

Enhanced Implementation of the Biological Diversity Convention by Judicial Control

by Alfred Rest*

Introduction

This article¹ inquires into the general problem of transformation and effective implementation of international environmental treaties into national law taking the Convention on Biological Diversity (CBD) as an example. After having highlighted the various recent legal activities and mechanisms in Germany for transposing CBD, the fundamental question asked is whether by the control of a judicial instrument, such as a future International Environmental Court, the implementation and application of international law by the “Treaty-States” could be guaranteed, enhanced and arranged more effectively or not.

To keep step with the increasingly huge number of international environmental treaties is nearly impossible. Related to the field of *biological diversity* around 154 multilateral agreements and amending protocols are in existence, concerning for instance *animal species protection* (52), *plant species protection* (40), *marine*

resources conservation (32) and *protected areas* (30) to name but a few. Parallel to this real “fall-out” of Conventions is a huge *deficiency* in implementing and enforcing treaty norms. The reasons are manifold and very complex: besides the missing will of the States to relinquish their sovereignty with regard to the use of natural resources and to decide themselves on implementation according to their national policies, financial and socio-economic aspects as well as the lack of knowledge in the natural science of interrelated causes and effects may be the main obstacles for effective implementation. In addition – at least in the past – States have been very reluctant to incorporate in treaties efficient mechanisms of judicial control and of enforcement, which could be indispensable for the surveillance of the implementation process, in particular when compliance-mechanisms² fail or recommendations or decisions of the Conference of the Parties are not enacted. In the following, therefore, the fundamental and conceptional questions will be raised: do we still need a *judicial instrument* to control the implementation of environmental law? Could a “new” International Environmental Court perhaps be the

* Dr. jur., University of Cologne, Germany.

proper legal instrument to enhance and speed up the application and enforcement of environmental treaty regulations? Can it achieve or guarantee greater efficiency? Before answering these questions brief attention will be focussed on the implementation of the Convention on Biological Diversity in Germany.

Importance of Biological Diversity for Germany

The awareness of the importance of biodiversity has a long-standing *tradition* in Germany. For example, the sustainable use of forests has been subject to statutory regulations for over 150 years.³ Also, aspects of nature protection always ranked very high. Today several strategies for integrating the concept of sustainable use have been put into place wherever components of biological diversity are being used by humankind, as emphasised by the *Government's National Report on Biological Diversity of 1998*.⁴ For the implementation of these strategies a powerful and varied set of legal, institutional and organisational instruments exists, based, *inter alia*, on the principle of precautionary action, the polluter-pays-principle and the principle of cooperation. Nevertheless, because of Germany's geographical and economic situation the threats to biological diversity could increase. So in the last 150 years, industrial development has led to a sharp decline in semi-natural and extensively used habitats – leaving aside the case of forests – not least as a result of the intensification of agriculture, the ongoing sprawl of human settlement and the construction of transport and water networks.⁵

Background data on Germany's economic situation

With 81.8 million inhabitants living in an area of around 357,000 km², Germany is a highly industrialised and densely populated country. Despite this, some 55 per cent of the country's surface area is used for agriculture. 30 per cent of the surface area is covered by forest and woodland. The areas used for settlement and transportation occupy approximately 11 per cent. The current slight rise in population is a trend that will continue until the year 2000. A clear decline in population is expected from 2020. The high degree of industrialisation and Germany's position in the middle of Europe have led to very high volumes of traffic, which have again increased considerably in the wake of German reunification, the commercial opening to Eastern Central Europe and the creation of an international market for Europe as a whole. Current forecasts predict a significant growth in traffic over the next fifteen years. High industrial output and high living standards go together with the German economy's strong international orientation. Both imply necessarily a high consumption of energy and raw materials. The latter and also consumer goods are imported to a large extent from

abroad. The problem of pollutant emissions into the aquatic environment and the atmosphere was recognised already at an early stage in Germany and led to ambitious preventive and precautionary environmental policies at the beginning of the 1970's. To this extent, Germany is internationally renowned for its high standard of technical environmental protection. Nevertheless, the ongoing threats to biological diversity have not been stopped.

These general conditions outlined have an impact on the various components of biological diversity, *i.e.*, the diversity of ecosystems, the diversity of species and the genetic variety within species.

Existing status of biological diversity in Germany

a) Diversity of ecosystems

About 750 different types of biotope have been identified in Germany.⁶ Natural habitats or biotic communities mainly exist in relatively small areas, such as certain water sources, cliffs, raised bogs, the Wadden Sea, some forests and woods and high-alpine regions. They all are to some extent impaired by pollutant impacts. Apart from the forest components, there has, over the last 50 years, been a decline in the total area covered by semi-natural biotopes. By far the largest area of land is now occupied by *anthropogenic habitats*, *i.e.* those which have evolved from human activity and differ in their structure and composition from natural biotopes. Examples here are fields, grasslands used to varying degrees of intensity, forests and industrial habitats. The anthropogenic biotopes also include many of the heaths, coppice and composite forests, oligotrophic grasslands and marshes usually considered valuable in terms of their special diversity, which mainly emerged from semi-natural forests as a result of particular management practices, over-exploitation or clearing.

b) Species diversity

About 45,000 animal species and 28,000 plant species – including lower plants; vascular plant species of approximately 3,200 – have so far been identified in Germany.⁷ By international comparison, however, Germany displays the same lack of endemic flora and fauna found in most Central European countries. But on the other hand, Germany is, even on a world scale, a major wintering and resting ground for migrating animals (migratory birds and bats) on their passage from the West and South in the Autumn and on their return to the northern breeding grounds in the Spring.

c) Genetic variety

Genetic variety is essential to the ability of species and populations to adapt to changing environmental conditions and is therefore a prerequisite for their survival. However, there is little knowledge about the extent of the historical changes, and the threat to genetic variety in natural populations. ➤

Forest tree species are found in Germany in the form of wild populations, which are still autochthonous, and populations used by humans, the latter being predominant.

In general, the genetic resources of wild species must be differentiated from genetic resources for agriculture or forestry. The latter underlie a deliberate genetic change and control to facilitate commercial use and possess a comparatively rapid genesis.

In Germany some 1,400 species are used in agriculture, forestry and horticulture.⁸ Whereas the grassland communities are predominantly made up of native species, a large proportion of the fruit species originate from other geographical and climatic regions of the world. Moreover, some native plants underwent domestication as crops, such as in the case of certain fruit species, vegetables or dye and oil-producing plants.

Of the approximately 40 species of domesticated animals occurring worldwide, cattle, pigs, sheep, goats, horses and poultry are of particular economic importance in Germany.

