

1994

Current Trends in International Civil Liability For Environmental Damage

Peter Wetterstein

Follow this and additional works at: <http://digitalcommons.law.ggu.edu/annlsurvey>



Part of the [Environmental Law Commons](#), and the [International Law Commons](#)

Recommended Citation

Wetterstein, Peter (1994) "Current Trends in International Civil Liability For Environmental Damage," *Annual Survey of International & Comparative Law*: Vol. 1: Iss. 1, Article 8.

Available at: <http://digitalcommons.law.ggu.edu/annlsurvey/vol1/iss1/8>

This Article is brought to you for free and open access by the Academic Journals at GGU Law Digital Commons. It has been accepted for inclusion in Annual Survey of International & Comparative Law by an authorized administrator of GGU Law Digital Commons. For more information, please contact jfischer@ggu.edu.

CURRENT TRENDS IN INTERNATIONAL CIVIL LIABILITY FOR ENVIRONMENTAL DAMAGE*

PETER WETTERSTEIN**

I. INTRODUCTION

A. ENVIRONMENTAL RISKS

With the rapid technological and industrial development in the world and the increasing intercourse between countries and people - especially in the fields of technology and trade - the risks of environmental catastrophes with international, (i.e. transboundary) consequences increase all the time. This is, unfortunately, the price that our consumer society has to pay for its demands for a higher standard of living. There exists a conflict between technological progress and the environment.¹

We have experienced a number accidents with serious transnational consequences. In the Chernobyl disaster of April 26, 1986 there was an explosion at a nuclear plant. The atomic reactor overheated and exploded, spreading radioactive particles across Central Europe and the Nordic countries. As a result of the accident, there were different kinds of damage, including damage to property and economic losses (e.g. radioactive meat had to be destroyed, and vegetables, milk products, fish, etc.

* Edited by Antoinette L. Nichols.

** Professor of Civil Law, Akademi University, Finland.

1. Developing nations are likely to surpass industrialized countries in the next century in contributing to international environmental problems. Developing countries are expected to be major contributors to international environmental problems such as global climate change, the greenhouse effect, ozone depletion, and acid rain. *See further Current Report*, 13 Int'l Env't Rep. (1990); Tamara Raye Crockett & Cynthia B. Schultz, *Environmental Protection Issues in Eastern Europe*, 13 INT'L ENV'T REP. 260 (1990).

could not be used for human consumption). No effects on human life seem to have been registered outside of the Soviet Union.² However, it is difficult to prove the long-term effects of radiation.³ In a fire at Sandoz' warehouse in Basel on November 1, 1986 a cloud of poisonous gases spread over the city, and an estimated 10-30 tons of mercury and other toxic chemicals were washed into the Rhine along with the water used to extinguish the fire. Considerable damage to the river's ecology resulted, especially to fish.

Serious accidents with international consequences have also occurred in conjunction with transport. When the Amoco Cadiz sank off the French coast in 1978, more than 220,000 tons of crude oil were released into the sea, and a large section of the French coast was badly polluted. After the tanker Exxon Valdez ran aground in March 1989 off the coast of Alaska, more than 240,000 barrels of crude oil were spilled into the sea. The oil polluted more than 1,000 km of beaches in Prince William Sound and also thousands of square kilometers of sea. It is difficult to estimate the damage that the oil pollution has caused to the fauna and flora on land and in the water. It is to be feared that the entire marine ecosystem has been impaired for decades to come, if not actually completely destroyed in some areas.⁴

In addition to the release of toxic compounds in accidents occurring in production, transport, storage, and waste-handling, our health, safety, and environment are also threatened by both gradual spills (leakage or seepage from cisterns, tanks or containers) and 'routine discharges' from permitted industrial activity (for example, emission, discharges or waste generation on a continuous or repetitive basis).⁵ Pollution of the Baltic Sea is an

2. According to information received 32 persons died and more than 200 were injured in the Chernobyl accident in the Soviet Union (official information provided by the Soviet Union). Furthermore, material damage (damage to property and other economic losses) amounted to approximately \$15-20 billion. 115,000 people had to be evacuated from 179 collective farm towns and villages in the area. Material damage has been caused in several European countries and indirectly even outside Europe, e.g. Brazil.

3. See further on the problems of proof of causality and radiological damage e.g. Christopher E. Miller, *Radiological Risks and Civil Liability*, 1 J. ENVTL. L. 10 (1989).

4. See, e.g., Alfred Rest & Ralf Leinemann, *The Environmental Catastrophe off the Coast of Alaska. Who will pay the bill for the oil pollution caused by "Exxon Valdez"?* 1 ENVTL. LIAB. L. REV. 13 (1990).

5. The distinction between immediate damage and gradual and long-term effects is important from the viewpoint of damage reduction and risk management. Immediate

example.

B. NEED FOR INTERNATIONAL CO-OPERATION

The legal and insurance problems pursuant to environmental impairment have been solved in diverse ways in different countries. There are different systems of liability, insurance arrangements (both liability insurance and insurance taken out by the injured party), etc. Moreover, legislation covering damage to the environment in most countries is heterogeneous and to some extent ambiguous.⁶

Because of the increasing integration between countries and people and in view of the ever greater risks of transboundary environmental impairment, national legislation and systems of liability should be as uniform as possible. This works to the advantage of the person suffering damage (in this way “forum shopping” and other jurisdictional problems are avoided), whereas variations in the legislation applied reduce protection. A transboundary environmental impairment affects several legal systems.⁷ Uniform liability systems are also an advantage for liability insurers and enhance their potential for providing better protection.⁸

damage usually arises from active operations (production plants, etc.), whereas the risk of delayed environmental damage is more typical of passive operations, exemplified by stores and refuse tips. P. Linkola, *Försäkringsprincipen som miljöekonomiskt styrmedel*, 2 NFT 92 (1989).

