Kaleidoscope

Liability for Transboundary Environmental Damage Towards a General Liability Regime?

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Since 1980, the International Law Commission (ILC) has been engaged in drafting a comprehensive convention on liability for damage arising out of acts not prohibited by international law. During its work, the ILC has increasingly focused on transboundary environmental damage. Thus, the project may have considerable impact on the further development of this area of international law.

This article analyzes the basic concepts of the project which have emerged so far. It assesses the political feasibility of the project in the light of the current state of international law concerning liability for environmental damage, given that a number of specific ultra-hazardous activities are already regulated by multilateral liability regimes. It concludes that the international community has increasingly accepted the obligation to regulate liability issues, which has improved the chances for victims to mount successful claims. However, this does not mean that states were prepared to compensate for transboundary environmental damage.

I. The Specific Character of International Liability for Environmental Damage

The fundamental legal concept guiding relations between states is the sovereignty of states. According to this principle, states are not restricted in the use of natural resources within their territory as long as they do not interfere with the interests of other states enjoying the same right. Hence, the principle of state sovereignty implies both the right of an independent exploitation of existing natural resources and the right to inviolability of the national territory.[1] Therefore, if an activity gives rise to transboundary environmental damage or risks of such damage, the rights of the concerned states arising out of the same international legal norm are at stake.

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1 Both aspects are included in Principle 21 of the 'Declaration of Principles' adopted by the 'UN Conference on the Human Environment' in 1972, see the Final Report of the Conference, UN Doc. A/CONF.48/14/Rev.1, 11 ILM (1972) 1416.

In order to solve this conflict, several concepts have been developed in international law.[2] All of them encounter serious difficulties when applied to specific cases. Frequently, they are not appropriate for the resolution of disputes. Consequently, transboundary environmental damage is rarely repaired. Even in these cases compensation is not made on the basis of the rules of general international law, but instead finds its legal foundations in conventions stipulating detailed and therefore applicable legal rules for specific risks. In other cases compensation is paid *ex gratia*, i.e. without acknowledging an obligation to repair. In practice, responsibility for an internationally wrongful act will be refused because it will be held that the damage had not been significant, and that rules for fault or strict liability are not yet regarded as sufficiently precise at the international level. This leads international legal scholars to occasionally distinguish between the 'validity' of a norm of international law and its 'effectiveness'.[3] However, legal norms will only be apt to influence political decisions if their authoritativeness is accepted by decision-makers, that is, if they are effective. A further problem relates to the extent to which states can be held responsible for damage resulting from activities of private parties. According to traditional international law, states are normally not directly responsible for such activities unless it is established that they were obliged to control dangerous activities within the scope of their sovereign control, and that they failed to do so.[4]

With continuing industrialization and increasing risks of transboundary environmental damage, there is a growing need to establish specific rules that are precise enough to be applicable and that are therefore apt to be 'effective'. However, a derivation of these specific rules in the area of transboundary environmental damage from the general law of state responsibility involves a number of fundamental problems. According to the traditional concept of international law, the notions of 'responsibility' and 'fault' are closely interrelated. The establishment of the breach of a primary norm of international law by the source state is the pre-condition for the right of the affected state to be compensated for the damage suffered.[5] If such a breach can be established, the source state will be obliged to repair the *whole* damage. If it cannot be established, it will not be liable to repair any part of it.

However, highly complex industrial activities create *risks* which can be minimized but not completely eliminated. The concept of state responsibility does not foresee any duty to compensate for damage due to activities which are not prohibited by international law. Furthermore, according to traditional international law, established legal wrongfulness of an activity having caused transboundary harm entails the obligation to cease its operation. The source state cannot avoid this consequence even if it is prepared to repair the damage which has occurred.[6] In many cases,

2 I.e. a general obligation of due diligence or the condition of significance of damage, see R. Pisillo-Mazzeschi, *'Due Diligence' e responsabilità internazionale degli Stati* (1989); id., 'Forms of International Responsibility for Environmental Harm', in F. Francioni *et al.* (ed.), International Responsibility for Environmental Harm (1991) 15-25.

3 See A. Verdross, B. Simma, *Universelles Völkerrecht* (3rd ed. 1984) 52-53.

4 See Kimminich, 'Völkerrechtliche Haftung für das Handeln Privater im Bereich des internationalen Umweltschutzes', 22 *Archiv des Völkerrechts* (1984) 243-248.

5 'Primary rules' establish the distinction between lawful and unlawful activities. Their violation entails legal consequences which are specified in 'secondary rules'. See Simma, 'Grundfragen der Staatenverantwortlichkeit in der Arbeit der International Law Commission', 24 *Archiv des Völkerrechts* (1986) 362; see also Quentin-Baxter, 1st Report, YbILC (1980) paras. 20-25. Until 1987, the Reports of the special rapporteurs of the ILC will be quoted referring to the Yearbooks of the International Law Commission (Vol. II, Part 1 respectively). From 1988 onwards, references will be made to the UN Document symbol.

6 See Magraw, 'Transboundary Harm: The International Law Commission's Study of "International Liability"', 80 *AJIL* (1986) 318. For a contrary view see Boyle, 'State Responsibility and International

however, states have a strong interest in promoting certain activities and in according them a status of lawfulness, *although* these activities may entail transboundary risks. Therefore, such risks cannot be sufficiently regulated even by a detailed codification of the law of state responsibility.[7] On the contrary, establishing too close a link between fault and the obligation to compensate for damage frequently does not result in an internationally accepted ban of a particular dangerous activity, but rather in a refusal by the source state to compensate; since any acceptance of the duty to repair damage would imply acknowledgement of a violation of international law and thus endanger the future operation of the activity in question.

