the high seas could be enforced as *erga omnes* obligations although the reasoning of the court has been criticised by some writers and conflicts with the ILC Draft Articles on State Responsibility 1980. Article 19(3)(d) provides that:

> ... a serious breach of an international obligation of essential importance for the safeguarding and preservation of the human environment, such as those prohibiting massive pollution of the atmosphere or of the seas ...

constitutes an international crime and therefore is the concern of all states and not just those suffering injury. The repetition of the obligation on states to safeguard and preserve the human environment in numerous international resolutions including the declaration made at the Rio Conference on the Environment and Development 1992 would seem to support the view that the obligation is indeed now one of *jus cogens*. The full extent of the obligation, however, remains to be clearly enunciated.

18.2 Sources

The bulk of international environmental law is contained in multilateral treaties and the important ones will be discussed in the subsequent sections. Such treaties may be designed to apply globally, such as the Convention on Long-Range Transboundary Air Pollution 1979 or may be concerned with protection of a specific region, for example the Antarctic Treaty 1959 and the Convention on Protection of the Mediterranean Sea 1976. In addition there are a number of treaties which, while not concerned exclusively with environmental matters, nevertheless contain provisions which have significance for the environment, for example the Law of the Sea Convention 1982.

Besides treaty law, there are also some important rules of customary international law affecting the environment. For example, reference has already been made to the prohibition on causing harm in or to the territory of another state. However, although states often make statements in support of environmental protection these statements are not always adhered to in practice. Furthermore it has often been difficult to prove the necessary accompanying *opinio juris* to be able to assert a binding rule of customary international law. Therefore, writers on international environmental law have made considerable use of the concept of soft law. It is often the case that states are unwilling to agree to legally binding obligations in particular areas of environmental protection because of the unavailability of relevant scientific information or knowledge. The concept of soft law allows there to be a statement of principle and intention and the soft law can gradually harden as scientific knowledge expands. Many of the international conventions dealing with environmental matters have been developed from broad statements of principle expressed in resolutions and declarations of the United Nations. Arguably, the declarations themselves could be considered soft law. A considerable amount of soft environmental law is to be found in the resolutions of various international organisations concerned with environmental matters such as the World Health Organisation, the International Atomic Energy Agency, the International Maritime Organisation and the Food and Agriculture Organisation.

If international protection of environmental resources requires an increasingly high degree of adaptability and responsiveness of the legal system to rapid and frequent change, a traditional, *ad hoc*, treaty-based approach to international environmental standard-setting, is evidently ill suited to meet the task. The disadvantages of the classic treaty approach are obvious: the drafting, adoption, and putting into effect of treaties as well as revisions or amendments involve elaborate and time-consuming exercises in diplomacy. In the aggregate, transaction costs of this approach become unacceptably high because, as legislative international intervention will be repeatedly required to respond to an evolving international environmental problem, this approach offers simply too many opportunities to states for 'opportunistic' behaviour.

The need to facilitate international environmental decision-making of a less cumbersome and time-consuming nature without sacrificing at the same time on the objective of broad state adherence to adequate environmental standards, has prompted the restructuring of multilateral legislative processes: diplomatic '*ad hocracy*' is being abandoned for institutionalised, periodic, and informal review of international regulatory regimes with simplified amendment procedures.

While there are other indications of this development in international environmental standard-setting (note, for example, the simplified amendment procedures of Article 313 of UNCLOS) it is only in the context of more recent environmental framework conventions and implementing Protocols that the trend has become conspicuous. For example, the Montreal Protocol on Substance that Deplete the Ozone Layer expressly provides for the periodic review and assessment of control measures taken and their adjustment or supplementation whenever deemed necessary ...

The resulting intrinsic flexibility or adaptability of the legislative process comes, as some might be apt to object, with a substantial price-tag. The framework-cum-implementation Protocols approach necessarily entails a significant degree of indeterminacy of the normative landscape thus being created: states tend to settle first broad policy outlines through the device of framework conventions and leave nettlesome international lawmaking within the individual environmental context as defined by the framework convention. By necessity, this approach also signals a certain open-endedness of the legislative enterprise.