6. Such legislation is most often found in the laws of different countries on adjoining property and general liability. And there are more comprehensive rules on environmental impairment liability in only a few countries (the Federal Republic of Germany, Norway, Sweden, and to some extent the Netherlands, Poland, and the United States). *See further, e.g., Peter Wetterstein, Damage from International Disasters in the Light of Tort and Insurance Law*, in GENERAL REPORTS, 2 (Association Internationale de Droit des Assurances, 8th World Congress, 1990).

7. It may be noted that the greater international unity is on the question of substantive rules of liability, *e.g.* as laid down in a convention, the less important becomes the question of choice of law.

8. Aspects of competition may also be mentioned in this context. *See, e.g.,* the European Commission’s Proposal for a Council Directive on Civil Liability for Damage Caused by Waste, COM (89) 282 final-SYN 217, at 1: “the occurrence of differences among national laws regarding the designation of the person liable (producer, holder) and the absence of a concerted development of notions like the damage and injury to the environment covered by liability, the causal relationship, the limitations of liability, etc., would lead to unequal conditions for competition among Member States and thus to artificial currents of investments and of wastes to those countries where conditions are least stringent for the economic operators and most disadvantageous to the victim. This

Consequently, problems contingent upon environmental impairment cannot be solved only from the national perspective. With the advances made in industry and the resulting potential transboundary damage, problems of compensation have taken on an international character. I am thinking of situations where, for example, extensive transboundary damage is caused by several sources of pollution.⁹

This underlines the need for international co-operation in the form of conventions, bilateral agreements, and other international co-operation. The international legal framework should be drastically improved and adapted to existing and future needs. Effective international regulation of these questions, of course, depends on persuading as many countries as possible to participate in the system.

C. PUBLIC LAW VERSUS CIVIL LAW

There seems to be fairly general international agreement that prevention should be the focus of efforts to protect the environment (e.g. the development of safer sources of energy and production methods,¹⁰ restrictions on discharge of pollutants, stricter safety regulations, instruction and supervision, more effective information for consumers,¹¹ etc.). Such measures are needed because of the limited possibilities offered by the law for adequate and effective compensation in the case of repairing the environment. This means that public law in this context plays a

is contrary to the philosophy of the Single European Act, that foresees a high level of protection.”

9. It may be mentioned that transboundary water pollution is of special concern for European countries: due to the relatively small size of most European nations, and the number of watercourses that connect throughout the continent, Europe has historically had a significant problem with transboundary water pollution. Crockett & Schultz, *supra* note 1, at 260.

10. Resources for this could be tax deductions for environmental investments, interest subsidies for environmental protection loans and increased appropriations for technological research favoring environmental solutions.

11. Consumers could be given information about products that both in their production and their use are less of a threat to the environment than others. A pan-Nordic trade mark is planned for such goods, for example. Plans to launch an EEC system for granting ecological labels to environmentally-friendly goods have also been officially launched by the European Commission in a draft EEC Regulation approved on November 29, 1990. See further 11 EUR. ENVTL. FORTNIGHTLY 3 (1990). Also an environment tax regulating consumption would have a favorable impact on the environment.

more important role than civil law.

Preventive solutions are also being sought on an international level; these seem to be easier to achieve than compensation agreements. Certain international agreements have been concluded on the limitation of discharges endangering the environment. However, it is not possible to discuss them here.

In addition, there are a number of bilateral treaties on environmental protection and mutual assistance between countries in the event of disasters.¹²

In this context it is worth noting, however, that the effectiveness of these international preventive agreements is limited by the absence of any effective supranational system of control and enforcement. In general, international environmental treaties are weak in providing for explicit responsibility and liability regimes. Importance should be attached to linking liability to a state's undertakings, for example, to reduce industrial discharges. In this way efforts to strengthen preventive measures could be better enforced.¹³

D. INTERNATIONAL CIVIL LIABILITY

Rules on civil liability enter into the picture only when administrative regulations have proved ineffective in preventing damage. The claimant then has an opportunity to obtain compensation through due process of law. Thus, the emphasis in terms of civil law lies on compensation.¹⁴

12. It may be mentioned that there are a considerable number of bilateral agreements, notably among continental European states, providing for prompt notification, information exchange and mutual assistance in the event of a nuclear accident or radiological emergency with potential transboundary effects. See further John Woodliffe, *Current Developments: Public International law, Chernobyl: Four Years On*, 39 INT'L & COMP. L.Q. 461, 463 (1990).

13. Compare the principle in Roman law of "ubi jus ibi remedium" - a right should be accompanied by a sanction.

14. In legal debate there has been general unanimity that rules governing compensation play a relatively limited role from the preventive viewpoint when it comes to the question of personal injuries and damage to property. The rules of compensation are of most importance from the point of view of distributing risk (also in the case of insurance adjustments) and as means of providing compensation for the injured parties. However, rules of compensation can perhaps persuade companies to opt for less risky and environmentally favorable methods of production. It becomes economically advantageous to

A number of conventions on civil liability relevant to the subject discussed here have already been concluded. These include, for example, the 1960 Paris Convention (Paris Convention on Third Party Liability in the Field of Nuclear Energy (OECD)¹⁵) and the 1963 Supplementary Convention (Convention Supplementary to the Paris Convention of 29th July 1960¹⁶) on Liability in the Field of Nuclear Energy (compare also the 1963 Vienna Convention on Civil Liability for Nuclear Damage¹⁷ and the 1971 Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material¹⁸),¹⁹ and the 1969 International Convention on Civil Liability for Oil Pollution Damage (CLC)²⁰ together with the accompanying International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage of 1971 (FC)²¹ (the CLC

avoid causing damage or injury. See NOU 1982:19. Generelle lovregler om erstatning for forurensningsskade. Oslo 1982 p. 41. It should also be noted that the difference between preventive and reparative measures is not always clear. For example, recovery of the costs of preventive measures even before damage has occurred constitutes a component in the compensation system (cfr. the 1984 Protocol to the 1969 CLC).