II. The Project of the International Law Commission

This dilemma, which cannot satisfactorily be solved within the traditional system of international law, laid the foundation[8] for the International Law Commission's project on the codification and progressive development of the rules of international liability for damage caused by activities *not prohibited* by international law.[9]

A. Balancing Interests

The basic aim of Robert Quentin-Baxter, the first special rapporteur on the topic, was to retain as much freedom as possible for states to exploit their resources, and at the same time to strengthen the rights of possibly affected (neighbouring) states.[10] His concept was based on the expectation that states would accept risk creating activities in other states more easily if a mutually acceptable preventive and compensatory legal regime could be agreed upon. Therefore, the transfer of the existing principle of balancing interests to the area of transboundary environmental risks below the level of an *undisputed* breach of a rule of international law[11] should be in the general interest of both the source and the affected state, since it provides both sides with an opportunity for an active formation of mutual relations.

The theoretical question of the lawfulness of an activity is necessarily rendered less important once a state on whose territory and under whose control a risk creating activity is carried out reaches a mutual agreement with affected (neighbouring) states upon the rights and obligations in connection with that activity and the risks involved. Agreement had to include the duties of *prevention prior to* and compensation *after* possible future damage. In this case, obligations of prevention and liability for potential damage could be separated from an investigation of the lawfulness of the harm creating activity and its operation,[12] since the rights and obligations of the states involved were based on agreement, i.e. exclusively on *primary* rules of international law. The necessity of first establishing a breach of a rule of international law would thus be avoided. This approach removed the emphasis of the project away from identifying a clear dividing line

Liability for Injurious Consequences of Acts not Prohibited by International Law: A Necessary Distinction?', 39 *ICLQ* (1990) 12-14.

7 See Quentin-Baxter, 2nd Report, YbILC (1981) para. 51.

8 See YbILC (Vol. I) (1970) 233, para. 83.

9 For the close relationship of the ILC project with other attempts to develop international environmental law see Quentin-Baxter, 1st Report, YbILC (1980) paras. 4-8. The project's long-winded title ('International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law') indicates the initial conceptual confusion concerning the substantive content of the topic.

10 See Quentin-Baxter, 1st Report, YbILC (1980) paras. 26-31.

11 Beyond this threshold, the rules of state responsibility apply; see Quentin-Baxter, 2nd Report, YbILC (1981) para. 10.

12 See ibid., paras. 84-86.

between the two projects of the ILC on international responsibility for wrongful acts and international liability for consequences of acts not prohibited by international law. Instead it focused on solving the practical problem of assuring compensation for the victims of transboundary environmental damage.[13]

In addition, it must be emphasized that a clear distinction between source and affected states is only meaningful for a limited number of instances of transboundary environmental damage. In many cases, the conflicting parties are faced with a more complex mutual relationship because they pursue similar activities and are thus *at the same time* causing risks, injuries and suffering. This is particularly true for activities: they cause risks and injuries and are *at the same time victims* of similar risks and injuries. For instance, most European states operate nuclear power stations and thus create risks, however small, of transboundary nuclear contamination. At the same time, all of them are suffering similar risks of potential future damage created elsewhere. Here, the solution of transboundary environmental problems cannot be limited to an improvement of mechanisms for compensation. Instead, comprehensive regimes accommodating the interests of all states concerned are needed. This requires co-operation with the aim of solving partial conflicts within an overall balance of interests. From this point of view, codification of international law in the field of liability for environmental damage is only one element within a general regulation which also comprises the elements of prevention and minimization of damage.

On the basis of these considerations, the first special rapporteur in his Schematic Outline of the project[14] proposed a framework convention containing *procedural guidelines* for the elaboration of detailed regimes governing specific cases. This framework convention should primarily have a catalytic function for the adoption of a multitude of concrete bilateral or multilateral agreements.[15] In order to facilitate early negotiations between the states concerned, this procedure should already apply to the planning stage of a dangerous activity. The Schematic Outline therefore created a close link between the elements of safety, information and compensation within a single regime ('the continuum of prevention and reparation')[16] and thus enlarged the scope of the project beyond the formal mandate given to the ILC.

In order to avoid the expected resistance of a multitude of states against rigid liability rules, Quentin-Baxter's concept deliberately did not include any compensatory automatism which would have amounted to strict liability. The necessary consequence was a certain 'negotiability' of the obligation to repair damage in cases where the states concerned had not agreed on a specific regime *before* damage occurred.

B. The Obligation to Repair

In 1985, the Argentine diplomat Julio Barboza succeeded Quentin-Baxter in the influential function of the special rapporteur for the project. He had been critical of the widening of the scope of the project and of the vague status of the obligation to compensate for damage.

Despite difficulties inherent in the integration of preventive and reparative elements in a single instrument, he nevertheless declared his intention to basically maintain the now undisputed integrative approach.[17] Whereas obligations of preventive action and of information are increasingly

13 See Dupuy, 'Ressources naturelles partagées et ressources de l'humanité', 54-56 *Yearbook of the Association of the Attenders and Alumni of the Hague Academy of International Law* (1984-86) 221.
14 Quentin-Baxter, 3rd Report, YbILC (1982) para. 53.
15 See Quentin-Baxter, 4th Report, YbILC (1983) para. 69.
16 Ibid., paras. 40 seq.
17 See Barboza, 2nd Report, YbILC (1986) paras. 6-8.

accepted in international law, international liability rules exist on a much weaker basis. Linking both aspects could thus unintentionally soften duties of prevention and information.[18] Likewise, making the duties of prevention and reparation compulsory threatens to introduce an implicit trigger for the regulation of transboundary harm by the rules of state responsibility instead of those of international liability.[19] It has not yet been decided how the two areas will be linked.