This brief outline of Germany's geographical and economic situation as well as of the existing biological diversity is evidence of the *great interest and need for a rapid and effective implementation of the CBD in German legislation.*

Implementation of CBD by German Law

German Legislation

Before the CBD, biodiversity was never addressed comprehensively in an international legal context. Such aspects were always protected globally by special international agreements regulating: 1. Areas of internationally important sites (*UNESCO World Heritage Convention*⁹), 2. Wetlands (*Ramsar Wetlands Convention*¹⁰), 3. Endangered species (*Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)*¹¹) and 4. Migratory species of wild animals (*Bonn Convention on Migratory Species*¹²). Parallel to this international process, German legislation on biodiversity aspects was split into numerous laws regulating the various fields, a long time before 1992; for example, those related to nature conservation (1976), animal protection (1972), plant protection (1986), forest conservation (1975), regional planning (1965), emission control (1974) and water management (1957), to name a few. On 21 March 1994, the CBD entered into force in Germany.¹³ Also, influenced by numerous EC Regulations/Directives and international conventions, most German Acts were issued and amended for adaptation to international law. This is illustrated by the following table¹⁴ showing a selection of the most important German legislation on the federal level, directly concerned with biological diversity. The table does not include EC law and statutes to implement international agreements. Also the numerous

laws and ordinances of the German countries (*Länder*) which concretise the Federal laws for effective, regional implementation and execution, cannot be reproduced here.

The table shows that *Germany by comprehensive legislation has largely implemented the CBD.*

Parallel Implementation of EC Biodiversity Law

As a Member State of the European Community – the EC has ratified the CBD too¹⁵ – Germany at the same time has enacted parts of the EC Strategy to implement the Convention. Important elements of this strategy can already be found in the *Fifth EC Action Programme on the Environment of 1992*.¹⁶ These are also reflected, *inter alia*, by *EC Regulation 1467/94 on the conservation, characterisation, collection and utilization of genetic resources in agriculture*¹⁷ and *Regulation 2078/92 on agricultural methods compatible with the requirements of the protection of the environment and the maintenance of the countryside*.¹⁸ In this context the *Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora of 1992*,¹⁹ as well as the *Directives 79/409 EEC*²⁰ and *97/49 EEC*²¹ on the conservation of wild birds should be mentioned. Germany also strongly supports the *Pan-European strategy on biological and landscape diversity of 1995*,²² which is conceived as a parallel European measure to promote the implementation of the CBD and is connected with the *European Forest Genetic Resources Programme (EUFORGEN)*, which in general aims at a coordination of efforts to conserve forest genetic resources.²³ Due reference is drawn to the National Report²⁴ for the numerous German activities to implement the CBD by international cooperation with States and International Organisations.

Coming back to German legislation and its application, one must be aware of the fact, that the *Länder* generally bear responsibility for the implementation of measures aimed at achieving the objectives of the CBD, in particular, in cases of nature conservation and forestry.

Implementation by Public Authorities and NGOs

Concerning the application and execution of such measures, it is very important to emphasise that the activities of public organs at federal, regional and local level (ministries, public authorities of the *Länder* and of municipalities), find strong support by nearly all parts of society, especially by non-governmental organisations (environmental protection associations and interest groups), branches of industry and active individuals. Examples of NGOs acting very effectively abound, such as: World Wide Fund for Nature, Germany and WWF Foundation; Nature Protection Union (*Naturschutzbund Deutschland e.V. (NABU)*); German Association for Nature Protection (*Deutscher Naturschutzring*); German Federal Working Group for Environmentally Conscious Management (*Bundesdeutscher Arbeitskreis für Umweltbewußtes Management e.V. (B.A.U.M.)*); German Forest Protection Association (*Schutzgemeinschaft Deutscher Wald e.V. (SDW)*);

Legal Regulation	Objective / content
Basic Law (<i>Grundgesetz</i>) of 23 May 1949, ^a amended 26 March 1998 ^b	Protecting the "natural sources of life"
Federal Nature Conservation Act (<i>Bundesnaturschutzgesetz</i>) of 20 Dec. 1976, ^c amended 30 April 1998 ^d	Securing on a sustainable basis the proper functioning of the ecosystem, the utility of nature's resources, fauna and flora as well as the variety, uniqueness and beauty of nature and the landscape to serve as the basis of human life and a source of recreational enjoyment of nature and the countryside; offering <i>inter alia</i> comprehensive protection of specific biotopes; provisions governing, in particular, the protection of, trade in, and the keeping and breeding of certain animal and plant species or populations of such species; provisions on the release of non-native species
Federal Ordinance on the Conservation of Species (<i>Bundesartenschutzverordnung</i>) of 18 Sept. 1989, ^e amended 6 June 1997 ^f	Specifying individual restrictions on extraction and sale; placing protection orders on endangered animal and plant species
Regional Planning Act (<i>Raumordnungsgesetz</i>) of 8 April 1965, ^g amended 15 Dec. 1997 ^h	Sustainable regional planning designed to bring the social and economic demands on land space into accord with the ecological functions of that space
Building Code (<i>Baugesetzbuch</i>) of 27 August 1997 ⁱ	Sustainable planning of urban development and socially equitable land use helping to create an environment worth living in
Land Consolidation Act (<i>Flurbereinigungsgesetz</i>) of 14 July 1953, ^j amended 18 June 1997 ^k	Development of rural areas; creation of better and healthier living, housing and working conditions for people living in the countryside; preserving, caring for and restoring threatened or damaged historical landscapes; ensuring the continued proper functioning of the ecosystem
Federal Soil Protection Act (<i>Bundesbodenschutzgesetz</i>) of 13 March 1998 ^l	Maintaining or restoring the soil's ability to perform its functions; its role as a basis of life and as a habitat for animals, plants and soil organisms is expressly mentioned as one such function; enforcing an obligation to protect against and eliminate hazards to the soil, to remedy soil pollution sources and contaminated sites and to take precautionary action against future detrimental impacts on the soil
Federal Forest Act (<i>Bundeswaldgesetz</i>) of 2 May 1975, ^m amended 27 July 1984 ⁿ	Enforcing an obligation to conserve and, where appropriate, expand forests and woodlands and use them sustainably; maintaining the forest's economic, protective and recreational functions taking into account biological diversity; promoting forestry; reconciling conflicts of interest between wider community and forest owners; ensuring the participation of forest authorities in public planning and measures; the framing of more detailed legislation is left to the <i>Länder</i>
Federal Hunting Act (<i>Bundesjagdgesetz</i>) of 29 Nov. 1952, ^o amended 26 January 1998 ^p	Enforcing an obligation to care for game, defined as the maintenance of habitat-appropriate, species-rich stocks and management and safeguarding of the environment they need; protecting specific species; detailed framing by the <i>Länder</i>
Federal Game Protection Ordinance (<i>Bundeswildschutzverordnung</i>) of 25 Oct. 1985 ^q	Transposing into national law the restrictions stipulated under the EC Directive 79/409 on the Protection of Wild Birds with respect to those birds species defined in the Federal Hunting Act; bans on ownership and sale
Federal Animal Protection Act (<i>Bundestierschutzgesetz</i>) of 24 July 1972, ^r amended 22 Dec. 1997 ^s	Protecting animals against needless pain and anguish; granting species-characteristic and suitable keeping of animals
Plant Protection Act (<i>Pflanzenschutzgesetz</i>) of 15 Sept. 1986, ^t amended 30 April 1998, ^u	Licensing and application of plant protection agents
Fertiliser Act (<i>Düngemittelgesetz</i>) of 15 Nov. 1977, ^v amended 27 Sept. 1994 ^w ; Fertiliser Ordinance (<i>Düngeverordnung</i>) of 26 January 1996 ^x , amended 16 July 1997, ^y	Licensing and application of fertilisers
Animal breeding legislation (<i>Tierzuchtrecht</i>)	Regulating animal breeding taking into account the need to safeguard genetic resources (domesticated animals)
Commercial Seeds Act (<i>Saatgutverkehrsgesetz</i>) of 20 August 1985, ^z amended 25 Oct. 1994 ^{aa}	Assuring the quality of seeds
Law on the Protection of New Varieties of Plants (<i>Sortenschutzgesetz</i>) of 19 Dec. 1997, ^{ab}	Protecting the intellectual property rights of plant breeders regarding varieties
Commercial Forestry Seed Act (<i>Gesetz über forstliches Saat- und Pflanzgut</i>); of 25 Sept. 1957, ^{ac} amended 2 August 1994, ^{ad}	Improving the economic yield and environmental benefit of the forest; provisions cover 19 main tree species used in forestry; consideration of genetic diversity aspects; labelling of seeds and plants with reference to autochthony and region of origin, categorised according to ecological conditions and phenotypical and genetic characteristics of forest stands
Law on the joint Federal / Länder Task of Improving Agricultural Structures and Coastal Defences (<i>Gesetz über die Gemeinschaftsaufgabe „Verbesserung der Agrarstruktur und des Küstenschutzes“</i>) of 3 Sept. 1969, ^{ae} amended 8 August 1997, ^{af}	<i>Inter alia</i> : improving productivity and working conditions in agriculture and forestry; managing the development of countryside; hydrological and agronomical measures; improving market structures in agriculture, fisheries and forestry
Genetic Engineering Act (<i>Gentechnikgesetz</i>) of 20 June 1990, ^{ag} amended 21 Sept. 1997, ^{ah}	Provisions governing work in genetic engineering facilities, the release of genetically engineered organisms, bringing products containing genetically engineered organisms onto the market
Federal Immission Control Act (<i>Bundesimmissionsschutzgesetz</i>) of 15 March 1974, ^{ai} amended 21 Sept. 1997, ^{aj} and 27 Ordinances (<i>Bundesimmissionsschutz-Verordnungen</i>)	Protecting humankind, animals and plants, the soil, water and the atmosphere, as well as cultural and other physical assets from harmful environmental impacts and from substantial problems caused by emissions