15. The convention came into force in 1968 (revised by the 1964 Additional Protocol). It has been acceded to by Belgium, Denmark, Finland, France, the Federal Republic of Germany, Greece, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Turkey and the United Kingdom.

16. This supplementary convention came into force in 1974 (revised by the 1964 Additional Protocol). Belgium, Denmark, Finland, France, the Federal Republic of Germany, Italy, the Netherlands, Norway, Spain, Sweden and the United Kingdom have acceded to the convention.

17. The Vienna Convention follows in many respects the rules of the Paris Convention. The former, which was expected to be applicable globally, came into force in 1977. Argentina, Bolivia, Cameroon, Chile, Cuba, Egypt, Hungary, Mexico, Niger, Peru, the Philippines, Poland, Trinidad-Tobago and Yugoslavia have acceded to the convention. Brazil, for example, has liability rules corresponding to those of the Vienna Convention.

18. The convention came into force in 1975. It has been acceded to by Argentina, Belgium, Denmark, France, Gabon, the Federal Republic of Germany, Italy, Liberia, Norway, Spain, Sweden, and Yemen.

19. Both the Paris and Vienna Conventions cover accidents at nuclear plants and nuclear damage resulting from the transport of nuclear materials. Regarding the origin and development of the Paris and Vienna Conventions, see, e.g., Norbert Pelzer, *Concepts of Nuclear Liability Revisited: A Post-Chernobyl Assessment of the Paris and Vienna Conventions*, "NUCLEAR ENERGY LAW AFTER CHERNOBYL" 97 (P. Cameron et al. eds., 1988).

20. The CLC came into force in 1975. Sixty-eight states, including the Nordic countries, have acceded to the convention. See also the 1976 Protocol to the International Convention on Civil Liability for Oil Pollution Damage, to which 28 states have acceded (1989). The Protocol introduces the SDR (Special Drawing Right) as the unit of currency.

21. The FC came into force in 1978. Forty-five states, including the Nordic countries, have acceded to the convention.

and FC were revised by Protocols in 1984, but these have not yet come into force). In 1989 a Convention on Civil Liability for Damage Caused During the Carriage of Dangerous Goods by Road, Rail, and Inland Navigation Vessels (the CRTD Convention) was concluded. Work is also, at present, in progress on rules governing liability for damage arising out of the transport by sea of hazardous substances (the HNS-Convention). By means of these conventions, efforts have been made to arrive at an international solution to the problem of compensation related to the different activities. Questions concerning liability insurance have also been regulated in part in these conventions.

International legislation in this respect seems to demand considerable revision and improvement. Despite the fact that the legislation on environmental protection and liability has developed since the 1972 Stockholm Conference on the Human Environment, there still remain considerable shortcomings in this respect. So far, law in its development has been inadequate to match the challenge and to move in directions beneficial to both the international community and nature.²²

As was said before, international risks demand international co-operation which can further the efforts to arrive at uniform solutions. Moreover, in view of the increasing seriousness of environmental problems, this international co-operation should be put into effect quickly. A major disaster is usually needed before extensive work on an international level is initiated, e.g. the tanker *Torrey Canyon*'s sinking off the south coast of England in March 1967, which intensified the work on international conventions on civil liability for oil pollution damage.²³

Below are given some reflections on international efforts and solutions concerning civil liability in the environmental field. The concept of international civil liability is used here in the meaning of civil liability based on a convention or other international agreement creating an obligation for contracting

22. Manfred Lachs, *The Challenge of the Environment*, 39 Int'l & Comp. L.Q. 663, 668 (1990).

23. Zdzislaw Brodecki pointedly says on the effect of disasters in this respect, "[t]he shock of such an event inspires a will, which is a 'great builder' of the law," IMO LEG 58/6/3 22 September 1987 Annex p. 1.

states (according to public international law²⁴) to apply the liability rules in national law.

II. TRENDS AND SOLUTIONS CONCERNING INTERNATIONAL CIVIL LIABILITY

A. LIABILITY FOR NUCLEAR DAMAGE

In the matter of nuclear damage it may be noted that efforts have been made to adapt the systems of liability in the Paris Conventions of 1960, the Supplementary Convention of 1963 and the 1963 Vienna Convention to each other. Such an adaption seems important in view of the need for an overall international system of compensation that could be accepted by as many countries as possible. However, one is somewhat skeptical about the practical significance of such an adaption unless it provides an incentive for countries to ratify the conventions. This is because only Hungary, Poland, and Yugoslavia among the countries of Europe have so far acceded to the Vienna Convention while the other Contracting States have no significant nuclear capacity. Outside the convention systems are states such as Canada, India, Israel, Japan, the United States of America and many of the Eastern European countries.²⁵

Work has been done, however, at the International Atomic Energy Agency to adapt the fields of the above-mentioned conventions to each other. The lack of correspondence between the fields covered by the conventions - which have been strictly separate - has constrained the conventions' importance, and a Joint Protocol was signed on September 21, 1988.²⁶ By mutually ex-

24. A basic principle is that states are not subject to rules other than those that in the absence of international obligations they willingly submit to and apply within their own jurisdiction. See, e.g., the Vienna Convention on the Law of Treaties (in force 1980) part III.

25. It may be noted that at present only 1/3 of the nuclear power plants world-wide are covered by the Paris or Vienna Conventions. Woodliffe, *supra* note 12, at 467 note 43.