For the present special rapporteur, the core of the project consisted initially in shifting the economic burden of transnational environmental damage to the source state which, after all, gained profit from its risk creating activities. His early reports indicated that within the project he intended to focus on the residual regime regulating the obligations to repair damage. The principle of strict liability of the source state therefore had to be the starting point of any conceptualization of the right of reparation on the part of the affected state; given that in the case of activities not prohibited by international law the element of subjective or objective fault is lacking by definition.[20] Starting from this principle, negotiations between states concerned could be directed at a limitation of liability in particular cases on the basis of a balance of interests. This approach meant that the development of a detailed and generally applicable regime on liability for transboundary environmental damage became the centerpiece of the project.[21] Since the intention of the project would remain the encouragment of states to conclude agreements regulating specific activities with transboundary implications, the general liability regime would fulfil a subsidiary function. Activities governed by specific regimes were thus only indirectly affected by this shift of emphasis. However, liability of the source state for activities not covered by specific regimes would be considerably reinforced, although it would be to some degree negotiable.[22]

The question remained whether a liability regime putting high economic risks upon *states* would eventually be accepted by these states. In 1990, the special rapporteur therefore proposed, within a comprehensive set of draft articles, a new chapter which was intended to reinforce private remedies for compensation of transboundary environmental harm.[23] However, this step did not mitigate the impact of the envisaged rigid obligation of state liability, but simply attempted to assure a minimum degree of uniformity of private remedies.[24] While so far the principle of liability of the source state for transboundary environmental damage from activities carried out by private parties had been considered as being widely acceptable, the majority of states commenting on the project in the Sixth Committee now favoured placing primary liability on the

18 See Barboza, 4th Report, 1988 (A/CN.4/413) paras. 103-111. The conflict focuses on the lack of legal consequences of a breach of the generally acknowledged obligations of prevention and information *according to the rules of this project.*

19 See Horbach, 'The Confusion about State Responsibility and International Liability', 4 *Leiden Journal of International Law* (1991) 72.

20 See 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 *Denver Journal of International Law and Policy* (1989/90) 145 seq. This approach raised some criticism, see I. Brownlie, *System of the Law of Nations: State Responsibility*, Part I (1983) 49-50; J. Willisch, *State Responsibility for Technological Damage in International Law* (1978) 293-296.

21 See ILC-Report, 1991 (A/46/10) para. 236.

22 See Arts. 9 and 21 of the proposed draft Articles, Barboza, 6th Report, 1990 (A/CN.4/428) 44 and 48; see also Barboza, 7th Report, 1991 (A/CN.4/437) para. 48.

23 See Barboza, 6th Report, 1990 (A/CN.4/428), draft Articles 28-33, and ILC-Report, 1990 (A/45/10) paras. 520-524.

24 See Barboza, 6th Report, 1990 (A/CN.4/428) para. 62.

(private) operator of the risk creating or harmful activity. Only residual liability, if any, should be placed on the authorizing state.[25]

The special rapporteur and the majority of the Commission[26] responded positively to this new development. Although the detailed structure of the general regime on environmental liability is not yet clearly visible, it may therefore be assumed that the focus of the project has shifted from international liability (mitigated by private remedies) to private liability (possibly to be reinforced by some residual liability of the authorizing state). The direction of this important turn of the ILC-project[27] is largely in conformity with existing conventional liability regimes or those still under preparation.

III. Environmental Liability Regimes in Multilateral Agreements

In the past three decades, states have concluded a number of conventions containing primary liability rules with respect to some specific risk creating activities, especially in the areas of international maritime, nuclear, and space law. In some cases, they accepted state liability. This should however not lead to the conclusion that states were *generally* prepared to be held liable for transnational environmental damage. On the contrary, an examination of the conventional regimes reveals a more differentiated picture of existing state practice with far-reaching consequences for the future development of the international law of environmental liability. For a realistic analysis of the emergence and later application of liability rules it is indispensable to take into account how these rules actually came into being, to explore which groups participated in the law making process and to identify their regulatory interests. The following chapter will analyze the extent to which it is possible to draw generalizations from the most important existing conventional liability regimes, with a view to establishing a general regime.[28]

A. Liability for Maritime Transport of Oil: A Model for Transnational Environmental Liability Regimes

With regard to its ecological, economic, and political goals, the regime of liability for damage caused by maritime transport of oil constitutes a model for modern environmental liability agreements. Its emergence started in 1967, immediately after the accident of the oil carrier 'Torrey Canyon' which had caused hitherto unprecedented damage in the English Channel. The accident clearly demonstrated that risks relating to the transport of oil had considerably increased with the operation of super tankers and the growth of maritime transport in general. All preventive measures as well as the existing liability rules for maritime transport proved to be insufficient. The British government faced important financial claims partly due to costs of clean-up measures and partly due to the political necessity to take over the considerable losses which had occurred to private persons and territorial authorities.[29] It therefore asked the states represented in the Intergovernmental Maritime Consultative Organization (IMCO) to draw consequences from the

25 See Barboza, 7th Report, 1991 (A/CN.4/437) para. 21.

26 See ILC-Report, 1991 (A/46/10) paras. 236-243.

27 See Erichsen, 'Das Liability Projekt der ILC', 51 *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht* (1991) 124-126.

28 In the framework of this article, this can only be done to a limited extent. For an in-depth analysis see T. Gehring, M. Jachtenfuchs, *Haftung und Umwelt. Interessenkonflikte im internationalen Weltraum-, Atom- und Seerecht* (1988).

29 For the actual costs see M. M'Gonigle, M. Zacher, *Pollution, Politics and International Law. Tankers at Sea* (1979) 146.

accident. The IMCO-Council reacted by proposing a list of 24 items for further consideration.[30] Aside from measures in the field of technical safety of tankers, traffic rules, and the right of coastal states to intervene in the case of events dangerous for the environment occurring on the High Seas, it proposed, with an exclusively economic objective, to formulate an improved liability regime. Legal measures were intended to shift the costs of risks of environmental pollution linked to the maritime transport of oil to those parties gaining profit from that activity.