Legal Regulation	Objective / content
Federal Water Management Act (<i>Wasserhaushaltsgesetz</i>) of 27 July 1957, ^{ak} amended 30 April 1998, ^{al}	Limiting emissions into the aquatic environment; ensuring economical use of water, maintenance of the quality of surface and groundwater and the functions it performs; enforcing an obligation to conserve the aquatic environment as the natural habitat for animals and plants
Closed Substance Cycle Waste Management Act (<i>Kreislaufwirtschafts- und Abfallgesetz</i>) of 27 Sept. 1994, ^{am} amended 12 Sept. 1996; ^{an} Sewage Sludge Ordinance (<i>Klärschlammverordnung</i>) of 15 April 1992, ^{ao} amended 6 March 1997, ^{ap}	Promoting closed substance cycles (recycling waste materials) to reduce the depletion of natural resources
Chemicals Act (<i>Chemikaliengesetz</i>) of 16 Sept. 1980, ^{aq} amended 14 May 1997, ^{ar}	Protecting people and the environment from the effects of hazardous substances and preparations; prohibiting certain substances from being brought into circulation
<p>^a BGBl. 1949 I, pp. 1, ^b BGBl. 1998 I, pp. 610, ^c BGBl. 1976 I, pp. 3574, ^d BGBl. 1998 I, pp. 823, ^e BGBl. 1989 I, pp. 1677, 2011, ^f BGBl. 1997 I, pp. 1327, ^g BGBl. 1965 I, pp. 306, ^h BGBl. 1997 I, pp. 2902, ⁱ BGBl. 1997 I, pp. 2141; BGBl. 1998 I, pp. 137, ^j BGBl. 1953 I, pp. 591, ^k BGBl. 1997 I, pp. 1430, ^l BGBl. 1998 I, pp. 502, ^m BGBl. 1975 I, pp. 1037, ⁿ BGBl. 1984 I, pp. 1034, ^o BGBl. 1952 I, pp. 780, ^p BGBl. 1998 I, pp. 164, ^q BGBl. 1985 I, pp. 2040, ^r BGBl. 1972 I, pp. 1277, ^s BGBl. 1997 I, pp. 3224, ^t BGBl. 1986 I, pp. 1505, ^u BGBl. 1998 I, pp. 823, ^v BGBl. 1977 I, pp. 2134, ^w BGBl. 1994 I, pp. 2705, ^x BGBl. 1996 I, pp. 118, ^y BGBl. 1997 I, pp. 1835, ^z BGBl. 1985 I, pp. 1633, ^{aa} BGBl. 1994 I, pp. 3082, ^{ab} BGBl. 1997 I, pp. 3164, ^{ac} BGBl. 1957 I, pp. 1388, ^{ad} BGBl. 1994 I, pp. 2018, ^{ae} BGBl. 1969 I, pp. 1573, ^{af} BGBl. 1997 I, pp. 2027, ^{ag} BGBl. 1990 I, pp. 1080, ^{ah} BGBl. 1997 I, pp. 2390, ^{ai} BGBl. 1974 I, pp. 721; 1193, ^{aj} BGBl. 1997 I, pp. 2390, ^{ak} BGBl. 1957 I, pp. 1110, ^{al} BGBl. 1998 I, pp. 2390, ^{am} BGBl. 1994 I, pp. 2705, ^{an} BGBl. 1996 I, pp. 1354, ^{ao} BGBl. 1992 I, pp. 912, ^{ap} BGBl. 1997 I, pp. 446, ^{aq} BGBl. 1980 I, pp. 1718, ^{ar} BGBl. 1997 I, pp. 1060</p>	

Organic Farming Association (*Arbeitsgemeinschaft Ökologischer Landbau e. V. (AGÖL)*); German Breeding Association (*Bundesverband Deutscher Pflanzenzüchter e. V.*) and Association of Pharmaceutical Manufacturers Active in Research (*Verband Forschender Arzneimittelhersteller (VFA)*).²⁵ By numerous self-binding declarations and covenants, branches of industry have shown their preparedness to protect nature and the environment and to cooperate with public authorities.²⁶

To summarise: Germany has developed comprehensive legislation to implement the CBD and EC-Strategies and EC-Law too. The proposed instruments and measures to enforce the existing laws seem encouraging although much more must be done to achieve effective conservation and protection of biodiversity. But optimistically evaluated, Germany is one of the few countries which has finished its initial part of the starting phase.