26. See IAEA Board of Governors, *The Question of International Liability for Damage Arising from a Nuclear Accident*, Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention, GOV/2326, 15 January 1988. See also Mauro Politi, *International and Civil Liability for Nuclear Damage: Some Recent Developments of State Practice. La reparation des dommages catastrophiques*, XIII JOURNEES D'ETUDES JURIDIQUES JEAN DABIN 155 f. (1988); Pelzer, *supra* note 19, at 112. It may be mentioned that following the Chernobyl disaster, two important conventions

tending the benefit of a special regime of civil liability for nuclear damage set forth under each convention and by eliminating conflicts arising from the simultaneous application of both conventions to a nuclear accident, the claimant's situation is improved. The Protocol removes the anomaly whereby neither convention applies to nuclear damage suffered in the territory of a contracting party to the other convention.²⁷

A further possibility would be to try to reach an entirely new convention covering the widest area possible.²⁸ But the difficulties are considerable in this respect. States have different opinions about the basis of liability (and exceptions), the channelling of liability, compensable damage, limitation of liability, geographical scope, procedural questions, etc.²⁹ and the Western European states, in particular, seem to cling to a system of liability of the type contained in the Paris Convention together with the Supplementary Convention (liability for the operator of the plant combined with liability insurance or other financial security and residual state liability) while some Eastern European countries (especially the USSR) plead strongly for states' liability for nuclear damage. These states express the opinion that the civil law mechanisms of the Paris and Vienna Conventions are inappropriate for dealing with some of the broader issues raised by the Chernobyl accident; for example, the question of the responsibility for harmful consequences caused by radioactive pollution to the general environment, such as air, water or soil, is one that might be better handled within the traditional framework of interstate claims.³⁰

The risk of an entirely new convention, however, is that the

were concluded in 1986. One provides for the obligation to notify as soon as possible all parties concerned (Convention on Early Notification of a Nuclear Accident), and the other regulates questions of assistance in cases of accidents (Convention on Assistance in the Case of Nuclear Accident or Radiological Emergency).

27. See Woodliffe, *supra* note 12, at 467.

28. A proposal for such co-operation has been under consideration in the IAEA, see Politi, *supra* note 26, at 151, 158.

29. See *Id.* at 157.

30. Woodliffe, *supra* note 12, at 468. However, some member states of the IAEA called for caution before involving the agency in developing substantive principles of state liability for nuclear damage while the International Law Commission has under active consideration the conceptual framework relating to state liability, including international liability for injurious consequences arising out of acts not prohibited by international law.

international picture could become further complicated: we might have three convention systems instead of the present two.

It is also to be noted that a Standing Committee to study all aspects of liability for nuclear damage was established by the Board of Governors of the IAEA in February 1989. The Standing Committee is now considering different ways in which the regime established by the Vienna Convention might be improved.

Regardless of how these questions are solved, it would be of special importance to ensure that the amounts payable in compensation are sufficiently large (possibly with a priority for personal injury claims) in view of inflation, either present or foreseeable in the future, and the extensive damage resulting from a serious nuclear accident of the Chernobyl type.³¹ Furthermore, the concept of nuclear damage should be reviewed. As the conventions are worded at present, the question of the nature, form and extent of compensation awarded is largely dependent on national law, which in turn can lead to nationally differing solutions. For example, some countries accept a wider notion of compensable damage for the environment than others.³² Here the concept of oil pollution damage as defined in the 1969/84 CLC (see *infra*) might serve as a guide. The wording used in this convention also takes into account aspects of environmental damage. The rules governing proof of causation and statutory time limits should also be overhauled in the light of the long-term effects of radiation, for example. Finally, the geographical scope of the nuclear conventions should be extended.

B. LIABILITY FOR MARITIME CLAIMS

1. *Limitation of liability*

The 1976 Convention on Limitation of Liability for Mari-

31. Cf. Henri Smets, *The Cost of Accidental Pollution* 3 (1990), who estimates that a Chernobyl-type accident in Western Europe could well cost over Ffr 100 billion for external losses only. Costs of this nature are out of all proportion to compensation ceilings specified in international conventions or by the domestic law of many industrialized countries. It should be noted, however, that unlimited liability exists in, for example, Argentina, Australia, Bulgaria, Germany, Hungary, Japan, Poland and Switzerland.

32. See Wetterstein, *supra* note 6, at 76.

time Claims³³ contains general rules limiting maritime claims (global limitation) with the exception of liability covered by the special rules on liability for nuclear damage³⁴ and oil pollution (see below).

I have put forward arguments in various contexts in favor of the abolition of limits on liability.³⁵ It is, therefore, in my view an obvious shortcoming that the amounts in the 1976 limitation convention are much too small to afford satisfactory and reasonable compensation for injured parties in a major maritime accident. Since 1976 inflation has markedly reduced the real value of the sums payable in compensation. A considerable increase of the 1976 amounts is therefore a pressing need. This increase should take into account the inflation that has already occurred, future inflation, partly the increased costs that may follow a major accident at sea.³⁶

Since the idea of limited liability, however, seems to be internationally accepted, it is especially important that a simple and flexible mechanism for adjusting the limitation amounts be introduced into international conventions dealing with liability. This would facilitate adjustments for inflation and other increases without the administrative complications and delays normally associated with amending conventions. The 1976 limitation convention contains such a mechanism for revising the limitation amounts (art. 21), and it should be used.

A possible improvement in the system of limited liability might also be to abolish limits based on tonnage. A maximum limit for all vessels might be considered. The size of damage is not always directly connected with the size of the vessel causing the damage.

33. The convention came into force on 1 December 1986. The following countries have acceded (1989) to the convention: Bahamas, Belize, Benin, Belgium, Denmark, Egypt, Finland, France, the German Democratic Republic, Japan, Liberia, Norway, Poland, Spain, Sweden, Switzerland, the United Kingdom, and North Yemen.

34. Rules on limitation of liability are also included in the 1962 Convention on the Liability of Operators of Nuclear Ships (art. III).