The states represented within IMCO did not consider it necessary to develop the law of *international* liability, for instance by putting new liability burdens on the flag state. Further, the majority of states was not prepared to jointly shoulder the economic risk involved in the transport of dangerous goods at sea. The representatives of Western states in particular stressed that states should not be held liable for risks created by private industry for its own economic interest.[31] For this reason, states focused on a broadened *civil* liability. Accordingly, the core question became how and to what extent the oil transporting industry could bear additional liability obligations and whether liability should be extended to the oil processing industry, which also profited from maritime transport of oil.

The industry concerned favoured a solution in the framework of existing private maritime liability law. Contrary to shipping interests organized in the *Comité maritime international*, the oil industry announced that it was ready to cooperate within certain limits. In 1968, major oil companies adopted voluntarily a private liability regime,[32] initially exclusively applicable to their own tankers, but after a year it already covered more than 90 per cent of the world tanker fleet. The voluntary regime facilitated acceptance of the concept of a liability channelled toward the ship owner and limited to an insurable amount.

A diplomatic conference meeting in 1969,[33] which was held in order to adopt an international convention incorporating the new rules into the body of international law, was characterized by the conflict of two groups of states divided over the issues of the type and amount of liability. In general, coastal states, being possible victims of pollution, opted for strict liability. The states with their own tanker fleets promoted the principle of fault liability, however modified by a reversal of the burden of proof. Thus, a polarity of interests emerged which seems to be typical for negotiations on the allocation of the economic burden of environmental harm linked to an activity that is itself widely considered beneficial. Whereas the majority of participating states was *at the same time* dependent on the maritime transport of oil and, as coastal states, exposed to the environmental risks involved in the activity, most delegations nevertheless clearly joined one of the two camps.

In order to avoid a breakdown of negotiations, the model of an exclusive liability of the ship owner was supplemented during the conference by the establishment of an international oil pollution compensation fund thus providing an additional layer of liability and transferring part of the economic burden to the oil processing industry. This made the initially strong resistance against an introduction of the principle of strict liability almost disappear. Accordingly, the final text of the convention[34] provides for a limited liability of the shipowner without proof of fault. The sharing of the economic burden by several branches of industry and the rather complicated

30 See 'Conclusions of the Council on the Action to be Taken on the Problems Brought to Light by the Loss of the "Torrey Canyon"', Inter-governmental Maritime Consultative Organization Doc. C/ES.III/5.

31 See 'Oil Pollution of the Sea', 9 *Harvard International Law Journal* (1969) 334-335.

32 Tanker Owners Voluntary Agreement Concerning Liability for Oil Pollution (hereafter referred to as TOVALOP) 1968, 8 ILM (1969) 498.

33 For a description of the proceedings of the conference see Herber, 'Das internationale Übereinkommen über die Haftung für Schäden durch Ölverschmutzung auf See', 35 *Rabels Zeitschrift für ausländisches und internationales Privatrecht* (1970) 230 seq.

34 International Convention on Civil Liability for Oil Pollution Damage, 1969, 9 ILM (1970) 45.

establishment of an international fund seemed to be more acceptable to states than a subsidiary liability of the controlling, i.e. flag state.

During the drafting process of the fund convention,[35] a direct participation of states in the financing of the fund was never seriously considered. By establishing a privately financed voluntary compensation scheme[36] during the preparatory phase of the fund, the oil processing industry demonstrated its general agreement with the envisaged second layer of liability. The international fund could thus be based on the rules of this private model.

Since the establishment of the oil liability regime of 1969/71, in no case have states, even on a subsidiary basis, been prepared to take over inter-governmental liability obligations. This is not surprising with regard to activities which are sufficiently profitable so as not to require a shift of economic risks of costly environmental damage to the public. The capacity of the insurance market has considerably enlarged during the past two decades. This, combined with the availability of additional compensation from the international fund, should mean that liability for oil pollution damage can be covered by the polluting industry alone.[37]

The basic principle of this combined regime[38] which stipulates a strengthened liability to be born exclusively by the profit gaining private industry, has been incorporated into the (draft) rules of international regulations of liability for damage created by both maritime[39] and inland transport[40] of dangerous goods and into a convention which regulates oil drilling activities in the North Sea area.[41] All these regulations aim at an improvement of compensation for victims of transnational environmental pollution, including states.

B. The Nuclear Liability Conventions

The regulatory goal of international law on liability for nuclear damage was completely different. It was primarily conceived to relieve the nuclear supply industry of the incalculable risks posed by high compensation claims. To achieve this goal, the nuclear liability conventions 'channel' the duty to compensate exclusively to the operator of a nuclear installation. They thus exonerate all other parties involved in the development of nuclear energy from any obligation to compensate for nuclear damage.

35 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971, 11 ILM (1972) 284.

36 Contract Regarding an Interim Supplement to Tanker Liability for Oil Pollution (CRISTAL) 1971, 2 *Journal of Maritime Law and Commerce* (1970/71) 705.

37 Despite the considerably increased costs of oil pollution, the degree of coverage is a purely political decision; see Smets, 'The Oil Spill Risk: Economic Assessment and Compensation Limit', 14 *Journal of Maritime Law and Commerce* (1983) 23 seq.

38 In 1984, the regime has been modified by two protocols; Protocol to the International Convention on Civil Liability for Oil Pollution Damage, in *International Environmental Law*, No. 969:88/A and Protocol to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, ibid., No. 971:94/A.
By the end of 1991, 47 states were parties to the combined regime. Additionally, 24 countries had ratified only the oil liability convention. Beside these public international law treaties, TOVALOP and CRISTAL, the private liability agreements of the oil transporting and the oil processing industries, still continue to exist.