Importance of Judicial Control

National jurisdiction – Germany, Europe

There is no doubt, that in States possessing an advanced legal system and a developed mechanism of jurisdiction, judicial control plays a very essential role for the implementation and execution of environmental law. So in Germany, according to a long-standing tradition in jurisdiction, potentially injured legal persons and individuals can rely on the lawful execution of national environmental law by claims brought to the competent courts. Judicial decisions can also promote legislation by constructive criticism on a possible lack of concrete regulations. As far as the litigation concerns *only national matters* of disputes and the application of national environmental law, the German judiciary grants effective legal protection. But as soon as *transboundary or transnational effects* and objectives of international environmental law are at stake, national jurisdiction may be

insufficient or even fails. This is evidenced for instance by German case law concerning the cases of *Chernobyl*, *Sandoz* and of the nuclear power plant of *Lingen*,²⁷ to name but a few. These all reflect the general tendency that in cases of transboundary/transnational pollution the injured individual victims have no prospect of success and only a limited opportunity to bring an action against a foreign polluter, and specifically against a foreign polluter-state or its organs before national courts.²⁸ Cases such as the *Dutch-French litigation concerning the salinisation of the river Rhine* and the judgements of Austrian and Swiss courts in the case of *Chernobyl* or the cases of the nuclear power plants of *Mochovce* and *Temelin* (Slovakia) as well as of the Slovenian Hydropower plant at *Soboth*, demonstrate the same tendency in almost all European States.²⁹

The recent project of the *American Society of International Law's Interest Group on "International Environmental Law in Domestic Courts"*, 1997,³⁰ examining for instance the national judiciary in Australian, Canadian, Dutch, German, Indian, Japanese and U.S. Courts, also states, that for the time being, international environmental law aspects are not sufficiently regarded and implemented by national courts (exemption: Dutch judiciary). At a *symposium "on the Role of the Judiciary in Promoting the Rule of Law in the Area of Sustainable Development"* of UNEP and the South Asia Co-operation Environment Programme (SACEP), held from 4–6 July 1997 at Colombo, Sri Lanka,³¹ it was recommended and emphasised that the national judiciary has the responsibility to mould emerging environmental law principles – such as the polluter-pays-principle, the precautionary principle, the principle of continuous mandamus and of the *erga omnes* obligations – with a view to giving these a sense of coherence and direction.³² The published *Compendium of Summaries of Judicial Decisions in Environment Related Cases*,³³ also evidences the still *existing deficiency* in national jurisdiction in the application of international environmental law, which

must be changed. The conference further emphasised the problems of the “aggrieved person” and of “*locus standi*” in regard to environmental damage and liability, which need to be solved.

As regards the German courts’ practice, a distinction needs to be made between civil, public and criminal law cases. When it comes to litigation before *civil courts* of



Courtesy: Das Parlament

the polluted State it is not only claims for compensation which have failed but also actions to cease environmentally harmful and hazardous activities.³⁴ Moreover, little if any attention is paid to aspects of protecting the *global commons*.³⁵ There are a number of reasons for this, including:

- individuals mostly abstain from filing a lawsuit because of the potentially high costs and the problem of dealing with a foreign language;
- immunity from jurisdiction may hinder the competence of the home-courts as well as of the court of the polluter-state;
- pursuant to the rules on the law of conflicts or of the *ordre public*, the application of the substantive law can be excluded; and
- immunity from enforcement can bring down the enforcement of a foreign decision.

As regards lawsuits brought before the *administrative courts* of the polluter-state the *ius standi* can be problematic. In particular, the application of the substantive law, dominated by the principle of territoriality, can be refused if it does not protect foreign legal interests. By reason of sovereignty the home-court of the injured individual has no competence to examine public foreign law aspects. The polluter-state’s court will argue, that its decision cannot be enforced abroad by reason of immunity from enforcement.

With regard to environmental protection by the *criminal courts*, the German Supreme Criminal Court has emphasised in a case concerning the transboundary movement of hazardous waste from Germany to Poland that the German criminal law does not protect the legal interests of foreign injured individuals and will only apply on German territory.³⁶

Accordingly, national judicial proceedings are *still mostly ineffective* because they lack the requisite powers and have to be further improved in matters concerning international environmental law. The long duration of litigation, lasting sometimes more than a decade (as with the *river Rhine salinisation case*, the *Lingen case*) also undermines legal protection. The protection of the global commons remains outside the scope of national jurisdiction and courts refuse, or are very reluctant to guarantee these legal interests by an interpretation pursuant to public international law. Perhaps such a task of interpretation demands too much from the national judge who is not so proficient in international law.

To summarise: if even in a country like Germany, having achieved an advanced legal system and well developed jurisdiction, a deficiency still exists in the application of international environmental law for the time being, in countries having not yet established a legal system, the lack of implementation will increase and be even greater. Therefore, to support the development of a legal order and to promote national jurisdiction mechanisms according to international law principles, strong safeguards can be offered by instruments and institutions at the international law level. In that respect, concerning the judiciary, an international instrument, such as an international environmental court – postulated since 1988³⁷ – could be the proper institution not only for the surveillance of the application of international regulations agreed to by environmental treaties. It could also give guidance to national courts on how best to apply international environmental law within the framework of national law. It is highly desirable in future that such an international court could be appealed to by NGOs or individuals too, or be addressed by national courts, to decide by procedure of preliminary decision or by interpretation, conflicts between international and national environmental law. Then its decisions certainly could have enormous impact and supporting influence on the further development of national environmental law and the national judiciary as well.

Need for Judicial Control in International Environmental Law – A General Problem –

According to the theory of separation of powers it belongs to the hallmarks of each democratic legal order that at least an *independent judicial institution* is empowered to control the legislative and executive organs to guarantee the implementation, application and execution of law. Without such an instrument every legal system is in danger of being abolished. Accordingly, the need for a judicial institution at the *national level* is accentuated by *principles 10 and 26 of the Rio Declaration*³⁸ by calling on States to provide “effective access to judicial and administrative proceedings, including redress and remedy.” The most recent *ECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters of 25 June 1998*³⁹ fulfills this task. The Århus Convention was signed by 35 countries and the European Community; (see Environmental Policy and Law, Vol. 28, p. 171). ➤