More significantly still, states may leave the definition of key legal parameters regarding the scope and very nature of conventional obligations to which they contract to be settled at a later date ... international legislation under this guise is no longer a single well-defined product carried by expectations of stability for a foreseeable future. It is rather a fragile, temporary legal sign-post in an institutionalised process in which legal positions are subject to constant review and susceptible to frequent and speedy alteration ...

Some aspects of this development may be undesirable. For example, the institutional dynamics of multilateral regimes (with regard to both the setting and implementation of standards), may be such as to de-couple decision-making within the regime from traditional national processes of control and supervision. In this sense, the new type of environmental regime may signal an emerging 'democratic deficit'. Other implications of such regimes might be merely inconvenient. However, on balance, there can be little doubt that the evolving international legislative process represents progress towards better international legal management of increasingly demanding global environmental problems.

It is against the background of the special regulationary exigencies of international environmental problems, that so-called 'soft law' plays an important role in the evolution of international environmental law. 'Soft law'

denotes international prescriptions that are deemed to lack the requisite characteristics of international legal norms proper, but which, notwithstanding this fact, are capable of producing certain effects. 'Soft law', of course, travels in tandem with 'hard law', its counterpart on the other side of the threshold of legal normativity.

There are international lawyers who harbour serious reservations about usage of the term, defining it as a 'pathological phenomenon' of international law; as introducing a graduated scale of normativity; as a practice that lends itself to legal pretension. The concept, so the argument goes, tends to blur the line between law and non-law, be that because merely aspirational norms are accorded 'legal' status, albeit of a secondary nature; be that because the effect of the usage of the term may be to undermine the status of an established legal norm.

On the other hand, 'soft law' can be a valuable instrument for enhancing or supplementing international law proper. In fact, frequently 'soft law' will capture emerging notions of international public order and thus help extend the realm of legitimate international concern to matters of previously exclusive national jurisdiction. This is especially true of the use of soft law with regard to the protection of the environment. In this sense, soft law is the thin end of the normative wedge of international environmental law, perhaps the 'Trojan Horse of environmentalists'.

There is, of course, abundant and well-known evidence of the effectiveness of soft law declarations as catalysts in the evolution of international environmental law proper. The so-called Helsinki Rules on the Uses of Waters of International Rivers, the 1972 Stockholm Declaration on the Human Environment, or the 1982 General Assembly Resolution entitled 'World Charter for Nature', to name only a few, all have proved to be agents in the 'legalisation of international environmental protection'.

In the final analysis, though, soft law concepts pose both a challenge for and an obligation on international lawyers. First, the declining reliability of formal criteria as guide-posts to what actually constitutes international law – a phenomenon that, as intimated, may be prevalent in the context of international environmental decision-making – requires an adequate theory about international law, namely as a process of communication, and thus sensitivity to those signals indicating international normativity and those that do not. Second, international environmental lawyers must heed the normative dividing line and avoid misrepresenting aspirational norms for 'hard law' and thereby rendering a disservice to the very cause that they purport to serve, namely the strengthening of the legal protection of the environment.'[6]

18.3 The Stockholm Conference

During the 1960s concern grew about the state of the human environment and manifested itself in Resolution 2398 (XXIII) which was passed by the General Assembly of the United Nations on 3 December 1968. The resolution noted that there was 'an urgent need for intensified action at national and international level to limit and, where possible, to eliminate the impairment of the human

6 Gunther Handl, 'Environmental Security and Global Change: The Challenge to International Law', in Lang, Neuhold and Zemanek (eds), *Environmental Protection and International Law*, 1991, London: Graham and Trotman at pp 61–64.