39 *Draft Convention on Liability and Compensation in Connexion with the Carriage of Noxious and Hazardous Substances by Sea*, 1984, 23 ILM (1984) 150.

40 Convention on Civil Liability for Damage Caused During Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels, 1989, United Nations Economic Commission for Europe Doc. ECE/TRANS/84 (including explanatory report).

41 Convention on Civil Liability for Oil Pollution Damage Resulting from Exploration for and Exploitation of Seabed Mineral Resources, 1976, 16 ILM (1977) 1451.

In the 1950s, the United States supply industry, whose cooperation seemed to be indispensable for the peaceful use of nuclear energy, was not prepared to take over the incalculable economic risk involved in this new activity. The development of the new and promising technology threatened to be hampered unless the state or the operator of the nuclear installation were to take over full liability. At that time insurance companies were certainly not capable of covering these economic risks.[42] In 1957, therefore, the US legislator felt obliged to channel liability exclusively to the operator of a nuclear installation and to exonerate all other parties completely from the economic risks of possible nuclear damage. The state took over the part of the economic risk which could not be covered by private insurance.

In its early years, the exploitation of nuclear energy in Western Europe was almost completely dependent on the American supply industry.[43] Again, an effective limitation of liability was required to avoid a cut of essential supplies. Therefore, the US nuclear energy legislation[44] served as a model for negotiation of an international convention. The negotations were started in 1957 under the auspices of the Organization for European Economic Co-operation (OEEC) and the participants included the United States supply industry and European insurance business. With regard to the regulatory goals of the future instrument, there was wide-ranging homogeneity of interests. All participating West European states considered themselves in the first place as future producers of nuclear energy and were, consequently, interested in the promotion of the new technology and in the granting of economic privileges to it.

The 1960 Paris Convention adopts the concept of an exclusive non-fault civil liability of the operator,[45] which must be covered by insurance. The contracting states were therefore bound by the limited capacity of the insurance market.[46] In order to facilitate the development of nuclear energy, they preferred to transfer the lion's share of the costs of a possible accident to the victims or to their home countries. Subsidiary state liability, as envisaged in US nuclear energy law, was highly controversial during the negotiations. However, a majority of states was not ready to accept, *in the interest of possible victims*, provisions for subsidiary state financed compensation. Instead, the Paris Convention (Annex II) refers to the existence of a possible additional basis for inter-governmental claims according to general international law, i.e. to the rules of state responsibility. However, given their lack of precision, an application of these rules bears well-known difficulties.

The Paris Convention alone did not achieve the regulatory goal of overcoming the obstacle of incalculable liability which hampered the development of nuclear energy. Because of the

42 See Belser, 'Examen des solutions apportées par les lois nationales et les conventions internationales sur la responsabilité dans le domaine de l'énergie nucléaire aux problèmes posés par la couverture de cette responsabilité', in *Droit nucléaire européen*, Colloque, 5-6 May 1966 (1968) 78.

43 See Belser, 'Atomic Risks: Third Party Liability and Insurance', in *The Industrial Challenge of Nuclear Energy* (Amsterdam Conference) (1958) 278.

44 Price-Anderson-Amendment of 2 September 1957 to the Atomic Energy Act; reprinted in J. Weinstein (ed.), *Nuclear Liability* (Progress in Nuclear Energy, Vol. 3; Series X: Law and Administration) (1962) 377 seq.

45 Convention on Third Party Liability in the Field of Nuclear Energy, 1960, 6 *European Yearbook* (1960) 268. The rules of the Paris Convention, originally limited to the European Member States of the Organization for European Economic Cooperation (OEEC) (later the OECD), have been basically incorporated into the 1963 Vienna Convention on Civil Liability for Nuclear Damage, UNTS, Vol. 1063, No. I-16197, 263, a global convention negotiated in the framework of the International Atomic Energy Agency (hereafter referred to as IAEA).

46 This explains the extremely low ceiling of only US $15 million, in exceptional cases even merely US $5 million, provided by the Paris Convention. These figures reflect the severe constraints of the insurance market, with all estimates of a nuclear accident anticipating far higher costs.

extraordinary severe limitation of liability of the operator, US suppliers feared being held liable by US courts despite their exoneration stipulated in an international instrument. It was under the pressure of US suppliers[47] that the West European states in 1963 agreed, in the Brussels Supplementary Convention,[48] on the introduction of two more layers of compensation. After privately financed funds available under the Paris Convention are exhausted, the licensing state of a nuclear installation causing harm assumes a limited subsidiary liability in the second layer. The third layer, an insurance-like pool, is jointly financed by all contracting states.

The regulatory goal of the convention on the liability of operators of nuclear ships[49] again facilitated the commercial use of nuclear energy. In its basic features, it follows the rules of nuclear, and not maritime, law. However, along with future licensing states, coastal states potentially affected by an accident took part in the global negotiations. They retained the right to approve – or to prohibit – the entrance of nuclear powered vessels into their coastal waters in each individual case. A generally acceptable liability regime was expected to facilitate the travel of these ships. Given this constellation of interests, the principle of a limited subsidiary state liability beyond the low amount covered by insured private liability was less controversial. Nevertheless, the coastal states had to accept a limitation of funds available below the level of the combined Paris/Brussels regime.[50]

Therefore, the development of an independent body of rules for international nuclear liability was pressed for primarily by industrialized states who sought to promote the development of nuclear energy. Less pressure than may have been expected was exerted by states threatened by serious nuclear transboundary harm. Contrary to the oil liability regime, the regulatory goal of nuclear liability was not the widening but the limitation of liability, with respect to both the amount and the persons liable. The private liability of the operator is supplemented by the international liability, however hidden, of the licensing state, and despite the fact that the creation of a direct claims procedure against that state has been carefully avoided.[51] States did not accept this liability for the benefit of potential victims[52] but in order to promote a new technology.