As to the *international* level, paragraph 39.10 of *Agenda 21*⁴⁰ emphasises, *inter alia*, the importance of the judicial settlement of disputes. It calls on States "to further study mechanisms for effective implementation of international agreements, such as modalities for dispute avoidance and settlement." It identifies the full range of techniques such as: prior consultation, fact-finding, commissions of inquiry, conciliation, mediation, non-compliance procedures, arbitration and judicial settlement of disputes. There is general consensus that all *preventive instruments* of dispute avoidance should be favoured in principle. In this respect the "political" non-confrontational mechanisms of "*compliance-procedure*"⁴¹ as well as of "*Conference of the Parties (COP)*" need special attention.⁴² With regard to the *Biodiversity Convention* it should be noted, that the CBD does not contain a provision establishing a compliance regime.⁴³ Instead of this the COP-mechanism is favoured in Art. 23. In case an agreement cannot be achieved by further negotiation or a decision of the COP, Art. 27 para. 3 CBD provides for an agreed compulsory settlement of disputes either by arbitration or submission of the dispute to the International Court of Justice. Insofar CBD also recognises the indispensability of a judicial control mechanism, if all modalities for dispute avoidance remain unsuccessful. Laudable though this approach is, it must be stressed that the judicial instruments foreseen only operate as *organs of the States*. NGOs or private third parties are not involved. They also do not participate in the non-compliance procedure. But what is needed, in effect in future, is an institution, which also provides NGOs, environmental associations and interest groups and even individuals with direct access, thus controlling activities of state organs. Most recently this postulation has been supported by two *Resolutions of the Institut de Droit International*.⁴⁴ A control of state activities by all parts of the society is necessary, because States themselves may commit or tolerate environmental destruction.⁴⁵ State interests, in particular its economic priorities, seldom coincide with those of its citizens and the environment.⁴⁶ Therefore States, not infrequently, refuse to support their injured nationals by means of diplomatic protection as, for instance, in the *Chernobyl case*.

But one must be aware of the fact that even a tribunal or a court in the end cannot gender or replace the *will of States* to implement effectively their obligations under international agreements because the competence of an international arbitral or tribunal institution also depends on the will of the States, *i.e.* on an agreement or compromise. Nevertheless, decisions of a court and impending potential sanctions, may press States to implement their obligations.

Judicial Control by an international Environmental Court

The next question is whether one of the *existing* international courts meets the task of an international environmental court. Or do we need a new international environmental court?

International Court of Justice (ICJ)

Although in 1993 it established an *ad hoc chamber* for environmental matters, the *International Court of Justice* cannot be the right forum, because *States alone* have direct access. This is regrettable because by its very function, the ICJ could be the proper institution to control the implementation of environmental treaty obligations – as shown in the most recent *Gabcikovo-Nagymaros case*⁴⁷ – to develop further and improve international environmental law and to concentrate on the urgent problems of protecting the global commons by applying the concept of *erga omnes* obligations. Sooner or later, under the influence of the current efforts and programmes of the State community to strengthen and enhance the legal position of NGOs, non-state actors will also be granted legal access to the ICJ. But such a step would require States to relinquish sovereignty⁴⁸ and expose themselves to legal proceedings as a prerequisite. Such necessary reform of the ICJ Statute and of the UN Charter seems to be *unrealistic* at the moment.

International Tribunal for the Law of the Sea (ITLS)

As regards the protection of the *marine environment*, the States Parties to the *Law of the Sea Convention*,⁴⁹ can submit disputes concerning interpretation and implementation of the regulations to the *International Tribunal for the Law of the Sea*, established in October 1996.⁵⁰ Pursuant to Part XI (The Area) of the Convention, or by special agreement conferring jurisdiction on the Tribunal, the Tribunal is also "open to entities other than States".⁵¹ But it must be emphasised that this regulation only enables a *limited jurisdiction* in the field of the "Area" and does not go beyond. Moreover, the term "entities" still needs to be precisely defined by future jurisprudence of the Tribunal. Finally, a comprehensive protection of the marine environment is not actually granted, as evidenced, *inter alia*, by Art. 135 which "shall not affect the legal status of the waters superjacent to the Area or that of the air space above those waters."

Court of Justice of the European Communities (ECJ)

In Europe NGOs and individuals have access to the *Court of Justice of the European Community*, if the interpretation of secondary European environmental law or the correct implementation and application of EU-Regulations and Directives is at stake. The court can be proud of an extensive case-load in environmental matters,⁵² but according to the *restricted regional field* of application of European Law its jurisdiction does not go as far as is desirable for global environmental protection. Nevertheless, the Court's importance for the further development of regional environmental law and general environmental principles remains unquestioned.

European Court on Human Rights (ECHR)

The recent jurisdiction of the *European Court on Human Rights*⁵³ paves new ways to improve environmental protection through an expanded concept of human rights and by linking both fields of law which tra-

ditionally have been treated separately. By its groundbreaking *López-Ostra* decision in 1994⁵⁴ the Court has now opened the door for the protection of human rights against *nearly all sources of environmental pollution*, as opposed to just noise emissions and radiation, as was the case in the 1970s and 1980s. This welcomed progressive decision provides for a more comprehensive environmental protection of the individual and stimulates the discussion on the existence of a *human right to a decent environment*. The Court has also promoted the *concept of State liability*, which has been debated by the *UN International Law Commission* for over 30 years and which still remains unsolved.

By its most recent judgement in the Mühleberg (Canton of Berne, Switzerland) nuclear power station case of 1997⁵⁵ the Court regrettably has not pursued or even extended its progressive judiciary. In this case the applicants – living within a radius of four or five kilometres from the nuclear power station – appealed against the extension of the nuclear installation's operating licence for an indefinite period and maintained that the power plant did not meet current safety standards. The applicants argued that they were exposed to a risk of accident which was greater than usual and their civil rights were affected. They also stressed the lack of access to a Swiss Court when attacking the decision of the Federal Council (executive, administrative authority) and pleaded a violation of Arts. 6 and 13 of the European Convention on Human Rights. By twelve to eight votes the Court rejected the applicants' objections. It stated, that the applicants "did not establish a direct link between the operating conditions of the power station which were contested by them and their right to protection of their physical integrity, as they failed to show that the operation of Mühleberg power station exposed them personally to a danger that was not only serious but also specific and, above all, imminent."⁵⁶ The effects on the population therefore remained hypothetical. It is remarkable that the dissenting opinions of seven judges with regard to the proof of a link and of a potential danger have emphasised that the majority of the judges "appear to have ignored the whole trend of international institutions and public international law towards protecting persons and heritage, as evident in European Union and Council of Europe instruments on the environment, the Rio agreements, UNESCO instruments, the development of the precautionary principle and the principle of conservation of common heritage".⁵⁷ These judges also underlined the importance of the Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment,⁵⁸ stressing the special hazards of certain installations, which need to be obviated by new international law measures and through the exercise of effective remedies. Such a statement is laudable and encouraging. It facilitates that in the future the judges will take into account these new trends in international environmental law and thereby pursue the progressive *López-Ostra* judiciary; but perhaps in general, decisions in the field of nuclear energy aspects will follow their own rules because of their political importance.

Despite this decision, the main *problem of direct access* to the ECHR still remains. An individual is only allowed access to the Court after having exhausted all local remedies, *i.e.* all stages of jurisdiction of his home-state. Such a time-consuming, thorny procedure considerably blocks better protection of environmental human rights.