environment' and convened an international conference on the human environment to be held under the auspices of the United Nations. The Conference met in June 1972 in Stockholm and was attended by 113 states.[7] At the end of the conference agreement had been reached on four major areas of policy:

1 an Action Plan for environmental policy was agreed consisting of 106 recommendations, including the establishment of Earthwatch, which was charged with monitoring and providing information on the state of the environment;

2 an Environment Fund would be created, funded by voluntary contributions from states;[8]

3 the establishment of the UN Environment Programme (UNEP) with a Governing Council and Secretariat. UNEP is based in Nairobi, Kenya and has adopted a number of codes of practice and recommendations, many of which could be considered soft law;

4 a Declaration of principles on the human environment which would provide a focus for future binding rules of international law in a manner analogous to the Universal Declaration of Human Rights.

DECLARATION OF THE UNITED NATIONS CONFERENCE ON THE HUMAN ENVIRONMENT – THE STOCKHOLM DECLARATION[9]

The United Nations Conference on the Human Environment,

Having met at Stockholm from 5 to 16 June 1972,

Having considered the need for a common outlook and for common principles to inspire and guide the peoples of the world in the preservation and enhancement of the human environment,

I

Proclaims that:

1 Man is both creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of the human race on this planet a stage has been reached when, through the rapid acceleration of science and technology, man has acquired the power to transform his

7 Significant absentees from the Conference were the USSR and a number of other Eastern-bloc states. This was due more to the fact that West Germany had been invited whilst East Germany (excluded from membership of the United Nations at that time) was not rather than any disagreement about the general aims of the Conference. Subsequently the USSR participated fully in the work of UNEP.

8 Unsurprisingly, states have proved extremely reluctant to contribute to the Fund and it has consequently not had the impact that might have been hoped in June 1972.

9 UN Doc A/Conf 48/14, Stockholm, 1972; (1972) 11 ILM 1416; *Report on the United Nations Conference on the Human Environment, Stockholm, 5–16 June 1972.*

environment in countless ways and on an unprecedented scale. Both aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights – even the right to life itself.

2 The protection and improvement of the human environment is a major issue which affects the well-being of peoples and economic development throughout the world; it is the urgent desire of the peoples of the whole world and the duty of all governments ...

II

Principles

States the common conviction that:

Principle 1

Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations. In this respect, policies promoting or perpetuating apartheid, racial segregation, discrimination, colonial and other forms of oppression and foreign domination stand condemned and must be eliminated.

Principle 2

The natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate.

Principle 3

The capacity of the earth to produce vital renewable resources must be maintained and, wherever practicable, restored or improved.

Principle 4

Man has a special responsibility to safeguard and wisely manage the heritage of wildlife and its habitat, which are now gravely imperilled by a combination of adverse factors. Nature conservation, including wildlife, must therefore receive importance in planning for economic development.

Principle 5

The non-renewable resources of the earth must be employed in such a way as to guard against the danger of their future exhaustion and to ensure that benefits from such employment are shared by all mankind.

Principle 6

The discharge of toxic substances or of other substances and the release of heat, in such quantities or concentrations as to exceed the capacity of the environment to render them harmless, must be halted in order to ensure that serious or irreversible damage is not inflicted upon ecosystems. The just struggle of the peoples of all countries against pollution should be supported.

Principle 7

States shall take all possible steps to prevent pollution of the seas by substances that are liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea.

Principle 8

Economic and social development is essential for ensuring a favourable living and working environment for man and for creating conditions on earth that are necessary for the improvement of the quality of life.

Principle 9

Environmental deficiencies generated by the conditions of underdevelopment and natural disasters pose grave problems and can best be remedied by accelerated development through the transfer of substantial quantities of financial and technological assistance as a supplement to the domestic effort of the developing countries and such timely assistance as may be required.

Principle 10

For the developing countries, stability of prices and adequate earnings for primary commodities and raw materials are essential to environmental management since economic factors as well as ecological processes must be taken into account.