35. See, e.g., Wetterstein, *supra* note 6, at 100.

36. It may be noted that a marked increase in the limitation amounts has only a marginal effect on shipowners' operating costs, see, e.g., Henri Smets, *The Oil Spill Risk: Economic Assessment and Compensation Limit*, 14 J. MAR. L. & COM. 23, 31 (1983); PETER WETTERSTEIN, *GLOBALBEGRÄNSNING AV SJORATTSLIGT SKADESTANDSANSVAR* 248 ff. (Ekenäs, 1980).

2. *Liability for oil pollution*

As far as oil liability is concerned, it may be noted that the 1984 amendments to the 1969 CLC and the 1971 FC³⁷ brought about a number of improvements. The CLC, for example, was extended to include oil pollution from tankers in ballast and from combined carriers provided that it could not be proved that the tanks of such vessels were free of oil. The geographical area covered by the convention was also extended to include oil pollution not only on a Contracting State's territory and its territorial waters (1969 CLC), but also pollution within the Contracting State's economic zone.

The main reason for the 1984 amendment was, however, the increasing dissatisfaction with the amounts of compensation laid down in the 1969 CLC. Inflation and the higher costs of cleaning up polluted beaches and other areas³⁸ had created a universal need to raise the amounts of compensation.³⁹ Demands had also been put forward for introducing minimum liability limits for small vessels into the convention.

Consequently, the amounts payable in compensation were increased markedly in the amendment protocols,⁴⁰ and a minimum liability limit for oil pollution caused by small vessels was introduced. In addition, a broader definition of oil pollution

37. Protocol to Amend the International Convention on Civil Liability for Oil Pollution Damage, 1969 and Protocol of 1984 to Amend the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971.

38. According to ZDZISLAW BRODECKI, *COMPENSATION IN THE LIGHT OF 1984 PROTOCOLS TO REVISE THE 1969 CLC AND 1971 FUND CONVENTIONS* 8 (1987), the real dollar costs resulting from oil pollution increased more than the rate of inflation in the 1970's.

39. According to the 1969 CLC the shipowner's liability for oil pollution is limited to SDR 133 per ton of the vessel's tonnage. The amount of compensation is per accident and is restricted to a total amount of SDR 14 million (art. V).

40. The amendments have limited the shipowner's liability to a maximum of SDR 59.7 million (CLC art. V) and the oil pollution fund's maximum amount is now SDR 135/200 million (FC art. IV). The latter amount of SDR 200 million will be used with respect to any incident occurring during any period when there are three states Parties to the 1984 Protocol to the FC in respect of which the combined quantity of contributing oil received by persons in these states during the previous calendar year exceeded 600 million tons. It seems that this quantity would not be reached unless the United States became a Party to the Protocol. IOFC Fund, Sixth Intersessional Working Group, Fund/WGR 6/3 22 January 1991 Annex p. 3.

damage taking into account aspects of environmental damage⁴¹ and a simplified system of revision making possible necessary inflation and other adjustments⁴² were included in both the CLC (amendment protocol art. 15) and the FC (amendment protocol art. 33). The improvements have all been important and appropriate; but unfortunately, the United States Congress has decided not to accede to the 1984 Protocols. The United States has adopted its own oil pollution legislation.⁴³ This essentially endangers the coming into force of the 1984 Protocols.⁴⁴

Consequently, opinions have been expressed to the effect of

41. The wording of the 1969/84 CLC concerning oil pollution damage: "compensation for impairment of the environment other than loss of profit from such impairment shall be limited to the costs of reasonable measures of reinstatement actually undertaken or to be undertaken." See further on compensable damage according to the 1969/84 CLC Wetterstein, *supra* note 6, at 82.

42. See also Smets, *supra* note 36, at 35, who addresses the need for increased amounts of compensation in the light of inflation. He also discusses the difficulties in the context.

43. Oil Pollution Act, 1990. See further, e.g., *Bimco Bulletin*, 52, 6/90 November/December.

44. The conditions for the entry into force of the 1984 Protocol to the CLC are laid down in art. 13.1 of the Protocol which reads: "This Protocol shall enter into force twelve months following the date on which ten States including six States each with not less than one million units of gross taker tonnage have deposited instruments of ratification, acceptance, approval or accession with the Secretary-General of the Organization." By January 1991 the following six states have become Parties to the 1984 Protocol: Australia, France, Germany, Peru, Saint Vincent and the Grenadines, South Africa (the United Kingdom is in the process of acceding). Of the states which have so far become Parties to the Protocol, only France fulfills the condition of having not less than one million units of gross tanker tonnage.

The conditions for the entry into force of the 1984 Protocol to the FC are laid down in art. 30.1 of that Protocol which reads: "This Protocol shall enter into force twelve months following the date on which the following requirements are fulfilled:

- a. At least eight States have deposited instruments of ratification, acceptance, approval or accession with the Secretary-General of the Organization; and
- b. The Secretary-General of the Organization has received information in accordance with Article 29 that those persons who would be liable to contribute pursuant to Article 10 of the 1971 Fund Convention as amended by this Protocol have received during the preceding calendar year a total quantity of at least 600 million tons of contributing oil."