International Criminal Court (ICC)

A conceivable perspective for the next century could perhaps also be the *International Criminal Court* which for a long time was under discussion in the UN International Law Commission and the General Assembly.⁵⁹ On 17 July 1998, the *United Nations Diplomatic Conference of Rome* decided to establish a permanent International Criminal Court with power to exercise its jurisdiction



The Logo of the International Criminal Court

over persons for the most serious crimes of international concern.⁶⁰ Those crimes are genocide, crimes against humanity, war crimes, as well as the crime of aggression, once an acceptable definition for the Court's jurisdiction over it is adopted.⁶¹ To establish its jurisdiction in environmental matters it would be necessary to extend and amend the list of crimes to "*crimes against the environment*." This topic was not on the agenda for discussion in Rome. But if at a propitious moment Art. 19(d) of the *ILC's Draft Articles on State Responsibility*⁶² become binding treaty law, then the Court could also prosecute crimes against the human environment committed by state organs or private polluters. Although the "criminal approach" is based on "*individual responsibility*" this concept could also easily be extended to responsibility of state organs. The Criminal Court's competences in general need not be regarded as competing with the pursuits of the other courts mentioned, because of its specific criminal law approach. On the contrary, in combination with the other international courts, and acting as a complement to them, an effective basis to fight international environmental pollution could be developed. But this target can only be achieved, if NGOs and individuals have legal access too. ➤

To sum up: at the moment the existing, above-mentioned international courts cannot offer an optimum solution for the protection of the environment and the injured individual. They can only play an important, desired, and complementary role.

Permanent Court of Arbitration (PCA) as proper forum

For the time being, however, the *Permanent Court of Arbitration*, The Hague, could be the appropriate forum to settle environmental disputes. Already at a Conference held in Venice in 1994, this author proposed that an examination of whether the PCA could meet the necessary tasks of a future Environmental Court adequately should be undertaken.⁶³ The idea was strongly supported by the Secretary-General of the International Bureau of the PCA, who at the Venice Conference and at subsequent meetings emphasised the potential role of the PCA in environmental law matters.⁶⁴ There are a number of reasons which favour the PCA.

First, it is a very flexible and unique institution, because it offers facilities for four of the dispute-settlement methods listed in Art. 33 of the UN Charter: enquiry, mediation, conciliation and arbitration. As regards *conciliation*, the PCA established in 1996 new Optional Conciliation Rules,⁶⁵ enabling the Parties, including States, International Organisations, NGOs, companies and private associations to use this mechanism. The Rules are based on the *UNCITRAL Conciliation Rules*⁶⁶ and can be linked with possible arbitration. Concerning *arbitration*, the Court adopted in 1992 *Optional Rules for Arbitrating Disputes between Two States*,⁶⁷ and in 1993 *Optional Rules for Disputes between Two Parties of Which Only One is a State*.⁶⁸ As a consequence, disputes between a non-state actor and a State can be submitted to the Court. In May 1996, the set of Optional Rules was extended to *Rules for Arbitration involving International Organisations and States*⁶⁹ as well as between *International Organisations and Private Parties*.⁷⁰ By widening its jurisdiction to all Parties of the community of states, including organisations, and all members of society, it goes far beyond the competence of the International Court of Justice. In June 1996, a *Working Group on Environmental and Natural Resources Law*, established by the PCA, discussed a background paper on "*Environmental Disputes and the Future Role of the PCA*."⁷¹ The representatives of Governments from Australia, Brazil, China, India, Russian Federation and Samoa, unanimously favoured using the PCA as the appropriate judicial instrument to settle environmental disputes and to promote international environmental law. It was decided that the PCA should instigate a publicity campaign to draw attention to its new role in the context of environmental protection. At the follow-up meeting on 24 February 1998, the Working Group discussed whether there is need or not to amend and concretise the Optional Rules by special environmental regulations or to draft completely new procedural rules for the dispute settlement of

environmental matters.⁷² It was decided to formulate new rules.

Second, the important issue of the extra *financing* required for a new Court for the Environment speaks in favour of the PCA. The operating costs of the International Bureau are covered by the UN budget. The costs of arbitration proceedings are borne by the parties.

Third, the flexibility of the Court with regard to the *place of arbitration* should also be noted. In transnational environmental litigation, in particular, this place can be important in terms of providing evidence of the harm which has occurred. The parties can agree on it. Where there is no agreement, the arbitration shall take place at The Hague, the seat of the PCA.

Although the PCA would be the proper institution to settle environmental disputes, one must bear in mind that it is only by an *agreement of the parties or by compromise*, that the competence of the Court can be established. If the parties are States or only one is a State, this huge impediment must be overcome. Ultimately, submitting a dispute to the court depends on the *political preparedness* of a State. Therefore, the arduous task of convincing governments to support the idea of an International Environmental Court has yet to be undertaken. In this respect it would be great progress, if the States would rule in future environmental treaties the competence of the PCA by a special dispute settlement clause, as done for instance in the *Bonn Convention on the Conservation of Migratory Species of Wild Animals*, 1979⁷³ and foreseen in the *IUCN Draft International Covenant on Environment and Development*, 1995.⁷⁴ In 1998, the PCA already developed guidelines for negotiating and drafting such dispute settlement clauses.⁷⁵

Nevertheless, what is encouraging is the *increasing number of arbitral decisions* of the PCA in 1996, as manifested, for instance, by proceedings between an African State and two foreign investors and between an Asian State and a foreign enterprise.⁷⁶ For the first time the Optional Rules for Arbitrating Disputes between Two Parties of which only One is a State were applied by an award of 25 November 1996, in a dispute between Technosystem SpA (Italy) on the one side and Tabara State on the other.⁷⁷

Conclusion

For the protection of the environment, the endangered global commons and the threatened or injured individuals in cases of transboundary/transnational pollution an *International Environmental Court is indispensable*. The *national courts*, as illustrated by German and European jurisdiction, are *still most ineffective*. As regards the *international level*, courts such as the ICJ, ITLS, ECJ, ECHR and ICC also cannot offer an optimum solution. These either do not have a comprehensive competence to protect the environment sufficiently, or cannot guarantee the rights of NGOs or individuals, because of lack of legal access. Nevertheless, the international courts mentioned are also prerequisite to evolve international environmental law. They can also play a very *important complementary*

role to support the work of the PCA, which for the time being, could be the proper forum. There is no doubt that the involvement of NGOs and individuals for the protection of the environment will constantly increase. Transnational environmental problems can be solved effectively *only* by all parts of national and international society. States need this cooperation and support of private institutions. In this respect, these private elements must *be merged still more in inter-state mechanisms*, especially in international environmental treaties, to give them a real chance of efficient contributions in decision-making, as well as in implementing international environmental law. States must cooperate with non-state actors *albeit with the limitation of their sovereignty*.

As to *judicial control*, NGOs, companies and individuals should be granted a *ius standi* in future. This target could be achieved by incorporating accordingly *dispute settlement clauses* in environmental agreements. Concerning the CBD it should therefore be envisaged to extend the dispute settlement clause of Art. 27 CBD also to the competence of the PCA besides the ICJ. But admittedly, at the moment the attention of the CBD is concentrated on other vital problems waiting to be solved. In general, as reiterated, a judicial instrument is *indispensable* for the surveillance of the implementation of treaty regulations, if preventive mechanisms, such as *compliance- and COP-systems*, fail. Thus, by the control of an international environmental court the implementation and application of international environmental (treaty-) law could additionally be sustained and enhanced.