Principle 11

The environmental policies of all states should enhance and not adversely affect the present or future development potential of developing countries, nor should they hamper the attainment of better living conditions for all, and appropriate steps should be taken by states and international organisations with a view to reaching agreement on meeting the possible national and international economic consequences resulting from the application of environmental measures.

Principle 12

Resources should be made available to preserve and improve the environment, taking into account the circumstances and particular requirements of developing countries and any costs which may emanate from their incorporating environmental safeguards into their development planning and the need for making available to them, upon their request, additional international technical and financial assistance for this purpose.

Principle 13

In order to achieve a more rational management of resources and thus to improve the environment, states should adopt an integrated and co-ordinated approach to their development planning so as to ensure that development is compatible with the need to protect and improve the environment for the benefit of their population.

Principle 14

Rational planning constitutes an essential tool for reconciling any conflict between the needs of development and the need to protect and improve the environment.

Principle 15

Planning must be applied to human settlements and urbanisation with a view to avoiding adverse effects on the environment and obtaining maximum social, economic and environmental benefits for all. In this respect, projects which are designed for colonialist and racist domination must be abandoned.

Principle 16

Demographic policies which are without prejudice to basic human rights and which are deemed appropriate by governments concerned should be applied in those regions where the rate of population growth or excessive population concentrations are likely to have adverse effects on the environment or development, or where low population density may prevent improvement of the human environment and impede development.

Principle 17

Appropriate national institutions must be entrusted with the task of planning, managing or controlling the environmental resources of states with a view to enhancing environmental quality.

Principle 18

Science and technology, as part of their contribution to economic and social development, must be applied to the identification, avoidance and control of environmental risks and the solution of environmental problems and for the common good of mankind.

Principle 19

Education in environmental matters, for the younger generation as well as adults, giving due consideration to the underprivileged, is essential in order to broaden the basis for an enlightened opinion and responsible conduct by individuals, enterprises and communities in protecting and improving the environment in its full human dimension. It is also essential that mass media of communications avoid contributing to the deterioration of the environment, but, on the contrary, disseminate information of an educational nature on the need to protect and improve the environment in order to enable man to develop in every respect.

Principle 20

Scientific research and development in the context of environmental problems, both national and multinational, must be promoted in all countries, especially the developing countries. In this connection, the free flow of up-to-date scientific information and transfer of experience must be supported and assisted, to facilitate the solution of environmental problems; environmental technologies should be made available to developing countries on terms which would encourage their wide dissemination without constituting an economic burden on the developing countries.

Principle 21

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

Principle 22

States shall co-operate to develop further the international law regarding liability and compensation for the victims of pollution and other environmental damage caused by activities within the jurisdiction or control of such states to areas beyond their jurisdiction.

Principle 23

Without prejudice to such criteria as may be agreed upon by the international community, or to standards which will have to be determined nationally, it will be essential in all cases to consider the systems of values prevailing in each country, and the extent of the applicability of standards which are valid for the most advanced countries but which may be inappropriate and of unwarranted social cost for the developing countries.

Principle 24

International matters concerning the protection and improvement of the environment should be handled in a co-operative spirit by all countries, big and

small, on an equal footing. Co-operation through multilateral or bilateral arrangements or other appropriate means is essential to effectively control, prevent, reduce and eliminate adverse environmental effects resulting from activities conducted in all spheres, in such a way that due account is taken of the sovereignty and interests of all states.

Principle 25

States shall ensure that international organisations play a co-ordinated, efficient and dynamic role for the protection and improvement of the environment.

Principle 26

Man and his environment must be spared the effects of nuclear weapons and all other means of mass destruction. States must strive to reach prompt agreement, in the relevant organs, on the elimination and complete destruction of such weapons.