47 See Arangio-Ruiz, 'Some International Legal Problems of the Civil Use of Nuclear Energy', 107 *RdC* (1962-III) 599.

48 Convention of 31 January 1963 Supplementary to the Paris Convention of 29 July 1960 on Third Party Liability in the Field of Nuclear Energy, 2 ILM (1963) 685.

49 Convention on the Liability of Operators of Nuclear Ships, 1962, 57 *AJIL* (1963) 268. See Könz, 'The 1962 Brussels Convention on the Liability of the Operators of Nuclear Ships', 57 *AJIL* (1963) 105 seq.

50 The convention never entered into force because of a conflict on the inclusion of nuclear warships. Its liability regime however was included almost identically in numerous bilateral agreements, see Breuer, 'Reflections on International Agreements Covering the Trading of the "Otto Hahn" in Foreign Waters', *Symposium on Nuclear Ships* (1971) 390 seq.

51 See A. Hoche, *Das Verhältnis der Zivilhaftungskonventionen für Atom- und Ölverschmutzungsschäden zur völkerrechtlichen Haftung* (1988) 80-89. Nevertheless, states enter into subsidiary liability in their capacity *as controlling states*, i.e. in an exercise of their sovereignty.

52 Only after the Chernobyl accident, an expert group of IAEA started formulating proposals for an additional international liability of licensing states, with inconclusive results so far; see Pelzer, 'The Impact of the Chernobyl Accident on International Nuclear Energy Law', 25 *Archiv des Völkerrechts* (1987) 308 and Politi, 'International and Civil Liability for Nuclear Damage, Some Recent Developments of State Practice', in *La réparation des dommages catastrophiques. Les risques technologiques majeurs en droit international et en droit communautaire*. Travaux des XIIIes Journées d'études juridiques Jean Dabin organisées par le Département de droit international Charles De Visscher (1990) 333-334.

C. The Space Liability Convention

The Space Liability Convention[53] is frequently cited in support of the hypothesis that states were already prepared to accept liability for transboundary environmental harm in specific areas.[54] In fact, the convention stipulates a mechanism for reparation along the lines of traditional international law. Reparation of damage takes place exclusively among states; insurance companies, persons privately liable, and domestic courts as well as private victims remain outside the regime. However, the economic aspect of compensation was not a major issue during the formulation of the convention.

Instead, the high military and strategic importance of outer space determined the course of the negotiations. In the beginning of the 1960s, both superpowers feared a militarization of outer space which, for various reasons, was not in their interests.[55] In the first place political agreements were needed to both provide a secure legal framework for space operations and to avoid an arms race in outer space. Given these political and military problems, negotiations on questions relating to the use of this area were held in a political forum, the United Nations Committee for the Peaceful Uses of Outer Space, and not in a 'technical' one, as had been the case for the nuclear and oil liability regimes.[56]

In a climate characterized by mutual distrust between the superpowers, but of basically identical interests, the Outer Space Treaty[57] was concluded as a framework agreement in 1966. It obliges states to supervise and control all space activities starting from their territory and renders them liable for damage resulting from these activities. This provision was strongly influenced by a dispute on the general admissibility of private space activities.[58]

Since 1962 the Space Liability Convention has been negotiated simultaneously with the Outer Space Treaty. It cannot therefore be considered an independent environmental liability regime. Instead, it is a detailed elaboration of the liability provision of a highly political general framework. This explains why conflicts on economic aspects of liability have been of secondary importance.[59] The space industry submitted numerous proposals in attempting to achieve a liability regime modelled along the lines of the nuclear liability treaties, without however achieving more than marginal impact on the negotiation process. Even the United States from the outset proposed an exclusive liability of the controlling state without private participation. In order not to endanger political agreement, the two superpowers, at that time the only states with technical capabilities for space missions, finally accepted even the principle of unlimited liability.

53 Convention on International Liability for Damage Caused by Space Objects, 1972, 10 ILM (1971) 965.

54 See Handl, 'State Liability for Accidental Transnational Environmental Damage by Private Persons', 74 *AJIL* (1980) 529; see also Pinto-Dobering, 'Liability for Harmful Consequences of Instances of Transfrontier Pollution Not Prohibited by International Law', 38 *Österreichische Zeitschrift für öffentliches Recht und Völkerrecht* (1987/88) 108.

55 For the political context of the treaty and its relationship to the politics of disarmament of the superpowers see R. Wolfrum, *Die Internationalisierung staatsfreier Räume* (1984) 274-278.

56 The role of the UN in the process leading to the space regime is analyzed in C. Christol, *The Modern International Law of Outer Space* (2nd ed. 1984) 12 seq.

57 Treaty of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, 1967, 6 ILM (1967) 386.

58 The less developed countries in particular insisted on an unlimited liability for damage caused by space objects as they would not be able to undertake these activities for a considerable time, see Christol, 'International Liability for Damage Caused by Space Objects', 74 *AJIL* (1980) 351.

59 Strict liability for damage on earth was rather uncontroversial as a proof of fault seemed almost impossible, see Pfeiffer, 'International Liability for Damage Caused by Space Objects', 30 *Zeitschrift für Luft- und Weltraumrecht* (1981) 221.

The rule of unlimited international liability, as envisaged in the Space Liability Convention, is, therefore, essentially not the result of economic or environmental concern but of a global political arrangement. The regulatory interest of the contracting states consisted only partly in shifting the economic burden of damage arising from a space casualty to the state controlling the activity. The participating states possessing the capabilities for space activities appeared to be more interested in the political result of a regulation as such, than in the details of the liability regime.