The forcible *demand* for an International Environmental Court now draws worldwide support.⁷⁸ Besides the PCA, in Germany this idea is supported by Eurosolar (NGO). The German Federal Government is still hesitant. What is needed is to convince the governments to get possession of the political will for the establishment of such a court. The increasing destruction of the environment, the growing consciousness of the public, as well as the progressive role of NGOs, will force this procedure. So all that remains to be done is to acknowledge openly the need, indeed the essentiality of a separate International Environmental Court and to act swiftly to bring that court into existence. Otherwise, nature and environment will teach us a lesson that will be hard to bear. □

References

- 1 This essay is based on a talk held at the UNITAR Conference in Tokyo on 12 September 1998
- 2 G. Handl, Compliance Control Mechanisms and International Environmental Obligations, in: Tulane Journal of International and Comparative Law, 1997, p. 19; A. Rest, The Aftermath of Rio: Hurdles and Obstacles in Implementing Environmental Policies and Law – Some Examples of Preliminary Efforts in State Practice, in: K. H. Böckstiegel (ed.), Proceedings of an International Colloquium, Cologne, 7–9 June 1995, (Cologne, 1996), p. 257
- 3 Cf. Federal Government Report under the Convention on Biological Diversity. National Report on Biological Diversity, edited by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Bonn, March 1998, p. 7 (in the following cited: National Report 1998)
- 4 See note before: National Report 1998, pp. 21
- 5 National Report 1998, p. 13
- 6 National Report 1998, p. 14

- 7 Cf. for the details table 2 in the National Report 1998, p. 15 et seq.
- 8 See National Report 1998, p. 17 with further references
- 9 Cf. Convention concerning the Protection of the World Cultural and Natural Heritage of 16 Nov. 1972, in: vol. 1037 UNTS, pp. 151
- 10 Convention on Wetlands of International Importance especially as Waterfowl Habitat of 2 February 1971, in: vol. 996 UNTS, pp. 245
- 11 Convention on International Trade in Endangered Species of Wild Fauna and Flora of 3 March 1973, in: vol. 983 UNTS, pp. 243
- 12 Convention on the Conservation of Migratory Species of Wild Animals of 23 June 1979, in: ILM 1980, pp. 19
- 13 Cf. BGBl.(Federal Official Journal) 1993 II, pp. 1741; BGBl. 1995 II, pp. 350
- 14 The table taken from National Report 1998, pp. 18 has been amended by the author
- 15 EC OJ 1993 No. L 309 of 13 Dec. 1993, pp. 1
- 16 EC OJ No. C 138 of 17 May 1993, p. 1
- 17 EC OJ 1994 No. L 159, pp. 1
- 18 EC OJ 1992 No. L 215, pp. 85
- 19 EC OJ 1992 No. L 206, pp. 7
- 20 EC OJ 1979 No. L103, pp. 1
- 21 EC OJ 1997 No. L 223, pp. 9
- 22 For the details cf. National Report 1998, p. 12
- 23 See National Report 1998, p. 13
- 24 For the numerous examples of running projects cf. National Report 1998, pp. 90
- 25 For further details cf. National Report 1998, pp. 121
- 26 Cf. for examples A. Rest, Die rechtliche Umsetzung der Rio-Vorgaben in der Staatenpraxis, in: Archiv des Völkerrechts, 1996, pp. 145; pp. 153; K. W. Grewlich, Umweltschutz durch "Umweltvereinbarungen" nach nationalem Recht und Europarecht, in: Die öffentliche Verwaltung (DÖV) 1998, pp. 54
- 27 To these and further cases see A. Rest, International Environmental Law in German Courts, in: EPL 1997, p. 409
- 28 A. Rest, The Need for an International Court for the Environment: Underdeveloped Legal Protection of the Individual in Transnational Litigation, in: Towards the World Governing of the Environment, IV. International Conference 2–5 June, Venice, a cura di G. Cordini/A. Postiglione, Pavia 1996, p. 591
- 29 For the details see A. Rest, The Need for an International Court for the Environment? in: EPL 1994, pp. 173
- 30 Cf. Workshop of the ASIL Interest Group for Environmental Law of 9 April 1997, Washington, D.C. The preliminary Report of national jurisdiction in the various countries is partially published in: Review of European Community & International Environmental Law (RECIEL), vol. 7, issue 1, 1998, pp. 1
- 31 For the details see L. Kurukulasuriya, Role of Judiciary in Promoting Sustainable Development, in: EPL 1998, pp. 27
- 32 EPL 1998, p. 28
- 33 Cf. Compendium of Summaries of Judicial Decisions in Environment Related Cases – with special Reference to Countries in South Asia –, in: SACEP/UNEP/NORAD Publication Series on Environmental Law and Policy No. 3, 1997
- 34 For the numerous decisions see A. Rest, International Environmental Law in German Courts, in: EPL 1997, pp. 412; for litigation in the 50s and 60s cf. A. Rest, The more Favourable Law Principle in Transfrontier Environmental Law – A Means of Strengthening the Protection of the Individual? in: Beiträge zur Umweltgestaltung, 1980, pp. 69
- 35 For a discussion on global commons, common heritage, common concern and interest, and *erga omnes* obligations cf. A. Rest, Ecological Damage in Public International Law, in: EPL 1992, pp. 31
- 36 To this and other criminal law cases cf. A. Rest, International Environmental Law in German Courts, EPL 1997, pp. 419
- 37 To such postulation of environmental lawyers, judges and environmental protection associations cf. A. Rest, Zur Notwendigkeit eines Internationalen Umweltgerichtshofes, in: Liber amicorum in honour of Prof. I. Seidl-Hohenveldern (G. Hafner/G. Loibl/A. Rest/L. Sucharipa-Behrmann/K. Zemanek, eds.), The Hague 1998, pp. 575; 577
- 38 (31) ILM 1992, pp. 876
- 39 ECE Doc. ECE/CEP/43 of 25 June 1998
- 40 Cf. Agenda 21: Earth's Action Plan, (N. A. Robinson, ed.), IUCN Environmental Policy & Law Paper No. 27, 1993, p. 626
- 41 To the details of "compliance procedure" in the various international environmental treaties see P. Széll, Compliance Regimes for Multilateral Environmental Agreements – A Progress Report – in: EPL 1997, pp. 304; W. Lang, Compliance Control in International Environmental Law: Institutional Necessities, in: (56) Zeitschrift für Ausländisches Öffentliches Recht und Völkerrecht (ZaöRV) 1996, pp. 685; P. H. Sand, Institution Building to Assist Compliance with International Environmental Law: Perspectives, in: (56) ZaöRV 1996, pp. 774; pp. 786–788; p. 793
- 42 Art. 6 of the Convention for the Protection of the Ozone Layer (ILM 1987, pp. 1516) has incorporated the COP-mechanism too. Together with the amending Montreal Protocol on Substances that Deplete the Ozone Layer (ILM 1987, pp. 1541) this mechanism is combined with the non-compliance-procedure ruled in Art. 8
- 43 Cf. to this statement P. Széll, EPL 1997, p. 305
- 44 Institut de Droit International, Session de Strasbourg, Resolution on "Environment", adopted 3 Sept. 1997; cf. Art. 11; Resolution on "Responsibility and Liability

under International Law for Environmental Damage”, adopted 4 Sept. 1997; see Articles 26–28. The text of the second Resolution is published in: Review of European Community & International Environmental Law (RECIEL), vol. 7, 1998, pp. 99

