successful claims, we have seen that costs of environmental loss would be internalized only to a limited extent. As far as the incentive or preventive functions of liability regimes are concerned, there appears to be no empirical evidence that would substantiate the underlying assumptions. At the international level, no studies appear to exist which assess the performance of liability regimes, even in the one area where they have seen extensive practice: oil pollution. Similarly, no systematic assessments seem to exist of the performance of domestic liability regimes. One of the few recent studies, commissioned by the European Commission in the context of its work towards a strict liability directive, suggests that strict liability regimes have no statistically significant effect on polluter behaviour. Other assessments suggest that liability regimes can serve an incentive function only when the likelihood that responsible parties will actually pay for damages is sufficiently high. Yet other commentators have pointed out that the liability limitations in most international regimes may actually have the reverse effects, removing incentives to take stricter prevention measures.

With respect to the ability of liability regimes to significantly improve the chances of compensation of victims of pollution damage, it seems fair to conclude that their potential depends on the circumstances. Oil pollution liability regimes appear to have been relatively successful. However, oil

92 Some commentators suggest that (domestic) liability regimes can promote cost internalization, but often result in delayed clean-up or do not achieve deterrence objectives due to difficulties in identifying the polluter, insufficient insurance, or insolvent polluters. See M Boyer and D Porrini ‘The Choice of Instruments for Environmental Policy: Liability or Regulation?’, in T Swanson (ed) An Introduction to the Law and Economics of Environmental Policy: Issues of Institutional Design (Amsterdam Elsevier 2002) 245.
96 See K Sergerson (ed) Economics and Liability for Environmental Problems (Burlington, VT Ashgate 2002), at xxi.
97 See Rao, above n 24, para 119.
98 However, even here observers have highlighted varying effectiveness. Rao, above n 24, paras 136–7, contrasts the experience in the Amoco Cadiz case (13 years of litigation, high burden of proof, award of one-tenth of amount claimed) with that of the Tanio case, which proceeded
pollution incidents produce immediate effects and tend to allow for relatively easy identification of responsible parties. It is far from clear that the experience in the oil pollution field predicts the success of compensation regimes in complex issue areas such as biosafety or chemicals management. In these areas, diffuse sources, cumulative effects and long time lags will greatly complicate matters.

VII. CONCLUSION

My inquiry into the sense and sensibilities of international environmental liability regimes returns me to a cautious assessment that I offered in a 1993 article on the role that the law of State responsibility plays in addressing transnational environmental harm. At that time, I pointed to a renewed trend towards treaty-based liability regimes as a potential avenue for addressing shortfalls in the general state responsibility framework. The experience of the intervening decade has consolidated a trend towards civil liability and strict liability. But it has also offered vivid illustrations of the difficulties involved in the development of liability regimes, of the likelihood of protracted negotiations, and of the modest odds that a negotiated regime will (quickly) enter into force. Based on international and domestic experience, it seems unlikely that liability regimes will play a significant role as a tool for environmental protection. In the right circumstances, they may facilitate compensation of pollution-related damage, including restoration or clean-up costs. However, it does not follow that even the goals of loss allocation and compensation are always best served through the negotiation of a liability regime.

after the oil pollution fund had come into existence (nearly a hundred claimants, receiving nearly 70 per cent of the amount claimed within 3 to 5 years of the incident).

99 Brunnée, above n 4.