IV. Private Liability and International Regulatory Obligations

The degree to which states were in the past prepared to accept liability obligations was determined by the regulatory goals of the respective regimes. The type of detailed *international* liability envisaged in the Space Liability Convention corresponds to a specific political constellation which is not typical for the regulation of transnational environmental damage. It can hardly be considered a true precedent for a general environmental liability regime. In the context of the different nuclear liability regimes, the distribution of economic consequences of potential damage were of overwhelming importance, whereas environmental considerations played only a minor role. The regulatory goal was the facilitation of a risk creating infant industry through *limitation* of its liability. Only for that purpose did states accept the obligation of a subsidiary state financed liability. Therefore, this type of combined liability regime does not provide a true precedent for a general regulation of liability for transboundary environmental damage.[60]

In contrast, the liability regime for oil pollution damage could serve as a model for future rules on liability for transboundary environmental damage. Its regulatory goal was the *improvement* of the victims' situation, and regimes similar to this type are presently under discussion, or have been adopted, for a series of comparable risks.[61] The relative success of this model relies on its specific sharing of burden between private operators of dangerous or harmful activities and states authorizing and controlling these activities.

States have long since acknowledged the necessity to improve existing liability rules and accepted an obligation to regulate the issue, but they have not been prepared to contribute financially to the compensation of transboundary environmental damage.[62] Yet the situation of private victims and affected states regarding compensation was, or will be, considerably improved.

60 See also Doeker, Gehring, 'Private or International Liability for Transnational Environmental Damage – The Precedent of Conventional Liability Regimes', 2 *Journal of Environmental Law* (1990) 15 seq.

61 E.g. concerning sea and inland transport of dangerous goods as well as for oil pollution from seabed drilling; see instruments mentioned in notes 69-71. See also the Council of Europe Draft Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment, 21 *Environmental Policy and Law* (1991) 270.

62 This is to a large extent also true for the liability rules in the field of deep-seabed mining, see UN Convention on the Law of the Sea, 1982, 21 ILM (1982) 1261, Art. 139 and Annex III, Art. 4(4) and Art. 22. A similar distribution between responsibility of supervising states and private liability of contractors is envisaged in the Draft Regulations on Prospecting, Exploration and Exploitation of Polymetalic Nodules in the Area, Chapter VIII (Protection and Preservation of the Marine Environment from Unacceptable Changes Resulting from Activities in the Area) LOS/PCN/SCN.3/WP.6/Add.5/ Rev.1, reprinted in R. Platzöder (ed.), *The Law of the Sea: 1983-1991 [Second Series]*. Preparatory Commission for the International Seabed Authority and the International Tribunal of the Law of the Sea, Vol. XIII (1992) 93, presently under discussion in the preparatory commission of the UN seabed authority. See also the provisional liability regime (Art. 8) of the Convention on the Regulation of Antarctic Minerals 1988, 27 ILM (1988) 868.

What are the consequences of this legal development for state responsibility or international liability for transnational environmental damage? The alleged distinction between rules of private liability and those of international responsibility is certainly not as clear-cut as is assumed by many authors. In fact, 'private' conventional regimes strongly interfere with existing obligations of the controlling state regarding reparation of damage.[63] The interrelationship between private and international mechanisms for compensation of given damage is most visibly illustrated by international nuclear liability law. Under the regimes of the Brussels Supplementary Convention and the Nuclear Ship Convention, licensing states accepted relatively high liability obligations compared to privately financed funds. Within the framework of conventional regimes, claims are settled according to an established procedure by domestic courts without proof of fault and primarily out of public funds. Due to the relative simplicity of this procedure, claims will be made and compensation paid in the first place on the basis of the liability conventions, even though a breach of international law by the controlling state might be provable (e.g. in cases of insufficient supervision). As long as international conflicts on liability issues can be solved *in a satisfactory manner* by using simplified conventional procedures, states will not insist on basing their claims on the comparatively vague rules of state responsibility. To be sure, the reason for this is the existence of an applicable, detailed and agreed upon procedure to settle claims. It is not the public nature of compensation funds. What may be assumed in the case of transboundary nuclear damage governed by mixed regimes will also be true for incidents governed by exclusively privately financed liability regimes.[64]

This is not to argue that a reasonable settlement of compensation claims for transboundary environmental harm is best dealt with exclusively under private law. On the contrary, they should be governed by international law,[65] for only states can set internationally recognized norms which are sufficiently uniform and authoritative and which can, accordingly, be expected to be generally observed. Conventional liability regimes provide a medium layer between purely private claims for compensation of victims of transboundary environmental harm on the basis of domestic law and reparation made from state to state on the basis of traditional international law. Individual claims for, and transfers of, compensation are formally and financially a matter of private law, but they are governed by conventional regimes that are part of international law and have even led to the creation of an inter-governmental organization, namely the oil pollution compensation fund. This type of international regulation of compensation for the consequences of transboundary environmental damage constitutes a category of international law which does not fit in with the traditional dichotomy of the legal order.[66]

Accordingly, the conventional liability regimes, whether they comprise obligations of the licensing states to contribute to compensation of damage or not, overlap with the traditional

63 From a formal perspective, these effects may be of a 'merely practical' nature, see Hoche, *supra* note 51, at 232-233. Thus, Doeker, Gehring, *supra* note 60, did not dispute the doctrinal existence of a further basis for reparation of transboundary environmental damage, as Tomuschat assumes but its relevance for state conduct. See Tomuschat, 'International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law: The Work of the International Law Commission', in F. Francioni *et al.* (ed.), *supra* note 2, at 51-54.

64 The procedure of settlement of compensation claims following the accident at the Sandoz chemical plant emphasizes the desire of states to solve disputes on liability issues below the level of inter-governmental relations, see Jessurun d'Oliveira, 'The Sandoz Blaze: The Damage and the Public and Private Liabilities', in F. Francioni *et al.* (ed.), *supra* note 2, at 429-445.