45 Example: the forest burning in Indonesia was tolerated by the government, although the existing law prohibited such activities. For the details and further examples see *A. Rest*, Zur Notwendigkeit eines Internationalen Umweltgerichtshofes, in: Liber Amicorum, *Seidl-Hohenveldern*, The Hague/London/Boston 1998, pp. 575; pp. 579

46 On several occasions this was pointed out by *A. Postiglione*, The Global Village without Regulations. Ethical, Economical, Social and Legal Motivations for an International Court of the Environment, (ICEF, Florence 1992), pp. 24 and *A. Rest*, The Indispensability of an International Environmental Court, in: RECIEL 1998, pp. 63; p. 64

47 See the judgement of 25 Sept. 1997 which has conciliation character, Case Concerning the Gabčíkovo-Nagymaros Project between Hungary and Slovakia in: ICJ Reports No. 92; to further details cf. *A. Rest*, Zur Notwendigkeit eines Internationalen Umweltgerichtshofes, in: Liber Amicorum, *Seidl-Hohenveldern*, 1998, p. 581

48 What is necessary is a new understanding of sovereignty which can meet the environmental challenges of our world in transition. Cf. *S. Bhatt*, Ecology and International Law, in: Indian Journal of Interantional Law 1982, pp. 422

49 (21) ILM 1982, pp. 1261

50 *R. Wolfrum*, Der Internationale Seegerichtshof in Hamburg, in: Vereinte Nationen 1996, pp. 205; *T. Treves*, The Law of the Sea Tribunal: Its Status and Scope of Jurisdiction after November 16, 1994, in: (55) ZaöRV 1995, pp. 421

51 Cf. Art. 20 and 21, Annex VI of the Convention

52 For examples of ECJ-decisions cf. *E. Hey*, The European Community's Courts and International Environmental Agreements, in: RECIEL 1998, pp. 4; *L. Krämer*, Die Rechtsprechung des Gerichtshofs der Europäischen Gemeinschaften zum Umweltrecht 1992–1994, in: EuGRZ 1995, pp. 45

53 For a survey see *A. Rest*, Improved Environmental Protection Through an Expanded Concept of Human Rights? in: EPL 1997, pp. 213; *idem*, Europäischer Menschenrechtsschutz als Katalysator für ein verbessertes Umweltrecht, in: Natur und Recht (NuR), 1997, pp. 209

54 *López-Ostra v. Spain*, ECHR Series A, Vol. 303/C

55 The judgement of 26 August 1997 in the case of *Balmer-Schafroth and Others v. Switzerland* is published in: European Court of Human Rights, Reports of Judgements and Decisions, No. 43, 1997, pp. 1347

56 Cf. Reports of Judgements and Decisions, No. 43, 1997, p. 1359 under para. 40 57 For the dissenting opinion of Judge Pettiti, joined by Judges Gölcüklü, Walsh, Russo, Valticos, Lopes Rocha and Jambrek and of Judge Foighel cf. Reports of Judgements and Decisions, No. 43, 1997, pp. 1361, 1367. The statement quoted is at p. 1363

58 Convention of 21 June 1993, in: (32) ILM 1993, pp. 1228

59 Cf. for example Report of the ILC on the work of its forty-fifth session, 3 May to 23 July 1993; General Assembly Official Records 48th session, Suppl. No. 10 (A/48/10), pp. 255

60 Cf. Press Release L/ROM/22 of 17 July 1998 edited by the UN Diplomatic Conference, Rome

61 For the details of the various kinds of crimes see the Bureau of the Conference Proposal for the Draft Statute – on jurisdiction, admissibility and applicable law (A/ Conf. 183/C. 1/L. 59) – containing over eight pages of options for Article 5 (crimes within the jurisdiction of the Court); cf. Press Release L/ROM/16 of 13 July 1998

62 Art. 19(d) provides: “the 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” as an international crime. Cf. YILC 1980, Vol. II, Part Two, pp. 30; at p. 32

63 *A. Rest*, The Need for an International Court for the Environment. Underdeveloped Legal Protection for the Individual in Transnational Litigation, in: Towards the World Governing of the Environment, IV. International Conference 2–5 June 1994, Venice (Italy), a cura di *A. Postiglione*, Pavia 1996, pp. 178

64 See *P. J. H. Jonkman*, Resolution of International Environmental Disputes: A Potential Role for the Permanent Court of Arbitration, in: Towards the World Governing of the Environment, Pavia 1996, at pp. 435

65 PCA, Optional Conciliation Rules of 1 July 1996. All Optional Rules concerning Conciliation and Arbitration are published by the International Bureau of the PCA, Peace Palace, The Hague

66 The Rules of the United Nations Commission for International Trade of December 1976 are published in: *A. Bülow/K. H. Böckstiegel/R. Geimer/R. A. Schütze*, Der Internationale Rechtverkehr in Zivil- und Handelssachen, Vol. II, loose-leaf-collection, 1997, under No. 753

67 Optional Rules of 20 October 1992

68 Optional Rules of 6 July 1993

69 Optional Rules of 1 July 1996

70 Optional Rules of 1 July 1996

71 Environmental Disputes and the Permanent Court of Arbitration: Issues for Consideration, Background Paper for the Secretary-General of the PCA prepared by *Ph. Sands*, (FIELD, March 1996)

72 Cf. Protocol of *P. J. H. Jonkman*, Secretary-General of PCA of 19 May 1998, Procedural Rules for the Settlement of Environmental Disputes Before The Permanent Court of Arbitration – Summary of views expressed during a discussion held at the Peace Palace on February 24, 1998

73 Cf. Art. XIII of the Convention of 23 June 1979, in: ILM 1980, pp. 19

74 See Art. 62 para. 2 of the Draft International Covenant on Environment and Development of the World Conservation Union in cooperation with the International Council of Environmental Law, in: Environmental Policy and Law Paper No. 31, Gland/Cambridge 1995

75 Cf. Guidelines for Negotiating and Drafting Dispute Settlement Clauses for International Environmental Agreements, prepared by *Ph. Sands* and *R. MacKenzie*, International Bureau of PCA, The Hague, January 1998

76 Cf. PCA, 96th Annual Report, Nos. 18–22, at p. 9

77 PCA, 96th Annual Report, No. 21, at p. 9

78 For the numerous recommendations coming from 54 States and several International Organisations see: The Global Demand for an International Court of the Environment, *International Report 1998* of the International Court of the Environment Foundation (ICEF), Rome 1998