18.4 The environment and development

Although concern about the environment was growing, during the 1960s the priority at the United Nations was economic development. The resolution on Permanent Sovereignty over Natural Resources[10] adopted in 1962 made no reference to conservation of resources or other environmental concerns and during the 1960s there were few voices in support of linking economic development issues to the environment. In fact, among developing states there was a significant number of people who viewed environmental concern with suspicion fearing that measures taken to protect and conserve the environment were simply a Western capitalist plot to prevent Third World development. Patricia Birnie identifies the preparations for the Stockholm Conference as marking a change in attitudes:

> A catalytic event, facilitating the success of UNCHE, was the convening of a meeting at Founex, Switzerland, in 1971, to consider a study (instigated by the UNCHE Prepcom) on environment and development. The study group brought together representatives of international development agencies and governments, including economists, bankers, planners, social scientists, and ecologists. Its conclusion that 'the kind of environmental problems that are of importance in developing countries are those that can be overcome by the process of development itself' reassured developing countries, which were wavering in their support for the conference. Twenty-five guidelines were laid down aimed at protecting their interests. This articulation of the symbiosis of environment and development was thus from the beginning central to the UN's work in the environmental field.[11]

The Stockholm Declaration acknowledged the link between the protection and improvement of the human environment and economic development although the emphasis of the Charter of Economic Rights and Duties of States,[12] adopted two years after the Stockholm Conference, was on optimum use of resources and full economic development with limited acknowledgment of environmental

10 GA Resolution 1803 (XVIII) of 14 December 1962.

11 Patricia Birnie, 'The UN and the Environment' in Roberts and Kingsbury (eds), *United Nations Divided World*, 2nd edn, 1993, Oxford: Oxford University Press at p 338.

12 GA Resolution 3202 (XXIX) of 1 May 1974.

concerns. It was not until 1983 that the link between environment and development started to attain practical significance. In that year the World Commission on Environment and Development (WCED) was created as a consequence of General Assembly Resolution 38/161 adopted at the 38th session of the UN in December 1983. That resolution called upon the Secretary General to appoint the Chairman and Vice Chairman of the Commission and in turn directed them jointly to appoint the remaining members, at least half of whom were to be selected from the developing world. The Secretary General appointed Mrs Brundtland, then leader of the Norwegian Labour Party, as Chairman and Dr Mansour Khalid, the former minister of Foreign Affairs from Sudan, as Vice Chairman. The WCED functioned as an independent body and its members served the Commission in their individual capacities not as state representatives. Its brief was to investigate the major environmental and development problems that faced the world and to formulate realistic proposals for their solution. The WCED reported back to the 42nd session of the General Assembly in the autumn of 1987. In her forward to the report Mrs Brundtland wrote:

> The environment does not exist as a sphere separate from human actions, ambitions, and needs, and attempts to defend it in isolation from human concerns have given the very word 'environment' a connotation of naiveté in some political circles. The word 'development' has also been narrowed by some into a very limited focus, along the lines of 'what poor nations should do to become richer', and thus again is automatically dismissed by many in the international arena as being a concern of specialists, of those involved in questions of 'development' assistance.
>
> But the 'environment' is where we all live; and 'development' is what we all do in attempting to improve our lot within that abode. The two are inseparable.[13]

The report itself acknowledged the important role that international law needed to play in protecting the environment:

> The international legal framework must also be significantly strengthened in support of sustainable development. Although international law related to environment has evolved rapidly since the 1972 Stockholm Conference, major gaps and deficiencies must still be overcome as part of the transition to sustainable development. Much of the evidence and conclusions presented in earlier chapters of this report calls into question not just the desirability but even the feasibility of maintaining an international system that cannot prevent one or several states from damaging the ecological basis for development and even the prospects for survival of any other or even all other states.[14]
>
> National and international law has traditionally lagged behind events. Today, legal regimes are being rapidly outdistanced by the accelerating pace and expanding scale of impacts on the environmental base of development. Human laws must be reformulated to keep human activities in harmony with the unchanging and universal laws of nature. There is an urgent need:

13 *Our Common Future*, Report of the World Commission on Environment and Development, 1987, Oxford: Oxford University Press at p xi.