65 See Lang, 'Haftung und Verantwortlichkeit im internationalen Umweltschutz', *Ius Humanitatis. Festschrift für Alfred Verdross* (1980) 523.

66 See Rest, 'Responsibility and Liability for Transboundary Air Pollution Damage', in C. Flinterman *et al.* (eds), *Transboundary Air Pollution. International Legal Aspects of Co-operation of States* (1986) 319.

concept of state responsibility. Such overlapping is unavoidable because different criteria apply to the two concepts.[67] It even became one of the aims of the projected general rules on liability for transnational environmental damage presently under discussion in the International Law Commission, as it provides a means to side-step the de facto inapplicable traditional concept of state responsibility.[68] An authoritative international regime which shifts liability obligations effectively onto the respective private operators does not only economically exonerate the state community at large from compensatory claims. It also has direct implications on the development of *applicable* norms on state responsibility or inter-governmental liability. The better 'civil' liability agreements are adapted to specific risks of transboundary harm, the less urgent is the drafting and refining of general provisions of state responsibility and international liability up to the point at which they become applicable.[69]

Therefore, a trend toward an increasing recognition of the obligation to *regulate* transnational liability issues by the state community as a whole can be observed. However, it does not extend to the acceptance of additional international *liability* obligations by these states. This international legal development is in conformity with the transnational nature of incidents of transboundary environmental damage. After all, many dangerous or harmful activities are operated by private parties, and a large share of transboundary environmental damage is suffered by private actors.

The transnational nature of the relationship between victims and operators of activities creating transboundary risks or harm[70] suggests the 'privatization' of liability obligations, i.e. to place these obligations primarily upon private operators.[71] However, this would not entirely solve the problem of cases in which operators are not identifiable, or where they lack the necessary funds. In these cases, it might be desirable to create a subsidiary liability of the licensing state as part of a combined regime, but the developments of the past few decades do not suggest that states, even on the basis of subsidiarity, would be prepared to accept such additional international liability.[72] However, both from a transnational and from an environmental perspective the matter is mainly one of secured availability of sufficient funds to compensate transboundary damage. Subsidiary liability of the licensing state is not the only way to overcome this problem, as is demonstrated by the international oil pollution compensation fund.[73]

67 This also clarifies the only seemingly paradoxical definition of the scope of the topic by the first special rapporteur Quentin-Baxter: 'The words ,acts not prohibited' in the title meant acts whether prohibited or not'; ILC-Yearbook 1982, Vol. I, 227.

68 'Whenever possible, the topic provides means of avoiding State to State confrontations'; Quentin-Baxter, 4th Report, YbILC (1983) para. 43; see also Barboza, 4th Report, 1988 (A/CN.4/413) paras. 13-14.

69 The Italian delegate commenting in the Sixth Committee of the UN General Assembly on the ILC's project on International Liability observed that the fact that compensation for damage could be obtained within the framework of private law 'did not eliminate legally the possibility of claims under international law, *although it did make the practical need for such claims unlikely*' A/C.6/42/SR.45, para. 58 (emphasis added).

70 Where states operate such activities and where they suffer such damage, they do so primarily in the place of private persons, and less in their capacity as subjects of international law.

71 As recognized by the ILC; see ILC-Report, 1991 (A/46/10) para. 239.

72 Even the regulatory enthusiasm provoked by the Chernobyl disaster did not lead to a reversal of this trend. Compare the optimism of Handl, 'Après Tchernobyl: Quelques réflexions sur le programme législatif multilatéral à l'ordre du jour', 92 *RGDIP* (1988) 55 and 62, with the description of the actual events by Politi, *supra* note 52, at 333-334.

73 Proposals made in the framework of the Basel Convention on the Control of the Transboundary Movements of Hazardous Wastes and their Disposal 1989, 28 ILM (1989) 657, concerning a liability regime focus on two alternatives to secure the necessary funds, namely subsidiary state liability or an

V. Conclusion

During the past three years, the ILC project on liability for (environmental) damage from activities not prohibited by international law has been subject to a fundamental change. The Commission acknowledged that modern industrial activities leading to transboundary environmental risks and harm are frequently carried out by private operators. Primary liability for such damage should therefore fall upon these private parties. In contrast, the primary responsibility of states lies in the areas of prevention of harm, supervision of dangerous activities and, last but not least, provision of liability regimes guaranteeing adequate compensation of damage suffered by victims. Consequently, the international regulation of private liability becomes one of the most important aspects of the law making project of the ILC. A crucial problem to be solved is assuring that necessary funds for compensation are in fact available. This may be done in various ways; only one of them is related to the introduction of a subsidiary liability of licensing states.

The integration of civil and state liability elements in a comprehensive regime, as is intended by the Commission, may turn out to become the most thorny subject of the project. The Commission cannot neglect the issue of acceptability of such a concept for the state community. In the past, states have accepted inter-governmental liability only under extraordinary circumstances which cannot easily be transferred to standard situations of transboundary environmental harm. There is no indication that this reluctance of states has fundamentally changed and that they are now ready to accept a convention imposing on them a general international liability for transnational environmental damage.

The Commission should thus take into account the continuing process of separation between regulatory obligations on the part of the state community and actual liability obligations on the part of private operators of risk creating activities. It is argued here that a convention which is not limited to easily identifiable specific risks should therefore remain below the level of a full-fledged state liability. In its attempt to integrate private and state liabilities, the Commission should attach priority to the concept of balancing of interests. It would already amount to a profound transformation of the international law of liability for environmental harm if the ILC succeeded in codifying a widely accepted international instrument that promotes the increasing acceptance of regulatory obligations by states. This effect would dramatically broaden the scope of liability regimes that are privately financed but internationally governed and controlled.

international fund; see the preparatory documents UNEP/CHW/WG.1/2/3, and UNEP/CHW/WG.1/3 of an expert group established for that purpose.