In January 1991, only France and Germany have become Parties to the 1984 Protocol to the FC (the United Kingdom is in the process of acceding). These three states (for Germany not including receipts in the former GDR) represent a total quantity of approximately 186 million tons of contributing oil. Consequently, in order for the 1984 Protocol to the FC to enter into force, it is necessary that further states representing at least 414 million tons of contributing oil become Parties to the Protocol. IOPC Fund, Sixth Inter-Sessional Working Group, Fund/WGR 6/3 22 January 1991 Annex p. 2.

making a new effort within the IMO to review the CLC and FC conventions. At its 13th session, the IOPC Fund (International Oil Pollution Compensation Fund) Assembly decided to set up an Intersessional Working Group with the mandate to consider the future development of the intergovernmental oil pollution liability and compensation system by considering whether it would be possible to facilitate the entry into force of the content of the 1984 Protocols possibly by amending their entry into force provisions.⁴⁵

The Intersessional Working Group held two meetings and decided to recommend for the Assembly that the entry into force provisions of the 1984 Protocols should be amended.⁴⁶ The Assembly decided (14th session) to make a request to the Secretary-General of IMO that an international conference be convened as soon as possible to consider the proposed amendments.⁴⁷

In any case, it is extremely important to have an international regime on oil pollution liability, and it is to be noted that the CLC/FC system for compensating oil pollution damage has functioned rather well. Compensation has been paid relatively quickly - bearing in mind the frequently complex problems involved - and the claimants have in most cases received adequate compensation.⁴⁸

3. *The HNS Convention*

The question of a convention on liability for the carriage by sea of hazardous and noxious substances (the HNS convention) was also discussed at the conference in London in 1984 (oil pollution liability). No HNS convention was agreed upon, however. This was partly due to lack of time, but primarily because it was impossible to reach agreement on certain key questions.

45. *Id.*

46. *See id.* at WGR 6/12.

47. *See* IOPC Fund, Assembly, FUND/A 14/WP. 3, 11 October 1991.

48. *See further* on the Fund system and the Fund's activities R.H. GANTEN, *THE INTERNATIONAL SYSTEM FOR COMPENSATION FOR OIL POLLUTION DAMAGE: AN ASSESSMENT BASED ON THE EXPERIENCES OF THE INTERNATIONAL OIL POLLUTION COMPENSATION FUND 62* (Oslo, 1981).

Despite the setback given to the convention by the London conference, there exists considerable unanimity on the need for international regulation of compensation.⁴⁹ Consequently, the Legal Committee of the IMO has put up a working group for further work with the matter. The working group has produced a preliminary draft on an HNS convention (Draft International Convention on Liability and Compensation for Damage in Connection with the Carriage of Dangerous Goods by Sea) based on discussions during the meeting of the Committee in September 1990. The draft contains the solution of divided liability between shipowner and cargo interest and represents the majority view of the Legal Committee. The proposed compensation system is a two-tier solution:

1. The shipowner has strict liability during the carriage of dangerous cargo named in the convention linked with the obligation to maintain liability insurance.
2. In addition to the shipowner's liability, it is proposed to set up an International Dangerous Goods Scheme to which cargo interests, *i.e.* shippers, would contribute by paying charges levied on HNS carriage (on those cargoes which are defined as contributing to the scheme). The purpose of the scheme is to provide compensation for damage resulting from the carriage of dangerous goods by sea to the extent that the protection afforded by the first tier is inadequate or not available (*cfr.* the 1971 oil pollution fund).

It is also my view that the HNS convention needs to be brought into existence. In this way it becomes possible to establish an international method for solving problems of compensation linked with the carriage of such substances. It is not possible to discuss the present work⁵⁰ in more detail but certain comments are appropriate.

It is important that the system should not be too complex and administratively unwieldy. It is also desirable that the area covered by the system be as comprehensive as possible both in

49. See also IMO LEG 55/11, 34, Report of the Legal Committee on the Work of its Fifty-Fifth Session 24 October 1985.

50. See further, *e.g.*, Wetterstein, *supra* note 6, at 129.

the hazardous substances covered (regardless of the way they are transported, i.e. both bulk cargoes and package cargo should be included) and in the geographical area. The basis of liability should be strict (with certain exceptions, cf. liability for oil pollution damage).

Compensable damage could most suitably be defined by solutions similar to those contained in the 1969/84 CLC. A broad definition of compensable damage is needed, taking into account aspects of environmental damage. Limitation amounts should be as high as possible (with minimum liability limits for small vessels) and a revision mechanism making possible rapid and simplified inflation, and other adjustments should be included in the HNS convention.

When it comes to insurance, it is important to establish a system of compulsory liability insurance including "direct action"⁵¹ and liability for nuclear damage and oil pollution damage, together with a complementary system of compensation in the form of a fund or something similar, e.g., the proposed scheme. A fund would be an important component in a functioning system of compensation (if compensation at the "primary level" were insufficient).

C. THE CRTD CONVENTION

Concerning international solutions, mention may be made of the ECE's (Economic Commission for Europe) Convention on Civil Liability for Damage Caused During the Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels, 1989 (CRTD) (not yet in force). This convention contains a system whereby the carrier of dangerous goods by road, rail and inland navigation vessels bears strict liability with certain exceptions, e.g. acts of war and natural disasters. Liability covers, in the main, the same types of damage as in the 1969/84 CLC. The carrier's obligation to maintain insurance and liability is restricted to the amounts referred to in the convention. Especially in view of the increasing amount of transit traffic on the continent of Europe,⁵² it is important that internationally uniform

51. See further, e.g., Wetterstein, *supra* note 6, at 129.

52. It is interesting to note that the total number of vessels in commercial traffic on

rules concerning liability have been drawn up for this field.⁵³

D. OTHER EFFORTS CONCERNING INTERNATIONAL CIVIL LIABILITY

The above shows that the greatest progress when it comes to international solutions of civil liability has been made in the fields of maritime and transport law and of nuclear damage. The main problems when it comes to environmental damage, however, are linked to damage resulting by hazardous or noxious substances from land-based activities. Although the problems involved have been noted and the need for international solutions emphasized - *e.g.*, in connection with art. 17 of the 1974 Baltic Sea Convention⁵⁴ - such efforts have hitherto proved relatively unsuccessful.