14 *Our Common Future*, Report of the World Commission on Environment and Development, 1987, Oxford: Oxford University Press at pp 312–13.

- to recognise and respect the reciprocal rights and responsibilities of individuals and states regarding sustainable development;
- to establish and apply new norms for state and inter-state behaviour to achieve sustainable development;
- to strengthen and extend the application of existing laws and international agreements in support of sustainable development; and
- to reinforce existing methods and develop new procedures for avoiding and resolving environmental disputes.[15]

To assist it in its work the Commission had established a group of international legal experts chaired by Robert Munro of Canada. The WCED recommended to the General Assembly that it commit itself to preparing a universal declaration on environmental protection and sustainable development which could subsequently form the basis for an international convention. As a starting point for discussion the Commission submitted a number of legal principles prepared by the group of legal experts.

I GENERAL PRINCIPLES, RIGHTS, AND RESPONSIBILITIES

Fundamental human right

1 All human beings have the fundamental right to an environment adequate for their health and well-being.

Inter-generational equity

2 States shall conserve and use the environment and natural resources for the benefit of present and future generations.

Conservation and sustainable use

3 States shall maintain ecosystems and ecological processes essential for the functioning of the biosphere, shall preserve biological diversity, and shall observe the principles of optimum sustainable yield ion the use of living natural resources and ecosystems.

Environmental standards and monitoring

4 States shall establish adequate environmental protection standards and monitor changes in and publish relevant data on environmental quality and resource use.

Prior environmental assessments

5 States shall make or require prior environmental assessments of proposed activities which may significantly affect the environment or use of a natural resource.

Prior notification, access, and due process

6 States shall inform in a timely manner all persons likely to be significantly affected by a planned activity and grant them equal access and due process in administrative and judicial proceedings.

15 *Our Common Future*, Report of the World Commission on Environment and Development, 1987, Oxford: Oxford University Press at p 330.

Sustainable development and assistance

7 States shall ensure that conservation is treated as an integral part of the planning and implementation of development activities and provide assistance to other states, especially to developing countries, in support of environmental protection and sustainable development.

General obligation to co-operate

8 States shall co-operate in good faith with other states in implementing the preceding rights and obligations.

II PRINCIPLES, RIGHTS, AND OBLIGATIONS CONCERNING TRANSBOUNDARY NATURAL RESOURCES AND ENVIRONMENTAL INTERFERENCES

Reasonable and equitable use

9 States shall use transboundary resources in a reasonable and equitable manner.

Prevention and abatement

10 States shall prevent or abate any transboundary environmental interference which could cause or causes significant harm (but subject to certain exceptions provided for in Articles 11 and 12 below).

Strict liability

11 States shall take all reasonable precautionary measures to limit the risk when carrying out or permitting certain dangerous but beneficial activities and shall ensure that compensation is provided should substantial transboundary harm occur even when the activities were not known to be harmful at the time they were undertaken.

Prior agreements when prevention costs greatly exceed harm

12 States shall enter into negotiations with the affected state on the equitable conditions under which the activity could be carried out when planning to carry out or permit the activities causing transboundary harm which is substantial but far less than the cost of prevention. (If no agreement can be reached, see Article 22.)

Non-discrimination

13 States shall apply as a minimum at least the same standards for environmental conduct and impacts regarding transboundary natural resources and environmental interferences as are applied domestically (ie, do not do to others what you would not do to your own citizens).

General obligation to co-operate on transboundary environmental problems

14 States shall co-operate in good faith with other states to achieve optimal use of transboundary natural resources and effective prevention or abatement of transboundary natural resources or environmental interferences.

Exchange of information

15 States of origin shall provide timely and relevant information to the other concerned states regarding transboundary natural resources or environmental interferences.

Prior assessment and notification

16 States shall provide prior and timely notification and relevant information to the other concerned states and shall make or require an environmental assessment of planned activities which may have significant transboundary effects.