As far as future international solutions are concerned, it is, therefore, important to discuss some form of HNS convention for hazardous and noxious substances from land-based activities (other than nuclear damage, see above section II.1.). Such an agreement could, in the main, be based on the principles contained in the conventions and draft conventions on environmental impairment already mentioned: strict liability (possible exceptions: acts of war, natural disasters, damage caused by third parties, etc), the channelling of liability to the owner/operator of the plant or activity causing damage ("polluter pays"), cover not only for personal injury and property damage but also for broadly defined environmental damage, compulsory liability insurance (or other financial security) direct action, and complementary compensation arrangements (*e.g.*, fund/insurance based on money from industry and/or state, cf. the above-mentioned HNS-work⁵⁵).

Furthermore, states party to the convention could bind themselves to take joint responsibility for compensating (*e.g.*, by

inland waterways in Europe has been estimated at 25,000 (1990) *SvSjT* No. 39, 28 September 1990 p. 11.

53. According to art. 22, the Convention was open for signature by all states in Geneva from February 1, 1990 until December 31, 1990 inclusive. Further, the Convention is open for accession by all states which are not signatory states from January 1, 1991.

54. See, *e.g.*, ZDZISLAW BRODECKI: *DAMAGE TO THE BALTIC SEA: THE FUTURE OF INTERNATIONAL LIABILITY POLLUTION OF THE BALTIC SEA*. SKRIFTER UTGIVNA AV AXEL AXSON JOHNSONS INSTITUT FÖR SJÖRÄTT OCH ANNAN TRANSPORTRATT 33 ff. (Stockholm, 1988).

55. See also Wetterstein, *supra* note 6, at 141.

contributing to the fund⁵⁶) environmental damage not covered by national systems of liability and complementary compensation arrangements⁵⁷ (cf. liability for nuclear damage).⁵⁸ It is to be noted, however, that states seem to accept public participation in the liability only as far as necessary and only in addition to the limited private liability, i.e. states are not prepared to engage in complementary liability as long as industry itself is able to bear the burden of increased liability, and the private regimes function satisfactorily.⁵⁹

The prospects of reaching an international agreement on "land-based HNS-damage" with many states participating, however, are not so good in the light of the present day possibilities of concluding international agreements and conventions. Efforts in this direction are obstructed by the fact that many different political, social and economic interests are involved when it comes to the work of drafting a convention - and these difficulties only increase the greater the number of countries and groups of countries participating. States represent different structures and degrees of development as far as industry and energy are concerned; they have different economic structures and

56. The states' duty to contribute could be based on GNP, for example, or the overall level of hazardous and polluting activity in each country. One might also envisage equal contributions by the contracting states especially if the nature and scope of a fund were limited to the recovery of the costs of necessary measures to prevent, abate and combat land pollution. A fund could also provide credit facilities for preventive measures in the field of transboundary pollution.

57. It may be mentioned that the establishment of a Baltic Marine Environmental Compensation Fund has been proposed, see BRODECKI, *supra* note 54, at 36. Note also the proposals for the second type of the Mediterranean Inter-State Guarantee Fund, Zdzislaw Brodecki, *Liability for Damage Caused by the Pollution of the Sea*, 3 Y.B. MAR. L. 72 (1986-7).

58. One could also think of some kind of international fund from which compensation could be paid directly to claimants when they have shown that damage covered by the system has occurred (cf., e.g., the TOVALOP and CRISTAL systems, see Rest & Leinemann, *supra* note 4, at 15, and Wetterstein, *supra* note 6, at 143). Not only would such a system accelerate the claimant's possibilities of obtaining compensation but there would also be the advantage that compensation would be paid according to uniform principles. Compare also HENRI SMETS, *GUARANTEED COMPENSATION FOR THE VICTIMS OF ACCIDENTAL POLLUTION* 7 (1989), who suggests that the costs involved need not be very high.

59. Compare here the space liability regime (Convention on Liability for Damage Caused by Space Objects, 1972), which excludes private participation, whereas nuclear liability law requires that liability of the plant operator be established. Contrary to the case of space law, the consideration concerning nuclear liability law seems not to be one of principle, but of pure economic evaluation. See Gunther Doeker & Thomas Gehring, *Private or International Liability for Transnational Environmental Damage - the Precedent of Conventional Liability Regimes*, 2 J. ENVTL. L. 1, 14 (1990).

social systems, etc. Geographical conditions also differ. Moreover, states often lack the political will and preparedness to tackle the problems in earnest. But it is not just a question of political will; the legal difficulties are great in this respect. Consequently, the result - if such is achieved - is often only a meager, watered-down compromise, i.e. the lowest common denominator. One often wonders afterwards whether the result was in fact worth all the trouble and money expended.⁶⁰

In view of these difficulties, it would perhaps be better to strive for more limited, regional co-operation, e.g., between the Nordic countries,⁶¹ within the European Community, etc.⁶² Such regional co-operation would seem to provide enhanced opportunities of achieving solutions that in context are of greater importance - and from the environmental viewpoint more stringent - and also more uniform.⁶³ Other countries and groups of countries could then follow such regionally based solutions and so further the efforts to achieve internationally uniform rules. An example in this respect is the 1985 EC directive on product liability, which has served as a model for much national legislation outside the Community. And my belief is that the EC Proposal for a Council Directive on Civil Liability for Damage Caused by Waste (COM (89) 282 final-SYN 217) is of great importance when it comes to harmonization measures in key areas of liability. This directive introduces a uniform system of civil liability and reflects the "polluter pays" principle promoted by the OECD and previously adopted by the European Community in 1975.⁶⁴ The draft directive covers different types of waste⁶⁵ gen-

60. Further difficulties and national differences may arise when it comes to the matter of incorporating the provisions of a convention into national law. Concerning such problems see, e.g., Francesco Berlingeri, *Uniformity in Maritime Law and Implementation of International Conventions*, 18 J. MAR. L. & COM. 317 (1987).

61. The Nordic Council, for example, has on a number of occasions urged the Ministerial Council to intensify Nordic co-operation with the aim of reaching joint solutions in legislation covering liability for environmental impairment, LUNDHOLM, GRÄNSÖVERSKRIDANDE LUFTFÖRORENINGAR. EXAMENSARBETE VID JURIDISKA FAKULTETEN VID STOCKHOLMS UNIVERSITET. (Stockholm, 1988).

62. The so-called Southern Cone countries (Brazil, Uruguay and Argentina) have initiated co-operation in matters concerning international disasters and risks, e.g., during the transport of hazardous substances.

63. *Cfr. also* ALLAN ROSAS, MOT EN PARTIKULÄR ÖSTERSJÖRÅTT. FREDSOCH KONFLIKTFORSKNINGSINSTITUTET. FORSKNINGSRAPPORT 141 ff. (1988), where the author discusses the possibility from the specific view of international law.

64. It may be noted that according to the Single European Act a Title VII on environment, art. 130 R is added to Part Three of the EEC Treaty of which paragraph 2 has

erated by commercial or industrial activity, nuclear waste and oil pollution excepted. The principle of strict liability has been approved for the producer of the waste that causes damage to the environment.

It may also be mentioned that in May 1987 the Council of Europe set up its Committee of Experts on Compensation for Damage Caused to the Environment. Its work has resulted in a draft convention (Draft Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment).⁶⁶

As long as it proves impossible to achieve internationally uniform solutions to liability systems and compensation arrangements that can be widely accepted by means of conventions and other agreements, interest will be focused on national rules and their appropriateness. National legal developments must not be unnecessarily delayed by the wait for international measures (on the other hand, neither should international developments be too dependent on national steps).⁶⁷ It should also be mentioned that as long as questions of civil liability remain insufficiently regulated in international conventions and agreements, it will continue to be important and desirable to discuss state liability on the basis of international law.⁶⁸ There exists already a certain interspersed of civil and state liability regimes. This tendency

the following wording: "Action by the Community relating to the environment shall be based on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source, and that the polluter should pay. Environmental protection requirements shall be a component of the Community's other policies." It may further be noted that the European Chemical Industry Federation (CEFIC) criticizes the EC Commission's proposed directive on civil liability for damage caused by waste for misinterpretation of the polluter pays principle. See *European Chemical Industry Says EEC Draft Misinterprets Principle of "Polluter Pays,"* 13 INT'L ENV'T REP. 236 (1990).

65. According to art. 2.1. "waste" means any substance or object defined as waste in art. 1 of Council Directive 75/442/EEC.

66. See also Council of Europe, DIR/JUR (90) 2, Draft Convention on Damage Resulting from Activities Dangerous to the Environment.

67. In my general report *Damage from International Disasters in the Light of Tort and Insurance Law 1990* (WETTERSTEIN, *supra* note 6) I have discussed different aspects of a comprehensive system of compensation for especially environmental impairment; in doing so, I have also tried to provide guidelines for persons who are engaged at the national level in compensation and insurance problems - with the intention of also encouraging efforts to find internationally uniform solutions.

68. See, e.g., Allan Rosas (in collaboration with Zdzislaw Brodecki), *State Liability for Transboundary Environmental Damage*, in GENERAL REPORT 188 (Association Internationale de Droit des Assurances ed., 1990).

should be encouraged, including the introduction of features of state liability into regimes hitherto considered as belonging to the sphere of civil liability.⁶⁹ State liability both strengthens the position of the victims of environmental disasters and encourages states to take more effective preventive measures in relation to activities conducted within their territory which give rise to injurious transboundary consequences.⁷⁰

But as was indicated earlier, states seem to accept a full-fledged international liability only in areas where issues of global and military importance prevail over economic and civil aspects. In areas where economic aspects prevail, states favor private solutions of the liability question.⁷¹

III. CONCLUSION

Summing up, it may be said that I have indicated in the foregoing a number of improvements and solutions on international civil liability. Further efforts in this direction should be encouraged. If the HNS and CRTD conventions actually come into force, the key risks involved in transport (nuclear damage, oil pollution, damage caused by hazardous and noxious substances) will be covered by conventions. Against the background of efforts to achieve international uniformity, it would naturally be a good thing, and I view as the key issue, that the amounts of compensation paid under these different arrangements be sufficiently large. Liability should be covered by insurance (or other financial security) and, in addition, complementary compensation arrangements in the form of funds, etc. should be considered. The administration of any system should be smooth and flexible, and the claimant should have the right to rapid compensation. It would also be important and appropriate to aim for

69. *Id.* at 43 n.90. It may be mentioned that the ILC (International Law Commission) is doing work on bridging the procedural gaps between state liability and civil liability regimes. See further INTERNATIONAL LAW COMMISSION, SIXTH REPORT ON INTERNATIONAL LIABILITY FOR INJURIOUS CONSEQUENCES ARISING OUT OF ACTS NOT PROHIBITED BY INTERNATIONAL LAW 35-51 (J. Barboza, Rapportuer, Doc. A/CN.4/428, 1990). See also INTERNATIONAL LAW COMMISSION, DRAFT REPORT OF THE INTERNATIONAL LAW COMMISSION ON THE WORK OF ITS 42ND SESS., Chapter VII, INTERNATIONAL LIABILITY FOR INJURIOUS CONSEQUENCES ARISING OUT OF ACTS NOT PROHIBITED BY INTERNATIONAL LAW 39 (Doc. A/CN.4/L.452, 1990).

70. See Barboza, *supra* note 69, at 34.

71. Doeker & Gehring, *supra* note 59, at 16.

similar systems of liability and compensation for damage caused by hazardous and noxious substances from land-based activities. Finally, it should be remembered that if the difficulties in reaching sensible solutions at the global level are too great, regional solutions should be considered, e.g. those between the Nordic countries and within the European Community.